

Copyright by

Ian W. Brown

1980

Early 18th Century French-Indian Culture Contact
in the Yazoo Bluffs Region
of the Lower Mississippi Valley

by

Ian W. Brown

B.A., Harvard College 1973
A.M., Brown University 1975

Thesis

Submitted in partial fulfillment of the requirements for the
Degree of Doctor of Philosophy in the Department of
Anthropology at Brown University
June, 1979

Early 18th Century French-Indian Culture Contact in the

Yazoo Bluffs Region

of the

Lower Mississippi Valley

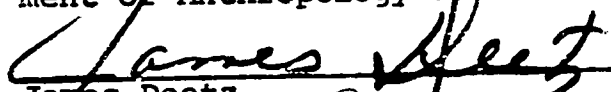
by


Ian W. Brown


B.A., Harvard College 1973
A.M., Brown University 1975

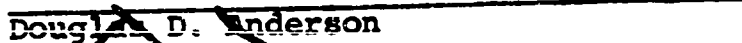
Thesis

Submitted in partial fulfillment of the requirements
for the Degree of Doctor of Philosophy in the Department
of Anthropology at Brown University, June, 1979.



James Deetz Advisor


Jane P. Dwyer


Dwight B. Heath


Douglas D. Anderson


Jeffrey Brain, Harvard University

June 1, 1979 
Approved by the Graduate Council

VITAE

Name: Ian William Brown

Address: Peabody Museum of Archaeology
and Ethnology
Harvard University
Cambridge, Massachusetts 02138

Birth: August 11, 1951

Higher Education

School Attended: Harvard College

Dates: September 1969 - June 1973

Degree Earned: B.A., Anthropology 1973

Honors: nominated to Phi Beta Kappa 1973
graduated Magna Cum Laude 1973

School Attended: Brown University

Dates: September 1973 - June 1979

Degrees Earned: A.M., Anthropology 1975
Ph.D., Anthropology 1979

Honors: University Fellow 1974

University Proctor 1975-1977

National Science Foundation 1976-1977
Doctoral Dissertation Grant

Publications and Papers Presented at Professional Conferences

1974 Americans and early Alaska history 1788-1812. Paper presented at the University of Alaska, Anchorage Community College.

1975 Excavations at Fort St. Pierre. The Conference on Historic Site Archaeology Papers 9:60-85.

1976 Fort St. Pierre, a mini-Pompeii. Paper presented at the 9th Annual Meeting of the Society for Historical Archaeology, Philadelphia.

- 1976 The French and Indian in the Lower Mississippi Valley: A proposal. Paper presented at the 4th French Regime Symposium, Mobile.
- 1976 The Portland site (22-M-12), an early 18th century historic Indian site in Warren County, Mississippi. Mississippi Archaeology XI:2-11.
- 1976 Current archaeological investigations of the French and Indians on the Yazoo River bluffs, Mississippi. Paper presented at the 5th French Regime Symposium, Fort De Chartres.
- 1976 The Tunica Indians in the Lower Yazoo Basin: Excavations at the Portland site, Warren County, Mississippi. Paper presented at the 17th Annual Conference on Historic Site Archaeology, Tuscaloosa.
- 1976 (With Jeffrey P. Brain) Archaeology of the Natchez bluff region, Mississippi: Hypothesized cultural and environmental factors influencing local population movements. Paper presented at the Southeastern Archaeological Conference, Tuscaloosa.
- 1977 Historic trade bells. The Conference on Historic Site Archaeology Papers 10:69-82.
- 1977 Archaeological contributions to Louisiana French settlement patterns. Paper presented at the 6th French Regime Symposium, Mackinac Island.
- 1977 Artifact patterning and activity areas: The evidence from Fort St. Pierre, Mississippi. Paper presented at the 18th Annual Conference on Historic Site Archaeology, Lafayette.
- 1977 Historic aboriginal pottery from the Yazoo bluffs region, Mississippi. Paper presented at the Southeastern Archaeological Conference, Lafayette.
- 1978 A reexamination of the houses at the Bayou Goula site, Iberville Parish, Louisiana. Louisiana Archaeology 3 (in press).
- 1978 The location of the historic Natchez villages. Paper presented at the 7th French Regime Symposium, Natchez.
- 1978 Decorated pottery of the Lower Mississippi Valley: A Sorting Manual. Avery Island Conference Document, Lower Mississippi Survey, Peabody Museum, Harvard University.
- 1978 Comments on "Temporal models in prehistory: An example from Eastern North America," by James B. Stoltzman. Current Anthropology 19(4) (in press).

- 1978 Historical artifacts and sociocultural change: Some warnings from the Lower Mississippi Valley. Paper presented at the Conference on Historic Site Archaeology, Old Salem.
- 1978 Archaeological investigations on Avery Island, Louisiana. Paper presented at the Southeastern Archaeological Conference, Knoxville.
- 1979 Functional group changes and acculturation: A case study of the French and Indian in the Lower Mississippi Valley. Paper presented at the 12th Annual Meeting of the Society for Historical Archaeology, Nashville.
- n.d. James Alfred Ford, the man and his works. Southeastern Archaeological Conference Special Publication (in press).
- n.d. Trade bells in the Tunica treasure. In Tunica treasure, by Jeffrey P. Brain et al. Papers of the Peabody Museum of Archaeology and Ethnology (in press).
- n.d. Burr's Hill trade bells. In The Burr's Hill collection, edited by Susan Ferguson. Brown University Press, Providence (in preparation).
- n.d. (With Jeffrey P. Brain and Vincas P. Steponaitis) Archaeology of the Natchez bluffs. Papers of the Peabody Museum of Archaeology and Ethnology (in preparation).

ACKNOWLEDGMENTS

Many people are directly or indirectly responsible for this dissertation, and I would at this time like to express my appreciation for their help. First, on the home front, my deepest thanks go to my parents. Without their constant encouragement I would never have made it through college and graduate school. To my wife, Nancy Lambert-Brown, I am grateful for artistic advice and am apologetic for her tiresome labor on my behalf.

Much of this work stems directly from interests cultivated as an undergraduate. Jeff Brain and Stephen Williams not only saw me through my college years, but have continued to critique and encourage my later efforts. Jeff in particular has closely followed my dissertation from start to finish and is largely responsible for whatever good is contained within the finished product.

My advisor, Jim Deetz, has been the light at the end of the tunnel. His constant reminding that this is just the start and not the finish, to get it over with and get out, is perhaps the best advice I could have had. Douglas Anderson, my mentor through graduate school, has been my model for excellence. His teaching qualities and empathy for students have been constant reminders of why I chose to be an anthropologist. Thank you Doug for your aid. A silent partner in my effort is Dwight Heath. How he ever had the patience to go through every line of

garbage I've dished out over the years is beyond me - I am thankful for the conscientiousness of this teacher.

Bill Beeman and Peter Schmidt were largely responsible for the early work on my dissertation but, because of their fieldwork, unfortunately did not witness my agony in the middle stages. I hope that the final product has justified their efforts. Jane Dwyer graciously accepted to fill in as a reader at a very late date. Others who have in many ways contributed to this work are Vincas P. Steponaitis, Jean-Francois Blanchette, and Steven Horvath. Bill Wright, of the Mississippi Department of Archives and History, made it all possible by somehow getting the funds each year to continue excavating. A Dissertation Improvement Grant from the National Science Foundation contributed immeasurably to the success of the 1976 season, as did the Vicksburg hospitality of Gordon Cotton and Mr. and Mrs. Frank Everett in all three seasons. Katherine Herring is most responsible for the final product as she had the thankless task of typing it.

Last, but certainly not least, my deepest gratitude is to Robert S. Neitzel. He has taught me honesty, efficiency, and love of labor. Without his guidance, I fear I would have taken myself too seriously. Stu, I dedicate this work to you.

CONTENTS

Part I	Introduction.....	1
	Chapter 1 - Background.....	1
	Chapter 2 - Method and Theory.....	8
Part II	The Yazoo Bluffs in Ethnohistorical Perspective....	25
	Introduction.....	25
	The Concept of Ethnohistory.....	25
	Chapter 3 - The Role of Louisiana in French Colonial History.....	31
	Chapter 4 - Early 18th Century History of the Yazoo Bluffs Region.....	63
	Introduction.....	63
	Aboriginal Inhabitants.....	64
	Yazoo.....	66
	Korca.....	67
	Ofo.....	68
	Tioux.....	69
	Chakchiuma.....	70
	Tunica.....	72
	Arrival of the French - the "missionary" period.....	73
	Englishmen in the Yazoo Bluffs Region.....	75
	French Reaction - The Construction of Fort St. Pierre.....	78
	Indians and French Settlers During the "trader" Period.....	85
	Indian Uprising - the Destruction of Fort St. Pierre.....	89
	Summary.....	97
	Chapter 5 - Sociocultural Background on the Yazoo Bluffs Indians.....	99
	Settlement Organization.....	100
	Economic Organization.....	107
	Sociopolitical Organization.....	110
	Religious Organization.....	115
	Summary.....	121
	Chapter 6 - Sociocultural Background on the French in Louisiana.....	123

Settlement Organization.....	123
Economic Organization.....	147
Summary of the French and Indian in the Yazoo Bluffs Region.....	154
Part III Archaeology of the Yazoo Bluffs Region.....	157
Chapter 8 - Excavations.....	157
Introduction.....	157
Techniques.....	158
St. Pierre (23-M-5).....	163
1974 Investigations.....	164
1975 Investigations.....	166
1976 Investigations.....	174
Dry Moat - Feature 31.....	174
Southern Curtain and Structure B.....	188
Structure C.....	192
Lead Shot Drop Area.....	197
Burned Area.....	198
Southeast Bastion.....	204
Summary.....	205
Portland (22-M-12).....	206
Wright's Bluff (22-M-15).....	214
Anglo (22-M-16).....	224
Lockguard (22-M-17).....	228
Lonely Frenchman (23-M-11).....	230
Chapter 9 - The Cultural Remains.....	235
Introduction.....	235
Aboriginal Artifacts.....	237
Ceramics.....	237
Pipes.....	262
Lithics.....	264
European Artifacts.....	272
Kitchen Group.....	272
Ceramics.....	272
Wine Bottles and Case Bottles.....	276
Tumblers.....	278
Spoons.....	278
Knives.....	279
Whetstones.....	282
Architectural Group.....	282
Hand Wrought Nails.....	282
Hinges.....	284
Staples.....	284
Locks.....	285
Furniture Group.....	285
Hasp Locks.....	285
Furniture Hinges.....	286

Handles.....	287
Arms Group.....	287
Ammunition.....	287
Powder Flasks.....	288
Gunflints.....	288
Gun Parts.....	295
Clothing Group.....	296
Buckles.....	296
Buttons.....	298
Cufflinks.....	299
Shoe Heels.....	299
Fabric.....	300
Pins.....	300
Bale Seals.....	300
Clothing Ornaments - Tinklers.....	301
Clothing Ornaments - Glass Beads.....	302
Clothing Ornaments - Bells.....	309
Clothing Ornaments - Springs.....	310
Personal Group.....	310
Bracelets.....	310
Coins.....	311
Crucifix Corpus.....	313
Fire - Steels.....	313
Keys.....	313
Mirrors.....	314
Rings.....	314
Miscellaneous Ornaments.....	314
Slateboards.....	314
Tobacco Pipe Group.....	315
White Clay Tobacco Pipes.....	315
Activities Group.....	316
Construction Tools - Axes.....	316
Construction Tools - Chisels.....	317
Construction Tools - Files.....	317
Construction Tools - Wedges.....	317
Toys - Jews Harps.....	317
Fishing Gear - Fishhooks.....	318
Storage Items - Barrel Hoops.....	318
Storage Items - Rivets.....	318
Miscellaneous Hardware - Bolts.....	318
Miscellaneous Hardware - Nuts.....	319
Miscellaneous Hardware - Chain Links.....	319
Miscellaneous Brass/Copper Artifacts.....	319
Miscellaneous Iron Artifacts.....	320
Miscellaneous Lead Artifacts.....	320
Summary.....	320

Part IV Sociocultural Change and Stability in the Yazoo	
Bluffs Region.....	332
Introduction.....	332

Chapter 10 - A review of Past and Present Contributions to the Study of Sociocultural Change.....	334
Early Evolutionary Theory and Historicist Reaction.....	334
Functionalism.....	342
Neo-Evolutionary Theory and Cultural Ecology.....	344
Acculturation and Other Approaches to Culture Contact Situations.....	355
Chapter 11 - French Agents of Sociocultural Change.....	384
Introduction.....	384
Explorers.....	385
Administrators.....	406
Traders.....	427
Missionaries.....	443
History of the Louisiana Missions.....	446
Methods of Dealing with the Indians.....	454
Language.....	454
Age of Missionaries.....	457
Converting the Indians.....	459
Concentrating on Children.....	461
Contribution to Material Culture Change.....	462
Moving the Indians.....	466
The Effect on Native Religion.....	467
Church.....	468
Cross.....	469
Reverence Given to Individual Missionaries.....	473
Success and Failure of the Missionary as an Agent of Sociocultural Change.....	479
Summary of French Roles in the Yazoo Bluffs Region.....	490
Chapter 12 - Louisiana Indians - Sociocultural Change and Stability.....	498
Introduction.....	498
Conservatism and Change in Non-material Aspects of Aboriginal Society.....	514
Economic Organization.....	516
Political Organization.....	519
Social Organization.....	522
Summary.....	535
Conservatism and Change in Material Aspects of Aboriginal Society.....	536
European Ceramics.....	538
Bottles.....	540
Kettles.....	542
Knives.....	543
Nails.....	544
Gunpowder.....	544
Guns.....	545
Fabric.....	548

Tinklers.....	553
Glass Beads.....	554
Bells.....	560
Springs.....	560
Bracelets.....	561
Vermilion.....	562
Axes.....	563
Hoes.....	565
Summary.....	566
Summary - Relationship of Material to Non-Material Changes in Aboriginal Society.....	568
Part V Conclusion.....	577

APPENDICES

Appendix 1

Louisiana Forts.....	583
Fort Maurepas (Fort of Biloxi).....	583
Fort de la Boulaye (Fort Mississippi).....	584
Fort Louis.....	586
Fort Condé.....	586
Fort on Dauphin Island.....	588
Fort Rosalie.....	588
Fort Toulouse.....	592
Fort St. Pierre.....	593
Fort on the Island of Balize.....	593

Appendix 2a

Aboriginal Artifacts - Ceramics.....	595
Addis Plain.....	595
Addis Plain, <u>var.</u> <u>Addis</u>	595
Addis Plain, <u>var.</u> <u>Greenville</u>	597
Addis Plain, <u>var.</u> <u>Holly Bluff</u>	599
Addis Plain, <u>var.</u> <u>Ratcliffe</u>	600

Alligator Incised, <u>var. Oxbow</u>	601
Anna Incised.....	602
Avoyelles Punctated.....	603
Avoyelles Punctated, <u>var. Avoyelles</u>	603
Avoyelles Punctated, <u>var. Dupree</u>	604
Barton Incised.....	605
Barton Incised, <u>var. Arcola</u>	606
Barton Incised, <u>var. Charlevoix</u>	607
Barton Incised, <u>var. Davion</u>	609
Barton Incised, <u>var. Midnight</u>	612
Barton Incised, <u>var. Portland</u>	613
Baytown Plain, <u>var. Thomas</u>	616
Baytown Plain, <u>var. Valley Park</u>	617
Baytown Plain, <u>var. Vicksburg</u>	618
Beldeau Incised, <u>var. Beldeau</u>	619
Beldeau Incised, <u>var. Bell Bayou</u>	620
Carter Engraved, <u>var. Carter</u>	621
Carter Engraved, <u>var. Mud Lake</u>	622
Chevalier Stamped, <u>var. Chevalier</u>	624
Chevalier Stamped, <u>var. Lulu</u>	625
Chevalier Stamped, <u>var. Perry</u>	627
Chickachae Combed.....	628
Chicot Red.....	629
Churupa Punctated, <u>var. Thornton</u>	629
Coleman Incised.....	630
Coleman Incised, <u>var. Coleman</u>	631
Coleman Incised, <u>var. Bass</u>	633
Coles Creek Incised.....	634
Coles Creek Incised, <u>var. Coles Creek</u>	636
Coles Creek Incised, <u>var. Blakely</u>	637
Coles Creek Incised, <u>var. Campbellsville</u>	638
Coles Creek Incised, <u>var. Hardy</u>	639
Coles Creek Incised, <u>var. Mott</u>	640
Coles Creek Incised, <u>var. Stoner</u>	642
Coles Creek Incised, <u>var. Wade</u>	644
Cracker Road Incised.....	645
Cracker Road Incised, <u>var. Cracker Road</u>	647
Cracker Road Incised, <u>var. Souel</u>	651
Evansville Punctated, <u>var. Evansville</u>	654
Evansville Punctated, <u>var. Braxton</u>	655
Evansville Punctated, <u>var. Rhinehart</u>	656
Evansville Punctated, <u>var. Sharkey</u>	657
Fatherland Incised.....	658
Fahterland Incised, <u>var. Fatherland</u>	659
Fatherland Incised, <u>var. Snyder's Bluff</u>	663
French Fork Incised, <u>var. McNutt</u>	666
Grace Brushed.....	667
Grace Brushed, <u>var. Grace</u>	667
Grace Brushed, <u>var. Warren</u>	668
Harrison Bayou Incised, <u>var. Harrison Bayou</u>	669
Hollyknowe Ridge Pinched, <u>var. Patmos</u>	672

Indian Bay Stamped, <u>var. Shaw</u>	673
Larto Red, <u>var. Larto</u>	674
Leland Incised, <u>var. Leland</u>	674
Leland Incised, <u>var. Bethlehem</u>	676
Leland Incised, <u>var. Blanchard</u>	677
Leland Incised, <u>var. Bovina</u>	679
Leland Incised, <u>var. Foster</u>	680
Leland Incised, <u>var. Russell</u>	681
Leland Incised, <u>var. Williams</u>	683
Maddox Engraved, <u>var. Silver City</u>	685
Marksville Incised.....	686
Marksville Stamped, <u>var. Troyville</u>	687
Mazique Incised.....	688
Mazique Incised, <u>var. Mazique</u>	689
Mazique Incised, <u>var. Kings Point</u>	690
Mazique Incised, <u>var. Manchac</u>	691
Mississippi Plain, <u>var. Montfort</u>	694
Mississippi Plain, <u>var. Yazoo</u>	695
Mound Place Incised, <u>var. Mound Place</u>	697
Mulberry Creek Cord Marked, <u>var. Edwards</u>	699
Nodena Red and White, <u>var. Poisson</u>	700
Old Town Red, <u>var. Ballground</u>	702
Old Town Red, <u>var. St. Pierre</u>	704
Owens Punctated.....	707
Owens Punctated, <u>var. Menard</u>	708
Owens Punctated, <u>var. Poor Joe</u>	710
Owens Punctated, <u>var. Redwood</u>	711
Owens Punctated, <u>var. Widow Creek</u>	715
Parkin Punctated, <u>var. Hollandale</u>	716
Parkin Punctated, <u>var. Transylvania</u>	717
Plaquemine Brushed, <u>var. Plaquemine</u>	718
Pouncey Ridge Pinched, <u>var. Patosi</u>	721
Salomon Brushed.....	722
Wallace Incised, <u>var. Wallace</u>	722
Winterville Incised.....	725
Winterville Incised, <u>var. Winterville</u>	725
Winterville Incised, <u>var. Belzoni</u>	726
Winterville Incised, <u>var. Tunica</u>	727
Pipes.....	757

Appendix 2b

Aboriginal Artifacts - Lithics.....	759
I Projectile Points.....	759
Provisional Type 1.....	759
Broad Gary Stemmed.....	762
Collins, <u>var. Claiborne</u>	763
Knight Incised.....	764
Nodena.....	766
Madison.....	767

	Guntersville.....	769
	Unclassified Points.....	771
II	Scrapers.....	772
	Side Scrapers.....	772
	Discoidal Scrapers.....	776
	Hafted Side Scrapers.....	782
	Double Side Scrapers.....	784
	Hafted End Scrapers.....	786
	Side-End Scrapers.....	791
	Hafted Side-End Scrapers.....	793
	Double Side-End Scrapers.....	795
III	Combination Tools.....	797
	End Scraper-Borers.....	797
	Double Side Scraper-Borers.....	798
	Hafted Double Side Scraper-Borers.....	799
	Hafted Side Scraper-Knife-Borers.....	800
	Side Scraper-Spokeshaves.....	801
	Double Side Scraper-Spokeshaves.....	802
	Hafted Side Scraper-Knife-Spokeshaves.....	802
IV	Additional Tools.....	803
	Knives.....	803
	Hafted Knives.....	804
	Burins.....	809
	Drills.....	810
	Spokeshaves.....	812
	Engravers.....	814
	Adzes.....	815
	Hoes.....	817
	Celts.....	818
	Choppers.....	820
	Hammerstones.....	821
V	Miscellaneous Tools.....	823
	Worked Bifacial Tool Fragments.....	823
	Crude Bifaces.....	824
	Biface Retouch Flakes.....	825
	Pebbles and Flakes with Unifacial Retouch.....	826
	Uniface Retouch Flakes.....	826
	Cores.....	827
	Core Rejuvenation Flakes.....	828
VI	Aboriginally-Worked Glass.....	829
	Projectile Points.....	829
	Scrapers.....	830
	Spokeshaves.....	831
	Glass with Unifacial Retouch.....	832

Appendix 2c

European Artifacts.....	851
Kitchen Group.....	851

European Ceramics.....	851
Wine Bottles and Case Bottles.....	867
Tumblers.....	870
Spoons.....	875
Knives.....	876
Whetstones.....	881
Architectural Group.....	881
Hand Wrought Nails.....	881
Hinges.....	887
Staples.....	890
Locks.....	890
Furniture Group.....	892
Hasp Locks.....	892
Furniture Hinges.....	893
Handles.....	894
Arms Group.....	895
Ammunition.....	895
Powder Flasks.....	899
Spout.....	900
Gunflints.....	901
Gun Parts.....	915
Clothing Group.....	938
Buckles.....	938
Buttons.....	942
Cufflinks.....	946
Shoe Heels.....	948
Fabric.....	949
Pins.....	949
Bale Seals.....	950
Clothing Ornaments - Tinklers.....	950
Clothing Ornaments - Glass Beads.....	951
Clothing Ornaments - Bells.....	1007
Clothing Ornaments - Springs.....	1007
Personal Group.....	1008
Bracelets.....	1008
Coins.....	1009
Crucific Corpus.....	1010
Fire-Steels.....	1011
Keys.....	1012
Mirrors.....	1013
Miscellaneous Ornaments.....	1013
Rings.....	1015
Slateboards.....	1015
Tobacco Pipe Group.....	1016
White Clay Tobacco Pipes.....	1016
Activities Group.....	1024
Construction Tools - Axes.....	1024
Construction Tools - Chisels.....	1027
Construction Tools - Files.....	1028
Construction Tools - Wedges.....	1028
Toys - Jews Harps.....	1029
Fishing Gear - Fishhooks.....	1030

Storage Items - Barrel Hoops.....	1031
Storage Items - Rivets.....	1031
Miscellaneous Hardware - Bolts.....	1032
Miscellaneous Hardware - Nuts.....	1033
Miscellaneous Hardware - Chain Links.....	1035
Miscellaneous Brass/Copper Artifacts.....	1035
Miscellaneous Iron Artifacts.....	1038
Miscellaneous Lead Artifacts.....	1044

FIGURES

1	- Yazoo Bluffs Region - Historic French and Indian Sites...	2
2	- Models of Aboriginal Sociocultural Change in the Yazoo Bluffs Region.....	14
3	- St. Pierre (23-M-5) - 1974 Excavations.....	165
	Section of Palisade within Slumped Area.....	167
5	- St. Pierre (23-M-5) - 1975 Excavations.....	169
6	- Locale 1 - Level A.....	171
7	- Locale 1 - Level B.....	172
8	- Locale 2 - Features 20 and 30.....	173
9	- St. Pierre (23-M-5) - 1976 Excavations.....	176
10	- Excavated Structures and Features.....	177
11	- Dry Moat - Feature 31.....	178
12	- Dry Moat - Feature 31.....	181
13	- Addis Plain, <u>var.</u> <u>Addis</u> jar.....	184
14	- Mississippi Plain, <u>var.</u> <u>Yazoo</u> jar.....	185
15	- Cracker Road Incised, <u>var.</u> <u>Cracker Road</u> Bowl.....	186
16	- Cracker Road Incised, <u>var.</u> <u>Cracker Road</u> Bowl.....	187
17	- Structure B.....	190

18	-	Space between Structures B and C.....	193
19	-	Structure C.....	194
20	-	Lead Shot Drop Area.....	199
21	-	Burned Plank Stain Area.....	202
22	-	Portland (22-M-12) - 1974 Excavations.....	208
23	-	Portland (22-M-12) - Features.....	210
24	-	Winterville Incised, <u>var. Tunica</u> jar. Leland Incised, <u>var. Williams</u> Bowl.....	211
25	-	Owens Punctated, <u>var. Redwood</u> Bowl. Barton Incised, <u>var. Portland</u> Bowl.....	213
26	-	Wright's Bluff (22-M-15) - 1976 Excavations.....	215
27	-	Anglo (22-M-16) - 1976 Excavations.....	226
28	-	Lockguard (22-M-17) 1976 Excavations.....	230
29	-	Lonely Frenchman (23-M-11) - 1975 and 1976 Excavations.....	231
30	-	Neo-Indian Chronology in the Yazoo Bluffs and Adjoining Regions.....	240
31	-	Phase Representations at Sites in the Yazoo Bluffs Region.....	248
32	-	Measurements of the Gunflints from the Yazoo Bluffs Region.....	294
33	-	Cumulative Frequency Curve of Functional Groups.....	326
34	-	Hand Wrought Nail Measurements - St. Pierre 1976 Excavations.....	885

TABLES

1	-	Material in Pot Hunter's Collection from Wright's Bluff (22-M-15) Burial.....	222
---	---	--	-----

2	-	Summary of the Ceramics from Sites in the Yazoo Bluffs Region Arranged According to Phases.....	241
3	-	Summary of the Lithic Tools from Sites in the Yazoo Bluffs Region.....	268
4	-	Summary of the European Ceramics from the Yazoo Bluffs Region.....	274
5	-	Summary of European Knives from the Yazoo Bluffs Region.....	280
6	-	Summary of the Gunflints from the Yazoo Bluffs Region.....	292
7	-	Summary of the Gun Parts from the Yazoo Bluffs Region.....	297
8	-	Summary of the Glass Beads from the Yazoo Bluffs Region.....	306
9	-	Summary of the Historic European Artifacts from the Yazoo Bluffs Region.....	322
10	-	Functional Group Percentages of Historic Sites in the Yazoo Bluffs Region.....	325
11	-	Provenience of Ceramics from the Yazoo Bluffs Region.....	730
12	-	Projectile Points from the Yazoo Bluffs Region.....	761
13	-	Lithic Tools from the Yazoo Bluffs Region.....	773
14	-	Hammerstone Weights.....	822
15	-	Provenience of Lithics from the Yazoo Bluffs Region.....	833
16	-	French Olive Green Glass - St. Pierre.....	871
17	-	Gunflints - Measurements and Description.....	904
18	-	Measurements of Cast Brass Buttons from the Yazoo Bluffs Region.....	945

PLATES

1	-	1976 Field Crew in the Yazoo Bluffs Region.....	1046
---	---	---	------

- 2 - Location of Fort St. Pierre (Broutin 1740).....1047
- 3 - Fort St. Claude (Pierre) (Anon.).....1048
- 4 - Fort St. Pierre (Dumont dit Montigny in Swanton
(1911:pl.7b).....1049
- 5 - Fort des Yazous (Dumont dit Montigny 1931).....1050
- 6 - St. Pierre (23-M-5) - Excavation of Locale 1.....1051
- 7 - St. Pierre (23-M-5) - Burned Plank Stains in
Locale 1.....1052
- 8 - St. Pierre (23-M-5) - Two Natural layers in Locale 1.1053
- 9 - St. Pierre (23-M-5) - Wall Trenches in Locale 1.....1054
- 10 - St. Pierre (23-M-5) - Mississippi Plain, var. Yazoo
in Section D of the Moat.....1055
- 11 - St. Pierre (23-M-5) - Moat and Southern Curtain.....1056
- 12 - St. Pierre (23-M-5) - Short Wall Trench Dividing
Rooms in Structure B.....1057
- 13 - St. Pierre (23-M-5) - Structure C.....1058
- 14 - St. Pierre (23-M-5) - Lead Shot Drop Area:Flat
Circular Area surrounded by Shallow Ditches.....1059
- 15 - St. Pierre (23-M-5) - Excavations in the Burned
Area Along the Western Part of the Site.....1060
- 16 - Wright's Bluff (22-M-15) - Disturbed Historic
Burial.....1061
- 17 - Wright's Bluff (22-M-15) Burial Collection -
Mississippi Plain, var. Yazoo Bottle.....1062
- 18 - Wright's Bluff (22-M-15) Burial Collection - Bells...1063
- 19 - Wright's Bluff (22-M-15) Burial Collection - Lock....1064
- 20 - Wright's Bluff (22-M-15) Burial Collection - Lock....1065
- 21 - Wright's Bluff (22-M-15) Burial Collection - Lock....1066
- 22 - Wright's Bluff (22-M-15) Burial Collection - Lock....1067
- 23 - Wright's Bluff (22-M-15) Burial Collection - Musket
Cocks.....1068

- 24 - Wright's Bluff (22-M-15) Burial Collection -
Triggerplates.....1069
- 25 - Wright's Bluff (22-M-15) Burial Collection -
Triggerguards.....1070
- 26 - Wright's Bluff (22-M-15) Burial Collection -
Triggerguard Finials.....1071
- 27 - Wright's Bluff (22-M-15) Burial Collection -
Rampipes.....1072
- 28 - Wright's Bluff (22-M-15) Burial Collection -
Sideplates.....1073
- 29 - Wright's Bluff (22-M-15) Burial Collection -
Buttplate Finial.....1074
- 30 - Wright's Bluff (22-M-15) Burial Collection -
Thumbplate.....1075
- 31 - Wright's Bluff (22-M-15) Burial Collection -
Screwdriver. Blade Gunflints. Lead Balls. Beads...1076
- 32 - View from Anglo (22-M-16) Looking Toward St. Pierre
(23-M-5).....1077
- 33 - Lockguard (22-M-17) - Excavations.....1078
- 34 - Lonely Frenchman (23-M-11) - Excavations.....1079
- 35 - Aboriginal Pottery - Avoyelles Punctated, vars. Dupree
and Unspecified.....1080
- 36 - Aboriginal Pottery - Barton Incised, vars. Charlevoix
and Davion.....1081
- 37 - Aboriginal Pottery - Barton Incised, var. Midnight...1082
- 38 - Aboriginal Pottery - Barton Incised, var. Portland...1083
- 39 - Aboriginal Pottery - Barton Incised, var. Portland...1084
- 40 - Aboriginal Pottery - Beldeau Incised, var. Bell Bayou.
Carter Engraved, vars. Carter and Mud Lake. Cevalier
Stamped, var. Chevalier. Chickachae Combed, var.
Unspecified. Churupa Punctated, var. Thornton.....1085
- 41 - Coleman Incised, var. Bass. Winterville Incised,
var. Unspecified. Coles Creek, vars. Coles Creek,
Blakely, and Campbellsville.....1086

- 42 - Aboriginal Pottery - Coles Creek Incised, vars. Hardy
and Mott.....1087
- 43 - Aboriginal Pottery - Coles Creek Incised, vars. Stoner,
Wade, and Unspecified.....1088
- 44 - Aboriginal Pottery - Cracker Road Incised, var.
Cracker Road.....1089
- 45 - Aboriginal Pottery - Cracker Road Incised, var. Souel.
Evansville Punctated, var. Evansville.....1090
- 46 - Aboriginal Pottery - Evansville Punctated, vars.
Braxton, Rhinehart, and Unspecified.....1091
- 47 - Aboriginal Pottery - Fatherland Incised, var.
Fatherland.....1092
- 48 - Aboriginal Pottery - Fatherland Incised, vars.
Snyders Bluff and Unspecified. French Fork
Incised, var. McNutt.....1093
- 49 - Aboriginal Pottery - Grace Brushed, vars. Grace and
Warren. Harrison Bayou Incised, var. Harrison Bayou.1094
- 50 - Aboriginal Pottery - Hollyknowe Ridge Pinched, var.
Patmos. Leland Incised, vars. Leland and Blanchard..1095
- 51 - Aboriginal Pottery - Leland Incised, vars. Bovina
Foster, and Russell.....1096
- 52 - Aboriginal Pottery - Leland Incised, var. Williams...1097
- 53 - Aboriginal Pottery - Mazizue Incised, vars.
Kings Point and Manchac.....1098
- 54 - Aboriginal Pottery - Mississippi Plain, var. Yazoo...1099
- 55 - Aboriginal Pottery - Maddox Engraved, var. Silver
City. Marksville Stamped, var. Troyville. Mound
Place Incised, var. Mound Place.....1100
- 56 - Aboriginal Pottery - Mound Place Incised, var.
Mound Place.....1101
- 57 - Aboriginal Pottery - Mulberry Creek Cord Marked,
var. Edwards. Nodena Red and White, var. Poisson.
Old Town Red, vars. Ballground and St. Pierre.....1102
- 58 - Aboriginal Pottery - Owens Punctated, vars.
Menard, Poor Joe, and Unspecified.....1103

59	-	Aboriginal Pottery - Owens Punctated, <u>var. Widow Creek.</u> Parkin Punctated, <u>var. Hollandale.</u>	1104
60	-	Aboriginal Pottery - Plaquemine Brushed, <u>var. Plaquemine.</u> Pouncey Ridge Pinched, <u>var. Patosi.</u> Wallace Incised, <u>var. Wallace.</u>	1105
61	-	Aboriginal Pottery - Winterville Incised, <u>vars. Winterville</u> and <u>Belzoni.</u>	1106
62	-	Aboriginal Pottery - Winterville Incised, <u>var. Tunica.</u>	1107
63	-	Aboriginal Pipe.....	1108
64	-	Aboriginal Pipe.....	1109
65	-	Projectile Points - Knight Island, Unclassified, Broad Gary Stemmed, and Provisional Type 1.....	1110
66	-	Projectile Points - Madison, Modena, Guntersville, Unclassified, Collins, <u>var. Claiborne,</u> and glass point.....	1111
67	-	Discoidal Scrapers.....	1112
68	-	Discoidal Scrapers.....	1113
69	-	Miscellaneous Lithics - Side Scraper, Hafted Side Scrapers, Double Side Scrapers, and Hafted End Scrapers.....	1114
70	-	Hafted End Scraper.....	1115
71	-	Miscellaneous Lithics - Hafted End Scrapers, Side-End Scrapers, and Hafted Side-End Scrapers.....	1116
72	-	Miscellaneous Lithics - Double Side-End Scrapers, End Scraper-Borers, Double Side Scraper-Borers, Hafted Double Side Scraper-Borers, Hafted Side Scraper-Knife-Borers, Side Scraper-Spokeshaves, Double Side Scraper-Spokeshaves, and Hafted Side Scraper-Knife-Spokeshave.....	1117
73	-	Miscellaneous Lithics - Knives and Hafted Knives.....	1118
74	-	Miscellaneous Lithics - Burins, Drills, Spokeshaves, and Engravers.....	1119
75	-	Burins.....	1120
76	-	Miscellaneous Lithics - Adzes, Hoes, Celts, and Choppers.....	1121

77	- Hammerstones (Category 1).....	1122
78	- Hammerstones (Categories 2 and 3).....	1123
79	- Crude Bifaces.....	1124
80	- Crude Bifaces.....	1125
81	- Cores.....	1126
82	- Glass Projectile Point.....	1127
83	- Glass Tools - Spokeshaves and Scrapers.....	1128
84	- Glass Scraper.....	1129
85	- Tin-Enameled Earthenware (Faience).....	1130
86	- Tin-Enameled Earthenware (Faience) and Lead-Glazed Earthenware.....	1131
87	- Tin-Enameled Earthenware (Faience) Bowl.....	1132
88	- Wine Bottles.....	1133
89	- Wine Bottle Seal.....	1134
90	- Miscellaneous Iron Objects - Spoons, Jews Harps, Springs, and Fire-Steels.....	1135
91	- Knives.....	1136
92	- Knife.....	1137
93	- Hinges.....	1138
94	- Miscellaneous Iron Objects - Keys, Hasp Locks, and Locks.....	1139
95	- Miscellaneous Iron Objects - HaspKeeper Elements, Cannister Shot, and Unclassified Materials.....	1140
96	- Miscellaneous Iron Objects - Handles, Iron Rings, and Hooks.....	1141
97	- Powder Flask.....	1142
98	- Spout.....	1143
99	- Gunflints - Type 1, Spall Gunflints.....	1144
100	- Gunflints - Type 2, Blade Gunflints and Flint Nodules.....	1145

101 -	Gunflints - Type 3, Aboriginal Gunflints.....	1146
102 -	Lock Plate.....	1147
103 -	Gun Parts - Sears, Sear Springs, Mainsprings, Triggers, and Tumbler Bridles.....	1148
104 -	Gun Parts - Sideplates, Triggerguards, Buttplates, Touchhole Picks, and Rampipes.....	1149
105 -	Sideplate.....	1150
106 -	Triggerguard.....	1151
107 -	Breechplug.....	1152
108 -	Barrel Bands and Swivels.....	1153
109 -	Barrel Band and Swivel.....	1154
110 -	Screwdriver.....	1155
111 -	Buckles.....	1156
112 -	Cufflink.....	1157
113 -	Cufflink.....	1158
114 -	Miscellaneous Objects - Shoe Heels, Whetstones, and Slateboard Fragments.....	1159
115 -	Pin.....	1160
116 -	Bale Seal.....	1161
117 -	Tinklers.....	1162
118 -	Glass Beads.....	1163
119 -	Clay Bead.....	1164
120 -	Coin.....	1165
121 -	Miscellaneous Ornament.....	1166
122 -	Construction Tools - Chisels and Files.....	1167
123 -	File.....	1168
124 -	Wedges.....	1169
125 -	Miscellaneous Hardware - Rivets, Bolts, and Nuts.....	1170

126 - Miscellaneous Brass/Copper Objects.....1171
127 - Miscellaneous Brass/Copper Objects.....1172
128 - Miscellaneous Iron Objects.....1173
129 - Miscellaneous Iron Object.....1174

Bibliography.....1175

Part I - Introduction

Chapter 1 - Background

This thesis is an investigation of the interaction between the French and Indians in the Yazoo Bluffs region, a small area in the Lower Mississippi Valley (Figure 1). The Yazoo Bluffs region, extending about 15 linear miles along the hills northeast of Vicksburg, Mississippi, was subjected to heavy French and aboriginal settlement in the early 18th century. Occupation was essentially confined to the bluffs and talus slopes leading down to the Yazoo River. French involvement in the region can basically be divided into two periods - the "missionary" period (1698-1706) and the "trader" period (1719-1729). This thesis is an examination of French-Indian relations in the Yazoo Bluffs region in times when the orientations of contact were considerably different, the first being more involved with religion and the second being more of an economic involvement. It is argued that the nature of contact in each period was different, and consequently, the effect of such contact on aboriginal culture varied through time. This study is primarily archaeological, but an extensive use of historical data and recent anthropological contributions on sociocultural change has been necessary in order to provide a well-rounded picture of French-Indian relations in the Yazoo Bluffs region.

- 1 HAYNES BLUFF
- 2 PORTLAND
- 3 WRIGHTS BLUFF
- 4 ANGLO
- 5 LOCKGUARD
- 6 BURROUGHS
- 7 ST. PIERRE
- 8 LONELY FRENCHMAN

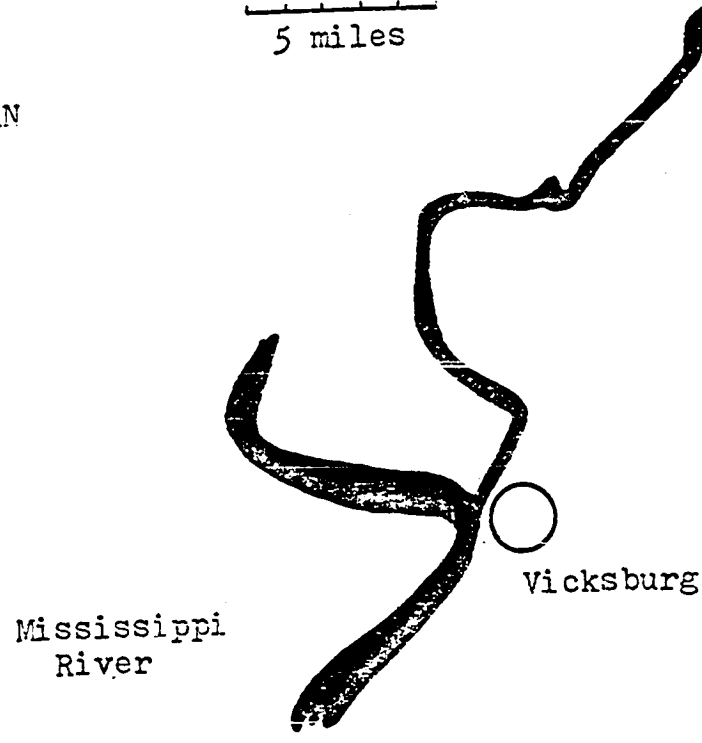
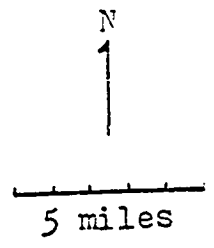


Figure 1

Yazoo Bluffs region - Historic French and

UFF
LUFF
RE
RENCHMAN

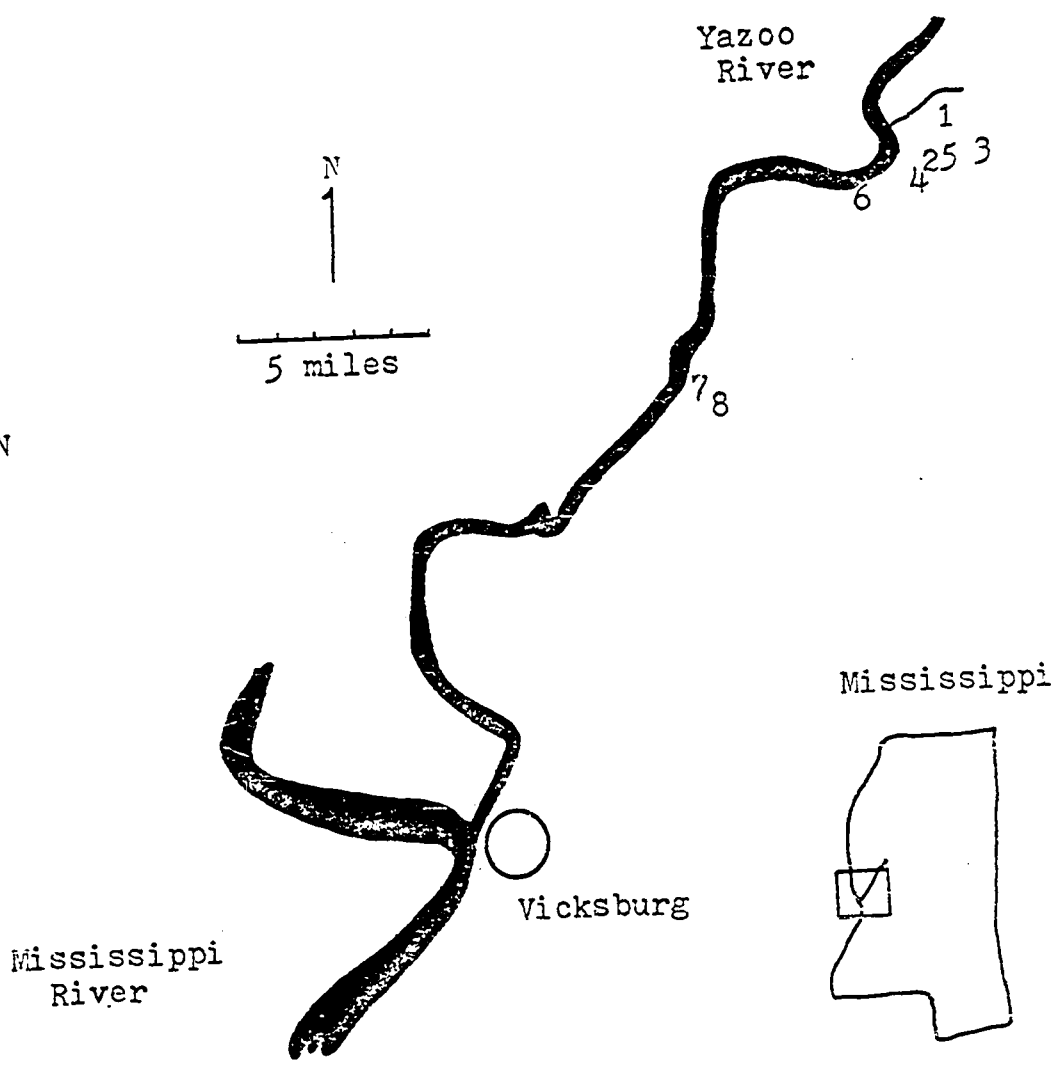


Figure 1

Yazoo Bluffs region - Historic French and Indian Sites

The Yazoo Bluffs region is an extremely important area to examine archaeologically. Almost all historic activity occurred in the first three decades of the 18th century, thus providing tight chronological control of historic French and Indian sites in the region. The first recorded Frenchmen on the Yazoo River were the missionaries de Montigny, La Source, and Davion. They arrived in 1698 and made contact with all the indigenous groups, but concentrated their proselytizing efforts on the numerically superior Tunica Indians. Davion remained in the area until 1706, at which time pressure from pro-English aboriginal groups forced the Tunica and their missionary to abandon the region and settle far to the south at the mouth of the Red River. French interest in the Yazoo Bluffs region waned until 1719. Fort St. Pierre and a number of French concessions were established along the banks of the Yazoo River at this time, and the relationship of the French settlers with the surrounding Indian groups (Yazoo, Korca, and Ofo) appears to have been primarily economic. Religious interaction was of little concern, as there is no evidence of a missionary in residence until 1727. Father Souel arrived at this time and was subsequently killed in 1729 when a combined force of local Indians killed the French inhabitants of the region and destroyed their fort. The French never attempted to reestablish the post on the Yazoo River, and subsequent aboriginal occupation along this tributary was minimal and sporadic.

Archaeological work in the Yazoo Bluffs region has also been minimal. James A. Ford took an interest in the region,

because he felt the discovery and excavation of Fort St. Pierre would provide an excellent means of dating the aboriginal sites in the vicinity. Although Ford did indeed determine the actual location of the fort, he did not demonstrate its existence archaeologically (Ford 1936:98-103). Several prehistoric sites were later recorded and investigated along the lower reaches of the Yazoo River (Phillips 1970), but until recently there has been no contributions to historical archaeology in the region. Stephen Williams spent several days excavating the Burroughs Site (22-M-10) in the mid-1960's, and collections from the Russell Site (22-N-19) were also examined at this time. His findings, combined with the numerous historic remains being unearthed by a railroad cut through the Haynes Bluff Site (22-M-5), led to the fieldwork of 1974. A joint project of the Lower Mississippi Survey of Peabody Museum, Harvard University,* and the Mississippi Department of Archives and History, conducted excavations at Haynes Bluff, Burroughs, Portland (22-M-12), Russell, and St. Pierre (23-M-5). The State of Mississippi continued to support excavations at St. Pierre in 1975, at which time test excavations were conducted at Lonely Frenchman (23-M-11). The project, funded by both the State of Mississippi and the National Science Foundation, continued in 1976 (Plate 1). Large-scale excavations were conducted at St. Pierre, Lonely Frenchman, Wright's Bluff (22-M-15), Anglo (22-M-16), and Lockguard (22-M-17).

* The LMS investigations were funded by a grant from the National Geographic Society.

All of the above sites, excepting Haynes Bluff, Burroughs, and Russell, are discussed in this thesis.* It is believed that the Portland Site is an Indian occupation dating to the "missionary" period. Lockguard is thought to be a later aboriginal settlement of the "trader" period, whereas St. Pierre and Lonely Frenchman are considered contemporary French settlements of the "trader" period.

The thesis is divided into five parts and thirteen chapters. The first section includes background information (Chapter 1) and a detailed description of the method and theory behind the research (Chapter 2). The second part is an intensive examination of the Yazoo Bluffs region in ethnohistorical perspective. After a short discussion of the concept and use of ethnohistory, an overall view of the role of Louisiana in French colonial history is offered (Chapter 3). Chapter 4 is a summary of the history of the Yazoo Bluffs region in relation to events occurring in Louisiana as a whole. Chapters 5 and 6 go beyond basic history and examine sociocultural phenomena of both the Yazoo Bluffs Indians (Chapter 5) and the French settlers (Chapter 6). With such a background, it is possible to examine the archaeology of the region. Part III is divided into two chapters. Chapter 8 reviews three years of excavation at the St. Pierre, Portland, Wright's Bluff, Anglo, Lockguard, and Lonely Frenchman sites. A discussion of the cultural remains from these sites is the subject of Chapter 9.

* The three exceptions, the research of Jeffrey P. Brain, are presently in the analysis stage.

A detailed examination of the artifacts, presented in Appendix 2, and summarized in Chapter 9, reveals that there is a quantitative change in European trade materials on aboriginal sites in the Yazoo Bluffs region. In terms of the total historic material assemblage, Lockguard is located approximately half way between the earlier aboriginal Portland Site and the contemporary French-related St. Pierre and Lonely Frenchman Sites. The significance of this archaeological discovery to sociocultural change and stability is the subject of Part IV. Chapter 10 is a review of various studies dealing with sociocultural change. It finishes with a discussion of acculturation and why in this thesis it was decided to utilize such an approach in studying French-Indian interaction. The actual contact situation, concerning who was responsible for the transmission of materials and how the transmission was conducted, is integrally related to the sociocultural effects of such introductions. This is the topic of Chapter 11. Each French role, including explorers, administrators, traders, and missionaries, is examined in depth to determine what potential and effect each had in wielding change among the Indians of Louisiana in general and the Yazoo Bluffs region in particular. Chapter 12 is a summary of the effects in regard to all of Louisiana. It is divided into three subsections, the first being a consideration of both change and stability in non-material aspects of aboriginal society. The second subsection deals with material aspects in a similar vein. Finally, the relationship between changes in material to non-material phenomena is examined to determine whether or

not the material changes observed archaeologically in the Yazoo Bluffs region are an indication of acculturation. Although there are both quantitative and qualitative changes in the archaeological assemblages in the transition from the "missionary" period to the "trader" period, the conclusion of this thesis is that archaeology alone cannot demonstrate changes in non-material aspects of Indian culture. The artifact itself does not tell how it was transmitted, who was doing the transmitting, nor how the item was used and valued by the recipients. However, used in conjunction with historical documents and basic cultural anthropological theory, the study of the material remains recovered archaeologically does contribute to an understanding of sociocultural change and stability for the Indians of this region. Its main contribution, the result of future investigations, may well be in the realm of settlement and subsistence changes.

Chapter 2 - Method and Theory

Abundant research has been devoted to the study of European material from archaeological sites, and its relevance to a better understanding of sociocultural change. However, few investigators have had the necessary control of the temporal element of their sites to contribute significantly to that which is already known in the historical and anthropological literature. As a result of recent work in the Yazoo Bluffs region, very tight cultural and temporal control of several early 18th century French and Indian sites has been established. This particular research examines the nature and degree of change in the historic "trade" material in this area when it was subjected to two different forms of culture contact: from a time when the Indians of the Yazoo Bluffs were under strong missionary influence (1698-1706), to a period when French-Indian interaction was more affected by economic factors (1719-1729). Differences in the material culture are apparent as a result of these dissimilar forms of interaction, but the significance of the differences will depend upon future testing. This research adds to our knowledge of culture contact situations and hopefully contributes to a better understanding of sociocultural change.

The idea of using archaeological materials for interpreting the relationship between European and Indian is by no means a new one. A recent attempt was Lyle Stone's volume, Fort Michilimackinac, An Archaeological Perspective on the Revolutionary Frontier (1974). Stone formulated a list of trade goods, based

upon historic inventories, and compared the quantity of these materials in French and English structures. He noted the radical decrease in trade goods as the fort changed its national orientation, and concluded that the decreasing relative importance of trading, from French to English occupation, was clearly demonstrated by the decrease in frequency of trade goods (Ibid:353).

I suggest that in order to utilize excavated "trade" material for interpreting changes in the interaction between Europeans and Indians, the researcher must be certain of the ethnicity of the distributive center (in this case, Fort Michilimackinac) and the time when the materials were being traded. Stone divided the chronology of Fort Michilimackinac into four periods, three of French and one of British settlement. The recovered artifacts were dated and assigned cultural affinity by virtue of their provenience within the structural remains from each period, but he deemphasized the fact that there was a great deal of overlap in the use of such structures both within the various French periods and between the French and British occupations (Ibid:348). Problems of this nature raise serious doubts as to the actual context of the artifacts in question.

It is also not adequate to merely examine the trade goods at the distributive center. An intensive examination of the aboriginal sites in the immediate vicinity is also required. It cannot be taken for granted, as Stone did for Fort Michilimackinac, that the trade materials recorded in the historical inventories were in actuality the only, or even the

principal, items of trade. In order to determine what were the actual trade goods at the distributive center for each period, various contemporaneous aboriginal components must be investigated. The in-ground evidence will reveal what was actually traded and not merely what was supposed to have been by virtue of the historical records. Several sites in the vicinity of Fort Michilimackinac have been examined (Quimby 1966; Stone 1972), but not in the systematic manner necessary to derive the conclusion Stone presented.

The overall problem with Stone's work lies not in his excellent descriptive report, but in the nature of the site itself. Fort Michilimackinac, like many other posts which served dual functions as military stations and distributive centers for local aboriginal populations, was occupied for a very long time and by different ethnic groups. The lengthy occupation creates the problem of dating the artifacts, and the overlap of different cultural groups obscures their actual ownership. If archaeology is to contribute to our understanding of the interaction between the European and the Indian, it is necessary that short-term, single-component sites, be examined. This should reduce the problem of artifact dating and dispense with the very real problem of cultural overlap.

Several European and Indian single-component sites with short-term occupations exist in the Yazoo Bluffs region, thus providing an excellent medium for a controlled study of contact situations. The accurate dating of the sites and their assignment to ethnic groups is obviously of fundamental

importance to this study. As a result of excavations at the Trudeau Site in West Feliciana Parish, Louisiana (Brain 1973) and analysis of the enormous historic collection retrieved from that site (Brain 1970; Brain et al.n.d. b), the Tunica Indian pottery of the early 18th century is well understood. As indicated in the introduction, and dealt with in more detail in the following chapter, the Tunica abandoned the Yazoo Bluffs region by 1706 and had very little additional contact with the remaining hostile inhabitants of the area. Theoretically, the discovery of a site bearing Tunica ceramic diagnostics was occupied prior to 1706 and, if European materials are in evidence, the site most likely post-dates 1698. It therefore dates to the "missionary" period. As will be discussed in succeeding sections, the Portland Site (22-M-12) dates to this period. Fort St. Pierre, occupied by the French between 1719 and 1729, provides a dating mechanism for aboriginal sites inhabited during the "trader" period of French-Indian contact. Several artifact categories, such as certain coin, button, and pipe types, have well-defined dates of initial distribution, those discovered at St. Pierre dating no earlier than several years preceding the construction of the fort (Brown 1976a). When found at surrounding aboriginal sites, they serve as indicators of contemporaneity with the occupation of Fort St. Pierre. In addition, complete aboriginal vessels found in sealed contexts at the fort date to the French occupation, and thus also serve as indicators of contemporaneity when found at

surrounding Indian sites.* The Lockguard Site (22-M-17) and probably the Wright's Bluff Site (22-M-15) date to the "Trader" period, and are hence most likely of Yazoo, Koroa, or Cfo derivation.

The fact that these sites can be arranged chronologically within a period of about thirty years duration presents an extraordinary situation for observing processes of sociocultural change. The word "process" has been a part of anthropological jargon for quite some time (See Boas 1896 in 1940), but there are many ways in which the term has been used. Robert Bee defined "process" as being the interaction of causal factors so as to produce a given situation. "Change process", which is of concern in this volume, is the interaction of causal factors so as to produce a transformation of one condition into another (Bee 1974:3-4). Paul Martin explained it as being:

...the analysis of a [cultural] system at one point in time and at one place, and how it is transformed into a different system in the same area at a later time.

(Martin 1972:11)

In any study of processual change it is the anthropologist's duty not only to document the fact of change, but to attempt to explain how the transformations took place. The "New Archaeology", or the "process school" as it has come to be called (Leone 1972b:22), has taken as its principal task the

* There are obviously a number of problems associated with the criteria for establishing contemporaneity. Presented above is the ideal, but the limitations will be pointed out below.

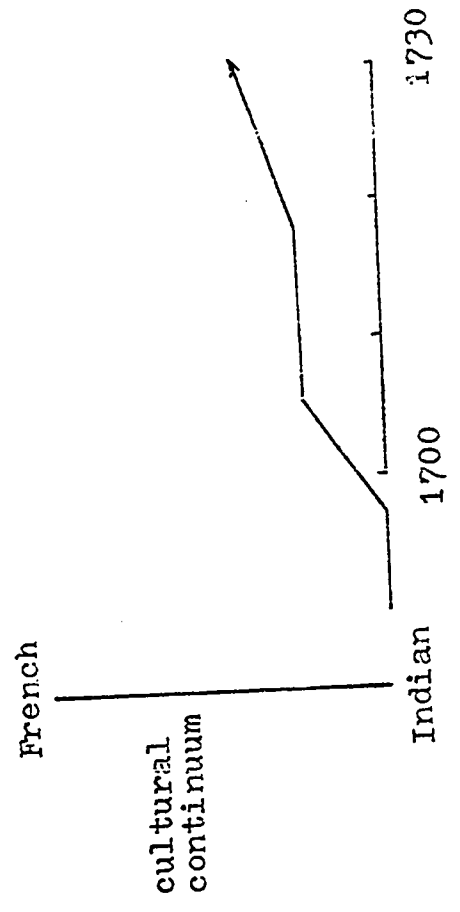
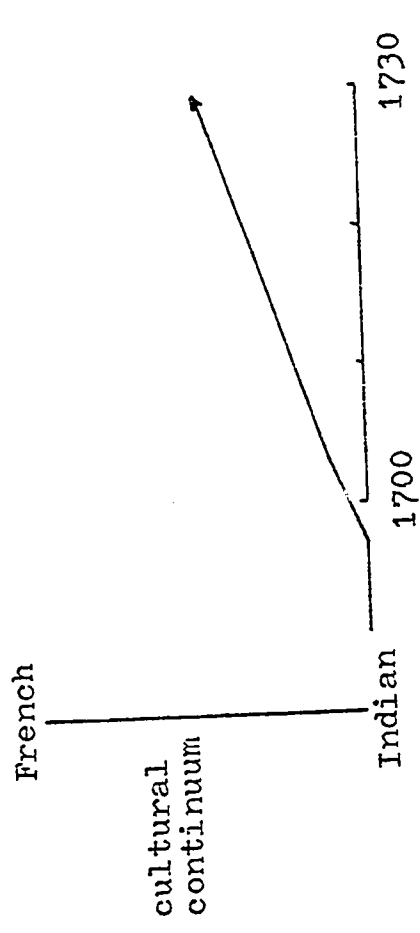
study of cultural processes. Members of this school reject the normative view of seeing change in culture arising from changes in shared ideas, values, and beliefs, but rather:

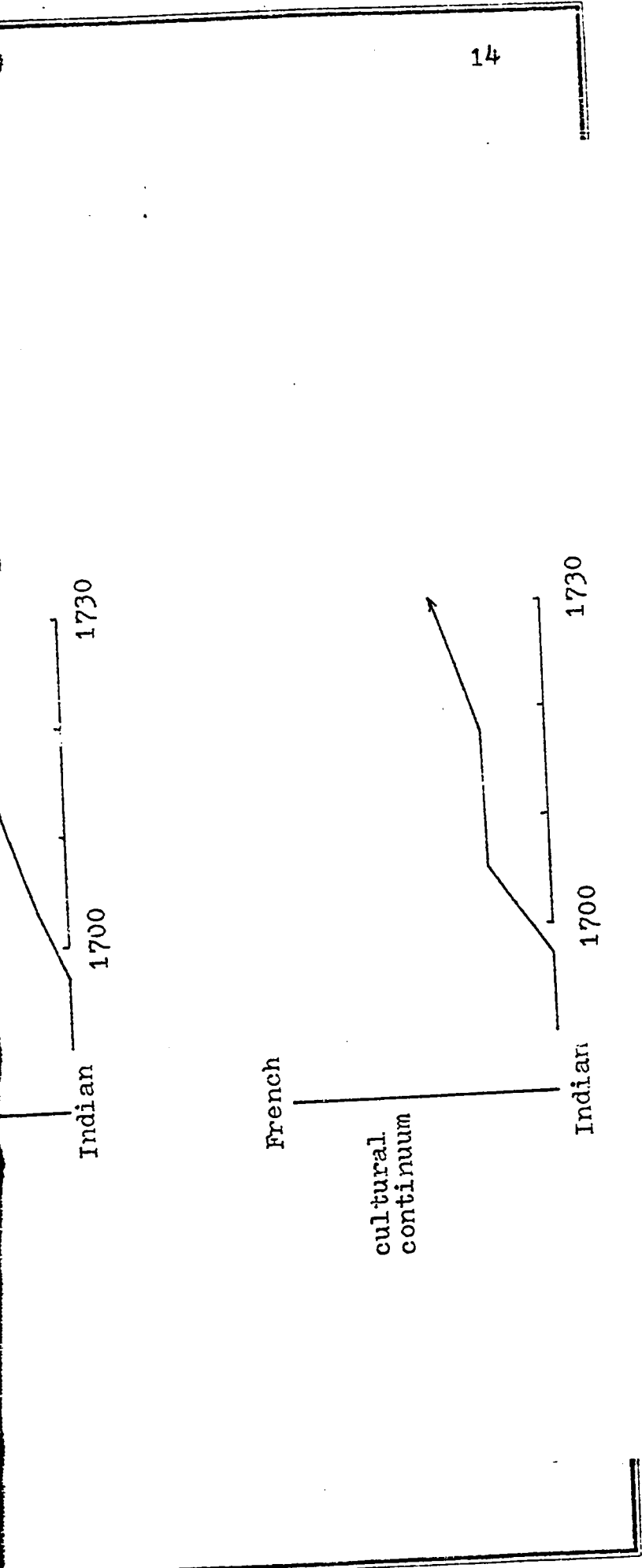
...view human behavior as a point of overlap (or "articulation") between a vast number of systems, each of which encompasses both cultural and non-cultural phenomena - often much more of the latter... Culture change comes about through minor variations in one or more systems, which grow, displace or reinforce others and reach equilibrium on a different plane.


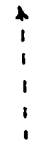
(Flannery 1972:103,4)

One might suppose that because temporal and ethnic elements are so well controlled in the Yazoo Bluffs region, conditions would be superb for an archaeological study of cultural processes. They are good, but certainly not superb. There are a number of limitations which, for the benefit of the critical reader, must be considered at the outset of this work. An idealized view of aboriginal sociocultural change resulting from French contact is depicted in figure 2a. In this view the various Indian groups in the Yazoo Bluffs region are considered to have had an identical culture whose material and non-material aspects changed in a uniform trajectory toward French culture. This model is much too simple. It assumes constant French influence upon these groups, when we know historically there was a gap in French activity in the area.* Furthermore, a change in

* It must be emphasized that the gap is of a historical nature and may not have existed in reality. For the purpose of this study, the gap is assumed to be true.





 Tunica
 Yazoo/Koroa/
 Ofo

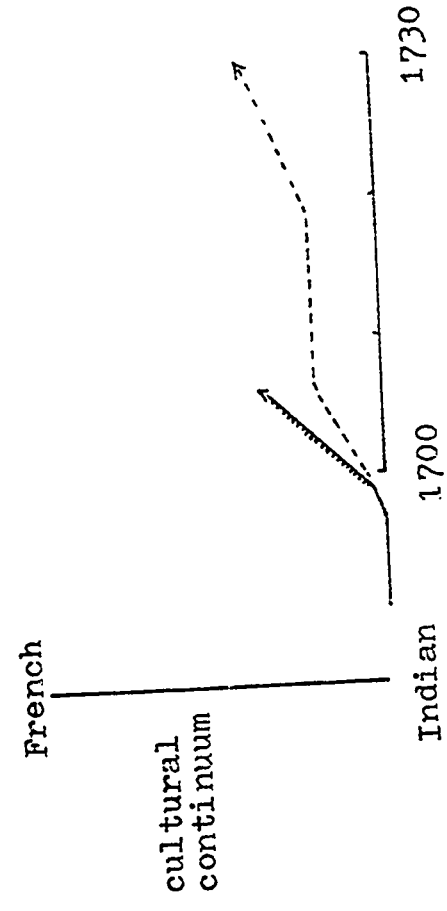


Figure 2
 Models of Aboriginal Sociocultural Change in the Yazoo Bluffs
 Region

orientation of French interest is not taken into consideration. While it will be discussed in greater detail in chapter 7 why it was decided to take an acculturation approach to the study of sociocultural change in the Yazoo Bluffs region, the basic reason was because I agree with the emphasis in acculturation studies of examining the interaction of individuals in the culture contact situation. It must always be remembered that individuals, the carriers of culture, come into contact rather than the total cultural systems. The individual knows only a portion of his culture's entire material and intangible inventory, that which is actually transmitted by him is conditioned primarily by the reasons for making the contact. Based on these premises, the aspects of culture which were transmitted by an 18th century French missionary would probably have been quite different from what a contemporary French trader would have presented. Performance of an act by a member of one autonomous cultural system, in this case being either the presentation or exchange of material goods, evokes a supporting response from a member of the other cultural system. Although the Indian may have received the same "trade" item, the missionary ultimately expected conversion while the trader expected merchandise of equivalent (or greater) value. There are mutually understood expectations in the performance of certain acts, but the actual reasons why each individual of the two cultural systems performs the acts are not necessarily the same, being founded upon different beliefs and attitudes.

With knowledge of the historical gap in the Yazoo Bluffs

region and the observation that different roles may affect the direction of sociocultural change, the process may have been more like that represented in figure 2b. It is assumed that sociocultural change would proceed faster when the French were in the area, and it is also assumed that the trajectory of change would be different in the "missionary" and "trader" periods.* There are still problems with the model. Although the total cultural system is being dealt with here, the reader should be aware that rarely is change manifested equally over the entire system. It is probable that the various subsystems reacted differently during the two periods. Another obvious shortcoming with the model is that only changes resulting from different forms of French contact have thus far been discussed. Cultural uniformity on the aboriginal level has been assumed. Cultural process is examined by analyzing the changes in one (cultural) system over time, but at least four aboriginal groups (Tunica, Yazoo, Koroa, and Ofo) resided in the Yazoo Bluffs region in the early 18th century. The Tunica received heaviest attention during the "missionary" period. In comparing sites of the two periods, it must be remembered that not only could time and different forms of French contact be responsible for variations in material assemblages, but so also could

* The model depicts the "missionary" period as having a greater acculturative effect than the "trader" period. This is a problem of graphic representation. The actual angle as drawn is of no importance, the purpose of the graph being merely to show that the angles are different.

selective preference by different ethnic groups. One positive note is that all of these groups were remnants of earlier powerful groups of the Mississippian cultural tradition, and there is thus believed to be a general cultural uniformity between them. However, as will be discussed in chapters 5 and 6, there are several differences in material culture which can be attributed to ethnic distinctions. Even under the assumption of general cultural uniformity, different levels of sociocultural change could have occurred as a result of the varying degrees of French contact during the two periods (figure 1c). One can easily see that the archaeological situation in the Yazoo Bluffs region is not as ideal as could be wished, even with all the controls. With the above limitations in mind, the analysis of changes in the material remains of different (but related) groups under varying stimuli through time can proceed, but the reader is forewarned that the interpretations are of only a very hypothetical nature.

If this study is in large part concerned with processes of change, it may be questioned why the strategy of the "New Archaeology" has not been employed in structuring the research. In other words, why each step of the research has not been presented as a series of hypotheses to be tested. I do not mean to imply that "law-and-order" practitioners characterize all of the "New Archaeology". Some prefer to work in a systems-theory framework (Flannery 1971; 1973), but there are a growing number of contemporary archaeologists who believe that our ultimate goal is to formulate laws of cultural dynamics. To them, the best

approach to understanding cultural process is through deduction, the hypotheses and tests being derived from general anthropological laws. Induction is allowed, but given only a small and insignificant role in hypothesis formulation (See Binford 1968: 16-18; 1972:118-19; Fritz and Plog 1970; Watson et al. 1971:9-12).

Explanation is, and should be, our fundamental goal (Binford 1972; Willey and Phillips 1958), but I do not believe that the formulation of general laws fits into this goal. Nor do I have enough confidence in existing general laws to deduce a series of hypotheses and to test them against the archaeological data. As with Levin (1973), I also do not feel secure, at all, in employing the Deductive-Nomological (D-N) model of "if-then" hypotheses (Fritz and Plog 1970). This model is of little use in the social sciences, as the reactions of an individual (or "culture") in a given situation depends not only upon the situation, but upon the individual's history. The Hypothetico-Deductive (H-D) model (Tuggle et al. 1972) provides more alternatives and hence appears more attractive, but it is in reality only one step removed from the D-N model. The danger in deducing hypotheses from fragile general laws can, I believe, do more to bias the data and warp the interpretation than can no hypotheses at all. The research presented in this volume is based upon the belief that if the problem(s) is fully laid out in detail with those data which should be collected to shed light on that problem, then interpretations as to the processes of change in this particular historic situation can be induced from the gathered data. Consider, for example, that

more gun parts or glass beads of a certain color are found in the "missionary" period as compared to the "trader" period. The fact that I designed a hypothesis or alternate hypotheses prior to excavation to "explain" these occurrences, does not necessarily mean that because my hypothesis turns out to be correct, when tested by archaeology, that the situation is now explained. Rather, the interpretations, induced from the archaeological finds, can now be rephrased as hypotheses. In this manner, my approach is following more in the line of Willey and Phillips (1958). It proceeds first from "culture-historical" integration" (observations and descriptions), to a level of "processual integration" whereby hypotheses as to regularities and patterns are derived from the data. These hypotheses can be tested by further archaeological investigation and/or through an independent data bank, such as the ethnohistorical record.

In this study of changes in material culture and other sociocultural aspects, I am drawing from the independent data banks of historical documents and archaeological discoveries. Each body of data has its problems. The historical record for the Yazoo Bluffs region is meager, and so I have drawn from other areas in Colonial Louisiana for understanding forms of interaction between French and Indians. Although the reasearch area has many historical gaps, the early 18th century French-Indian history can be considered a continuum whereby, for the most part, there are more facts than gaps. This is a situation which Kroeber (1938) noted is a major distinction between history and

anthropology and, in examining the nature of the archaeological information at hand, he seems to have been correct. In the Yazoo Bluffs region, nine historic sites have been tested. Most of these were short-term occupations.* In terms of archaeology, gaps exceed the facts. However, the lack of temporal continuity does not detract from the study of sociocultural change, as many scholars investigating cultural processes among living people have similarly been forced to partition their own continuous data into discrete static units in order to understand the interrelationships between the elements in the system:

Although other alternatives exist (e.g., Barth 1967), by far the majority of the studies of change have detected and documented change by analyzing conditions at two or more points in time, then extrapolating from these analyses the processes by which the change from one point to another took place...if the objective of a particular approach is to study changes in a system over an extensive time period, it is necessary (with few exceptions) to regard that system as if it were static - frozen in time - at some point or points in its history (keeping in mind the importance of the structural duration, which is not inconsistent with such an "as if" set of conditions). If this were not done, it would be most difficult to understand how the elements of the system interrelate, and it would be impossible to detect changes in this interrelationship.

(Bee 1974:20)

The method of dividing cultural continuity into discrete static units is a useful technique for studying systemic relations of living peoples (Firth 1936; 1959; Mead 1956), but

* Only five sites are dealt with in this volume. Haynes Bluff (22-M-5) is probably the only site to have been occupied throughout the entire thirty-year period of study.

archaeology cannot be handled in exactly the same way. The total cultural system, contrary to Binford (1962a), is not represented in the materials and is not capable of being fully reconstructed, no matter how skilled the analyst. Admittedly, the potential of archaeology for reconstructing sociocultural phenomena has greatly expanded in the last two decades, but I do not believe archaeology will ever be able to recreate a "living" culture capable of being studied by cultural anthropological techniques. A further problem is that although the sites in the Yazoo Bluffs region must be dealt with as static units, they are no more static than the arbitrary divisions made by the cultural anthropologist. Even if the period of occupation of each site was infinitely small, the units still could not be considered perfect synchronic systems. The lapse of time between the time of deposition and the present must also be taken into consideration. Robert Ascher (1968) ably demonstrated that the process of decay is continually occurring on an archaeological site. The interrelationships between the deposited materials (and their reflection of sociocultural phenomena) becomes more and more diffuse as time progresses. After 250 years of decay, erosion, and cultivation, the discrete archaeological components considered in this study have no doubt changed profoundly. However, for purposes of analysis, it must be assumed (perhaps an ill-founded assumption) that the rate of these dispersion processes has been equal at all sites. The fact that they are all located in similar settings on the loess bluff hills contributes to the belief that

environmental factors have affected the sites equally. Under this assumption, it is possible to compare the sites as if they are static units of past behavior.

Another problem, one which the critical reader will immediately detect, is that the imbalance in the historic and archaeological data banks for the Yazoo Bluffs region has resulted in them being used in different ways. The historic information, because it is minimal for this area, is being used more or less deductively. French-Indian interaction in all of Colonial Louisiana has been examined for a better understanding of general cultural processes which may have been operating in the immediate area of research. Comparisons are drawn with the historical information in the Yazoo Bluffs region to determine if there are indeed indications of similar processes at work. In investigating the historical literature for similar cultural processes which may also be reflected in the archaeology, I have not merely tried to "put flesh on the archaeological skeleton" (Flannery 1972:105). Rather, it is hoped that areas of similarity and deviance in the different data banks will improve our understanding of French-Indian interaction in this area. As Kent Flannery has suggested, the deviations may be the critical factor in understanding sociocultural change:

...These differences are in some ways analogous to the "residuals" left when the principal factors in a factor analysis have been run, and they may constitute unexpectedly critical data. When the archaeologist sets himself the task of explaining the differences between the observed archaeological pattern and the pattern predicted by the ethnographic

model, he may come up with process data not obtained through the use of analogy alone.
(Flannery 1972:105-106)

The archaeological evidence for the Yazoo Bluffs region is located on the opposite extreme of the scarcity/abundance information continuum. In terms of known, excavated, and published French-Indian historic sites, there are perhaps more in this region of study than in any other area of Colonial Louisiana. I am thus in the position of arguing more or less inductively from the Yazoo archaeological data, drawing in some comparisons from other sites in other areas, for interpreting cultural processes as seen from the ground. Although my treatment of historical and archaeological data may seem to be opposed, I believe they are not. Used together they give a much clearer interpretation of historical reconstruction and cultural processes for the Yazoo Bluffs region than could ever be formed by using either data base alone. It is hoped that this case study will shed some light on cultural processes observed elsewhere between contacting cultural systems. Both Robert Schuyler (1972:123) and Mark Leone (1972b) have stressed the potential of the growing fields of historic archaeology, ethnographic archaeology, and the science of material objects for better understanding cultural processes:

I would like to suggest that these three marginally affiliated types of archaeology represent, among other things, potential tangents allowing archaeologists data amenable to their sole unaddressed aim. Studies of culture change may either be too expensive or yield too prosaic a set of results when using a prehistoric laboratory...Further, considering

the range of pressures on archaeologists, the exigencies of our own culture point out quite clearly that we know almost nothing about the effects of technology and material culture on other cultural subsystems and vice versa. That archaeology should expand into such domains would seem implausible, if it had not already begun (Leone 1972b:26-27).

In this volume I deal, in different degrees, with all three of the "new" fields referred to above by Leone. My form of ethnographic archaeology, however, is not one of observing how introduced items are used in a present-day context by descendants of the various Indian groups. Rather, it has consisted of examining historic accounts which indicate how these materials were employed in the past. The combined use of all three fields provides a better understanding of French-Indian interaction and cultural processes than any one field used alone.

Part II - The Yazoo Bluffs Region in Ethnohistorical Perspective

Introduction

In order to investigate sociocultural changes resulting from French-Indian contact, it is obvious that this study must be framed within a solid understanding of the ethnohistorical happenings in the Yazoo Bluffs region. This chapter is designed to provide that background. The first section is a review of the definitions of ethnohistory and the various ways in which it has been used. The second deals with the role of Louisiana in the broader perspective of French colonial history. This is followed by a detailed examination of the early 18th century of the Yazoo Bluffs region. The sociocultural aspects of the various local Indian groups and their French counterparts are dealt with in the fourth and fifth sections respectively.

The Concept of Ethnohistory

The Indian Land Claims Commission was established in the 1950's. As a result of this action, many ethnologists and historians were hired to investigate claims to certain tracts of land. One such group in the Ohio Valley region made it known that ethnologists in general were neglecting a vital source of information concerning American Indian cultures -

the historical document. They found that information concerning culture content and change through time is often much better preserved in historic documents than in the memories of living informants. In 1954 the members of the Ohio Valley Historic Indian Conference founded the journal Ethnohistory (Eggan 1961: 6; Wedel 1976:3-4). This journal is designed to provide:

...original research in the documentary history of the culture and movements of primitive peoples, and related problems of broader scope.
(Washburn 1961:31)

Although ethnohistory has only recently been recognized, certain ethnologists have used historical records for quite some time (Wedel 1976:3). According to David Baerreis (1961: 49), the term "ethnohistory" was first used in Clark Wissler's volume, The Indians of Greater New York and the Lower Hudson (1909). Its definition to Wissler consisted in reconstructing an ethnography of peoples once resident in a region by using cultural data extracted from historical narratives. This concept was later incorporated in the "Direct Historical Approach." Julian Steward defined this approach:

Methodologically, the direct historical involves the elementary logic of working from the known to the unknown. First, sites of the historic period are located. These are preferably, but not necessarily, those of identifiable tribes. Second, the cultural complexes of the sites are determined. Third, sequences are carried backward in time to protohistoric periods and cultures.
(Steward 1942:337)

Although this method was not defined until 1942, it was employed at least as early as the second decade of the 20th

century by N. C. Nelson (1914) in his work in the Galisteo Basin, New Mexico, but some of the finest examples of its execution are William Duncan Strong's (1935; 1940) and Waldo Wedel's (1940) investigations in the Plains region, Henry Collins (1940) work in the Arctic, and William Ritchie's (1932) research in New York. Others, such as John R. Swanton, Frank Speck, and Roland B. Dixon, were at the same time using historical documents essentially for cultural reconstruction.

The reason why ethnohistory had such a "hard birth" is probably because it cannot be isolated as a separate discipline. Wilcomb Washburn described it as being a "process" and a "method". It is not a rigid discipline with fixed borders and strict entrance requirements (1961:45). Similarly, Mildred Mott Wedel (1976:2) and David Baerreis saw it as being an "approach":

What, then, is the nature of an ethnohistoric approach in archaeology? In essence, it clearly centers upon the use of documentary sources in conjunction with the study of data from archaeological excavation. Its range is broad and not confined solely to the determination of who lived at a particular site and when they occupied that location. Under favorable circumstances, documentary materials can provide data on the pattern of incorporation of the native groups into a broader social system, on changing economic patterns, or on the total pattern of culture change or acculturation to express it more simply and comprehensively. Ethnohistory in conjunction with ethnology provides the means for coordinating diverse kinds of data in the solution of anthropological problems.

(Baerreis 1961:70)

Each discipline which participates in the ethnohistoric approach contributes enormously to the others (Eggan 1961:8;

Hallowell 1957), and so it was perhaps inevitable that its value would eventually be recognized. Alfred Kroeber, Edward Sapir, Claude Levi-Strauss and others have made it quite clear that the gap between historians and anthropologists is really quite small. Both disciplines have been moving in the same direction, at the same pace, but with different orientations. The historian walks backwards with eyes fixed on concrete and specific events, and withdraws from them to provide a richer perspective. The anthropologist however walks forward, making a transition from particular to general and learning more and more of the unconscious by studying the conscious:

A true two-faced Janus, it is the solidarity of the two disciplines that makes it possible to keep the whole road in sight.

(Levi-Strauss 1967b:25)

It may be that the historian is too conscious of historical change, the ethnologist too little. It may also be true that the historian is too little aware of the social organization of the peoples he studies, while the ethnologist is too little aware of the less tangible elements of a culture, its esprit, for example. Both could profit from greater factual knowledge of the past, and it is in this area that the ethnohistorian, from whatever discipline he may come, is expanding our horizons.

Only when history and ethnology have been illuminated by detailed research in both English and Indian cultures, when the best theories have been cautiously applied, and when the final interpreter has written in full understanding of the values and history of both groups, will we attain the method and ideal of ethnohistory.

(Washburn 1961:40-41)

The development of ethnohistory is still in its youth, but thus far it has gone well beyond the advances of the "Direct

Historical Approach". The practitioners of the latter method had as their principal goal the identification of a site's occupants. Even in this they were not overly rigorous. Baerreis took exception to Steward's statement that located sites need not be of identifiable tribes (see p. 26), as this departs from sound ethnohistoric methods. In order to take full advantage of ethnology and documentary history, it is essential that identifiable sites be used as a point of departure. When one considers the rapid population and cultural changes in various areas during the historic period, the importance of identifying sites with specific ethnic groups is readily apparent (Baerreis 1961:51-52). Ronald Mason made a similar point in his discussion of "site-unit ethnicity" vs. "territorial ethnicity" (1976:351-352). As will be demonstrated in this thesis, identifying sites with particular groups is not an easy task. There are many problems involved. Intensive historical research is obviously required, but the investigator must also critically evaluate the document he is using (Pargellis 1957:116-117; Wedel 1976:12-17). Archaeologists who have performed detailed historical research in their areas have inevitably discovered that there was often a great deal of overlap among different ethnic groups. Sorting out which group was where at what time is generally a complex problem (Brain et al. 1974; Mason 1976; Phillips et al. 1951:347-421; Quimby 1957).

Even after intensive historical research is completed, the ethnohistorian faces a problem which historians have been aware

of for quite some time. Many of the groups one is interested in simply do not have much written about them. The records are often one-sided. As the reader will see in the following sections, this is a situation which exists in the Yazoo Bluffs region. The French had contact with almost all of the aboriginal groups located along the bluffs bordering the eastern shore of the Mississippi River, yet only the Natchez and Tunica Indians (especially the former) are satisfactorily described. Our knowledge of the Yazoo, Koroa, Ofo, etc. is minimal. Certainly they were smaller than the Natchez and Tunica, and this in part accounts for the lack of concern over them, but undoubtedly a large part of the neglect was due to their pro-English sentiments. Unlike French missionaries, most English traders were illiterate and were unable to record their activities among the Indians.

The above are just a few of the problems encountered in using ethnohistory as an approach. Most of these difficulties were not even recognized by anthropologists until they started to delve intensively into the historical documents. Although the obstacles to understanding the history and lifeways of native peoples in contact with Western cultures are considerable, they are not insurmountable. Hopefully in the future, and perhaps even in this volume, archaeology will contribute its share in overcoming some of these obstacles.

Chapter 3 - The Role of Louisiana in French Colonial History

In order to understand more fully the history of the Yazoo Bluffs region, the interaction between French and Indian, it is necessary to look at the area in relation to general historical happenings. I had hoped to confine this section to a concise overview of Louisiana's history, but I found that in order to understand the role of the French in Louisiana, it was necessary to examine the greater Southeastern scene, including the English and Spanish colonies. Similarly, the French presence in Louisiana was directly related to events in New France, and so the history of Canada had to be dealt with. For practical purposes, there had to be some cut-off point. As the emphasis is on Louisiana, French colonial history is reviewed only insofar as it relates to its southern-most possession. Similarly, other colonial powers are dealt with only in relation to the activities of the French settlers.*

Prior to the late 17th century, French activity in the New World was primarily confined to Canada. There were, however, a few attempts to colonize more southernly regions in earlier times. In 1555, a French Huguenot settlement was established at the mouth of the Rio de Janeiro in Brazil, but the Portuguese

* This section will be confined essentially to the "Great Man" syndrome, as its purpose is to place the case study of the Yazoo Bluffs region into overall historical perspective. Succeeding sections will deal more with French sociocultural history.

soon put a stop to this intrusion. Nine years later, the Huguenots established another settlement on the Florida coast, but the Spanish, who founded St. Augustine in 1565, similarly eliminated this foreign intervention. Three years prior to this date Spaniards had destroyed Jean Ribault's colony on the South Carolina coast, and the continued French settlement attempts must have encouraged the Spanish to quickly protect their interests (French 1869:165-362; Le Moyne de Morgues 1875).

Failing to compete with the Spanish and Portuguese, France concentrated on her Canadian interests. It was almost a century before France was able to expand out of her principal settlements along the St. Lawrence River. The Huron Indians effectively maintained middleman status over the fur trade in the first half of the 17th century and, although allied to France, prevented French expansion. The Iroquois virtually annihilated the Huron in 1649 and waged an intermittent war which was to plague the French colony throughout the remainder of the 17th century (Eccles 1969:53-56; Hunt 1960; Trigger 1968; Zoltvany 1969:50-60).

With the termination of the Huron as middlemen, French colonists started to venture farther west, to make contact with Indian groups they had earlier only heard about. Jean Nicolet made the first known contact in the deep interior. In 1638 he voyaged to the Fox River to establish relations with the Winnebago, the ancient foes of the Huron (Eccles 1969:37), but it was not until 1656 that the French seriously attempted to open up the interior. In that year thirty Frenchmen, including

Pierre Esprit Radisson and Médart Chouart de Groseilliers traveled extensively in western regions. A trading post was established on the south shore of Lake Superior in 1660. Such activity was of course a threat to the Iroquois who wished to fill the middleman vacuum left by the Huron (Ibid.:55-56).

Jean-Baptiste Colbert, minister of the marine and Louis XIV's principal administrator, was strictly opposed to the westward expansion which started in the 1650's. He was certainly not against the fur trade, but he did not want it to hinder his long-range plans for Canada's development. Colbert thought the only justification for expansion was to either forestall other nations from moving west or to set up a year-round post on a southern sea. The fur trade certainly was not a justification, as it served to draw men away from the St. Lawrence settlements and into the wilderness. It is hence ironic that Colbert opened up the floodgates to a greater extension of the fur trade. With the renewal of Iroquois attacks in the 1660's, Colbert sent a large army to New France to retaliate. They were beaten badly by the Mohawk in 1666, but in the autumn of that same year they managed to burn some of the latter's villages and destroy their winter food supplies. The Iroquois sued for peace in 1667, and this event, combined with the inability of France to finance the new colonial industries in the 1670's* completely opened up the wilderness

* France was then at war with Holland.

to the fur traders (Eccles 1969:60-82, 103-106; Zoltvany 1969:9-18).

Jean Talon, the Intendent of New France, did not heed Colbert's instructions. In 1668 Jean Peré was sent out to Lake Superior to seek copper mines. The following year Adrien Jollier was sent out to join him, and by 1670 a number of French traders, such as Nicholas Perrot and Louis Jolliet had established trading posts on Green Bay and were trading on the Wisconsin River. In 1672 Louis Jolliet was sent out to locate the Mississippi River and the direction of its flow. Colbert realized the potential of Jolliet's discovery, but felt the population of New France needed to be larger before additional colonization could be considered. Talon returned to France and Louis de Buade, Comte de Frontenac et de Palluau was appointed governor-general. He had an even more aggressive expansionist policy than Talon's. His concern with the short term benefits of the fur trade resulted in his secret disobedience of Colbert's will. Fort Frontenac was built at the eastern end of Lake Ontario and additional posts were constructed at Niagara in 1676, one each on the St. Joseph and Illinois Rivers in 1679 and 1680, and two on the Mississippi below the Ohio River (Eccles 1969:106-9; Delanglez 1948b).

Developments in the southern part of the continent contributed to French expansion. England established Charles Town*in 1670, but because of the surrounding Westo Indians, who

* Located near present-day Charleston, South Carolina

served as their middlemen, were unable to move directly into the Indian trade. With the aid of the Shawnee, the English destroyed the Westo in 1680 and their traders rapidly moved west into the interior (Crane 1929:3-21). It hence became imperative that France control the Mississippi River. In 1682 René-Robert Cavelier, Sieur de La Salle was allowed to explore the Mississippi. Colbert and Louis XIV were led to believe that La Salle's purpose was to explore and claim land for France, but Frontenac was chiefly concerned with using the claims for a monopolization of the fur trade (Eccles 1969:109; Osler 1967). La Salle thus initiated trade relations with the various aboriginal groups he met on his travels. With the addition of this vast new area under the French colony, France was confronted with a problem. The only way the land could be controlled was by the Indian groups and in order to hold their allegiance, the wilderness posts had to be manned by *coureurs de bois*, missionaries, and soldiers. The movement of people to these areas hence served to diminish the population of the St. Lawrence Valley and make the fur trade an even more important aspect of Canadian economy (Zoltvany 1969:18-19). The opening of the west also hindered the economic interests of the major settlements along the St. Lawrence River. Colbert tried to bring the Indians back east by holding annual trade fairs in Montreal, but these only lasted for several years. By 1680 Montreal became merely an outpost for voyages to the west (Eccles 1969:111-112).

The Iroquois, having made peace with the aboriginal groups

along their immediate borders, again turned to the west in their vendetta against the French. The Illinois country was invaded in 1680. French posts, voyageurs, and even Fort Frontenac were subjected to raids. Le Pevre de la Barre replaced Frontenac in 1682. Two years later he waged an attack on the Iroquois at Fort Frontenac, and, although peace was made, the French were humiliated by the voiced threats of the Iroquois against the Illinois Indians. The French allies were outraged and La Barre, made the scapegoat, was dismissed. He was succeeded by Jacques-Rene de Brisay, Marquis de Denonville in 1685. Relations with the English were particularly tense at this time. Although a peace treaty was made with the Iroquois in 1689, this was soon nullified when war broke out between England and France. In the War of the League of Augsburg (also called King Williams War), which lasted from 1689 to 1697, England and Spain were allied against France. The English used their Iroquois allies to destroy the settlement of Lachine, located near Montreal. Frontenac, having replaced Denonville in 1689, retaliated by attacking the English colonies. Acadia was taken by the New England colonists, but they failed to take Quebec. France could not destroy New England and the English could not destroy New France, so the war resulted in a series of savage raids by small war parties. As the war continued, the English aid to the Iroquois diminished, and the French brought the battles to the Iroquois' own lands. In 1696 the villages of the Onondaga and Oneida were completely destroyed and the Iroquois earnestly sued for peace. The official treaty made

with the Iroquois in 1701 ended a century of conflict with this powerful group (Eccles 1969:113-125; Howell 1973:110-11).

It is ironic that with peace finally made with the Iroquois, a period when France had its greatest control of the western territories. Louis XIV ordered the destruction of the posts in these areas and called the garrisons back to the central colony. Fort St. Louis on the Illinois River remained open, but only for military purposes. This removal was directly related to the economic situation in Europe. A glut on the beaver market occurred at the end of the 17th century and there was no longer the demand for furs. The price for beaver hence fell drastically. As a result of the breakdown in the Iroquois barrier, the French allies started taking their furs to the English at Albany. Control of the west started to slip away and so, to reverse the shift, Antoine Laumet de Lamothe de Cadillac persuaded the minister of marine to establish a large settlement at Detroit and move all the allied Indians to that location. The purpose of this consolidation was to keep the Iroquois in line and to prevent English expansion (Surrey 1916:316-317). Hector de Callières, successor to Frontenac,* was against Cadillac's plan, and for good reason. The establishment of Detroit served to bring the French allies and Iroquois closer together, both physically and socially, and the allied Indians still continued to take their furs to Albany (Eccles 1969:125-126; Keesing 1939:65-66).

* Frontenac died in 1698.

The peace secured with England in 1697 was a very unstable one. At the turn of the century it looked as if war was going to break out again. The Spanish throne was vacant and it was to go to either the grandson of Louis XIV or a member of the Habsburg family. Depending upon the outcome, France was to either defend or assault Spain (Ibid:130). In 1698, Pierre Le Moyne d'Iberville, a Canadian hero of the preceding war, was sent to the Gulf of Mexico to establish a settlement near the recently constructed Spanish Fort Pensacola. There were also rumors that the English, under Daniel Coxe, were attempting to found a colony on the Mississippi River. The rumors turned out to be true, as Jean-Baptiste Le Moyne de Bienville, brother to d'Iberville, encountered one of Coxe's ships on that river in the fall of 1698. The War of the Spanish Succession (also called Queen Anne's War) finally did break out in 1701. Louis XIV's grandson was the heir, and so France ended up in alliance with Spain (Giraud 1974:22-25; Howell 1973:113-115; Rowland and Sanders 1929:256-257).

The colony of Louisiana had a very ominous beginning. It was a reversal of Colbert's non-expansionist policy and, what with the opening up of a southern post, it was seen as a threat to the merchants of New France (Surrey 1916:chap.XVIII). It might have been different if the fur trade was as lucrative an enterprise in the Southeast as in the Northwest, but such was not the case. Although beaver were plentiful, its fur was of an inferior quality. The Indian trade in the Southeast revolved around leather (deer skins). There was a great demand for this

material in England, but a far lesser desire for it in France. Louisiana suffered from this discrepancy, as the British traders radiating out from Charles Town, Virginia, and later Georgia, were able to lavish the Indians with much more material (Surrey 1916:319-320). There was also a major difference in the actual transactions between European and Indian. The English trader had a much greater advantage over the *coureurs de bois* in cheating the Indians and getting better deals, because the missionaries were partially able to keep the French traders in line. There were no English missionaries to hamper individual trading interests (Crane 1929:109-115,152; Delanglez 1935:106). French traders found competition much more vigorous in the Southeast. In the north there was little direct contact between the English and French traders during the 17th century. The Iroquois formed a buffer around the English colonies and carried all the latter's trade interests inland. There was no buffer in the Southeast and so the French and English traders came into direct contact, a situation which inevitably created severe conflicts (Crane 1929:23).

Although the situation was not hopeful, d'Iberville and Bienville tried to create a strong colony. Fort Maurepas was built at Biloxi Bay in 1699 and a year later the small Fort de la Boulaye was constructed along the lower reaches of the Mississippi River. The latter was abandoned in either late 1704 or 1705. D'Iberville spent very little time in the new colony. He returned to France in 1699, leaving Sauvolle de la Villantray in command at Fort Maurepas. When he returned in 1700 he made

Sauvolle the new governor, but the latter died shortly thereafter and Bienville took command. D'Iberville left once more for France and subsequently returned with the news that England and France were at war. The capital of Louisiana was moved from Biloxi to Mobile Bay in 1701 in order to be closer to their Spanish allies at Pensacola. Bienville constructed Fort Louis at Mobile for added protection. D'Iberville left almost immediately for France and, because of various scandals, was unable to return to Louisiana. For the duration of the war the Louisiana colony was severely neglected. The lack of economic potential resulted in its low priority for aid. Were it not for Bienville, and his expertise in handling the native populations,* the Southeast might have fallen under English control a half century earlier than it actually did (French 1869:19-76,96; Giraud 1974:33-39; Howell 1973:117-118; Rowland and Sanders 1932:39).

Major confrontations between the foreign powers occurred in 1702. In this year Colonel James Moore, operating out of Charles Town, led an expedition along the Georgia coast. He destroyed a number of Spanish missions, but failed to take St. Augustine (Crane 1929:75-76). The Indians played a major role in this expedition, as they did in all military operations. Bienville was cognizant of their importance and tried to use the various groups as a buffer to protect Louisiana. In 1702,

* Bienville made a practice of learning the Indian languages and constantly flattering powerful Indian chiefs. It took much courtesy to compensate for the meager and cheap French products distributed in the first decade of the 18th century.

D'Iberville persuaded the Chickasaw and Choctaw to be French allies but, as Bienville soon learned, deep-rooted hostility between these two groups made them less than desirable allies (Howell 1973:118-121). The French had promised to establish a post among the Chickasaw, but they never followed through with their promise (Crane 1929:84; Rowland and Sanders 1929:23-25). Failure to provide a constant source for the distribution of European goods resulted in the Chickasaw siding with the English for the entire French dominion of Louisiana. A similar situation occurred in the Lower Mississippi Valley. The missionary Antoine Davion was placed among the Tunica Indians in 1699 and remained with them for about twenty years, but the Natchez Indians to the south (the most powerful group in the valley) were severely neglected by the French. Francois-Jolliet de Montigny started a mission among them in 1700, but left for France shortly thereafter (Delanglez 1935:24). Jean Francois Buisson de St. Cosme took his place, but was killed by a Chitimacha Indian war party in 1706. No missionary endeavors were attempted among the Natchez after this date (Swanton 1911:20-21), and so the traders from Charles Town had ample time to seduce the Natchez to English interests.

Bienville was too concerned with the immediate war to worry about establishing missions and trading posts. Charles Town learned of a French/Spanish plot to persuade the Apalachee Indians to attack the Lower Creeks and so in 1704 James Moore put together an army of 50 English and 1000 Indians and destroyed most of the Apalachee villages and their associated Spanish

missions (Boyd et al. 1951; Jones 1972). In the next six years the British similarly succeeded in destroying most of the Timucuan missions in Florida (Ehrmann 1940), established a major alliance with the Upper and Lower Creeks in 1705, and persuaded the Alabama Indians to oppose the French at Mobile. The Choctaws remained steadfast friends of the French, but their loyalty did them very little good.* Between 1704 and 1705 the Chickasaw waged devastating attacks against the Choctaw, the latter demanding guns from the French, but receiving little but promises in return. The Creeks, by this time allied with the English, assaulted a number of small groups along the Apalachicola River. The survivors moved west to be closer to the protection of the French at Mobile and the Spanish at Pensacola. Little convincing protection was offered however. After the failure of a combined French/Spanish naval attack against Charles Town in 1706, the English retaliated by burning Pensacola (French 1869:98). Mobile was next on the list. Thomas Welch, a veteran Chickasaw trader, and Thomas Nairne, an Indian agent, made plans for an attack on Mobile. In 1708, while Nairne was making peace with the Choctaw, Welch had council at the Yazoo with the Arkansas, Tourima, Taensa, Natchez, Koroa, and Yazoo Indians. Fortunately for the French, the concerted attack against Mobile was never realized. Rumors of a massive French/Spanish expedition against Charles Town delayed the campaign, and a personal vendetta resulted in Nairne being

* Even the Choctaw were left without a missionary until 1728 (Delanglez 1935:56)

jailed in Charles Town and subsequently shipped to England to answer charges made against him (Crane 1929:78-92; Rowland and Sanders 1929:39-41). The last major confrontation occurred in 1710. The settlement at Dauphin Island in Mobile Bay was destroyed in that year, but the capital itself escaped attack (Rowland & Sanders 1929:67).

While Louisiana was struggling to hold off the combined English/Indian forces, the situation in New France was almost the reverse. Phillippe de Rigaud, Marquis de Vaudreuil became governor-general in 1703 and he held this post until 1725. When the War of the Spanish Succession broke out, Vandreuil was hesitant to attack the New York colonies. The recent peace made with the Iroquois was too young to be tested. French policy in Acadia was rather different. The local Indians in this area were constantly encouraged to attack the New England settlements, even though the English at this time were trying to make a lasting peace with these Indians. In 1703, Leneuf de Beaubassin, with a party of 500 Indians and a few Canadians, destroyed the villages from Wells to Falmouth, and a year later Hertel de Rouville, with 50 Canadians and 250 Abenakis and Caughnawaga Iroquois, massacred the settlement of Deerfield, Massachusetts. The poorly trained New England settlers had neither the means to defend themselves properly nor the ability to put together an aggressive army, but they did have the capacity to wage a successful naval war. In retaliation for the Deerfield raid, New England destroyed the inoffensive Acadian settlements at Grand Pré in the Bay of Fundy and in 1709 attempted to conquer

all of Acadia and New France. The attack was two-pronged. One force was to go by sea to Quebec while the other was to travel overland from Albany to Montreal. The campaign failed because of poor organization, but the English did manage to capture the capital of Acadia (Port Royal) in 1710. They held this until the war ended in 1713 (Eccles 1969:132-141).

Although France was clearly the victor in the New World, they had lost in Europe. The Treaty of Utrecht hence drastically rearranged the colonial scene. The changes were: Hudson's Bay, Newfoundland, and Acadia (including the fisheries and the fur trade) were ceded to the British; France had to recognize British suzerainty over the Iroquois; and commerce with western Indians was to be open to traders of both nations (Zoltvany 1969:127-130). The treaty was ambiguous in some parts and so the Canadians generally ignored it (Ibid:22). The only real concession was Fort Bourbon on Hudson's Bay.* France still retained fishing rights off Newfoundland, their main concern, while Acadia became a buffer zone between the two powers. With the war ended, France was able to start protecting her colonial interests. Fortress Louisbourg was built on Cape Breton Island (renamed^A Île Royale) in 1713. It was designed as a stronghold to protect fishing stations and was also to serve as a naval base in guarding the St. Lawrence River (McLennan 1918; Zoltvany 1969:

* D'Iberville captured the English owned York factory at the end of the War of the League of Augsburg. He renamed it Fort Bourbon and the French held it through the duration of the following war (Eccles 1969:141).

131-135). The huge beaver surplus, which had glutted the market at the turn of the 18th century, was ruined by vermin in 1714, and so the demand for fur rose sharply (Eccles 1969:145). In order to intercept Indians heading for the British-owned forts on Hudson's Bay, the French established a chain of posts stretching from the Great Lakes to the Rockies (Zoltvany 1969:22). Fort Michilimackinac was ordered restored and garrisoned, and a number of fortifications were erected in the Mississippi Valley. Detroit, a mistake from the beginning, was allowed to "wither on the vine", and its incompetent promoter (Cadillac) was "punished" by being kicked upstairs. He became the governor of Louisiana in place of Bienville (Eccles 1969:142).

Cadillac hated Louisiana from the moment he arrived there. As Bienville was demoted to lieutenant-governor, it was inevitable that the two authorities failed to become friends. Whereas Bienville was more concerned with stabilizing the colony, Cadillac's interests largely revolved around personal gain. His two major goals were to find mines and initiate commercial relations between Louisiana and Mexico (Howell 1973:123)*. He failed in both endeavors. The French Crown had been trying to get merchants to support Louisiana since it was founded as it served only as a liability to the government. Antoine Crozat

* The former was his principal concern and was actually a strong factor in the initial establishment of Louisiana, whereas the English colonists had given up their search for mines by the end of the 17th century (Delanglez 1935:69)

received a trade monopoly in September of 1712. In return for this grant, he had to send a fixed number of settlers to the colony yearly, provide merchandise for the support of garrisons, and pay the Crown one-fifth of all the gold, silver, and precious stones taken from the colony. Under these conditions he was allowed the monopoly for 15 years and was free from all trade duties (Surrey 1916:156-157; Zoltvany 1969:135-138).

Crozat's post among the Natchez in 1713 was the first major French contact with the Natchez since the missionary St. Cosme was killed in 1706 (Giraud 1974:249-255; Swanton 1911:192). The English were establishing strong trade relations with the Lower Mississippi Valley groups at this time, thus severely threatening the French colony. Between 1713 and 1715 Price Hughes, a Welshman, waged a campaign to establish a British settlement at either Natchez or on the Yazoo River. He traveled throughout the area making friends with all the aboriginal groups. In 1714 a dozen Englishmen and 2,000 Alabamas, Creeks, and Chickasaws descended on the Choctaw and lavished them with merchandise. The Choctaw could hardly refuse to become comrades. Hughes was so effective that he was even able to persuade a number of French voyageurs to trade directly with Charles Town. Needless to say, Mobile was in an uproar. Fortunately, Cadillac left at this time to search for some mines, and Bienville was left in charge. Bienville told the Choctaw that Cadillac, whom they despised immensely, had gone for good and so they reestablished their loyalty to the French by arresting the English traders among them and plundering their storehouses.

Crozat's French traders at Natchez were instructed to arrest Hughes who was in the area in 1715, but they dared not. He finally was captured downriver from Natchez and was then escorted to Mobile. He was eventually released, but was assassinated en route to Carolina (Crane 1929:103-107; French 1969:124-127; Swanton 1911:193).

French control of the Natchez Indians was always rather precarious. Factionalism was evident from the initial establishment of Crozat's trading post. Early in 1714 the English faction killed a number of Frenchmen going up the Mississippi River to the Illinois country. Cadillac sent a small party with Bienville to crush the insurrection. Treachery was used to make the Natchez comply with French demands. The friendly Suns (Chiefs) of the Natchez came to Bienville to confer, but were imprisoned instead. He released them when the heads of two hostile Suns were delivered to him. The Natchez were then instructed to build Fort Rosalie for the French (Swanton 1911:193-204). Bienville had always been effective in his power demonstrations among smaller Indian groups but, as later events were to prove, the Natchez were not content to be treated in such an uncivilized manner (Ibid:220).

The rising English threat to Louisiana was drastically undermined in 1715. Since 1680, with the extermination of the Westo Indians, Charles Town protected its settlement by encouraging many aboriginal groups to establish themselves in the area. It was hoped that the formation of alliances between these groups would benefit the English colonists in the

event of war with France or Spain. The plan worked well up until the Yamassee War of 1715. Due to the injustices of traders, the large accumulation of native debts, and the fear of being taken as slaves, the Indians surrounding Charles Town delivered a blow to the colonists from which they were not soon to recover. Were it not for continued allegiance of the Catawba and the Cherokee, the English colony might have been entirely destroyed (Crane 1929:162-186). Louisiana rapidly took advantage of the unexpected turn of events. Fort Toulouse was built among the Alabamas and Upper Creeks in 1717 and the following year they made plans to build Fort Crèvecoeur among the Lower Creeks at the mouth of the Apalichicola River. The Spanish did not look kindly on having a French post so deep within their own territory and so the latter plan fell through (Crane 1929:256-261).

Jean-Michel de L'Epiney replaced Cadillac as governor of Louisiana in 1717. He lasted but a year as governor and Bienville once again moved into that position. Crozat gave up his commercial monopoly in 1717, the failure of his enterprise resulting from his greed and lack of concern for the colonists. The primary purpose of Crozat's company was the establishment of commerce with Mexico (Rowland and Sanders 1929:89-90) and the welfare of the colonists apparently meant little to the accomplishment of this goal. Trade at first was almost entirely confined to the exporting of pelts and lumber from Mobile and Dauphin Island. Only four ships laden with merchandise left France between 1712 and 1716, and because they were so long in

coming to the colony, a good deal of the pelts were ruined by insects from the hot humid summers. The colonists were in desperate need of merchandise and yet Crozat was so jealous of his monopoly that he did not even allow foreign ships to enter colonial ports in order to provide the settlers with necessities. In the meantime, his officers made a great deal of profit from their transactions (Rowland and Sanders 1929:84-92; Surrey 1916:156-159). John Law took over Crozat's monopoly and established the Company of the West (also called the Mississippi Company or the Western Company), a subsidiary of the Company of the Indies (French 1869:134-136). In the next few years, the Louisiana colony looked as if it might finally get on its feet. In order to build up credit for his Company, Law "painted a picture of Louisiana with mountains of gold, precious metals, and simple natives ready to exchange these for the cheapest goods of Europe" (Chartrand 1973:59). The shiploads of people who poured into the colony were convinced they were entering another Peru (Delanglez 1937:34). The Company of the West earnestly tried to do what Crozat was supposed to have done. The Company's purpose was to provide the colony with people who would engage in agriculture for the export trade and so ships were sent regularly laden with merchandise and hundreds of French and German settlers. A large group of Germans arrived in Louisiana in 1719 and a year later 300 galley slaves from Dunkerque were deposited on the coast. An improved lot of 300 settlers were sent in the same year and in 1722, nine ships carrying 4,200 prospective settlers of German, French, and

Jewish origin arrived in the colony (Surrey 1916:158-162). Settlements began to spring up throughout the Lower Mississippi Valley. The colonies among the Yazoo (Fort St. Pierre), the Arkansas, and the Natchez Indians seemed to have the most promise, but the economic boom was extremely short-lived. Due to rampant speculation, Law's Mississippi "Bubble" burst in 1719 and Law himself was forced to leave France. The Company of the West remained in control of Louisiana until 1721, at which time its privileges were annulled and commissaires appointed by the king were placed in charge. The Company of the Indies reorganized itself in 1723* and continued to maintain its monopoly over Louisiana (Delanglez 1935:92; French 1869:159; Giraud 1966; Howell 1973:125-126; Rowland and Sanders 1927:55).

Between 1719 and 1721 France was again at war, but this time her ally was England and her foe Spain. There was actually very little fighting in the colonies. Bienville captured Pensacola in 1719, but lost it almost immediately thereafter. He recaptured it in the following year, but when the war ended in 1721, Pensacola went back to the Spaniards (Crane 1929: 262-263; French 1869:147-150; Holmes 1969). Although on paper England and France were allies, there was not a great demonstration of this allegiance in the Southeast. The English colony was still trying to get back on its feet since its recent Indian troubles. Indian policy changed drastically in the years following the Yamassee War. Instead of forming

* Surrey (1916:60) recorded this reorganization occurring in 1719.

alliances between the various native groups, the English now tried to keep a very unstable peace among them. This is readily seen in Tobias Fitch's (1725) visit among the Lower Creeks and Colonel George Chicken's (1725) travels among the Cherokee. Each governmental representative was encouraged to play off one group against the other, but to prevent the antagonisms from developing into armed conflict. Actual war would result in the British having to choose sides and this would damage their colonial commerce (Crane 1929:263-264). However, one group which the English consistently sided with was the Chickasaw, and, as stated earlier, the Chickasaw were mortal enemies of the Choctaw. In 1720, the two groups were at war, and at the same time the Chickasaw were giving the French a lot of trouble. To retaliate, Bienville offered goods to the Choctaw for Chickasaw scalps. The Choctaw threw all their weight against their enemies and the Chickasaw crumbled beneath this pressure. A great many of them moved to the Savannah River to be close to Charles Town, and some moved in with the Creeks. Only the western towns remained in their homeland and they made peace with Bienville in 1724 (Crane 1929:273; Mereness 1916:51).

In 1720 Bienville moved the capital from Mobile to New Biloxi. Dauphin Harbor was continually becoming shallower and unable to admit large ships. Bienville also wanted the capital to be closer to New Orleans, a rapidly growing town which he had established on the Mississippi River in 1718. In 1722 the capital was moved to New Orleans, where it remained until 1763. Louisiana became independent of the governor-general of

New France in 1723, and by this time it looked as if it might have survived its growing pains. The population had grown from 400 in 1717 to 5,000 (including 1,300 slaves) in 1724, and one-fifth of the colonists were settled around the capital (Howell 1973:127). The growing pains may have been over, but the Indian problems certainly were not. The Second Natchez War occurred at the end of 1722. Although it was initiated by the stupidity of the local commandant, the events were in no doubt related to a growing dissatisfaction among the Indians. The war itself resulted from a soldier shooting an unarmed Indian. The commander only reprimanded the soldier and so a series of minor Indian uprisings occurred throughout the settlement. These were soon brought to an end and the Natchez were forced to make up the damages by giving goods to the commander. The Third Natchez War followed close on the heels of the second. The hostile faction, perturbed by their loss of goods, revenged themselves by butchering some livestock on one of the French concessions. Bienville, what with his troubles with the Chickasaw, no doubt feared a general Indian uprising. He therefore unexpectedly arrived in Natchez in 1723 with a war party of Choctaw, Tunica, and Yazoo Indians. Although few lives were lost, a number of Natchez villages were destroyed.

The Natchez had not even realized they were at war with the French, and so Bienville's actions must have appeared to them as rather harsh. Even the friendly towns were threatened. To obtain peace the Natchez had to kill one of their principal Suns (chiefs) and pay damages (Mereness 1916:33-35; Swanton 1911:

207-216). Louisiana shortly had to pay itself for its treatment of the Natchez.

Bienville was recalled to France in 1725, and Roucher de la Périer succeeded him as governor. Périer is perhaps best known for his indiscrete choice of subordinates. In 1729 he appointed Sieur Chopart (also called Chépart and Dechepare) as commander of Fort Rosalie at Natchez. Chopart was a tyrant over settlers and Indians alike. Things got so bad that he was recalled to New Orleans. A trial was held and he was found guilty of exceeding his authority. Périer, believing him innocent, reinstated Chopart at Fort Rosalie. The breaking point in the relations between French and Indian occurred when Chopart, now believing himself a king, demanded that the Natchez remove themselves from one of their villages so that he could build a warehouse for the great French chief (Périer) on good land. The Great Sun of the Natchez was warned that if he failed to comply with the demands he would be sent bound hand and foot to New Orleans. In the fall of that year the Natchez rose against the French colony, liquidating almost the entire population. A month later the Indians of the Yazoo Bluffs region similarly massacred the French settlers at Fort St. Pierre (Delanglez 1937:41-43.; Howell 1973:129-130; Swanton 1911:217-234). Although these events did not go unpunished, the French in Louisiana were never able to recuperate from this crippling blow.

The Company of the Indies surrendered its charter to the Crown in 1732. Bienville returned as governor of Louisiana

in the following year, but by this time he was in no position to control the course of events. The English were well established among both the Upper and Lower Creeks, and were making themselves indispensable to the Choctaw (Beauchamps 1746; Swanton 1931:57-58). Failure to totally destroy the Chickasaw in 1724, came back to haunt Bienville in the 1730's. He attempted to rectify this mistake in 1736. While the younger brother of Diron d'Artaguiette marched south from Fort de Chartres in the Illinois country toward Chickasaw territory, Bienville marched north from Mobile. He brought with him 500 French, 600 friendly Choctaw, and 45 Blacks. The colonists were badly beaten in the famous battle at Ackia. Bienville made plans for another expedition against the Chickasaw in 1739. This time he was to march from Prudhomme Bluffs (Memphis) with an army of 1,200 Europeans and 2,500 Indians. Fever struck their camps and his army was severely reduced before the campaign even started. A small party was sent out to confront the Chickasaw, and the latter, thinking it was just an advance party, sued for peace. Bienville left Louisiana for good in 1739 and was replaced in the following year by Pierre de Regaud, Marquis de Vaudreuil (Rowland and Sanders 1927:297-314,447-461).

To the north, as the French and English continued to expand and protect their territories, it was inevitable that the two powers would eventually vie for the same western lands. In 1720 the English planned to construct a post at the mouth of the Niagara River. The French heard of the plans and so immediately received permission from the Seneca to build Fort

Niagara on the exact same location. In order to maintain the political balance, the Iroquois allowed the outraged English to establish the nearby Fort Oswego in 1724. In 1725, Marquis de Beauharnois, the recently appointed governor-general of New France, replaced the wooden post at Niagara with one designed of stone, and continued to expand French control of the west by building a chain of forts along Lake Champlain. Fort Frédéric at Crown Point was the principal post in this area (Eccles 1969:142-145).

The massive arms race was eventually bound to result in conflict. The War of the Austrian Succession (also called King George's War) broke out in 1744 and, unlike the previous wars between France, Spain and England, the North American continent became a primary theater (Zoltvany 1969:25). New England was the only English colony which wanted to get involved in this conflict.* The reasons were largely commercial. Fortress Louisbourg was not only a haven for the French navy and privateers, but it also competed with New England ports in the West Indian trade. Therefore, the English laid siege to the fortress in 1745. It fell after seven weeks of heavy bombardment and New England held it until the end of the war. With this important loss, the French strengthened Quebec and Fort Frédéric

* The only major confrontation between the French and English in the Southeast during this war was a Choctaw British faction attack upon a German settlement (Les Allemands) above New Orleans in 1748 (Howell 1973:132), and upon Natchez and a number of plantations near Mobile (Delanglez 1935:475)

and commenced a number of raids on English settlements. Saratoga was destroyed in 1745 and there were many additional minor skirmishes in the region between Albany and Boston. The Iroquois decided to refrain from defending the English colonists, and so the latter had to obtain allies elsewhere. In making their way over the Allegheny Mountains, the English convinced the Indian allies of the French to rebel. Because of the loss of Fortress Louisbourg and the subsequent severance of access to European goods, the French could no longer supply their allies with merchandise. Prior to the war, the French dealt in contraband materials from Albany, but this activity had stopped after 1744. The problems with their Indian allies eased in 1748 when the war ended and when ships arrived from France. Fortress Louisbourg was returned to New France in the peace treaty (Eccles 1969:150-154).

The peace between France and England was not a very lasting one. Comte de la Galissonière was appointed governor-general of New France in 1748. He realized that France's power in Europe was directly related to their ability to hold North America. He advocated the strengthening of Canada, Louisiana, and particularly the Ohio Valley, because if the latter fell under British control the French colonies would be severed (Zoltvany 1969:158-165). England was undoubtedly aware of the significance of the Ohio Valley because in 1748, the Lees, Fairfaxes, and Washingtons of Virginia formed the Ohio Company. They received one-half million acres of land in the Ohio Valley from the Crown and they were to sell it to land-hungry

settlers. The main problem was that the resident Indians first had to either be bought out or driven out. The French warned the Iroquois, Miami, Delaware, and Shawnee of the English plans, but because these groups needed the goods from the Ohio posts, they could not heed their French allies. Ange de Menneville, Marquis de Duquesne replaced Galissonière as governor-general in 1752 and his primary task was to fortify the Ohio. In 1753 he had a road constructed from Lake Erie to the headwaters of the Ohio and erected forts at strategic points. These posts included Fort Presqu'ile, Fort Le Boeuf, and Fort Machault (Venango). Unfortunately, France had a great deal of trouble keeping these posts manned. The Canadian traders had no desire to go into the Ohio Valley. France had to have them there to provide the Indians with goods equal in price and quantity to those offered by the English, but what the traders wanted in return (furs) were just not there. The French needed to control the Ohio as a buffer zone, but they certainly were not interested in its resources.

In 1753 Governor Dinwiddie of Virginia sent George Washington and a force of seven men to Fort Machault and Fort Le Boeuf to inform the French that they were infringing on English territory. This apparently did little good because in the following year, while Captain William Trent and a small Virginia militia were building a fort at the juncture of the Monongahela and Ohio Rivers, a French force arrived on the scene, forced Trent's surrender, destroyed his post, and then proceeded to construct Fort Duquesne. Washington was again sent out to

protest these militant actions. Contrecoeur, the commander of the Ohio country, sent Ensign Joseph Coulon de Villiers de Jumonville to intercept Washington and warn him to proceed no further. Villiers' party was ambushed by Washington and Villiers himself died in the encounter. Washington retreated to a small wooden stockade (Fort Necessity), but soon surrendered to Contrecoeur's force of Canadians and Indians (Eccles 1969:156-157).

This small skirmish marked the beginning of the Seven Years War (also called the French and Indian War). England let Prussia fight France in Europe while she devoted all of her energy to defeating France in North America. England thus had twice the power of France (even more so in the navy) at the beginning of the war (Zoltvany 1969:26-27). England's strength was further increased by her pre-war activity. Prior to the declaration of war, French convoys were sent over to stock Fortress Louisbourg and strengthen the Canadian militia. Some of these ships were captured off the coast of Newfoundland by English ships and more than 300 French merchant vessels and 800 sailors were captured at English ports and in the high seas.. The French navy was thus severely crippled when the war finally began (Eccles 1969:168).

It is actually quite amazing that the French held out as long as they did. Neither side, however, was blessed with particularly brilliant field commanders. The English planned a four point attack on New France. Primary targets were Acadia, Lake Champlain, Fort Niagara, and Fort Duquesne. Major General James Braddock was in charge of the Fort Duquesne campaign.

The French did not attack Braddock until he got over the Alleghenies on land which was claimed by France. Two-thirds of Braddock's army were killed or wounded by a force commanded by Daniel de Beaujeu. William Shirley, the Governor of Massachusetts, led the attack against Fort Niagara, but his army was depleted before it even got to Fort Oswego. The operation against Fort Frédéric was an even bigger fiasco. There was extremely poor commanding on both sides. England failed to capture Fort Frédéric and France failed to take Fort William Henry on Lake George. The Acadia campaign was an exercise in treachery. The Acadian settlers had lived under British authority prior to the war and, although they did not declare British citizenship, they did not care who ruled over them. When war broke out several hundred Acadians were forced, under pain of death, to fight with the French at Fort Beauséjour. The English captured the fort in 1755 and the surrender terms guaranteed that the Acadians would be pardoned. The English reneged on this promise and totally removed the Acadians from Nova Scotia (Eccles 1969:168-172).

With the exception of Acadia, the French generally had the upper hand in confrontations at the beginning of the war. Governor Vaudreuil of Louisiana was dismissed in 1753 and promoted to the position of governor-general of New France. Louis Billouard de Kerlerac became the last governor of Louisiana (Howell 1973:132). Under the able direction of Vaudreuil, the French continued to amass victories. Using Indians, colonial regulars, Canadian militia, and Troupes de

la Marine, the Anglo-American frontier settlements along the Alleghenies were completely destroyed, and in 1756 Fort Oswego was captured. In 1757, Louis-Joseph, Marquis de Montcalm, operating out of the recently built Fort Ticonderoga, forced the English at Fort William Henry to surrender, even though the French forces were considerably outnumbered. The defeat of New France three years later was not so much a result of population differences, but a result of divided command. Vaudreuil was a Canadian and he wanted to fight an aggressive guerilla-like war. Montcalm, on the other hand, was French and he wanted to wage a defensive European style war. The two leaders spent more time feuding than concentrating on the war. By 1758 Montcalm had even given the colony up as lost, and this was unfortunate because Montcalm was made supreme commander in that year. Unlike the French authorities, England's William Pitt concentrated all his efforts on winning the war, but Pitt also had to contend with foolish commanders. In 1758 Jeffrey Amherst spent so much time in the seige of Fortress Louisbourg that he was unable to attack Quebec that year. Louisbourg's main purpose was to house the French navy and thus protect the mouth of the St. Lawrence River. Its capture would have been quite an achievement if the French fleet were in residence but, as noted earlier, it had been destroyed at the beginning of the war. There was thus no reason to lay seige to Louisbourg in the first place (Eccles 1969:173-178).

The turning point perhaps came with the French loss of Fort Duquesne. The loss was not due to English victory, but to the

shortage of supplies and the defection of the Ohio Indian allies. The garrison withdrew to Fort Machault and the British moved in and built Fort Pitt on the previous location of Fort Duquesne. The loss of Duquesne made Montcalm even more pessimistic, although the situation did not warrant it. Furs were still coming into the colony with great regularity, men were still going west to trade, all interior lines of communication were open, and all short supply lines were intact. But Montcalm decided to strengthen Quebec and he did so by abandoning Forts Ticonderoga and Frédéric! Continuing with his defensive policy, he allowed James Wolfe's army to reach Quebec unopposed. The army was then allowed to establish itself on the Île d'Orleans opposite Quebec, and was finally permitted to mount their cannons which were used to pummel the homes of Quebec. What with the approach of winter, Wolfe luckily captured the city several days before he would have had to give up the siege. The city, but only the city, fell in 1759. The French had lost Fort Niagara several months earlier, but they still had more than enough strength to win the war. Chevalier de Levis, laid siege to Quebec in 1760 and severely beat the English occupants. The war was a stalemate and its outcome depended upon the nationality of the first ships to sail up the St. Lawrence with reinforcements in the spring of 1760. These ships were British and so Levis retired to Montreal. He and Vaudreuil tried to make a final stand at Montreal, but by this time they realized that France had given up on her North American colonies (Ibid:178-185).

The Seven Years War ended in 1760 and the Treaty of Paris was signed in 1763. Louisiana's fate was sealed by events in the north. It had played no role in the last war, but it suffered from the outcome. A pawn in the treaty, it was given to Spain in reward for her allegiance. Everything west of the Mississippi River belonged to Spain and everything east fell under British jurisdiction (Howell 1973). Although the political history of colonial France terminated in 1763, the social history certainly did not. However, the general historical framework has been presented and we can now begin to examine one area, the Yazoo Bluffs region, in somewhat greater detail to see how it fits into the overall scheme of French-Indian interaction in the Southeast.

Chapter 4 - Early 18th Century History of the Yazoo Bluffs Region

Introduction

The Yazoo Bluffs region does not appear to have played a principal role in colonial Louisiana's history. It is located about halfway between the two major centers - Mobile/New Orleans and the Illinois country. It was hence isolated, but isolation in itself was not the reason for its neglect. An area located only about 100 miles to the south was of deep concern to the French, and the reason is obvious. A large and powerful group of Indians, the Natchez, inhabited the region and in order to maintain the colony France had to court this major group. There were no major groups in the Yazoo Bluffs region after 1706, only small scattered villages of mixed populations. France was concerned with this area only to the extent that the English were, and what happened there is typical of what occurred in other frontier situations. The area was of importance in terms of a buffer zone. The small Indian groups were alternately seduced by first one colonial power and then the other, but once the Indians left, the area lost its significance and received no further attention. French influence in the Yazoo Bluffs region occurred in two major pulses, the "missionary" period (1698-1706) and the "trader" period (1719-1729), the latter corresponding to the occupation of Fort St. Pierre. The historical relations between the French and the local Indians during these two

periods is the subject of this chapter.

Aboriginal Inhabitants

Several Indian groups were situated along the lower reaches of the Yazoo River in the early 18th century. Included were the Tunica, Yazoo, Koroa, Ofo, Tioux, and Chakchiuma. The first record of people along this tributary was made by M. de la Salle in 1682. He did not visit the region, but noted the existence of "Tourika", "Jason", and "Kouera" (Cox 1905:164). M. Tonti, a member of the La Salle expedition, listed the "Ionica", "Yazon", "Coroa", and "Chonque" (Ibid:64). The Englishman Daniel Coxe also did not visit the Yazoo River groups, but he did obtain some information on their whereabouts. He gave their order of location on the "Yasque" River as follows: "Yassouees", "Tonicas", "Kourouas", "Thiou", "Samboukia", and "Epitoupa" (Coxe 1940:24). In 1699 M. d'Iberville, a contemporary of Daniel Coxe, was informed by a Taënsa Indian that the "Tonicas", "Ouispe", "Opocoulas", "Taposa", "Chaguesauma", "Outapa", and "Thysia" lived on the Yazoo River (Swanton 1911:10). He estimated a total of 400 men for the first three groups (Delanglez 1935:447).

The first recorded French contact occurred in 1698 when the missionaries Francois-Jolliet de Montigny, Thamar de la Source, and Antoine Davion ascended the Yazoo River in search of converts. The Superior of the Priests of the Foreign Missions,

on information received from either De Montigny or La Source, reported the presence of "Tunicas", "Yazoos", "Courouars", "Houspé" and "Tioux". The first four groups, which resided in three villages (the Koroa and Yazoo were combined), he estimated as having 300 people (Delanglez 1935:446-447). Father de Montigny himself estimated a combined total of 2,000 people in the region (Shea 1861:76). André Pénicaut, who visited the area in the spring of 1700, observed six Indian groups, including the "Tonicas", "Yasous", "Corcas", "Offogoulas", "Bitoupas", and "Oussipes" (French 1869:61). Several months later the Jesuit Father Gravier visited Father Davion's mission among the Tunica and, with information received from the latter, reported the presence of the "Toumika", "Jakou", and "Ounspik" (Delanglez 1935:446-447; Shea 1861:133; Thwaites 1896-1901:65:129-130). Curiously, he made no mention of the Koroa. As will be discussed shortly, the Tunica left the region several years after Gravier's visit, but his is the only reference to the Koroa having left the area for any extended period. The next person to describe the groups along the Yazoo River was Father Charlevoix in 1721. He recorded the presence of "Yasous", "Courcoas", and "Ofogoulas" in a mixed village with a combined total of 200 men at the most (Charlevoix 1923:233-234; Delanglez 1935:448; Swanton 1911:11). A year later Bénard de la Harpe reported a total population of about 250 for the "Yasons", "Courcois", "Offogoulas", and "Onspee" (Delanglez 1935:446-447). Father Le Petit reported that the Yazoo and Koroa numbered only 40 warriors by 1730 (Thwaites 1896-1900,68:221). Le Page du Pratz reported five groups as

having lived along the river. He included the "Yazous", "Coroas", "Chacchi-Oumas", "Ouse-Ogouias", and "Tapoussas". The first two groups could pronounce the phoneme "r", whereas the others (like the Natchez) could not (Le Page du Pratz 1774:299-300).

Yazoo

It was on the basis of the "r" phoneme that John R. Swanton included the Tunica, Yazoo, and Koroa in the Tunican linguistic group. This of course is little to base linguistic uniformity on, especially when there appears to have been considerable language diversity. The Superior of the Foreign Missions reported three languages, one spoken by the "Tunicas" and "Tioux", one by the "Yazoos" and "Courouars", and the last by the "Houspé" (Delanglez 1935:446). Gravier also noted that the groups he observed spoke three different languages and that Father Davion devoted himself to the Tunica language, to the exclusion of the others, because the Tunica were the largest (Shea 1861:133). There are a number of factors which could have been responsible for the noted linguistic diversity, the principal one no doubt being that these small groups were mere remnants of large prehistoric populations scattered throughout the Yazoo Basin. Jeffrey P. Brain et al. (1974) has argued quite convincingly that the Tunica were located in the northern part of the Basin at the time of the DeSoto Entrada, migrating down to the Yazoo Bluffs region in the period between Spanish and French

explorations. This could account for linguistic differences with the Yazoo Indians, as the ancestral roots of the latter are believed to have stretched far back into prehistory in the Yazoo Bluffs region. M. Tonty in 1682 referred to the river occupied by the "Ionica", "Yazou", and "Coroa" as the "river of the Yazou", even though the Tunica were much more numerous (Cox 1905:64; French 1846:82-83). Swanton felt that naming the river as such is related to Tonty's statement that the Yazoo are masters of the soil, and is perhaps indicative of this group's long domain in the area (Swanton 1911:332-334). The evidence is of course slim, but the hypothesis is worth testing. The activities of the Yazoo Indians during the "missionary period" are for the most part unknown. They apparently resided with a Koroa population at the time of first contact (Delanglez 1935:446), and there is some evidence to suggest that this mixture continued in later years (see p. 65). As a result of their probable involvement in the murder of the missionary Father Foucault, their relationship with the French was considerably strained in the first decade of the 18th century. Their sentiments laid essentially in the direction of the Chickasaws and the English (Swanton 1911:332-334). More will be said about these Indians under the discussion of the Yazoo Post.

Koroe

The Koroa have had a very complex history (to us). There must have been a number of different Koroa branches as they were encountered in quite a few widely-dispersed places. La Salle met them below the Natchez while Tonty, and later d' Iberville, signified they were situated farther to the north upon the west bank of the Mississippi River. Swanton believed that one branch, different from the one met by La Salle, occupied the territory along the Mississippi River near the mouth of the Yazoo. As a result of their role in the murder of Father Foucault, the Koroa were attacked by the Illinois and Quapaw in 1704. It may have been at this time that the Koroa repositioned themselves further up the Yazoo River to be closer to their pro-British allies, the Yazoo and Chickasaws (Swanton 1911:327-332). However, in almost all the early descriptions of the Yazoo Bluffs region, there appears to have been one branch which remained in close association with the Yazoo Indians. It is probable that the Yazoo-Koroa relationship had deep prehistoric roots.

Ofo

The Ofo, apparently the smallest group in the Yazoo Bluffs region, was of little concern to the early historians. Few agreed on the way their name was to be pronounced. The term "Ushpie" was the Tunica (and seemingly the Yazoo and Koroa also) name for the Ofo. Swanton believed that the terms "Ofogoula",

"Ouispe", "Opocoulas", "Oussipés", and "Ounspik" all referred to the Ofo (Swanton 1911:34; Swanton and Dorsey 1912:10-12). It is probable that some of the other groups listed earlier were also Ofo. Le Page du Pratz referred to them as the "Ouse-Ogoulas" and erroneously interpreted their name to mean "Nation of the Dog" (Le Page du Pratz 1774:300; Swanton and Dorsey 1912:10-11). The Ofo, Quapaw, and Biloxi were all members of the Siouan linguistic stock (Swanton 1911:7-8) and Swanton hypothesized that they migrated from the upper Ohio River in the early contact period (Swanton 1946:31). Like their close neighbors, the Ofo generally seem to have had pro-British inclinations. They did not participate in the massacre of the Yazoo Post in 1729, their constraint being interpreted as loyalty to the French (Swanton 1911:230; Swanton and Dorsey 1912:11; Thwaites 1896-1901,68:172-173). According to a survivor, however, their absence appears to have been more related to their not being told of the plans. They did attack the three French pirogues carrying Father Doutreleau shortly after the massacre (Rowland and Sanders 1927:100). The Ofo soon left the region to live with the Tunica (Swanton 1911:230). There is some record of Ofo activity in the Natchez area in the 1730's and 1740's, but they are not heard of again, as a group, after this period (Frank 1975:8; Rowland and Sanders 1932:622-623; Swanton 1946:166).

Tioux

The Tioux may not have resided in the Yazoo Bluffs region, as defined in this volume, but they certainly were located on the upper reaches of the Yazoo River in the late 17th century. They were in historic times, like the other Yazoo River groups, a remnant of a large prehistoric population. They were adopted into the lowest class of the Natchez in protohistoric times, and may have been one in the same as the "Koroa" met by La Salle in 1682 south of Natchez. This branch of the Koroa disappears (at least in name) after this date (Swanton 1911: 334-336). They were certainly the "Tougoulas" met by d'Iberville in 1699 (Ibid:46-47). However, a branch of the Tioux was still on the Yazoo River at this time (see p. 64). Their language was the same as the Tunica. Even the group which lived 20 years among the Natchez are reported to have still had:

...the same language as the Thoniquas and does not differ from them in any way as to customs.
(Diron d'Artaguiette 1722-1723 in Mereness 1916:46)

The Tioux "nation" occurs periodically in discussions of the various wars between the French and the Natchez, but otherwise very little is known about this particular group (Frank 1975:10; Rowland and Sanders 1927:77; Swanton 1911:334-336).

Chakchiuma

The only other known historic Indians who resided in the Yazoo Bluffs region were the Chakchiuma. Their homeland was on

the upper stretches of the Yazoo River at the juncture of the Yalobusha River. They inhabited the area between the Chickasaws and Choctaw, a somewhat unenviable position. The Chakchiuma, undoubtedly the "Saquechuma" met by DeSoto, had a very checkered history. They were declared responsible for the murder of a French missionary in 1704*, and yet they seemingly were not allied with pro-British groups. In 1700 some English traders persuaded the Quapaw to attack the Chakchiuma in order to obtain slaves. The aggressors were repulsed, but the Chakchiuma apparently felt the need for future protection as they subsequently migrated to the Yazoo Bluffs region. They remained there until 1702, at which time Father Davion made peace between the various parties, thus allowing the Chakchiuma to return to their homeland. Their later activities prove them to have been closely allied with the French. In 1722 Chakchiuma ambassadors informed the commandant of St. Pierre of the hostile intentions of the Chickasaw, and after the massacre of the colony in 1729 the Chakchiuma were responsible for destroying a portion of the combined Yazoo-Koroa group. As indicated in Plate 2, they apparently settled for a short while in the Yazoo Bluffs region after this date. A burial containing pottery identical with that used at Chakchiuma sites in the Tchula-Greenwood Bluff region to the north (Brown 1978a) was excavated on Mound A at

* Obviously the reference is to Father Foucault, but most authors attribute his death to Koroa and/or Yazoo assassins in 1702 (Swanton 1911:310).

Haynes Bluff (22-M-5) in 1974, perhaps reflecting this Chakchiuma occupation. In the following years the Chakchiuma served in the French campaigns against the Chickasaw (Brain 1975a; Swanton 1911:292 -296).

Tunica

The Tunica were the most populous group inhabiting the lower reaches of the Yazoo River at the turn of the 18th century. The French missionaries hence concentrated most of their attention on the Tunica and, consequently, more is known about them than about any of the other aboriginal groups in the area. Father Jacques Marquette was the first to refer to the Tunica when, in 1673, he called them the "Tanikwa" (Shea 1861:80). In their language this word meant "men" or "people", they themselves referring to their group as the "Yoron" (Swanton 1911:306). It is probable that the Tunica made contact with Europeans at a much earlier date. They were possibly the "Tanico" that DeSoto met in northeast Louisiana or southeast Arkansas. Choctaw and Chickasaw tradition identified "Tunica Oldfields" as being near the above areas, which lends credence to this hypothesis (Ibid:306). Jeffrey P. Brain et al. (1974) recently argued that the first village of Quizquiz, visited by DeSoto in 1541 (Bourne 1904:25), was the 16th century home of the Tunica and they placed its location at the Montgomery Site (15-N-6) in the northern Yazoo Basin (Brain et al. 1974:261-262).

On Marquette's 1676 map the Tunica were plotted west of the Methegamea and Arkansas Rivers, along with the "Akoroa" and several other tribes. Shortly thereafter, Joutel was told of two Tunica settlements in northeast Louisiana (Swanton 1911:307). In subsequent years they were always associated with the south bank of the Yazoo River (see p. 64-66).

Arrival of the French - The "Missionary" Period

As stated earlier, the first recorded French contact in the Yazoo Bluffs region was in 1698. In that year the Recollect missionaries De Montigny, La Source, and Davion descended the Mississippi and made quick stops at the Tunica and Taënsa before returning to their headquarters among the Arkansas. The Tunica were suffering from a severe epidemic at the time (Giraud 1974: 56), but the first meeting with the French missionaries was extremely friendly and anticipatory of the future close relationship between the two groups. There has been some question as to where the Tunica were actually situated along the Yazoo River. De Montigny reported the 1698 Tunica location as being 20 leagues (about 60 miles) above The Taënsa. La Source elaborated upon this information, stating that their position was 60 leagues below the Arkansas, their first village located 4 leagues inland from the Mississippi along a tributary (Shea 1861:80-81). D'Iberville, among the Taënsa in 1699, was told by his hosts that their enemies, the "Tonics", occupied

the first village along the river of the Chickasaw (Swanton 1911:308), thus agreeing with La Source's account. Davion returned to the Tunica in 1699 and established his mission (Ibid:20). There appears to have been a movement of some sort at this time as M. le Sueur, visiting the area in the spring of 1700, reported that Father Davion and the Tunica were located 7 leagues up the river, rather than four as suggested earlier. Father Gravier also visited the Tunica in 1700 and he recorded the distance to the mission as four leagues by water and then two by land. Had he continued by water, a total of seven leagues would have been covered and he would have arrived at the Haynes Bluff Site (22-M-5). André Pénicaut, who accompanied Le Sueur, noted that the "Tonicas" were situated, in order of ascent, after the "Yasoux" and "Offogoulas" (Ibid:308).*

Daniel Coxe listed them second after the "Yassouees" (Coxe 1940:24), but it is not clear at which time he was referring to. He also did not visit the region. Although more evidence is obviously required, it is possible that the principal settlement of the Tunica shifted upstream shortly after French contact. Perhaps the placement of Father Davion's mission in a central location to all the local aboriginal groups was responsible for the shift in settlement which appears to have occurred. The

* As a forewarning, Pénicaut was often quite casual in dating events and recording observations, and so whatever he presented must be regarded with some caution. However, he was a prolific writer and his accounts are often quite detailed. The problem is sorting out the good from the bad.

Tunica, being the most numerous, and presumably the most powerful group, may have wished to be closer to the mission and its associated benefits.

The year 1702 was a turning point in the history of the Tunica, as it was in this year that Davion fled from his mission. Penicaut attributed this action to Davion's destruction of the idols in the Tunica temple and the hostile reaction which ensued (Swanton 1911:309), but perhaps of greater importance was the assassination of Father Foucault and two Frenchmen by four Koroa Indians who were guiding this party from the Arkansas to Davion's mission (Delanglez 1935:34; Swanton 1911:330). A number of reasons have been given for the treachery. It is possible that the guides were mistreated, or that they desired the French goods, or even that they were encouraged by the Arkansas to perform these actions (Delanglez 1935:34), but one thing which is clear is that their actions were condoned by a number of local aboriginal groups. As stated earlier (see p. 71), the Chakchiuma may have been involved, and it is definite that the Yazoo were. After the murder, the Koroa shared the booty with their Yazoo allies (Ibid:34).

Englishmen in the Yazoo Bluffs Region

The anti-French sentiments were undoubtedly the result of English activity. English traders were well-established in

lands claimed as Louisiana throughout the early 18th century. Their greatest influence was among the Chickasaw (Le Page du Pratz 1774:90), but they also infiltrated groups west of the Mississippi River. Bénard de la Harp, among some Wichita groups on the Arkansas River in 1719 was understandably surprised and dismayed to see a Cherokee Indian appear laden with British goods to trade with these Indians (Wedel and Wedel 1976:18). English influence was felt even earlier, the focus of their activity having been on the Indian slave trade (Delanglez 1935: 18; Swanton 1911:39; see p. 71). English traders reached the Mississippi long before the first Recollect missionaries arrived at the Taënsa, and when Father Gravier visited the Arkansas groups in 1700, he noticed that they possessed several guns which had been brought (along with a quantity of other goods) by an English trader in the previous year in order to secure their loyalty (French 1869:63; Thwaites 1896-1901,65:117). It is apparent that English traders also exerted some influence over the Yazoo Indians at the turn of the 18th century, which suggests that they played some role in instigating the murder of Father Foucault. Several days prior to the assassination, the Yazoo were courted by a British trader. According to Father Davion:

This chief (Yazoo) seemed to side with the French; but he had on so many occasions shown himself to be the friend of the English, that it was useless for him to try to persuade us he was our friend. Only a few days before (Foucault's murder), an Englishman had come, and slaves were bought; this Englishman highly praised by the Yazoos was to stay among them. He was rich, they said, made

great presents, whereas the French were only beggars. (Father Davion in Delanglez 1935:447)

Father Davion, reasonably fearing a conspiracy, deserted his mission after hearing of the murder. The Tunica desired his return (French 1869:96), but Governor Bienville demanded justice. Davion would be allowed to return to the Tunica on the condition that they punish the Koroa and Yazoo offenders. Bienville also added, "that they should bring him the English that might be found among them after having plundered their storehouse" (Swanton 1911:310).* The Tunica seemingly fulfilled their part of the bargain as the Koroa murderers were subsequently killed and an English trader is reported to have been imprisoned by them. Therefore, in 1705, Davion returned to his mission and was to remain with the Tunica intermittently for the next 15 years (Swanton 1911:311-313).

Having alienated the other groups along the Yazoo River by their close alliance with the French, the Tunica were forced to reconsider their position when the embittered English trader mentioned above assembled the Chickasaw, Alabama, and other groups against them. Around 1706 the Tunica migrated from the

* Le Page du Pratz may have been referring to this storehouse when he described the Yazoo area some 20 years later, "The village of the Indians (Yascus) is a league from this settlement; and on one side of it there is a hill, on which they pretend that the English formerly had a fort; accordingly there are still some traces of it to be seen" (Le Page du Pratz 1774:56).

Yazoo Bluffs region to the mouth of the Red River in order to be closer to the French settlements (Ibid:311).^{*} Tunica history does not of course end at this point, but because they no longer had any substantial involvement in subsequent activities in the Yazoo Bluffs region, it will be dealt with no further.

French Reaction - The Construction of Fort St. Pierre

With the termination of the "missionary period" in the Yazoo Bluffs region in 1706, there was a hiatus of about 13 years in this area in the documented relations between the French and Indians. Louisiana was deeply involved in the War of the Spanish Succession at this time and lacked the ability to reestablish contacts with the Yazoo River groups. The English took advantage of French weakness by continuing strong trade relations in this area. In 1708 Thomas Welch met with a number of different aboriginal groups in the Yazoo Bluffs region, including the Yazoo and Koroa, to plan a coordinated attack on Mobile. Five years later the Welshman, Price Hughes, even

* It is possible that a group of Tunica split off from the main concentration prior to 1706 and settled somewhere between the Yazoo River and the Red River as Davion stated he bypassed a Tunica settlement on his way downriver in 1702 and did not stop until reaching the Houmas where Father de Limoges was stationed (Delanglez 1935:34). It is also possible that Davion confused the Tioux with the Tunica, because of their close cultural ties (see p. 70).

attempted to establish a settlement in the Yazoo Bluffs region (see p. 46). Louisiana needed a permanent settlement in this area to prevent further English penetration. (Delanglez 1935:434). As early as 1716 plans were made to establish a fort among the Yazoo River groups and Bienville was to be the commander of it. However, the plans were never carried out (Ibid:77). A year later, when John Law's Company of the West was created, the hopes for a Yazoo Post were revived.

In the next few years a fort and a sizeable settlement were established on the southern bank of the Yazoo River (Plate 2). As with all forts being erected in Louisiana at this time, such as Fort Toulouse among the Alabamas and Fort Rosalie among the Natchez, the one built along the Yazoo River was erected not so much as a defense against the local Indians, but for purposes of trade (Thomas 1969:172-178). The establishment was called Fort St. Pierre by all but Dumont dit Montigny, who referred to it as Fort St. Claude. Mulvihill (1931:18) believed it was erected in 1719 by Colonel Bigart, but according to Pénicaut (who must be regarded with some caution), Bienville sent Lieutenant Boulaye and 30 men to establish the installation in 1718:

At this same time M. de Bienville sent M. de la Boulaye, lieutenant, with thirty men, many munitions, and much merchandise to establish a fort near the village of the Yazoo. When he arrived there he selected one of the most elevated situations which he could find on the borders of their river, four leagues distant from its mouth on the right, two gunshots distant from their village where he had his fort built.
(Pénicaut in Swanton 1911:333; see also French 1869:142)

In the year that the fort was erected, M. de la Houssaye and M. de Scovion obtained concessions along the Yazoo River and settled them with 82 people. In December of 1720, two French ships - L'Éléphant and le Dromedaire - arrived at Ship Island with 250 people destined for the Yazoo Colony. The company included the officers M. M. Dillon, Fabre, Duplessis, Leviller, Le Suze, and La Combe (Gayarré 1846:178-179; Mulvihill 1931:18). In this same year M. Desliette, stationed in the Illinois country, received orders to go to the Yazoo Post with 15 men to prepare the area for the arrival of the concessionaires' personnel (Giraud 1966:370-371). The Company of the Indies had a warehouse at this post, but the fort and most of the territory belonged to a private company consisting of M. le Blanc, M. le Comte de Belle-Isle, M. le Marquis d'Arsfeld, and M. le Blond de la Tour (Charlevoix 1923:234-235).*

According to Pénicaut, in January of 1721, the ships La Gironde and La Volage arrived at Ship Island with about 300 persons for the Yazoo concessions of M. le Blanc and Count Belleville, and a month later another ship arrived carrying 375 Swiss troops to be distributed among the various posts, including the Yazoo (French 1869:157-158).

Although considerable numbers of people were slated for the Yazoo Post, many probably died upon landing in the country,

* Samuel Wilson referred to the grant as belonging to M. d'Asfeld and M. le Blanc, with M. le Blond de la Tour as director (1965:112;118).

a feature typical of Law's other grants (Delanglez 1937:36; Le Conte 1924; Thwaites 1896-1901,67:259). According to Dawson Phelps, the 172 men, 33 women, and 35 children who sailed from Lorient, France on the ship L'Éléphant in 1720, most perished on the beaches of New Biloxi. Others returned to France, with only about 60 of the total arriving at the Yazoo Post (Phelps 1966:46). However, in comparison with other French settlements, that at the Yazoo was quite large. Forty-eight soldiers were in residence in 1721, over twice as many as were at the Natchez Post at the same time (Chartrand 1973:60). M. le Blanc's concession, which was operated by M. le Tour de la Blond and 60 men (Swanton 1911:333), was situated four leagues from the mouth of the Yazoo River, adjacent to Fort St. Pierre. Le Page du Pratz described the concession as follows:

The grant of M. le Blanc, Minister, or Secretary at War, was settled there, four leagues from the Mississippi, as you go up this little river. There a fort stands, with a company of men, commanded by a Captain. This company, together with the servants, were in the pay of their Minister.
(Le Page du Pratz 1774:56)

The fort itself appears to have been quite a formidable structure. When it was originally constructed it may not have been terribly impressive, but there is strong historical evidence that it was improved upon in the next few years. Dumont dit Montigny was commissioned to draw the plan of the fort in 1722 and it seems that he also engineered some changes in its actual layout (Delanglez 1937:37-38). Diron d'Artaguiette, who visited the area in February of 1723, was very impressed with his short

stay there:

We stayed at Fort St. Pierre des Yazous, which is on a bluff. The plan of the Fort is square, having four bastions surrounded by a little moat about six feet wide and three feet deep. The commandant, who is M. Degrave, had his house in the fort, as do also the officers and the soldiers, who form two companies. It is at this fort where I have seen the best disciplined troops and where the duty is performed with exactitude, thanks to the attention of the commandant. These two companies are to go to the Natchez, as I have already said.

(Diron d'Artaguiette 1722-1723 in Mereness 1916:51)*

One receives quite a different and far from complimentary impression from Father Poisson who attended the Yazoo Post in 1727:

On the 23rd, we arrived at the Yatous (Yazoo); this is a French post two leagues from the mouth of the river bearing this name, which flows into the Mississippi; there is an Officer with the title of commandant, a dozen soldiers, and three or four planters. Here was Monsieur le Blanc's concession, which had come to ruin like many others. The ground is rolling; it has been slightly explored, and the air is said to be unhealthy. The Commandant ordered all the artillery of the fort to be fired; this consisted of two very small guns. This fort in which the Commandant lives, is a shed surrounded by a palisade, but well defended by the situation of the place.

(Poisson 1727 in Thwaites 1896-1901, 67: 314-317)

It appears that the colony deteriorated severely in the space of but four years. The reason may in part have been related

* These two companies were replaced by Bernaval's Company at the time of Diron d'Artaguiette's visit (see below).

to the unhealthy conditions of the Yazoo environment (Bénard de la Harpe 1831:310). The region was originally noted for its high fertility and its potential for establishing lucrative concessions (Giraud 1966:370-171; Le Page du Pratz 1774:57), but Dumont dit Montigny noted in his 1722 visit that half the garrison was dead, the air or water apparently having disagreed with them (Delanglez 1937:37). A year earlier the commandant considered moving the fort a league upriver where the air was thought to be healthier, but he died before putting this operation into effect. According to Father Charlevoix:

Its waters are of a reddish colour, and are said to affect those who drink them with the bloody flux. The air is, besides, extremely unwholesome. I had three leagues to travel before I reached the fort, which I found all in mourning, on account of the death of Mons. Bizart, its governor. He had built the fort in a bad situation, and, before he died, had thought of removing it a league farther off, to a fine meadow, where the air was more wholesome, and where there was a village of the Yasous, mixed with the Couroas and Ofogoulas...

(Charlevoix 1923:233-234)

Diron d'Artaguiette, in 1723, confirmed the reports on the unhealthy conditions at the Yazoo Post:

Two hours before day there arrived from the Yazous a boat manned with ten soldiers in charge of a sergeant, which is carrying a half score of workmen for Terre Blanche. These people are from the concession of M. Le Blanc. They are abandoning the post of the Yazous because of the sickness there, and the company of Bernaval will go to the fort of the Yazous.

(Diron d'Artaguiette 1722-1723 in Mereness 1916:49)

Other recently formed settlements were also having severe troubles with disease (Ibid:41), which suggests that it was not

the Yazoo environment itself which was responsible for the pestilence, but rather the inability of the colonists to cope with such a radical change in physical environment. The inhabitants of the Yazoo Post were also affected by famine in the summer of 1722 (Delanglez 1937:38) and a terrible drought plagued the area during the following summer (Swanton 1911:178), both of which no doubt contributed to the decimation of the colony. Another reason was the financial disaster suffered by John Law, which resulted in the collapse of his colonial enterprise. As referred to above, M. le Blanc, the leading concession holder along the Yazoo, abandoned the region in 1723, consolidating his interests in the Terre Blanche concession at Natchez (Swanton 1911:333). The withdrawal of the principal grantee no doubt severely affected the development of the Yazoo colony.

The troubles between the French and the Chickasaw in the 1720's (see p. 51) also affected the residents of the Yazoo Bluffs region:

This post was very advantageously situated, as well as for the goodness of the air as the quality of the soil, like to that of the Natchez, as for the landing-place, which was very commodious, and for the commerce with the natives, if our people but knew how to gain and preserve their friendship. But the neighborhood of the Chickasaw, ever fast friends of the English, almost cut off any hopes of succeeding. This post was on these accounts threatened with utter ruin, sooner or later; as actually happened in 1722, by means of those wretched Chickasaw; who came in the night and murdered the people in the settlements that were made by two sergeants out of the fort. But a boy who was scalped by them was cured, and escaped with life. (Le Page du Pratz 1774:56)

Father Charlevoix concurred with the bothersome Indian problem:

They certainly could have chosen better lands in a better place. True, it is important to secure this river, the source of which is not far from Carolina. But it would have been enough to have a good garrison to hold in check the Yazoos who are allies of the Chickasaws. To be obliged to be always on guard against the Savages, who are the neighbors of the English, is not the way to settle firmly a concession.

(Charlevoix in Delanglez 1935:448; see also Charlevoix 1923:235)

M. de Grave, commandant of the fort after Bigart's death, made peace with the Chickasaw shortly after the above events (Diron d'Artaguiette 1722-1723 in Mereness 1916:33), but Chickasaw troubles in other parts of Louisiana continued. As mentioned earlier, the Choctaw did much to weaken the power of the Chickasaw. The latter sued for peace in 1723 when two Chickasaw chiefs appeared at the Yazoo Post. They were sent to New Orleans to confer with Bienville (Ibid:87). Because of the Indian problems, the provincial administration debated in 1724, after peace had been made, whether or not to evacuate the Yazoo Post (Rowland and Sanders 1929:411). They decided not to, but they did reduce the garrison. In 1726, a year before Father Poisson's visit, the garrison consisted of only 15 soldiers (Gayarré 1846:227).

Indians and French Settlers During The "Trader" Period

The type of relationship which existed between the French and the local Indians can only be speculated upon. Too little attention was paid to these small groups, but perhaps they themselves were most responsible for their historical neglect. The 1729 massacre destroyed all records of what Father Souel had done in his mission (Delanglez 1935:385). The earliest mention of the Indian villages in respect to the Yazoo Post is Pénicaut's description in 1718 of the fort being situated two gunshots distance from the Yazoo (French 1869:142; Swanton 1911:333). Three years later Father Charlevoix described a mixed Yazoo, Koroa, and Ofo village of about 200 men about a league from the fort (Charlevoix 1923:233-234; Delanglez 1935:448). Bénard de la Harpe, who visited the post in 1722, was more definite in the location of these Indians:

The course of the Yazoo River from its mouth to Fort St. Peter is towards the north-northeast, afterwards towards the north-northwest for a half league, and then turning back past north to the east-northeast for another half league to the little stone bluffs on which are located the settlements of the Yazoo, Koroa, Ofo, and Onspee nations; their houses are scattered by districts (and) most are situated on mounds of earth between little valleys, made by hand, so that it is presumed that formerly these nations were more numerous. Today they are reduced to about 250 persons.
(Bénard de la Harpe, Peabody Museum, LMS Files, Harvard University)

The directions given by la Harpe and Charlevoix would place the above groups in the vicinity of the Haynes Bluff Site (22-M-5), undoubtedly their principal village during the fort's occupation. Diron d'Artaguiette, who examined the post a year

after M. de la Harpe, estimated a population of 200 warriors:

A league above Fort St. Pierre, on the bank of the river, and on the same side, there are three Indian villages, which hardly make one. They are the Yazous, the Aufaugoulas and the Couroyes. The last are going to establish themselves on the Rivière des Ouatchitas. These nations number in all perhaps 200 warriors, who form a sort of little republic, living without recognizing any chiefs.
(Diron d'Artaguiette 1722-1723 in Mereness 1916:51)

Four years later, Father Poisson referred to the Indian groups in his short stay at the fort, but did little more than confirm the earlier locational information:

During our stay at Yatous, he (Father Souel) bought a house - or rather, a cabin built in the French fashion - while waiting until he could make his arrangements to settle among the Savages, who are a league from the French post. There are three villages, in which three different languages are spoken; their inhabitants compose a small tribe; I know nothing more of them.
(Poisson 1727 in Thwaites 1896-1901,67:314-317)

The relationship between the French and the local aboriginal groups appears to have been essentially peaceful throughout most of Fort St. Pierre's occupation. The Yazoo even aided the French in the Third Natchez War (Swanton 1911:211). However, as indicated by Father Charlevoix, the settlers were wary of their allegiance:

The French live on pretty good terms with them, but they have not too much confidence in them on account of the relations which the Yazoos, above all, have always had with the English.
(Father Charlevoix in Delanglez 1935:448; see also Charlevoix 1923:233-234)

It seems that the Indians were also not overly content with their French neighbors, as alluded to by Diron d'Artaguiette in July of 1723:

It was from M. Petit Livilliers that (we learned) that M. Degrave had gone to New Orleans without orders. That since the departure of M. Degrave he had engaged the Aufaugolas, Couroye, and Yazous to remain there. They had intended to go and settle on the Rivière des Wachitas. That he had engaged the Tapoucha Indians to come and settle near the fort. This is a small Indian nation, which lived forty leagues up this river. They were going to come in the autumn.
(Diron d'Artaguiette 1722-1723 in Mereness 1916:87)

It is probable that French-Indian relations improved somewhat with the arrival of Father Souel in 1727. French interest in both the Yazoo and Arkansas areas was largely a product of strategic position. The purpose in manning these areas with Frenchmen was to contain the English by allying local Indians to French interest. The Company of the Indies was well aware that the best way to maintain Indian allegiance, even more so than arming them, was to send them missionaries (Delanglez 1935: 449). Two chaplains, M. M. John Claude Juif and Nicholas Darquevaux, accompanied the Le Blanc workmen to the Yazoo Post. The former arrived in Louisiana in 1720 and was still in residence at Le Blanc's concession in 1723. Father Darquevaux died in August of 1722 (Charlevoix 1923:260; Delanglez 1935: 448; Swanton 1911:178). It is evident that these priests only served the European population, much like Father Philibert at the Natchez colony (Swanton 1911:207; Thwaites 1896-1901,67: 310-311), as the Company of the Indies decided in 1724 that the

Yazoo Post should have a missionary as well as a chaplain (Delanglez 1935:112). The Jesuits had been paid by the king since 1723 for having a missionary in this location, but there is no evidence that one was actually there. The Jesuit Father Souel arrived in 1727, at the same time as Father Poisson's visit. Although Souel spent some time in New Orleans between the fall of 1728 and the spring of 1729 (Delanglez 1935:195, 451), there are indications that he had made some headway with the local Indians in the two years of his mission. It thus is rather curious that the Natchez, who revolted against the rapidly encroaching French colony in their area in the fall of 1729, found a willing party of conspirators in the Yazoo Indians.

Indian Uprising - The Reconstruction of Fort St. Pierre

Several Yazoo Indians accompanied M. du Codère, the commandant of Fort St. Pierre, to the Natchez Post when the Natchez Massacre occurred. Although witness to the events, these Indians apparently did not participate in them. One Frenchman managed to allude the Natchez, yet ended up amidst the Yazoo when he entered a French house:

He was agreeably surprised when he found these Savages eager to render him a service, to heap kindnesses upon him, to commiserate him, to console him, to furnish him with provisions, clothes, and a boat to make his escape to New Orleans. These were the Yazous, who were returning from chanting the calumet at Oumas. The Chief charged him to say to Monsieur Perrier, that he had nothing to

fear on the part of the Yazous, 'that they would not lose their sense,' that is, that they would always remain attached to the French, and that he would be constantly on the watch with his tribe to warn the French pircgues that were descending the river to be on their guard against the Natchez.

(Le Petit 1730 in Thwaites 1896-1901,68:170-173;
see also Rowland and Sanders 1927:66-67 and Swanton 1911:227)

These Indians failed to keep their word to Governor Perier, because in December of the same year the inhabitants of the Yazoo Post were massacred. The attack commenced with their missionary, as related by Father Le Petit:

On December 11, Father Souel was returning towards evening from having paid a visit to the Chief, and while in a ravine was shot at several times, and fell dead on the spot. The Savages immediately rushed to his cabin to plunder it. His Negro, his only companion and protection, armed himself with a woodcutter's knife to prevent the plunder, and even wounded a savage. He paid for this zealous action with his life. Fortunately, he had been baptized only a few months before, and was living a very Christian life.

These Savages, who until that time had seemed to appreciate the affection the missionary bore them, reproached themselves for his death as soon as they were capable of reflection: but returning to their natural ferocity, they resolved to complete their crime by destroying the French post: "Since the black Chief is dead," they exclaimed, "it is as if all the French were dead; let us not spare any". (Le Petit in Delanglez 1935:252-253; see also Claiborne 1880:44; Swanton 1911:230; and Thwaites 1896-1901,68:172-175)

It is probable that the murder of Father Souel and the attack on the fort was a bit more organized than suggested above by Le Petit. Father Charlevoix recorded the events as follows:

On the 11th of December, the Jesuit Father Souel, who was missionary to the Yazoos, then mingled in the

same village with the Corrois and Offogoulas, when returning in the evening from visiting the chief of the Yazooos, receiving several musket-shots as he was crossing a river, and expired on the spot. His murderers at once ran to his cabin to plunder it.

Early the next morning they proceeded to the fort, which was only a league from their village. On seeing them approach it was supposed that they were coming to chant the calumet to the Chevalier des Roches, who commanded in the absence of du Codère; for although it is only forty leagues by water and fifteen by land from the Natchez to the Yazooos, no information had reached the latter post of what had occurred nearly a fortnight before in the former. The Indians were accordingly allowed to enter the fort, and when it was least expected, they rushed on the French, who were only seventeen in all; they had not even time to attempt to defend themselves, and not one escaped. These savages spared the lives only of four women and five children, whom they made slaves.

(Charlevoix 1902:85)

There is some question as to the actual date of the massacre and the number of people involved. Both Le Petit (1730 in Thwaites 1896-1901, 68:172) and Charlevoix concurred on the date of December 11, 1729 for the death of Father Souel, and Charlevoix added that 17 people were in the fort at the time of the attack. There were thus 19 colonists (including Souel and his Negro slave) in the area at this time. In addition to M. du Codère, two other Frenchmen (M. Soupar and M. Bompugnon) were killed in the Natchez Massacre (Rowland and Sanders 1927: 125). This would bring the overall population of the Yazoo Post to 22 in 1729, but it may have been somewhat larger. Father Le Petit recorded 17 men killed, with four children and five women spared; M. de Lusser reported the death of 15 men with five women and four children taken prisoner; while Dumont dit Montigny recorded as many as 20 men killed (Delanglez 1935:254).

However, none of the above historians witnessed the event, their information being received directly or indirectly from the wife of M. Aubry who was captured by the Yazoo and Koroa. She was "rescued" by the Choctaw and reported her account to M. de Lusser who was among these Indians in January of 1730:

I inquired of her at what time the Yazoos had attacked the French. She told me that it was a week before Christmas, that the Reverend Father Souel with his little negro had been killed the day before which was a Sunday, the day on which the chiefs of the Yazoos had returned from the Natchez, that on Monday morning as she was embarking and was for that purpose at the water's edge the Indians came and killed her husband who began to shout with all his might, but that he was stunned by a tomahawk blow, and that at once they went to the fort with a calumet, and that their tomahawks hidden under their robes they had laid violent hands on all the French who were fifteen in number, having spared only five women and four children. The fact that the Koroa women had lamented the death of the latter was what saved their lives. (She said) that they had dragged Chevalier de Roche, the commandant of the post, from his bed to cut him to pieces.
(M. de Lusser 1730 in Rowland and Sanders 1927:99)

The Choctaw reported that Father Souel escaped the massacre with several Frenchmen (Ibid:87); but they were obviously confusing him with Father Doutreleau. This last mentioned Jesuit missionary and his escorts were attacked at the mouth of the Yazoo River by either the Ofo or Yazoo Indians. He unbelievably escaped with but a slight arm wound and a mouth full of bird shot (Delanglez 1935:255-256; Rowland and Sanders 1927:100; Thwaites 1896-1901,68: 174-183). There is no record of any other men surviving the massacre. Three of the five French women, the wives of Aubry, Blondin, and St. Denis, were "saved" by a combined Choctaw-Chakchiuma attack on the Yazoo and

Koroa. This occurred three weeks after the massacre when the latter groups were taking their prisoners to the Chakchiumas and from there on to the Chickasaw to sell to the British. Three children, one of whom belong to Mdm. Aubry, were also "rescued".* The other prisoners ran with the Yazoo when the Choctaw and Chakchiuma attacked, not knowing who their real enemies were. What happened to them is unknown (Delanglez 1935: 254-255; Rowland and Sanders 1927:96-102; Swanton 1911:233,331).

The Choctaw and Chakchiuma apparently profited quite well from their rescue mission. M. de Lusser observed a Choctaw dance soon after the above event and noted that all but the dance leader were adorned with the clothes of the French which had been stolen from the Yazoo. Included with this booty were most of Father Souel's religious paraphernalia:

The Indian who was leading (the dance) had a paten hanging about his neck, a ciborium at his side, this one with a maniple on his arm and all the others were adorned with the clothes of the French they had won at the defeat of the Yazoo.** The Reverend Father Baudouin recovered all the sacred vessels in exchange for some goods that were given them as presents. Having learned that the chalice of Reverend Father Souel was at the Chakchiumas, he told me to please speak in order to recover it. This I did, and they promised to bring it back to me, when they brought back the prisoners...That evening when we were about to go to bed, the chief told the Reverend Father

* Their rescuers did not release the survivors until they were handsomely paid (Rowland and Sanders 1927:110).

** A paten is a metal plate or disk used for holding the bread in the Eucharist; a ciborium is a covered cup for holding the consecrated wafers of the Eucharist; and a maniple is a silk band worn hanging over the left forearm as a Eucharistic vestment.

Baudoin that he had a coat like his, and at once he went and got a front cloth of a funeral altar, which the Reverend Father Baudouin obtained by trading. (M. de Lusser in Delanglez 1935:254-255)

The Indians of the Yazoo Bluffs region had apparently secured a great deal of merchandise in their attack on the French settlement. It was noted that some Arkansas Indians visited Father Souel's hut after the massacre and observed a bell and some books which had been left behind (Thwaites 1896-1901,68:216), but, as indicated above, the missionary's possessions seem to have otherwise had great appeal to the Indians:

One of the Yazoos, having stripped the missionary, clothed himself with his garments, and soon went to announce to the Natchez, that his nation had kept their word, and that the French settled among them were all massacred. (Le Petit 1730 in Thwaites 1896,68:174)

This reference to the Natchez Indians suggests that the events in the Yazoo Bluffs region were directly related to the activities to the south. Prior to December of 1729, the French and Indians along the Yazoo seem to have gotten along tolerably well. It was noted above by Charlevoix (see p. 91) that the local Indians were trustingly allowed to enter Fort St. Pierre. Le Page du Pratz similarly illustrated this trust when he related that the Yazoo Indians went into the fort under the pretext of "paying (them) a visit, as usual" (Le Page du Pratz 1774:83). According to him, the Natchez gave presents to the Yazoo and encouraged them to "follow the example that had been

set" when they returned to their homes (Swanton 1911:229).
 Father Le Petit, in describing the escape of Father Doutreleau
 and his escorts from the Yazoo Bluffs region, explained the
 "example":

(It had been) their intention to stop in passing at
 the Natchez, but having seen that the houses of
 the French were either demolished or burned, they
 did not think it advisable to listen to the
 compliments of the savages who from the bank of
 the river invited them to land.
 (Le Petit in 1730 Thwaites 1896-1901,68:180-181)

Le Page du Pratz similarly emphasized the widespread use of
 fire:

After they [the Natchez] had cleared the fort,
 warehouse, and other houses, the Natchez set them
 all on fire, not leaving a single building standing.
 (Le Page du Pratz 1774:83)

Although the Natchez Indians were undoubtedly instrumental
 in convincing the Yazoo to rid themselves of their French
 neighbors, it is obvious that other groups, especially the
 Chickasaw, were in part responsible for the events. Some
 Chickasaw warriors even participated in the Yazoo Massacre,
 as one brought a French scalp to his chief immediately after the
 event. It was mentioned above that the Yazoo and Koroa were
 taking their prisoners to the Chickasaw when they were attacked
 by the combined Choctaw-Chakchiuma war party. English traders,
 who had two warehouses full of European merchandise, were among
 the Chickasaw at this time and no doubt supported, if not
 instigated, the rebellions to the south (Rowland and Sanders

1927:85-87). Governor Périer felt the English were solely responsible for the atrocities and was even convinced they had seduced the Choctaw into revolting (M. Périer 1730 in Rowland and Sanders 1927:63-69). He was no doubt justified in these beliefs.

The French were fortunate the Choctaw did not enter the treachery. The reasons why they failed to join will probably never be known. They were obviously involved in the original plans, but the part they were to play in the attack on New Orleans was thwarted by French readiness. When the Natchez and Yazoo Massacres occurred, the Choctaw were pretty much excluded from the benefits of these activities. Jealousy and failure on their own part perhaps resulted in them joining with the French in punishing the groups responsible for the atrocities. Whether this was actually the case is not known for sure, but it is known that the French did not rely too heavily on the loyalty of the Choctaw in the campaigns waged against the Natchez in the following years (Swanton 1911:232-235). The Yazoo Bluffs groups suffered greatly from their role in the murder of the French colonists. Small as they were, they fell easily under the weight of the Choctaw. The Quapaw also participated in reducing the manpower of the Yazoo and Koroa in the years following 1729. The remainder of these Indians probably joined up with the Chickasaw (Ibid:242-243,332). As stated earlier, the Ofo apparently escaped retribution, as they were adopted for awhile by the Tunica and later maintained some autonomy by residing in a small village in the Natchez area.

Summary

There was some minor aboriginal occupation of the Yazoo Bluffs region in the years following the massacre (see p. 71), but the political value of the area as a buffer zone disappeared with the Indians. Thus, after only 30 years of French-Indian interaction in this region, the two groups managed to destroy each other, leaving the land to itself. The initial relations, as in so many contact situations, were promising. The "missionary period", which lasted from 1698 to 1706 was a time in which the Indians were subjected to a small group of people who tried to alter their cultural values. The Tunica Indians received the bulk of attention. The mission failed possibly for the same reason the later French enterprise was to fail. Those groups which were not treated as evenly as the Tunica found comfort in the seduction of English traders. The Tunica and their missionary left the area in 1706 leaving the Yazoo Bluffs region essentially free from French influence for an interval of about 13 years. Throughout this time the political value of the area was realized, but not until the creation of John Law's Comapny of the West were the resources available to do anything about it. The "trader period" lasted from 1719 to 1729 and was characterized by the construction of a fort (St. Pierre) and establishment of a fairly sizeable French settlement. With the dissipation of European supplies, resulting from the collapse of Law's colonial venture, combined with Chickasaw troubles,

disease, and famine, the colony was soon reduced to a pathetic little community. By 1727 there was little remaining of the splendor which had been noted but four years previously. The massacre and destruction of Fort St. Pierre in 1729 and the disappearance of the local aboriginal populations put the finishing touch to a rapidly dying enterprise.

Chapter 5 - Sociocultural Background of the Yazoo Bluffs Indians

It has been discussed in Chapter 2, and will be made more apparent in subsequent chapters, that the early 18th century aboriginal groups along the Yazoo River were not a single culture. The differences were most apparent with the Ofo, who were of a completely different linguistic stock from their neighbors. Swanton classified the other groups under the Tunican linguistic stock, as they all shared the "r" phoneme in their language, yet it is apparent these groups shared more than this particular sound:

From youth the women have a line tattooed across the highest part of the nose, some in the middle of the chin from above downward, others in different places, especially the women of those nations which have an r in their language. I have seen some of them tattooed all over, though this part of the body is extremely sensitive (Le Page du Pratz in Swanton 1911:57).

In general, most of the Yazoo Bluffs Indian groups shared deep cultural roots, stretching far back into the Mississippi period. By discussing the sociocultural aspects of the groups together under each section, rather than dealing with each separately, I believe the reader will obtain a much better idea of the aboriginal lifestyle of the Yazoo Bluffs at the time of French contact. This chapter is divided into four sections. The divisions are arbitrary, largely following the chapter headings of an ethnography. In reality there is no separation

in sociocultural phenomena, the sociopolitical organization, religious organization, settlement and subsistence patterns all being interrelated, but the sections should be of some use in terms of reference.

Settlement Organization

Our understanding of the spatial and economic organization of the Yazoo River groups is, as with all the other aspects of aboriginal culture described below, almost entirely confined to the Tunica Indians. The reason is understandable, as the French were closest to this group in the early 18th century. Knowledge of the early Tunica lifestyle is far from complete, but the French explorers fortunately did make some record of their settlement and seasonal subsistence patterns. It has been demonstrated for the Natchez Bluffs region that the prehistoric and historic aboriginal groups resided in many small and dispersed hamlets (Brown 1972; 1973; Brain et al. n.d. a), and a similar situation seems to have existed in the Yazoo Bluffs region. The explorers usually assigned villages they visited to certain "nations", but it is obvious that they were often confused as to the areas which fell under the jurisdiction of each "nation". Thus, as indicated in the early population estimates (see p.64-66), they usually lumped groups together when describing their characteristics. La Source's account is evidence of this confusion. He reported that the Tunica were

dispersed in little villages which "covered in all four leagues of country" (Shea 1861:80-81). The Yazoo, Koroa, and Ofo must also have been included in this area. As with the Natchez to the south, the overall regional pattern of settlement appears to have been one of a series of small ceremonial centers, each with a temple situated atop a mound, corresponding to what the French called a "nation". Radiating out from these centers were small and scattered hamlets which probably catered to their respective centers. This form of settlement pattern is supported by the statements of Father Gravier in regard to the Tunica:

They have only a small temple erected on a mound of earth.
(Gravier 1701 in Thwaites 1896-1901, 65:134-135)

and of Bénard de la Harpe in 1722 in describing the course of the Yazoo River as leading to:

...the little stone bluffs on which are located the settlements of the Yazoo, Koroa, Ofo, and Onspee nations; their houses are scattered by districts (and most are situated on mounds of earth between little valleys, made by hand...
(Bénard de la Harpe 1722, LMS files, Harvard University)

Comparing the various population estimates, Swanton estimated that there were approximately 2,450 Indians in the Yazoo Bluffs region in the year 1698, 1,575 of whom were Tunica, 263 Ofo, and 612 Yazoo and Koroa mixed (1911:43). Father La Source reported 260 cabins scattered throughout the area (Shea 1861:80) and Swanton, using the general formula of 2.5 warriors per cabin and one warrior per 3.5 persons in the total population,

hypothesized that 180 of these cabins belonged to the Tunica, 30 were Ofo, and 70 were Yazoo and Koroa. He was aware that the ratios were not always constant, but felt that they had some validity on a relative basis (Swanton 1911:43). According to the Superior of the Foreign Missions, on information received from either de Montigny or la Source, the Yazoo and Koroa were settled in 36 huts, whereas the Ofo were in 15 (Delanglez 1935:446). This estimate conforms closely with Father Gravier's account. He visited the Yazoo Bluffs in 1700 and reported that the Tunica resided in seven hamlets of 50 or 60 small cabins, the Yazoo in 30 cabins, and the Ofo in 10 or 12 (Shea 1861:133). If Swanton's population estimate and La Source's report on the number of cabins were anywhere near correct, Gravier must have missed a considerable number of dwellings in his visit. However, of all the early historians in this region, Gravier was the most observant and I tend to favor his calculations. Approximately seven to nine cabins per hamlet seems to have been the average for those settlements which he visited, although one had as few as five or six. (Ibid:133). During the occupation of Fort St. Pierre, the Yazoo were reported by Le Page du Pratz to have resided in 100 huts, the Koroa in 40, and the Ofo in 60 (Le Page du Pratz 1774:300; Swanton 1911:42).

References to the positioning of villages and the arrangement of dwellings are practically nonexistent for the Yazoo Bluffs region. There is some information concerning the settlement patterns of the Tunica after their move to the mouth of the Red River and, as some continuity can be assumed, it is

reasonable that the village layout in the two areas was similar. M. de Richebourg, accompanying Bienville in 1716 to the Tunica settlement, described their village as being located on very high ground (Swanton 1911:204). Father Charlevoix, five years later, also noted the high ground and added that the village had a circular arrangement and was surrounded by a large open space about 100 paces in diameter. The village had no enclosures and was moderately peopled. He also recorded two other Tunica villages near the one he visited (Charlevoix 1923:262-263; French 1851:174; Swanton 1911:312-313). Diron d'Artaguiette visited a Tunica settlement at the northern extremity of the Great Bend's neck (Mereness 1916:44), and Father Poisson recorded the presence of two villages. The "Great Tunica" was the village visited by Diron, the "Little Tunica" being located at the southern extremity of the Great Bend (Swanton 1911:314; Thwaites 1896-1901,67:304-305). Neither of these men made reference to high ground, which suggests that there were a number of Tunica hamlets scattered about the area. Recent archaeological information and cartographic research has revealed that there were at least five different locations occupied by the Tunica in the Red River region, some of which were definitely overlapping in time (Brain n.d. a). In both areas the Tunica settlement pattern seems to have been one of dispersion in small hamlets,* and this pattern undoubtedly was also

* Jeffrey P. Brain is of the opinion that Tunica settlement at the mouth of the Red River was nucleated, and offers the

characteristic of the other Indian groups which resided in the Yazoo Bluffs region. It is interesting that the practice of dispersion is even supported in the Tunica migration legend:

They went down the Mississippi again. (Their) big boats were tied together. They went (on) down until the rope broke. One (of) the boats went on down (the river). They settled again near that place. They did not see the other boat. It went on down the Mississippi. The Tunica settled there.
(Haas 1950:133)

The 18th century historians were fortunately a bit more detailed in their descriptions of the Indian dwellings. Father la Source indicated that the average Tunica house was large and was made of palisades and earth (Shea 1861:80). Father Gravier indicated it was round and vaulted, being lathed with canes and plastered with mud from top to bottom. A covering of straw had been placed over this structure (Shea 1861:133-134; Swanton 1911:

Trudeau Site (29-J-1) as evidence of heavy concentrated settlement (personal communication). I readily admit that no settlement in the Natchez region can compare archaeologically with Trudeau (in terms of trade goods with burials), but at the same time, I believe that the quantity of goods at Trudeau is more an indication of closer relationships with the source of such material (the French) than a reflection of population size. True, over 200 burials were removed from Trudeau, but the occupation covered at least 20 years. An average of 10 people a year does not necessarily indicate a large nucleated village. As yet we have no archaeological information on settlement patterns at Trudeau to say one way or the other, but we do know both historically and archaeologically that there were quite a number of Tunica settlements at the mouth of the Red River. Therefore, I remain of the opinion that the pattern of dispersion in small hamlets, definitely characterizing the Tunica in the Yazoo Bluffs region, continued after their move south.

316; Thwaites 1896-1901,65:132-133). According to legend, Tunica dwellings ranged from 10 to 20 feet long and were kept very clean. Palmetto leaves were placed on the floor and covered with deerskins in order to keep the floor dry (Haas 1950:159). Gravier found the Tunica house to be extremely hot and poorly lighted. The door served as both window and smoke exhaust and, at night, dried canes were lit for warmth and light (Shea 1861:135; Thwaites 1896-1901;65:132-133). The hearth was centrally located (Shea 1861:80). The few portable items were not left in the dwellings, but were carried by the natives. The only furniture reported was the bed. It was built of round cane, set on four posts, and positioned three feet above the ground. A cane mat was then placed on top as a mattress (Shea 1861:135).

According to Dumont dit Montigny, the Yazoo dwelling was very similar. He described the houses of the Arkansas and Yazoos as being round and in the shape of French ice houses (glacières). Large long poles were placed about 2 feet apart in a circle ranging between 40 and 50 feet in diameter. The tops of these poles were tied, forming a dome. Pliant pieces of wood were arranged horizontally at vertical distances of about a foot. These were attached with cords. Clay and "Spanish beard" were mixed together and plastered upon the house, the whole then being covered with cypress or palmetto bark. There were neither chimneys nor windows, the only opening being a narrow door 5 feet high. As the smoke exited only through the door, the dwelling was usually smoke-filled. Dumont believed this to be purposeful, the smoke serving as a protection from

mosquitos and gnats. The fire was made outdoors in summer. Dumont also described "fort cabins" which were square huts with many holes pierced at regular intervals (Swanton 1911:59).

The French missionaries who visited the Yazoo Bluffs region were, needless to say, concerned with everything relating to native religion, and so Indian temples were a subject of some interest. Fathers Gravier and la Source were the first to record the Tunica temple. They described it as being situated upon a little hill which, like that of the Natchez, appeared to be artificial. According to Gravier, there was but one small temple, the fire in which was always tended by an old man. People entered the temple only when going to and from war (Shea 1861:81,136; Thwaites 1896-1901,65:134-135). Father de Montigny alluded to the structure of the building:

I often speak of the Tonicas and the Taensas and of those who are on the banks of the Mississippi going down to the sea, for far inland the Indians are in great numbers. They have rather fine temples, the walls of which are of mats. That of the Taensas has walls seven or eight feet thick on account of the great number of mats one on another (Father de Montigny 1699b in Shea 1861:77).

According to Father Charlevoix, the Tunica did not construct another temple when they moved to the Red River mouth (Charlevoix 1923:263; French 1851:174). Swanton felt that some other structure must have been set aside for the storage of ritual objects (Swanton 1911:318), but an illustration drawn by Dumont dit Montigny around 1740 (Le Baron Marc de Villiers 1931: fig.44.1) clearly demonstrates that the Tunica continued to

build temples. Charlevoix had either not been in the village which possessed the temple or else the structure did not stand out from the other buildings in the village. Contrary to their practices in the Yazoo Bluffs region, the Tunica apparently no longer placed their temples on mounds (Brain n.d. a).

Evidence for structures other than dwellings and temples is extremely minimal, but there is some information on Tunica granaries. Father Gravier observed well-built granaries in his visit to the Yazoo Bluffs region and described them as being located near the cabins. They were placed on top of four large posts and were 15 to 16 feet in height. The posts were polished to prevent mice from climbing up them (Shea 1861:135). Another structure, some form of meat rack, was mentioned in the Tunica's "Thunder" legend:

...Outside of the house was a scaffolding raised on four posts and covered with what looked like animal meat.
(Swanton 1911:321)

Economic Organization

Information concerning the subsistence patterns of the Yazoo River groups is almost as rare as that on settlement patterns. The early French accounts reveal that corn and squash were the most important items of the Tunica vegetable diet, as was deer in their protein intake. Buffalo, turkey, and muskrat were also consumed and, of the fruits, piakimina (parsimmons) and

peaches, are most often referred to (Shea 1861:134-136; Swanton 1911:315-317). According to Tunica legend, in addition to buffalo and deer, other large animals, such as bear and wild hogs, were consumed. Garfish, buffalo fish, gaspergou, and catfish were also eaten, as were black crane and blue heron. Foods collected included honey, mulberries and briar berries, while peach and plum trees were planted (Haas 1950:157).

We know very little about the economic resources exploited by the Tunica and other groups during the spring, largely because none of the early explorers visited them during this season. If a parallel can be drawn with the Natchez Indians to the south, it is known that these Indians were busily sowing and cultivating maize in the spring, as their first harvest occurred in June (Swanton 1911:142). As there is no dramatic change in the physical environment between the two regions, it is perhaps safe to assume that the Yazoo River groups were similarly occupied during the spring.

The Natchez had their second maize harvest in November, thus confining the summer months, for the most part, to sowing and cultivating. This seemingly was the case for the Tunica also. Father la Source reported that the men were employed solely on their fields, tending maize which grew between 15 and 20 feet in height (Shea 1861:81). The sole occupation of men in tending the fields could reasonably only be applicable to the summer months, as there is ample evidence of additional male activities during other seasons.

Father Gravier visited the Tunica in the autumn and, like

la Source, noted the extraordinary height of the maize. This crop, along with squash, was stored in the granaries (Shea 1861: 132-135). With the harvest and storage of cultigens taken care of, the Tunica (and presumably the other local groups) devoted themselves to the seasonal resources. Gravier indicated that the piakimina (parsimmons) trees were abounding with fruit in the autumn. The Tunica would go into the woods with their families at this time and live off piakimina for a month. They would pound and dry great quantities which could be preserved for a long period of time (Ibid:135-136). If Gravier's observation is correct, a sizeable portion of the Tunica population must have abandoned their hamlets in the late fall. As Gravier noted the absence of bear, deer, and other meat in his visit among the Tunica (Ibid:134), it is possible that hunting was not a primary feature of their subsistence cycle in the autumn.

The collection of fruit, at least for a part of the population, continued to be an occupation of the winter season. Both Fathers de Montigny and la Source remarked upon the full blossoming of the peach trees in January, which the Yazoo River groups undoubtedly used to their advantage, but the principal winter activity seems to have been hunting. In a winter trip along the Mississippi River, Le Page du Pratz observed an incredible amount of wildlife. Herds of buffalo, elk, and deer concentrated around the rivers and brooks. Bears kept to the thick woods in most seasons, but in winter the banks of the Mississippi were lined with them searching for food (Le Page du

Pratz 1774:132). Trading and collecting salt appear also to have been primary concerns in the winter season. Portions of the Ouachita River of northwestern Louisiana were often frequented by Indian groups at this time, the Tunica being no exception. As noted earlier (see p. 73), Joutel reported that two Tunica villages were situated in northwestern Louisiana. He did not visit these towns, but learned of their whereabouts from an Indian who had recently obtained a load of salt from the Tunicas (Swanton 1911:307). Perhaps these towns were merely winter hunting camps.

The early 18th century Tunica and other Yazoo River groups seem to have taken full advantage of seasonal resources. In the spring and summer they probably spent most of their time in the fields tending squash and maize. The harvests were in June and November. The latter yield was the most abundant, thus providing a sizeable quantity of produce for storage and winter use. The latter half of autumn appears to have been characterized by a dispersion of a part of the population, each family, or group of families, leaving their hamlets to collect persimmons and other seasonal fruits and nuts. The gathering of fruit continued into the winter, but of more importance at this time was long-range trade and travel. During this season, when the local resources were least productive, parties of Indians traveled west to hunt, collect salt, and trade with natives from even more distant regions.

There is a lack of information concerning the social organization of the Yazoo Bluffs Indians. Even though the Tunica were the close allies of the French throughout the 18th century, records concerning their social institutions are so few that it is not even certain that they had a matrilineal kinship system like their southern and eastern Muskogean neighbors. At one time I argued for a patrilineal social organization (Brown 1974a), but the evidence for this is so marginal that I am sorry now to have so strongly supported the interpretation. Some minimal information concerning male/female roles, polygyny, and the authority structure has survived, but not enough to establish any solid conclusions. Elman Service (1962) has repeatedly demonstrated the great havoc wrought on social organization as a result of drastic depopulation. Such was the situation in the Yazoo Bluffs region in protohistoric and historic times. The reconstruction of the prehistoric sociopolitical institutions of these peoples is a difficult, if not impossible, task.

Examining first the division of labor, the earliest reference to the "Tunica" male's role is expressed in the Biedma narrative of De Soto's approach to the town of Quizquiz, a settlement believed to have been the 16th century Tunica home. De Soto received little resistance as the men were all occupied tending the maize fields (Brain et al. 1974:262). As noted above (see p.108), Father La Source also indicated the Tunica male's strong participation in agricultural activities. Gravier added:

The men do here what peasants do in France; they cultivate and dig the earth: plant and harvest the crops...cut the wood and bring it to the cabin, dress the deer and buffalo skins when they have any. They dress them the best of all Indians that I have seen.
(Gravier 1700 in Shea 1861:134-135)

Although men in other Southeastern groups on certain occasions helped in sowing and cultivating the fields (Swanton 1911:75; 1928:371-372), agriculture was primarily the domain of women. The dressing of skins was also women's work among most Southeastern Indians. That the Tunica male participated in this activity is supported by their mythology:

[from the "Thunder" myth]
...Then she told him to shoot it [a white squirrel] through a hole in the roof...he shot the white squirrel and killed it, and said to her, "Hand the squirrel in to me." She gave it to him and he took and cleaned it, removing all the claws except one.
(Swanton 1911:319)

[from the "Revenge" myth]
...A certain (man) was tanning (hides)...(His father) was baking bread (and there) was no lard. Nevertheless, he finished baking (the bread), took his little boy and went hunting in the woods.
(Haas 1950:129)*

There are of course dangers in using myths to reconstruct ancient lifeways, yet it can probably be stated that men among the Tunica, and perhaps among the other Yazoo River groups, sometimes performed functions usually attributed to women in

* The man was a widower in this myth, but the important point is that it was normal and socially acceptable for the male to perform female duties.

most other Southeastern Indian ethnology. As stated earlier (see p. 109), the principal seasonal male activities were hunting and trading. As with most Indians, warfare, gambling, ballgames, and other such activities were also in the male's social realm.

Less is known of the role of the women in the Yazoo Bluffs region. Father Gravier indicated that Tunica women did only indoor work. They made pots and clothing (Shea 1861:134-135). La Source added that cooking was done outside in earthen pots (Ibid:80), but he failed to mention who was doing the cooking.

The presence of polygyny among the Yazoo River groups is a debatable issue. There are two contradictory references to this subject in regard to the Tunica. Father Gravier in 1700 reported polygyny as minimal, whereas Bénard de la Harpe, in 1719, suggested it was common:

They [the Tunica] are very docile; polygamy is rare among the, but their caprice and the custom of the country authorizes repudiation for next to nothing, for which reason the village is scarcely peopled, and I saw hardly any children. The girls are not so loose or bold as they are among the Natchez and Taensa (Gravier 1700 in Shea 1861:133; see also Ibid:136).

...he Cahura-Joligo, the Tunica chief repairs every day with his family to the prayers and exhortations which M. Davion makes to them, who is very much revered in this village, although he opposes their feasts and the plurality of wives (Bénard de la Harpe in Swanton 1911:312).

Little can be made from these accounts. The historians spent too little time among their subjects to have adequately studied

their social organization. It is evident, however, that some polygyny was in existence among the Tunica, and it is probable that it was practiced most among the higher echelon, as with the Natchez (Mereness 1916:48; Swanton 1911:97).

The political structure of the aboriginal groups in the Yazoo Bluffs region is only slightly better known. The Tunica, at least, appear to have had a number of chiefs throughout most of the early 18th century. Father La Source noted in 1698 the presence of a "great" chief as well as lesser chiefs:

...the village of the great chief is in a beautiful prairie. Sickness was among them when we arrived there. One of their chiefs being about to die, M. de Montigny asked him through an interpreter whether he wished to be baptized...

(La Source in Swanton 1911:308)

Fathers de Montigny and Davion visited Biloxi in May of 1700 and brought with them two Tunica chiefs (Swanton 1911:191). In 1719, M. de la Harpe noted there were two grand chiefs, both of whom spoke the same language (Ibid:312). These were undoubtedly the same two chiefs (one of whom was Cahura-Joligo) who Diron d'Artaguiette referred to in 1723 concerning the Third Natchez War:

...two hundred of their [Natchez] men had attacked the Thoniquas, whom they had beaten, and wounded the great chief in the arm, and that the second chief of this nation had died of disease (Diron d'Artaguiette 1722-1723 in Mereness 1916:91).

Cahura-Joligo was cured and the second in command was apparently soon replaced as Father Charlevoix noted in describing

a 1731 encounter between the Natchez and the Tunica that:

The head grand chief (Cahura-Joligo) ran up at the noise and first killed 4 Natchez; but, overborne by numbers, he was slain with some 12 of his warriors. His war chief, undismayed by this loss or the flight of most of his braves, rallied a dozen, with whom he regained the head chief's cabin.

(Swanton 1911:249)

Cahura-Joligo was succeeded by Bride les Boeuf, but the duration of the latter's rule is unknown. He was perhaps one of the two principal chiefs whose heads were demanded by the colonial administration in 1739 for having been involved in the assassination of two French travelers (Claiborne 1880:67; Swanton 1911:314). The norm for the Tunica, and perhaps also for the other Yazoo River groups, appears to have been two principal chiefs. The one of greater esteem conducted civil affairs, the other having been responsible for war leadership (Swanton 1911:318).

Religious Organization

The first Frenchmen among the Indians of the Yazoo Bluffs region were understandably very interested in the native religion. Although more information has survived concerning religion, as compared to other sociocultural phenomena, our knowledge is far from complete on the subject. Father Gravier said in 1700:

They (the Tunica) are so close-mouthed as to all the mysteries of their religion that the missionaries

could not discover anything about it.
(Gravier 1700 in Shea 1861:134)

As has already been discussed (see pp. 106-107), the temple was a very prominent feature in the early principal Tunica settlement. Contained within it was the sacred fire. It was always supposed to be burning, a feature which was common to a number of other Lower Mississippi Valley groups. To both the Natchez and the Taënsa, the sacred fire was symbolic of the sun. Four guards were assigned to preserve its flame. If by their negligence it happened to be extinguished, the guards, and sometimes their families, enjoyed a similar fate (Swanton 1911: 159). There is very little information concerning the sacred fire of the Tunica, but there is some indication that it was more than just a symbol of the sun. It may itself have been a deity (Brain n.d. a; Haas 1943:531-535). Father Gravier included it in his list of Tunica gods after "sun" and "thunder" (Shea 1861:133). In relating the "Thunder" myth Sesosterie Youchigant distinguished "fire" from "sun" and "thunder". The latter two had once been real people, but fire had never been. It did however have the power of turning into a person (Haas 1950:3). It is hence possible that fire was of greater importance to the Tunica than to the Natchez and Taënsa. Evidence supporting this possibility appears in Father Poisson's discussion of the Natchez:

...they know by tradition, if it (the sacred fire) happen to be extinguished, they must go to the Tonicas to relight it.
(Poisson 1727 in Thwaites 1896-1901,67:310-311)

In addition to "sun", "thunder", and "fire", Father Gravier recorded a number of other Tunica gods. These included the god of the "east", "south", "north", "west", "heaven", and "earth" (Shea 1861:133-134). The idols destroyed by Father Davion, made of stone, were perhaps symbolic of these gods. Such idols were common among the Natchez (Swanton 1911:162,172-173). Swanton noted the peculiarity that the "sun" and "heaven" deities were regarded separately by the Tunica because usually, as with the Natchez, the two were combined. He interpreted this to mean that the sun was, or had been, of greater importance to the Tunica (Ibid:319). The deities worshiped by the other Yazoo River groups are unknown, but according to Dumont dit Montigny, the Yazoo at least believed in two spirits. The "great Spirit" (Mingo-Chitou) was good and did harm to no one while the "little spirit" (Minguo-pouscoulou) was bad, caused sickness, and destroyed their goods by storms and tempests (Ibid:334).

In addition to the above gods, Bénard de la Harpe stated that the Tunica possessed a number of household deities. The frog and a figure of a woman were the most notable, and they were believed to represent the sun (Ibid:319). The significance of the feminine deity is related in the "Solar" myth told by Youchigant. According to this myth a beautiful young woman went up into the sky and became the sun. On her ascent she sang and danced, the reenactment of which occurred in the Tunica sun dance, which Youchigant had unfortunately forgotten (Haas 1950:2). The connection between the sun and the frog has been lost, but the latter's significance is revealed in Youchigant's statement

that the droughts of the 1930's were the result of white people eating frogs. The Tunica never ate them because dry weather would ensue (Ibid:6).

Various other animals played a role in the Tunica religion. For reasons given in their mythology, certain animals, such as the American egret and the dove, were taboo (Ibid:157). Even some trees, like the cypress (ko'meli) were considered sacred (Ibid:6). Superstition revolved around other animals. For example, in the "Emergence" myth the Tunica believed that red and blue alligators controlled hot and cold weather respectively (Ibid:1). Father Gravier felt the Tunica had a great many other incomprehensible superstitions:

In each cabin there is a great post which supports it, at the foot of which there are two or three little earthen pots near the fire, out of which they take a little ashes to put in these pots, from I know not what superstition. This is the post of the spirit or genius.

(Gravier 1700 in Shea 1861:133-134)

Evil spirits were also a part of Tunica mythology. In the "Thunder" myth it was revealed that they resided in cane-brakes, while witches (female beasts or devils) dwelled in the forest and came out at night (Swanton 1911:320). Witches are extremely common in Tunica folklore, the most important one being the cannibalistic Stone Witch and Clawed Witch. Legends involving cannibalism are also abundant and Haas felt that, as with the Natchez, these stories were taboo, only to be told at certain times (1950:4-5).

The early historic accounts and modern mythology have

revealed that beliefs in a number of gods and spirits were characteristic of Tunica religion. Superstitions were abundant and magic, although not recorded by the early historians, was undoubtedly prevalent. The Indians probably took care to hide these practices from the missionaries, but some evidence for their existence has managed to seep through the literature. Bénard de la Harpe recorded that a shaman from the Tioux, a group closely related to the Tunica, unsuccessfully tried to save the life of Cahura-Joligo's son in 1719. Swanton thus suspected that the Tunica also had shamans and sorcerers (1911:326). The Yazoo Indians definitely had doctors, which the French referred to as "alexis" (Ibid:86). These Yazoo doctors appear to have really been shamans as one of their duties was to make rain. Other duties recorded for shamans in the Lower Mississippi Valley included healing maladies, driving away storms and, in general, just changing the weather (Ibid:178-179). The Natchez had both male and female shamans (Ibid:237) and, as related in the "Flood" myth, it appears that Tunica females also participated in this role:

But when the chief saw that no one could tell what the sign really meant he sent for an old woman, the oldest in that village, to see if she could interpret it. She came and examined it thoroughly. Then they asked her if she could tell them what the water signified, and she finally answered that the water was going to rise.

(Anon. in Swanton 1911:323-324)

Almost all information concerning the burial practices of the Yazoo Bluffs Indians has come from archaeology. Fortunately,

there are some historic references concerning disposal of the dead. Father la Source related in 1698 that the Tunica:

...inter their dead and the relations come to weep with those of the house and in the evening they weep over the grave of the departed and make a fire there and pass their hands over it, crying out and weeping.

(La Source 1698 in Shea 1861:81)

A number of years later Dumont dit Montigny revealed the mortuary rites of the Yazoo Indians:

The Yazous and the Chacchoumas employ still less ceremony. When their chief is dead they go into the woods to bury him, just as in the case of an ordinary man, some on one side, some on the other, the relative of the deceased accompanying the convoy and bearing in their hands a pine stick lighted like a torch. When the body is in the trench all those taking part throw their lighted torches into it in the same way, after which it is covered with earth. That is what the entire ceremony is confined to. It is true that it continues more than six months longer for the relations of the dead and for his friends, who during all that time go almost every night to utter howls over the grave, and on account of the difference in their cries and voices form a regular charivari. These ceremonies, as I have said, are common to the chiefs and people. The only difference which marks the first is that at their head is planted a post on which is cut with the point of a knife the figure they have worn painted on the body during life.

(Dumont dit Montigny in Swanton 1911:334)

More recent mortuary rites of the Tunica are described by Swanton and Gatschet. Upon death, the corpse was kept for one day and then interred with its head to the east. For four consecutive nights a fire was lit at the head to keep the bad spirits away who sat in that direction. The people would fast during this period, at the end of which they would plunge into

the water four times. The soul had by that time ascended. It was believed that spirits hovered around the graves and so each year for a period of three or four days they were appeased by the offering of corn and beans. The corn fast (fête du blé) was another ritual occasion which occurred each year when the little corn was ripe. Roasted corn was placed in a saucer at the head of the grave at this time. The offering lasted for four days, at the end of which the people fasted until noon. They then assembled at the house of the cemetery guardian and descended to the bayou to plunge into the water four times. This activity was subsequently followed by a speech and a dinner conducted by the cemetery guardian (Swanton 1911:325-326). There were some continuities between the early 18th century burial practices of the Yazoo Bluffs Indians and their modern descendants, particularly in the employment of fire,* but there were undoubtedly a number of changes resulting from Christian contact over the years. Although I believe the Tunica retained a fairly conservative mythology, the overt manifestations of their various ceremonies may have changed significantly.

Summary

The Indian groups in the Yazoo Bluffs region were, for the

* At the death of the last Tunica chief (Joseph Pierite) in 1976, I was told by his daughter that the chief must always have a light burning over his grave.

most part, similar to their Southeastern neighbors. They lived in small round houses clustered in groups of about half a dozen. These hamlets were distributed around a principal village which contained their temple. The principal crop was maize, but other seasonal foods were also consumed. Portions of the population shifted seasonally in response to changes in food availability. Division of labor followed the overall Southeastern pattern, although masculine duties (at least for the Tunica) were not as clearly defined. Polygyny was practiced but, as with most groups, only by those who could afford to have more than one mate. Authority was vested in two principal chiefs (there may have been lesser ones), one in charge of civil matters, the other in charge of warfare. There are no indications of a priest class, but shamans undoubtedly filled this void in their religion. These Indians had a number of gods, the "sun", "thunder", and "fire" being of greatest importance. There are unfortunately many gaps in our knowledge, but the material presented above provides a relatively adequate background of the culture of these aboriginal groups at the time of French contact.

Chapter 6 - Sociocultural Background of the French in Louisiana

In the previous chapter, because of minimal information, it was possible to deal with "all" sociocultural aspects of the Yazoo Bluffs aboriginal populations. The lifeways of the French colonists cannot be handled in the same manner. To do so, even if only Louisiana is considered, would require several volumes.* I have chosen to deal only with those aspects of early 18th century French colonial life which appear to have been most closely related to and affected by the native groups. Settlement patterns were obviously so, as the French inevitably settled in proximity to the Indians. The arrangement of colonial villages, whether nucleated or dispersed, fortified or open, in large part depended upon the relationship between the French and the neighboring aboriginal groups. The reasons for settling near the Indians were essentially economic. Not only were the Indians the greatest supplier of local resources for the export trade, but the fledgling colonial settlements depended on them, to a large part, for subsistence aid. Other French institutions, such as their religion and sociopolitical organization appear to have been affected minimally as a result of aboriginal contact.

Settlement Organization

* For more detailed studies of the Louisiana French, see Delanglez 1935; P. Hamilton 1898; McDermott 1965; 1969; and Surrey 1916.

Sieur de la Salle had planned to colonize the Lower Mississippi Valley, but his untimely death effectively terminated this project. It was not until the explorations of d'Iberville in 1698 that a French population started to take root in Louisiana. The settlers at this time were mostly Canadians, and the population concentration, if it can be called that, occurred along the Gulf Coast. Biloxi and later Mobile had the heaviest occupations in the first few years of the colony. A few settlers trickled into the interior, particularly when Antoine Crozat received his monopoly (see p. 46), but it was not until John Law and the Company of the Indies took charge that significant numbers of people established themselves on interior waterways. Under the Company of the Indies, Louisiana was divided into nine districts, as follows: "la Nouvelle-Orléans, le Biloxi, la Mobile, les Alibamons, les Natchez, les Yazoux, les Natchitoches, les Arkansas, et les Illinois". Mobile and Biloxi were combined as one district in 1723, the ninth then becoming "le Ouabache" (Gayarré 1846: 184-185, 195). Soldiers were sent to these posts, and many of them later ended up being the greater part of the settlers (Swanton 1911:129). The French colonists also included those who, according to Father Poisson, "have no other occupation than that of roving about" (Poisson 1727; Thwaites 1896-1901, 67:282-283). He included in this category the women and girls taken from the hospitals of Paris, or other places of equally good repute; travelers, who for the most part were young men sent to Louisiana "for various reasons"; and hunters who brought

meat and bear's oil to New Orleans in the spring (Ibid:282-285).

As indicated earlier (see p.49), in the first few years of monopoly, the Company of the Indies sent shiploads of colonists in a valiant attempt to people the colony with respectable, hard-working, sedentary citizens. Most of the colonists came from France, but Law also attracted emigrants from neighboring countries. Germans and Alsatians were recruited for Law's concession at the Arkansas Post. The promises must have been grand because in some cases entire villages headed by their mayors accepted the proposals of the Company and migrated to French ports for the voyage to the colony (Rowland and Sanders 1929:465). In all, either 9,000 (Charlevoix 1923:230) or 12,000 (Thwaites 1896-1901,67:260-261) Germans were destined for the Arkansas Post. Between 3,000 and 4,000 arrived in 1719 (French 1869:151), most of whom died on the beaches of the Gulf Coast. A large portion of the survivors returned to Europe when Law's "Bubble" burst, but 250 of the original group reached the Arkansas before the collapse (Charlevoix 1923:230). When Father Poisson visited the post in 1726, he recorded 30 people in residence (Thwaites 1896-1901,67:260-261). A large portion of the German colonists in 1723 received grants at the village of Les Allemands, or what is now known as the German Coast in St. Charles and St. John the Baptist Parishes, Louisiana. This land is located above New Orleans (Charlevoix 1923:230). Diron d'Artaguiette described the German colony a year before the official grant. There were 300 settlers in 1722, including women and children, and they resided in three little villages

(Mereness 1916:41). These villages were scattered over an area extending for five or six leagues along the west bank of the river (Surrey 1916:27).

In addition to the German villages, a fairly sizeable number of French settlements were scattered along the lower course of the Mississippi River in the 1720's. In 1722 in the distance of but half a league between two Houma Indian villages north of New Orleans were eight French settlements (Mereness 1916:42). Naturally the density decreased in ascending the river, but some fairly large population centers existed to the north. The Natchez and Yazoo Posts were the most impressive, particularly the former as the decade progressed. Between Baton Rouge and Natchez was Pointe Coupée. Parts of this last settlement were all but abandoned when visited by Diron d'Artaquiette in 1723 (Ibid:43). The above were the principal early 18th century colonial settlements in the Lower Mississippi Valley, but not the only ones. Small habitations, such as the 15 French residences observed by Diron d'Artaquiette among the Tunica in 1721 (Ibid:44), were scattered throughout the region.

The division of land into grants was very much dictated by tradition. The long thin strips of property running perpendicular to the Mississippi River even now partition the landscape of Louisiana. This tradition was brought from Canada. When the Seigniorial System was initiated, the land along both sides of the St. Lawrence River was divided into these long narrow strips. Even when seigneurs were granted

large plots of land they partitioned them into these curious shapes before distributing them among the censitaires:

Along both banks of the St. Lawrence from Quebec to Montreal the farms stretched back from the river, the houses and barns on the river bank spaced a few hundred yards apart. Every few miles there was a seigneurial manor house and a mill, and eventually a steep-roofed stone church. (Eccles 1969:85)

The reason for this form of spatial organization appears to have been that each Canadian desired to have both water frontage and isolation. As arable lands were confined almost entirely to a narrow belt along the St. Lawrence Valley, there was very little movement (accepting fur traders) away from this river. The settlement pattern of New France hence became one continuous line of houses stretching from Quebec to Montreal. The pattern was unfortunate as it left the colonists very vulnerable to Indian (Iroquois) attacks. They did attempt a radial pattern once to keep the settlement closer together, but the plan failed. Late in the 18th century, as the population began to expand, a second row of houses was constructed behind the first row and a road was placed between the two (Eccles 1969: 83-87; Zoltvany 1969:14).

Although the lands in Louisiana were partitioned similarly to those in Canada, the settlement pattern differed somewhat. Arable land was not merely confined to the banks of the Mississippi and so people were not quite as restricted by the physical environment. In some of the areas, like the Natchez and Yazoo Posts, the environment was radically different, the

oblong plots of land having never been in vogue. The physical variations allowed more flexibility, yet the sociocultural environment - the Indians - in some cases created barriers which were reflected in the spatial layout of the various French settlements. There are unfortunately very few records of the early 18th century overall community pattern, yet we do know that some settlements were clustered. Mobile in 1704 was enclosed within 190 arpents* of land and consisted of:

Eighty wooden houses of one story covered with palmetto leaves or straw, built on the streets laid out in a straight line.
(Nicolas de La Salle 1704 in Rowland and Sanders 1929:20)

Mobile continued to build its character, albeit slowly, over the following decades. Most communities, however, were not particularly attractive to the educated French traveler. Dauphin Island, located at the mouth of Mobile Bay, was observed by Lamothe Cadillac in 1716:

On Dauphin Island there are only fourteen poor huts of stakes, a guard-house and a prison, all of them covered with reeds and so insecure that twelve or fourteen soldiers have escaped from it and deserted.

There are no lodgings on this island which makes it impossible for the staff to reside there. It would be necessary to build there first a good vaulted powder magazine.

(Lamothe Cadillac 1716 in Rowland and Sanders 1929: 220)

The capital fared no better. Dumont dit Montigny visited

* equivalent to 193 English feet

the recently established New Orleans in 1721 and described it as being a wretched little hovel of a village where there were only four or five scattered houses (Delanglez 1937:37). Father Charlevoix passed through the area the following year and was similarly unimpressed by its development. He described it as being:

...reduced to a hundred barracks, placed in no very good order; to a large ware-house built of timber; to two or three houses which would be no ornament to a village in France; to one half of a sorry ware-house, formerly set apart for divine service, and was scarce appropriated for that purpose, when it was removed to a tent. (Charlevoix 1923:257-258)

Developing at the same time as New Orleans, but perhaps initially at an even faster rate, were the settlements at the Yazoo and Natchez Posts. As has been shown earlier (see p. 78ff) the colony established along the Yazoo River was quite progressive in its first few years, and that at Natchez was the pride of Louisiana up until the time of the 1729 massacre. These two posts were in a different ecological zone from the villages established along the Mississippi River, and French settlement pattern in the bluffs similarly took on a different form.

One thing which characterized both the Yazoo and the Natchez establishments, as indeed was typical of almost all of Louisiana, was the presence of a fort.* The shapes and interior layouts

* The Chevalier de la Salle left with a detachment, entered the Illinois area, took possession of the country in the name of Louis XIV, called it Louisiana in honor of this

of Louisiana's forts generally followed the Vauban design.* Some of the colonial fortifications, such as Fort Maurepas, Fort Condé, and the plans for the New Biloxi capital were extremely elaborate, but the French commonly called anything which provided some protection a "fort". La Salle in 1682 erected a "fort" in less than half an hour (Cox 1905:19). Father Membre described it as being:

...a retrenched redoubt on a point, with palisades, and felled trees.
(Membre n.d.in Cox 1905:135)

Similarly, in 1716 Bienville stopped at an island opposite a Tunica village and constructed a "fort" consisting of:

...a little intrenchment surrounded with palings and... three sheds - one for the provisions and munitions of war, another as a guardhouse, and a third of a prison.
(De Richebourg in Swanton 1911:198)

Surely the above, as well as many other "forts" constructed by the French in Louisiana, did not fit the proper fortification criteria of the time. The most important colonial forts, besides those listed above, were Fort de la Bculaye (Fort Mississippi), Fort Louis, the fort on Dauphin Island, Fort Rosalie, Fort St.

prince, and constructed a fort there; the Spaniards would have built a church; the English a tavern.

(Abbé Delaporte in Wilson 1965:103)

* Vauban (1633-1707) was the military genius of France. His fortification designs and military strategy were followed throughout Europe (Wilson 1965:104).

Pierre, the Natchez Fort, Fort Toulouse, and the fort on the island of Balize. They all shared certain characteristics, but were distinct in other respects. Pertinent data relating to each fort is presented in Appendix 1. An important point regarding all of the interior forts built among the Indians is that they were not designed as a defense against the native populations. The presence of a fortification naturally deterred the western expansion of England, but the principal purpose of these posts was for trade. The Indians, for the most part, desired these establishments and even helped in their construction (Phelps 1966:51; Swanton 1911:202). Rarely were soldiers involved in military activities at these colonial forts. Indeed, most of the garrison performed roles similar to the common settlers. Although most posts had barracks set up within the fort to provide lodgings for the soldiers, some, such as Fort Louis (French 1869:76), had lodgings apart from the fortifications. Others provided no barracks at all, the soldiers being forced to fend for themselves. M. de la Chaise complained of this situation in New Orleans in 1723:

The soldiers have no barracks. The majority sleep in the open air in chains; the others pay twelve livres a month for their lodgings. The officers are again crying to be given lodgings...
(La Chaise 1723 in Rowland and Sanders 1929:334)

Others preferred to live in the woods away from the fort where they could trade with the Indians. Officers were some of the worst offenders. Lamothe Cadillac complained of this situation at Mobile (1713 in Rowland and Sanders 1929:167-170)

as did Le Page du Pratz at the Natchez Post:

None should be allowed to lie out of the fort, not even the Officers, and even the Sergeants, were killed in their houses without the fort. I should not be against the soldiers planting little fields of tobacco, potatoes, and other plants, too low to conceal a man; on the contrary, these employments would incline them to become settlers; but I would never allow them houses out of the fort...

(Le Page du Pratz 1774:99)

I do not believe the colonists along the Yazoo River had the problem of a dispersed population. The history of the Yazoo Post has been discussed in a previous section, but it may be of some value to review the general spatial arrangement of this installation. Although historic references to Fort St. Pierre are minimal, there fortunately was a considerable amount of interest in recording it pictorially. Three plans of the post have survived. The "Fort St. Claude" map (Plate 3), definitely depicting St. Pierre, is believed, on the basis of stylistic similarities, to have been drawn by M. Devin in 1722 (Jeffrey P. Brain - pers. comm.). The fort's square outline, with four bastions and a moat, correlates well with Diron d'Artaguiette's description (see P. 82). In this plan, the fort's entrance is on the west towards the river. Immediately to the right of the gate (in entering) is the guards' quarters and this is followed along the south wall by two buildings for the officers' lodgings, a kitchen, and the commandant's quarters. Arranged along the eastern curtain is the warehouse and the lodgings for its keeper. The barracks are aligned along the northern wall and finally the sergeant's lodgings are to the immediate north

of the gate. Le Blanc's workers' houses are to the north of the fort and scattered around are a number of isolated dwellings, including the interpreter's house. Of some interest is the garden to the immediate south of the fort. It is depicted in a classical garden form, with a fountain or some elaborate floral arrangement marking the intersection of two avenues. The plan is so mindful of detail that I fear in some respects it is the product of an 18th century French draftsman recording what he felt a military outpost should look like, rather than what it was like in reality. A stockade is depicted around the garden, perhaps protecting the crops, like at the Terre Blanche concession in Natchez (Swanton 1911:pl.7a), but perhaps more than vegetables were being protected.

The Dumont dit Montigny plan (Plate 4) is possibly the base map for the above plan. This map is quite consistent with present geographical features and is perhaps the more accurate of the two plans. The layout of the fort is basically the same, the only differences being the absence of a kitchen between the commandant's and officers' and soldiers' barracks, and the reversal of the warehouse and its keeper's quarters. There are some additions in the surrounding countryside, including a stream with three catch-basins between the fort and the workers' lodgings, a furnace of some sort (le font) near the mouth of this stream, a pavilion (pavillon) marking the approach to the fort, and a gardener's house which, although depicted, is not labeled in the Devin plan. Although the gardener's house is shown in the Dumont map, the zone to the south of the fort is

not labeled "Jardin", as in the above plan. The palisade stands out much more plainly and there are two vertical intersecting avenues instead of one.

The earliest Dumont dit Montigny map (Plate 5), undoubtedly drawn by him on location, may perhaps be the original drawing for the above two plans. The structures within the fort are not labeled in this map, their general positioning being indicated by dashed lines. The garden is of some interest as it no longer appears like one. Rather, it resembles a system of roads and house blocks with a palisade encircling the entire formation. Walled communities situated adjacent to forts were common in 17th century Wales and 16th century France (Garvan 1951:fig.13,14), and may be what is being indicated for the Yazoo Post in this early map by Dumont. Planned fortified settlements are not without precedence in Louisiana. As discussed earlier (see p. 128), Mobile was built on streets laid out in a straight line. Similarly, M. le Blond de la Tour, the engineer-in-chief of Louisiana during the 1720's planned New Biloxi and New Orleans. In describing the 1721 plans for the former, Samuel Wilson noted:

Each plan was for a fortified town in the Vauban manner, not unlike Vauban's plan for Fort Louis du Rhin. The streets were laid out in gridiron pattern around a Place d'Armes, the same plan form to be later adopted for New Orleans.
(Wilson 1965:113)

New Orleans is described as having its streets laid out "in length and breadth by the line, and intersect and cross each

other at right angles" (Le Page du Pratz 1774:50-51).

As M. le Blond de la Tour was director of the Louisiana concessions of Marquis d'Asfeld, a co-owner of the principal concession at the Yazoo (Wilson 1965:112,118), it is reasonable to suppose that he had some influence over the layout of the Yazoo Post. It is obvious that some people did settle apart from the fort, but I believe they were the exceptions. The heaviest settlement occurred at the post when fears of Indian attack were strongest (see pp. 84-85). Two of the sergeants who did settle apart from the fort were killed in a Chickasaw raid in 1722, an incident which undoubtedly convinced others to stay close to the fort. This interpretation is supported by Bénard de la Harpe's statement that not many settlers took up land near St. Pierre because of Indian hostility (Surrey 1916:27).*

The French settlement pattern at Natchez was unlike that which is suggested for the Yazoo Post. The establishments among the Natchez were formed in a different manner from all other settlements in Louisiana. Elsewhere people went directly to the Council to obtain certain lands, but at Natchez land had to be bought from the Indians. Dumont dit Montigny, displaying a lack of foresight, considered this practice to be beneficial because the Indians "by this traffic were bound to the French,

* Hopefully this interpretation will be invalidated by future archaeological survey because, if correct, as the entire area to the immediate south of Fort St. Pierre was totally leveled in the early 20th century, almost all evidence of French habitation in the Yazoo Bluffs region would have been destroyed.

were attached to them, and became their friends" (Dumont dit Montigny in Swanton 1911:210). The settlement pattern which developed is clearly depicted in Dumont's plan of the post (Ibid:pl.7a). Father Raphael described the colonists as being "established on the hills where each has his land around his house" (Raphael 1726b in Rowland and Sanders 1929:525). Le Page du Pratz was quite wary of this dispersed settlement pattern, the 1729 events having demonstrated the validity of his warnings:

...the houses of the inhabitants, dispersed in the country, each amidst his field, far from affording mutual assistance, as they would have been in a body, stood each of them, upon any accident, in need of the assistance of others.

(Le Page du Pratz 1774:33)

Perhaps another reason why the French at Natchez could afford to be dispersed is that they, unlike the settlers along the Yazoo, were not in constant danger of Indian attack. True, they had a number of minor confrontations with the Natchez prior to 1729, but the Natchez Post was never subjected to the depredations of the Chickasaw, a people who continually hindered the development of the French colony along the Yazoo River.

I have often referred to the term "concession" in the above discussions and it might be of some use to examine its definition in regard to colonial settlements. When John Law and the Company of the Indies took over Antoine Crozat's monopoly in 1717, one of their tasks was to provide the colony with people who would engage in agriculture and other activities for the

export trade. To populate the colony they issued a number of concessions to prominent Frenchmen, a concession being defined as:

...a certain tract of land granted by the Company of the Indies to a private individual, or to several persons who have together formed a partnership, for the purpose of clearing that land and making it valuable.
(Poisson 1727 in Thwaites 1896-1901, 67:280-281)

The Concessionaires never left France. To establish their grants they sent superintendents, stewards, storekeepers, clerks, and workmen of various trades on equipped vessels. Most of these concessions fell to ruin in the first few years of their establishment, yet some appear to have been quite lucrative enterprises. John Law's concession at New Biloxi is in the latter category. A drawing dating to 1720 depicts a rather sizeable settlement consisting of tents, triangular-shaped thatched dwellings, more solid square houses of perhaps post construction, and a very large timber-frame building with a shingled roof (Le Bouteux 1720). The combination of different structures was also observed by Father Charlevoix at Madame de Mezieres grant between Baton Rouge and the mouth of the Red River:

A few huts covered with the leaves of trees, and a large tent made of canvas, are what the whole of this settlement at present consists of.
(Charlevoix 1923:265)

As discussed earlier (see p. 81), the principal concession at the Yazoo Post was quite elaborate in its first few years.

Two concessions at Natchez are also particularly worthy of note. The Terre Blanche (White Earth) concession was originally owned by the Western Company and run by M. de Montplaisir who settled it with people from the town of Clérac in Gascony in order to cultivate and work tobacco. Its ownership passed to M. le Blanc when the latter gave up his Yazoo concession (Swanton 1911:205). As depicted in Swanton (Ibid:pl.7a) Terre Blanche was quite an elaborate settlement. According to Diron d'Artaguiette who visited the area in January of 1723, a bridge had been built to cross the river (St. Catherine Creek) at this location (Mereness 1916:46). Upstream from Terre Blanche located on both sides of St. Catherine Creek, was a concession having the same name as this tributary. It was originally owned by M. Hubert and was later sold (1723) to M. Kolly (Swanton 1911:205-206). Diron d'Artaguiette described it as being run by a director, two officers, a surgeon, some Frenchmen, and Blacks, and he noted that a water mill had been constructed on the stream. He described the houses as "very ordinary and very badly built" (Diron d'Artaguiette 1722-1723 in Mereness 1916:46). M. Hubert, however, reported to have "erected a large dwelling house" for himself (French 1869:154). As depicted in Swanton (1911:pl.7a), the St. Catherine concession was arranged in a rectangular pattern with a large open square in the middle. Penicaut was very impressed with his visit to M. Hubert's concession:

The land was about a league from Fort Rosalie, and extended into the prairies, which he ploughed up and

sowed with French wheat. He afterwards erected a grist-mill, a forge, and machine shops, to manufacture arms and agricultural implements. (Pénicaut 1698-1722 in French 1869:154-155)

In addition to the granting of concessions, an independent colonist was granted a "habitation". Father Poisson defined this as being:

...a smaller portion of land granted by the Company... A man with his wife or his partner clears a little ground, builds himself a house on four piles, covers it with sheets of bark, and plants corn and rice for his provisions; the next year he raises a little more for food, and has also a field of tobacco; if at last he succeeds in having three or four Negroes, then he is out of his difficulties. This is what is called a habitation, a habitant; but how many of them are as nearly beggars as when they began! (Poisson in Thwaites 1896-1901,67:282-283)

According to Charles Peterson, habitations in the Illinois country were typically fortified, a trait which appears to have carried over into Lower Louisiana:

(When) New Orleans was laid out it was ordered that all of the property holders must have their houses on land enclosed by palisades within two months or they will be deprived of their property and it will revert to the company...

(Peterson 1965:25)

The practice of enclosing habitations and larger settlements was common at even an earlier date in Louisiana. In 1713 Lamothe Cadillac described the fort at Dauphin Island as being:

...surrounded by woods, by stumps and houses of private persons who are at a great distance from each other and separated by vast gardens enclosed with stockades so that it is a hotchpotch in which one can understand nothing.

(Lamothe Cadillac 1713 in Rowland and Sanders 1929: 165)

Dumont dit Montigny's drawing of the Natchez Post indicates that a number of habitations, as well as the whole of M. le Blanc's Terre Blanche concession, were enclosed by palisades (Swanton 1911:pl.7a), as was the Interpreter's house at the Yazoo Post (see Plate 4).

The houses built at the concessions and habitations were of various forms. The design of the structures obviously had its roots in France and Canada, but the Louisiana colonists (especially those in the Lower Mississippi Valley) lacked what was abundant in their homelands - stone. Nearly all Canadian houses of the mid-18th century were made of stone. They had thick walls and steep Norman roofs with curving parallels for Louisiana structures occurred in the Illinois country. The palisadoed wall (poteaux en terre) form was in general use throughout the 18th century in the latter area. To make a house of this type one dug a trench, placed a series of upright logs a few inches apart, attached their tops to a plate, backfilled the trench, and filled the spaces between the posts with a mixture of mud and grass (bousillée) or mortar and stone (pierrottée) (Peterson 1965:27). Another related method was to mortice the posts into a sill, rather than running them into the ground. The advantages are obvious as the structural timbers would be kept away from the damp earth (Ibid:35). Poteaux en terre construction was perhaps the most typical form used in Louisiana. It was employed at Fort Balize, the posts having been neatly hewn to provide a good exterior finish like a framed house, as well as at Biloxi and New Orleans.

Pine logs were typically employed at Biloxi, cypress being used at New Orleans (Ibid:26,9). Lamothe Cadillac described a house of this sort on Dauphin Island in 1716 (see p. 128). Other settlements which had buildings of this form were Fort de la Boulaye on the Mississippi (Wilson 1965:110) and John Law's concession at New Biloxi (Le Bouteux 1720). It seems that the Louisiana poteaux en terre houses were not built as sturdily as those in the Illinois country, undoubtedly due to differences in winter weather. Instead of digging trenches, the posts of these houses were often set in individual holes, a construction form typical in the Carribbean and perhaps sharing some historical roots with this area (Peterson 1965:29)*. Dumont dit Montigny has provided us with the best description of this type of architecture in Louisiana, and it is worth quoting his discussion in full:

In regard to cabins; they do not require much craftsmanship and their method of construction is very quick. First one takes as many poles (perches) or forked logs (fourches) as are judged appropriate to the length and width desired for the cabin. These forked logs are to be at least a dozen feet long. They are planted in the ground at regular intervals two and a half feet deep and joined together by plates (traverses) laid on top. Thus is formed a rectangle of which the short sides make the width of the cabin, taking the place of a gable. In the middle of the two short sides, one raises two other forked poles to the height of sixteen to eighteen

* Jeffrey P. Brain feels that the method may perhaps have less to do with historical roots than it does with the fact that individual post holes take much less time to dig than does a wall trench (personal communication).

feet on which is placed the ridgepole (*faite*) to which are nailed the rafters, the latter being properly spaced and falling on the plates to which they are also nailed. The framework (*carcasse*) of the cabin is thus raised. It is closed in with cypress stakes (*pieux*) driven a foot into the ground and fastened above to the plates (*traverses*) with nails, allowing for doors and windows in the walls. Finally it is covered, as I have said, with cypress bark or palmetto (?*lantancier*) leaves, and voilà, a cabin has been built. One can see that in a country as well wooded as Louisiana there should be no difficulty of procuring shelter since one can build a house in twenty-four hours.
(Dumont dit Montigny in Peterson 1965:28-29)

Another method of house construction, one which had been especially typical of Canada, is de pièce sur pièce. In this form of frame construction upright poles are widely-spaced, the intervals being filled with hewn horizontal planks (madriers) or logs. The vertical posts have channels to receive the planks (Peterson 1965:37). Charles Peterson noted the scarcity of this architectural type in the Illinois country and made no mention of it in lower Louisiana. However, it is becoming evident that such structures were commonly made in the latter area. Two of the bastions at Fort Maurepas were of de pièce sur pièce (French 1869:30,1; Giraud 1974:fig.2; Wilson 1965:fig.2,108), but buildings were also made in this manner. M. de la Salle erected one such structure at Fort St. Louis in Texas in 1685, as recorded by Joutel:

each was put to work at his own trade and a number of pieces of wood were found sizeable enough for building a house, M. de la Salle had all the pieces cut to the length he judged proper and built a building of it, adjoining the other one that had been commenced; but the latter was larger and finer. The first one was built in the Canadian manner and

the other almost the same, but as the pieces of this latter were straighter and thicker they were adjusted better. All the pieces were dovetailed at the corners, fastened with a good peg...This house was the first one ready; it was roofed with the old planks...on which we nailed the skins of oxen.
(Joutel in Wilson 1965:106)

A similar building of de pièce sur pièce structure was erected at the Arkansas Post, as described by Joutel in 1687:

...(There) was a house in the French manner....It is built of heavy pieces of wood notched one into the other, dovetailed, all the way up to the height of the roof, and of fine cedar wood and roofed with bark, not a bad roofing.
(Ibid:106)

A house in Mobile which belonged to the king was described by Nicholas de la Salle in 1704 as being:

...of one story of dressed timber laid piece on piece with a roof of framework covered with shingles and a gallery from one end to the other on the side of the river.
(Nicolas de la Salle 1704 in Rowland and Sanders 1929:19)

Archaeology is currently revealing that de pièce sur pièce architecture was more popular in lower Louisiana than originally thought. As will be discussed in the next chapter, I believe that Structures B and C at St. Pierre were of this architectural form. Buildings of this sort were also found at Fort Toulouse (Donald Heldman-pers. comm.), and the "Indian" houses at the Bayou Goula Site (32-L-1) were most likely French dwellings of de pièce sur pièce construction (Brown 1978b)*.

* Undoubtedly for many of the early 18th century Louisiana

A third type of architecture employed, the rarest of all it seems, is frame construction sur une solage or de colombage. Large timbers are used in these houses, the interstices being filled with mud plaster or bricks (briqueté entre poteaux) for added strength. Wide boards are often placed on the exterior to cover and protect the frame. Some of the earliest buildings in New Orleans were of this architecture, and some are still standing today. The church designed by M. de Pauger, the three-story Ursuline Convent, "Lafitte's Blacksmith shop", and "Madame John's Legacy" are fine examples. Historic reference to this type of architecture elsewhere in lower Louisiana is exceedingly scarce (Peterson 1965:36-37; Wilson 1965:115).

The majority of the Louisiana frontier houses were probably of the rustic form described by Dumont dit Montigny. The materials used were obviously conditioned by those which were available. Cypress was the preferred wood, because of its rot resistant characteristics, but pine and acacia were also employed (Peterson 1965:26-29; Swanton 1911:202,241-243). Shingles were the preferred material for roofing, but when not available, bark was used (cypress bark according to Dumont). Such was the situation at Fort Condé in 1724 (Rowland and Sanders

houses, archaeology will contribute little in regard to structural information. As indicated above by Father Poisson (see p. 139), many houses were built on four posts as a protection against flooding. This is a situation he observed at the Pointe Coupée settlement (Thwaites 1896-1901,67:302-303) and one which still occurs today.

1929:19,393), and it appears that the designers of both the Arkansas Post (Wilson 1965:106) and Fort Rosalie in Natchez (French 1869:128; Swanton 1911:202) also resorted to using bark. In addition to shingles and bark, palmetto leaves, straw, and reeds were used as roofing materials (Peterson 1965:28-29; Rowland and Sanders 1929:19,220). A combination of these elements was employed in Father Avond's house, missionary to the Arkansas Post. Father Vitry described it in 1738:

His lodging is a lent hut (cabane d'emprunt), the walls of which are made of splinters of wood; the roof of cypress bark; and the chimney of mud mixed with dry grass, which is the straw of this country. I had elsewhere lived in such dwellings, but nowhere did I get so much fresh air, the house is full of cracks from top to bottom.
(Vitry in Delanglez 1935:438)

The dimensions of these houses varied, but the "16 foot" unit appears most frequently in the historic accounts.* A 1704 storehouse in Mobile was covered with shingles and measured 40 by 16 feet (Rowland and Sanders 1929:19). A guardhouse observed at the same time by Nicolas de la Salle is described as being of one story with the exact same dimensions. It was of framework construction,** had shingles, and two-thirds of it was used as a storeroom for arms and ammunition (Ibid:19). Another house

* Space divided into multiples of 16 feet is quite typical of the early Anglo-American culture (Deetz 1977: Glassie 1975:21-24)

** This could refer to de pièce sur pièce, sur une solage, or de colomage.

recorded at the same time was of one story of de pièce sur pièce construction. Its dimensions were 68 by 16 feet and its roof was covered with shingles. A gallery was situated "from one end to the other on the side of the river" (Nicholas de la Salle 1704 in Rowland and Sanders 1929:19). A house belonging to M. Layssard, a resident of the Arkansas Post, was described in 1758 as a small dwelling, 25 by 16 feet, in which were packed his wife, four children, five slaves, dogs, cats, and hens (Delanglez 1935:445). The "16 foot" unit was also typical of some churches. One described in Mobile in 1704 was 62 by 16 feet, of framework construction, and covered with shingles (Rowland and Sanders 1929:19). There was however some variation. The church Father Du Ru built among the Bayagoula Indians in 1700 was designed to be 50 feet long and 20 wide. Its shape was to be that of a ship turned upside down (Delanglez 1935:16). Louisiana's churches seldom attained the ambitious dimensions outlined above. Lamothe Cadillac described one in Mobile as being, "a small room in which there is room for only about twenty persons even when they are closely crowded together" (Lamothe Cadillac 1713 in Rowland and Sanders 1929:182). The priests often met their vows of poverty. Father Avond's house among the Arkansas is described above. Father Gaspar's house on the island of Balize fared no better. Father Raphael described it in 1726 as being, "a wretched house without a fireplace or any convenience" (Raphael 1726 in Rowland and Sanders 1929:517). He had little better to say about the parsonage at Natchez. It was located at the base of the bluffs adjacent to the river and

was:

...very indecent, without a ceiling, without a pavement, without windows, receiving light only through the door of the house and with room for only about twenty persons although there are certainly nearly two hundred communicants. It [mass] was formerly said in a more spacious and less indecent place, but the commanding officer has taken lodgings in it.
(Ibid:525-526)

The early French colonists thus had a fairly complicated settlement pattern, one that was essentially tuned to the particular sociophysical environment the settlers ended up in. True, they brought certain patterns with them from France and Canada, but the available resources often limited the expression of these patterns. The general outlines of architectural construction continued to persist. The larger more established settlements were generally planned communities, but the arrangement of concessions and habitations set up in frontier regions was more dependent upon the relationship between the French settlers and the native populations. Whereas at Natchez the settlement pattern was one of dispersal, at the Yazoo Post it appears to have been more one of nucleation. French-Indian interaction appears then to have had some, if not a major, effect on colonial settlement patterns in Louisiana.

Economic Organization

Another effect the native populations had on the French settlers was in the realm of subsistence. More concerning

trade and economic aid will be discussed in chapter 11, but it will be of some use to outline the colonial economy at this time. The Company of the Indies was little interested in establishing permanent agricultural settlements in and of themselves, but they realized that in order to protect their principal commercial interests (originally mines and later peltries), they had to establish self-sufficient permanent settlements. Peoples of all trades were sent to form balanced communities. A list of those killed at the Natchez Post in 1729 reveals that carpenters, coopers, tailors, surgeons, coppersmiths, goldsmiths, and potters were some of the skilled craftsmen sent to the colony (Phelps 1966:54; Rowland and Sanders 1927: 122-126). The Company was opposed to the planting of vines and the growing of hemp and flax, for fear of competition with home products, but they were not adverse to the cultivation of crops not grown in France. However, as will be discussed in greater detail below, the colonists were paid little for their labor. The settlers, therefore, soon turned to the necessary task of tilling the soil for their own subsistence (Delanglez 1935:154-155; Surrey 1916:160). The adaptation of their new physical environment did not occur immediately. The first French settlers depended almost entirely on merchandise arriving on French ships. Vessels sailed to Louisiana from the ports of La Rochelle, Rochefort, Bordeaux, St. Malo, Marseilles, Nantes, Lavre, Bayonne, and Dunkerque. The majority of those sent by the Crown sailed from Rochefort, whereas merchants in La Rochelle and Bordeaux dealt most heavily in transactions with

Louisiana (Surrey 1916:77-78).

The ships from France were not of the highest dependability. Some reserves were stored in the warehouses of the colonial settlements and the recently arrived settlers were in great part supplied from these reserves. The Company stores at New Biloxi supplied the people destined for the concessions with a variety of livestock, including cattle, hogs, and fowls (Surrey 1916:253). Perhaps horses were also included, as settlers at the Natchez Post are reported to have had them (Swanton 1911: 207).^{*} Fresh meat was very hard to get throughout the colony and there were fines on persons who sold it above the legal price (beef especially) (Surrey 1916:253). The settlers also depended heavily on local Indians for meat. The 14 French colonists at the Arkansas Post in 1726 were described as being, "very poor and who only subsist by the hunt of the Savages" (Delanglez 1935:435). The first settlers relied heavily on the Indians for other foods, a subject which will be discussed in greater detail in chapter 11, but a large part of their staples came from the Illinois country. Le Page du Pratz, in speaking of the Arkansas Post, noted "that wheat thrives extremely well here, without our being obliged ever to manure the land" (1774:57), but most authors agreed that the Gulf region was not suited for the production of wheat. The supply of flour thus came from both France and Illinois. It was scarce and expensive though, and so the colonists resorted to making bread in whole or in part

* It is also possible that horses were obtained from the local Indians (see p. 433).

from corn meal or rice flour (Surrey 1916:265-1267). In addition to wheat flour, during the First Natchez War in 1715-1716, there is mention of boats coming to Lower Louisiana from the Illinois country laden with pelts, smoke meats, and bear's oil (Swanton 1911:198-200). Similarly, Perier noted in 1729 that a considerable amount of flour and bacon was sent to New Orleans from Illinois (Rowland and Sanders 1929:646).

Although single boats from time to time made the voyage from Illinois to lower Louisiana, the expeditions by and large consisted of from two to twenty or more vessels. These expeditions were generally accompanied by a military escort. One launched in 1732 consisted of twenty men as an escort for four pirogues of voyageurs. Convoys usually left Illinois in February when the water was high and flowing faster than normal. Indians were involved in hunting at this time and so the trip was safer. Convoys leaving New Orleans for the Illinois country left between August and November to avoid currents and reach their destination before winter set in. The colonial administration usually sent two convoys annually to Illinois, one in the fall and the other in the spring. These consisted of seven or eight boats each (Surrey 1916:45-47). Large bark canoes were typical of the Upper Mississippi Valley, but were impractical in more southernly regions. The strength of the current as well as the many obstacles (trees, roots, etc.) in the river prevented the use of these fragile vessels (Charlevoix 1923:220-221). Pirogues (or "dug-outs") made from the trunks of cotton-wood, cypress and walnut trees, were the basic form of water

transportation used by the Indians, and the French similarly adopted them for their own use. The largest were as much as 50 feet long and could carry 50 men (Ibid:221; Surrey 1916:55-57).

As the years passed, the settlers began to rely less and less on France and the Illinois country. Like the Indians, colonial hunting parties were sent out to take advantage of the seasonal resources. According to Le Page du Pratz:

It is on the river of St. Francis, that the hunters of New Orleans go every winter to make salt provisions, tallow, and bears oil, for the supply of the capital.
(Le Page du Pratz 1774:112; also see Poisson in Thwaites 1896-1901,67:284-285)

The colonists were necessarily involved in the raising of subsistence crops. The 20 Frenchmen and 25 Blacks at M. Colly's (also called Kolly) concession at Pointe Coupée cultivated rice, beans, potatoes, and, "other things necessary to life" (Diron d'Artaguiette 1722-1723 in Mereness 1916:43). Farther to the north at the mouth of the Red River, the French settlers among the Tunica grew rice, beans, maize, and other vegetables. They also raised poultry to sell in New Orleans (Ibid:44). The Natchez settlers raised the above vegetables, but their money crop was tobacco, "which grows there very fine and good and abundant" (Ibid:45). Le Page du Pratz considered the tobacco grown at the Natchez and Yazoo concessions to be the finest in North America, due to the excellent soil (Swanton 1911:79). In addition to tobacco, large cargoes of lumber and other colonial products were taken to New Orleans for export (Surrey 1916:48). Other vegetables raised as provisions for the

soldiers of the frontier garrisons and to be sent to market were potatoes, watermelons, peas, pumpkins, cabbages, herbs, and rice. The German settlers contributed apples, peaches, pears, figs, sweet potatoes, artichokes, large cabbages, and salad plants (Ibid:270-272). Non-perishable trade products included bees-wax, salt, furs, lead, masts, pitch, tar, indigo, cotton, sassafras, quinine, and cane walking sticks (Ibid:100-101,160). One French concession in 1721 was even growing white mulberries and raising silk worms (Charlevoix 1923:267; French 1869:140).

As the colony developed, the production of rice and especially tobacco became of most concern to the Company of the Indies. In exchange for the local products, the Company gave European merchandise (Surrey 1916:160). Bartering was not only the way in which exchanges were made between French and Indian, but it was also the manner in which economic transactions were made between French settlers, particularly in the interior. There is no evidence of any standard of value among the French in Louisiana, such as the "made beaver" or wampum of the English. Money was scarce. Even the Louisiana employees of the Company of the Indies received the wage they were to use in Louisiana in the equivalent amount of merchandise, whereas the remainder, which was to go to the support of their families in France, was paid in silver (Surrey 1916:100-101). Silver coinage in Louisiana was always something of a rarity. Prior to 1712 it came from the Spanish in Pensacola, and after the founding of Natchitoches it came from the Spanish to the west. It never lasted long in the colony. Once received it was immediately

exchanged for European merchandise and thus shipped to France. Some attempts were made at introducing copper coins (see pp. 311-33), but this did not seriously affect the economic practice of bartering (Rowland and Sanders 1929:501,554,600,634; Surrey 1916:102-109). As stated earlier (see p. 148), the settlers soon became disillusioned with their role in the export trade. The Company did not deal squarely with them. European merchandise was particularly expensive at the Yazoo Post. Settlers at Mobile paid 50% more than the going price in France, but because of the distance and hardships involved in getting the merchandise to the Yazoo, the latter people had to pay an additional 13% in 1720 (15% according to Surrey). A year later they were required to pay an additional 70%: (Gayarré 1846:176,184; Surrey 1916:252). With little wonder did the colonists begin to learn to live without the benefits of French manufactured goods.

An important element, if not the important element, in the development of Louisiana's economy was the importation of Black slaves. Traffic in Indian slaves was common from the beginning of French settlement, but it was never very profitable as the Indians could merely run away when forced to work. Blacks were first brought into the colony, in any great quantity, in 1719 and they quickly replaced Indians as laborers. At this time 250 were imported and two years later another ship, carrying 175 Blacks, arrived in the colony. An additional 600 slaves arrived a few days after the last batch (French 1869:146,159-160; Howell 1973:127-128; Surrey 1916:232). Very few Blacks ever reached the frontier settlement however. The Company of the Indies

promised 1,500 slaves to the St. Catherine Concession in Natchez, but only 45 had appeared by 1723, and by 1727 only 158 were in residence (Phelps 1966:51). Diron d'Artaguiette noted a lack of slaves in the general Natchez area in 1723 (Mereness 1916:45). Importation increased over the years. In 1729, 260 out of an original total of 400 slaves arrived in the colony (Rowland and Sanders 1929:620), and by 1731 there were 3,395 Black slaves in the whole of Louisiana. This increased to 4,730 by 1746 and by the end of the French dominion there were about 6,000 slaves in Louisiana (Howell 1973:127-128).

Summary

The colonial economy, like the settlement patterns, obviously had traditional roots. What the French did and did not grow was conditioned by the Company of the Indies as well as by their own food preferences brought from Europe. The lack of wheat must have been a frightful experience to people so conditioned to eating bread made of this flour but, just as the colonists learned to use the local resources in building their homes, so also did they learn to eat the local foods. The Indians not only helped them survive the first few years of settlement but, the foods and manners of their preparation were also incorporated into the colonial diet. In time the settlers learned that there was little profit in the export trade and so devoted themselves to the development of the land. The colony gradually became self-sufficient.

Summary of the French and Indian in the Yazoo Bluffs Region

This part of my dissertation was designed to provide an ethnohistoric background for the study of French-Indian interaction in the Yazoo Bluffs region. There are a number of important points, the first being that this region played a small, but not insignificant, role in the history of Louisiana, which in turn played but a small part in the overall course of events which shaped French history in the New World. The Yazoo Bluffs region was a typical buffer zone, much like that of the Ohio Valley during the Seven Years War, but on a much smaller scale. The French were not overly interested in the area for its physical properties, but they were concerned about its human resources.

Several small groups inhabited the area in the early 18th century and were alternately seduced by French and English, each trying to penetrate farther into regions claimed by the other. The French twice tried to win Indian loyalty. The "missionary" period (1698-1706) was an attempt to capture their souls, while the "trader" period (1719-1729) was designed to bind the Yazoo Bluffs Indians economically to the French. Each period succeeded in some respects, but failed in others, the ultimate failure being the extinction of these aboriginal groups. The history is fairly clear, but how it was happening and how each group was being affected by the other, is not. The cultural systems of the French and Indians throughout the

three decades of contact has been dealt with in some detail, it now being possible to examine the nature of interaction and the character of sociocultural change throughout this turbulent period. Archaeology has shed some light on French-Indian relations in the Yazoo Bluffs region, and to that we now turn.

Part III - Archaeology of the Yazoo Bluffs Region

Chapter 8 - Excavations

Introduction

As stated in the introduction, recent archaeological investigations began in the Yazoo Bluffs region in the summer of 1974 (Figure 1). Excavations were conducted at Haynes Bluff (22-M-5), Burroughs (22-M-10), Portland (22-M-12), Russell (22-N-19), and St. Pierre (23-M-5). The following year excavations were continued at St. Pierre and test excavations were conducted at Lonely Frenchman (23-M-11). In 1976, archaeological investigations were conducted at St. Pierre, Lonely Frenchman, Wright's Bluff (22-M-15), Anglo (22-M-16), and Lockguard (22-M-17).

The excavation information presented in this chapter is largely the result of our work in 1976. The 1974 and 1975 investigations are quickly summarized, as the findings of these years are recorded in detail elsewhere (Brown 1975a; 1975b; 1975c; 1976c). As the Portland Site is extremely important in this volume, a detailed review of the excavations conducted at this site in 1974 (Brown 1975a) is offered here. Although only the 1976 investigations in the Yazoo Bluffs region receive primary attention, the artifacts from three years of excavation in this area are dealt with equivalently in Chapter 9. The

work at Haynes Bluff, Burroughs, and Russell, was conducted by Jeffrey P. Brain and has been dealt with in preliminary form elsewhere (Brain 1975a).

Techniques*

Prior to discussing the techniques of excavation, it will be of some value to describe the cataloguing system used. When excavations began in the Yazoo Bluffs region in 1974, we adopted the labeling system of the Lower Mississippi Survey used by Harvard University. Each site was given a number and a letter based upon the U.S.G.S. topographic quadrangle in which it was found (22-M; 23-M). Each site was distinguished from other sites within the same quadrangle by being given an additional number, based upon the order of discovery (22-M-12; 22-M-13) (see Phillips et al. 1951; Phillips 1970). Surface collections, test trenches, and test squares were given "Y" numbers (Yazoo), similarly designated on the order of collection or excavation. For example, one square at St. Pierre was labeled Y500, the one excavated next being labeled Y501. Levels within the squares

* Following Leone (1972a:133), "technique" is defined as a "set of tools used in obtaining and measuring data." It is distinct from "method" in that the latter is, "generally a series of logical and procedural devices insuring rigor in the match between data and the variable those data measure." An example of "method" is the direct historical approach, while examples of "techniques" are stratigraphy and radiocarbon dating. This section is devoted to the treatment of how information was extracted from the earth.

were further distinguished by letters (Y500A; Y501A). Each "Y" number and its various letters were recorded and described on index cards, as well as in the fieldbook. Site index cards were also made, and listed on each card were all the "Y" number surface collections and excavations made at the site in question. This catalogue system provided a useful method of cross-reference, and had the added benefit of not having to put an inordinate amount of information on each artifact. We used this system in 1974 and 1975:

1974

Y500 - Y549	excavations at Portland
Y550 - Y599	excavations at St. Pierre

1975

Y600 - Y699	excavations at St. Pierre
Y900 - Y999	surface collections and other excavations in the Yazoo Bluffs region

In returning to the area in 1976, it was apparent that the excavation numbers had to either move into the Y1000's, with all its accompanying labeling problems, or the cataloguing system had to be changed. We settled on the latter alternative by selecting a new letter (W) to designate the type of collection:

1976

W1 - W299	excavations at St. Pierre
W300- W399	other excavations in the Yazoo Bluffs region
W300	Anglo
W301 - W324	Lonely Frenchman
W325 - W349	Wright's Bluff

W350 - W399 Lockguard
W400 - W499 surface collections in the Yazoo Bluffs
region

We used two systems of excavation in the Yazoo Bluffs region - a grid of 2 meter squares and .5 meter wide trenches. There was some variation in our investigation of the Wright's Bluff Site, but in all other cases excavations were conducted by troweling. Balks, 10 cm wide, were left along the south and west wall of each square. Each member of the crew was given a sheet of graph paper which had the plan of his square drawn on it (figure 2). The grid was divided into 5 cm square units. The historic European artifacts from each level, as well as the more "exotic" aboriginal artifacts (projectile points, clusters of potsherds, etc.) were plotted on the graph paper. In addition to their horizontal placement, the vertical position of each historic artifact (excluding nails and wine bottle glass, which were too numerous to handle) was recorded by the use of a transit. Ideally, every artifact, aboriginal and historic, should have been plotted, but ceramics and lithic debitage were too abundant to deal with in this manner.

Prior to plotting the artifacts, the investigators were instructed to show each specimen to one of the site supervisors. The purpose behind this procedure was to make sure that such items as white china would not be recorded as tin-glazed earthenware. Our controls were not always successful. Often, for example, any clump of iron was plotted as a nail. It was also impossible to retrieve everything by troweling. All dirt was sifted through $\frac{1}{2}$ inch square mesh screen in order to get

a "complete" and comparable sample from each square. Theoretically, there should have been more artifacts in the total artifact inventory of each square level than plotted on the graph paper. Figures 12, 16, 17, and 18 are consequently a good approximation of artifact clustering, but the reader is warned that some items were missed and others were mislabeled.

When an entire square was taken down to subsoil, any stains in the soil were labeled by adding a number to the level. For example, a stain at the base of level A of square W23 was designated W23A1. Stains were not excavated until adjoining squares were taken down to subsoil. In this manner it was possible to ascertain the complete outlines of the stains. If stains had definite outlines, and were not just the result of differential moisture retention, they were given feature designation.* Each feature was bisected. One half was excavated to subsoil, following the contours of the feature. The horizontal and vertical positioning of historic European artifacts contained within each feature were recorded. The profile of each feature was drawn and photographed. The remaining half of each feature was then excavated by natural levels, or, if there was no apparent stratigraphy, was taken out as a single unit. All feature soil was subsequently sifted through $\frac{1}{4}$ inch screen. A plastic bag, with a capacity of two

* Over the three years of excavation at St. Pierre, all features were preceded by the number Y558. For example, an artifact from Feature 8 was labeled Y558-8. If more precise location within the feature was desired, the artifact was labeled Y558-8A, Y558-8B, etc.).

gallons, was filled with earth from each feature for flotation.* A small soil sample from each feature was also secured.

If only one thin natural level existed from the present surface of the site to the subsoil, balks were removed when squares to the north and west were excavated. The purpose of this procedure was to increase the artifact sample and entirely isolate features and structures.** Prior to removal, each balk was drawn. Balks were generally retained if natural stratigraphy was observed, in order to maintain vertical control.

As artifacts were deposited in the laboratory, they were cleaned, labeled, and classified. Historic copper/brass and iron artifacts, which required chemical cleaning, were photographed, drawn, and described, both prior to and after cleaning. The square plans employed by each excavator were transcribed immediately upon the completion of each level. This procedure was the responsibility of a single person so that there would be standard symbols and uniform neatness for each transcribed square plan. Any questions concerning certain artifacts plotted on the graph paper could be posed to the excavator the next day, while the notations were still fresh in the latter's memory. We thus have two complete sets of square plans - the originals and the transcribed versions. Each plan has the artifacts

* We had neither the time nor the facilities for performing this technique, but the flotation samples have been saved and stored for future analysis.

** The term structure was used solely for the outline of buildings. Thus, a single structure may have had within it a number of features.

depicted in relation to the uncovered stains, features, and structures. From the original square plans we daily plotted stains on a master excavation plan. In addition to the square plans and master excavation plan, the stains discovered in each square were drawn and described in a field book. The overall process may seem redundant, but the extra effort was well worth the cost.

St. Pierre (23-M-5)

The remains of Fort St. Pierre, constructed in 1719 and destroyed by a local Indian uprising in 1729, were found in 1974 on a high bluff overlooking the Yazoo River, about 10 miles northeast of Vicksburg, Mississippi (Figure 1). The site is situated at the first contact point of the Yazoo River and the steep bluffs which form the eastern edge of the valley. A great deal of disturbance, including the construction of a railroad, a highway, and a bridge approach, occurred in this area in the 20th century. Fortunately, a major portion of the fort has survived. Its remains are situated upon a small bluff north of the bridge approach.

The site of St. Pierre is of principal importance in the study of French-Indian relations in the Southeast. Diagnostic European artifacts found at the fort have been used in identifying local contemporary French and historic aboriginal sites. The analysis of materials given, or traded, to the Indians contributes

to a better understanding of French-Indian interaction in the Yazoo Bluffs region. St. Pierre is of further importance, because a large amount of historic aboriginal material has been found at this site. We thus have a fairly good idea of the native materials received and used by the French. The discovery of several complete aboriginal vessels in contexts dating to the 1729 massacre, also provides a better understanding of the native wares of contemporary local Indians.

1974 Investigations

Preliminary test excavations in 1974 occurred on the northwestern part of the plateau, at the intersection of two natural embankments (Brown 1975a;b). Our discoveries can be summarized in Figure 3. Located on top of the westernmost embankment, which runs parallel to the Yazoo River, are a number of large linear log stains. Several meters to the west of this embankment we discovered the fort's palisade trench. Sandwiched between the palisade line and the embankment are a number of trash pits. Excavation revealed that this particular part of the fort was no longer included within the fortifications at the time the trash was thrown over the embankment. This interpretation is based upon the fact that the posts within the palisade trench had been pulled out, the vacant shafts later being filled by fine water-sorted loess and/or trash deposits. In an earlier paper (Brown 1975b), I suggested that

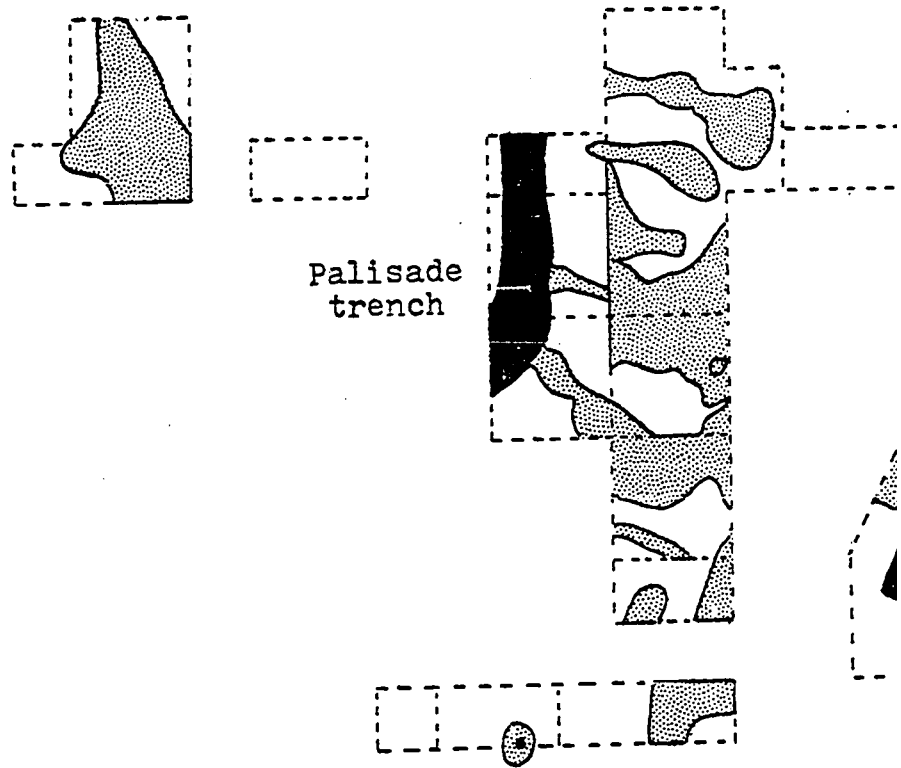


Figure 3

St. Pierre (23-M-5) - 1974 Excavations

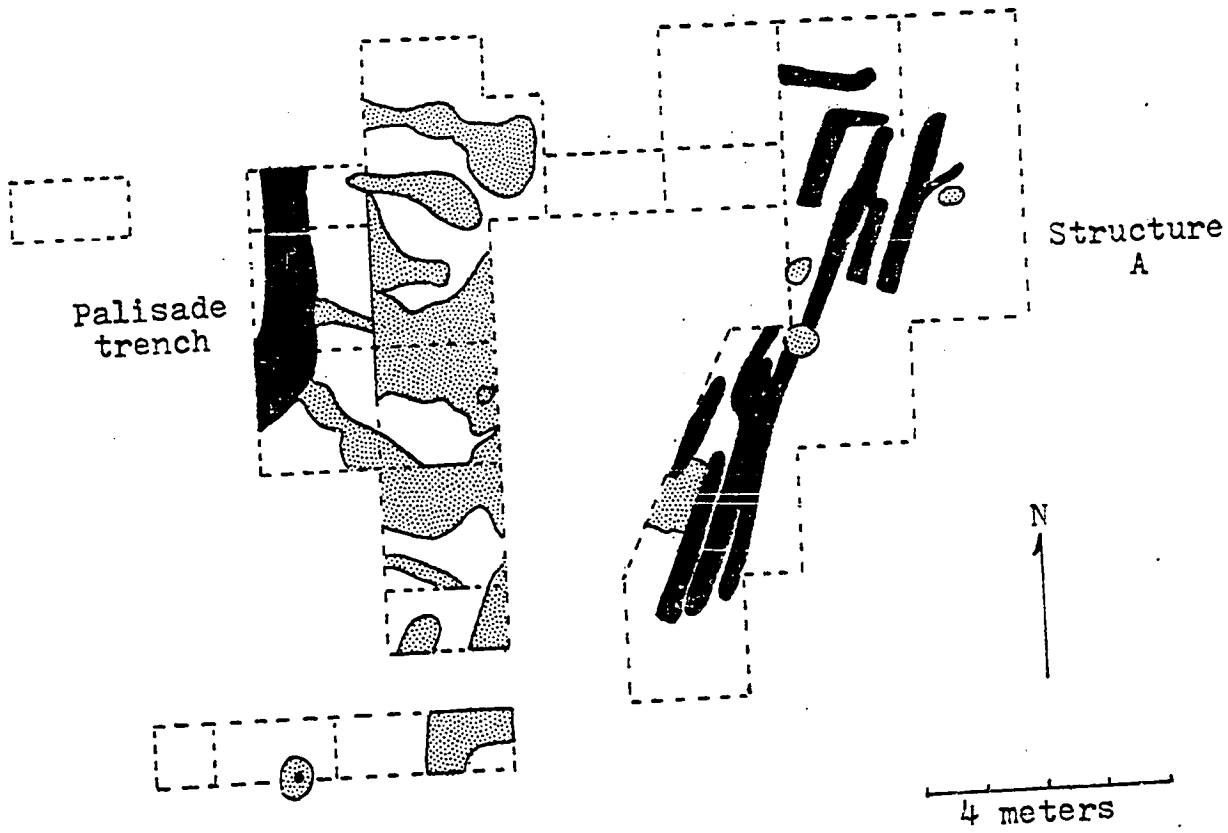


Figure 3

Site (23-M-5) - 1974 Excavations

- Features
- Log Stains

the "shrinking-in" of the physical size of the fort may have been directly related to the decline in the resident population. With a reduction in the population, it may not have been necessary to have had fortifications as large as those described by Diron d'Artaguiette in 1723 (Mereness 1916:51). I felt that the absence of intensive burning in this area, a feature which characterized the Natchez Indian massacre of the French a month prior to the Yazoo intrigue (Le Page du Pratz 1774:83), was evidence supporting the abandonment of this portion of the fort. However, I could not offer an explanation as to why this particular part of Fort St. Pierre was abandoned, being used merely for the deposition of trash.

1975 Investigations

In 1975 we may have discovered the reason why the northeastern part of Fort St. Pierre was abandoned (Brown 1975c; 1976c). Heavy spring rains caused a great deal of bluff erosion along the Yazoo River, and a large part of the northwestern portion of the site, including at least a third of our excavations, dropped into the Yazoo Valley. One fortunate aspect of this event was that we were able to observe a cross-section of the palisade trench and a large portion of the surrounding subsoil. The palisade trench, filled with highly organic wastes, is depicted in the upper left of figure 4. It can clearly be seen that the eastern edge of the palisade trench

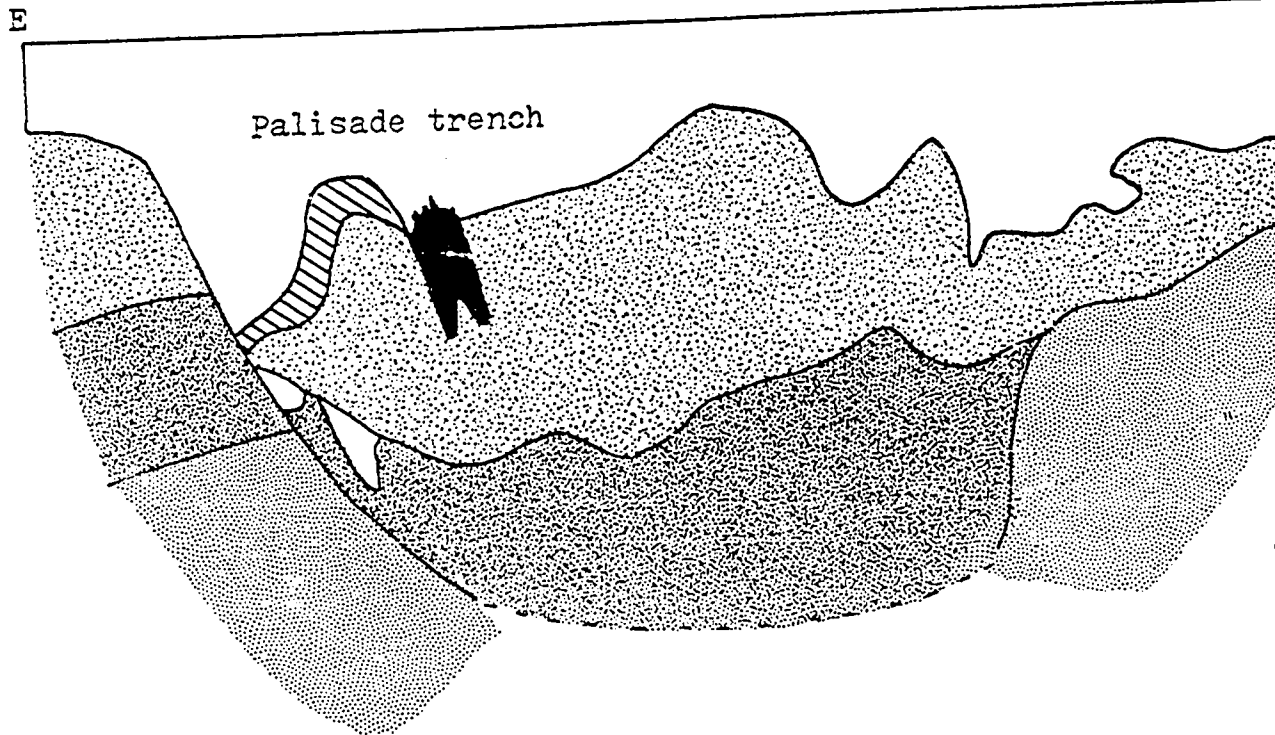


Figure 4
Section of palisade within slumped area

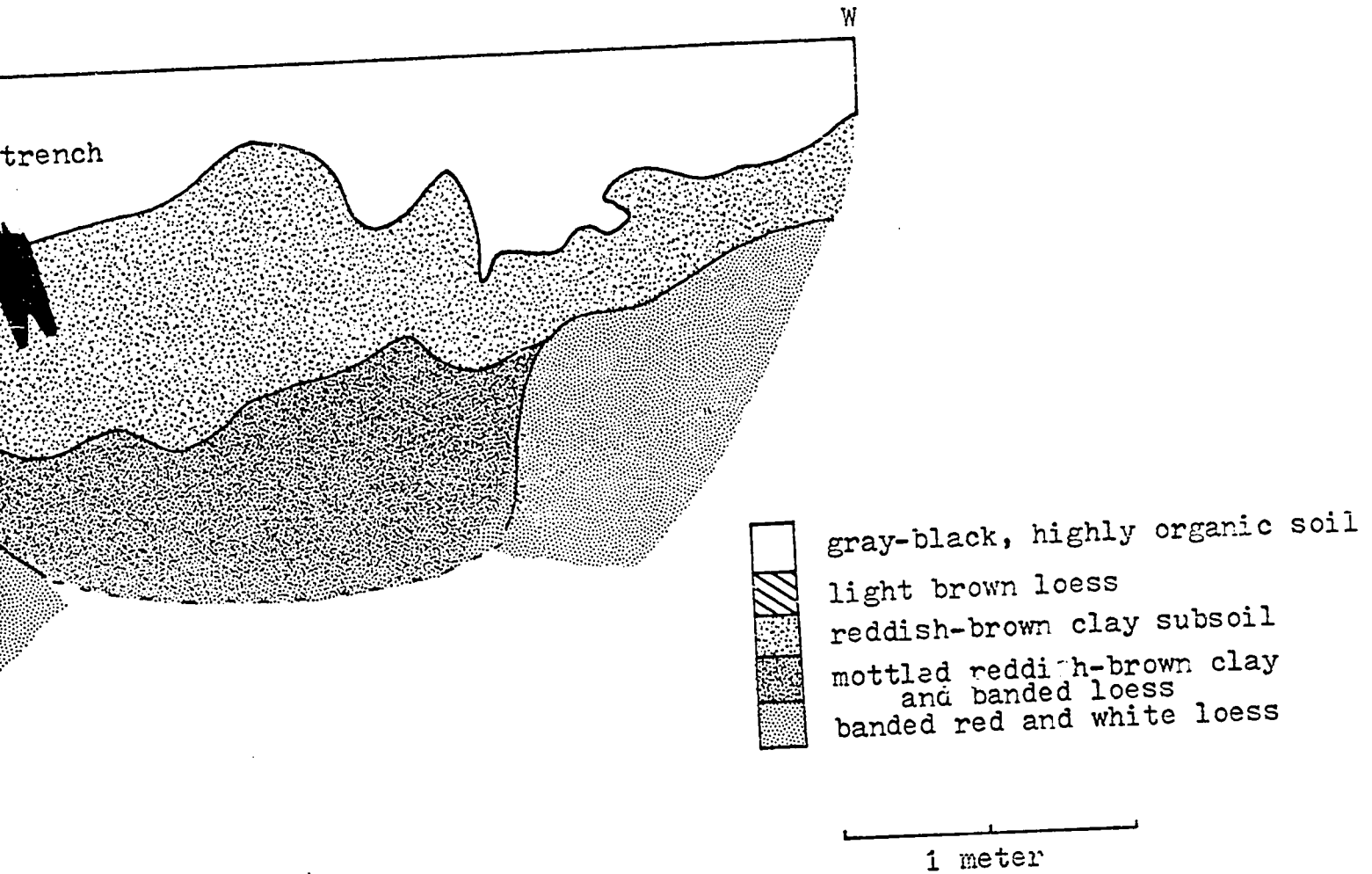
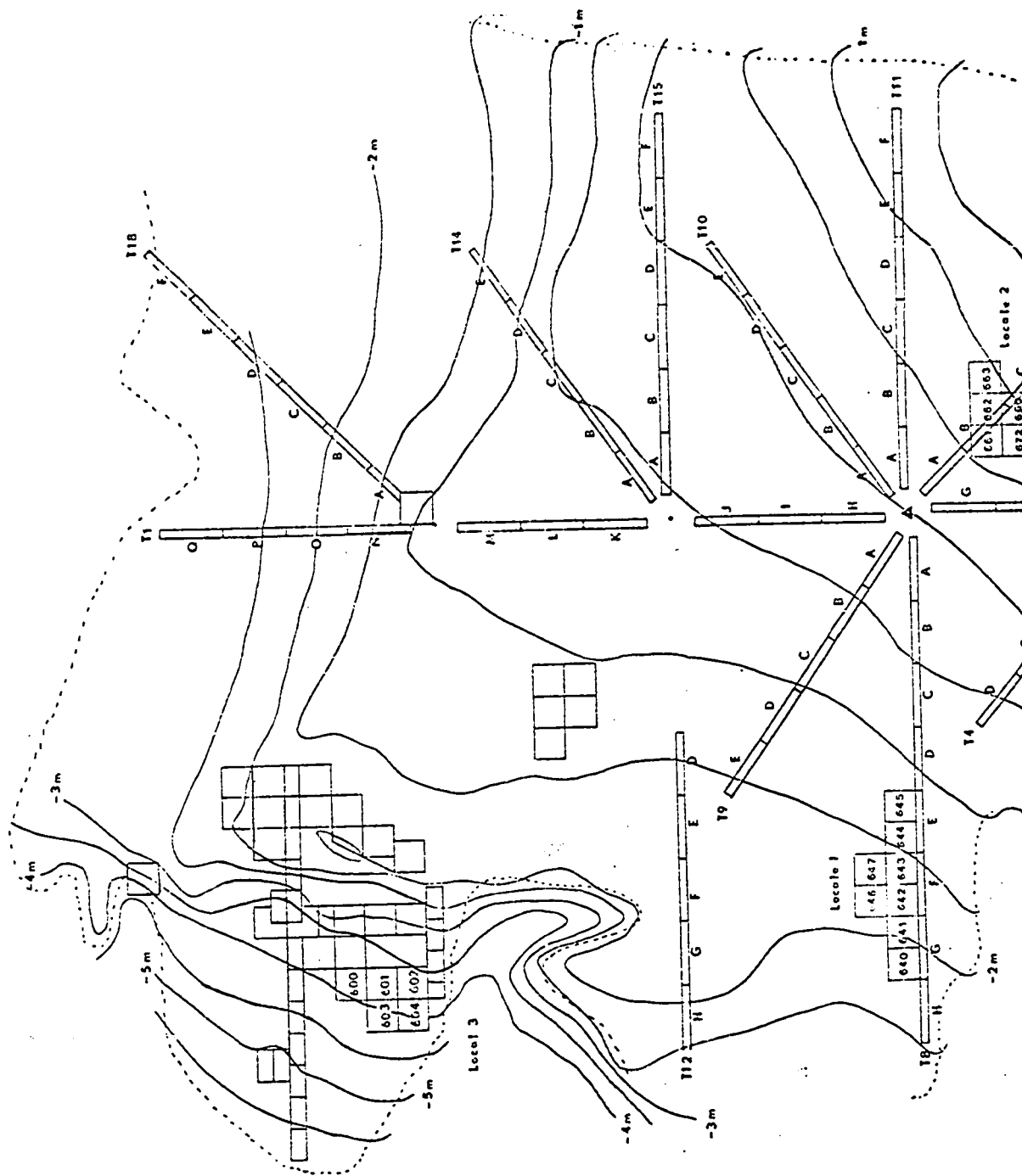


Figure 4

tion of palisade within slumped area

is situated along a fault line. The soil layers to the right of the line are between 10 cm and 20 cm lower than those on the left. It is possible that the French, in denuding the area of vegetation, and digging a large trench, considerably weakened the soil. Perhaps what is depicted in this section is the evidence for a soil slump which occurred during the occupation of the fort. If this did occur at that time, the resident population may not have been of a size sufficient to restore the collapsed wall. Nor may it have been necessary to fix it, as a large fortified area was no longer practical. Instead, the occupants may have merely pulled out the logs, used them as firewood, and subsequently employed this part of the fort for trash disposal.

In 1975, we investigated the remainder of the site by excavating a series of narrow test trenches (Figure 5). Our goals were to learn something of the outlines of the fort, to obtain further information on structures within the post, and to uncover portions of the fort which were destroyed in the 1729 massacre. The area excavated in 1974 is depicted in the upper left corner of Figure 5. The numbered pits and trenches were excavated in 1975. The trenching operation was especially useful in detecting areas of heavy material concentration, but in order to learn something of the outline and structural arrangement of the fort, it was necessary to perform block excavations. Therefore, investigations were expanded in three locales. Locale 1 provided the most exciting discoveries. A series of parallel burned plank stains occur in this area



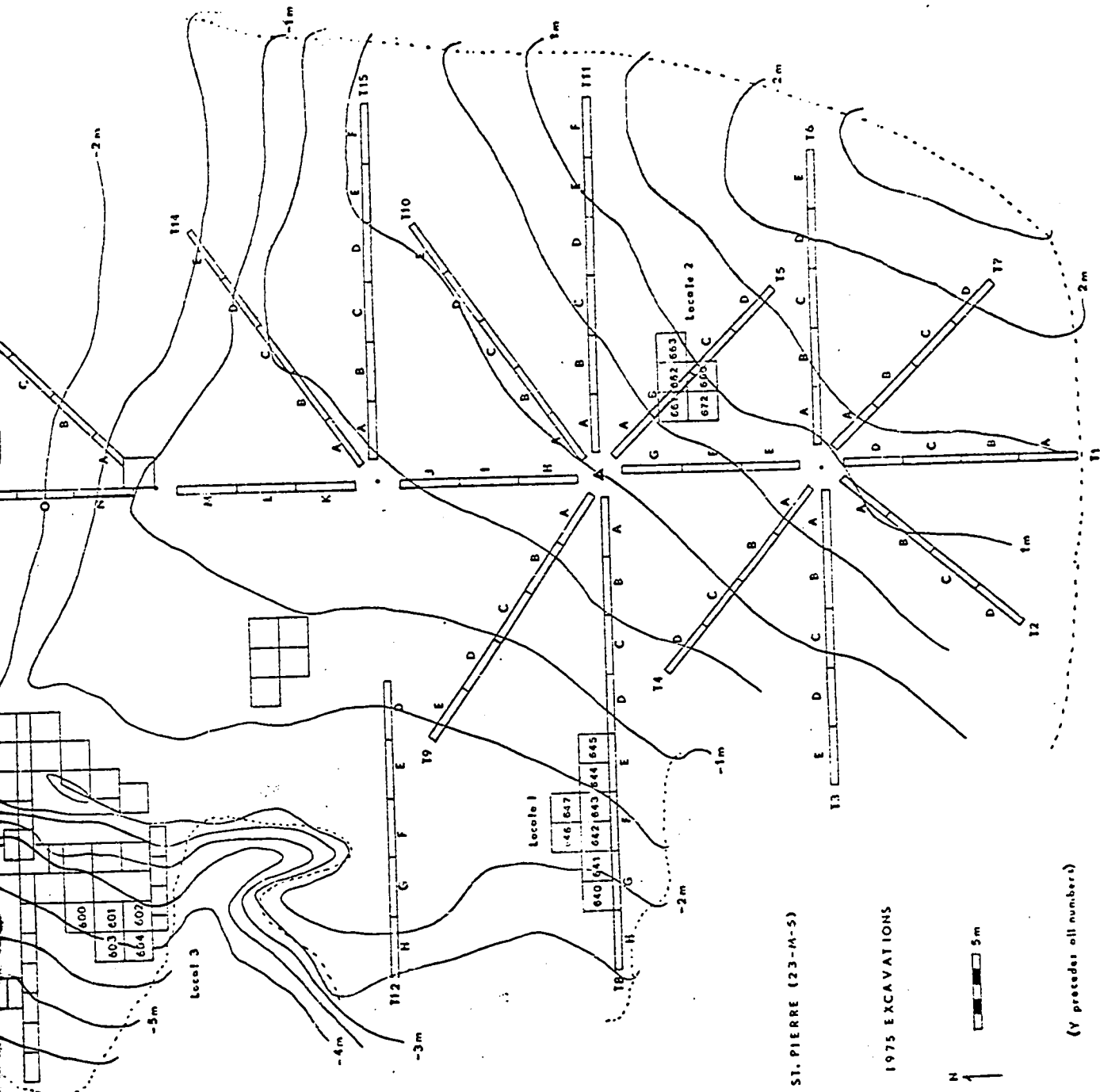


Figure 5
St. Pierre (23-M-5) - 1975 Excavations

(Y precedes all numbers)

(Figure 6; Plates 6-7). These stains, found between 15 cm and 35 cm below the topsoil, continued beyond the limits of our pits. The stains were again picked up in trenches 9 and 12, the latter situated 15 meters to the north of Locale 1. The burned plank floor was probably a part of the fort which had been occupied at the time of the 1729 massacre. Continuing excavations in Locale 1, we found a layer of grayish-black soil, surprisingly scarce of artifacts, beneath the plank stains (Plate 8). This layer of midden, between 15 cm and 35 cm thick, covers a number of L-shaped stains, wall trenches of structures constructed in the initial establishment of the fort (Figure 7; Plate 9)

A large circular bowl-shaped pit (Feature 20) was found in Locale 2 (Figure 8). A trench placed through the center of the pit revealed it to have a diameter of 2.8 meters and a maximum depth of .5 meters below ground surface. A charred oblong hewn post is wedged against the western part of the pit and a large quantity of nails surround it. Iron objects, particularly nails, rivets, staples, and several barrel hoop fragments are scattered throughout the pit, along with cinders. Fragments of shoes were also found. There is good evidence of burning, but the absence of scorched subsoil suggests the pit was constructed merely to receive waste material. An irregular oval stain, containing a post mold, occurs immediately west of Feature 20.

The above objects and features suggest a smithing operation was situated in this portion of the fort. The post west of the waste pit may have supported an anvil, similar to that depicted

- 1 gunflint
- 2 pipe
- 3 lead spout
- 4 spoon
- 5 buckle
- 6 knife
- 7 jews harp
- 8 musket ball
- 9 powder flask
- 10 bead

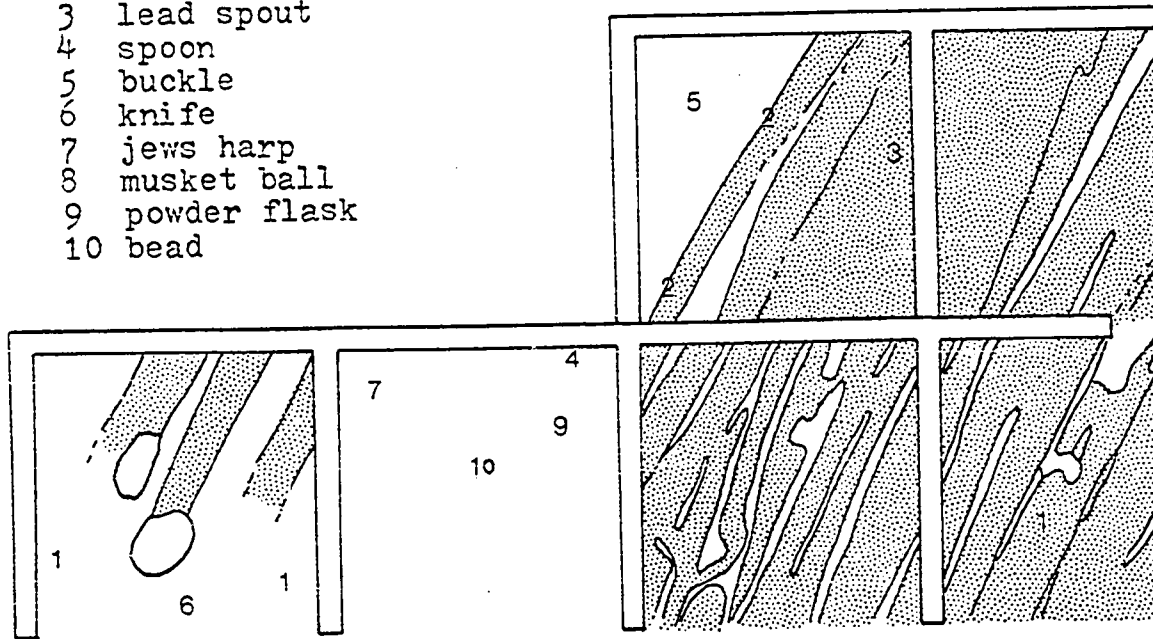


Figure 6
Locale 1 - Level A

ht
p
all
lask



1 meter

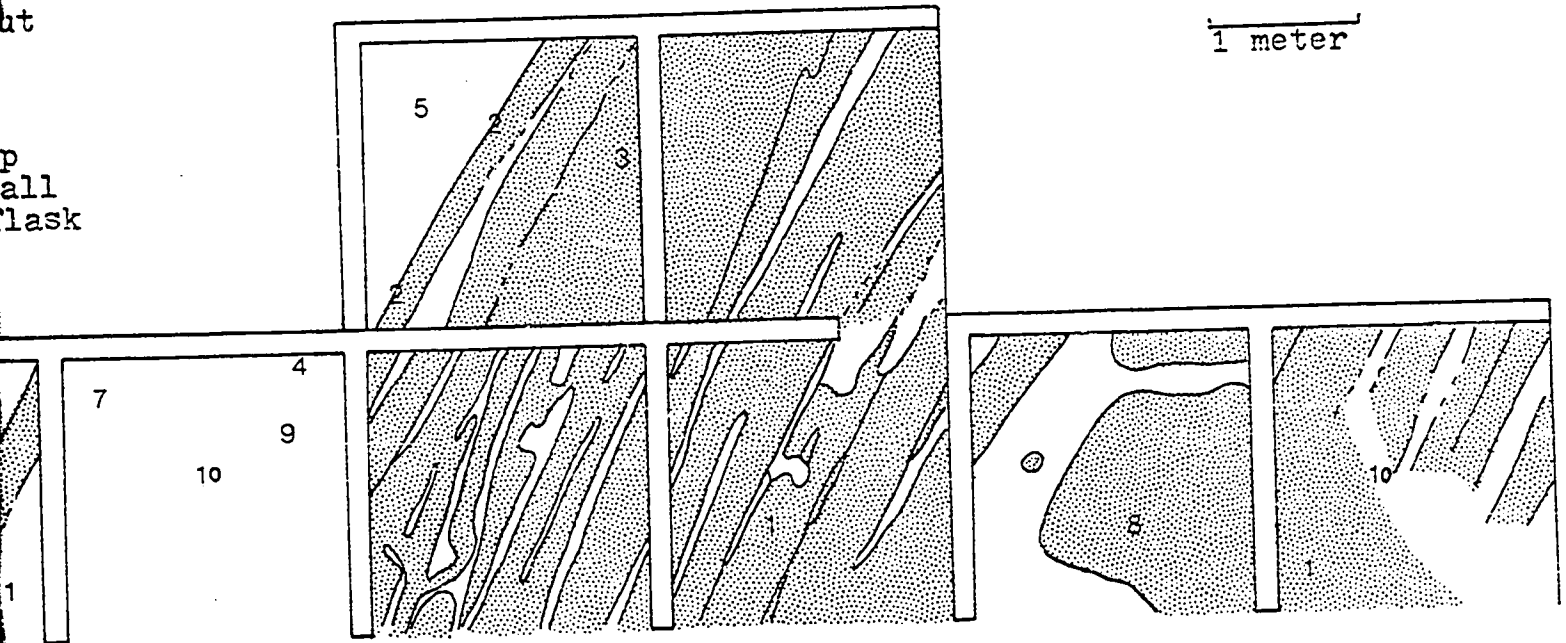


Figure 6

Locale I - Level A

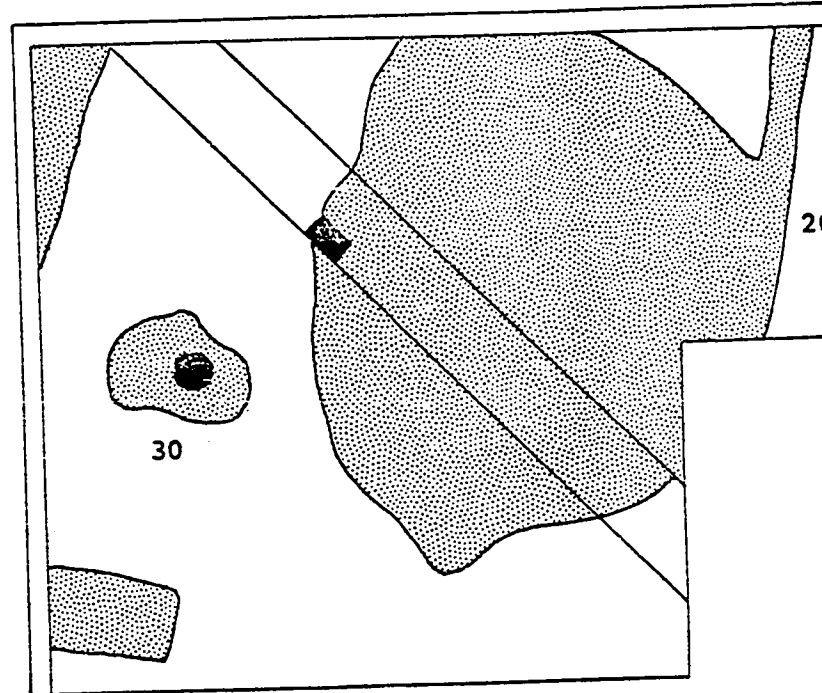


Figure 8

Locale 2 - Features 20 and 30

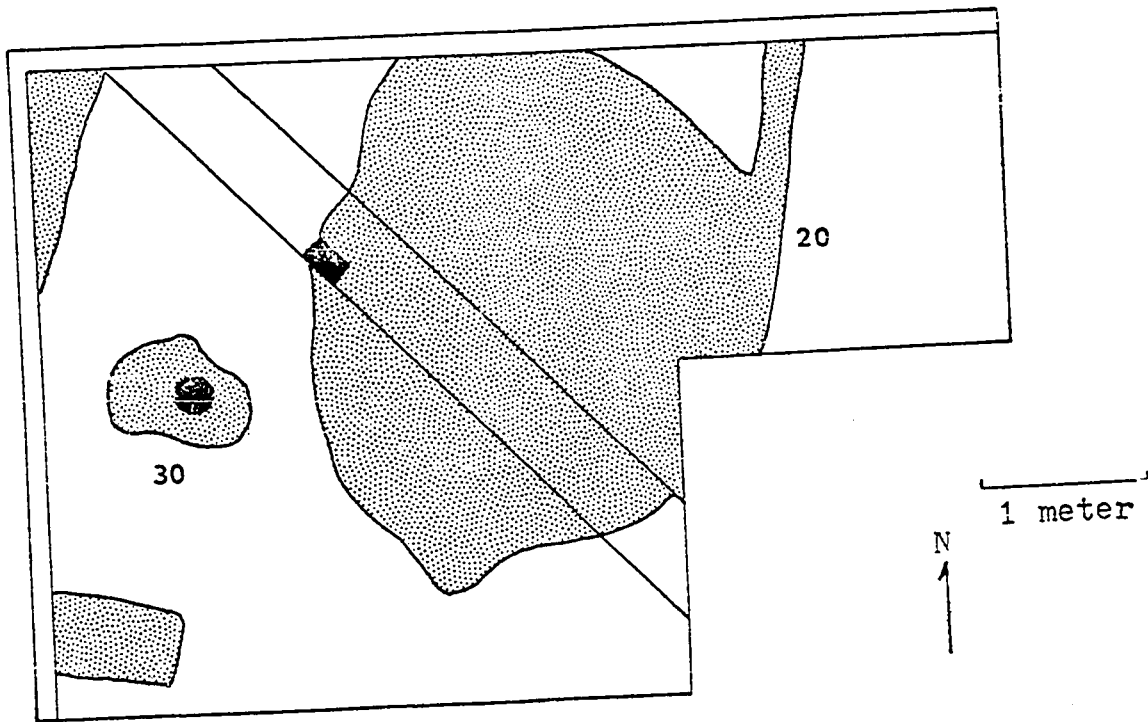


Figure 8
Locale 2 - Features 20 and 30

in a painting of the English Fort Bedford (Stotz 1974:fig.15). It was fairly common procedure historically for expeditions to have forges and blacksmiths. A forge was included in an equipment list made by Robert Cavelier Sieur de la Salle in 1684 (Cox 1905:188). One was constructed at Fort Crèvecoeur in the Illinois country in 1680 (Wilson 1965:104), at Fort Maurepas in 1699 (Ibid:108), at Mobile in 1704 (Rowland and Sanders 1929:19), and at Fort Rosalie in 1729 (Swanton 1911:226). Even Father Gravier, in his voyage down the Mississippi in 1700, made sure he brought a blacksmith with him (Thwaites 1896-1901, 65:113). Blacksmiths and forges were instrumental in any form of construction, the obvious reason being that tools break and need repair (Wilson 1965:108). It would have been curious had we not recovered indication of such activity at Fort. St. Pierre.*

1976 Investigations

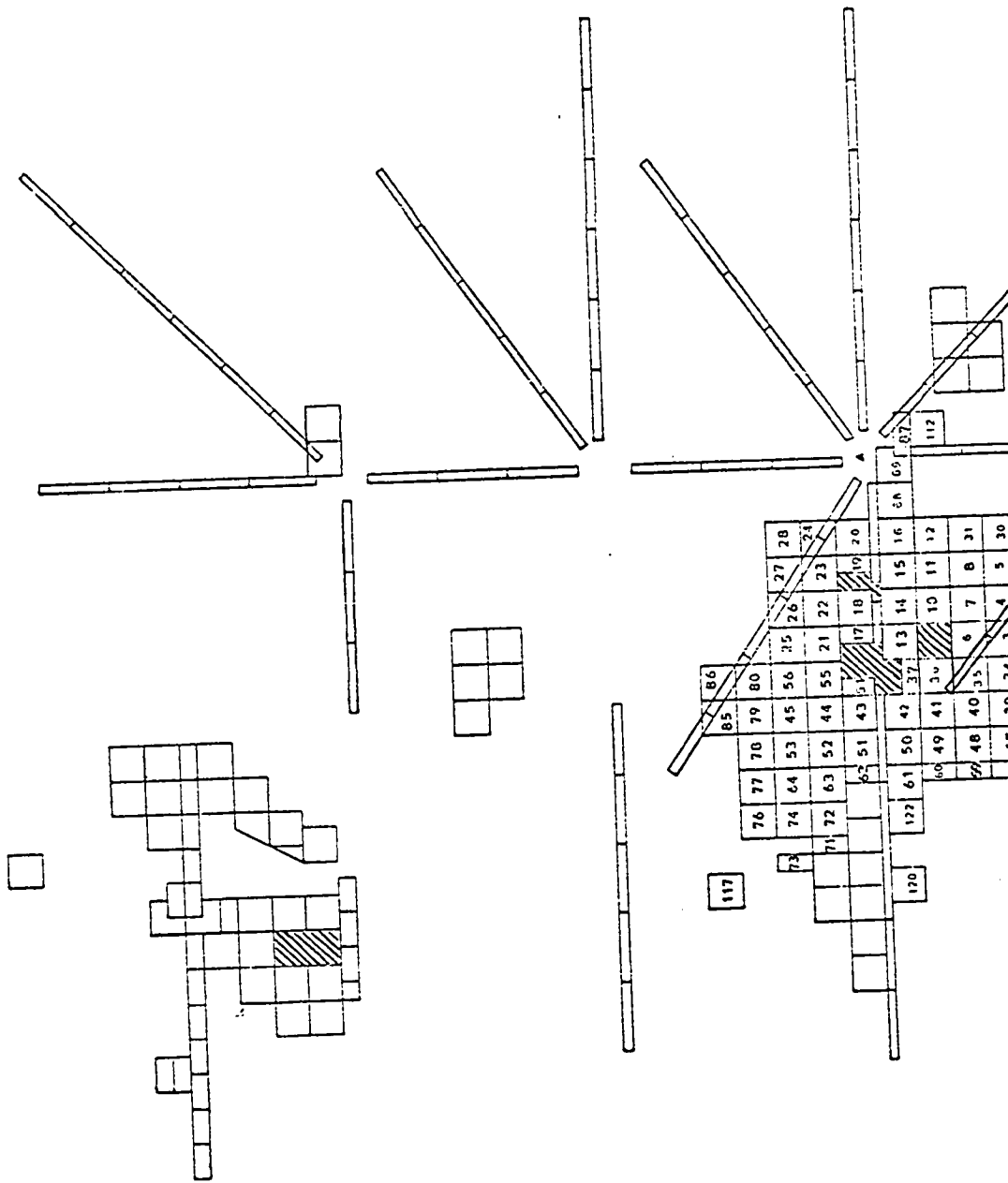
Dry Moat - Feature 31

The investigation of St. Pierre in 1976 proceeded directly from where the 1975 season left off. As most structural and

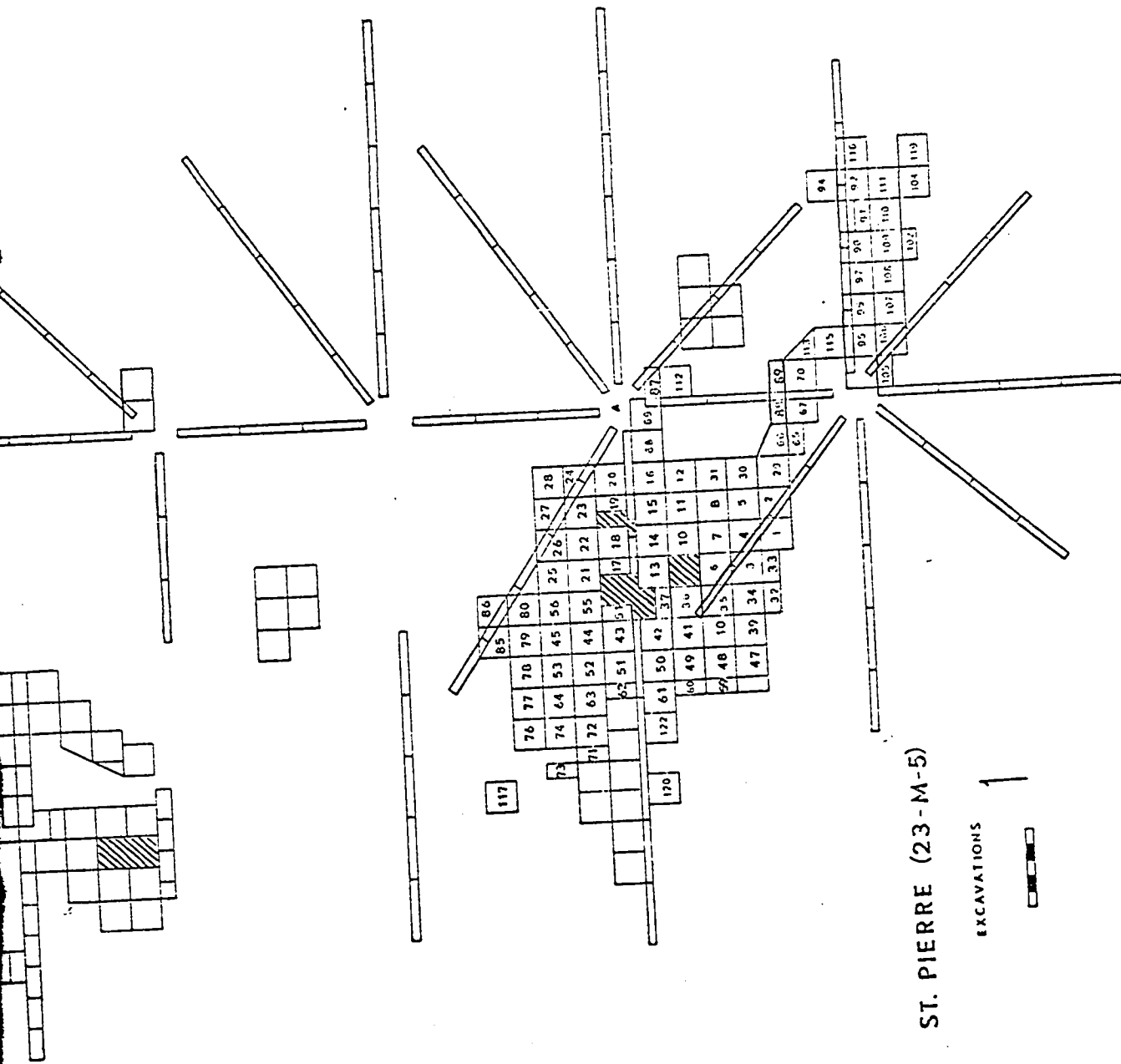
* One of the Dumont dit Montigny plans of Fort. St. Pierre indicates a furnace of some sort located outside the boundaries of the fort (p. 133). We have not yet been able to find this location.

artifactual remains were discovered in trenches to the south and west of the datum point, we decided to open up this entire area (Figure 9). Our first pit (W2) was positioned over a large wide black stain which was originally interpreted to be a trash pit. However, as squares were excavated to the west and east, the "trash pit" was found to be the southern dry moat of the fort (Figure 10). Diron d'Artaguiette reported in 1723 that Fort St. Pierre was surrounded by a little moat which was about 6 feet wide and 3 feet deep (Mereness 1916:51). Archaeological investigation has revealed that the moat has a constant width of approximately 1 meter, but the depth varies considerably (Figures 11 and 12). In excavating this feature, we first opened up a section (A) with an east-west length of 2 meters. The walls were drawn and photographed, after which a distance of 1 meter was skipped on each side. Sections B and C were then excavated, the western wall being drawn of the former and the eastern wall of the latter. Sections D, E, F, and H were excavated in the same manner. The exact techniques employed are discussed in the "techniques" section.

Section A contains a considerable quantity of historic artifacts. Beads, lead spillage, lead shot, and gunflints are particularly abundant. Fragments of a case bottle and a large portion of a Mississippi Plain, var. Yazoo vessel were also found. Section B has a high concentration of charcoal, daub, and bone fragments in its western portion, as well as a large number of artifacts. The remainder of the above case bottle was found in this section, along with a significant quantity of



176



ST. PIERRE (23-M-5)

EXCAVATIONS
1

(W/ precedes all numbers)

Figure 9

St. Pierre (23-M-5) - 1976 Excavations

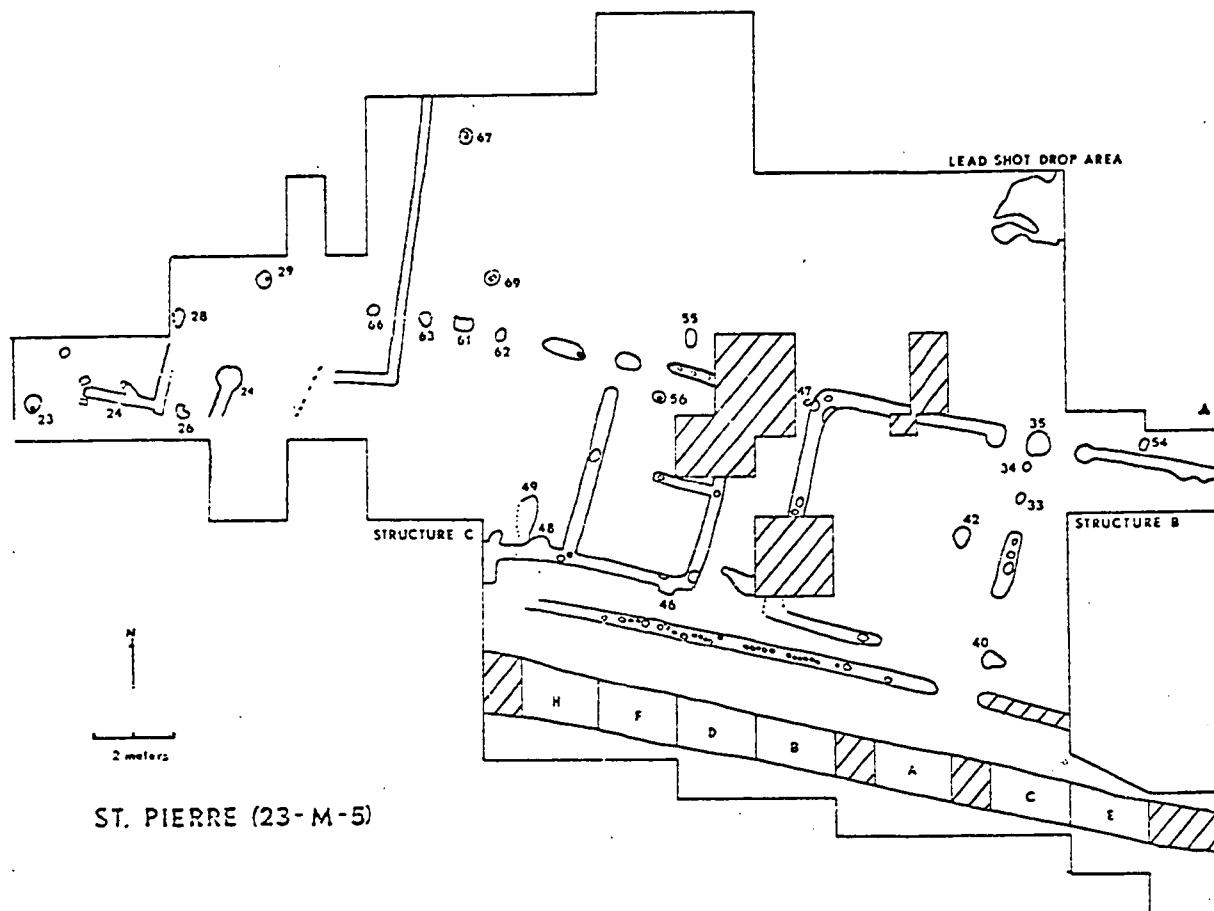


Figure 10

Excavated Structures and Features

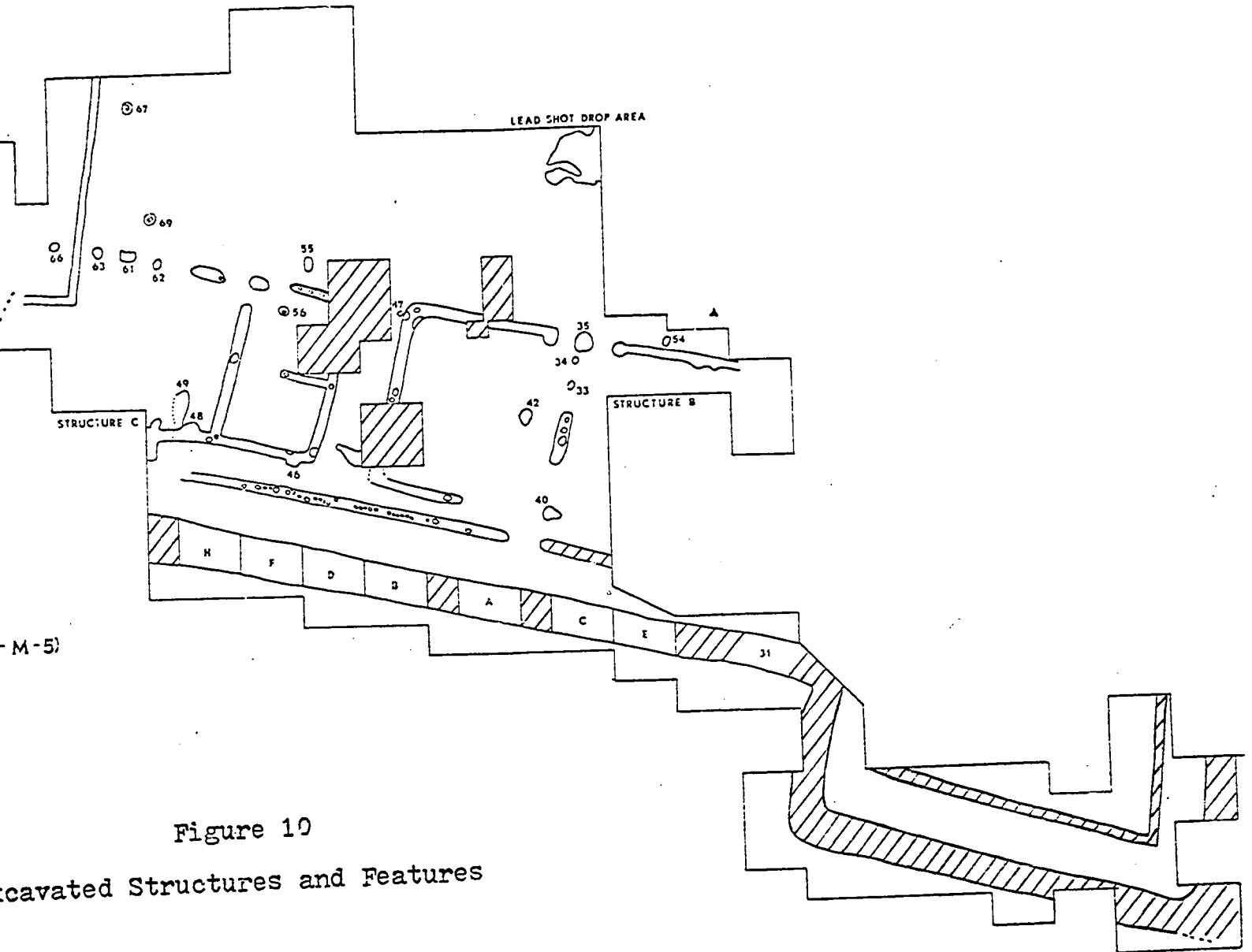
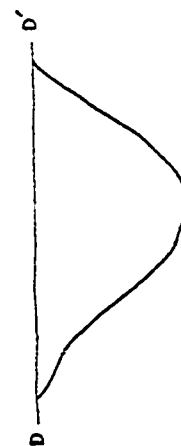
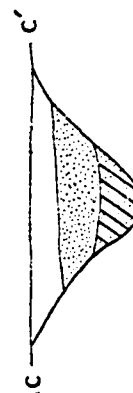
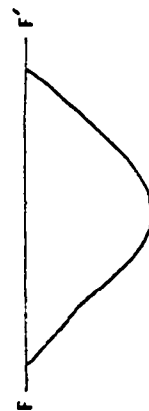
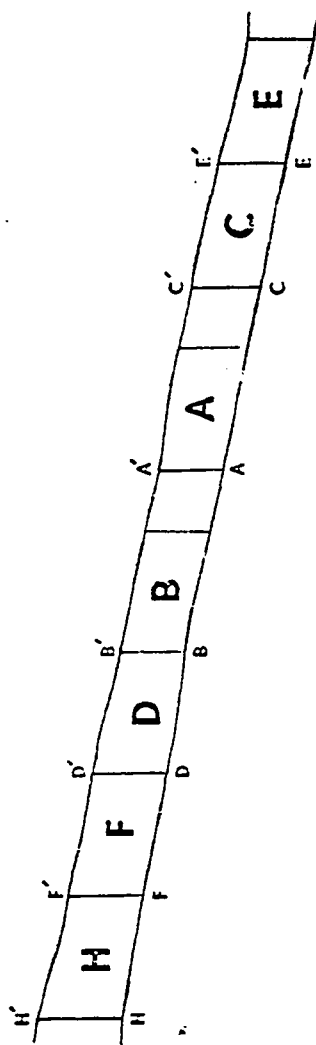


Figure 10

Excavated Structures and Features



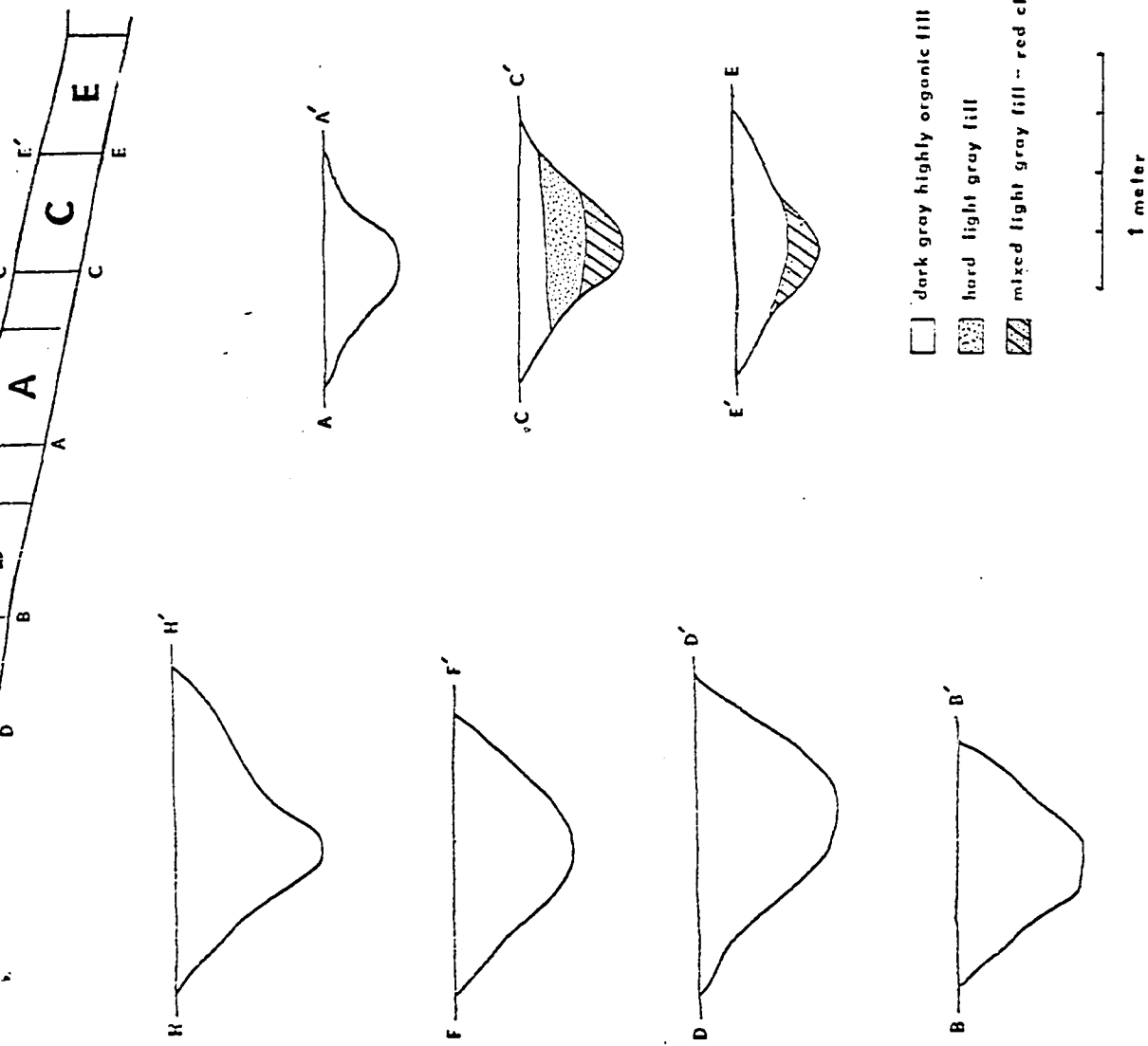


Figure 11
Dry Moat - Feature 31

Key To Figures 12, 17, 18, and 19

- b - bead
- f - faience
- g - olive green glass
- i - miscellaneous iron
- p - pipe stem or bowl
- s - lead shot
- . - hand wrought nail

Y558-31A

- dashed area - Yazoo jar fragments
- 1 - lead spillage
 - 2 - gunflints
 - 3 - musket balls
 - 4 - miscellaneous copper
 - 5 - barrel hoop fragment
 - 6 - buttons

Y558-31C

- 1 - wine bottle seal
- 2 - musket ball
- 3 - lead spillage

Y558-31F

- dashed areas - concentrations of charcoal
- 1 - barrel hoop fragment
 - 2 - staple
 - 3 - rampipe section
 - 4 - gunflint
 - 5 - fragments of Cracker Road inc. var. Cracker Road Bowl (Fig. 16)
 - 6 - musket balls
 - 7 - knife

Y558-31B

- dashed area - heavy concentration of charcoal, daub, bone, nails, and potsherds
- 1 - Cracker Road Inc., var. Cracker Road Bowl (Fig. 15)
 - 2 - lead spillage
 - 3 - gunflints
 - 4 - musket balls
 - 5 - miscellaneous brass
 - 6 - Yazoo jar (Fig. 14)

Y558-31D

- dashed areas - heavy concentration of charcoal, daub, bone, nails, and potsherds
- 1 - key
 - 2 - projectile point
 - 3 - knife
 - 4 - Yazoo jar fragments (Fig. 14)
 - 5 - tinklers
 - 6 - iron spring
 - 7 - hasp

Y558-31H

- 1 - musket ball
- 2 - miscellaneous copper
- 3 - coin

Structure B

- 1 - iron nut
- 2 - staples
- 3 - projectile point
- 4 - lead spillage
- 5 - gunflints
- 6 - leather (recent?)
- 7 - buckle
- 8 - iron bolt
- 9 - musket ball
- 10- coin
- 11- miscellaneous brass
- 12- brick (recent?)
- 13- eagle button (Civil War)
- 14- iron ring
- 15- cinder
- 16- trigger guard
- 17- 15 lead shot

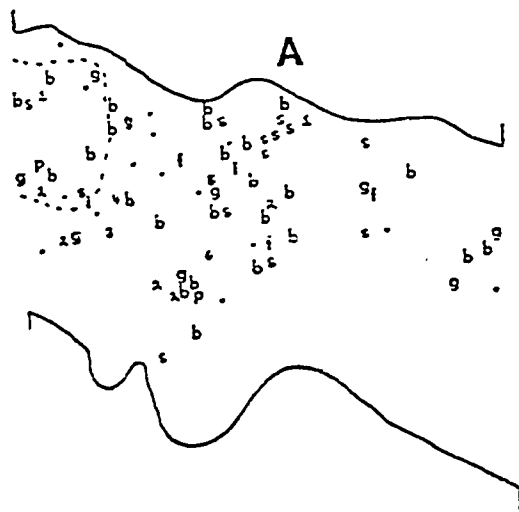
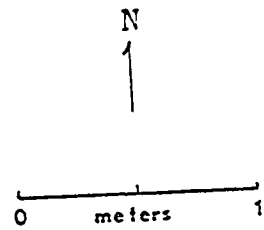
Space between Structures B & C

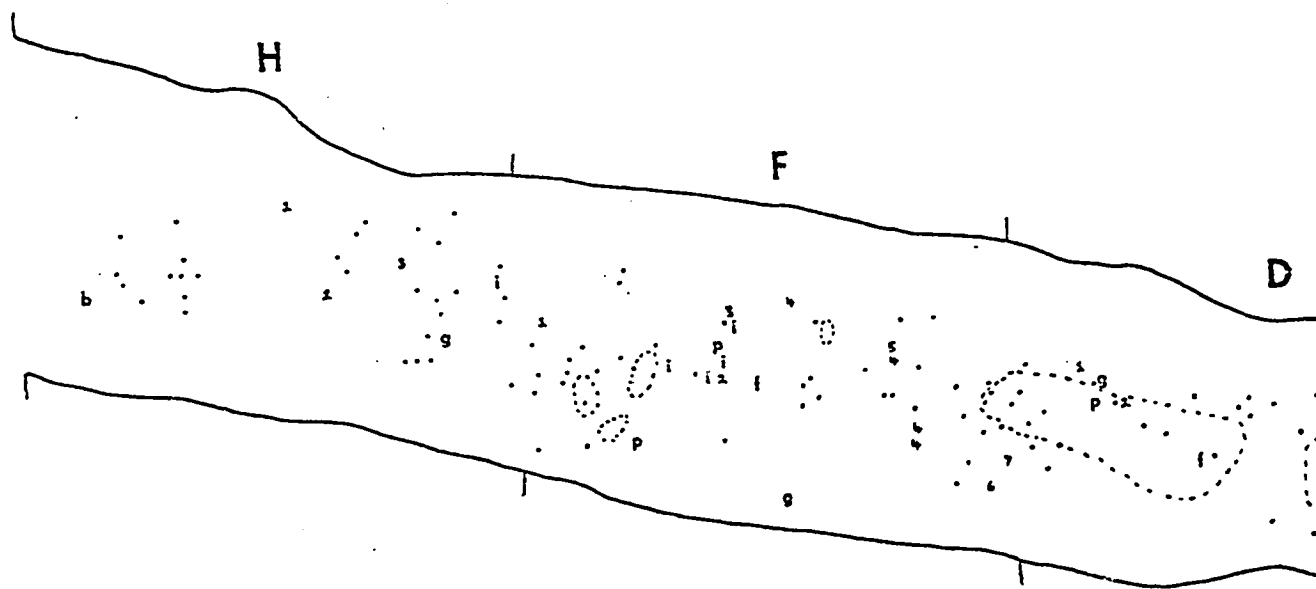
- 1 - iron nut
- 2 - staples
- 3 - projectile point
- 4 - gunflints
- 5 - wire
- 6 - musket ball
- 7 - coin

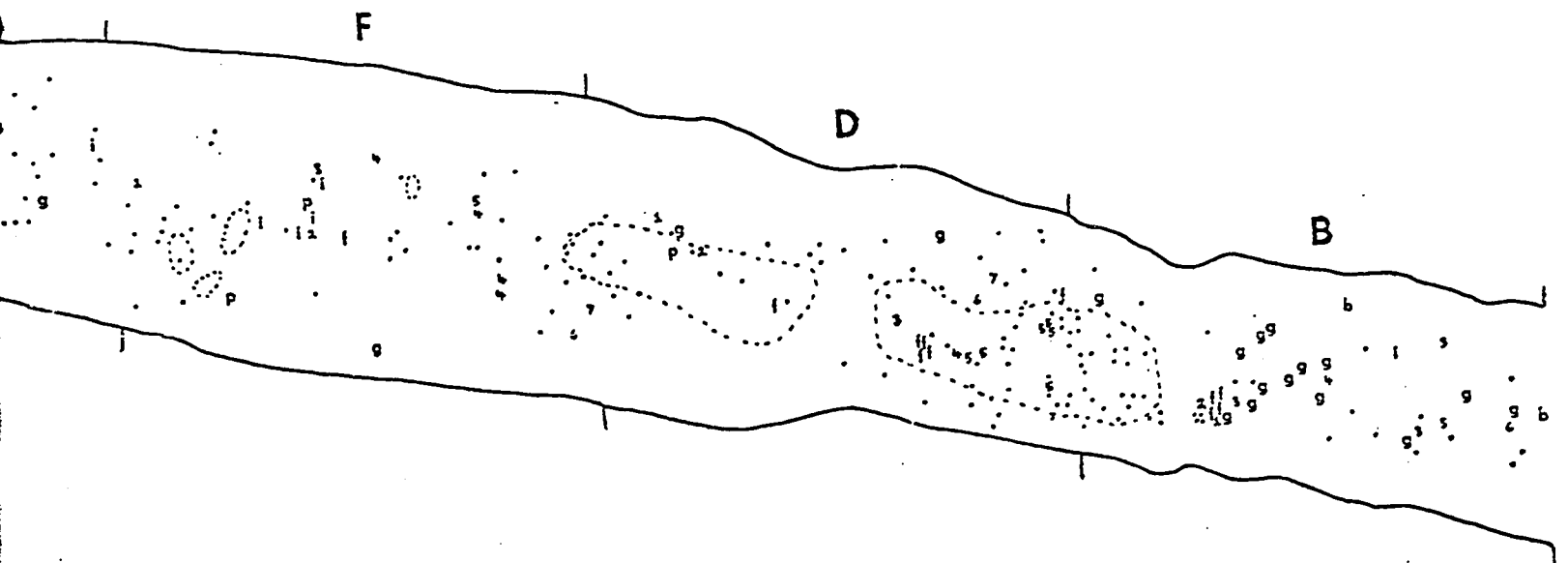
Structure C

- 1 - gunflints
- 2 - staple
- 3 - musket balls
- 4 - projectile point
- 5 - bone fragments
- 6 - cufflink glass inset
- 7 - large cobble
- 8 - lead-glazed earthenware

Figure
DRY
featu







hand wrought nails. An Addis Plain, var. Addis jar (Figure 13), a Yazoo jar (Figure 14), and a nearly complete Cracker Road Incised, var. Cracker Road bowl (Figure 15) were also recovered. The latter is a diagnostic marker of the historic Russell phase (see Figure 30). As stated earlier, the discovery of complete aboriginal vessels in sealed layers dating to the occupation of the fort is extremely important, because these wares were most likely the products of contemporary Indian potters.*

In section D the moat continues to deepen and produce a high number of historic artifacts, including a large amount of building hardware (nails, a padlock latch, and a key), a table knife, and a sizeable portion of a tin-glazed earthenware (faience) bowl. Also found were six tinklers, suggestive of the fort's trading orientation. A large portion of the Mississippi Plain, var. Yazoo jar depicted in Figure 14 was found in section D (Plate 10). Artifacts are not as plentiful in sections F and H but a Cracker Road Incised, var. Cracker Road bowl was found (Figure 16). A coin discovered in section H is identical to four other specimens recovered in the 1976 investigations. Colonial coins dating to 1721 and 1722 have been found in the past on Indian sites to the north of St. Pierre, but the type found at the fort, which bears the profile of Louis XIV, is

* We know that the Ofo were trading bear's oil to the fort in native-made earthenware jars, and it is probable that the other local aboriginal groups participated in this trade also (see p. 431).

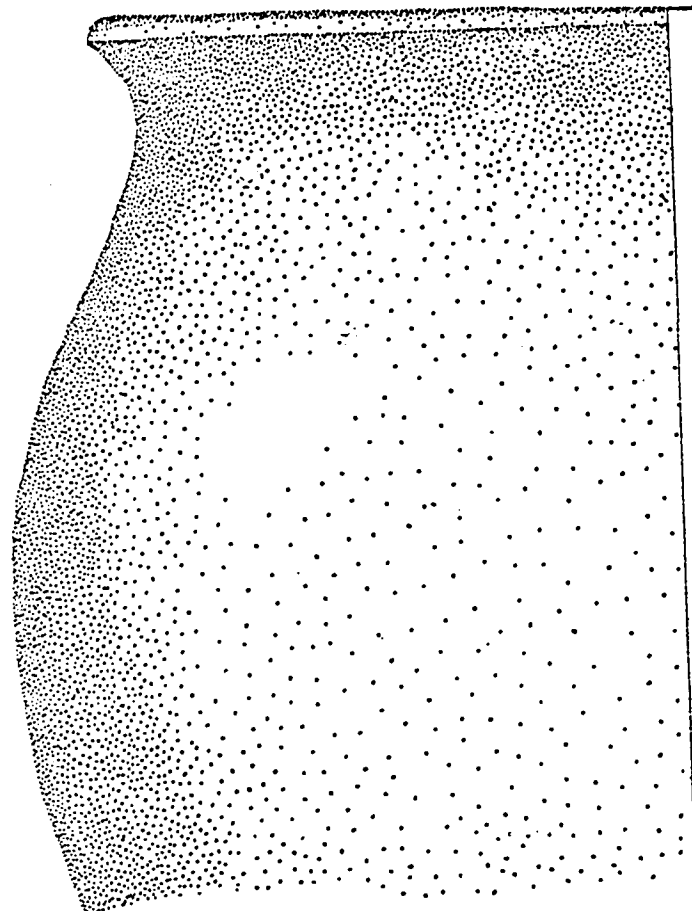
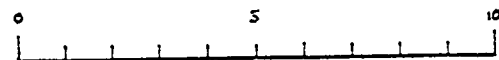


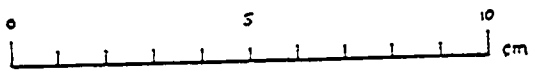
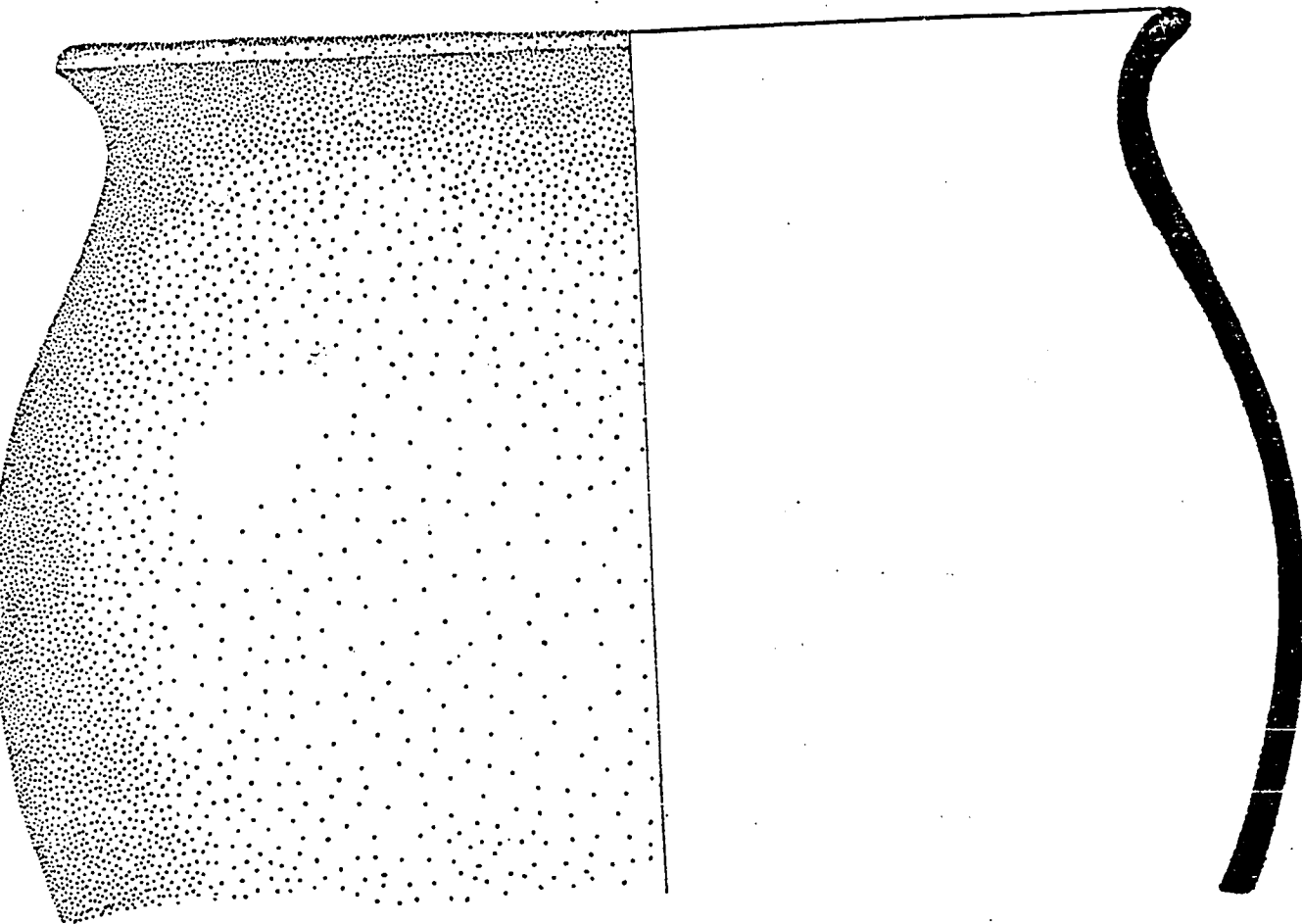
FIGURE 13

ADDIS PLAIN

VAR. ADDIS JAR

Provenience - St. Pierre. Y558-31B.





3

AIN

JAR

St. Pierre. Y558-31B.

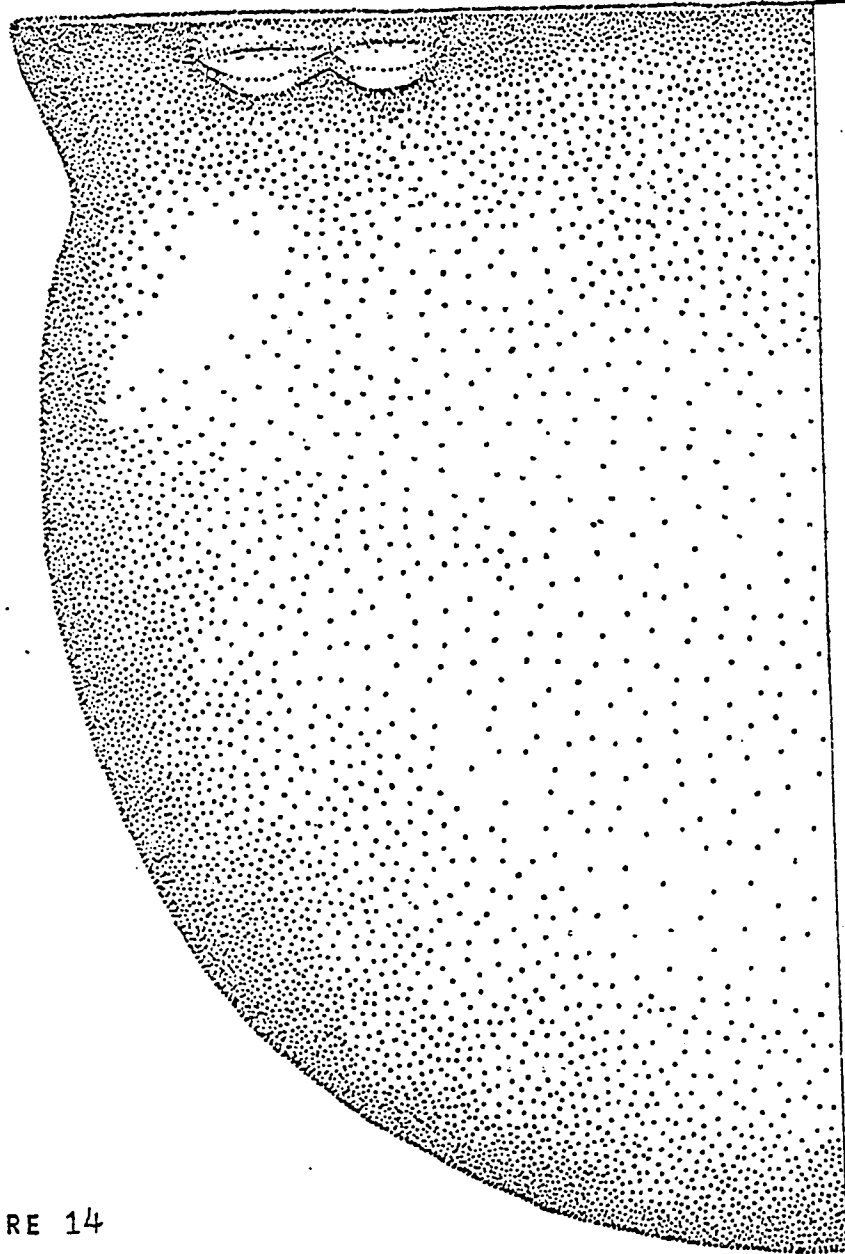
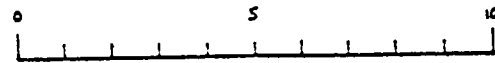


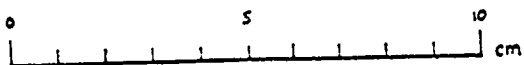
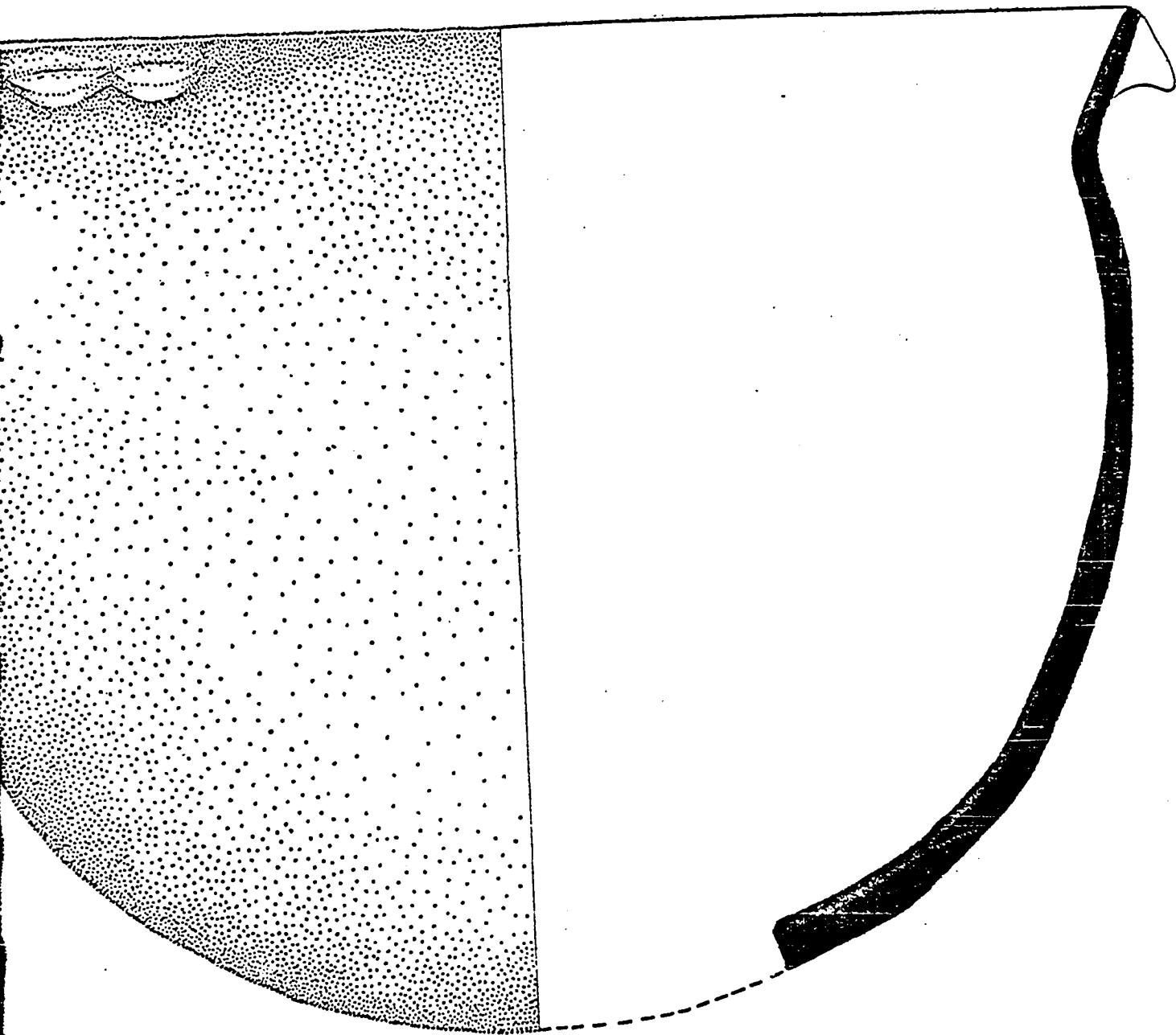
FIGURE 14

MISSISSIPPI PLAIN

VAR. YAZOO JAR

Provenience - St. Pierre.
Y558-31B/Y558-31D





Pierre.

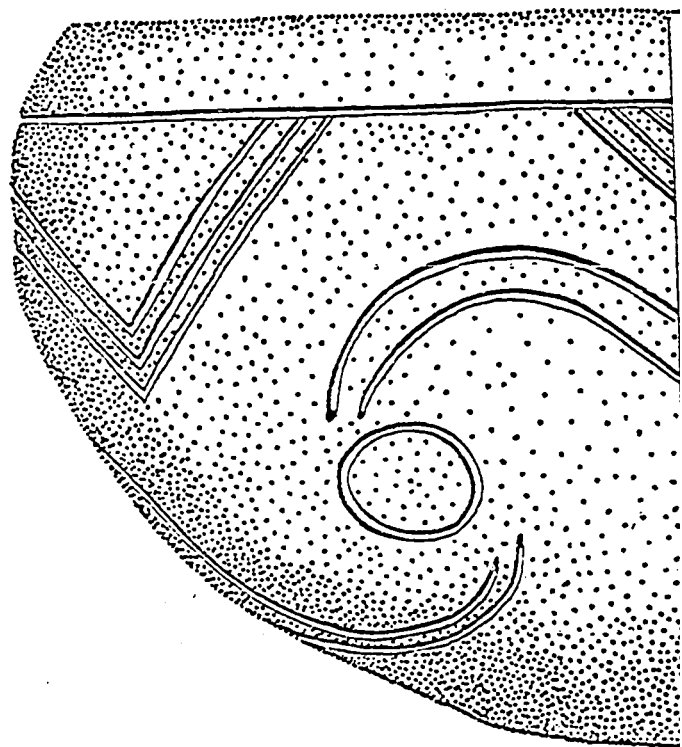
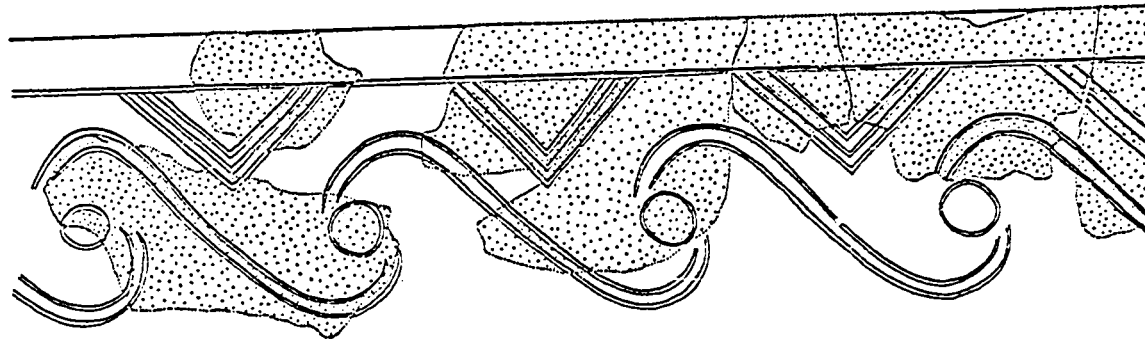
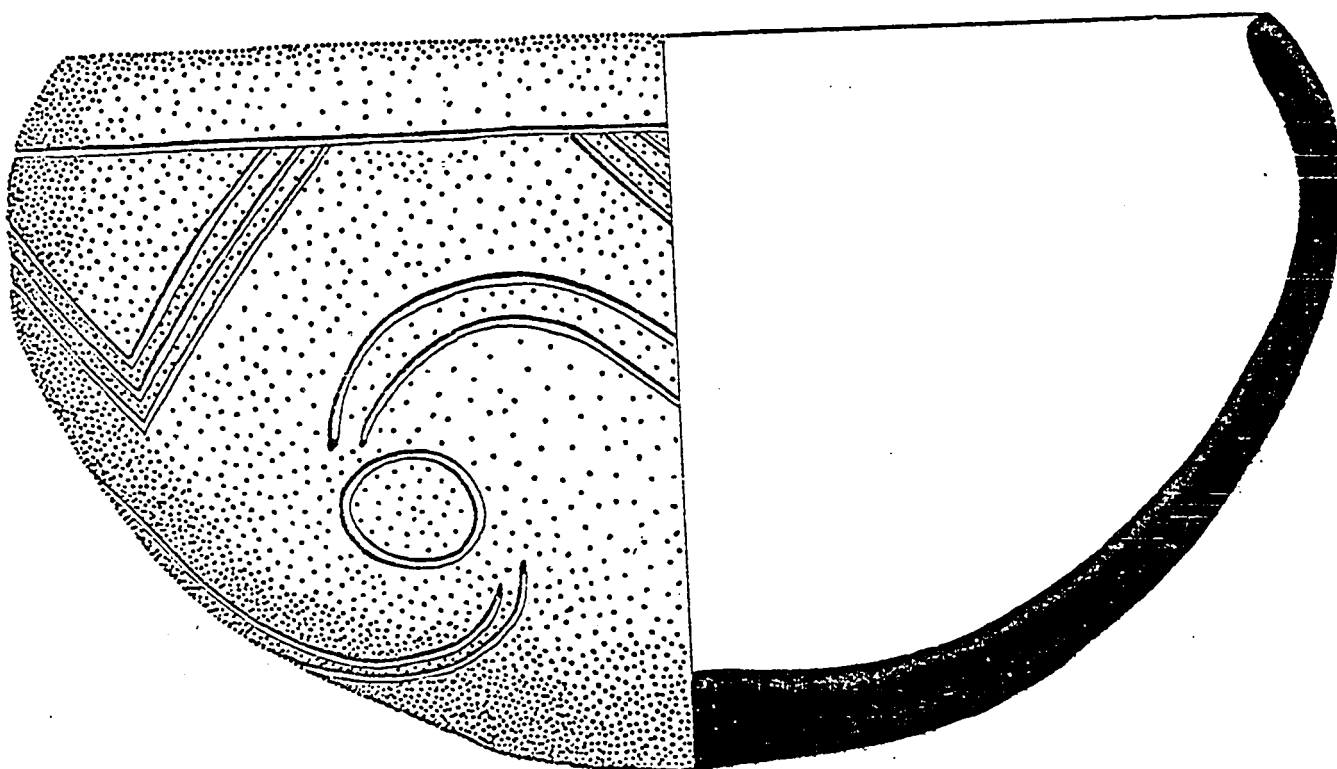
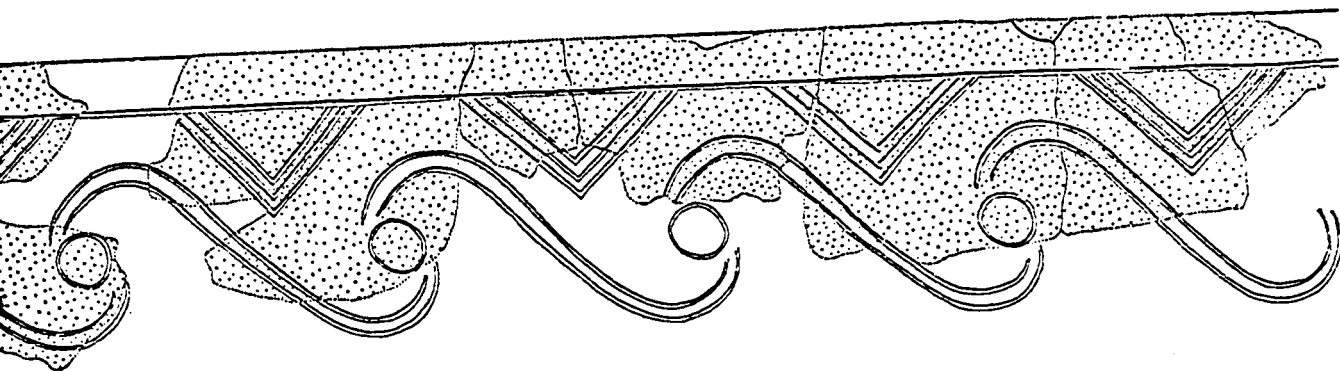


FIGURE 15

CRACKER ROAD INCISED
VAR. CRACKER ROAD BOWL

Provenience - St. Pierre.
Y558-31B.





SED
BOWL
Pierre.



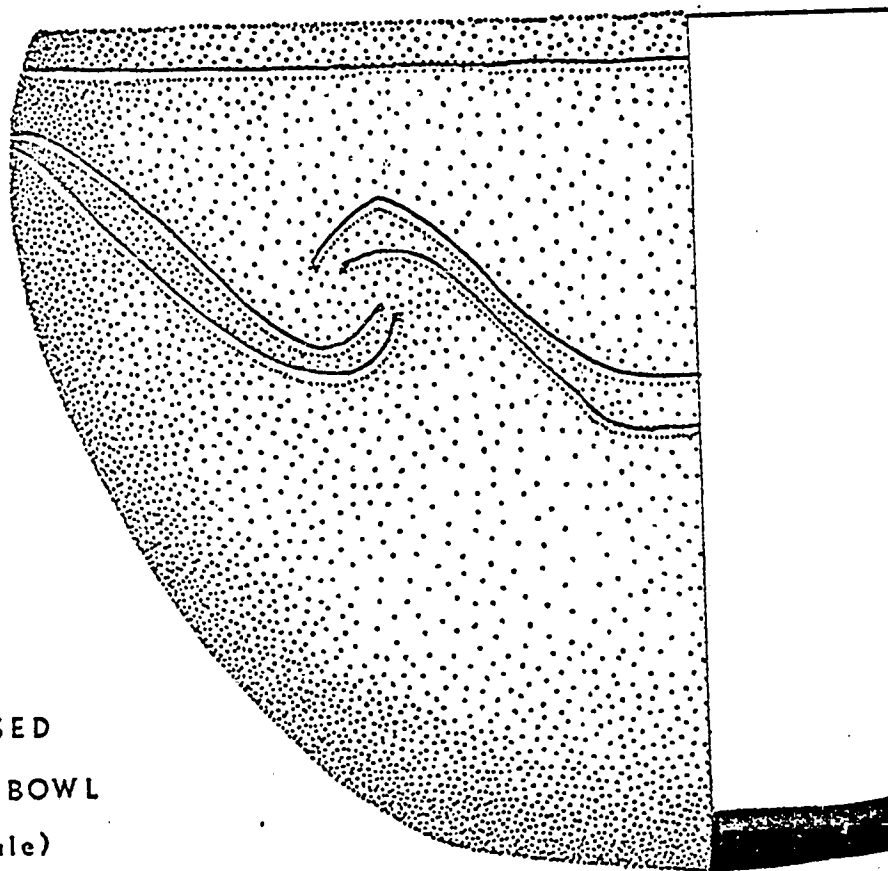
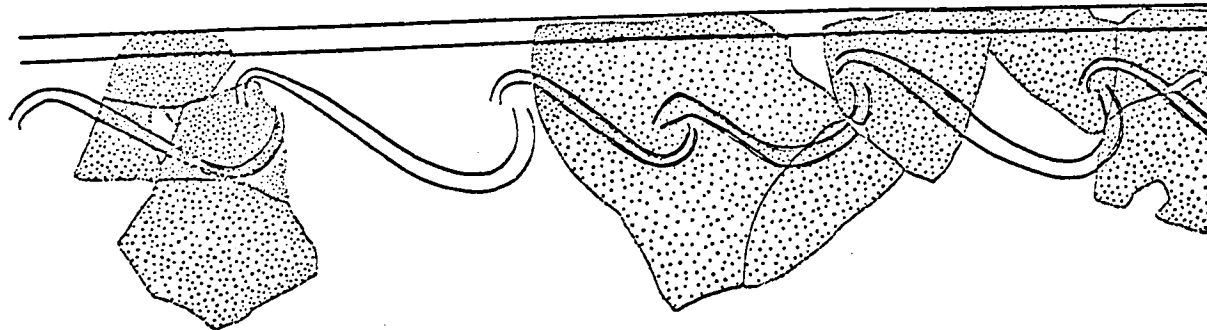
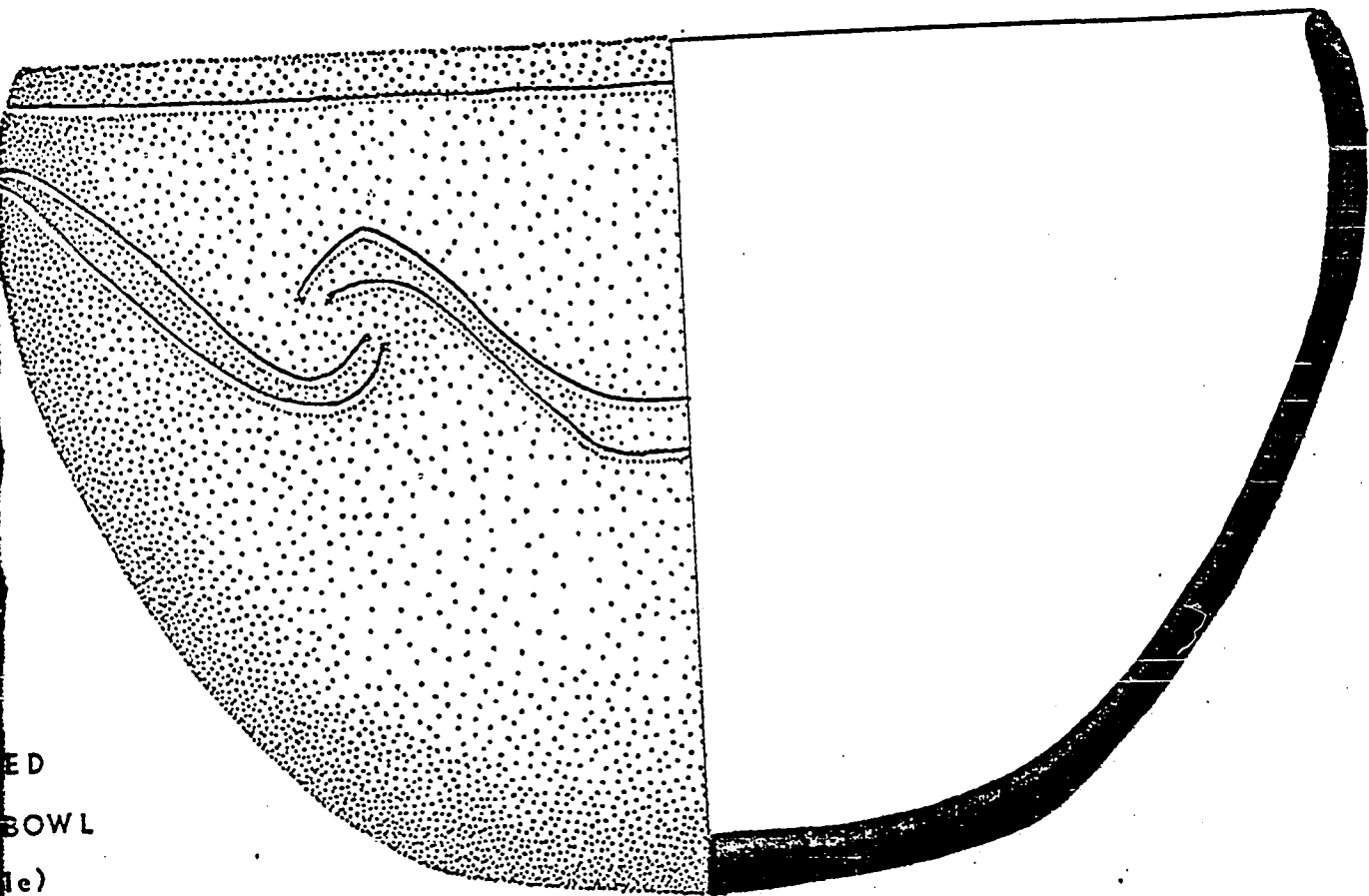
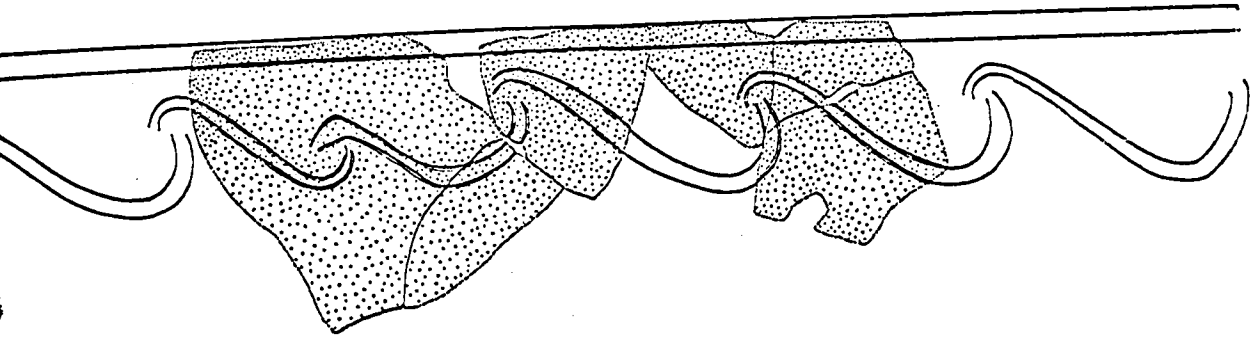


FIGURE 16

CRACKER ROAD INCISED
VAR. CRACKER ROAD BOWL

(to scale)

Provenience - St. Pierre.
Y558-31F/Y558-31H.



ED
BOWL
(le)
erre.

unlike any thus far encountered in the Lower Mississippi Valley.

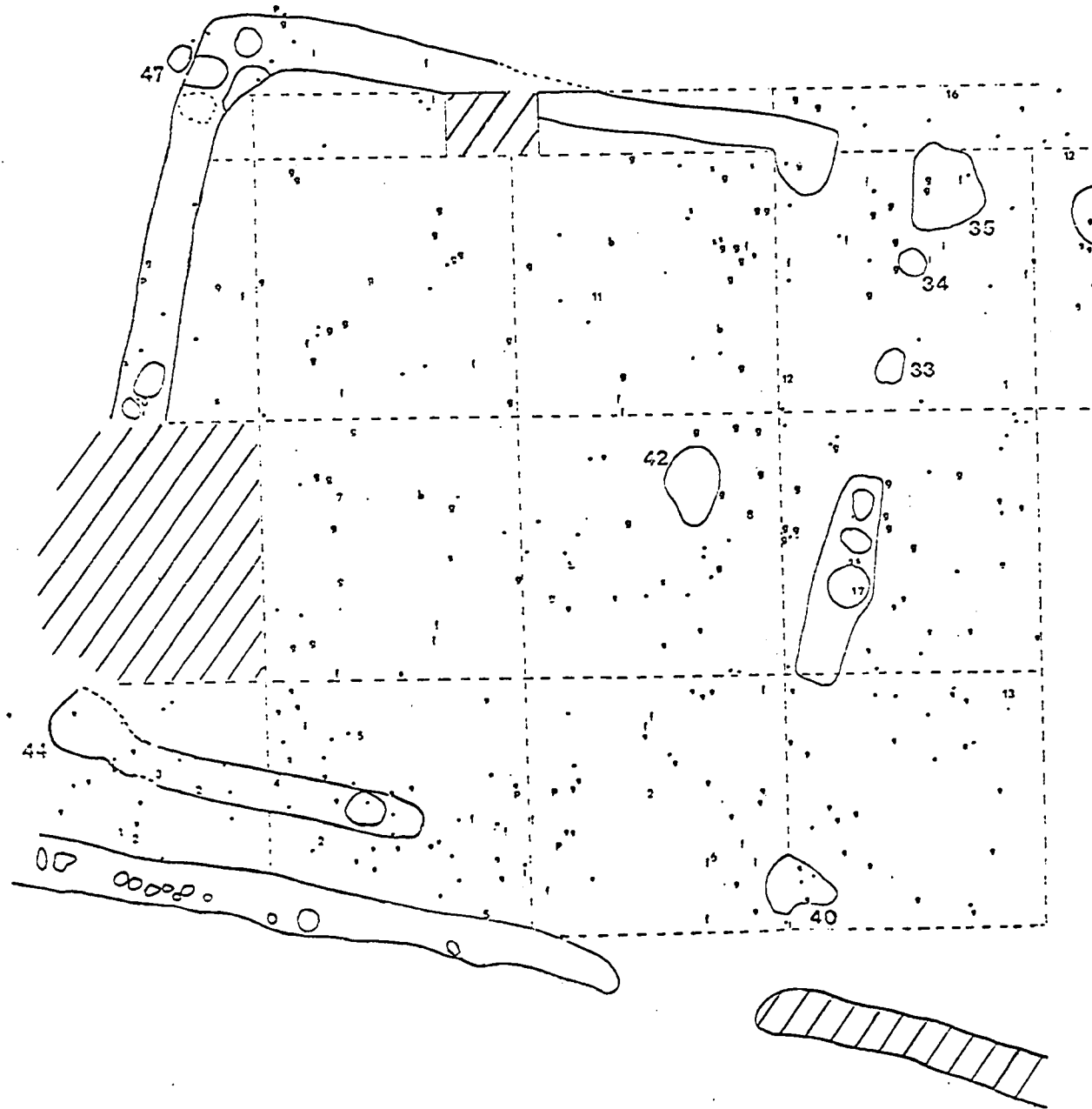
The excavation of the moat terminated at section H, as did the bluff edge. Feature 31 at this point, is about 65 cm deep, and reveals no visual stratigraphy. The moat, from section H to section A, appears to have filled rapidly and at a single point in time. Stratigraphy does appear in section C. Directly above the base of the moat is a 20 cm deposit of clay, mottled with flecks of charcoal. Above this layer is a 15 cm to 20 cm thick light gray compact soil, which also has flecks of charcoal mixed in. This latter zone is capped by a highly organic 10 cm thick dark gray deposit, this last layer being characteristic of the entire fill in sections to the west of C. With the exception of a wine bottle seal, and olive green glass fragments which presumably are from the same bottle, historic artifacts are scarce in section C. They are rarer still in section E, and the capping of highly organic soil becomes even thinner. My interpretation, based on the archaeological investigations, is that Feature 31 was a dry moat employed for drainage, that it had been periodically cleaned in the sections to the west of C, and that the sections west of C filled rapidly and at the same time, a product of the 1729 massacre.

Southern Curtain and Structure B

Approximately 1.5 meters to the north of the moat, and running almost exactly parallel to it, is the fort's southern

curtain (Plate 11). The palisade trench, between 35 cm and 45 cm wide, has a constant width of 45 cm below the surface of the subsoil. Posts cannot be detected in the palisade trench when looking from above, because they were removed at some time during the occupation of the fort. The vacant shafts filled with soil, and the position of many of the posts can be easily seen in the bottom of the trench. Water-sorted white loess, contained within small circular depressions in the base of the trench, often show up quite clearly. There seems to be a break in the palisade line opposite section A of the moat. A gap at this particular point does not fit well with discoveries to the immediate north. Separated from the southern curtain of the fort by a space of just under a meter is the southern wall of a rectangular building (Figure 17). Various historic fort plans indicate that this building (Structure B) was the commandant's headquarters (see pp. 131-133). Its interior width ranges between 5.4 meters and 5.6 meters, and, were we able to excavate the entire structure,* its interior length would have been a little over 11 meters, or rather, twice its width. Two square rooms of similar dimensions are contained within this structure. A gap of 3.5 meters occurs along the southern wall, perhaps a rear entrance. Two gaps along the northern face, covering a space of 2.4 meters and separated by Feature 35, probably represent two front entrances. There appears to

* Heavy vegetation, limited time, and the unfortunate placement of our backdirt pile prevented complete excavation of Structure B.



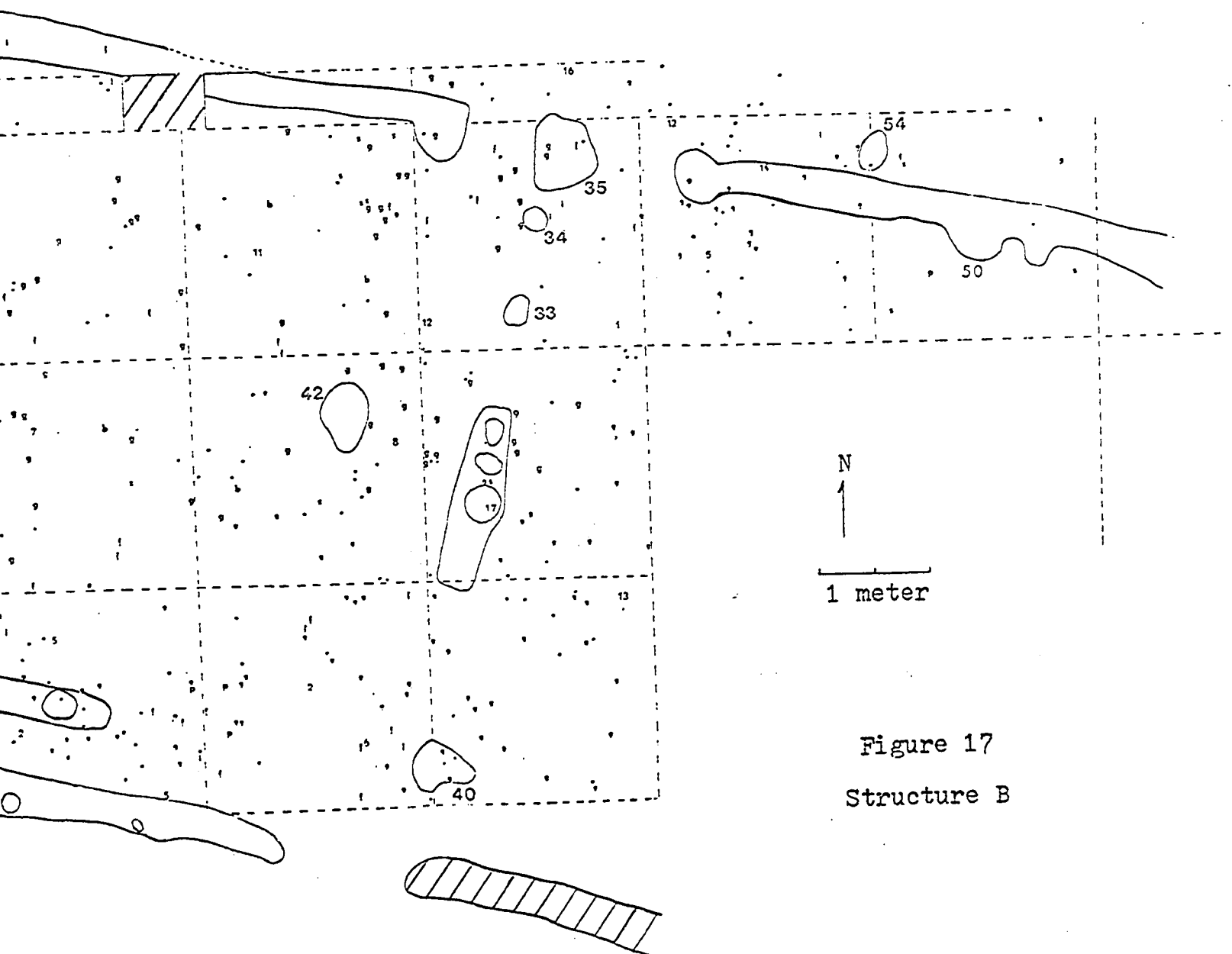


Figure 17
Structure B

have been two passageways, one along the eastern portion of the western room and one between the two rooms at the back door. A short wall trench section, 1.45 meters long, 34 cm wide, and 10 cm deep, occurs in the middle of the structure (Plate 12). It has three postmolds in it and, together with Features 33, 34, 35, and 40, forms a partition between the two rooms. The other walls of the building were also placed in trenches. The latter are approximately 30 cm wide and 10 cm deep, but they drop down deeply at corners, entranceways, and middle sections of the building to receive vertical posts. There are no indications of posts in other portions of the wall trenches, and many of those observed in corners had been pulled out sometime when the fort was occupied, the empty shafts being filled with mottled gray and white loess. A small protrusion from the wall trench along the northern wall in the eastern room is perhaps a fireplace.

Structure B is probably the remains of a de pièce sur pièce house (pp. 142-143). Had this form of construction been used, archaeology should reveal relatively shallow wall trenches (for securing horizontal members) which drop suddenly at evenly-spaced intervals. The depressions would have contained the vertical posts. Such a situation is observed in Structure B at St. Pierre.

Nails are the most numerous historic artifacts in Structure B, and they are scattered throughout the building. Their even distribution is no doubt related to the use of this artifact in construction. Wine bottle glass and faience, more abundant

in this structure than in any other part of the site, and probably a reflection of status, visually appear to be arranged in clusters. A quantity of such artifacts occurs around the entrances on the northern and southern sides, as well as in the middle of what is believed to be the central passageway of the building. An application of "nearest neighbor analysis" to these materials has revealed a significant clustering of both glass and faience (or what I call "breakables") in these locations. Over a maximum of ten years, it is probable that a great number of people walked through the narrow passageways of this building. Some no doubt carried bottles and various other kitchen wares and, through rushing, far-sightedness, or whatever, bumped into walls and dropped their burdens. The clustered "breakables" are a reflection of such activity (Brown 1977d).

Structure C

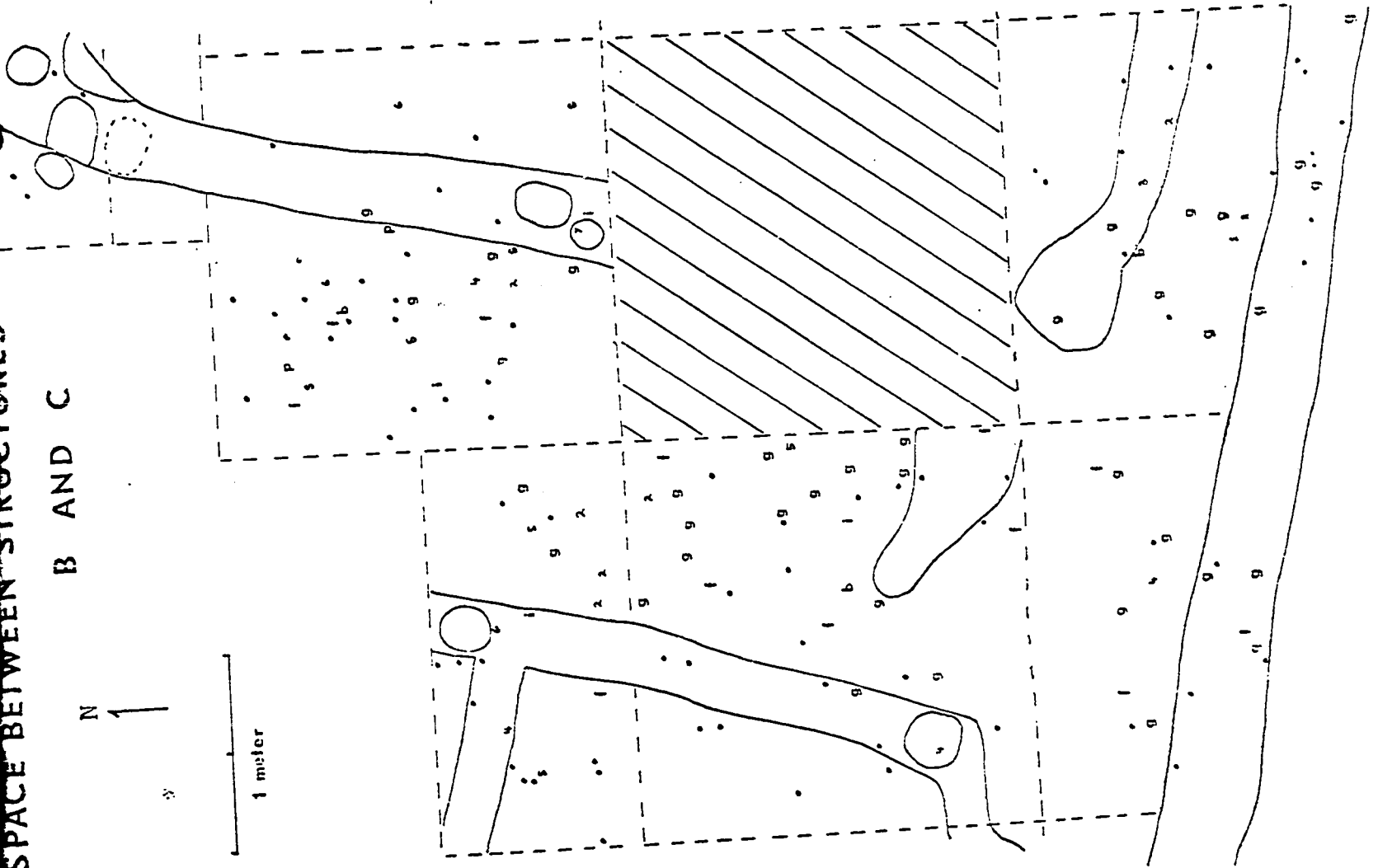
There is a space of exactly 2 meters to the west of Structure B which contains within the topsoil a relatively large number of artifacts (Figure 18). Continued excavation revealed that this space is a passage between Structures B and C (Figure 19). The concentration of artifacts within the passage, as opposed to that contained within the buildings to the east and west demonstrates that there was little disturbance on the site following its destruction in 1729 (Brown 1977b). Particularly abundant are the "breakables", such as wine bottle

SPACE BETWEEN STRUCTURES

B AND C

N ↑

1 meter



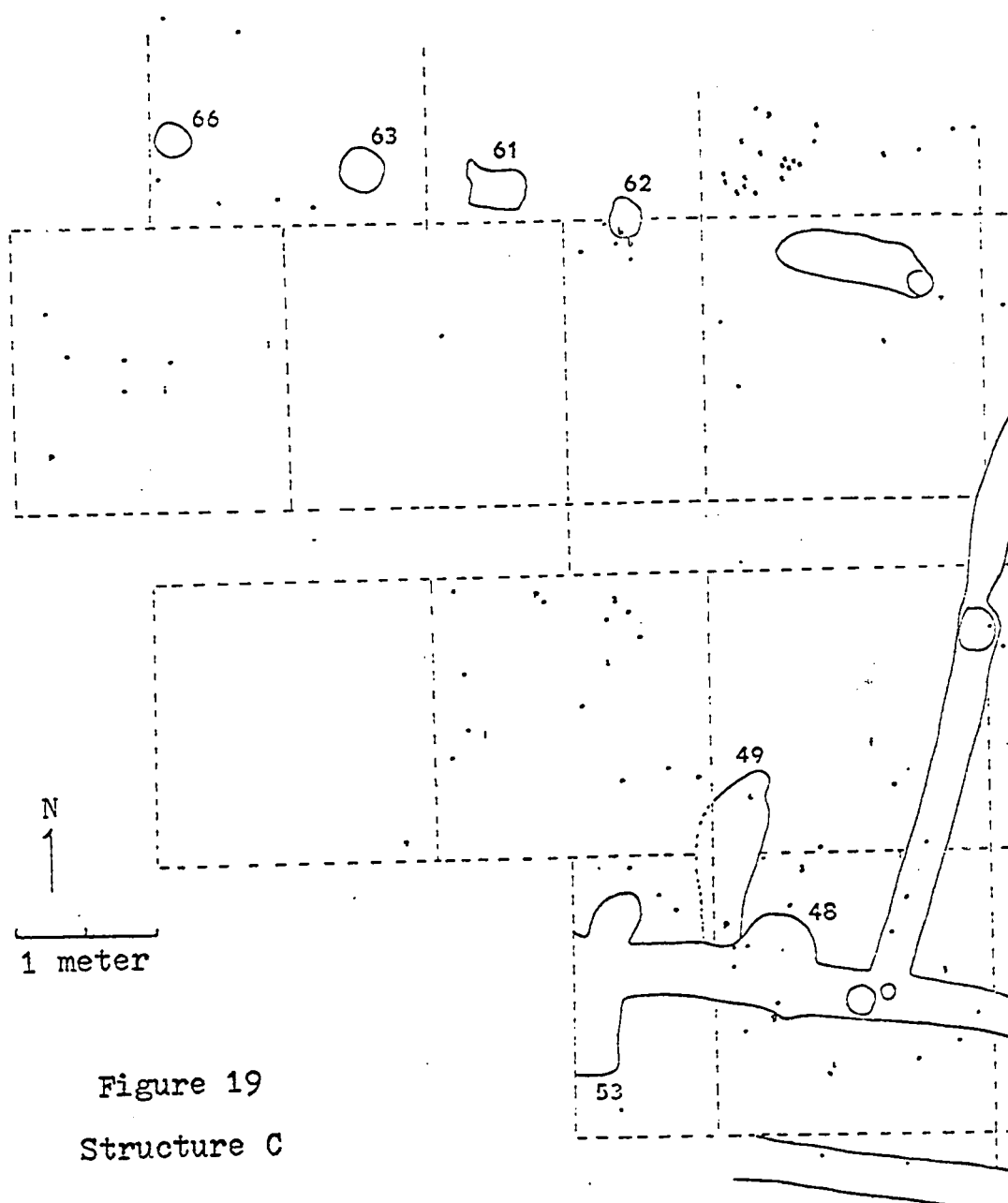
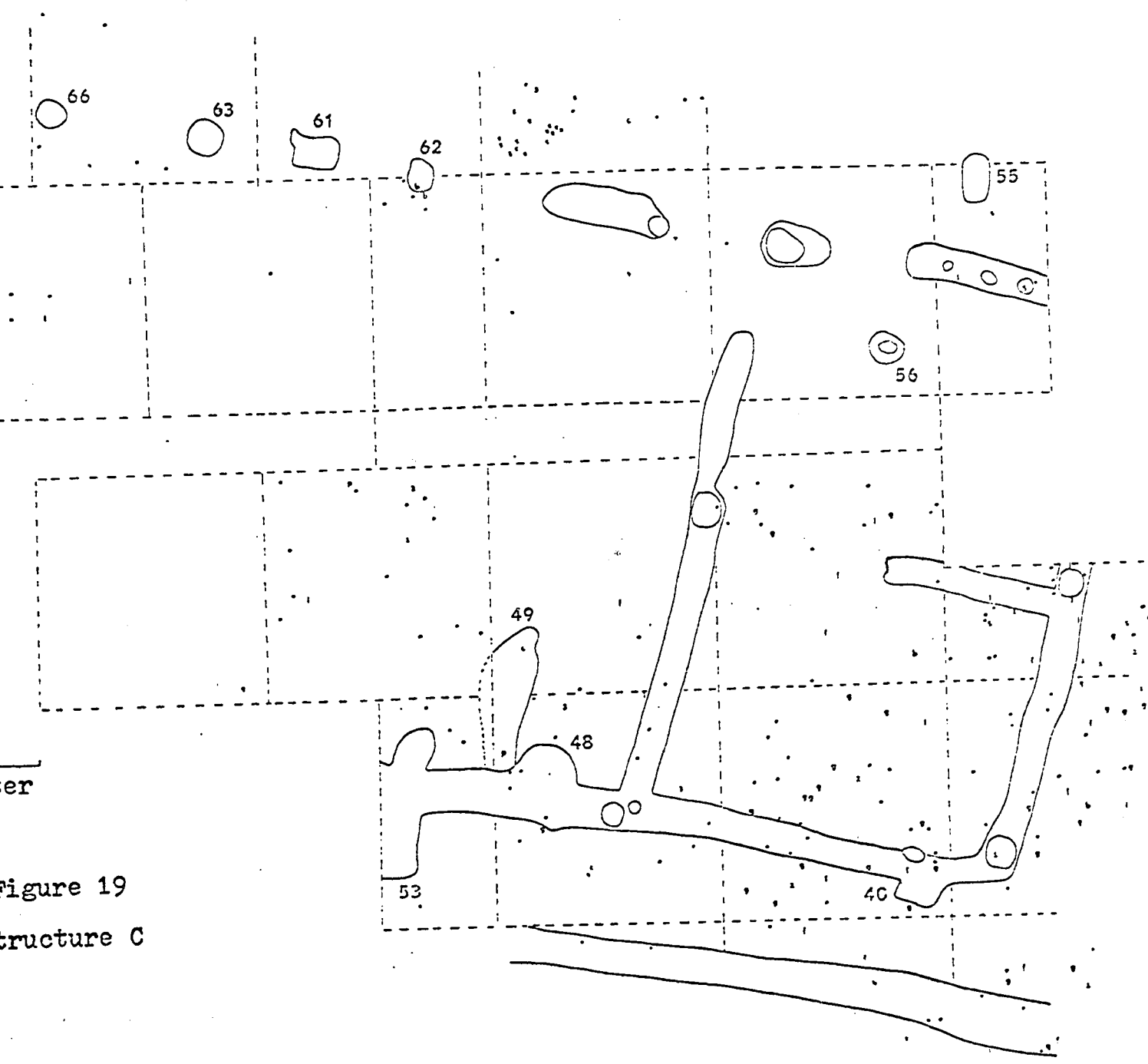


Figure 19
Structure C



er
Figure 19
Structure C

glass and faience. Unlike Structure B, however, there is not a tight clustering of "breakables" within the passageway. Such clustering would be expected had people continually dropped items in one place. Rather, there is a general scatter of numerous items. This phenomenon may be directly related to the traffic flow and period of use of this passage.*

Depending upon which historic map is referred to, Structure C is either the officers' barracks or the kitchen (pp. 132-134). Its interior width is 5.2 meters and its length is at least 9.5 meters.** This building is divided into three rooms, two of equal dimensions (2.6 meters by 3.25 meters) along the eastern wall, and one long room (5.2 meters by at least 6.25 meters) extending to the west (Plate 13). The southern face and eastern side of Structure C appear to be wall trench constructions. Vertical posts in the corners and middle sections suggest a de pièce sur pièce construction similar to Structure B. A row of posts in the northeast corner is indicative of another form of architecture in this part of the building, perhaps poteaux en terre (pp. 140-141). The remaining portion of the northern face may also be de pièce sur pièce, but without wall trenches. Individual post holes were dug with horizontal members being laid directly on the ground. As with Structure B, most of the posts had been pulled out during the

* A stain (W36A2) appears in the southern end of the passage. It was not excavated, because of root disturbance.

** The western edge of this structure now lies below the present bluff edge.

occupation of the fort. The wall trench dimensions are also similar to those of Structure B, ranging between 30 cm and 40 cm wide, and between 5 cm and 15 cm deep.

The area around Features 18, 49, and 50 probably supported a fireplace, as the ground has a thin lens of white ash on it. Similar features were observed in Structure B (p. 191).

Artifacts are primarily concentrated in the southeastern room of Structure C, but the differential distribution has no doubt been affected by stratigraphic changes west of this room. The western portion of Structure C is covered by a thick layer of dark grayish-black soil, above which are burned plank stains, and then topsoil. Only the artifacts in the grayish-black soil layer are marked where more than one layer occurs. In the eastern part of Structure C, where only the topsoil exists, all artifacts are marked on Figure 18. A concentration of lead shot, probably spilled, occurs along the middle of Structure C's northern face and might be indicative of the entranceway to this building. There is an absence of artifact clustering in the passage to the southeastern room, but the "breakables" (faience and glass) do indeed occur in this area. Another concentration of glass occurs along the southern wall in the southeastern room.

Lead Shot Drop Area

Immediately to the north of Structure B is an area which

has an enormous amount of lead shot (Figure 10). Other historic European artifacts are also abundant. This material is included within a 16 square meter area, including squares W23, W24, W27, and W28. Below the topsoil, at a depth ranging between 20 cm and 25 cm, is a solid layer of black earth. This layer covers W27, most of W28, and the northern peripheries of W23 and W24. We at first thought we were dealing with a single isolatable feature but, after excavating adjoining squares to the west, it became apparent that the deposition in this area is similar to that which occurs in Locale 1 (p. 170). It differs only in that burned plank stains are not apparent. After removing the topsoil from all four squares as level A, the remaining deposits were excavated as level B.

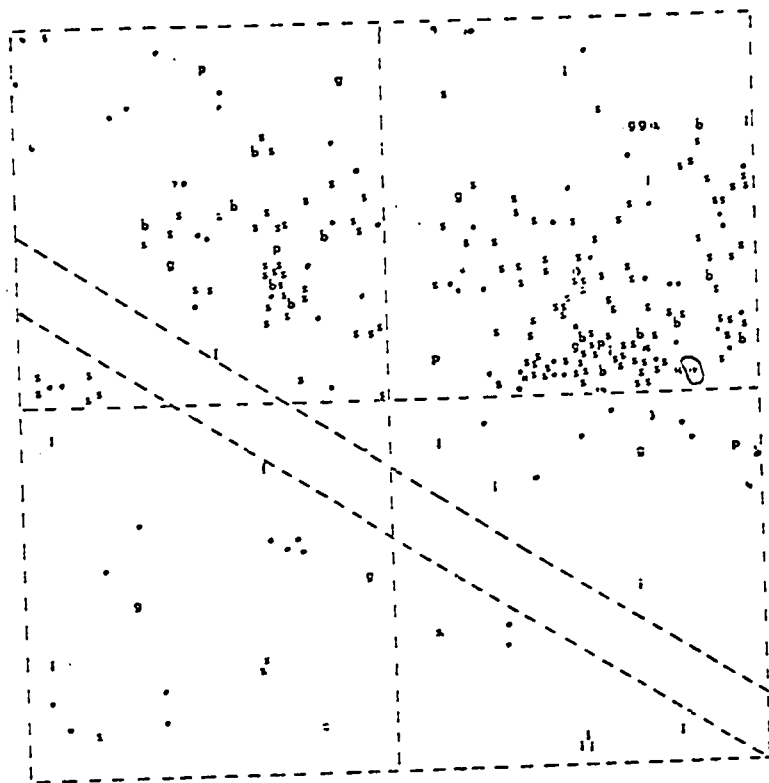
Level A is particularly productive (Figure 20). As can be seen, lead shot, beads, wine bottle glass fragments, gunflints, and pipe stems are very common. An unusual find in W28A is a brass finger spur from a pistol. Most of the artifacts occur in the eastern half of W27A and the southern half of W28A. A dark highly organic layer covers the base of most of square W28A, but along its southern edge a high concentration of daub appears. Immediately to the west of this concentration, in the southwest corner of W28A, is a very compact whitish stain, perhaps ash. Radiating out from this white soil, toward the northwest corner of the square, is a linear stain of the same color and consistency.

In level B, the trends in artifact distribution which are observed in level A, become further amplified. W28B is

Key To Figure 20

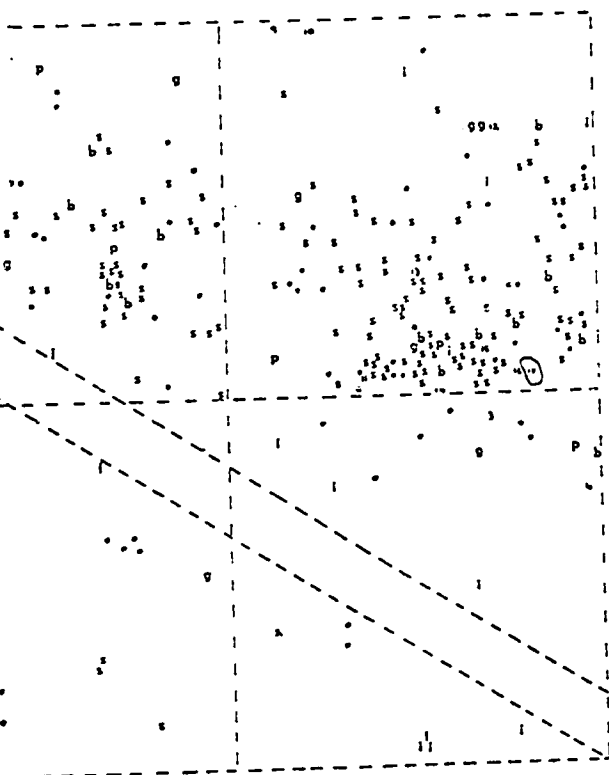
- 1 - mainspring
- 2 - gunflints
- 3 - buttons
- 4 - copper wire
- 5 - iron eyelet
- 6 - projectile point
- 7 - biface
- 8 - celt
- 9 - brick fragments
- 10 - staple
- 11 - brass trigger guard
- 12 - iron buckle fragment
- 13 - bone fragments
- 14 - lead spillage
- 15 - lead-glazed earthenware
- 16 - musket balls
- 17 - 66 lead shot, 2 nails, 2 olive green glass
- 18 - 5 lead shot
- 19 - iron with copper
- 20 - staples
- 21 - tooth
- 22 - miscellaneous brass
- 23 - tinkler
- 24 - hook
- 25 - iron blade
- 26 - 17 lead shot
- 27 - 9 lead shot
- 28 - 21 lead shot
- 29 - barrel hoop fragment
- 30 - sideplate
- 31 - iron ring
- 32 - 11 lead shot

- b - bead
- f - faience
- g - olive green glass
- i - miscellaneous iron
- p - pipe stem or bowl
- s - lead shot
- . - hand wrought nail

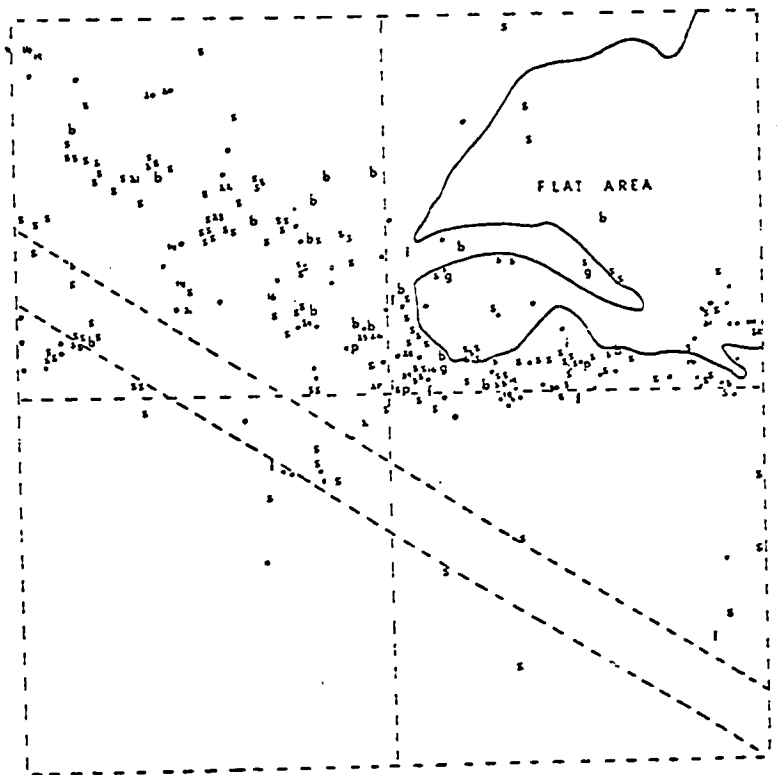


LEVEL A

Figure 20
LEAD SHOT DROP AREA

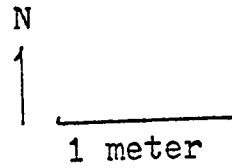


LEVEL A



LEVEL B

Figure 20
LEAD SHOT DROP AREA



particularly rich in cultural debris, especially lead shot and beads, and these materials are almost entirely confined to ditches in the southern and western edges of the square. The remainder of the square is essentially flat and sterile (Plate 14). The ditches continue along the northern edges of W23B and W24B and proceed in an east-west direction entirely through W27B. Historic artifacts are largely confined to these ditches.

Gouged earth, like that surrounding the small plateau in W28B, commonly occurs at this site when a heavy rain strikes against the clay subsoil. The topsoil easily absorbs the water, but the subsoil does not. I believe that this flat area supported a circular water trough during the occupation of the fort. The heavy wear around the trough, resulting from the tread of human and/or livestock feet, accompanied by the constant spilling of water from general use, and overflow during periods of heavy rain, resulted in the shallow ditches observed in excavation. The discovery of hundreds of pieces of lead shot, ranging between No. 3 and No. 9½, has been identified as Rupert shot (Ted Hamilton-pers. comm.). The manufacture of this shot involves the dropping of molten lead from a short distance above a pool of water. The lead, in descending, separates into small semi-spherical particles which subsequently harden when hitting the water (Baird 1973). Shot produced by this method, a technique popular in the early 18th century, bear a nipple on their surface (Hamilton-pers. comm.). I believe that the shot surrounding the flat area in W28B was produced by this method at Fort St. Pierre. To my knowledge, this technology has never

previously been recorded archaeologically.

Burned Area

At the beginning of the 1976 season, the intention had been to rapidly move across the southern end of the site and concentrate on the western edge, as we believed that the latter area was the part of the fort occupied at the time of the massacre. We hoped to discover the remains of a community which came to an abrupt termination in December of 1729. The 1975 excavations revealed a burned plank floor (see p. 168) and, as indicated in figure 21, these planks cover quite a large area. A significant number of historic European artifacts recovered in this part of the site bear traces of having been subjected to fire. We left balks in this area (Plate 15) because, unlike the soil covering the moat, the palisade trench, and the buildings, this part of the site has two distinct levels.* Burned planks, parallel to those encountered earlier in locale 1, or a general black staining, occur several centimeters below the present ground level, and underlying these stains is the midden referred to earlier.

In the discussion of the palisade trench and Structures B and C, it was observed that, with few exceptions, almost all of

* In several of the pits we were able to observe three levels, the third being a thin, soft, whitish loess resting upon the subsoil. It is artifactually sterile and we have not yet been able to determine its cultural significance.

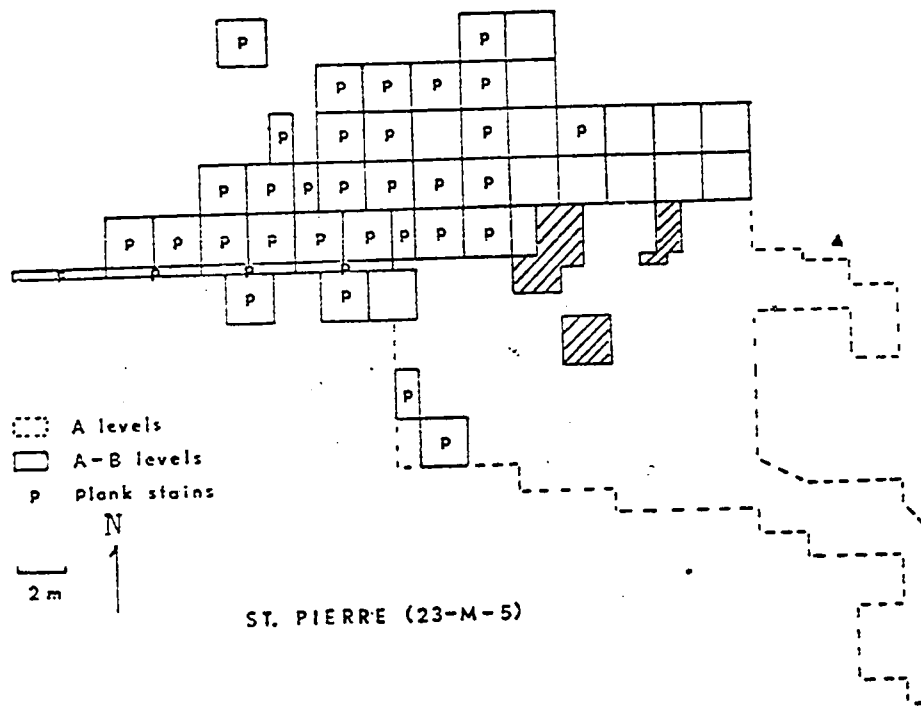


Figure 21
Burned Plank Stain Area

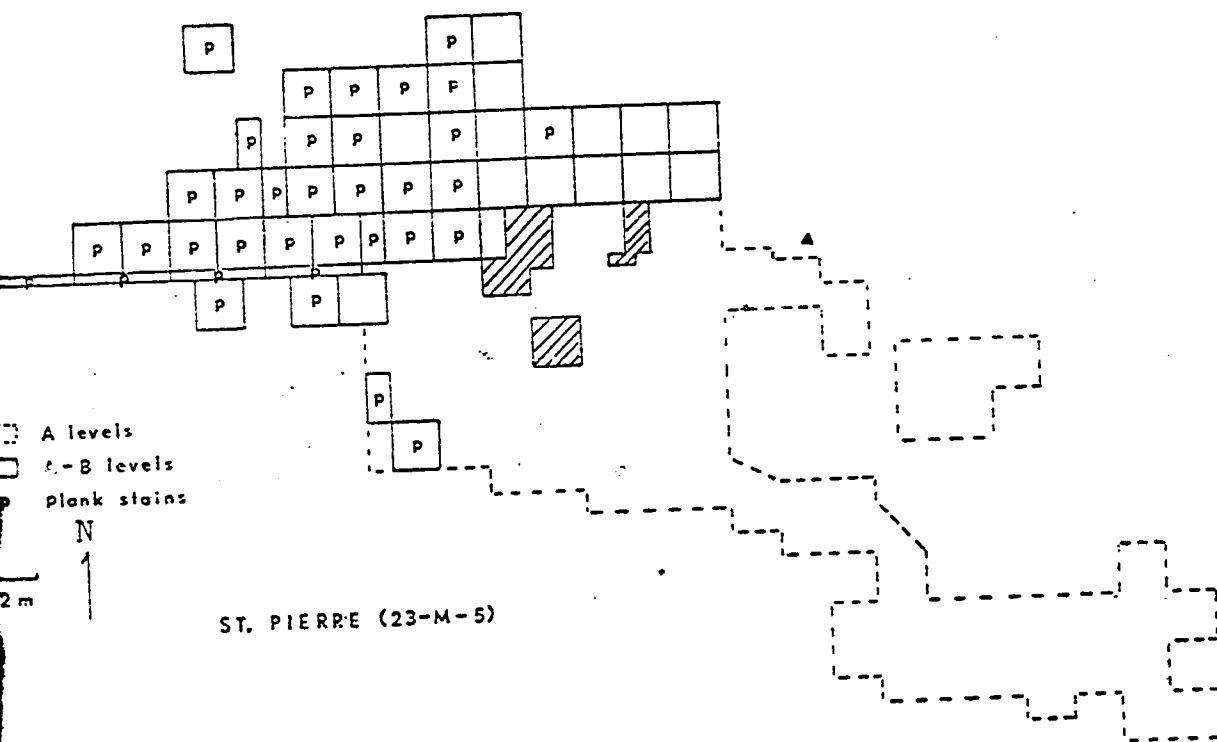


Figure 21

Burned Plank Stain Area

the principal posts were removed at some time during the occupation of the fort. It is obvious, in comparing Figures 10 and 21, that a large portion of Structure C necessarily had to be removed during the fort's occupation, as a plank floor was placed on top of its northern half. The latter construction occurred after a considerable midden deposit had already developed. This discovery thus supports the hypothesis of two distinct periods of construction at St. Pierre, the latter period representing a "shrinking-in" of the fort's physical dimensions to suit the similar shrinkage of population noted historically (pp. 80).*

* There is a problem with this interpretation. It was noted earlier that the moat (Feature 31) west of section E is believed to have been open throughout the duration of the site's occupation, being rapidly filled at the time of, or shortly after, the 1729 massacre. All evidence supports this interpretation, except for the occurrence of a series of burned plank stains overlying section H. They may have rested on a joist uncovered in W48A. If these planks relate to a building designed in the latter half of the fort's occupation, then the moat could not have been left open at this point. However, had this been the case, it does not seem likely that the stratigraphy would have failed to appear in the profile of section H (Figure 11). Nor can the presence of complete vessels and burned artifacts within the moat be easily explained away. I hence offer as alternatives: 1) the planks were laid down over a soft spot by a French salvage operation to retrieve what remained of the fort's moveable property, or 2) the stains represent a part of a standing structure which fell over the moat at some time after the fort's destruction. I unfortunately do not feel satisfied by either of the alternative interpretations.

Southeast Bastion

Work was prematurely terminated along the western edge of the site, due to discoveries along the southeastern periphery of the plateau. In the last days of excavation, we uncovered an abrupt turn in the moat (Figure 10). Following this out, we discovered the southeast bastion of the fort. It is not diamond-shaped, as indicated in the historic plans, but rather is square-shaped. We do not know the exact dimensions of the bastion's palisade trench, because of the unfortunate positioning of our backdirt pile, but the southern edge of the moat turns to the south at an angle of 90° , continues for 5 meters, makes a 92° turn at the southwest corner of the bastion, and continues for an additional 15 meters until it joins the section of the moat which runs parallel to the eastern face of the bastion. The southern face of the bastion is 9.75 meters long, is located 1.5 meters from the edge of the moat, and joins the eastern face at a salient angle of 80° .

The discovery of the southeast bastion is perhaps our most exciting discovery of the summer, and is certainly a fitting ending for the season. On the basis of the 1975 test trenches, it was concluded that only a small portion of the fort's southern and western edges survived the double stress of man and nature, but it is now known that a large portion of the eastern part of the fort, as yet virtually uninvestigated, remains for the future. Situated within the eastern curtain of the fort are the storehouse

(magazin) and the storekeeper's lodgings (maison du garde magasin)

In terms of the orientation of this study, the interaction between the French and the local native population, the investigation of the storehouse, the center of material distribution, is of fundamental concern.

Summary

It usually takes a considerable amount of time to plan a season of archaeological work. After three consecutive years of formulating objectives, and calculating the time, labor, and money necessary for their completion, it has become apparent that few things go as planned. The deviation from schedules, however, has been a happy frustration. After the 1974 season, I was convinced that only a small portion of the site of St. Pierre remained intact and that the greatest remains were concentrated in the northwestern portion of the site. It was thought that a month's work in 1975 would be more than enough time to complete excavations at St. Pierre. I was happily surprised to learn that much of the western part of the fort, and perhaps some of the southern portion, survived. In returning to the site in 1976, the intention was to quickly excavate the southern side and then concentrate on the western periphery where there was strong evidence of burning. These plans changed when it became apparent that a great deal more of the southern portion of the fort remained. Included within this

area are the southern curtain, a dry moat, and two buildings. One of the buildings is the commandant's headquarters while the other is either a kitchen or the officers' barracks. A great deal of time was spent investigating this area, with only minimal excavations along the western edge of the site. More time could have been expended on the latter, had we not discovered the fort's southeast bastion. This discovery was totally unexpected and revealed the survival of the entire eastern side of the fort. After three years of work, my feelings now are that the surprises at St. Pierre have only just begun. Future work at this site will continue to contribute to our understanding of French-Indian interaction in the Yazoo Bluffs region.

Portland (22-M-12)

The Portland Site is located high on the loess bluff hills about two miles northeast of St. Pierre (23-M-5), and less than $\frac{1}{4}$ mile south of Haynes Bluff (22-M-5) (Figure 1). The bluffs to the east and southeast of the Haynes Bluff Site have long been known to be productive in terms of early colonial artifacts. At least eight "Colonies Francaises 1722" coins have been collected in the area, as well as a 1692 German coin and an English one dating to 1588. It was suspected that some extension of the French colony may have been situated in this area. Local amateurs reported the location of Portland, a site which has yielded coins, axes, and gun parts in the past.

Excavations had hardly begun when it became apparent, by the large quantity of pottery and lithics, that the site was aboriginal, rather than French. Test pits were placed in three different areas on the site. The first area investigated was expanded to isolate what turned out to be five separate pits. Numerous aboriginal and historic artifacts were found in all but one of the five pits. The aboriginal assemblage is in many ways similar to materials from the Trudeau Site (29-J-1), a Tunica settlement in Louisiana occupied between 1731 and 1764 (Brain 1973). The main Tunica settlement in the Yazoo Bluffs region is believed to have been at the Haynes Bluff Site, situated on a talus slope directly north of Portland. On the basis of the materials collected at Portland, it is believed that the trash pits are the remains of a single Tunica occupation dating to the "missionary" period (1698-1706).

Six 2 meter squares were excavated at the Portland Site (Figure 22), four of which (Y500-Y503) were placed over a series of trash pits. It was originally supposed that there was just one single large pit, but excavation revealed four additional pits. The habitation area, represented by a thin sheet midden, is situated to the south and southwest of the pits and was discovered by means of a post hole survey. A single 2 meter square (Y504) excavated in the above area was unproductive. Only 20 potsherds were found out of a total of 2,146 retrieved at the site. Four-fifths of the assemblage within this square is either Addis Plain, var. Addis or Mississippi Plain, var. Yazoo.

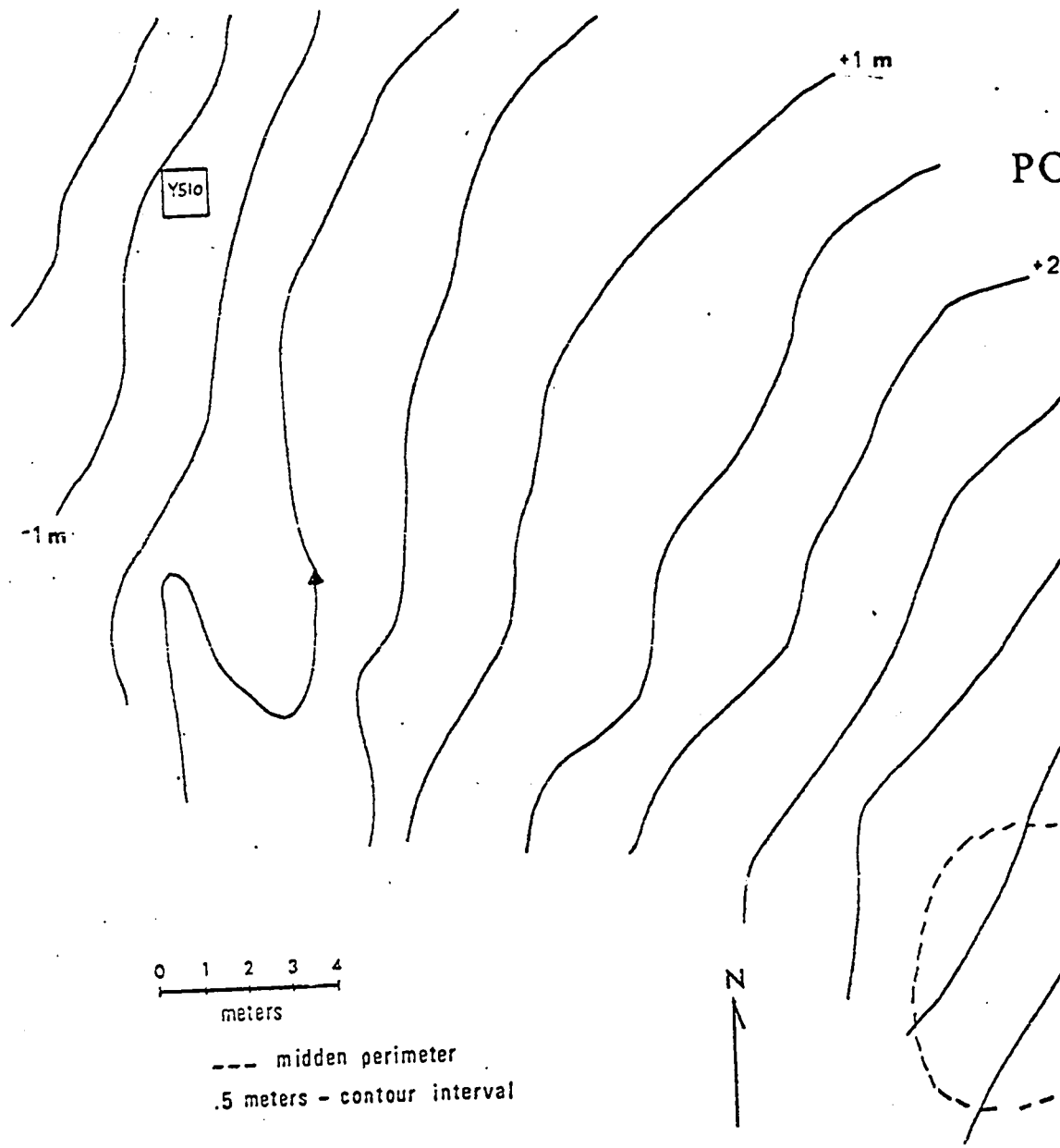


Figure 22
Portland (22-M-12) - 1974 Excavation

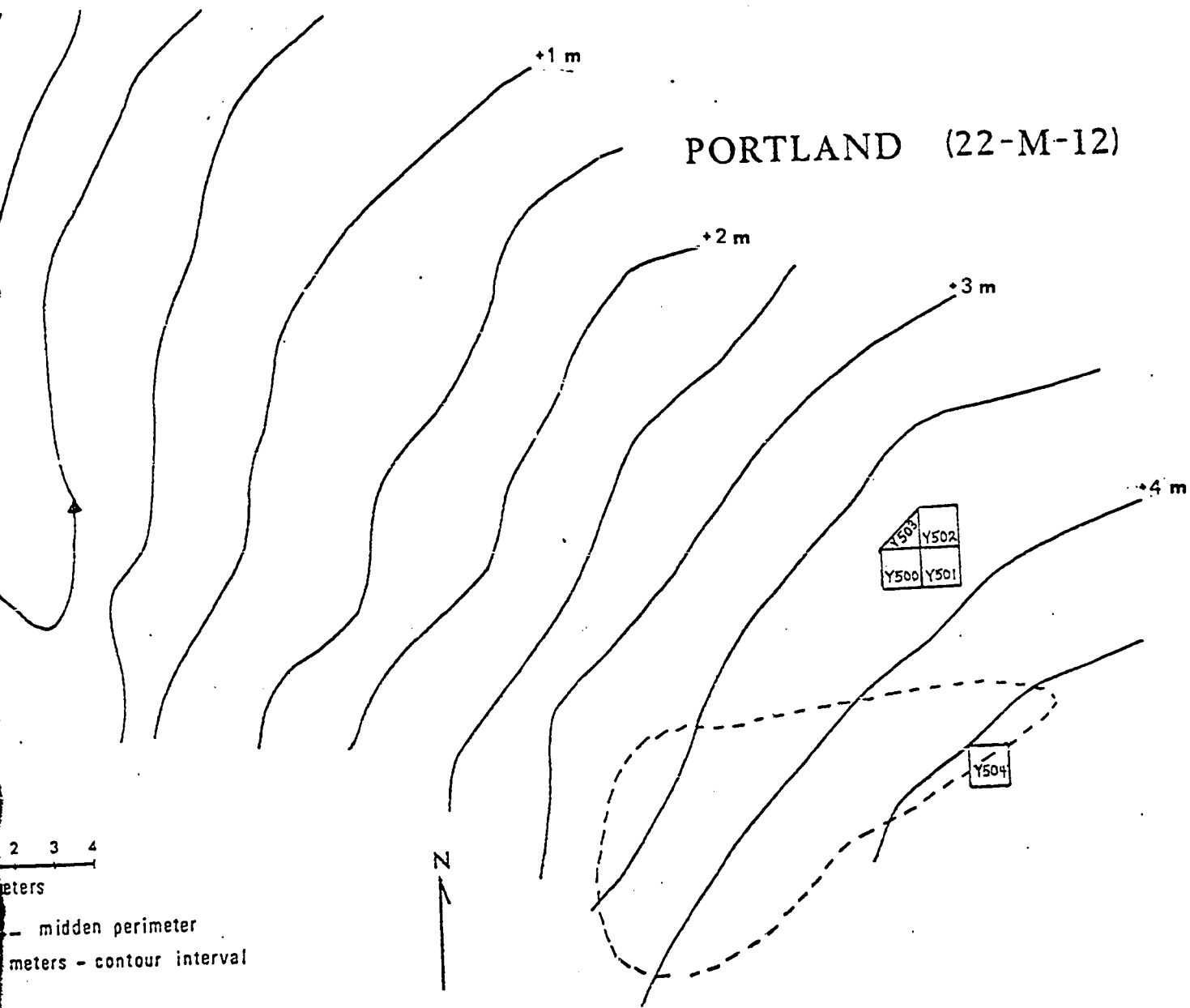


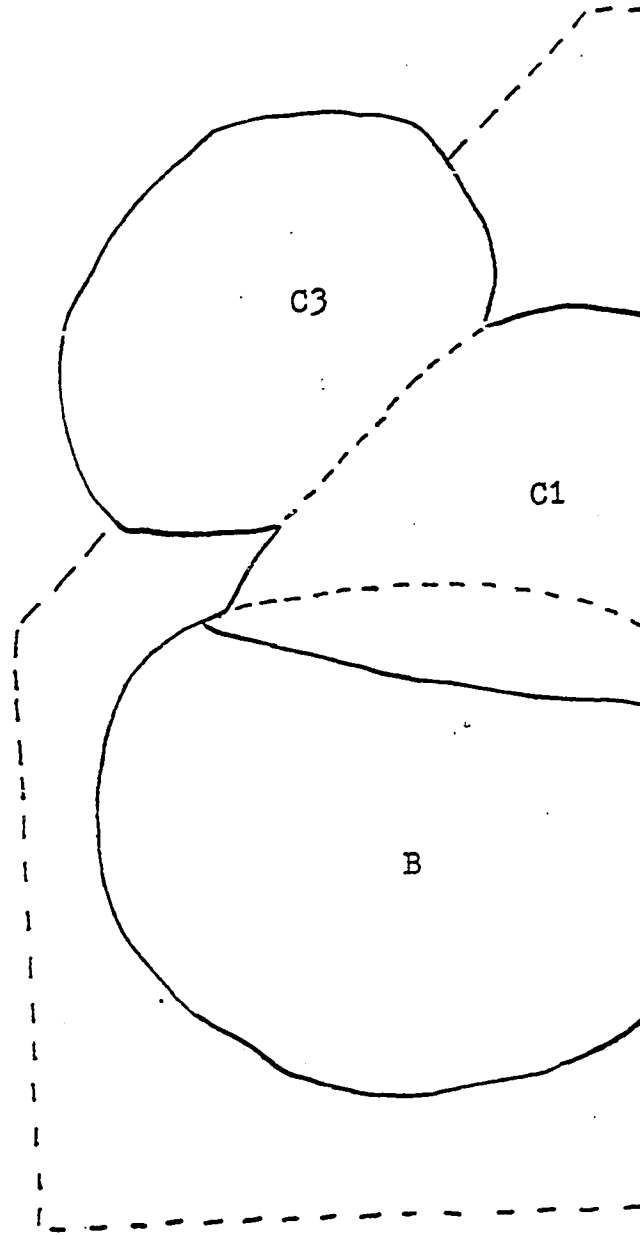
Figure 22
Portland (22-M-12) - 1974 Excavations

An additional test square (Y510) was excavated to the northwest of the main excavations, in the area in which "Colonies Francaises" coins are reported to have been found. Ninety-two potsherds were discovered most of which occur in the second level. Historic artifacts include a piece of green lead-glazed earthenware, a musket ball, and five glass beads.

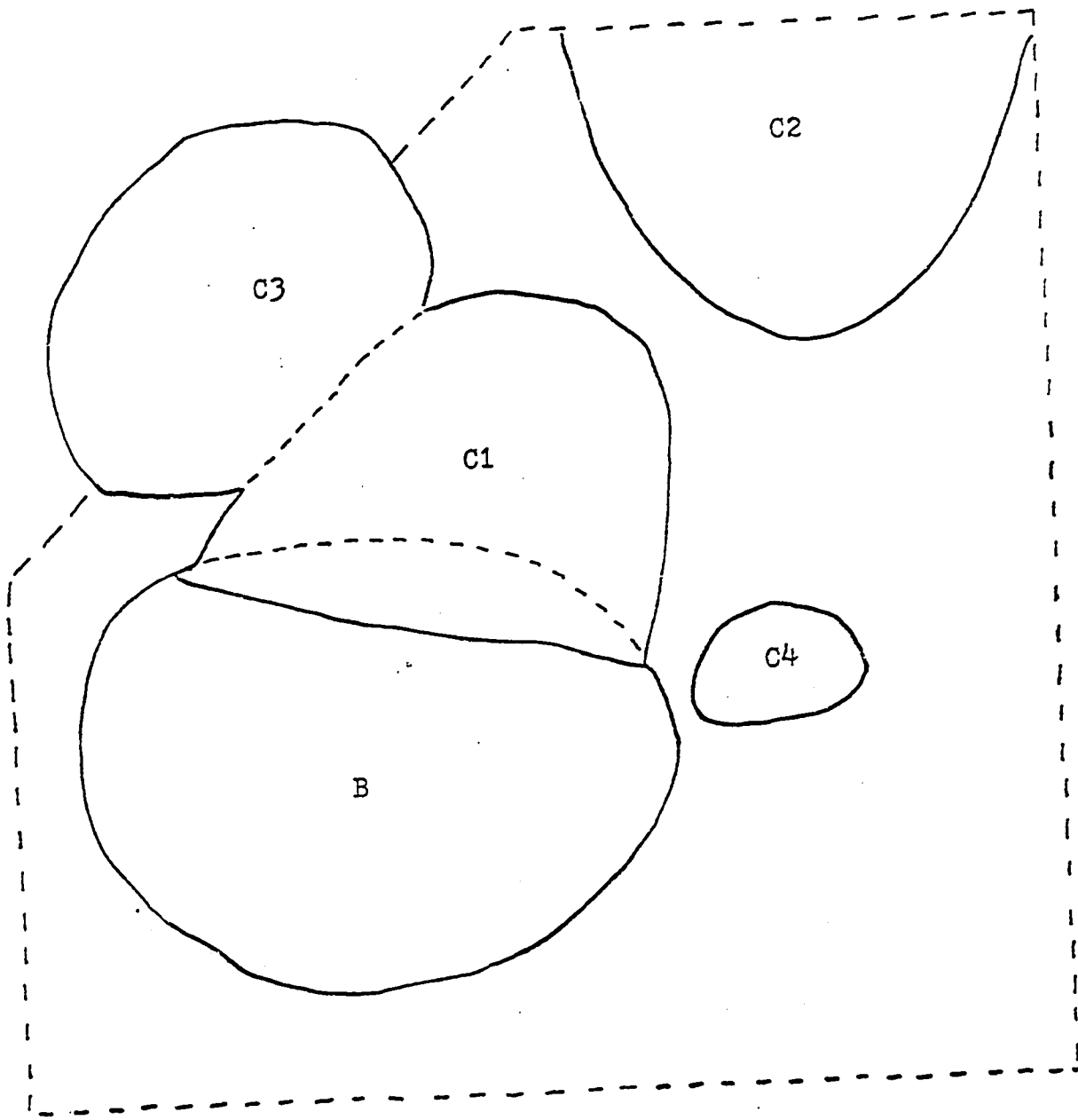
Squares Y500 through Y503 were excavated by arbitrary levels, in each case being taken down to the +3.61 meter level above datum. This level extends no deeper than 50 cm below ground surface. Y501 required the removal of two arbitrary units to get down to this level, but only one level was removed in the other squares. At this depth, a large oval feature, over 4 meters in length and 2.5 meters at the widest point, stood out from the surrounding subsoil. This was at first thought to be a burial pit, as some human bone was discovered, but the large quantity of various animal bones and small potsherds indicated it to be a large trash pit. Further excavation revealed a series of five trash pits, some of which overlap (Figure 23).

Y506B is the largest of these pits, 2.25 meters long and approximately 1.7 meters wide. The original width cannot be determined as the southern portion of pit Y506C1 had been dug into Y506B. As with many of the pits excavated at the Fatherland Site, Y506B is bathtub-shaped (Neitzel-personal communication). It has a maximum depth of 26 cm. A large fragment of a Winterville Incised, var. Tunica jar (Figure 24a) was found within this pit, it being quite similar to material found at the historic Tunica site of Trudeau (29-J-1).

..
Figure 23
Portland (22-M-12)
Feature
Y506

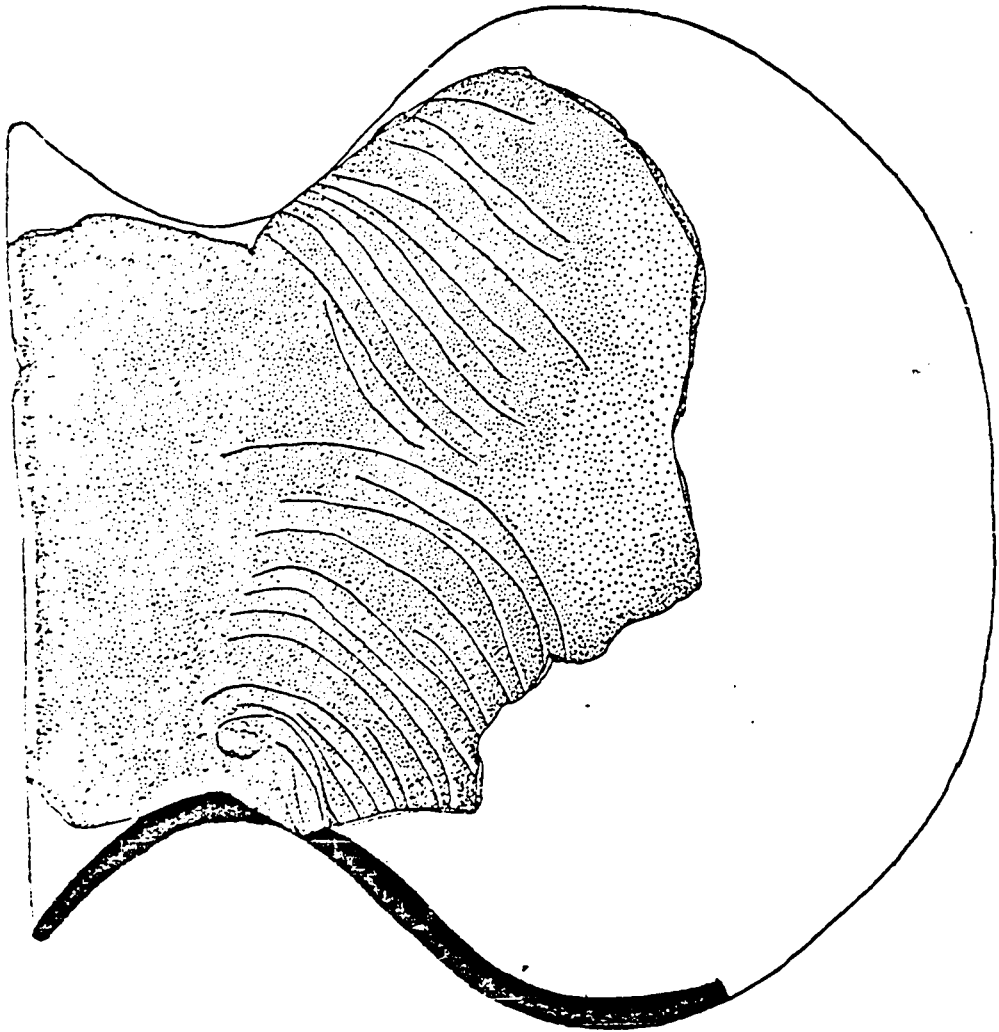


S6
E41



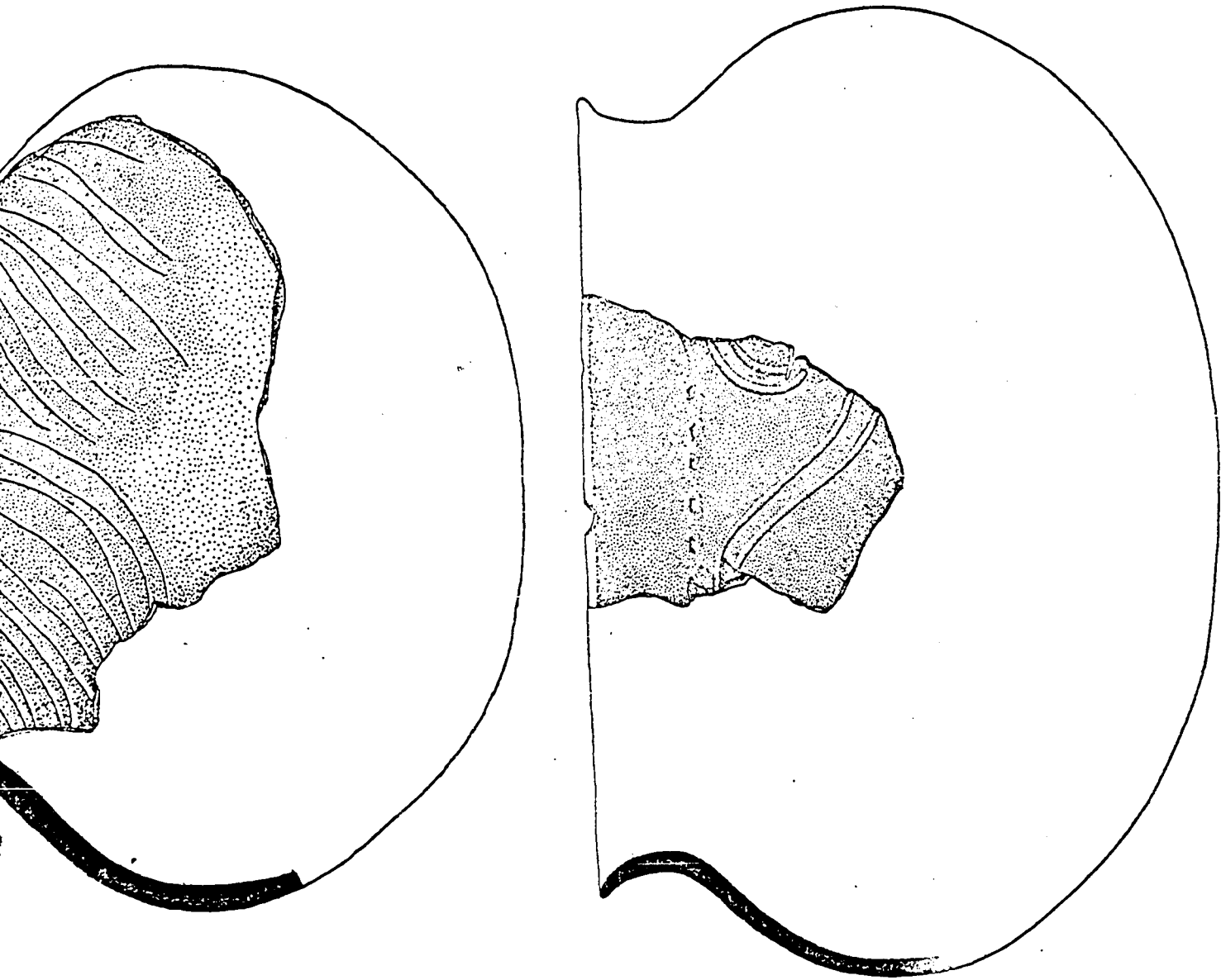
S6
E41

a



b





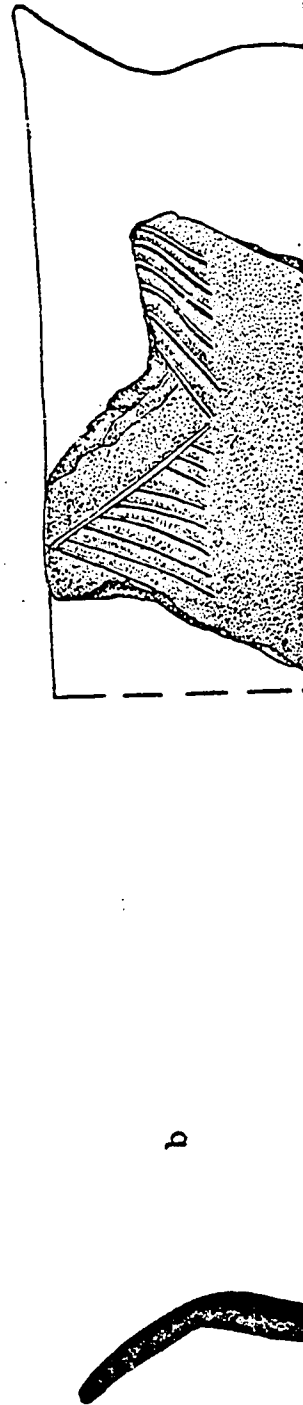
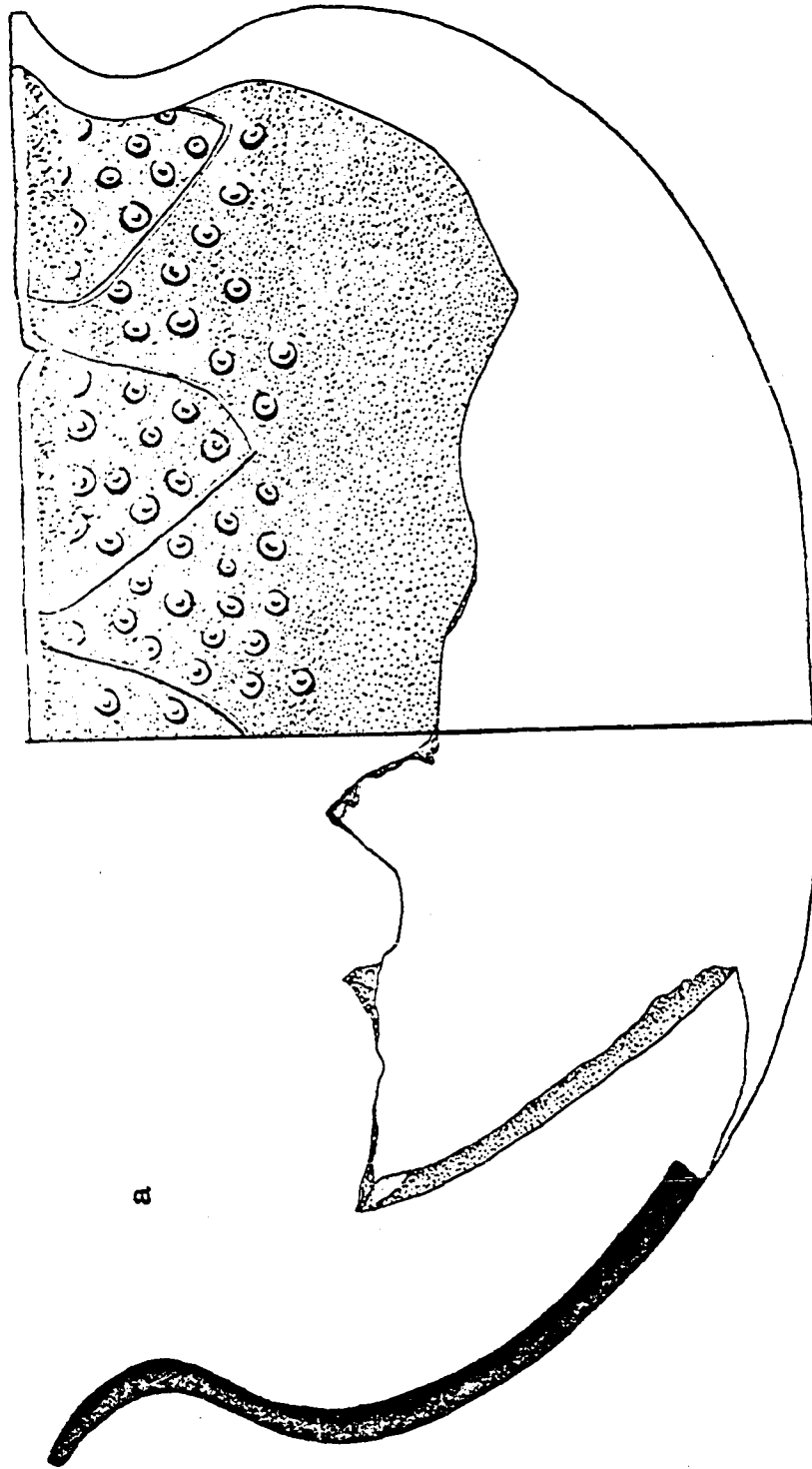
b

Figure 24

Winterville Incised. a, var. Tunica jar. Leland Incised.
b, var. Williams bowl. Provenience - Portland. a, Y506B.
b, Y506C. (a reduced 3/5ths. b reduced 3/10ths).

It was hoped that a chronological ordering of artifacts would be attained through the analysis and comparison of trash pits Y506B and Y506C, as the latter is known to have been dug at a somewhat later date. Pot hunters unfortunately succeeded in tearing up a large portion of these pits, thereby preventing such a study. The loose dirt from their destruction was sifted and labeled Y506C, but it was later learned that Y506C consists of three additional pits, only one of which (Y506C1) overlaps with Y506B. The artifacts, therefore, cannot be arranged chronologically through stratigraphic means. A large portion of an Owens Punctated, var. Redwood bowl (Figure 25a) was found in Y506C1.

The remaining three trash pits are of a smaller size than the first two pits. Y506C2 was only partially excavated, because of time limitations. It is 1.8 meters wide and, had it been symmetrical, 2.4 meters long. Its maximum depth, below the arbitrary +3.61 meter level, is 15cm. A partial Leland Incised, var. Williams bowl (Figure 24b) was reconstructed out of the remains left by the pot hunters. Y506C3 is somewhat smaller, but has a shape similar to Y506C2. Its long axis runs northeast-southwest, instead of north-south. Its length and width are 1.9 meters and 1.25 meters respectively, and its maximum depth is 26 cm. The discovery of a historic trade axe within this trash pit supports the local amateurs' claim that axes were unearthed by them in this region. Y506C4, the remaining pit, is a peculiar feature. It does not overlap with any of the other pits. It is small and round, having a length of 60 cm



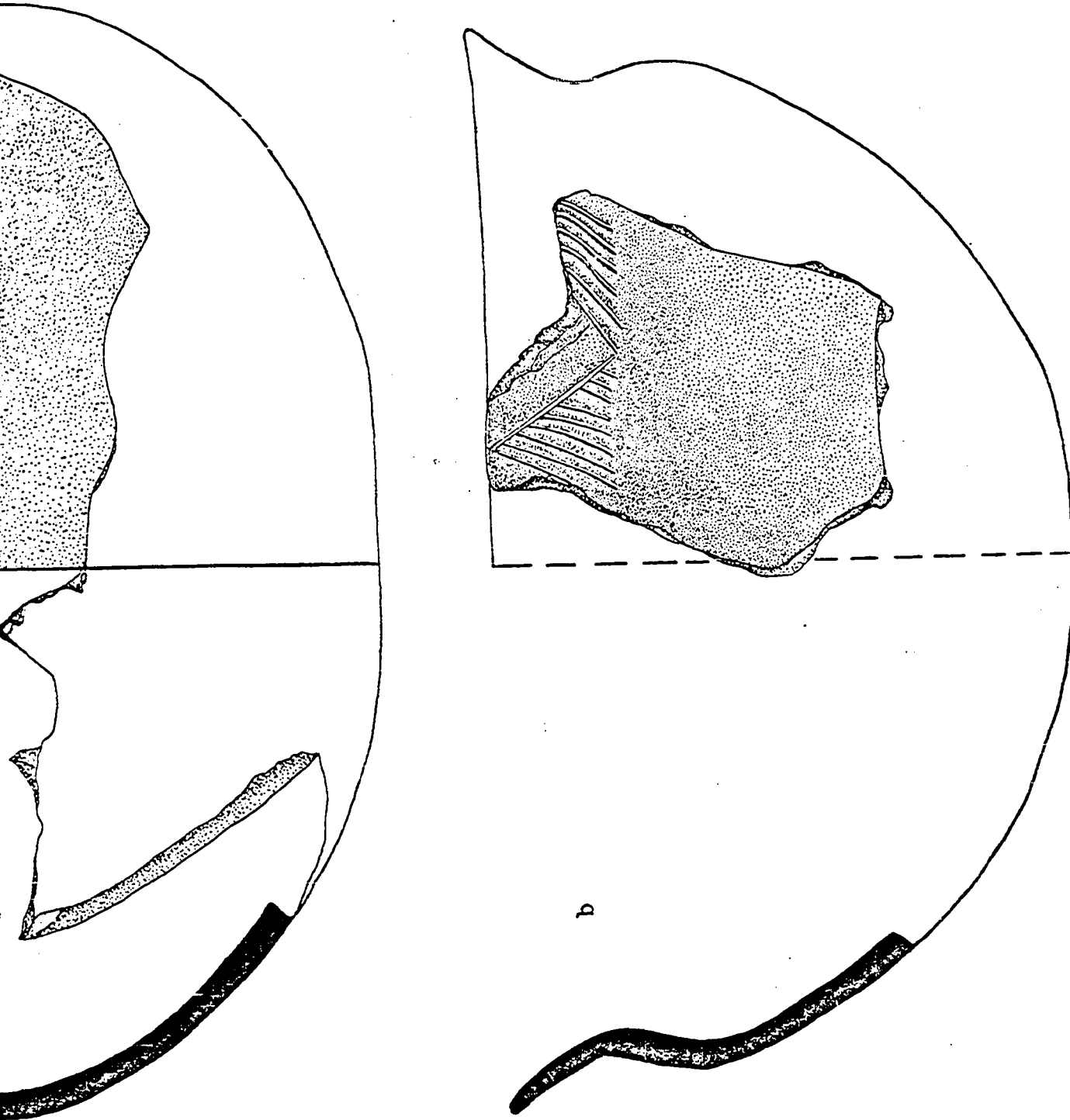


Figure 25

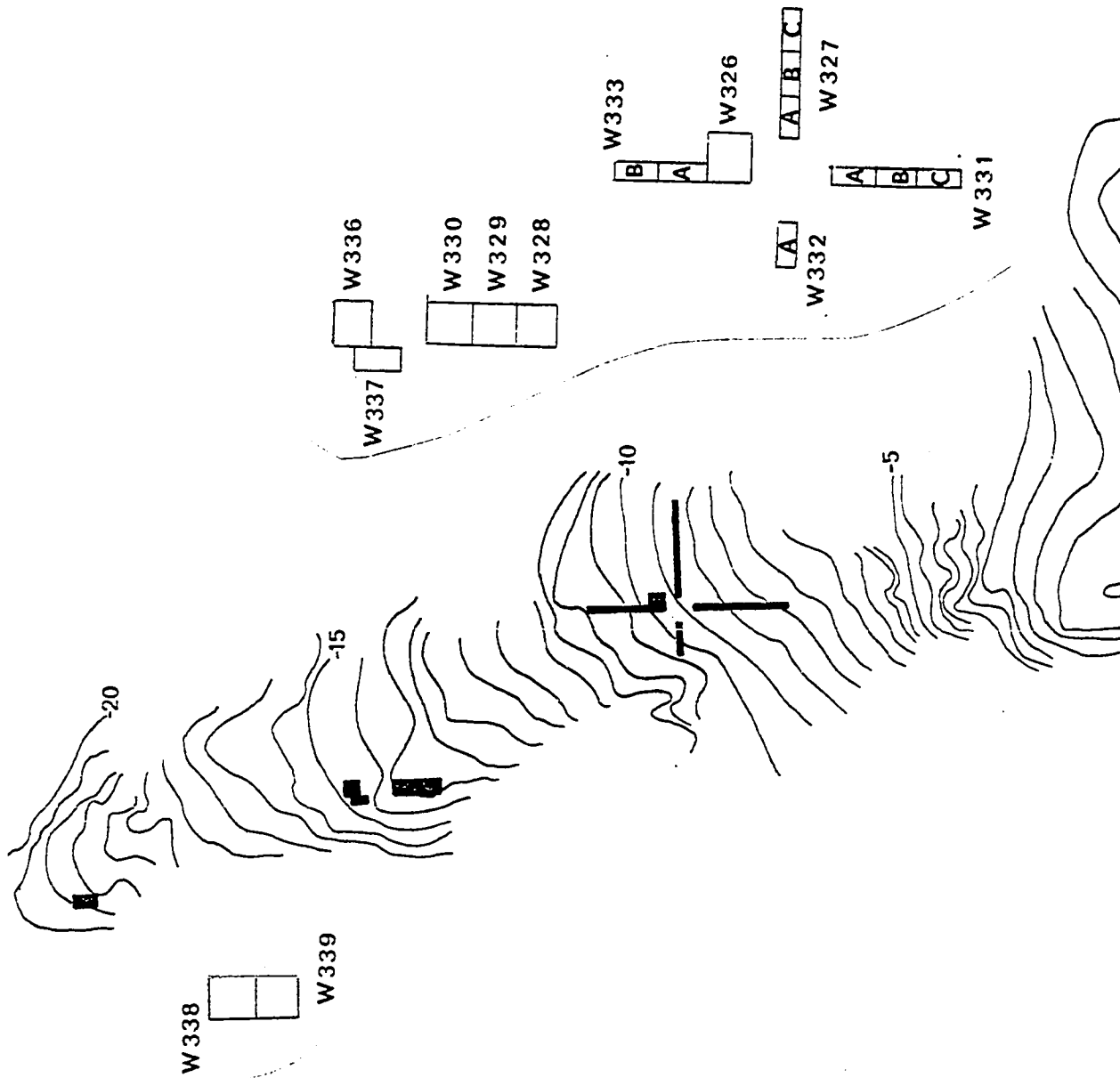
Owens Punctated. a, var. Redwood.bowl. Barton Incised. b, var. Portland bowl. Provenience - Portland. a, Y506C/Y506C1/Y506C1-2/Y506C1-3. b, Y506C. (reduced 3/5ths).

and a width of 45 cm, its long axis oriented east-west. Its maximum depth is similar to Y506C2 at 14 cm. Unlike the other pits, Y506C4 is culturally sterile.

In sum, the excavations at Portland uncovered a series of five pits containing variable amounts, but essentially similar types of artifacts. Some of the pits overlap with earlier ones, but little time probably passed between when the various pits were used. The associated house remains are probably located to the south and southeast of the trash pits, as revealed in a thin veneer of cultural material which appeared in a posthole survey.

Wright's Bluff (22-M-15)

Wright's Bluff, located $1\frac{1}{2}$ miles southeast of and overlooking the Haynes Bluff Site (22-M-5), is a multi-component Indian site. Occupational remains occur on a series of terraces which comprise a single ridge chain (Figure 26). We were first attracted to the site in the spring of 1976 when a pot hunter uncovered a historic Indian burial. This locale had already been high on our list of areas to be investigated, and the discovery made it first priority. As a rich collection of historic materials was found with the burial, we believed this individual was an inhabitant of an early 18th century hamlet associated with the Haynes Bluff mound complex. Our archaeological knowledge of settlement structures in the Yazoo Bluffs region



is confined to a single house pattern uncovered at Haynes Bluff (Brain 1975a). We hoped that Wright's Bluff would prove to be a single component historic aboriginal village, and help flush out our knowledge. Unfortunately, it is not. After an extensive trenching operation, we discovered that Wright's Bluff had been occupied, although sparsely, since at least the Issaquena phase of the Marksville period (see Figure 30). Evidence for historic settlement is confined merely to the burial referred to above.

Five areas on the Wright's Bluff ridge are flat enough and wide enough to have supported residential structures. We decided to test each of these areas, planning to expand excavations when historic occupation became apparent. Starting from the highest plateau and working down, a 2 meter square pit (W340) was placed at the southern-most extremity of the site. The topsoil, ranging between 10 cm and 15 cm, was removed as a single level, and beneath this we confronted sterile subsoil. Only three unutilized lithic flakes were recovered from this square.

A long narrow plateau occurs directly to the north of the ridge summit, and on this we excavated one 2 meter square pit (W325) and a 40 meter long trench (W335). Two 25 cm arbitrary levels were removed in the test square. Humus ranges in depth between 15 cm and 20 cm, and caps a deposit of brown loess. Subsoil is encountered at a depth of 45 cm. Cultural material is extremely rare, the pottery consisting of two rim sherds of Barton Incised, var. Davion (same vessel), one sherd of

Leland Incised, var. Unspecified, and eight additional plain body sherds, three of which are Mississippi Plain, var. Yazoo. All of the above material are from level A. A large quartzite hammerstone was also found in this level, along with two large chert cobbles and a number of utilized and unutilized chert flakes. Level B contains lithic debitage, but no ceramics. A 50 cm wide trench (W335) extends from the south of square W325 to a point 40 meters to the west. The trench was excavated in ten 4 meter long sections. Each section, excepting H and the eastern half of G,* was taken down to subsoil. Arbitrary levels, 25 cm thick, were excavated in sections D, F, and G. The remaining sections were taken out as a single unit. Deposits are fairly deep, yet virtually sterile. The stratigraphy consists of a thin (10 cm) band of humus overlying a layer (10 cm - 25 cm) of dark brown loess. The latter in turn grades into a light brown loess of comparable thickness, although in the eastern portion of section C it increases in depth to about 50 cm. Beneath this layer, and ranging between 50 cm and 80 cm below the present ground surface, is sterile subsoil. A pit of some sort, perhaps tree roots, occurs in the western half of section D. There is no associated cultural debris. Material from the entire trench is sparse, to say the least. With the exception of a sherd of Barton Incised, var. Davion in section B, and several pottery fragments of Mississippi Plain and Baytown Plain scattered throughout the excavations, aboriginal ceramics are practically nonexistent. Lithic material is also limited in number. A chert projectile point, a biface tip, and a flake

* not excavated because of trees

scraper were recovered in section A, and another flake scraper was found in section B, but otherwise there is merely a general scattering of chert flakes. The utilization of this plateau appears to have been minimal throughout prehistory. The presence of projectile points, scrapers, and utilized flakes suggests that the area was used sporadically as a hunting encampment. The association of a hammerstone, cobbles, and lithic flakes in square W325 suggests that the plateau had once been used in the manufacture of stone tools, and the slight, but general, scattering of Mississippian pottery indicates a small late prehistoric settlement in this area.

Continuing to the north of the above excavations, there is a steep drop which levels out to another broad flat plateau. Four trenches and a 2 meter square pit were excavated in this area. The stratigraphy of the test square (W326), which contains only several lithic flakes, is characterized by a thin humus layer (10 cm - 12 cm thick) which caps a slightly thicker (15 cm - 20 cm) brown loess layer. Beneath the latter is the subsoil. The stratigraphy is consistent in the surrounding test trenches, and the lack of cultural material is also similar. Chert flakes are few, but are scattered throughout the sections. A chert biface retouch flake was found in W331A and a chert core was recovered in W333A. Also in the latter section was a small deposit of charcoal. Pottery is basically nonexistent in the area, and the only features uncovered are two possible linear stains in W331B. The lack of any material in association with these stains influenced our decision not to expand excavations

in this area.

There is only a slight drop in elevation to the next area of investigation. Unlike the above plateaus, the location marked by squares W328-W330 and W336-W337, is not of a size (at the present time) suitable for a residential structure. However, the historic Indian burial referred to in the beginning of this site report, was found in this location. The burial pit is contained within squares W329 and W330. We approached this pit from the south by first excavating W328. The topsoil is extremely thin (5 cm - 10 cm) in this square and lies directly on top of the sterile red clay subsoil. We did not find anything of significance in this square, but two gunflints, one of the spall type and one aboriginally-chipped, and two small unidentified iron objects, were found in the adjoining square (W329). The burial pit appears along the northern wall of the latter square and continues through most of W330. A considerable amount of cultural material was found mixed in with the dirt and leaves which had been thrown in the pit by the local pothunter. Included are a Fatherland Incised, var. Unspecified sherd, Barton Incised, vars. Davion and Portland sherds (Brown 1975a; 1976e), and a large amount of Mississippi Plain, variety Yazoo pottery. Nine of the latter potsherds are rims, and seven of these are from different Yazoo jars. Other materials include a vent pick (or screwdriver shank), a hand wrought nail, eight pieces of lead shot, a broken brass rampipe section, two triggers, a trigger assemblage, an aboriginally-chipped blade gunflint, a flattened musketball, and a white seed bead.

Fortunately, when the pothunter performed his own "excavations", he kept fairly close to the original dimensions of the burial pit. In its original form, the pit was an irregular circular depression about 1.4 meters in diameter (Plate 16). It was very shallow, ranging in depth between 13 cm and 34 cm below the original ground surface. The burial is a relatively tall male Indian in his late 30's or early 40's. The teeth are in superb condition, but he suffered somewhat from arthritis of the lower vertebra. He had been placed in the grave on his back. With the exception of the skeleton's cranium, which was discovered on the individual's thoracic region, the body was essentially undisturbed. The mandible was found within the backfill and leaves were found beneath the skull, indicating that the head had been disturbed by the pothunter. The skeleton is a semi-flexed primary interment, the head being oriented to the north. The spinal column is oriented northeast by southwest. The upper legs follow the same orientation, but the lower legs are tightly flexed at the knees and bend toward the individual's right side. The bones of the right foot are jammed against the west side of the burial pit, apparently to force the body into a grave of unsuitable size. The arms are flexed and crossed over the chest in proper Christian manner. The cause of death was not revealed by a study of the skeleton, but the presence of four flattened musket balls in the pothunter's collection, in addition to the one discovered in our investigations, suggest that the individual was shot.

We did not find a single artifact in situ but, as indicated by what the pothunter found (Table 1; Plates 17-31), this individual is certainly a high status burial. The greatest recent disturbance occurs on the left side of the skeleton, and so it is probable that the offerings were largely located in this region. The displacement of the head suggests that some material was also located adjacent to it. The bells are a set of chimes, having all been tuned to different pitches. The incredible number of gun parts accompanying the burial, out of which only one complete gun could have been made, suggests that this Indian was either an aboriginal gunsmith himself, or had somehow secured a gunsmith's collection. The screwdriver would of course have been an important tool for this role. According to historical records, gunsmiths were rare in Louisiana (Rowland and Sanders 1929:344), and Indians were rather inept at fixing their own guns (Cox 1905:70; Delanglez 1935:468; Phelps 1966:56; Rowland and Sanders 1929:580). Archaeological evidence is now beginning to demonstrate that Indians were considerably more adept at gunsmithing than they have been given credit for historically (Hamilton 1976; personal communication). The Wright's Bluff burial is further support for native gunsmiths.

Whatever the "trade" of this individual, the quantity of material certainly suggests that he was highly regarded by the people who buried him. A curious phenomenon is the high number of different Mississippi Plain, var. Yazoo vessels represented in our excavations. Had there been a strong indication of a

Table 1 - Material in Pothunter's Collection from Wright's Bluff
(22-M-15) Burial

Aboriginal materials

complete vessels - Mississippi Plain, <u>var. Yazoo</u> bowl	1
<u>var. Yazoo</u> bottle	1
Catlinite pipe	1

Historic European materials

bells - large open-mouth series (brass or bronze)	6
clappers	5
gun parts	4
locks	7
musket cocks	2
frizzens	6
triggers	4
upper vise for cocks	3
mainsprings	5
tumblers	2
sear springs	4
triggerplates	3
triggerguards (brass)	3
rampipes	6
brass (3 with wood within)	1
iron	3
sideplates (2 brass, 1 iron)	1
buttplate (brass)	1
barrels (in 2 pieces) Thumbplate 1	6
Unidentified iron	2
gunflints (blade gunflint type)	1
<u>var. a</u>	4
<u>var. b</u>	6
musket balls (all flattened)	1
lead shot	22
screwdriver	1
hand wrought nails	22
glass beads	1
white	1

residence around the burial, the presence of a small number of sherds from at least seven different vessels would have not been unusual. However, excepting the burial, we found no evidence of any historic occupation on the entire site. Mississippian burials are often accompanied by large fragments of vessels, in addition to complete pots. This situation has even been observed at Haynes Bluff (Brain 1975a). Perhaps a similar event occurred at Wright's Bluff, a scattering of a few sherds from several vessels being thrown into the fill of the burial pit.

In excavations to the immediate north of the above burial, we found only a single Madison point (W336), even though our electronic instrument survey indicated a strong burial possibility in this area. We also received good instrument readings in the northern extremity of the site in the area contained within squares W338 and W339. Curiously, although a circular area of gray organic mottling is situated within a depression, it is essentially sterile. It appears that some recent digging had occurred in this area prior to our investigations, the soil disturbance being picked up by our instruments. Artifacts in these two squares consist of several potsherds and lithics, the latter including a chert biface retouch flake.

In all, the investigation of Wright's Bluff was quite disappointing. We already knew that the historic burial "excavated" in the spring would yield very little information, because of the manner in which it was dug. However, we hoped that the burial was associated with a residential area which

could provide us with more cultural information on the settlement patterns and lifeways of the historic Yazoo Bluffs Indians. Although we did discover some stains which may have been structural remains, there was not enough evidence to suggest the stains have cultural significance, and no evidence at all to suggest historic occupation. Rather, our investigations suggest that the historic burial found at Wright's Bluff is an isolated interment, not associated with an adjoining settlement. Furthermore, the materials present with the burial suggest that the individual had high status. Admittedly, this is a hypothetical statement. Reported burials are relatively rare in the Yazoo Bluffs Region, so we have very little comparative evidence for the Wright's Bluff interment. However, this individual was accompanied by much more artifactual material than the two burials excavated on top of the principal Haynes Bluff mound (Brain 1975 a). The Wright's Bluff Site itself was sporadically used, and it seems that its greatest role had been in supporting temporary hunting camps.

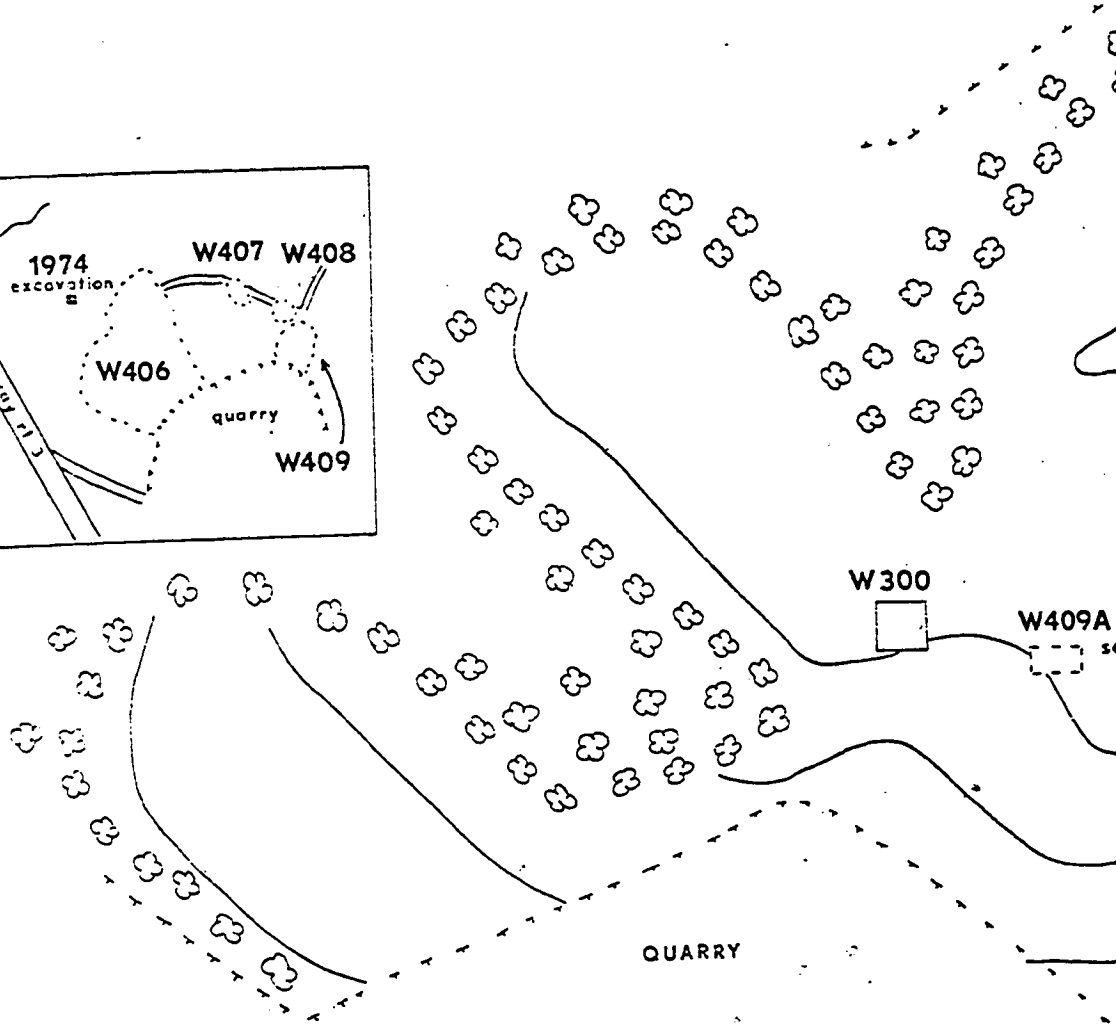
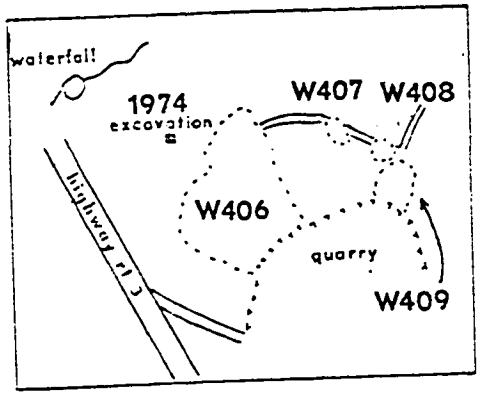
Anglo (22-M-16)

In 1974 we excavated a series of eight 2 meter squares on a level plot of land approximately $\frac{1}{2}$ mile to the southwest of the Portland Site (Figure 1). Our work in this area, which proved to be miserably unfruitful, was due to its proximity to a small stream. Prior to passing beneath Highway Rt. 3, this

stream forms a waterfall. In 1974 we were uncertain as to the location of Fort St. Pierre and, as a number of historic plans positioned the fort next to a small stream which formed a series of reservoirs (perhaps natural reservoirs formed by waterfalls), we deemed the above area worthy of investigation. However, we failed to find evidence of early 18th century occupation. Most of the artifacts recovered were of 19th century vintage, and a good portion of these were brick fragments. We did not feel totally justified in establishing a new site name, and so the excavations and surface collections were simply given "Y" numbers. Investigations in the summer of 1976 revealed a sizeable area of human occupation, and the site has since been given the name Anglo (22-M-16).

A cement quarry is situated to the immediate south of the above area (Figure 27), and activity associated with the quarry tends to create a great deal of erosion along its perimeter. Over the years we have periodically examined the area to make sure we were not losing an important site. Nothing ever resulted from these surveys. Some recent bulldozing was conducted along the northern edge of the quarry in the late spring of 1976. A large amount of aboriginal pottery and lithics appeared throughout the area between the "present" quarry border and the 1974 excavations (Plate 32).

There are four main areas of artifact concentration, the most productive being W406 and W409. Aboriginal pottery from W406 is entirely plain (Baytown Plain, vars. Valley Park; Unspecified; Addis Plain, vars. Addis; Unspecified; Mississippi



ANGLO SITE (22-M-16)

area W409



Figure 27

Anglo (22-M-16) - 1976 Excavation

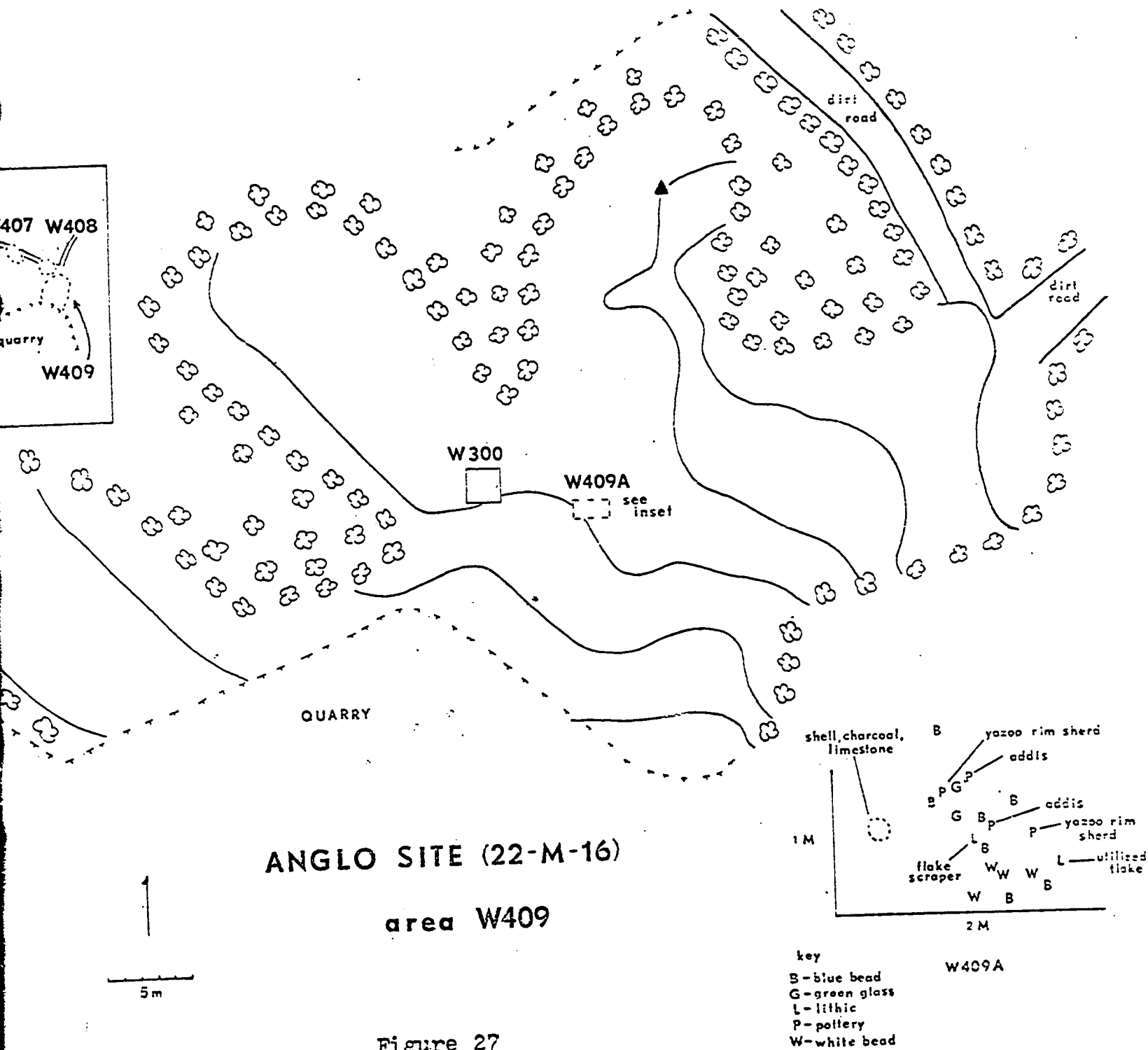


Figure 27

Anglo (22-M-16) - 1976 Excavations

Plain, var. Yazoo), and so cultural phases cannot be ascertained. Lithics, particularly common in this area, include a quartzite chopper/hammerstone, a flake side scraper, and a chert core, as well as a number of utilized and unutilized chert flakes. The above pottery types and varieties are included within W409 also, as are Baytown Plain, var. Vicksburg, and Addis Plain, vars. Greenville and Holly Bluff. A ground quartzite celt and a large quantity of shell were also discovered in this area.

In the center of the W409 area we discovered a clustering of historic material associated with aboriginal artifacts (W409A). This material had been exposed for a period of perhaps a week, and had been rained upon at least once. The bulldozer and erosion may have altered the original placement of these artifacts, but we felt that their relative positioning may have some cultural significance. We did not have surveying equipment with us at the time of this discovery and so we were only able to estimate the distances between the artifacts. A total of eleven glass beads were found, seven of which are blue and four white. The latter are clustered together while the blue beads are scattered throughout W409A. Two pieces of glass (one of olive green and the other light green) were also found, as were four potsherds, two of which are Addis Plain, var. Addis, and two (same vessel) are Mississippi Plain, var. Yazoo. A flake scraper and a utilized chert flake are the only lithic implements within this cluster. Also associated with these artifacts is a small concentration of charcoal, broken shell

fragments, and pieces of unweathered limestone. A number of blue and white beads, identical to those found in W409A, were found between the latter area and some unidentifiable bone fragments. A 2 meter square, positioned around these bones, was excavated, but nothing of significance (excepting a Winterville Incised, var. Winterville sherd) was discovered.

Similar to Wright's Bluff, the early 18th century component at Anglo is thus far represented by what was probably a single historic aboriginal interment. We found nothing else of interest at the Anglo Site, even though we continued to visit it throughout the summer. The cement quarry has now closed down, and the site, what is left of it, is no longer in jeopardy.

Lockguard (22-M-17)

It had been our intention in 1976 to continue excavations at the Portland Site, but a visit to this location in the spring revealed that a lot of pot hunting had occurred since our departure two years earlier. There was really not a great deal of undisturbed soil left for us to excavate. We thus concentrated our efforts on St. Pierre and Wright's Bluff, and hoped that some other historic Indian sites would be found as the summer progressed. Contrary to past experience, just such a site was discovered. Jackie Sarrett, a local amateur, informed us of historic materials, including coins and buttons, which he had found on the ridge to the north of the Portland Site. He and

two of his friends took us to this area in the middle of July. With very sensitive metal detectors, they succeeded in discovering a lock plate, a brass trigger guard, and several hand wrought nails. As cultural remains were scattered throughout the area, rather than clustered as at Portland, Wright's Bluff, and Anglo, it seemed that we were finally going to investigate the remains of a historic Indian settlement.

The site was named Lockguard (22-M-17), and we began excavating the two areas of strongest instrument readings (Figure 28) on July 21. Excavations continued, with a maximum crew of four, until August 19. In all, we excavated 27 2-meter squares, one of which (W361A1) was only half removed. The topsoil is relatively thin (average of 25 cm at this site), but troweling is difficult because of the hardness of the soil (Plate 33). We unfortunately did not find a single postmold or feature indicative of a historic aboriginal settlement in the areas investigated, although the general scattering of historic debris suggests that a settlement had been located in this locale. In virtually every square, European and aboriginal materials were found, particularly in the western area, but there was never any great abundance of artifacts. It is believed that this site was occupied by a Yazoo, Koroa or Ofo Indian group. Almost all the artifacts are consistent with what would be expected on an Indian site which is contemporary with Fort St. Pierre. Some of the materials, such as Cracker Road Incised, var. Cracker Road, and Old Town Red, var. St. Pierre, and a brass military button with a wedgeshaped attachment handle,

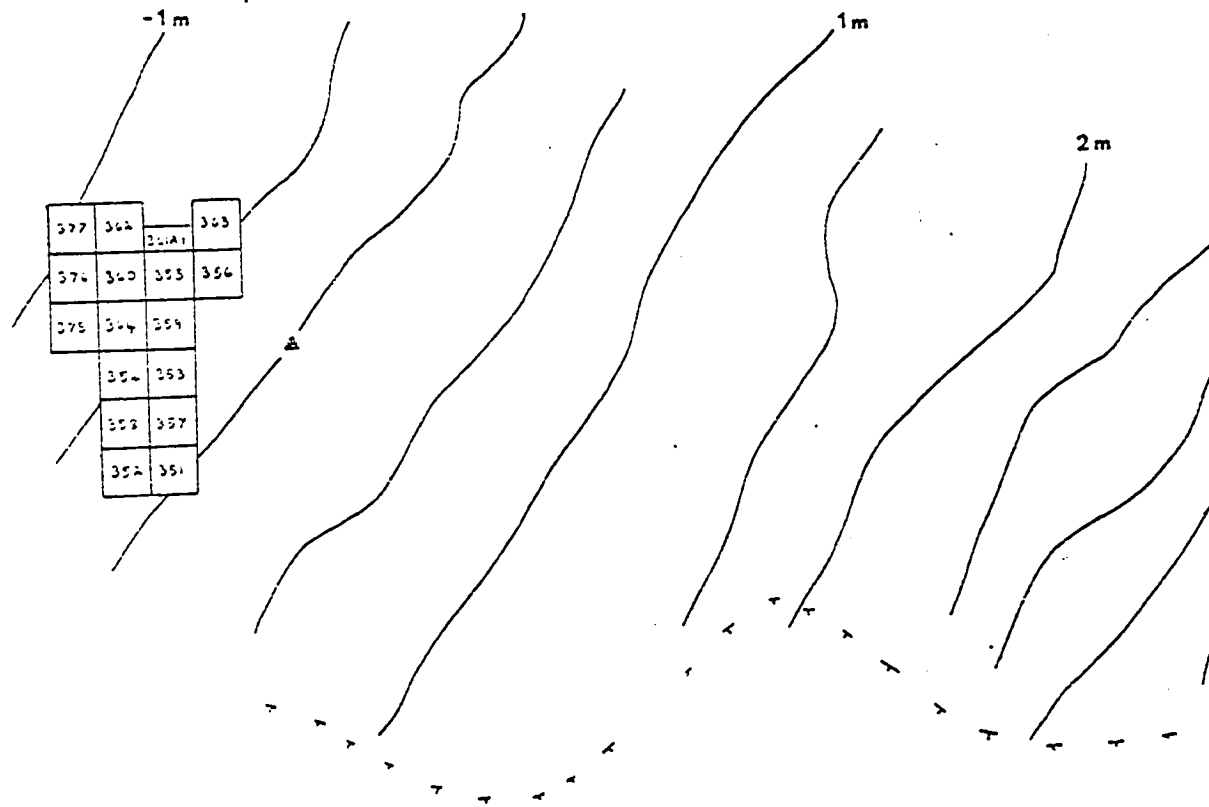


Figure 28
Lockguard (22-M-17) - 1976 Exca

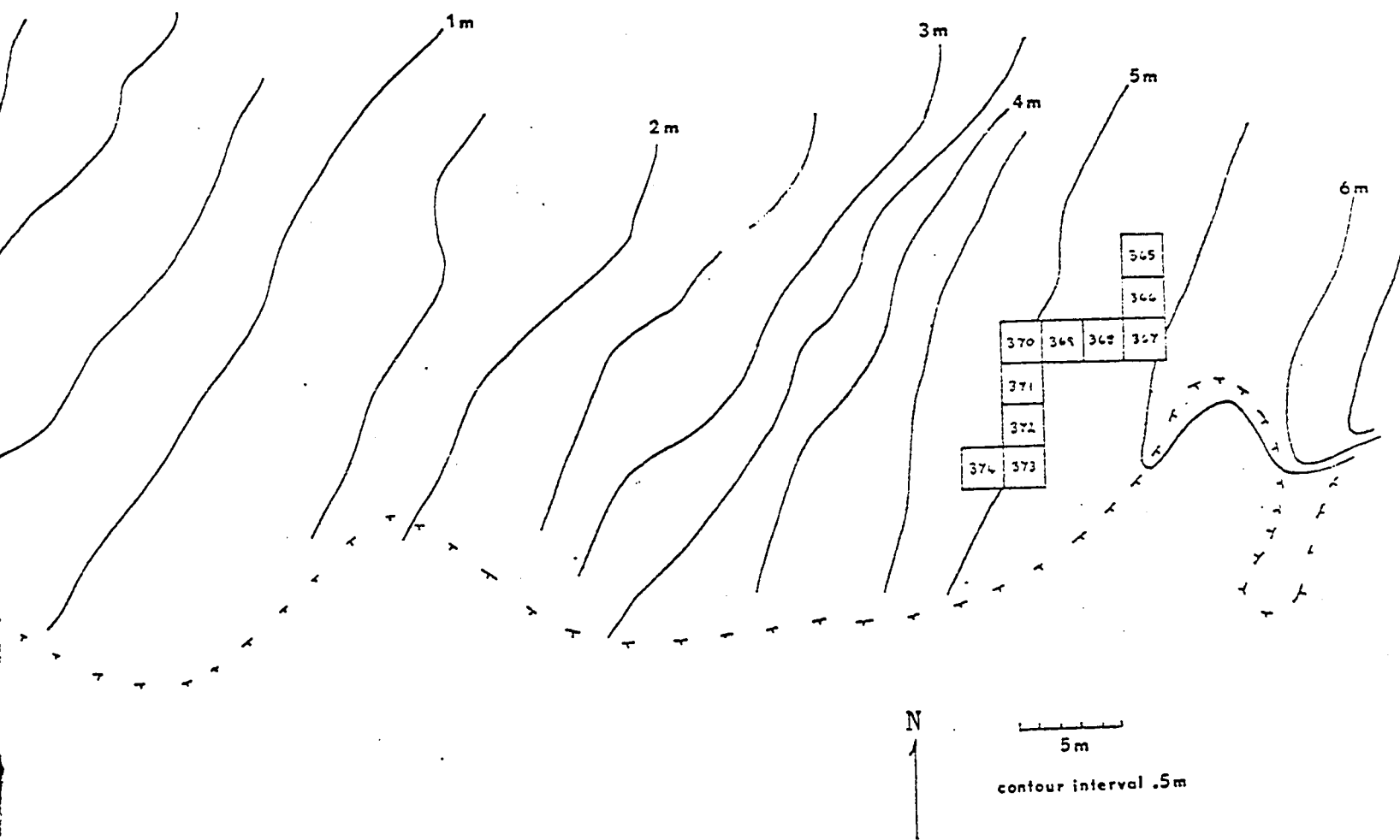
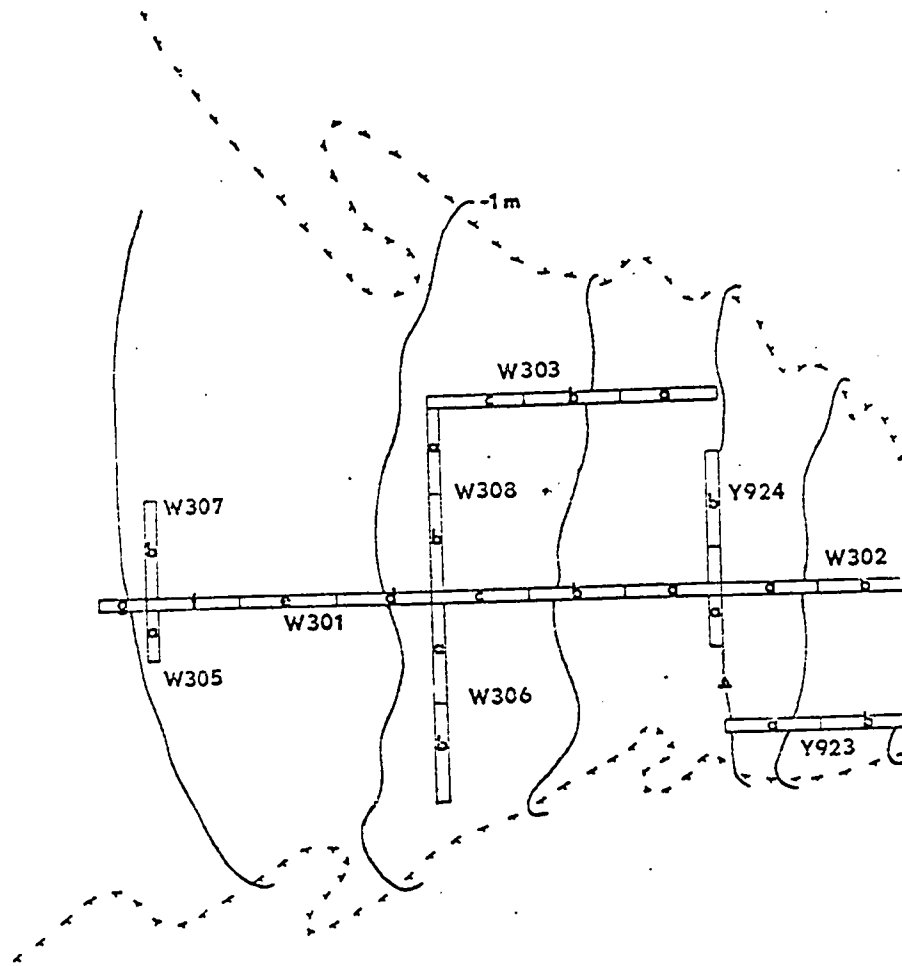


Figure 28
Lockguard (22-M-17) - 1976 Excavations

strongly suggest contemporaneity. Other native wares found at both Lockguard and St. Pierre include Barton Incised, var. Portland; Leland Incised, var. Russell; Mound Place Incised, var. Mound Place; and Old Town Red, var. Ballground. Historic European materials include a considerable amount of hand wrought nails; olive green wine bottle glass (much of which is burnt); yellow lead-glazed earthenware; white drawn glass beads and a number of wire-wound varieties; lead musket balls (several are melted); lead spillage; cinders; iron spring; brass bells; a brass ring; and aboriginally-chipped spall flints and other foreign gunflints. Evidence of conflagration is suggested by many of the European artifacts, and it is possible that the settlement of the people who employed these materials burned. No other indication appears in the ground, however, to support such a possibility.

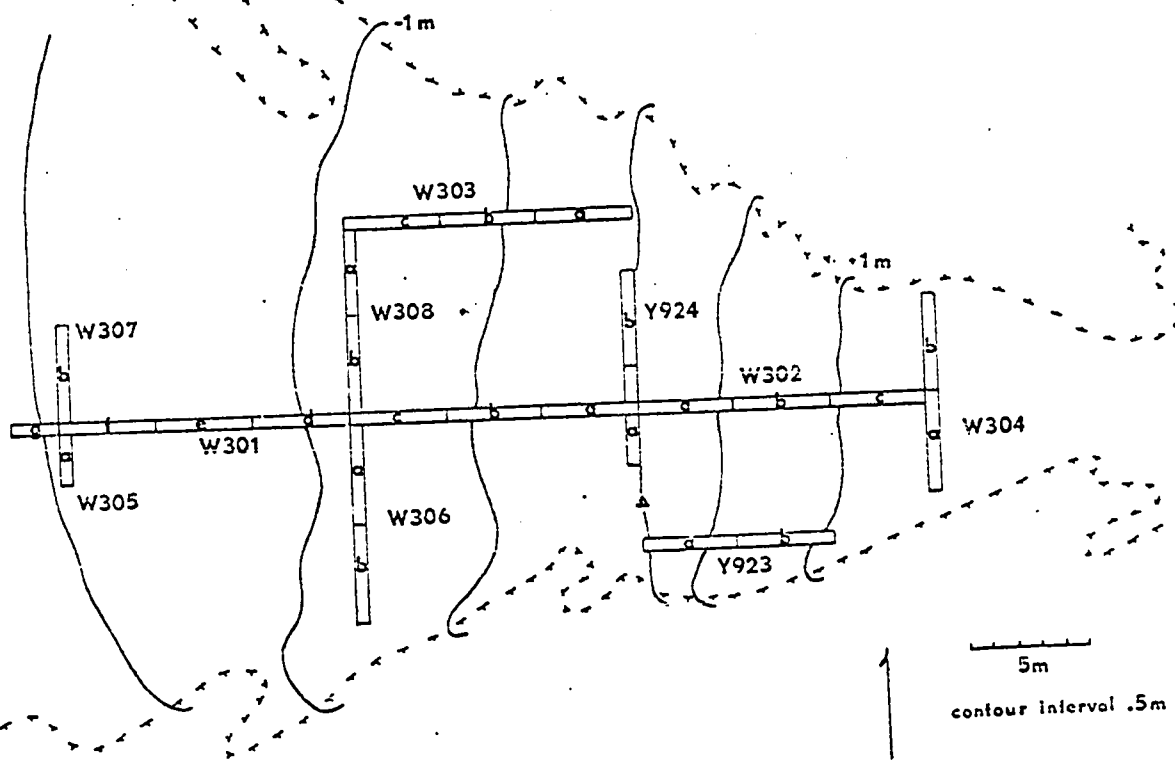
Lonely Frenchman (23-M-11)

Along with St. Pierre and Portland, the Lonely Frenchman Site was scheduled to be excavated during the 1976 season (Figure 29). Two 8 meter test trenches (Y923, Y924) had been dug in 1975 (Brown 1975c). European material was extremely scarce, but almost all of it dates to the early 18th century. Historic aboriginal material is totally absent at this site. Historic plans of Fort St. Pierre indicate that the Interpreter's house was situated on the bluffs to the southwest of the fort



LONELY FRE

Figure 29
Lonely Frenchman (23-M-11) - 1975 and 1976 Ex



LONELY FRENCHMAN (23-M-11)

Figure 29

Lonely Frenchman (23-M-11) - 1975 and 1976 Excavations

(pp. 132-134), and this is a location which fits nicely with that of the Lonely Frenchman Site. Even if this is not the Interpreter's house, I am fairly sure that it is the location of a French homestead contemporary with the fort. The purpose in continued excavation was hence to uncover the remains of a short term early 18th century French occupation. In terms of the overall project, we were interested in the types of materials utilized by French settlers, as compared to those employed by the contemporary local aboriginal occupation. It is believed that both groups were receiving some, if not all, of their historic materials from the same distribution center (Fort St. Pierre).

In addition to the 16 meters of trench excavated in 1975, an additional 82 meters were opened up in 1976 (Plate 34). We hoped that one of these trenches would have crossed a structure, or penetrated a midden, but, unfortunately, neither turned up in our excavations. A glass bead, hand wrought nails, and olive green bottle glass were found in 1975, and these artifacts were the most common ones recovered the following year. Seven hand wrought nails, two pieces of unidentified iron, two fragments of olive green glass, one tin-glazed earthenware sherd, and a pipe stem constitute the entire historic assemblage secured from the Lonely Frenchman Site in the 1976 season. There is a considerable amount of prehistoric pottery in our collections, but most of it dates to the Winterville phase (see Figure 30). A scraper and a biface are the only worked lithic implements,

although chert flakes are scattered throughout the excavations.

In sum, the results of our work at Lonely Frenchman are not overly impressive, but the historic material is consistently European. The absence of historic native material, like that found at Haynes Bluff, Portland, Wright's Bluff, Anglo, Lockguard, and St. Pierre, reaffirms the interpretation that the Lonely Frenchman Site supported a French habitation. A small household, which was occupied for no more than ten years, would not leave a thick surface midden. After a period of 250 years of natural erosion, the original midden would be considerably less. The lack of occupational debris at Lonely Frenchman is not too surprising, but the lack of structural information is a disappointment.

Chapter 9 - The Cultural Remains

Introduction

In the previous section each site in the Yazoo Bluffs region was dealt with as a separate entity. Artifacts were discussed according to the significance they have in improving our knowledge of the inhabitants' behavior. The cultural remains from the Yazoo Bluffs region will now be examined on a comparative basis. Much of what is to follow is necessarily detailed, but I have hopefully spared the reader by confining most artifact description to Appendix 2. Only the analysis is presented below. The order of presentation requires some comment. First discussed are artifacts of aboriginal make. This includes ceramics (pottery and pipes) and lithics (projectile points, celts, etc.). Also included are materials from European sources which were modified by the Indians into pre-existing aboriginal forms (e.g., glass projectile points). Each artifact category is described separately, and the artifacts from each site within that category are discussed together. Provenience is kept distinct, however, so that there should be no confusion as to context. The sites are arranged chronologically according to the interpretations made in the previous chapter. These interpretations were based largely on stratigraphic information, but artifact analysis has also contributed to the ordering of the sites. Setting up chronological arrangement prior to discussing

the artifacts may suggest a certain amount of circularity. It is not, however, as there is abundant independent evidence (stratigraphic and dated materials from other historic sites) to chronologically arrange the sites in the Yazoo Bluffs region. I readily admit to having "jumped the gun" in discussing relative dating prior to artifact analysis, but hopefully, the arrangement of site materials in chronological order will provide the reader with ease in comparison of artifacts as they change with respect to both time and cultural differences.

Following the aboriginal materials section is a discussion of each historic European artifact type (buttons, gun parts, etc.). Also included in this section are artifacts of aboriginal manufacture which were made to resemble and function as European prototypes (e.g., native gunflints). In order to highlight behavioral patterns, the order of discussion follows Stanley South's class and group criteria (1977:92-102). I am well aware that materials of a certain class do not always indicate a specific functional artifact group. For example, South includes thimbles under the "Clothing group" (Ibid:95). While this may have been true for the French settlers, for Indians, who wore thimbles as ornaments, they more logically should be discussed under the "Personal group". More will be said about the aboriginal use of European materials in Chapter 12, but for now I have decided to follow South's outline for two main reasons. Firstly, most of the historic European materials are from St. Pierre, and their discussion according to functional groups may indeed reflect cultural behavior;

and secondly, for anyone wishing to compare the materials from the Yazoo Bluffs region with historic sites of other areas, the arrangement presented here is in accord with South and provides ease of comparison. As yet, I have seen no form of artifact presentation (in terms of arrangement) which improves upon South's scheme.

Aboriginal Artifacts

Ceramics

A considerable amount of literature has accumulated on the ceramics of the Lower Mississippi Valley. The first major discussion of its basic characteristics was William H. Holmes. "Aboriginal Pottery of the Eastern United States" (1903). His book was soon followed by a series of Clarence B. Moore's well-illustrated volumes (1908; 1909; 1911; 1912; 1913), and Calvin Brown also included the Lower Mississippi Valley in his Archaeology of Mississippi (1926). The first person to develop a detailed ceramic classification for this area was James A. Ford (1936). The Red River sequence was the first established chronology (Ford 1935a; 1935b; 1936; Ford and Willy 1940). Other areas and cultures in the Lower Valley were soon added to the rapidly developing chronology (Ford and Quimby 1945; Quimby 1951; 1957). The monumental classificatory work which

stemmed from surveys far to the north of the Red River was Phillips, Ford, and Griffin's, "Archaeological Survey in the Lower Mississippi Alluvial Valley, 1940-1947" (1951). The ceramic typology presented in the latter volume was heavily influenced by Ford, and so it naturally corresponded nicely with the Red River ceramic sequence. Later Ford contributions (1951; 1952; 1961; 1963; Ford and Webb 1956) strayed little from the 1951 survey volume. Philip Phillips essentially followed Ford's outline in the co-authored Jaketown report (Ford, Phillips, and Haag 1955), but shortly after this publication, Phillips started to modify the classification.

The Binomial Ceramic Classification (Ford and Griffin 1937; 1938) was adopted over much of the Southeast when Phillips began intensive survey work in the Lower Yazoo Basin. He found this system to be totally inadequate for establishing the chronological and spatial controls so necessary for determining cultural phases (Phillips 1958; Willey and Phillips 1958). Thus, he and others (e.g., Gifford 1960) adopted the Type-Variety system of classification. The Lower Yazoo Basin Survey volume (Phillips 1970) sets forth the theory and practice of this very useful typological system. The most recent classificatory contributions, which have largely sprung from Phillips, are provided by Jeffrey P. Brain in his work at the Winterville (Brain 1969) and Lake George (Williams and Brain n.d.) Sites, and Vincas P. Steponaitis in his analysis of the Mississippi period ceramics from the Natchez region (Steponaitis 1974; 1976). The classification presented here follows the lead of these type-variety advocates.

As much of Brain's and Steponaitis' works are as yet unpublished, I will, in the appropriate places, review their modifications of the classification originally set forth by Phillips (1970). My work in the Yazoo Bluffs region has also occasioned a few small changes and additions in the Lower Mississippi Valley ceramic typology.

A total of 17,057 potsherds were discovered in our work in the Yazoo Bluffs region. Most of the material comes from St. Pierre (13,992 sherds), largely because of our emphasis on this site. A significant amount was also recovered at Portland (2,146 sherds), but Lonely Frenchman (124 sherds), Lockguard (529 sherds), Wright's Bluff (160 sherds), and Anglo (106 sherds) are under-represented in our tabulations. The ceramics are described in Appendix 2a and provenience at the various sites is presented in Table 11. The following remarks merely summarize the more detailed analysis in the above Appendix. Table 2 is a record of the various ceramic types and varieties arranged according to the cultural phases presented in Figure 30. Ceramics typical to but one phase - "Diagnostic Phase Markers" - are listed first. Ceramics which cross over a number of phases are recorded under "Shared Phase Markers." Such a procedure provides a minimum and maximum estimate of relative phase occupation at each site. Table 2 is represented graphically in Figure 31.

The ceramics at Portland are almost all of the historic Russell phase. Wasp Lake markers are indeed evident, but they are completely overshadowed by historic diagnostics. It is hence probable that most of the shared markers at this site in

Table 2

Summary of the Ceramics from Sites in the Yazoo
Arranged According to Phases

	Portland		St. Pierre		Lonely Frenchman	
	#	%	#	%	#	%
Total Ceramics from Sites	2146		13992		124	
RUSSELL PHASE						
Diagnostic Phase Markers						
Addis Plain, <u>var. Ratcliffe</u>	1	0.04	120	0.86	4	3.2
Barton Incised, <u>var. Charlevoix</u>	11	0.51	12	0.09		
Barton Incised, <u>var. Davion</u>	30	1.40	31	0.22		
Barton Incised, <u>var. Portland</u>	28	1.30	12	0.09		
Cracker Road Incised, <u>var. Souel</u>			9	0.06		
Fatherland Incised, <u>var. Fatherland</u>	14	0.65	109	0.78		
Fatherland Incised, <u>var. Snyders Bluff</u>			2	0.01		
Mississippi Plain, <u>var. Montfort</u>			8	0.06		
Modena Red and White, <u>var. Poisson</u>			2	0.01		
Old Town Red, <u>var. Ballground</u>	24	1.12	166	1.19		
Old Town Red, <u>var. St. Pierre</u>			32	0.23		
Owens Punctated, <u>var. Redwood</u>	11	0.51	18	0.13		
Wallace Incised, <u>var. Wallace</u>	1	0.04	12	0.09		
Winterville Incised, <u>var. Tunica</u>	18	0.84	12	0.09	4	3.2
Minimum Total	138	6.43	533	3.81		
Shared Phase Markers						
Addis Plain, <u>var. Addis</u>	106	4.93	2328	16.64	56	45
Cracker Road Incised, <u>var. Cracker Road</u>	22	1.03	84	0.60		
Grace Brushed, <u>var. Grace</u>	7	0.33	3	0.02		
Leland Incised, <u>var. Russell</u>	15	0.70	59	0.42		
Leland Incised, <u>var. Williams</u>	30	1.40	22	0.16		
Mississippi Plain, <u>var. Yazoo</u>	1507	70.22	4413	31.54	5	4
Maximum Total	1825	85.04	7442	53.19	65	52

Table 2

Summary of the Ceramics from Sites in the Yazoo Bluffs Region
Arranged According to Phases

Sites	Portland		St. Pierre		Lonely Frenchman		Lockguard		Wrights Bluff		Anglo	
	#	%	#	%	#	%	#	%	#	%	#	%
	2146		13992		124		529		160		106	
arkers												
<u>Ratcliffe</u>	1	0.04	120	0.86	4	3.23	1	0.19			3	2.83
<u>r. Charlevoix</u>	11	0.51	12	0.09			2	0.38			3	2.83
<u>r. Davion</u>	30	1.40	31	0.22								
<u>r. Portland</u>	28	1.30	12	0.09								
<u>ed, var. Souel</u>			9	0.06								
	14	0.65	109	0.78								
			2	0.01			1	0.19				
<u>uff</u>			8	0.06					2	1.25		
<u>var. Montfort</u>												
<u>te,</u>			2	0.01								
<u>Ballground</u>	24	1.12	166	1.19			7	1.32				
<u>St. Pierre</u>			32	0.23			3	0.57				
<u>var. Redwood</u>	11	0.51	18	0.13								
<u>var. Wallace</u>	1	0.04	12	0.09								
<u>ed, var. Tunica</u>	18	0.84	533	3.81	4	3.23	14	2.65	2	1.25	6	5.66
<u>imum Total</u>	138	6.43										
<u>s</u>												
<u>Addis</u>	106	4.93	2328	16.64	56	45.16	40	7.56	7	4.38	38	35.85
<u>sed,</u>												
<u>pad</u>	22	1.03	84	0.60			4	0.76	3	1.88		
<u>. Grace</u>	7	0.33	3	0.02								
<u>var. Russell</u>	15	0.70	59	0.42			2	0.38	1	0.63		
<u>var. Williams</u>	30	1.40	22	0.16								
<u>var. Yazoo</u>	1507	70.22	4413	31.54	5	4.03	300	56.71	108	67.50	19	17.92
<u>imum Total</u>	1825	85.04	7442	53.19	65	52.42	360	68.05	121	75.63	63	59.43

Table 2 (Cont.)

WASP LAKE PHASE	Portland		St. Pierre		Lonely Frenchman	
	#	%	#	%	#	%
Diagnostic Phase Markers						
Grace Brushed, <u>var. Warren</u>	1	0.05	1	0.01		
Leland Incised, <u>var. Blanchard</u>	9	0.42	6	0.04		
Leland Incised, <u>var. Bovina</u>	9	0.42	6	0.04		
Owens Punctated, <u>var. Menard</u>			1	0.01		
Owens Punctated, <u>var. Poor Joe</u>			14	0.10	0	0
Minimum Total	19	0.89	14	0.10		
Shared Phase Markers						
Addis Plain, <u>var. Holly Bluff</u>	43	2.00	95	0.68		
Barton Incised, <u>var. Arcola</u>	9	0.42	15	0.11		
Barton Incised, <u>var. Midnight</u>	2	0.09	5	0.04		
Cracker Road Incised, <u>var. Cracker Road</u>	22	1.03	84	0.60		
Leland Incised, <u>var. Russell</u>	15	0.70	59	0.42		
Leland Incised, <u>var. Williams</u>	30	1.40	22	0.16		
Mazique Incised, <u>var. Manchac</u>			63	0.45		
Mississippi Plain, <u>var. Yazoo</u>	1507	70.22	4413	31.54	5	0.
Owens Punctated, <u>var. Widow</u> <u>Creek</u>	6	0.28	2	0.01		
Winterville Incised, <u>var. Belzoni</u>	2	0.07	11	0.08		
Maximum Total	1655	77.12	4783	34.18	5	0.
LAKE GEORGE PHASE						
Diagnostic Phase Markers						
Maddox Engraved, <u>var. Silver City</u>			1	0.01		
Minimum Total	0	0	1	0.01	0	
Shared Phase Markers						
Addis Plain, <u>var. Holly Bluff</u>	43	2.00	95	0.68		
Barton Incised, <u>var. Arcola</u>	9	0.42	15	0.11		
Barton Incised, <u>var. Midnight</u>	2	0.09	5	0.04		
Leland Incised, <u>var. Leland</u>	8	0.37	13	0.09		

Table 2 (Cont.)

	Portland		St. Pierre		Lonely French	
	#	%	#	%	#	%
Mazique Incised, <u>var. Manchac</u>			63	0.45		
Mississippi Plain, <u>var. Yazoo</u>	1507	70.22	4413	31.54	5	4.
Owens Punctated, <u>var. Widow</u> <u>Creek</u>	6	0.28	2	0.01		
Parkin Punctated, <u>var.</u> <u>Hollandale</u>	4	0.19	17	0.12	2	1.
Parkin Punctated, <u>var.</u> <u>Transylvania</u>			2	0.01		
Winterville Incised, <u>var.</u> <u>Winterville</u>	8	0.37	85	0.61		
Winterville Incised, <u>var.</u> <u>Belzoni</u>	2	0.09	11	0.08		
Maximum Total	1589	74.04	4722	33.75	7	5.
WINTERVILLE PHASE						
Diagnostic Phase Markers						
Addis Plain, <u>var. Greenville</u>	24	1.12	1378	9.85	33	26
Carter Engraved, <u>var. Carter</u>			3	0.02		
Leland Incised, <u>var. Bethlehem</u>			5	0.04		
Pouncey Ridge Pinched, <u>var. Patosi</u>			1	0.01		
Minimum Total	24	1.12	1387	9.91	33	26
Shared Phase Markers						
Addis Plain, <u>var. Addis</u>	106	4.94	2328	16.64	56	4
Coleman Incised, <u>var. Coleman</u>			1	0.01		
Grace Brushed, <u>var. Grace</u>	7	0.33	3	0.02		
Hollyknowe Ridge Pinched, <u>var. Patmos</u>			4	0.03		
Leland Incised, <u>var. Leland</u>	8	0.37	13	0.09		
Mazique Incised, <u>var. Manchac</u>			63	0.45		
Parkin Punctated, <u>var.</u> <u>Hollandale</u>	4	0.19	17	0.12	2	1

Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenchman		Lockguard		Wrights Bluff		Anglo	
	#	%	#	%	#	%	#	%	#	%	#	%
<u>var. Manchac</u>			63	0.45					1	0.63		
<u>var. Yazoo</u>	1507	70.22	4413	31.54	5	4.03	300	56.71	108	67.50	19	17.92
<u>var. Widow</u>	6	0.28	2	0.01								
<u>var.</u>	4	0.19	17	0.12	2	1.61	1	0.19				
<u>var.</u>			2	0.01								
<u>d, var.</u>	8	0.37	85	0.61					1	0.63		
<u>d, var.</u>	2	0.09	11	0.08			1	0.19				
<u>imum Total</u>	1589	74.04	4722	33.75	7	5.65	309	58.41	110	68.75	20	18.87
<u>arkers</u>												
<u>Greenville</u>	24	1.12	1378	9.85	33	26.61	46	8.70	14	8.75	11	10.38
<u>var. Carter</u>			3	0.02			1	0.19				
<u>var. Bethlehem</u>			5	0.04								
<u>ched,</u>			1	0.01								
<u>imum Total</u>	24	1.12	1387	9.91	33	26.61	47	8.88	14	8.75	11	10.38
<u>rs</u>												
<u>Addis</u>	106	4.94	2328	16.64	56	45.16	40	7.56	7	4.38	38	35.85
<u>var. Coleman</u>			1	0.01								
<u>r. Grace</u>	7	0.33	3	0.02								
<u>Pinched,</u>			4	0.03								
<u>var. Leland</u>	8	0.37	13	0.09					1	0.63		
<u>var. Manchac</u>			63	0.45								
<u>var.</u>	4	0.19	17	0.12	2	1.61	1	0.19				

Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenchm	
	#	%	#	%	#	%
Parkin Punctated, <u>var.</u> <u>Transylvania</u>			2	0.01		
Plaquemine Brushed, <u>var.</u> <u>Plaquemine</u>	7	0.33	22	0.16	2	1.6
Winterville Incised, <u>var.</u> <u>Winterville</u>	8	0.37	85	0.61		
Maximum Total	164	7.64	3925	28.05	93	75
CRIPPEN POINT PHASE						
Diagnostic Phase Markers						
Avoyelles Punctated, <u>var.</u> <u>Dupree</u>			10	0.07		
Beldeau Incised, <u>var.</u> <u>Bell Bayou</u>			1	0.01		
Chevalier Stamped, <u>var.</u> <u>Lulu</u>			3	0.02		
Chevalier Stamped, <u>var.</u> <u>Perry</u>			1	0.01		
Coles Creek Incised, <u>var.</u> <u>Hardy</u>			16	0.11		
Evansville Punctated, <u>var.</u> <u>Sharkey</u>			5	0.04		
Harrison Bayou Incised, <u>var.</u> <u>Harrison Bayou</u>			11	0.08	1	0.
Minimum Total	0	0	47	0.34	1	0.
Shared Phase Markers						
Addis Plain, <u>var.</u> <u>Addis</u>	106	4.94	2328	16.64	56	45
Carter Engraved, <u>var.</u> <u>Mud Lake</u>			1	0.01		
Coleman Incised, <u>var.</u> <u>Coleman</u>			1	0.01		
Hollyknowe Ridge Pinched, <u>var.</u> <u>Patmos</u>			4	0.03		
Mazique Incised, <u>var.</u> <u>Manchac</u>			63	0.45		
Plaquemine Brushed, <u>var.</u> <u>Plaquemine</u>	7	0.33	22	0.16	2	1
Maximum Total	113	5.27	2466	17.62	59	4

Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenchman		Lockguard		Wrights Bluff		Anglo	
	#	%	#	%	#	%	#	%	#	%	#	%
ers			2	0.01								
var.	7	0.33	22	0.16	2	1.61	1	0.19				
var.	8	0.37	85	0.61			1	0.19				
um Total	164	7.64	3925	28.05	93	75.0	90	17.01	22	13.75	49	46.23
ers			10	0.07								
var. Dupree			1	0.01								
var. Lulu			3	0.02								
var. Perry			1	0.01								
var. Hardy			16	0.11			1	0.19				
, var.			5	0.04								
ed,			11	0.08	1	0.81						
ou			1	0.01	1	0.81	1	0.19	0	0	0	0
um Total	0	0	47	0.34	1	0.81	1	0.19	0	0	0	0
adis	106	4.94	2328	16.64	56	45.16	40	7.56	7	4.38	38	35.85
. Mud Lake			1	0.01								
. Coleman			1	0.01								
ched,			4	0.03								
. Manchac			63	0.45					1	0.63		
var.	7	0.33	22	0.16	2	1.61	1	0.19				
um Total	113	5.27	2466	17.62	59	47.58	42	7.94	8	5.00	38	35.85

Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenchm	
	#	%	#	%	#	%
KINGS CROSSING PHASE						
Diagnostic Phase Markers						
Baytown Plain, <u>var. Vicksburg</u>	2	0.09	122	0.87		
Beldeau Incised, <u>var. Beldeau</u>			2	0.01		
Coles Creek Incised, <u>var. Blakely</u>			4	0.03		
Coles Creek Incised, <u>var. Mott</u>	2	0.09	19	0.14		
Evansville Punctated, <u>var.</u> <u>Rhinehart</u>			10	0.07		
French Fork Incised, <u>var.</u> <u>McNutt</u>			2	0.01		
Mazique Incised, <u>var.</u> <u>Kings Point</u>			23	0.16		
Minimum Total	4	0.19	182	1.30	0	0
Shared Phase Markers						
Baytown Plain, <u>var.</u> <u>Valley Park</u>	34	1.58	734	5.25	1	0.8
Carter Engraved, <u>var. Mud Lake</u>			1	0.01		
Maximum Total	38	1.77	917	6.55	1	0.8
ADEN PHASE						
Diagnostic Phase Markers						
Chevalier Stamped, <u>var.</u> <u>Chevalier</u>			3	0.02	1	0
Coles Creek Incised, <u>var.</u> <u>Coles Creek</u>	2	0.09	13	0.09	1	0.
Coles Creek Incised, <u>var.</u> <u>Cambellsville</u>			1	0.01		
Mazique Incised, <u>var. Mazique</u>			4	0.03		
Minimum Total	2	0.09	21	0.15	2	1.
Shared Phase Markers						
Avoyelles Punctated, <u>var.</u> <u>Avoyelles</u>	1	0.05				

Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenc #
	#	%	#	%	#
Baytown Plain, <u>var.</u>	34	1.58	734	5.25	1
<u>Valley Park</u>	37	1.72	755	5.40	3
Maximum Total					
BAYLAND PHASE					
Diagnostic Markers					
Coles Creek Incised, <u>var. Stoner</u>			5	0.04	
Coles Creek Incised, <u>var. Wade</u>			2	0.01	
Minimum Total	0	0			0
Shared Phase Markers					
Baytown Plain, <u>var. Unspecified</u>	13	0.61	1798	12.84	8
Evansville Punctated, <u>var.</u>			5	0.04	
<u>Evansville</u>	13	0.61	1810	12.94	8
Maximum Total					
DEASONVILLE PHASE					
Diagnostic Phase Markers					
Alligator Incised, <u>var. Oxbow</u>			1	0.01	
Larto Red, <u>var. Larto</u>			2	0.01	
Mulberry Creek Cord Marked, <u>var. Edwards</u>			23	0.16	
Minimum Total	0	0	26	0.19	0
Shared Phase Markers					
Baytown Plain, <u>var. Unspecified</u>	13	0.61	1798	12.85	8
Evansville Punctated, <u>var.</u>			5	0.04	
<u>Evansville</u>	13	0.61	1829	13.07	8
Maximum Total					

Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenchman		Lockguard		Wrights Bluff		Anglo	
	#	%	#	%	#	%	#	%	#	%	#	%
imum Total	34	1.58	734	5.25	1	0.81	12	2.27	2	1.25	8	7.55
	37	1.72	755	5.40	3	2.42	12	2.27	2	1.25	8	7.55
			5	0.04								
, var. Stoner			2	0.01								
, var. Wade	0	0			0	0	0	0	0	0	0	0
imum Total												
Unspecified	13	0.61	1798	12.84	8	6.45	22	4.16	2	1.25	10	9.43
ed, var.			5	0.04								
imum Total	13	0.61	1810	12.94	8	6.45	22	4.16	2	1.25	10	9.43
rkers			1	0.01								
var. Oxbow			2	0.01								
rto												
d Marked,			23	0.16								
imum Total	0	0	26	0.19	0	0	0	0	0	0	0	0
s												
Unspecified	13	0.61	1798	12.85	8	6.45	22	4.16	2	1.25	10	9.43
ed, var.			5	0.04								
imum Total	13	0.61	1829	13.07	8	6.45	22	4.16	2	1.25	10	9.43

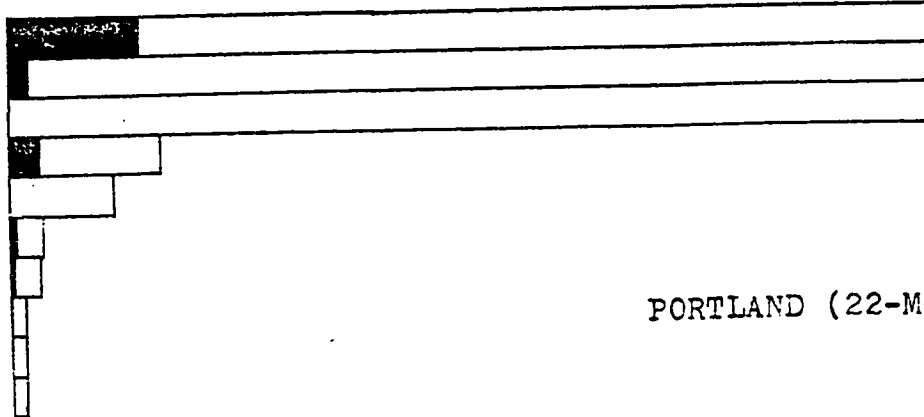
Table 2 (Cont.)

ISSAQUENA PHASE	Portland		St. Pierre		Lonely Fren
	#	%	#	%	#
Diagnostic Phase Markers					
Churupa Punctated, <u>var. Thornton</u>			1	0.01	
Evansville Punctated, <u>var. Braxton</u>			2	0.01	
Marksville Stamped, <u>var. Troyville</u>			4	0.03	
Minimum Total	0	0	7	0.05	0
Shared Phase Markers					
Baytown Plain, <u>var. Thomas</u>	1	0.05	2	0.01	1
Baytown Plain, <u>var. Unspecified</u>	13	0.61	1798	12.85	8
Indian Bay Stamped, <u>var. Shaw</u>			1	0.01	
Maximum Total	14	0.65	1808	12.92	9

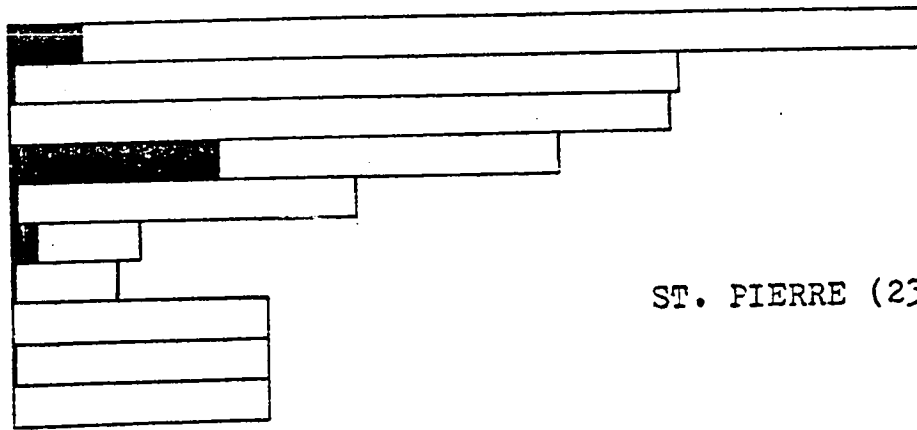
Table 2 (Cont.)

	Portland		St. Pierre		Lonely Frenchman		Lockguard		Wrights Bluff		Anglo	
	#	%	#	%	#	%	#	%	#	%	#	%
Workers												
<u>var. Thornton</u>			1	0.01								
<u>ed, var.</u>			2	0.01								
<u>, var.</u>			4	0.03								
imum Total	0	0	7	0.05	0	0	0	0	0	0	0	0
S												
<u>. Thomas</u>	1	0.05	2	0.01	1	0.81						
<u>. Unspecified</u>	13	0.61	1798	12.85	8	6.45	22	3.37	2	1.25	10	9.43
<u>, var. Shaw</u>			1	0.01								
imum Total	14	0.65	1808	12.92	9	7.26	22	3.37	2	1.25	10	9.43

Russell
Wasp Lake
Lake George
Winterville
Crippen Point
Kings Crossing
Aden
Bayland
Deasonville
Issaquena



Russell
Wasp Lake
Lake George
Winterville
Crippen Point
Kings Crossing
Aden
Bayland
Deasonville
Issaquena



% 10 20 30 40

Figure 31

Phase Representations at Sites in the Yazoo

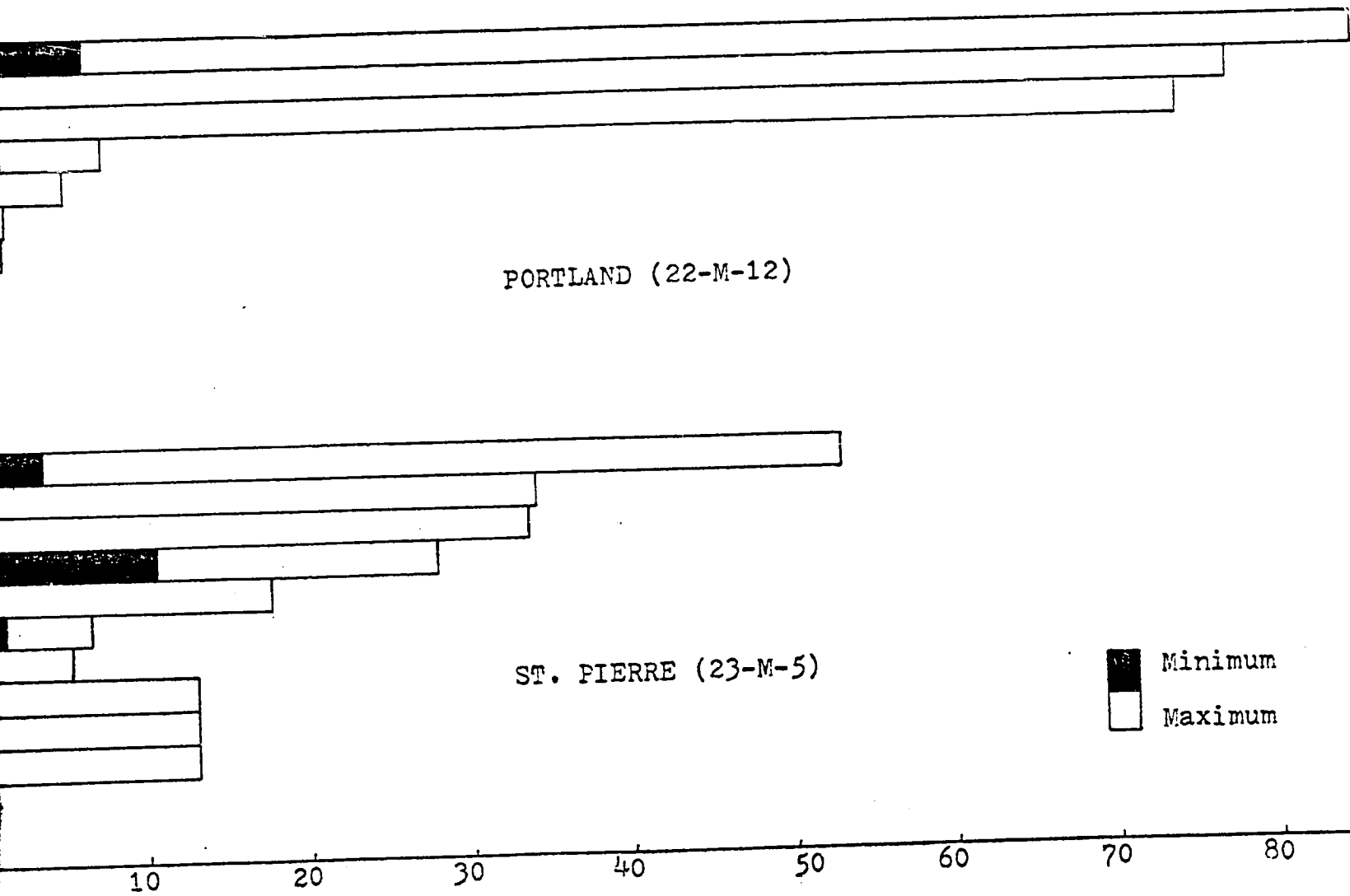
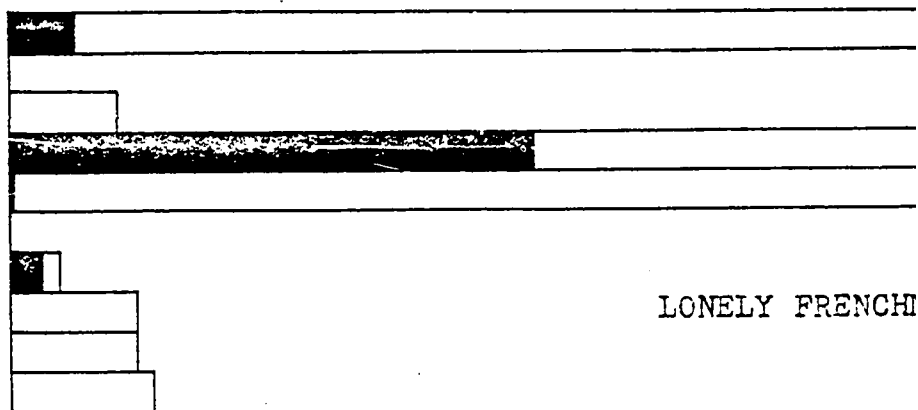


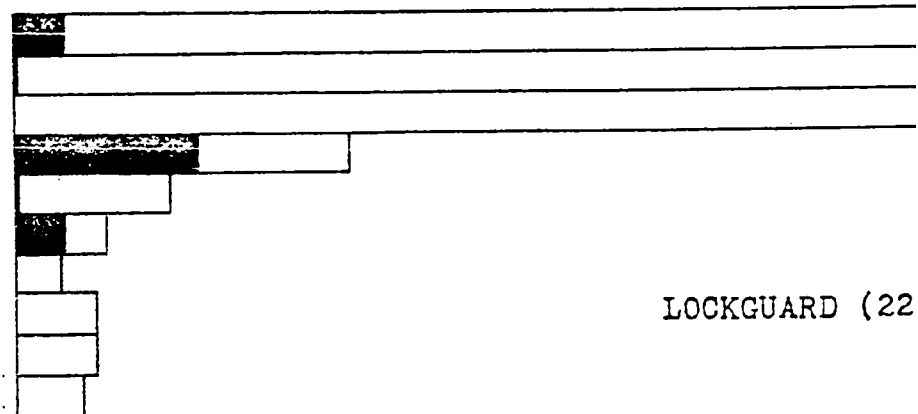
Figure 31
Phase Representations at Sites in the Yazoo Bluffs Region

Russell
 Wasp Lake
 Lake George
 Winterville
 Crippen Point
 Kings Crossing
 Aden
 Bayland
 Deasonville
 Issaquena



LONELY FRENCH

Russell
 Wasp Lake
 Lake George
 Winterville
 Crippen Point
 Kings Crossing
 Aden
 Bayland
 Deasonville
 Issaquena

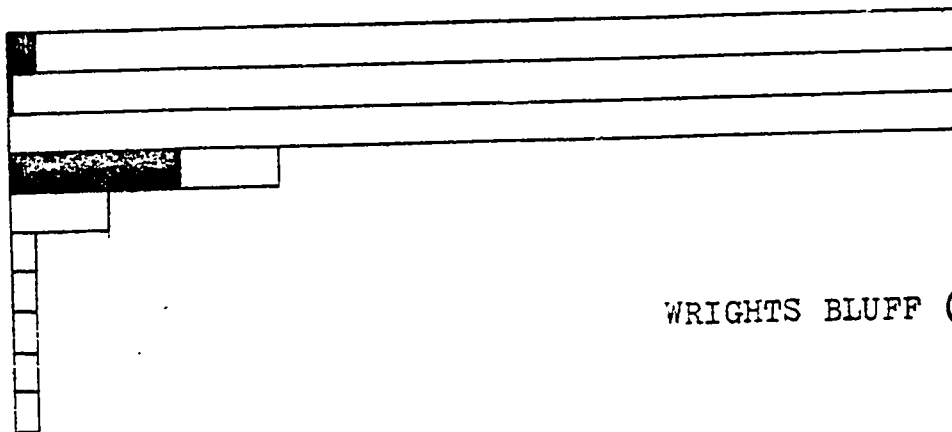


LOCKGUARD (22)

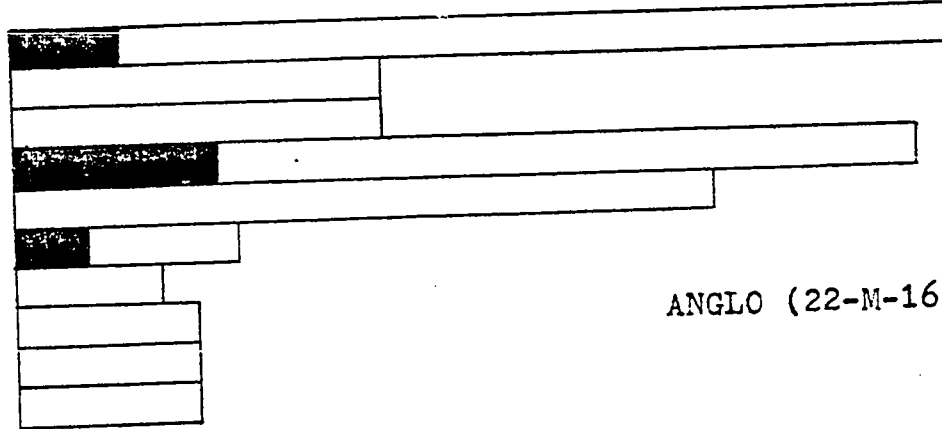
% 10 20 30 40

Figure 31 (Cont.)

Russell
 Wasp Lake
 Lake George
 Winterville
 Crippen Point
 Kings Crossing
 Aden
 Bayland
 Deasonville
 Issaquena



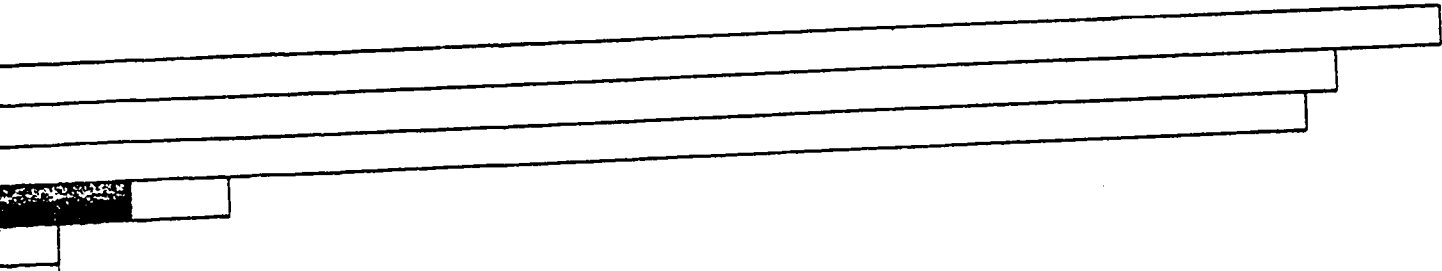
Russell
 Wasp Lake
 Lake George
 Winterville
 Crippen Point
 Kings Crossing
 Aden
 Bayland
 Deasonville
 Issaquena



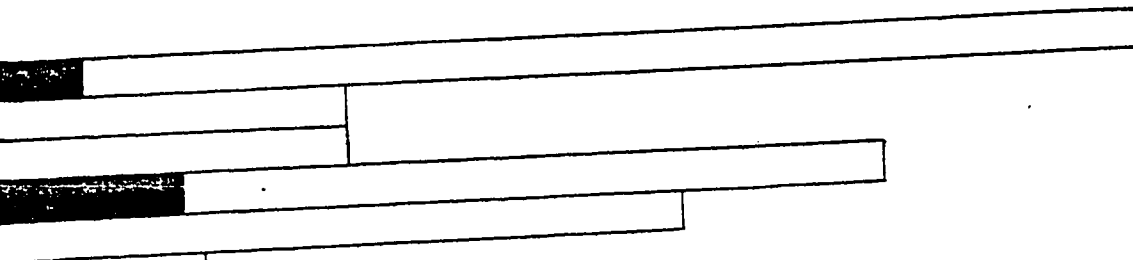
% 10 20 30 40

Figure 31 (Cont.)

250



WRIGHTS BLUFF (22-M-15)



ANGLO (22-M-16)

Minimum
Maximum

10 20 30 40 50 60 70 80

Figure 31 (Cont.)

actuality date to historic times although they could be indicative of continuity. The Aden and Kings Crossing phases of the Coles Creek period are also evident at Portland, as is a Winterville phase component of the early Mississippi period. The latter is not apparent on the basis of decorated markers, however. With the exception of a few decorated sherds which could date to a number of phases, a Winterville occupation at Portland is indicated solely by the presence of Addis Plain, var. Greenville. This variety, sorted on the basis of a small sprinkling of shell added to typical Addis Plain, var. Addis paste, supposedly dates only to the Winterville phase (Williams and Brain n.d.). Whether this is actually true or not in the Yazoo Bluffs region bears further investigation. It could be that the mixing of wares which apparently occurred in this area in historic times, also revived the Greenville variety (see discussion under Addis Plain, var. Addis and Cracker Road Incised, var. Cracker Road in Appendix 2a).

The same problem is evident at St. Pierre. The Winterville phase diagnostics at this site consist of nine decorated ceramics and 1,378 Addis Plain, var. Greenville sherds. The Deasonville, Kings Crossing, and Crippen Point phases are also represented at St. Pierre, but the heaviest occupation again appears to have occurred in late Mississippi period times. As expected, the Russell phase is strongly represented in the tabulations.

The Winterville phase is also heavily represented at the Lonely Frenchman Site, once again the result of the frequency of Addis Plain, var. Greenville. In this case, however, I believe

Greenville is correctly placed culturally. The presence of Parkin Punctated, var. Hollandale and Plaquemine Brushed, var. Plaquemine at Lonely Frenchman adds credence to there having been a significant early Mississippi period occupation at this site. Occupation also occurred during the Aden, Crippen Point, and Russell phases. Addis Plain, var. Ratcliffe is the only diagnostic evidence of a Russell phase component at Lonely Frenchman. The maximum representation for this phase, presented in Figure 31, results from a scattering of a few plain shell-tempered sherds (Mississippi Plain, var. Yazoo) and a heavy concentration of Addis Plain, var. Addis. As discussed in Appendix 2a, however, the latter variety is believed to have had two peaks of popularity in the Yazoo Bluffs region. Its first use was in the Crippen Point phase and its second appearance was in historic times. The fact that the Winterville phase is strong at Lonely Frenchman, as represented by other diagnostics, suggest that most (if not all) of the Addis sherds date to this early phase of the Mississippi period. If so, only a handful of plain sherds remain to represent a historic Indian occupation. It was observed while excavating the site that, although materials in general were sparse, the ratio of European to aboriginal materials was quite high - much greater than what is normally found on early 18th century Indian sites in the area. This observation, combined with the documentary evidence of a French structure having been located in the general vicinity of the Lonely Frenchman Site,* resulted in our

* My reference is to the three plans of Fort St. Pierre (see

interpretation that the historic occupation at the site was European rather than Indian. The ceramic analysis contributes little to changing this interpretation.

The Lockguard Site witnessed considerable occupation in the Kings Crossing phase of the Coles Creek period. Although definite diagnostics are slim, the site appears to have also been used in the subsequent Crippen Point phase. The Winterville phase is strongly represented, but once again, this is the result of a high concentration of Addis Plain, var. Greenville. Heaviest occupation occurred in the late Mississippi period. Both Wasp Lake and Russell phase diagnostics are evident, but the prevalence of the latter, in combination with abundant historic artifacts, suggests that most of the shared phase markers belong to the Russell phase at this site. The same is true for the Wright's Bluff and Anglo Sites, at which late Mississippi period occupations are strong. The Winterville phase is also strong at these sites, but only because of the abundance of Addis Plain, vars. Addis and Greenville. A Kings Crossing component also has considerable representation at Anglo.

The above summary is merely an overview of the components represented at six historic sites in the Yazoo Bluffs region, as seen through ceramic analysis. Obviously, much more can be said in regard to ceramic relationships (stylistic, stratigraphic, etc.)

* pp. 132-134), but the reader should realize that the plans are quite general. All that can actually be said is that the interpreter's house was located east of Fort St. Pierre, as is the Lonely Frenchman Site.

both within and between sites. I do so below only for the historic Russell phase, but the data is available in the appendices for those interested in pursuing such a study in regard to the other cultural phases.

Plain, coarse, shell-tempered pottery was the material most commonly used by the historic Indians of the Yazoo Bluffs region. These ceramics are primarily Mississippi Plain, var. Yazoo. One large Yazoo vessel was found within the dry moat at St. Pierre (Figure 14). It has a double-noded lug, an attribute commonly observed on other Yazoo jars found within features associated with the French occupation (Plate 54). These vessels often have a considerable amount of charcoal staining on their exterior surface, indicative of heavy use in fire.

Shell-tempered pottery with high sand content, so typical of historic sites in the Angola Farm region (Jeffrey P. Brain-personal communication), is quite rare in the Yazoo Bluffs. It does occur, however, and, following Brain, it has been sorted as Mississippi Plain, var. Montfort. Another plain ware common historically in the Yazoo Bluffs region, but rare in proto-historic and late prehistoric times, is Addis Plain, var. Addis (Figure 13). Addis is characteristic of the Crippen Point and Winterville phases in the Yazoo Valley (see Phillips 1970), but virtually disappears with the appearance of shell-tempered pottery (Williams and Brain n.d.). Only in the Natchez region does it remain the most common plain ware throughout the Mississippi period. Its late reappearance in the Yazoo Bluffs may be the result of increased southernly contacts in historic

times.

Several decorated wares produced by 18th century Yazoo Bluffs Indians were also made in the protohistoric Wasp Lake phase, Leland Incised, vars. Russell (Plate 51f-k) and Williams (Plate 52) being two such examples (Brown 1976e:Fig.2a; Williams and Brain n.d.). Fatherland Incised, var. Fatherland similarly occurs in the Wasp Lake phase (Plate 47). Philip Phillips (1970:106) included this pottery as a variety of Leland Incised but, following Vincas Steponaitis' lead (1974:134-138; 1976), the Fatherland Incised type has been revived in this volume. There are just too many technological differences between the "trailed" lines of Leland Incised and the fine-line incisions of Fatherland Incised to include them within the same type. In the Natchez region the Fatherland variety is strongly represented in both protohistoric and historic phases. Although it does indeed occur in the protohistoric Wasp Lake phase of the Yazoo Bluffs region, not until the historic Russell phase does it become a typical design. Following Steponaitis, sorting criteria for the Fatherland variety consists of crude multiple incisions, two or three lines, arranged in simple running scrolls and meander patterns. The incisions are less than 1 mm wide and are sometimes mere scratches. Ware is equivalent to all varieties of Addis Plain. Vessel forms represented in the Yazoo Bluffs region are simple and restricted bowls and plates. Steponaitis includes Phillips' two-lined Natchez variety with Phillips' three-lined Fatherland variety, because there is no stratigraphic distinction between the two treatments in sites

along the Natchez Bluffs. A similar situation exists in the Yazoo Bluffs region, the sherd depicted in Plate 47d having both treatments represented. By far the majority of Fatherland has been found at St. Pierre. Portland has a fair sample of the variety, as seen in row 1, but the sherds are quite distinct. The polished surface of the Portland specimens is hard, and the lines, having been incised when the paste was dry, are deep and rough. The high frequency of Fatherland at the St. Pierre Site may be related to the increased contact between the Natchez and Yazoo Bluffs regions following the establishment of Fort St. Pierre.

Also suggestive of increased contact between north and south in historic times is the type Cracker Road Incised. The decision for creating this new type was not an easy one. A considerable amount of pottery from Portland and St. Pierre has typical Fatherland Incised, var. Fatherland designs, but instead of occurring on Addis Plain paste, the ware is Mississippi Plain, var. Yazoo (Plate 44). Such a situation is particularly interesting in that the Yazoo Bluffs region appears to have been a frontier in which a southern decoration blended with a northern ware in the late Mississippi period. This material was originally sorted as an unspecified variety of Fatherland Incised. Including major tempering distinctions within the same type, however, is glaringly inconsistent with the type-variety system presently being used in the Lower Mississippi Valley (Brain, Brown, and Steponaitis n.d.; Williams and Brain n.d.). I therefore decided to set up a new type to account for the shell-

tempered specimens bearing typical Fatherland designs. The decorative treatment of Cracker Road Incised, var. Cracker Road similarly consists of multiple parallel lines incised with a pointed instrument, but the incisions on the whole appear cruder than those observed on the Fatherland variety. As depicted in two bowls (Figures 15 and 16) found in the dry moat at St. Pierre (23-M-5), the "sun-burst" motif of lines radiating out from circular incisions in scroll-like patterns, is particularly typical, but rectilinear decorations are also quite common. The curvilinear and rectilinear patterns often appear on the same vessels (Figure 15). The simple bowl is the only vessel form thus far represented. The Cracker Road variety has been observed at the Keno Site along the Cuachita River, Arkansas, and at the Foster Site (26-K-3) in the Natchez region (Vincas Steponaitis-personal communication), but it is generally quite rare outside of the Yazoo Bluffs region.

Narrow multiple incisions often occur at the St. Pierre Site on a finely-pulverized shell-tempered pottery which has a thick pink paint and a blackish core. The actual substance forming this pink color is not known, but it is unlike that commonly seen on the various varieties of Old Town Red and Nodena Red and White. Steponaitis (personal communication) has suggested that vermilion may have been used to form this pigment, a hypothesis which needs to be tested. Sherds lacking decoration, except for this pink paint, have been classified as Old Town Red, var. St. Pierre. Those which have multiple fine-line incisions have been classified as Cracker Road Incised,

var. Souel. Those which bear white paint in addition to pink, are sorted as Nodena Red and White, var. Poisson. I am well aware of the possibility that the plain pink sherds may merely be body fragments of incised or pink and white vessels. This is a problem one faces in working with potsherds. Until whole vessels of these types have been found, however, the classification presented here is consistent with that set up by Phillips (1970) and in more recent years refined by Brain and Steponaitis (Brain, Brown, and Steponaitis n.d.; Williams and Brain n.d.). An interesting observation is that the various pink painted types and varieties occur only at St. Pierre and Lockguard, sites which are thought to be contemporary. Portland, believed to be a Tunica settlement occupied at the turn of the 18th century, totally lacks this pink painted pottery. It is hence possible that the material is a product of Yazoo Indian potters.

Old Town Red, var. Ballground is quite common historically throughout the Yazoo Bluffs region. The variety, set up by Brain on the basis of the Haynes Bluff (22-M-5) excavations, consists of a heavy red slip on coarse sandy shell-tempered pottery equivalent to Mississippi Plain, var. Montfort. The slip is applied to both exterior and interior surfaces, but primarily the former (Plate 57d-g).

Another historic ceramic which occurs on var. Montfort paste is Barton Incised, var. Charlevoix (Plate 36a). Like Barton Incised, var. Estill, the design consists of rectilinear line-filled triangles. It differs, however, in that the shell-

tempered paste has a high sand content and the lines are not confined to the neck region. The sample is not large enough to say for certain what the overall decoration is like, but it is of some significance that the variety is found at most of the historic sites in the Yazoo Bluffs region. To my knowledge, it has not been found outside of the area.

The remainder of the sherds depicted in Plate 36 are Barton Incised, var. Davion. Originally this material was classified as Barton Incised, var. Estill (see Brown 1976e; Fig.2b). Phillips' criteria for Estill is close-spaced, steeply-pitched, line-filled triangles (Phillips 1970:45-46), a description which does not apply to the Yazoo Bluffs sample. Not only is there an absence of alternating line-filled triangles, but triangles themselves are absent. The major pattern is a series of slanted parallel incisions arranged around the vessel neck of Mississippi Plain, var. Yazoo jars and bowls. Similar material has been observed at the Pocahontas Site (Rucker 1976: 43-46; Fig.10a,b,d) and at the historic Menard Site (17-K-1) (Ford 1961:pl.23D), but it appears in general to be quite rare outside of the Yazoo Bluffs region.

The Portland variety of Barton Incised is most common at the Portland Site (Brown 1976e:Fig.2c), but it also has a considerable representation at St. Pierre (Plates 38 and 39). Portland differs from Estill in having line-filled triangles alternating with blank triangles, rather than with other line-filled forms. The triangles with lines all have their base on the shoulder of the vessel. The lines either run parallel or

radiate from the apex of each triangle. With few exceptions, the incisions are made with a thin pointed instrument on a fairly wet paste. The standard Mississippian jar is the most common vessel form, but the variety also occurs on bowls. The high incidence of Portland at the type site, and its total absence in features associated with Fort St. Pierre, suggests that it may be a Tunica Indian diagnostic. In support of this interpretation, the Portland variety has recently been found at the Bloodhound Hill Site (29-J-19) in the Angola Farm region (Jeffrey P. Brain-personal communication), a Tunica site postdating the 1706 migration from the Yazoo Bluffs region.

Another probable diagnostic of this aboriginal group is Winterville Incised, var. Tunica, a variety established by Brain on the basis of his work with the Tunica Treasure (Plate 62). Decoration consists of narrow, rather carelessly executed incisions on a wet or leather-hard surface of ware equivalent to Mississippi Plain, var. Yazoo. The design, a simple whorl, is placed on the body and shoulder of small to medium-sized jars (Brain 1976). The sample from the Yazoo Bluffs region is not particularly large, but the discovery of a partial Tunica vessel in a trash pit at the Portland Site (Brown 1976e:fig.1a) contributes to the hypothesis that the pits are the product of Tunica inhabitants

Another variety met infrequently in the Yazoo Bluffs region, but dating to the historic Russell phase, is Owens Punctated, var. Redwood (Figure 25a). This variety consists of narrow single incised lines forming triangular zones filled with large

shallow circular punctations. These zones occur on the neck of shell-tempered vessels equivalent to Mississippi Plain, var. Yazoo. The variety, as yet, has but minor representation in the Yazoo Bluffs region, and it certainly needs further refinement. Its closest relative is Owens Punctated, var. Menard (Plate 58a), a historic ceramic in the Lower Arkansas region (Phillips 1970:149-150; Williams and Brain n.d.).

Our knowledge of the ceramics of the historic Yazoo Bluffs Indians has increased ten-fold over the last four years, but much still remains to be learned. We now have a fairly good idea of the historic pottery and can even date it within a thirty-year period, but even this refinement offers little satisfaction. Hopefully, it will eventually be possible to assign ethnic labels to these types and varieties, to be able to sort out who was making and using which vessel shapes and designs. Only when a Yazoo Indian ceramic assemblage is differentiated from a Tunica or Koroa assemblage will it be possible to determine relationships between these peoples and trace their respective sociocultural traits both backwards and forwards in time. Fort. St. Pierre has been invaluable in this research, because it provides a marker for aboriginal contemporaneity. For example, the Cracker Road Incised, var. Cracker Road vessels depicted in Figures 15 and 16 were found in sealed context within the dry moat which surrounded the fort. They therefore date no earlier than 1729, the year in which the fort was destroyed. The vessels could not have been Tunica at this time, but were, in all probability, a Yazoo Indian product. Whereas

the tight dating of the French component at St. Pierre, and the small single component sites surrounding it, provides fine synchronic control, the archaeology of the multi-component Haynes Bluff Site (22-M-5), provides data on change through time. Jeffrey P. Brain's work in tracing the Tunica as they moved through the valley has provided an alternative, but supplementary, way of observing this change (Brain 1970; 1973; 1975a; 1977; n.d.a). In this section I have assigned ethnic labels to a number of ceramic varieties, but as a cautionary note, I want to stress that these assignments are merely interpretations based on the data presently on hand. In determining ethnicity of material culture for the Yazoo Bluffs region, further excavation is obviously required. The information presented here on historic native ceramics provides a framework in which to pursue the above goals.

Pipes (Plates 63 and 64; Appendix 2a)

Three pipes were found in our excavations in the Yazoo Bluffs region, one at Portland and two at St. Pierre. A catlinite pipe was also recovered in the Wright's Bluff Burial Collection (see Table 1). The early French explorers knew the importance of calumet pipes and carried them into unknown territories to insure a safe trip (see pp. 389-390). Father Gravier, in 1700, described the calumet as having two usages, one for peace, the other for war. They were distinguishable by

the color of the feathers which adorned them, red being for war:

It is a sort of pipe for smoking tobacco, made from a red stone polished like marble, and bored out in such a manner that one end serves for holding the tobacco, while the other fits upon the stem. The latter consists of a hollow stick two feet long, as large as an ordinary cane. Hence the French have called it "calumet", from a corruption of the word chalumeau, because it resembles that instrument or, rather, a long flute. It is ornamented with the heads or necks of various birds, whose plumage is very handsome. They also add long feathers of red, green, or other colors with which it is covered (Gravier 1701 in Thwaites 1896-1901, 65:123-125).

The Wright's Bluff pipe is made of catlinite and may have been a calumet. Catlinite is a very densely grained metamorphosed clay. It is red, glossy, and easily carved, the best material coming from southwest Minnesota. Prior to the introduction of iron implements, flint or other hard minerals were used to cut and shape the stone. The bowl and shank were either drilled with a chipped flint tool or were drilled with a hollow reed rotated between the hands, sand being thrown in as an abrasive agent (Erickson 1966:134-135). As will be discussed later (see pp. 527), the calumet and its associated ceremony survived well into historic times. I believe that the ceremony itself remained unchanged throughout the years of French contact, but the meaning associated with its performance was rapidly lost. The discovery of a pipe, which fits the description of a calumet, with the Wright's Bluff burial, supports the written evidence of it being used in historic times. A similar, although somewhat more elaborate, catlinite pipe was found with a burial in the top of Haynes Bluff (22-M-5) Mound A

(Brain 1975a).

The other pipes in the Yazoo Bluffs sample are not made of catlinite, but whether or not they were used as calumets is not known. Disk pipes are fairly rare in this part of the Lower Mississippi Valley, yet one was found at Portland (Plate 63). According to Salter (1977:56-73), they are most often made of catlinite and they appear in two basic forms - "handle disk" and "handleless disk". The former has an extension which may have been used as a base, and the latter has a disk which is wider than the handle is long. There has been some debate as to how disk pipes were smoked. The question has been whether the disk or the "handle" held the tobacco (McGuire 1899:487; Stephens 1958:66; West 1905:130; 1934:206). The "handleless disk" form from Portland obviously had the tobacco in its disk. It thus corresponds with the later forms of "handle disk" pipes where stems have been found in the handle in historic war bundles. According to Salter (1977:56-73), catlinite disk pipes are mostly found in the Upper Mississippi Valley, particularly in Wisconsin, which appears to be its home. Although primarily a late prehistoric-protohistoric feature of Oneota sites, they have also been found in historic contexts in more distant regions. Eighteen were found at the protohistoric-historic Utz Site in Missouri (Hamilton 1967:3) and one was found in association with 18th century European artifacts in a Cherokee context at the Nacoochee Mound, Georgia (Heye et al. 1918:83, pl. 49).

When I started to classify the lithics from the Yazoo Bluffs region, I followed the usual procedure of sorting objects by form into bifaces, unifaces, and miscellaneous tools. These basic categories were then subdivided, bifaces being broken down into projectile points, knives, celts, and the like. Such a classification seemed reasonable for presenting the material, but it tended to ignore functional reality. In the first place, a considerable number of tools were found to exhibit both bifacial and unifacial retouching. I thus contemplated a third category, but after doing microscopic wear analysis on all of the worked lithics, it was discovered that tools bearing the exact same form were often employed in different ways. I hence decided to reject a formal analysis in favor of a functional one. The reader should therefore not be overly concerned in seeing identically shaped objects discussed under different sections.

My interpretations of wear are based largely on the work of Semenov (1976), but it must be understood that experimental studies of lithic use are still in a nascent state. Many archaeologists have concentrated on the technology of lithic manufacture (Bordaz 1970; Bordes 1968; Crabtree 1967; 1972; Shafer 1970; Speth 1972; 1975; Tsirk 1974; Warren 1914), but only in recent years have scholars become interested in the way lithic implements were used and how this activity is reflected on the tools themselves (Brose 1975; Frison 1968; Hester et al. 1973; Nance 1971; Wilmsen 1968; Witthoft 1967). Few have had the necessary experimental controls to establish one-to-one

relationships between wear and use, however, and so the reader is warned that the interpretations presented in this study are tenuous. Future research will undoubtedly necessitate a reanalysis of the Yazoo Bluffs materials.

A few remarks on the description of the lithics should be made. Stone does not occur in the alluvial valley of the Mississippi River, but extensive deposits of chert, jasper, and other stones suitable for chipping are found in gravel deposits in the hills to the east and west and along the valley walls (Ford, Phillips, and Haag 1955:126). Most of the tools from the Yazoo Bluffs region were made out of these gravel cobbles. The color of the gravel ranges through the various shades of white, gray, yellow, brown, and red. All of these colors often appear in the same rock and so the use of a color chart in describing these artifacts is frustrating, if not absurd. I thus decided to describe colors in a simple subjective manner in order to provide a fuller description of the artifacts as well as to satisfy, to some degree, the "scientific" student. I will not argue for total consistency in my color judgement, nor do I maintain that every color shade is described for each artifact. In most cases, the primary color of each lithic is the only color recorded. Another point to be mentioned is the measurement of the lithics. Width, length, thickness, and weight of stone tools are relatively easy attributes to record, but it is beyond me how anyone can provide accurate measurements on working edge angle (see Wilmsen 1968). Irregularity in the edge of the tool and the difficulty in getting the protractor

aligned correctly with this edge are but two simple problems, the major one being that for practically every tool the angle of the working edge varies enormously. To provide a maximum or an average angle clouds the issue as it ignores which part of the working edge was actually being used. A range of angle retouch is better, but I have found the subjective terms "steep" (greater than 50° - arbitrary dividing point) and "acute" (less than 50°) to be just as appropriate. These are but some of the problems I have faced in classifying and describing the lithics according to a functional analysis, but hopefully, this analysis contributes more to our understanding of the behavior of the Indians of the Yazoo Bluffs than does a simple formal typology.

A summary of the lithic tools from the Yazoo Bluffs region is presented in Table 3. The interested reader can find more detailed information on each functional tool type in Appendix 2b. Included in this Appendix is Table 15, a complete inventory of lithic provenience from each site dealt with in this report. Also included in these tallies are the amount of utilized chert flakes, unutilized chert flakes, unutilized fire-cracked chert flakes, ground sandstone, pebbles, etc. Debitage and unmodified materials are excluded from Table 3 simply for economic reasons. The interested student can easily reconstruct this information from Table 15. Table 3 presents a broad view of what tools are present, quantitatively and qualitatively at each site, but there is little that can be done with this information with our present state of archaeological knowledge. A comparative

Table 3
Summary of the Lithic Tools from Sites in the Ya

	Portland		St. Pierre		Lonely Frenchm	
	#	%	#	%	#	%
Projectile Points	5	20.8	12	4.7		
Scrapers			1	0.4		
Side Scrapers			5	1.9	1	12.
Discoidal Scrapers			1	0.4		
Hafted Side Scrapers			2	0.8		
Double Side Scrapers	4	16.7	1	0.4		
Hafted End Scrapers			2	0.8		
Side-End Scrapers	1	4.2				
Hafted Side-End Scrapers			2	0.8		
Double Side-End Scrapers						
Combination Tools			1	0.4		
End Scraper - Borers			1	0.4		
Double Side Scraper - Borers						
Hafted Double Side Scraper - Knife - Borers			1	0.4		
Hafted Side Scraper - Knife - Borers			1	0.4		
Side Scraper - Spokeshaves						
Double Side Scraper - Spokeshaves			1	0.4		
Hafted Side Scraper - Knife - Spokeshaves						
Additional Tools			1	0.4		
Knives	1	4.2	4	1.6		
Hafted Knives			2	0.8		
Burins	1	4.2	5	1.9		
Drills			2	0.8		
Spokeshaves						
Engravers			1	0.4		
Adzes			1	0.4		
Hoes			2	0.8		
Celts						

Table 3 (Cont.)

	Portland		St. Pierre		Lonely Frenchman	
	#	%	#	%	#	%
Choppers			1	0.4		
Hammerstones	1	4.2	47	18.2	1	12.5
Miscellaneous Tools						
Worked Bifacial Tool Fragments	3	12.5	25	9.7		
Crude Bifaces	3	12.5	46	17.8	2	25
Biface Retouch Flakes			16	6.2	1	12.5
Pebbles and Flakes with Unifacial Retouch	3	12.5	28	10.9	2	25
Uniface Retouch Flakes			4	1.6		
Cores	2	8.3	41	15.9	1	12.5
Core Rejuvenation Flakes			1	0.4		
Total	24		258		8	

Table 3 (Cont.)

	Portland		St. Pierre		Lonely Frenchman		Lockguard		Wrights Bluff		Anglo	
	#	%	#	%	#	%	#	%	#	%	#	%
			1	0.4								
	1	4.2	47	18.2	1	12.5	2	11.1	3	27.3	2	22.2
Fragments	3	12.5	25	9.7			1	5.6			1	11.1
	3	12.5	46	17.8	2	25.0	5	27.8				
s			16	6.2	1	12.5			1	9.1		
with												
	3	12.5	28	10.9	2	25.0	3	16.7			1	11.1
es			4	1.6					1	9.1		
	2	8.3	41	15.9	1	12.5	2	11.1	1	9.1	1	11.1
akes			1	0.4								
	24		258		8		18		11		9	

analysis of tool percentages between sites is absurd, because such an analysis implies the implements at each site were being used at the same time. This may actually have been the case for some, such as those tools found in the trash pits at Portland, but we know from the ceramic analysis that all of the sites (especially St. Pierre) are multicomponent. Only projectile points and certain tool types are at present capable of being dated, and even these artifacts can only be dated within broad parameters. Most tools, like knives and scrapers, cannot be dated. We therefore have no idea whether they were being employed together or several hundred years apart.

The analysis of this sample does, however, improve our understanding of how the Indians of the Yazoo Bluffs region, throughout prehistory and history, used stone in their daily lives. This is a functional analysis but, as the reader is well aware, there is often a very close association between form and function. In general terms, there is a basic formal distinction between knives and scrapers. Scrapers tend to have steep angle retouch, whereas knives have acute angles. Such formal criteria cannot always be relied upon as indicative of function, however. Most of the knives in the Yazoo Bluffs sample were hafted, but at least one was not. Wear is exhibited on the jagged lateral edges of these tools, but not in the manner set forth by Semenov (1976). Instead of striations running parallel to the working edge, there are tiny step flake scars removed from both ventral and dorsal surfaces of the tools' working edge. Similarly, drills do not have the same sort of

wear outlined by Semenov. They do indeed exhibit a slight ridge on one side of the point and a depression on the other, but they do not have the circular striations which are supposed to result from a drilling motion. A number of additional wear variations are discussed in the Appendix.

Wear analysis has been extremely important in this research and should be employed by anyone attempting lithic classification. As stated above, were it not for the use of a microscope, many tools would have been thrown together in the same category. Even tools which have been classified together show considerable variation. They all appear to have been used in a scraping activity, but the objects scraped were obviously quite different. Some of these tools exhibit polishing, probably from skin scraping, while others have step flake scars more typically resulting from woodworking. Other tool categories seem to have been used primarily on just one substance. Side-End scrapers and Hafted Side-End scrapers, for example, appear to have only been used on wood. The kinetics involved in the use of these tools were also often quite different. Wear analysis suggests that some Discoidal scrapers and Hafted Side scrapers were employed by pushing the tool away from the user while other tools in the same category were pulled toward the user. The tools of other categories, such as Side-End scrapers, appear to have had only one motion involved in their use.

What all of this means in cultural terms is impossible to say at present. We obviously first need considerably more studies of a similar sort. Too many Southeastern archaeologists

either ignore the lithics in their excavations or "pigeon-hole" them in simple formal categories. It would seem that we, who are interested in cultural behavior, should have as our primary concern a reconstruction of the use of such materials by the Indians. A second problem, as stated above, is the dating of assemblages. Until we are certain that a given collection is contemporaneous, lithics can only be discussed in general cultural terms. Ceramics often define the broad parameters of site occupation, but even with this aid one cannot be sure that some Archaic material has not slipped into the assemblage. We are fortunate in at least one case in the Yazoo Bluffs in defining contemporaneity. The retouched glass fragments must obviously date to the historic Russell phase. These materials are especially important to this thesis, because they are hard evidence that Indians modified European introductions to fit a preexisting technology. More will be said of this phenomena and its relation to sociocultural change in the Yazoo Bluffs region in Chapter 12.

European Artifacts

Kitchen Group

Ceramics (Plates 85, 86, and 87; Appendix 2c)

More has been written about European ceramics than any

other historic artifact type found in the Yazoo Bluffs region. Most of the ceramic literature, like that on French faience (Buyer 1964; Giacomotti 1963; Lane 1948; Solon 1903), unfortunately deals only with art objects and thus adds little to the analysis of archaeological specimens. Historical archaeologists, having long realized this problem, have consequently devoted considerable attention to studying the more common utilitarian types of European ceramics. Through the work of Ivor Noël Hume (1969a-c), Stanley South (1962; 1972; 1977), James Deetz (1973; 1977) and others, we are rapidly learning the forms and decorations of English ceramics, their significance as chronological markers, and their social functions, but French ceramic analysis is still in its infancy (Jolliffe 1973; Long 1973a,b; Marwitt 1967; Miller and Stone 1970).

Three basic ceramic wares occur on French-related sites: earthenware, stoneware, and porcelain. Only the first category is frequently found in the Yazoo Bluffs region, and it is divided into tin-glazed (faience) and lead-glazed earthenware. In my Masters Thesis (Brown 1975a), I set up the divisions series, class, type, and variety to classify the ceramics, and this same basic outline, with a number of changes will be followed here. Series is the broadest division, this being broken up into tin-glazed earthenware, lead-glazed earthenware, and stoneware. Class is defined on the basis of paste color, and type on the basis of surface tint (monochrome, polychrome).

The European ceramic assemblage, tabulated at 455 sherds, is presented in Table 4, the various classes and types being

Table 4

Summary of the European Ceramics from the Yazoo

		Portland	St. Pierre	Lone
Series I tin-glazed earthenware				
Class A	Type 1			4
	Type 2	1		49
	Type 3			231
Class B	Type 1			5
	Type 3			19
	Total	1		308
Series II lead-glazed earthenware				
Class A	Type 1			6
	Type 2	1		68
Class B	Type 1			7
Class C	Type 1			22
Class D	Type 1			31
	Total	1		134
Series III stoneware				
Class A				1
	Total			1

Table 4

Summary of the European Ceramics from the Yazoo Bluffs Region

	Portland	St. Pierre	Lonely Frenchman	Lockguard
Un-glazed earthenware				
Type 1		4		
Type 2	1	49		1
Type 3		231	1	
Type 1		5		
Type 3		19		
Total	1	308	1	1
Glazed earthenware				
Type 1		6		
Type 2	1	68		7
Type 1		7		
Type 1		22		1
Type 1		31		
Total	1	134		8
Stoneware				
		1		
Total		1		

discussed in Appendix 2c. As can readily be seen, the collection is almost entirely from St. Pierre. Only one faience sherd comes from Lonely Frenchman, and the historic aboriginal sites in the vicinity have a grand total of 11 European sherds. Anglo and Wright's Bluff do not have any. The only aboriginal site which bears a "sizeable" sample of European ceramics is Lockguard.* One of the lead-glazed earthenware sherds has a pink pigment rubbed into its surface, identical with that found on Old Town Red, var. St. Pierre and Cracker Road Incised, var. Souel, aboriginal pottery believed to be contemporary with the occupation of Fort St. Pierre. This is additional evidence supporting the interpretation that the Lockguard Site was occupied by Yazoo, Koroa, or Ofo peoples of the "trader" period.

St. Pierre has a fair sample of faience and lead-glazed earthenware. The amount of faience is more than double the utilitarian lead-glazed earthenware. As discussed under Series I, Class A, Type 3 and Series II, Class A, Type 2 (see Appendix 2c), the distribution and physical condition of the sherds (burned vs. not-burned) suggest certain behavioral phenomena. Faience is most often associated with trash pits and the Commandant's headquarters (Structure B), whereas the lead-glazed earthenware is scattered fairly randomly throughout the site. Such a distribution suggests status patterning of material culture. Another observation is the high degree of

* The sample is certainly not large enough to have statistical significance, but it is large in proportion to the total artifact assemblage from this site.

burning of the lead-glazed sherds along the western periphery of the site, the portion of the fort occupied at the time of the massacre. Faience, however, is rarely burned. As the Commandant's headquarters appears to date to the early part of the fort's occupation, and as there is so little faience within the moat, I believe that faience was of more frequent use in the early 1720's, when times were more affluent. Lead-glazed earthenware seems to have had consistent use up to the time of the massacre, while the use of native ceramics increased over the years, perhaps indicative of the expense and unreliability of French supplies (see p. 153).

Wine Bottles and Case Bottles (Plates 88 and 89; Appendix 2c)

Glass is a frequent find at most historic sites in the Yazoo Bluffs region, particularly St. Pierre. Modern glass occurs in a number of shades including clear, light blue, light green, brown, and "black" (actually dark amber). The quantity and provenience of the recent glass is recorded, but is not presented in this volume. As suggested by some of the aboriginally-worked glass pieces, a portion of the glass classified as recent may actually be of early 18th century vintage. Olive green glass, the substance of wine bottles, also presents some problems. The first point to clarify is that such glass does not always belong to wine bottles. They were generally used for transporting and storing wine, but other

liquids may have been contained in these receptacles. Olive green glass is not solely confined to early 18th century contexts. It continued to be used throughout the 19th century and is still employed today. One can readily see the avenues for mistakes in field catalogueing this material. When olive green glass was mapped in the St. Pierre excavations, no distinctions were made by the excavators as to whether or not the glass was of the French period. Distinguishing between the glass of these periods is often a difficult task, one which I cannot claim to be overly adept in myself. If mold seams are apparent, the matter is easy, but differentiating among small fragments of glass is a frustrating task. I have separated the materials on the basis of patination. Glass exhibiting a fine film or cloud on one or both surfaces is believed to date to the early 18th century, whereas the rest most likely date to more recent years.* By far the majority of the glass is patinated, and so the various distribution plans in the excavation section are reasonably accurate. It may, however, be of some use to know which fragments were classified as French in the field, so that the square plans can be adjusted accordingly. I have therefore listed both recent and historic French olive green glass in Appendix 2c. Also presented is a table (16) listing provenience, amount (including burnt specimens) and weight of the French olive green wine bottle glass from the 1975 and 1976

* Such criteria of course is not infallible. Modern glass will develop a considerable patination if exposed to the sun for a long time.

excavations at St. Pierre.

Altogether, 640 fragments of historic olive green glass was recovered, all but 20 of which are from St. Pierre. The remainder are from Portland (7) and Lockguard (13). A number of bottle rims, reflective of form, were found at St. Pierre and Lockguard, and a wine bottle seal was recovered from the moat at St. Pierre. Also found in various sections of the moat were the remains of a single case bottle. South (1977) assigns wine bottles and case bottles to different classes of the Kitchen Group, but I have decided to include them together under olive green glass because of the difficulty in separating small fragments. All of the Lockguard specimens and a considerable number of the St. Pierre fragments bear evidence of fire. Most of the burnt specimens from St. Pierre were found in the western portion of the site, that which was occupied at the time of the massacre.

Tumblers (Appendix 2c)

Tumblers, common drinking glasses, are quite rare in the Yazoo Bluffs region. All 10 fragments were found at St. Pierre. They are clear and have a typical cloudy lustre, but are sometimes hard to distinguish from more recent clear glass.

Spoons (Plate 90a; Appendix 2c)

Only one spoon was found in the Yazoo Bluffs region. It is from St. Pierre.

Knives (Plates 91 and 92; Appendix 2c)

Knives were very important materials in the French-Indian trade network. They were included on most trade lists, often a gross or more being requested (Swanton 1942:197-203). A French trader in 1688 carried with him into the Illinois country 26 dozen butcher knives of two sizes and two dozen clasp knives (Bauxar 1959:47). Le Sueur's supply of gifts for the Chippewa and Dakota in 1693 similarly included eight dozen butcher knives and eight dozen couteau flatins* (Wedel 1974:159). One receives an idea of the value of knives from the expense list of the Fox War of 1715-1716 in which common knives were valued at 54 livres a gross, Flemish knives at 127 livres 10 sols a gross, and horn-handled clasp knives at 6 livres a dozen (Quimby 1966: 65-66).**

Clasp knives and Case knives are the most common forms found on early 18th century French-related sites, and these are both represented in the Yazoo Bluffs region (Table 5). Clasp knives are characterized by a hinge hole and a flange at the

* These are pocket knives with horn cases named after the manufacturer Denis Flatin.

** See p. 311 for a discussion of French money.

Table 5
 Summary of European Knives from the Yazoo

	Portland	St. Pierre	Lonely
Clasp Knives			
"hawk-billed"	1	9	
Case Knives			
"hawk-billed"		2	
"sword"		2	
Miscellaneous Fragments		11	
Total	1	26	

Table 5

Summary of European Knives from the Yazoo Bluffs Region

	Portland	St. Pierre	Lonely Frenchman	Wrights Bluff
Knives				
"hawk-billed"	1	9	1	1
"hawk-billed"		2		
"sword"		2		
Fragmentous Fragments		11		
Total	1	26	1	1

butt end of the blade (Wittry 1963:35). The flange extends over the back of the blade and serves as a stop to make the knife rigid when open (Harris and Harris 1965:348). Several forms of clasp knives exist, the most common being the "sharp-pointed sword" shape and the "hawk-billed" shape (Wittry 1963: fig.25). The first is characterized by a cutting edge which gradually curves upward toward the tip, while the blade back slopes downward toward the point for about two-thirds its length. The "hawk-billed" knife consists of a straight cutting edge and a straight, or slightly diverging, blade back which tapers rapidly to form a point (Jelks et al.1966:18-22). French clasp knives are generally between four and five inches (10.2 cm and 12.7 cm) long and often have names stamped on their blades. They were rarely distributed after 1760, having been replaced by British clasp knives at this time. The latter have a split hinge at the clasp end (Quimby 1966:46). The British knives traded earlier in the century are apparently also quite different from the French forms (Wedel 1974:165).

Only "hawk-billed" clasp knives were found in the Yazoo Bluffs region, and their length (between 9.0 cm and 10.0 cm) is below average for this type. Although the "sword" shaped clasp knife form is absent, this shape is apparent on a set of two table knives from St. Pierre. These specimens belong to the case knife category, which consists of knives with a tang which projects out of the butt end of the blade for attachment to a wood or bone handle (Harris and Harris 1965:348-350; Jelks et al.1966:23-24). Two additional "hawk-billed" shape case knives

were found at St. Pierre. Portland, Lonely Frenchman, and Wright's Bluff have only clasp knives. Only a sample of the knives were chemically cleaned, and they reveal no evidence of manufacturers' marks.

Whetstones (Plate 114c; Appendix 2c)

Probably many of the ground sandstone fragments were used as whetstones by both French and Indians of the Yazoo Bluffs region. There is only one stone, however, which was ground into a definite shape to serve such a function. This was found at St. Pierre.

Architectural Group

Hand Wrought Nails (Appendix 2c)

A total sample of 3,533 hand wrought nails were recovered in the Yazoo Bluffs excavations, almost all of which are from St. Pierre (3,479). Portland (5), Lonely Frenchman (18), Lockguard (28), and Wright's Bluff (3) also produced some specimens.

Little study has been done on hand wrought nails, largely due to their uniformity through time, and hence their minimal

contribution to chronological control. They were the only nails available to the carpenters of the 17th and most of the 18th centuries (Noël Hume 1969a:252). Fortunately, some scholars have tried to make some use of this ubiquitous aspect of material culture (Mercer 1923; Nelson 1963; Noël Hume 1969a: 252-254; Stone 1974:229-233). Almost all of the hand wrought nails from the Yazoo Bluffs region are of the "rose head" form. Such nails have a series of four or five hammer blow marks on the butt end of the nail, a result of head production. The marks radiate from the head and form a floral pattern. The shaft of these nails tapers on all four sides forming a point. Lyle Stone established two varieties of the "rose head" type (1). Variety "a" has a pointed shank end (drawn point) and variety "b" has a flattened shank end (Stone 1974:229-233). With but two exceptions, all of the "rose head" nails from the Yazoo Bluffs belong to Stone's variety "a." Three other nails have L-shaped heads (Ibid:Type 2, variety "a"), and one has a square head (Ibid:Type 5). "Rose head" nails were used in a variety of tasks, but L-headed nails were primarily employed as trim and flooring nails (Noël Hume 1969a:252).

Compared to other European materials, nails are not frequently found on aboriginal sites in the Yazoo Bluffs region, Lockguard being a curious example. They are, however, the most abundant historic item at St. Pierre. The Indians apparently had little use for this aspect of French material culture. The distribution of hand wrought nails at St. Pierre is not totally uniform. As discussed in Appendix 2c, some interesting patterns

are revealed in the analysis of their sizes when examined in relation to different activity zones at the site.

Hinges (Plate 93; Appendix 2c)

Nine structural hinges were found at St. Pierre. Lyle Stone divides hinges into two forms, the first being self-contained or leaf hinges, and the second, pintle hinges. A self-contained hinge is composed of three elements. One element is stationary, one is attached to a moveable object, and the third is an iron pin which joins the other two. A pintle hinge consists of two separate parts. One part, the pintle, is an L-shaped iron shank. One of the legs is sharp in order to be driven into a stationary object. A flat hinge strap element, attached to a moveable object, has one end looped to be mounted on top of the unsharpened leg of the pintle (Stone 1974:217-225). Both hinge forms are represented at St. Pierre. Included are one self-contained hinge, three pintle hinge strap elements, and four pintle hinges.

Staples (Appendix 2c)

A total of 30 hand wrought staples were recovered in our excavations at St. Pierre. They average 3.2 cm in length, with a standard deviation of .33 cm. They are actually quite uniform

in size. Staples were not found at the other historic sites.

Locks (Plate 94e-f; Appendix 2c)

Two partial padlocks are represented in the St. Pierre collections. One of the padlocks (Plate 94e) is of a "half-heart" form. This padlock type, which resembles a heart sliced down the middle, is common in 18th century contexts. The front plate curves broadly to meet a flat rear plate. The key hole enters from the right side and there are generally flanges projecting beyond the body at either side. The hasp and lock body of this lock are separate elements (Noël Hume 1969a:251-252; Stone 1974:233, fig. 143B). Another padlock represented is a "heart-shaped" specimen (Plate 94f). The front and back plates of such a lock are attached to a heart shaped iron rim. The keyhole is situated in the lower half of the front face (Stone 1974:233, fig. 143A).

Furniture Group

Hasp Locks (Plates 94d and 95a; Appendix 2c)

Hasp locks are typically used to fasten a moveable object, such as a chest or trunk lid, to the main body of the trunk.

They are also used to fasten doors and gates. There are two types of hasp lock mechanisms. The first consists of a complete lock element (with lock plate, spring, and bolt) and a hinged hasp element which is inserted into and secured by the lock (Stone 1974:193-195). A part of a lock element was found at St. Pierre (Plate 94d) and a hasp element was recovered from Lockguard. The second type of hasp lock mechanism consists of a stationary hasp keeper element and a moveable hasp element which passes over and is connected to the former by a padlock (Stone 1974:195). The stationary portion of one such hasp lock mechanism was found at St. Pierre (Plate 95a).

Furniture Hinges (Plate 93d; Appendix 2c)

There are a number of different forms of furniture hinges. There are those made of brass or copper which are generally small and are used on jewelry boxes or on hinged pieces of household furniture, and there are those made of iron which are "staple" or "pin" hinges used to connect trunk or chest lids. The latter consists of two joined iron elements, one a staple, the other a pin with a loop on one end to attach to the staple. Each element is driven into the two pieces of wood to be joined. Only the latter form of furniture hinge has been found in the Yazoo Bluffs and this was recovered from the dry moat at St. Pierre (Plate 93d). It may be associated with the hasp lock mechanism also found in the dry moat (Plate 95a).

Handles (Plate 96a-d; Appendix 2c)

Four iron handles were found at St. Pierre, most of which were probably attached to furniture. They are not of the more exotic ornamental types discussed elsewhere (Noël Hume 1969a; fig. 72), but are of simple utilitarian forms such as those recovered from Fort Michilimackinac (Stone 1974:plate 120).

Arms Group

Ammunition (Plate 95b-c; Appendix 2c)

This category consists of musket balls, lead shot, iron shot, cannister shot, lead sprues and spillage, and cannon ball shrapnel. Musket balls were primarily cast in molds, but at least one specimen at St. Pierre was made by the "drop" method. A total of 73 musket balls were found in the Yazoo Bluffs region. St. Pierre had the most (65 specimens), but they were also found at Portland (5), Lockguard (2) and Wright's Bluff (1). Shot, all of which was made of lead, except for one iron pellet from Lockguard, was made entirely by the Rupert method (see pp. 200-201). A total of 637 specimens were found, 625 of which are from St. Pierre, principally from the Lead Shot Drop area. Portland has two, Lockguard one, and Wright's Bluff nine. Miscellaneous fragments of lead, sprues and spillage, are the

by-products of spherical bullet manufacture. Such materials have been found at both St. Pierre and Lockguard. Two iron pellets from cannisters and three fragments of cannon balls have also been found at St. Pierre (Plate 95b-c).

Powder Flasks (Plate 97; Appendix 2c)

Two portions of powder flasks were found at St. Pierre. One is a brass spout (Plate 97), and the other is a piece of animal horn which may or may not date to the occupation of the fort. Another spout (Plate 98), made of lead, was found in the immediate vicinity of the brass spout. It may also have been part of a powder flask, but its actual function is not known.

Gunflints (Plates 99-101; Appendix 2c)

According to John Witthoft, an evolution of European gunflints occurs on North American sites. Nordic is the earliest form, followed by Dutch, French, and finally English gunflints, their changing popularity following familiar battleship shaped curves (Witthoft 1966:24). There is actually little use, however, in labeling gunflints by nationality, because such designations do not indicate who used or traded the artifacts. Some, including Witthoft, have argued that the terms do reflect flint origin, but even this last point has been recently questioned

(Blanchette 1974; 1975; S. White 1975). Nor is technology ethnically distinct. The "English" gunflint industry primarily used a glassy black flint and supposedly was unique in developing a micro-burin technique for separating blades into segments. These flints are characterized by a demi-cone on the scar of the micro-burin blow and are technologically superior to the earlier "French" gunflint. Witthoft argued that the technique was known only in England (1966:36), but evidence of demi-cones are often seen on honey-colored "French" flints on sites throughout North America, Port Dauphin (Blanchette 1976b) and the Yazoo Bluffs region sites being several examples. The assumption has been that nodules of "French" flint were exported to England, then being manufactured into gunflints. Recent excavations in a French gunflint quarry, however, have produced honey-colored flints bearing micro-burin scars. This suggests that not only were gunflint materials dispersed widely over Europe, but so also were the manufacturing techniques (Blanchette 1976a). Hence, on the basis of current information, any attempt to associate a particular gunflint with a specific quarry or country is questionable.

A total of 124 gunflints were recovered in the Yazoo Bluffs region. Also found was a significant amount of debitage, resulting from either the manufacture or aboriginal modification of gunflints in this area. The specimens are classified into types and varieties on the basis of technology. The first type is the Spall Gunflint. It corresponds to Blanchette's (1975: 49;fig.8) Type 1, and to Stone's (1974:255-261,fig.156-157) Series

C. Gunflints of this type have been referred to as gunspalls (Hamilton 1960a:73-79), wedge-shaped Clactonian gunflints, and Dutch gunflints (Witthoft 1966:26). The Spall Gunflint is made by striking a plano-convex (wedge-shaped) flake from a flint pebble. The bulb of percussion is plainly visible on the convex surface of the flake.

The second type is the Blade Gunflint. It corresponds to Blanchette's (1975:49,fig.9) Type 2, and to Stone's (1974:247-255,fig.152-153) Series A. This method of manufacture involves the striking of straight strap-like flakes from prepared cores. The type includes Witthoft's (1966:28-37) "French" and "English" gunflints. The inclusion is purposeful, the methods of manufacture being genetically related. The "English" gunflint developed directly out of the "French" gunflint. Blade Gunflint technology was improving throughout the late 17th and early 18th centuries and the form represented by the "English" specimens is just the last step in the evolution. This last jump seems to have been the result of a change in the tools used in manufacturing the blades (Jean-Francois Blanchette-personal communication). The "English" gunflint should be established as a separate variety, but as specimens of this sort were not found in the Yazoo Bluffs region, I will leave this classificatory revision to others. In this report, Blade Gunflints are only those previously referred to as "French". Following Blanchette's (1976b) lead, I have set up three varieties of Blade Gunflints: A - trapezoidal, B - triangular, and C - trapezoidal/triangular. These are based on the cross-section of the blades. Frenchmen

considered trapezoidal gunflints to be of higher quality. They referred to them as "fine", whereas triangular gunflints were called "ordinary" (Hamilton and Fry 1975:109).

The third type is the Aboriginal Gunflint. This type consists of both European and native materials which were struck into square shapes by the use of fine percussion flaking. This occurred bifacially, a biconvex cross-section being the result, or unifacially, the form being plano-convex. The use of the word "Aboriginal" is contrary to my attempt to replace ethnic labels with technological ones, but the reason it is used is merely to indicate that the gunflints, whether originally European Spall or Blade Gunflints, or made from a North American chert, did not obtain their final form in Europe. The percussion flake exhibited on these flints was a typical aboriginal skill.

The gunflints from the Yazoo Bluffs region are described in detail in Appendix 2c, and the distribution of the various types and varieties are listed in Table 6. Blade Gunflints are the most common, the trapezoidal variety being best represented. Witthoft (1966:28) felt that Blade Gunflints were not in existence prior to 1719 and even after this date were used primarily as strike-a-lights until the late 18th century. Hamilton (1965:55; 1971:66) argued that the type occurs on North American sites dating around 1680, and Blanchette (1975:50) made a good case for their existence in Canada prior to 1663. The sample from the Yazoo Bluffs region indicates this type was as common as the Spall Gunflint type in the early 18th century.

Table 6

Summary of the Gunflints from the Yazoo B

	Portland	St. Pierre	Lockguard
Spall Gunflints	3	37	
Blade Gunflints			
<u>Var. A</u>	3	24	
<u>Var. B</u>	2	19	
<u>Var. C</u>		8	2
Aboriginal Gunflints	3	17	2
Total	11	105	4

Table 6

Summary of the Gunflints from the Yazoo Bluffs Region

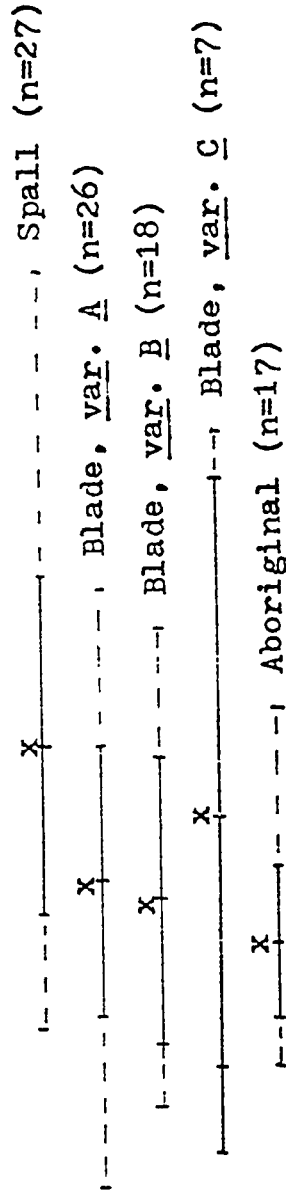
	Portland	St. Pierre	Lockguard	Wrights Bluff
ints	3	37		1
ints				1
<u>r. A</u>	3	24		
<u>r. B</u>	2	19		
<u>r. C</u>		8	2	
Gunflints	3	17	2	2
total	11	105	4	4

Aboriginal Gunflints also have a healthy representation. They occur most frequently at St. Pierre, but percentage-wise are best represented at the various Indian sites.

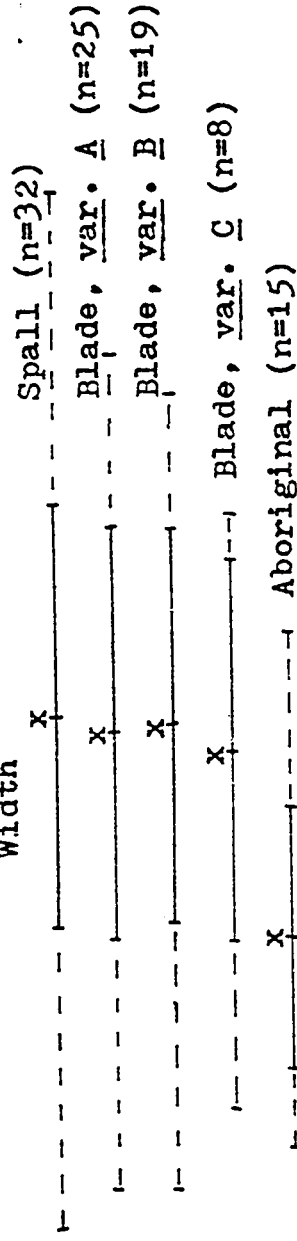
The measurements of the Yazoo Bluffs region gunflints, presented in Table 17 of Appendix 2c, are of some interest. Following Blanchette (n.d.), gunflint length is the distance from the striking edge to the heel or, if double edged, from edge to edge. It is that part of the flint which runs parallel to the gun when mounted in the cock. Width is the distance from side to side,* while thickness is the distance between the highest points on the two faces. Figure 32 is a summary of the data presented in the Appendix. \bar{x} is the average, or mean, of each of the type measurements. The solid lines equal one standard deviation (s) to the left and right of the mean, while the dashed lines indicate the observed range of the specimens. As can be seen, length is rather variable. Spall Gunflints have the greatest length and Aboriginal the least, the various Blade Gunflint varieties falling somewhere in between. Apparently, the manufacturers of these flints had no established length measurement in mind, except in terms of a general range. The width, however, does appear to have been established with a set dimension in mind. Spalls were chipped off at a width averaging 2.99 cm and the flints from all three

* It should be noted that Hamilton and Fry (1975) considered length and width the reverse from what is presented in Blanchette's work and what is employed here.

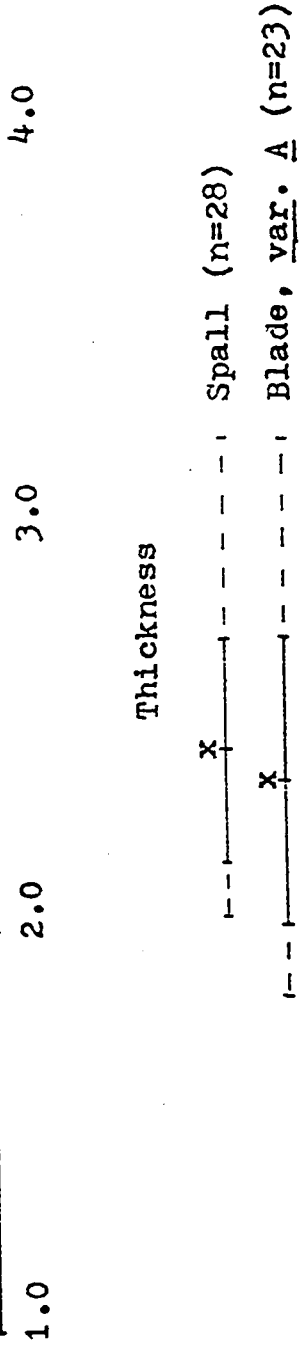
Length



Width



Thickness



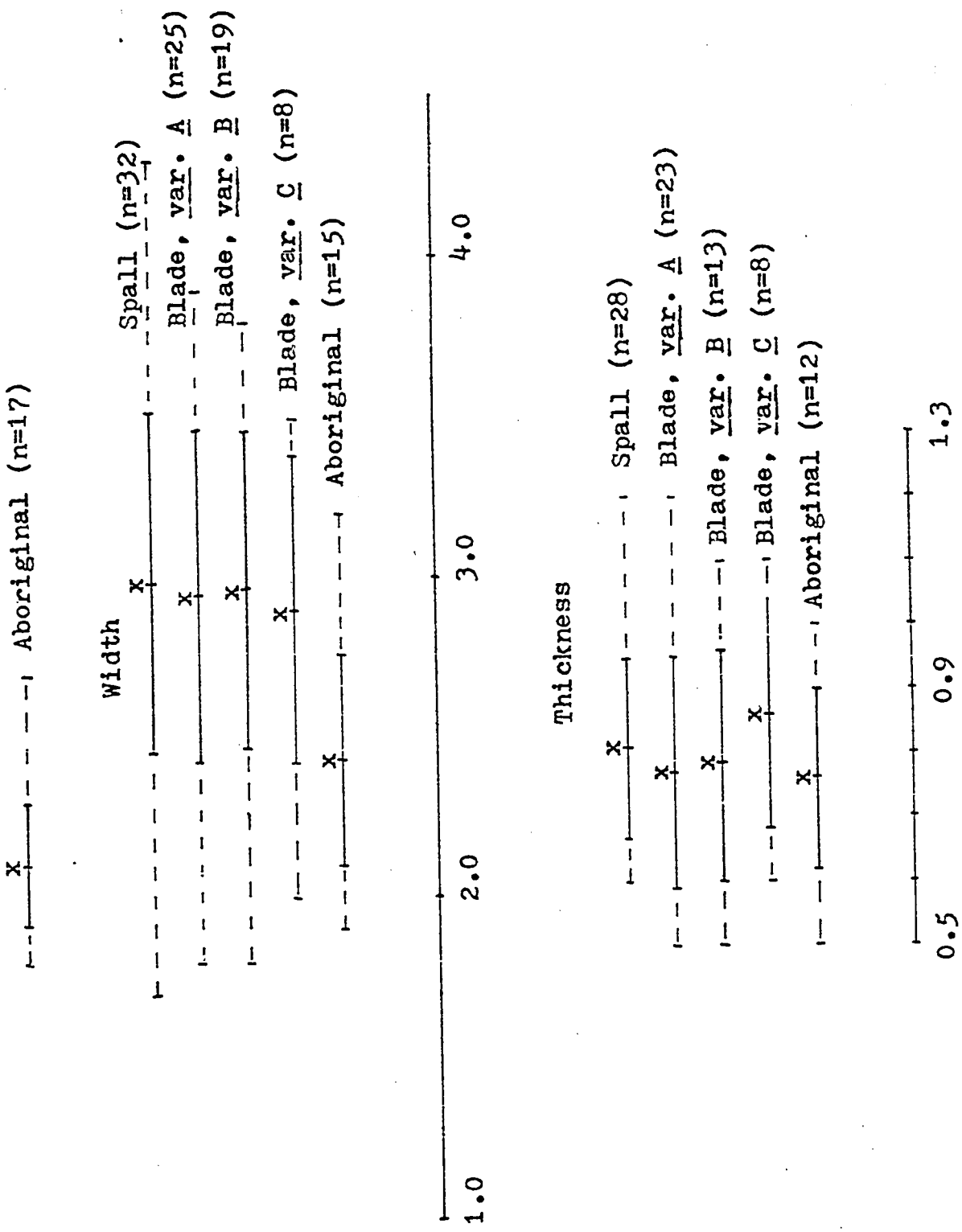


Figure 32

Measurements of the Gunflints from the Yazoo Bluffs Region

Blade varieties were snapped at remarkably close means ranging between 2.90 cm and 2.97 cm. From this sample one might postulate that gunflints made in Europe, no matter what type or variety, tend to have almost identical mean widths. Other sites, such as Fort Michilimackinac (Stone 1974) and Fortress Louisbourg (Hamilton and Fry 1975) do not conform quite as nicely to this pattern, however. The gunflints from the latter site tend to be, on the whole, larger than the jaws and frizzen widths of contemporary French firearms. The Spall and Blade Gunflints from the Yazoo Bluffs region are smaller than most of those from Fortress Louisbourg, and indeed are somewhat below the width (length in my report) specified in a 1740 gunflint contract (Ibid:125-217), but they conform exactly to the upper vise jaw and frizzen dimensions of firearm models dating between 1690 and 1730 (Ibid:123). The only gunflint width which varies from the 2.9 cm to 3.0 cm mean, is the Aboriginal type. It has a mean width (2.43 cm) which approaches its mean length (2.11 cm). Mean thickness in all of the gunflint types ranges between 0.7 cm and 0.9 cm. Anything larger would have been too heavy, and anything much thinner would result in a very fragile edge. Similarity in mean thickness is hence not as striking as the mean width parallels.

Gun Parts (Plates 102-109; Appendix 2c)

Guns were undoubtedly the most important items of the

Indian trade. In order to establish a fighting force of allied Indian groups, the French had to provide them with firearms. Between 1650 and 1750 an estimated 200,000 French trade guns were manufactured (Russell 1957:22-24). A considerable number of these were distributed in the Lower Mississippi Valley and parts to some were recovered in the Yazoo Bluffs region. Several were found associated with burials in the principal mound at Haynes Bluff (Brain 1975a), and a considerable assemblage of parts was found by a local pothunter in a burial at Wright's Bluff (Plates 19-30). A total of 59 pieces of firearm furniture was recovered in our excavations (Table 7). Most specimens are from St. Pierre, but Portland, Lockguard, and Wright's Bluff are also represented. Much of the furniture is characteristic of French trade guns (Hamilton 1968; 1976), but some from St. Pierre are, naturally, of military design. English gun furniture may also be represented at St. Pierre. Portland is the only Indian site which has a gun in evidence which is of higher quality than the typical French trade gun. There is hence the suggestion that finer quality firearms were traded in the "missionary" period. St. Pierre and Wright's Bluff have identical sideplates, suggesting the contemporaneity of the two sites.

Clothing Group

Buckles (Plate 111; Appendix 2c)

Table 7

Summary of the Gun Parts from the Ya

	Portland	St. Pierre	Lockg
Lock Plate			1
Musket Cocks		2	
Sears		2	
Sear Springs		1	
Tumbler Bridle		1	
Tumblers		2	2
Mainsprings		4	
Frizzenspring		1	
Trigger Assemblies		5	
Sideplates		1	
Trigguards		9	1
Buttplates	1	1	
Rampipes	2	3	
Breech Plug		1	
Barrels		1	
Barrel Bands and Swivels		2	
Lead Flint Patches		4	
Touchole Picks		3	
Screwdriver			
Total	3	43	

Table 7

Summary of the Gun Parts from the Yazoo Bluffs Region

	Portland	St. Pierre	Lockguard	Wrights Bluff
			1	
		2		
		2		
		1		1
lle		1		
		2	2	1
		4		
		1		
ag		5		2
semblies		1		1
		9	1	
is	1	1		2
	2	3		
		1		1
		1		
s and Swivels		2		
Patches		4		
cks		3		1
al	3	43	4	9

Buckles of all types are found on historic sites. Functions include shoe, spur, harness, baldric, hat, knee, and stock (Abbitt 1973; Calver and Bolton 1950:221-222; Grimm 1970:56-62; Klinger and Wilder 1967:20-22; Noël Hume 1969a:84-88; Peterson 1968:76, 230-231; Smith 1965:67,115). A few general works on colonial buckles have been written, but most scholars have concentrated on shoe buckles. Harness buckles, the most frequently found buckle form at St. Pierre, have received but minimal attention (but see Grimm 1970:56), no doubt because their form has remained so conservative through time. A total of 12 buckles were found in the Yazoo Bluffs excavations, all but one of which are from St. Pierre. The Portland specimen is of the Flanged or winged hook form, a type thought to be early at Fort Michilimackinac (Stone 1974:33). This buckles was probably from a knee, spur, or hat buckle. A single specimen from St. Pierre (Y593A) may have served as either a stock, belt, or knee buckle, but all the rest are harness buckles. These buckles should perhaps have been discussed under South's (1977:96) "Stable and Barn" Class. I decided to include them here here so that the reader would not have to search through the entire volume to find different buckle forms. The length of the harness buckles ranges from 2.5 cm to 9.3 cm, with an average of 4.88 cm. Width ranges from 2.1 cm to 4.4 cm, with an average of 3.04 cm.

Buttons (Appendix 2c)

A total of 30 buttons were found, all but one of which are from St. Pierre. Two are Civil War Eagle buttons, one is a silver-colored button cap, another is a brass or copper button cap, and four are iron discs, perhaps the center piece of cloth-covered buttons. The remaining buttons from St. Pierre, and a single specimen from Lockguard, are all of the same type. They are cast brass with wedge-shaped attachment handles, a button associated with post 1716 military uniforms (René Chartrand - personal communication). The occurrence of this type at Lockguard is partial proof of its contemporaneity with Fort St. Pierre. This button type is largely confined to the Gulf states and is believed to be the principal military button distributed by the Company of the Indies. Three size categories have been isolated - small (1.5 cm - 1.8 cm); medium (2.2 cm - 2.3 cm); and large (2.6 cm). The majority of the specimens fall within the small category.

Cufflinks (Plates 112 and 113; Appendix 2c)

Three cufflinks were found, all of which come from St. Pierre. One is merely a glass inset. Another is a crown piece bearing the profile of a man in its center, while a third is a crown with a central floral design.

Shoe Heels (Plate 114a-b; Appendix 2c)

At least two shoe or boot heels are represented at St. Pierre. When they were first excavated they were not recognized as clothing. The objects are malleable, like rubber, and the field crew, thinking they were recent, merely threw them into their respective collection bags. I too thought they were recent until one specimen was removed from feature 20. I got a better look at these objects in the lab and subsequently concluded they are actually burnt leather. The objects have neither been chemically cleaned nor rigorously examined, however. They must be subjected to further study before it is possible to attribute them to the French occupation of St. Pierre.

Fabric (Appendix 2c)

A narrow band of green fabric was discovered at St. Pierre. It has neither been cleaned nor studied.

Pins (Plate 115; Appendix 2c)

Two pins were found at St. Fierre.

Bale Seals (Plate 116; Appendix 2c)

Bale seals are small circular lead objects which were used

by the French to seal and identify the contents of packaged goods. Stone identified three basic kinds in his work at Fort Michilimackinac, almost all of which have stamped letters or numbers indicating either the manufacturer, country, or city of origin of the goods. Series A seals have two disks connected by a thin lead band. A knob occurs on one disk and a corresponding hole occurs in the other. To seal a package the seal is passed through a hole in the parcel binder and is then bent and joined, the knob fitting within the hole. The two disks are then pressed together, usually with a marked clamp. Another seal (Series B) consists of a single lead disk to which a narrow band is attached. The band is similarly pushed through a hole in the parcel and then joined to the disk. A third method (Series C) consists of passing wires through both the parcel and the lead disk (Stone 1974:281-297). The latter bale seal form is rare at Fort Michilimackinac, yet it is the only form represented in the Yazoo Bluffs region. A single bale seal was found at St. Pierre and it is stamped on both faces.

Clothing Ornaments - Tinklers (Plate 117; Appendix 2c)

Tinklers are small metal objects, generally cone-shaped. They are typically made of brass or copper, but iron and pewter examples have also appeared. To make these ornaments small isosceles trapezoidal or isosceles triangular sections are cut

from brass or copper kettles and then rolled into the shape of a cone. These are then attached to leather thongs and finally fastened to clothing. Such objects have also been called "bangles", "tinkling cones", and "jangers" (Cleland et al. 1971:27-82, fig. 21A; Good 1972:87, fig. 22g-h, k; fig. 23a, d-i, l-o; Grimm 1970:151, plate 31, No. 19; Jelks et al. 1966:91-92). Twelve tinklers were discovered in our excavations, all of which are from St. Pierre. Most of the specimens were found in the southern dry moat. Leather is often preserved within the archaeological specimens, because of copper salts. Two of the tinklers found at St. Pierre are still attached to each other. Charles Cleland described the method of attaching tinklers to clothing:

In most cases, after a piece of leather cordage was tied to the center of a small bundle of organic material, probably hair or vegetable fiber, the free end was passed through the wide end of the cone and out through the narrow terminal opening. The fiber bundle, pulled into the cone, became lodged in a doubled-over position, thus securing the leather cord. Occasionally a small piece of wood which was wedged into the cone further secured the fiber anchor. The cone was then suspended by the leather cord (Cleland 1971 :27).

The tinklers from St. Pierre range in length between 1.1 cm and 3.9 cm, with an average of 2.73 cm and a standard deviation of 0.78 cm.

Clothing Ornaments - Glass Beads (Plate 118; Appendix 2c)

A total of 298 glass beads were recovered from the Portland (87), St. Pierre (188), Lonely Frenchman (1), Lockguard (7), and Anglo (15) Sites. Glass beads were one of the most important items of the North American Indian trade. They are found on virtually every historic aboriginal site, and often in considerable numbers. Much has been written about bead technology and classification (Good 1972:92-129; Kidd and Kidd 1970; Murray 1964; Stone 1971; 1974:88-117; Sleen 1967). The system used in this volume is adopted directly from that used to classify the beads in the Tunica Treasure (Brain et al. n.d. b). Before discussing the classification, however, it may be of some use to quickly summarize glass beads technology.

There are two basic ways in which glass beads are made. The first manner is called the drawn or tube bead method. Drawn beads are formed by stretching a large hollow globule of glass. After cooling, the long filaments are either cut or snapped into small pieces. If round beads are desired, the small glass sections are reheated and tumbled in a mixture of ground charcoal and fine sand. Decoration is applied in several ways. One method is to add layers by dipping the globule into different batches of glass metal. To add stripes one places the globule in a pail lined with different colored glass rods. The globule, with the glass rods sticking to it, is then placed in the fire and subsequently stretched. The second technique of bead manufacture is called the wire or mandrel - wound method. This technique consists of wrapping a heated glass rod around a chalk-covered iron or copper rod. Each bead is then individually

manipulated (molded, faceted, etc.) until the desired shape is achieved. Different glass filaments are also applied as decoration.

Wire-wound and drawn beads are well represented in the Yazoo Bluffs region, particularly the latter. As stated above, this assemblage is analyzed according to Brain's classification of the beads in the "Tunica Treasure" (Brain et al. n.d. b). As the latter work is not yet published, the structure of the classification is presented here. All classes and associated types are described, but only those varieties which are represented in the Yazoo Bluffs sample are included. Similar to Kidd and Kidd's (1970) typology, Brain divides drawn beads into four classes. These classes are based on structure, structure being defined as to whether the beads are rounded or not and whether they are of simple, compound, complex, or composite construction. The latter terminology is taken directly from Stone (1974:88-89). Simple construction consists of one layer of glass. Compound is two or more layers. Complex beads have a simple construction with the addition of surface decoration, and composite beads have compound construction with surface decoration.

Brain divides wire-wound beads into three classes. Beads of the first class are of simple shape and construction, and are monochrome. The second class is similar, but the beads are modified in some way (faceting, pinching, etc.). Beads of the third class consist of more than one layer of glass. Also included in this last class are colored insets, incising, etc.

The breakdown of classes into types is based on whether the beads are monochrome or polychrome, their average shape, and any additional physical manipulation. Decorative elements are described according to shape, color, number, and size. Finally, varieties are set up according to differences in color, degree of opacity or translucency, and the color and form of decoration.

In describing the beads of each variety, Brain draws from several pre-existing classifications. Kidd and Kidd's (1970:66) criteria for bead diameter is applied - very small (under 0.2 cm), small (0.2 cm - 0.4 cm), medium (0.4 cm - 0.6 cm), large 0.6 cm - 1.0 cm), and very large (over 1.0 cm). In presenting the proportions of the beads, Sleen's (1967:32) classification is adopted - a standard bead is one in which the length and diameter are equal; a long bead is one in which the length is greater than the diameter; and a short bead consists of a diameter greater than the length. Finally, Stone (1974:89) is again referred to in classifying bead form as to being round, convex, convexo-elongate, ring, or doughnut-shaped.

The results of this classification are presented in Appendix 2c and summarized in Table 8. Most of the beads are from St. Pierre and Portland, and only at these two sites are the samples large enough to allow some statement on changing bead popularity. There is now ample evidence that Portland is considerably older than the historic component at the St. Pierre Site, and although it is not possible to say all the glass beads found at St. Pierre definitely relate to the French occupation, it is reasonable to assume that most of them do. With this assumption, some trends

Table 8

Summary of the Glass Beads from the Yazoo Bl

Drawn Beads	Portland	St. Pierre	Lonely	Frenchman	Lockguard
DIIA1	44	121		1	4
DIIA2		1			
DIIA4	1				
DIIA5		2			
DIIA6	16	16			
DIIA7	1	1			
DIIA8	6				
DIIA13	3				
DIIA15		12			
DIIA18		5			
Total	71	158		1	4
DIIB2	1				
DIIB15	2				
DIIB16	1				
Total	3				
DIVB1	1	19			
DIVB2		3			
DIVB3	2	5			
DIVB9	1				
DIVB10	1				
DIVB11	1				
DIVB12		1			
DIVB13		1			
Total	6	29			

Table 8

Summary of the Glass Beads from the Yazoo Bluffs Region

	and St. Pierre	Lonely	Frenchman	Lockguard	Wrights Bluff	Anglo	Total
	121	1		4		5	175
	1						1
	2						2
	16					1	32
	1					9	3
							15
							3
	12						12
	5						5
	158	1		4		15	249
							1
							2
							1
							3
							20
	19						3
	3						7
	5						1
							1
							1
	1						1
	1						1
							35
6	29						

Table 8 (Cont.)

Wire Wound Beads	Portland	St. Pierre	Lonely Frenchman	Lock
WIA5		1		
WIIA3	1			
WIIA4				
WIIA11	1			
WIIB2	3			
WIIB3	1			
WIIIA4	1			
WIIIA6				
Total	7	1		
Total Beads	87	188	1	

Table 8 (Cont.)

Portland	St. Pierre	Lonely Frenchman	Lockguard	Wrights Bluff	Anglo	Total
	1					1
1						1
			1			1
1			1			2
3						3
1						1
1						1
			1			1
7	1		3			11
87	188	1	7		15	298

can be observed. Overall, drawn glass beads far outnumber wire-wound beads at both Portland and St. Pierre. There is some evidence, however, that wire-wound specimens were more common at the turn of the 18th century than later as 8.05% of the Portland bead assemblage is wire-wound, whereas only .53% of the St. Pierre beads are made in this manner.* Drawn beads with rounded ends (DII) are the most common specimens at both sites, untumbled beads being totally absent in the Yazoo Bluffs region. Those of simple construction (DIIA) are, by far, most typical, constituting 81.61% of the assemblage at Portland and 84.04% at St. Pierre. There is no significant difference between these percentages, yet there does appear to be significant variation in some of the other drawn types and classes. Beads with but a single layer of glass and additional surface decoration (DIIB) may have been more popular at the turn of the century (Portland- 3.45%; St. Pierre - 0.00%), whereas beads with two layers of glass and additional surface decoration (DIVB) appear to have increased in popularity over the next three decades (Portland - 6.9%; St. Pierre - 15.45%). Beads made out of two layers of glass, but lacking surface decoration do not appear to have been introduced at all to the Yazoo Bluffs region.

An item of interest is a small clay bead found at St. Pierre

* Lockguard, believed to have been contemporary with St. Pierre, seems to be an exception to this trend, yet the discovery of but seven beads has little statistical significance.

(Plate 119). It is believed to be an aboriginal copy of a European trade bead. It is cone-shaped, has a flat irregularly circular base, and at least four facets on its top. Its maximum thickness is 1.8 cm. It has been drilled for a short distance on two opposing ends, the manufacturer having for some reason decided not to complete the bead, I believe this to be a copy of a wire-wound faceted trade bead, corresponding most closely to varieties WIIA3, WIIA4, and WIIAll in the Yazoo Bluffs collection.

Clothing Ornaments - Bells (Appendix 2c)

Bells are an important item in the North American Indian trade. All European nations at one time or another distributed this aspect of material culture. A good deal of literature is beginning to accumulate on the technology, origin, and aboriginal use of such bells (Brain 1975b; Brown 1977a;n.d. a-b; Jelks et al.1966:87-90). In the Southeast, the large cast brass bells appear to have largely derived from England. The lighter smaller sheet brass and sheet copper bells correlate in distribution most closely with the French trade sphere. Two principal varieties, believed to be of French origin, are Flushloop bells and Saturn bells. The former are small spherical bells made in three parts. Two bowl-like hemispheres are joined flush with an independent brass or copper loop emerging from the hole in the top of the upper hemisphere. There are two holes connected by a slit in

its base. The Saturn variety is very similar, yet instead of joining flush, the edges of the two hemispheres are flared and joined, a thin wide flange being the result. Both of these varieties are particularly common in 18th century contexts, but the Flushloop bell appears much earlier and the Saturn bell continues into the 19th century. The latter was made by Anglo-American industries during the 19th century. Through time there appears to have been a general reduction in the size of both Flushloop and Saturn bells (Brown 1977a;n.d. b). Only two small Flushloop bells were found in the Yazoo Bluffs region. Both of these are from Lockguard and they are so badly crushed that measurements cannot be taken.

Clothing Ornaments - Springs (Plate 90c; Appendix 2c)

Small sections of springs were traded and given to the Indians. Specific uses are described in Chapter 12. They were generally employed as clothing ornaments and in bodily adornment. Two iron springs were recovered in our excavations, one from St. Pierre and another from Lockguard.

Personal Group

Bracelets (Appendix 2c)

One bracelet was recovered from the Portland Site.

Coins (Plate 120; Appendix 2c)

Four copper coins were found at St. Pierre, a somewhat surprising discovery as historically coins are supposed to have been quite rare in early 18th century Louisiana (see pp. 152-153). With but a minor alteration in 1785, the value of French coinage remained the same from 1726 until the French Revolution. The basic unit of money was the livre (tournois or franc) and the equivalents were: 1 sous = 12 deniers (or 4 liards); 1 livre = 20 sous; 1 écu = 3 livres; and 1 louis = 24 livres. The English pound sterling was worth approximately 24 livres during the 18th century (Lough 1960:vi). Silver currency in Louisiana was always rather scarce. Most of it came from the Spanish, but it never lasted long in the colony. As soon as ships arrived from France, the Spanish coins were exchanged for merchandise and hence ended up in France. The home government did, however, make an attempt to establish small currency in the colony for purposes of exchange. In December of 1716, a royal edict provided for the coinage of 150,000 marcs (8 ounces) of copper money, in 12 and 6 denier pieces, to be used exclusively in the American colonies. This endeavor failed because of the inferior quality of copper received at the mints. A second attempt was made in 1721, at which time 150,000 marcs of copper money was to be processed at the following mints: Bordeaux (30,000), La

Rochelle (50,000), Nantes (40,000), and Rouen (30,000). Coins issued at La Rochelle in 1721 and 1722 are marked by the letter "H" and those made at Rouen are stamped "B". The royal edict stipulated that these coins were to circulate at fixed values: those of 20 marcs to the silver marc, at 18 deniers; those of 40 marcs, at 9 deniers; and those of 80 marcs, at 4 deniers. Bordeaux and Nantes failed to comply with the edict, while the other two mints made only the 9 denier pieces. This enterprise failed because of speculation in the colonies (Surrey 1916: 102-109; Zay 1892:48-54).

Copper money was so depreciated in New Orleans in 1723 that nobody wanted any, "They are considered as straw (M. de la Chaise 1723 in Rowland and Sanders 1929:307)." Some of these coins did arrive in the colony, however, and were used. A 1722 "Colonies Francoise" coin, stamped "H", was found in the King's Bastion at Louisbourg (S. Walker 1968:111;fig.11-13), and one minted in the same year was found at the Guebert Site. The latter coin has "H" or "L" stamped beneath the date (Good 1972: 135,plate 74). These coins have also been found at Site 1Ds53 in Dallas County, Alabama (Gay 1974:2), at the Bayou Goula Site (32-L-1) in Iberville Parish, Louisiana (Quimby 1957:137-138, fig.50), and at least a dozen such specimens have been found throughout the Yazoo Bluffs region by local collectors.

We hence expected to find "Colonies Francoise" coins in our excavations. "Hoped" may be a better term, because such finds at aboriginal sites would be a sure sign of contemporaneity with Fort St. Pierre. However, we did not even find these coins

at the fort. The only type recovered (5 specimens) bears the profile of a man donning a wig, and the words "LUDOVIGUS MAGNUM REX" ("LOUIS GREAT KING"), obviously Louis XIV. The other surface has a lion and a griffin. Located between these animals is a post, perhaps a tree. A bird hovers above this post, holding between its claws the carcass of an animal. Written around the edge are the words "LABOR ALITIS ACFE_T" ("GIVEN WINGED YEARS"). To my knowledge, this coin type has not been found on sites associated with the Louisiana colony. The closest parallel is a Louis XV coin, identified as a French écu, which was made into a pendant by the Indians of the Gilbert Site (Jelks et al. 1966:94, fig. 44g).

Crucifix Corporus (Appendix 2c)

A single crucifix corporus was found at the Portland Site. It would have originally been attached to a wooden cross.

Fire - Steels (Plate 90d-e; Appendix 2c)

Two fire-steels were found at St. Pierre. Gunflints or local chert flakes were struck against such objects to produce sparks.

Keys (Plate 94a-c; Appendix 2c)

Four keys were recovered at St. Pierre. They were used for opening door locks, padlocks, or hasp locks. All are fragmentary and it is questionable whether or not two specimens actually served this function.

Mirrors (Appendix 2c)

One fragment of mirror glass was found at St. Pierre.

Rings (Appendix 2c)

Two rings were found, one from Portland and another from Lockguard.

Miscellaneous Ornaments (Plate 121; Appendix 2c)

A tapered antler section from Portland and a carved, drilled, and polished black stone from St. Pierre (Plate 121) are the only two objects which fit this designation.

Slateboards (Plate 114d-e; Appendix 2c)

Three fragments of slateboards were found at St. Pierre.

All have scratches on their surface and some have lists of numbers. They were probably used to inventory goods coming into the fort.

Tobacco Pipe Group

White Clay Tobacco Pipes (Appendix 2c)

Tobacco pipes are probably the most tightly controlled historic archaeological materials. Various pipe attributes have been used to determine dates. Included are pipe stem bore diameters (Barber 1966; Hanson 1969; Harrington 1954; Maxwell and Binford 1961; Omwake 1965; Walker 1965), pipe bowl form (Alexander 1966; Oswald 1951; 1955), and decorative features, including manufacturers' marks (Atkinson 1962; 1965; Oswald 1955; 1960). All of these studies are useful in themselves, but the best results have been attained by using them together (Oswald 1975).

Although ubiquitous on historic European sites, white clay tobacco pipes are rarely found in aboriginal contexts. Very few have been found in Indian villages, camps, or burial sites (Quimby 1966:77). There are, of course, exceptions to this rule, a whole pipe found with an Indian burial at Childersburg (DeJarnette and Hansen 1960:49, pl.xc) being one, and Portland another. Four pipe stems were found at the latter site, all

but one of which were fashioned into beads. The situation is hence one of modifying a European artifact to serve an aboriginal function. Only one pipe fragment was found at Lonely Frenchman, but a total of 107 were discovered at St. Pierre. The latter assemblage is unquestionably Dutch in origin. The remaining aboriginal sites in the Yazoo Bluffs region failed to produce white clay tobacco pipes.

Activities Group

Construction Tools - Axes (Appendix 2c)

Axes were popular items in the French-Indian trade. Their value was dependent upon size. After the Fox War of 1715-1716, axes were included in a tabulation of material expenses. Small axes were valued at 3 livres each. Medium-sized ones were valued at 9 livres each, and large axes at 13 livres 10 sols (Quimby 1966:65-66).* There are two principal ways in which to manufacture historic axes. The first is to forge a thick iron strap over a wedge-shaped blade, the attachment loop and blade thus being separate elements (Ibid:71,fig.12). An axe of this form was found at St. Pierre. Another technique, called the "laminated method", consists of bending a strip of sheet iron

* See p. 311 for a discussion of French money.

around a form, doubling it back on itself and forging it, thus leaving a hafting eye (Jelks et al. 1966:25-26). This method characterizes two axes found at the Portland Site. Both techniques were used and traded by the French. Axes of each design often have stamped impressions consisting of either crosses or blossom shapes arranged in a round cartouche (Quimby 1966:71). The axes from the Yazoo Bluffs region lack these impressions.

Construction Tools - Chisels (Plate 122a; Appendix 2c)

A single chisel was found at St. Pierre.

Construction Tools - Files (Plates 122b and 123; Appendix 2c)

One file was found at St. Pierre.

Construction Tools - Wedges (Plate 124; Appendix 2c)

Two wedges were recovered in the St. Pierre excavations.

Toys - Jews Harps (Plate 90b; Appendix 2c)

One Jews Harp was found at St. Pierre.

Fishing Gear - Fishhooks (Appendix 2c)

Four fishhooks were recovered at St. Pierre.

Storage Items - Barrel Hoops

Seven barrel hoop sections were found at St. Pierre. Their heaviest distribution occurs in the Lead Shot Drop area, perhaps having once been a part of the water barrel which was used in the manufacture of lead shot. One of the specimens is in two parts, connected by a rivet.

Storage Items - Rivets (Plate 125a-f; Appendix 2c)

Thirty rivets were found at St. Pierre, primarily in the location of the blacksmithing operations (locale 2). They appear to have been made at the site out of wrought iron bars.

Miscellaneous Hardware - Bolts (Plate 125g-h; Appendix 2c)

Three bolts were found at St. Pierre and, as with rivets,

all are associated with the blacksmith area (Locale 2).

Miscellaneous Hardware - Nuts (Plate 125i-k; Appendix 2c)

Seven nuts found at St. Pierre are fairly evenly scattered throughout the excavations.

Miscellaneous Hardware - Chain Links (Appendix 2c)

Four fragments of chains were found at St. Pierre, two of which are individual links.

Miscellaneous Brass/Copper Artifacts (Plates 126 and 127; Appendix 2c)

A total of 23 objects of brass and copper, whose use is unknown, were found at Portland (2) and St. Pierre (21). Most artifacts are fragments of sheet brass/copper, but some may eventually be assigned function. Included in the latter (all from St. Pierre) are a cast brass hook (Plate 126a), a cast ornament which may be a buckling device (Plate 126b), a pen-cap like object, and a brass disk with a central perforation (Plate 126c). The use of the latter object at St. Pierre is not known, but it may have been an Indian hair or ear ornament. It

is quite similar to earlier circular shell gorgets and in some Indian sites such objects have been found associated with the skull region of burials. Its presence at St. Pierre may relate to an earlier aboriginal occupation of the site.

Miscellaneous Iron Artifacts (Plates 95d-g, 96e-g, 128, and 129
Appendix 2c)

A total of 47 miscellaneous iron objects were found at Portland (4), St. Pierre (41), and Lockguard (2). Twenty-five are blade fragments, all but one of which is from St. Pierre. Two hooks, two wedge-shaped objects, and five iron rings were also found at St. Pierre and two rings were recovered in the Lockguard excavations. Eleven artifacts, three from Portland and the remainder from St. Pierre, cannot be identified as to function.

Miscellaneous Lead Artifacts (Appendix 2c)

Two lead nodules of regular shape were found at St. Pierre. Their use is not known.

Summary

A summary of the historic European artifacts from sites

in the Yazoo Bluffs region is presented in Tables 9 and 10 and depicted visually in Figure 33. As I mentioned in the introduction to the artifact section, the materials are organized (with a few minor changes) according to the scheme set up by South (1977). I do not for a moment believe that all materials were used in the manner indicated by the various functional categories, especially as concerns the Indian sites, but the format does at least provide a means of comparing site assemblages. The ogive (cumulative frequency curve) depicted in Figure 33 must be regarded with caution. The abscissa (X axis) consists of nominal variates which have no ranking, and so the shape of the curves will change depending upon the arrangement of the functional groups. Although statisticians generally frown upon such use of ogives (Kerrich and Clarke 1967; Thomas 1971; 1976;49-52), the important thing to remember is that no matter how the groups are arranged the slope of the line between any two groups is that which must be examined, and all sites will be equally affected by any shuffling of the groups. With this in mind, let us examine the relationships depicted in Figure 33.

It takes no more than a quick glance at the graph to determine that the historic materials at Portland are quite different from those at St. Pierre, Lonely Frenchman and Lockguard.*

* Wright's Bluff and Anglo are not considered graphically, because they are burial rather than midden excavations.

Table 9

Summary of the Historic European Artifacts from the

	Portland	St. Pierre	Lonely Frenchman
Kitchen Group			
European Ceramics	2	443	1
Wine Bottles and Case Bottles	7	620	
Tumblers		10	
Spoons		1	
Knives	1	26	1
Whetstones		1	
Total	10	1101	2
Architectural Group			
Hand Wrought Nails	5	3479	18
Hinges		9	
Staples		30	
Locks		2	
Total	5	3561	18
Furniture Group			
Hasp Locks		2	
Furniture Hinges		1	
Handles		4	
Total		7	

Table 9

ry of the Historic European Artifacts from the Yazoo Bluffs Region

	Portland	St. Pierre	Lonely Frenchman	Lockguard	Wrights Bluff	Anglo
cs	2	443	1	9		
d Case Bottles	7	620		13		
		10				
		1				
	1	26	1		1	
		1				
	10	1101	2	22	1	
ap						
ills	5	3479	18	28	3	
		9				
		30				
		2				
	5	3561	18	28	3	
		2		1		
		1				
es		4				
		7		1		

Table 9 (Cont.)

	Portland	St. Pierre	Lonely Frenchman	Lock
Arms Group				
Ammunition	7	766		
Powder Flasks		2		
Gunflints and Debitage	13	128		
Gun Parts	3	43		
Total	23	939		
Clothing Group				
Buckles	1	11		
Buttons		29		
Cufflinks		3		
Shoe Heels		4		
Fabric		1		
Pins		2		
Bale Seals		1		
Clothing Ornaments				
Tinklers		12		
Beads	87	188		1
Bells		1		
Springs				
Total	88	252		1
Personal Group				
Bracelets	1			
Coins		5		
Crucifix Corpora	1			
Fire-Steels		2		
Keys		4		
Mirrors		1		
Misc. Ornaments	1	1		

Table 9 (Cont.)

	Portland	St. Pierre	Lonely Frenchman	Lockguard	Wrights Bluff	Anglo
	7	766		9	10	
		2				
Debitage	13	128		5	4	
	3	43		4	9	
	23	939		18	23	
	1	11				
		29		1		
		3				
		4				
		1				
		2				
		1				
ments		12				
	87	188	1	7		15
				2		
		1		1		
l	88	252	1	11		15
	1					
pora	1	5				
		2				
		4				
		1				
nts	1	1				

Table 9 (Cont.)

	Portland	St. Pierre	Lonely Frenchman	L
Rings	1			
Slateboards		3		
Total	4	16		
Tobacco Pipe Group				
White Clay Tobacco Pipes	4	107	1	
Activities Group				
Axes	1	1		
Chisels		1		
Files		1		
Wedges		2		
Toys - Jews Harps		1		
Fishing Gear		4		
Storage Items				
Barrel Hoops		7		
Rivets		30		
Misc. Hardware		14		
Total	1	61		
Overall Total	135	6044	22	

Table 9 (Cont.)

	Portland	St. Pierre	Lonely Frenchman	Lockguard	Wrights Bluff	Anglo
	1	3		1		
	4	16		1		
acco Pipes	4	107	1			
	1	1				
		1				
		1				
		2				
		1				
		4				
		7				
		30				
		14				
	1	61				
	135	6044	22	81	27	15

Table 10

Functional Group Percentage
of Historic Sites in the Yazoo Bluf

Group	Portland	St. Pierre	Lonely Frenchman	Lockgu
A Kitchen	7.41	18.22	9.09	27.1
B Architectural	3.70	58.92	81.82	34.5
C Furniture	0.00	0.12	0.00	1.2
D Arms	17.01	15.54	0.00	22.2
E Clothing	65.19	4.17	4.54	13.5
F Personal	2.96	0.26	0.00	1.2
G Tobacco	2.96	1.77	4.54	0.0
H Activities	0.74	1.01	0.00	0.0
Cumulative	99.97	100.01	99.99	99.9

Table 10
 Functional Group Percentages
 of Historic Sites in the Yazoo Bluffs Region

Portland	St. Pierre	Lonely Frenchman	Lockguard	Wrights Bluff	Anglo
7.41	18.22	9.09	27.16	3.70	0.00
3.70	58.92	81.82	34.56	11.11	0.00
0.00	0.12	0.00	1.23	0.00	0.00
17.01	15.54	0.00	22.22	85.19	0.00
65.19	4.17	4.54	13.58	0.00	100.00
2.96	0.26	0.00	1.23	0.00	0.00
2.96	1.77	4.54	0.00	0.00	0.00
0.74	1.01	0.00	0.00	0.00	0.00
99.97	100.01	99.99	99.98	100.00	100.00

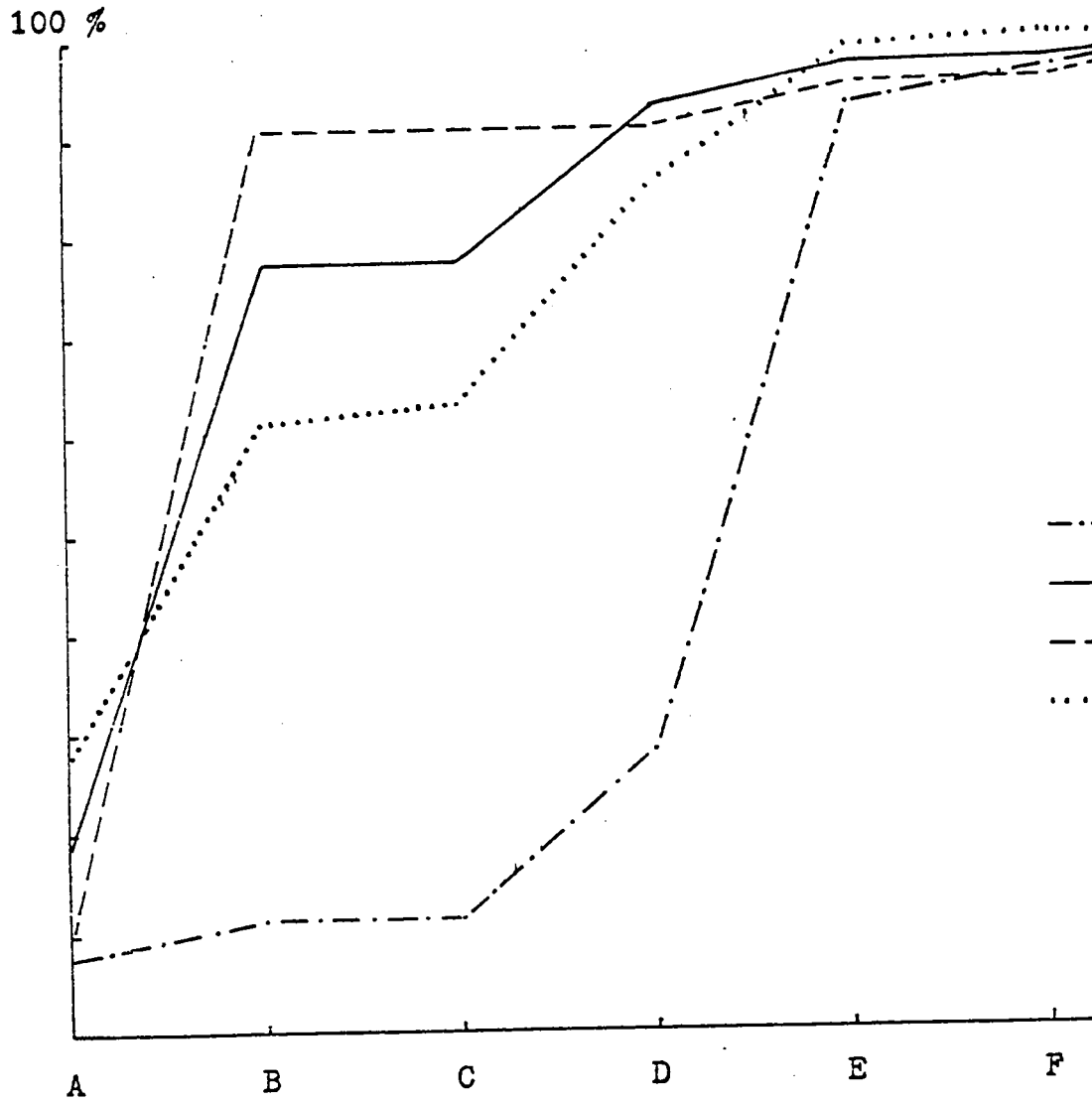


Figure 33
Cumulative Frequency Curve of Function

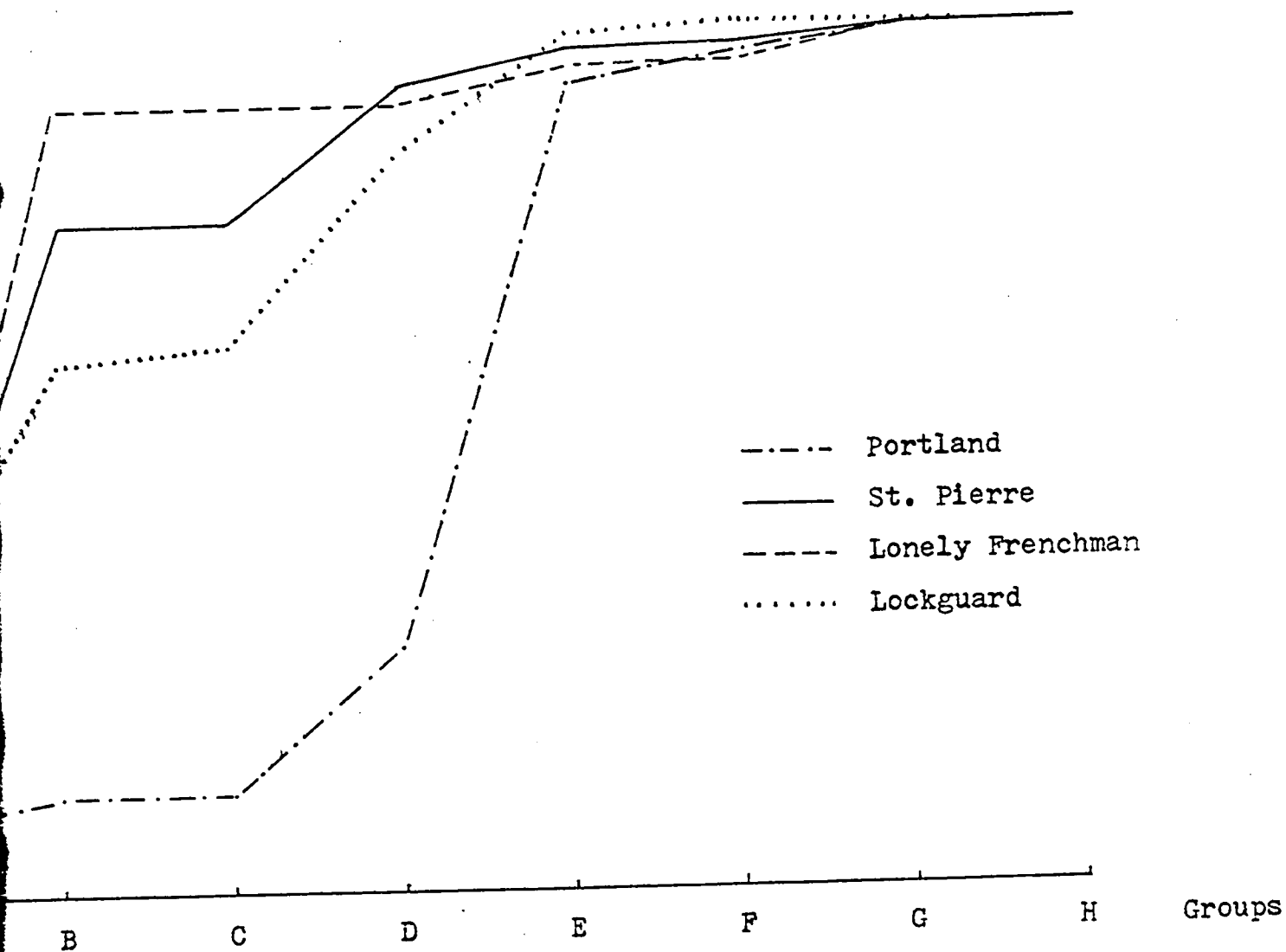


Figure 33

Cumulative Frequency Curve of Functional Groups

The separation is suggested in the Kitchen Group, but becomes readily apparent in the Architecture Group. St. Pierre, Lonely Frenchman, and Lockguard rise quickly as a result of the relative abundance of hand wrought nails. The Furniture Group has little effect on any group, but Portland, St. Pierre, and Lockguard all rise sharply with the Arms Group. It is at this point that Lockguard and Portland correlate nicely with what is expected as a result of the Indian trade. The heavy gun trade noted historically (see p. 434) should be apparent archaeologically in the relative importance of the Arms Group. St. Pierre is well represented in this category, undoubtedly because it was a fort. Lonely Frenchman perhaps better reveals the relative concentration of such material at a domestic site.

Neither St. Pierre nor Lonely Frenchman are considerably affected by the Clothing Group, but Lockguard and especially Portland are well represented in this category. The reason is obvious. Glass beads were principal items of the Indian trade and their relative abundance at both Portland and Lockguard result in similar curves. No site is particularly well represented in the remaining groups. St. Pierre and Lonely Frenchman do exhibit slight rises in the Tobacco Group, as a result of the presence of white clay tobacco pipes, but the Indian sites are not affected^{ed} at all. As stated earlier, European pipes are extremely rare on Indian sites. The specimens recovered at Portland were not even used for smoking, but rather were made into beads.

The historic materials at Portland thus follow a nice

predictable pattern of an early 18th century Indian site - high concentrations in the Arms and Clothing Groups and low in everything else. Lonely Frenchman and St. Pierre follow what in general might be expected for a contemporary local French site - high concentrations in the Kitchen and Architectural Groups and low in everything else. The added dimension of St. Pierre being high in Arms is no doubt related to its military function. Lockguard, however, presents a problem. It is close to a French pattern in having high Architectural and Kitchen percentages, yet shares parallels with the expected Indian pattern in having high Arms and Clothing representation.

It may be of some use to quickly examine once again why Lockguard is believed to be a late Indian site. First of all, historic Russell phase ceramics are the most common artifacts at this site. Furthermore, numerous historic records indicate Indian habitations were located in the immediate area of Lockguard at the time Fort St. Pierre was occupied. Further evidence is the presence of aboriginally-chipped gunflints. There is little doubt that the site is Indian, rather than French, and there is also little question that the occupation is considerably later than that represented by the trash pits at Portland. The ceramics at the two sites are quite different, Lockguard sharing much greater similarities with historic aboriginal ceramics found in association with St. Pierre. Evidence for contemporaneity with St. Pierre are certain red-painted ceramics (Fatherland Incised, var. Snyders Bluff and Old Town Red, var. St. Pierre) and a button having a wedge-shaped

attachment handle. This button type post-dates 1716 and is found in considerable numbers at St. Pierre.

If then it is granted that Lockguard is an Indian site occupied approximately two decades after Portland, the pattern depicted in Figure 33 starts to make sense. The increase in the Kitchen Group is almost entirely the result of European ceramics and wine bottles. With the exception of one tin-glazed earthenware (faience) sherd, all of the ceramics at Lockguard are lead-glazed earthenware. As indicated by differential scatter of materials at St. Pierre, there is ample evidence that faience was a status ceramic at the fort. Lead-glazed ceramics were, as expected, the utilitarian ware at St. Pierre. They appear to have maintained a fairly stable frequency throughout the fort's occupation, whereas faience seems to have decreased over the years as Indian wares increased. It is probable that local Indians sometimes received French utilitarian wares in trade. This increase in European wares at Lockguard, as compared to Portland, is no doubt an indication of changing material culture resulting from French contact. One lead-glazed sherd at Lockguard was even smeared with the same pink paint used to decorate their Indian pottery. It should be mentioned that the Trudeau Site (29-J-1), a Tunica Indian site located in the Angola Farm region, was occupied only a decade or so later than Lockguard, and yet over half of the ceramics recovered at this site are of European make. Glass bottles also far outnumbered aboriginal containers of this form (Brain et al. n.d. b).

The most marked change at Lockguard is the high percentage of Architecture - related artifacts, or rather, hand-wrought nails. All but five of the nails at Lockguard are complete specimens, and in most cases they are straight. This is rather a remarkable circumstance, especially when compared to St. Pierre where almost every other nail is badly bent. If the Indians at Lockguard were in the process of learning how to use these objects in construction, one would expect the nails to bear evidence of the trials of their education. But they do not. A similar situation was observed at Haynes Bluff (22-M-5). Excavating the late historic component on the top of Mound A, Jeffrey P. Brain recovered dozens of absolutely straight hand-wrought nails. They exhibit little corrosion, because they had been in a fire. At the time of this discovery, I remember wondering how the Indians could have been so careful in the use of such materials in construction. The findings at Lockguard once again raised this question. The problem lost some of its complexity, however, when I stopped assuming that the local Indians used these nails as the French would have used them. A search of the ethnohistoric records revealed that the Natchez employed iron nails in torturing their war prisoners. They would hold the nails in a fire until they were red hot and would then apply them to various parts of their victim's body (Swanton 1911:132). Although such a use cannot automatically be applied to the Yazoo Bluffs Indians, the archaeological evidence makes more sense when viewed in such a light.

In all, the historic cultural remains from the Yazoo Bluffs

region show a general pattern of French-Indian relations when examined according to functional categories, but at the same time, the actual aboriginal use of the objects being transmitted and the meanings they had to the Indians are not so clear. I believe it is possible to say, through archaeology alone, that during the "missionary" period the Indians of the Yazoo Bluffs region were primarily supplied with materials of the Arms and Clothing Groups. Similarly, I believe the archaeology reveals that during the "trader" period the local Indians received large quantities of Kitchen and Architectural Group materials in addition to the continued transmission of guns, beads, etc. But it is not possible, at present, to say anything about how the Indians were affected culturally and socially by the transmission of European merchandise by using only archaeological evidence. In order to begin to understand the cultural processes which occurred in the historic period we must examine the ethnohistoric record. Who was giving the materials to the Indians and how it was transmitted surely must have had a considerable effect on the direction of change in Indian culture.

Part IV - Sociocultural Change and Stability in the Yazoo
Bluffs Region

Introduction

In this section I will explain why an acculturation approach has been used for the study of sociocultural change in the Yazoo Bluffs region. As the focal point of this study is archaeology, a great deal of emphasis is placed on the stability and change of material culture. However, as has been stated repeatedly, there is considerable danger in arguing directly from material remains for evidence of sociocultural change. Karl Heider (1971) demonstrated, in his study of the Grand Valley Dani of New Guinea, that what is found in the ground often bears no relation at all to what is actually occurring in a people's behavior. Mary Douglas (1972) has also warned that although the organization of thought is imprinted on the physical landscape, if only the latter aspect is available for study, the interpretation of the actual pattern is virtually an insurmountable problem. We are fortunate enough in the Southeast to have an adequate (with considerable limitations) data bank of historic documents concerning French-Indian interaction which can be compared to independent archaeological information. The purpose in using these different sources of data is not merely to "put flesh on the bones" of each discipline, but to provide a more complete picture of French-Indian

interaction and to compare the interpretations drawn independently from each data source. Important to this thesis is the concept of sociocultural change. As Robert Bee (1974) has demonstrated, the interpretation of cultural processes in particular studies is directly related to the theoretical approach of the analysts. In determining the "best" way to examine changes in French-Indian behavior and values as a result of contact, I found it necessary to investigate how others have approached the general study of sociocultural change. The following chapter is a review of past approaches. Included are the strong points and weaknesses of each theoretical perspective, as well as the reasons as to why I have decided to accept certain aspects and reject others for each approach in this study of the Yazoo Bluffs region. Chapter 11 deals with the French agents of sociocultural change in Louisiana. Included is a close examination of the way explorers, administrators, traders, and missionaries interacted with the Indians. How the Indians of Louisiana in general, and the Yazoo Bluffs region in particular, were affected by these roles is the subject of Chapter 12. The use and meaning European objects had to the Indians is also examined in this chapter.

Chapter 10 - A review of Past and Present Contributions to the Study of Sociocultural Change

Early Evolutionary Theory and Historicist Reaction

About the time that Charles Darwin presented to the Western world his notion of biological evolution, others were starting to make major statements concerning general cultural evolution. Karl Marx and Friedrik Engels were two such individuals. They felt that materials were the determinant of other elements in human societies, and they spent most of their lives demonstrating the application of a materialist approach to an analysis of capitalism (Engels 1972; Marx 1965; 1970). In these works, Marx and Engels divided the evolution of human society into a series of stages. Their sequence starts with the tribal property form (small groups of people whose subsistence is based on hunting, fishing, herding, and later agriculture), and continues to either the oriental or the ancient form (communal and state property of antiquity), depending upon locality. These stages are succeeded by the Germanic form, which is later replaced by feudalism, and finally capitalism. They saw the future stages of socialism and communism as the epitome of cultural evolution. Their scheme was not new in its basic outline, but it was unique in the emphasis on the study of material conditions as a mechanism for understanding sociocultural change (Bee 1974:30-42).

Herbert Spencer, a contemporary of Marx and Engels, was also interested in materials in cultural evolution, but did not place as much emphasis on them:

For Spencer, the evolution of ideas derived from the evolution of material factors. He firmly believed in the ultimate morality of individualism and noted that it accompanied the evolution of the industrial society; but it was not a motivating influence in his scheme - man was not constantly pushing toward some final realization of his ideal state. This could come only after appropriate material conditions had been met.

(Bee 1974:48)

Spencer was very much influenced by developments in biological evolution (Spencer 1876-1896). He laid a great deal of stress on the relationship between the social system and its local environment. Cultural evolution was to him dependent upon a number of interrelated factors, including population increase, local food supply, and natural habitat (Carneiro 1967: 10). Particularly important to Spencer was Darwin's concept of natural selection. Spencer interpreted this concept as "survival of the fittest" and argued that societies best equipped to win conflicts are most suited for survival (Ibid:33). Survival is closely related to population increase which, in turn, is related to increase in the food supply. Using these assumptions, he conceived a model of cultural evolution whereby control and organization has to emerge in order to keep the increasing population as a functioning whole. The earliest stages are characterized by two systems, one for regulation (or control) and the other for providing members with food, commodities, etc.

The increasing complexity of these two systems eventually necessitates a third intermediate system which is responsible for the distribution of products (merchants, communication, roads, etc.). Military success, in combination with an adequate subsistence base, allows the continued growth of the population and, therefore, the entire system. The result is either the militant or industrial society, depending upon which basic system (control or sustenance) most characterizes group activities. Characteristic of militant societies is oppressive authoritarian control, whereas industrial societies are decentralized, have voluntary controls, and free institutions. To Spencer, 19th century England was the epitome of evolutionary progression, a somewhat different conclusion from that derived by Marx and Engels (Bee 1974:43-44,47).

Lewis H. Morgan and Edward B. Tylor were also heavily influenced by the "Social Darwinism"* which was at the base of Spencer's scheme. However, they were also attracted to Marx and Engel's material approach to cultural evolution. They each presented their own special brand of general, since called unilinear (Harris 1968:171-173), evolution. Bee (1974:223-224) noted that each new theoretical perspective on cultural processes builds upon its predecessors, but in many ways the theories of Morgan and Tylor were a reaction to current dogma.

* Victorian England and America being the highest stages of cultural evolution, the bearers of civilization being better and happier than those at lower stages of evolution (Tylor 1874, I:31)

Their major task was to combat the theological belief of degeneration, and they did so by championing the view of progression. The debate was over which view could best explain the radical differences observed between civilized and savage life. Morgan and Tylor set up an evolutionary scheme based on materials. Morgan divided the development into three major strata: Savagery, Barbarism, and Civilization, all but the latter being further subdivided. The presence of material items such as the bow and arrow, pottery, metallurgy, etc. form the basis of these divisions, but Morgan was well aware that the strata could have been constructed on the basis of social structural forms such as kinship, family, property management, and politics. He selected the materialist approach because he felt it provides a rough but sufficient indication of the social structural forms in each division (Morgan 1877:9-18). To explain the evolutionary processes, Morgan and Tylor had to account for why cultures develop along similar paths. The concept of "germ ideas" was developed, which merely assumes there is a general psychic unity among all mankind which serves as the basis for parallel developments in sociocultural phenomena (Ibid:255; Tylor 1874,I:6). Morgan and Tylor were both cognizant that diffusion has and does occur. Conclusions about whether evolution or diffusion occurred in certain situations were drawn on the basis of evidence as they saw fit to use it. Tylor was somewhat more cautious than Morgan in his interpretations (Ree 1974:48-66).

Although Morgan and Tylor hesitated in their conclusions

as to which specific instances were the result of evolution or diffusion, some of their later followers (e.g., Daniel Brinton and W. J. McGee) had no reservations in accepting evolution in accounting for all change (Ibid:68). The development of the "Boas school" of historicists was a reaction to this new generation of evolution advocates. In Franz Boas' initial works, it is apparent that he had no real qualms about the overall concept of evolution. The purpose in his early studies of mythology and folklore was to discover which traits were the result of diffusion in order to distinguish them from those due to evolution (Harris 1968:260). Boas was opposed to the concepts of "cultural parallelism", "biological reduction", and the universal standards of progress which were so vehemently supported by most late 19th century anthropologists. His attack was not so much aimed at evolution as it was at the unilinear evolutionary schemes supported by men such as Brinton and McGee (Ibid:293,5). Boas himself originally advocated many of the traditional evolutionary sequences, one in particular being the progression from maternal to paternal social organization. His field study among the Kwakiutl destroyed this conception in that the mixed kinship regulations observed by him resulted from a tribe at the paternal development stage borrowing maternal laws (Stocking 1971:209). To Boas, the main problem with evolutionists was that they construct classificatory schemes, with the institutions ranged from simple to complex, and assumed that the classification reflects history, the simpler being the older (Harris 1968:151).

What they failed to see, according to Boas, is that the cultural inventory of a people is almost entirely the cumulative result of diffusion. Practically every trait comes from another culture, some of them persisting longer and becoming molded to a greater degree into their new cultural context (Hatch 1973:57-58). He felt that man is essentially uninventive, but not necessarily uncreative. Man's creativity is expressed in the imaginative manipulation and reinterpretation of the borrowed elements (Stocking 1971:226). Boas was totally aware that not all similarities are the product of diffusion, as often found in widespread areas are traits which bear remarkable resemblances, yet have no possible historical connection. He felt these similarities result from convergent evolution, as opposed to parallel evolution, his article comparing the historical development of Navaho and Northwest Coast Indian clan formation being an example of this belief (Boas 1896 in 1940: 274).

The principal difference between the historicist and evolutionist approaches lay not so much in the methodology, as in the level of abstraction at which results were applied. Whereas the evolutionists were concerned with the formation of general laws, Boas and his students were concerned with descriptions of local developments (Boas 1896 in 1940:273-279; Boas 1897 in 1940; Stocking 1971:210). Diffusion postulated by evolutionists is on a global dimension, whereas Boas described it within a restricted geographical area, and only then if the transmission could be proven. The problem of diffusion versus

independent invention was not as troublesome an issue to historicists, because they remained open as to which of the two factors was operating in particular situations. They did not have to worry about diffusion contradicting general laws (like psychic unity), because they were not convinced general laws exist. Whereas the evolutionists felt psychic unity is the principal factor in sociocultural change, which in turn would be demonstrated in historical reconstruction, causal factors to the historicists are unique to cultures located in a circumscribed area and are so variable that they cannot be detected beforehand (Bee 1974:72-76).

Origin speculations and causal hypotheses were avoided by historicists because they believed cultures are too tied up in the occurrences of their past. Causes are far too complex and too cumulative as each culture, at any given time, is a precipitate of its history (earlier group choices), and its present people and environment (current choices) (Singer 1968). Alfred Kroeber felt that specific origins are delusions because, as there is always a predecessor, there is never a beginning. The tendencies of cultural phenomena, rather than the causes, may be found, but only by rigorous historical construction (Kroeber 1901). Boas was aware that the reconstruction of history is not the principal goal of the historicist. His ultimate goal, as with the evolutionist, was the discovery of general laws of cultural processes, but he felt the goal could be approached only through rigorous historical reconstruction. Boas was never sure the laws did indeed exist (Harris 1968:266-267).

Through years of research, the Diffusion Theory of the historicists became further refined. It became associated with such concepts as "culture area" (Sapir 1916 in 1949:425), "culture climax" (Kroeber 1939), "stimulus diffusion" (Kroeber 1940), and the "age-area method" (Kroeber 1923:302; Sapir 1916 in 1949; Wissler 1923; 1926), and became further clarified as distinctions were made between "organized" and "natural" diffusion (Wissler 1923:159), and between "primary" and "secondary" diffusion (Dixon 1928:106). Edward Sapir (1916 in 1949:414) observed several factors which affect the rate of diffusion. Traits spread more rapidly if they are not surrounded by secrecy or taboo; if they can easily be separated from a larger context; if they satisfy immediate needs or interests of the borrowers; and if the groups involved in the transmission are friendly and speak related languages.

Further refinements have come in recent years, including David Clarke's development of a flow chart to represent the mechanism of diffusion (Clarke 1968:chap.3), but even with all these improvements in Diffusion Theory, a number of problems remain. The trouble with this approach, a problem which also characterized the work of the earlier evolutionists, is that the practitioners merely paid lip service to the holistic concept of culture. Their focus was on traits and, although they were able to expertly trace the development of these traits through space and time, they seldom ever demonstrated how the diffused traits were modified and reinterpreted by each culture to fit into its previously existing values and beliefs (Bee 1974:81-84).

As Claude Levi-Strauss (1967b) remarked, it is not only important to know if diffusion occurred, but how men who did not possess a certain institution went about acquiring it. Related to this is Karl Heider's (1971:393) observation that many traits possessed by Dani groups near the Grand Valley Dani of New Guinea were not picked up by the latter, even though the physical environment and technological capacity of the various groups are identical. Diffusion Theory (and for that matter, cultural ecology) fails to explain why, in instances such as these, traits often do not spread into perfectly adequate cultural and physical environments.

Functionalism

Functionalism was developed (although not conceived - see Hays 1968:320) by Bronislaw Malinowski and A. R. Radcliffe-Brown in the third decade of the 20th century. Its development was in large part a reaction to the current historicist approach of the "Boas school", just as the latter was a reaction to 19th century cultural evolutionary theories. The basic assumption behind functionalism is that each society is a functional unity, with all of its component parts operating in a harmonious manner in order to maintain its existence and continuity. Under this assumption, each society can be studied on a single time plane (Singer 1968). Functionalists have generally tended to focus their studies on social rather than cultural aspects of human

life. The various social institutions, their structure, and their various interrelationships, take precedence over the values, beliefs, or artifacts of the specific group under study. The opposition to 19th century evolutionists and 20th century historicists essentially revolved around the condemnation of conjectural history. Malinowski (1944:73-131) was adamantly opposed to the use of history in all but antiquarian anthropology, although he often employed it in his own analyses (Gluckman 1949:5). Radcliffe-Brown objected to conjectural history, not because it is history, but because it is conjectural (1952:50). He felt that functionalism and history (i.e., a detailed account of how a trait came to be what it is and where it is) do not conflict, but rather supplement one another (1935).

It is important to remember however that history is and must be involved in all functional approaches dealing with change (Bee 1974:141). In functionalism, group life is assumed to be a social system, and change in the system of interrelated components may or may not occur when one of the components is modified. Functionalists have examined change by holding the system still long enough to determine how the parts mesh in the whole system. There are two ways to approach this study - "Static" or "Dynamic" functionalism. Static functionalism assumes as an ideal, that the components of a system are in equilibrium, and that they all play a role in the harmonious operation of the system. This view of course does not allow much freedom for a consideration of change, because change in such a framework of study is regarded as either trivial (so

miniscule that the system remains unscathed) or tragic (the harmony of the entire system is disrupted) (Moore 1963). Dynamic functionalism provides more leeway for understanding change in social systems. It assumes that a system may be in relative equilibrium, yet at the same time there are always intrasystemic tensions or strains which create dysfunction in the entire system. Anthropologists who have used this approach (Geertz 1957; Vogt 1960) examine the ways in which the components mesh harmoniously as well as the ways in which they do not fit together, as the dysfunctional elements may lead to a change in the total system (Bee 1974:134-137).

The problem with the functionalist approach overall, one which is readily seen in Godfrey and Monica Wilson's (1945) study of the effects of industrialization in Central Africa, is that the field of study is generally seen as a single system in which the parts do not mesh well, rather than as a situation of contact between two separate cultural systems. Hence, functionalism does not appear to be a useful approach for studying French-Indian interaction and sociocultural change in colonial Louisiana.

Neo-evolutionary Theory and Cultural Ecology

Leslie White's theory of cultural evolution was derived from the views of the late 19th century evolutionists. The strong emphasis on materials and technology he drew directly from Marx

and Morgan, but he differed from the earlier evolutionists by stressing universal, rather than unilinear, evolution. White was concerned with the totality of culture, rather than specific cultures at specific times, but he did not always make his level of analysis clear. Thus, he readily admitted that not all cultures go through the particular stages he outlined. The stages are set up on the basis of cultural development, which in turn is directly related to the degree of technology and amount of energy, the latter being of most importance (Bee 1974: 122-126),

Culture advances as the amount of energy harnessed per capita per year increases, or as the efficiency or economy of the means of controlling energy is increased, or both.

(White 1959:56)

This "law of cultural development" is expressed by the formula, $EXT=P$ where E is energy, T is technology, and P is the cultural product (White 1949:chap.13). White looked at culture in the form of a big triangle. Energy is at its base supporting technology, which in turn supports social systems, which is the base for philosophy or ideological systems. Each of the systems are molded by those located directly below it. White's stages of (r)evolution are reminiscent of Morgan's Savagery, Barbarism, and Civilization. After an initial energy burst (agricultural revolution), culture also develops. The development eventually reaches a plateau as the tools necessary for advancement cannot be improved. Another burst of energy (fuel revolution) is required for further cultural progression.

The "fuel revolution" is finally superceded by another burst of energy (atomic revolution), but White offered no prediction as to where the latter will lead (White 1949:chp.13).

White severely deemphasized the role of the natural environment in the development of culture. However, under pressure from later contributions in cultural ecology (e.g., Steward 1955), he conceded to the point of including it as a minor factor in the left side of his formula: $EXTX(V)=P$, where V is environment (White 1959:chap.2). White's main contribution, although explained more eloquently by his students (Sahlins and Service 1960), was the distinction between "evolutionary process" and "historical process" (Bee 1974:127-130). He was cognizant that the latter would equate with the former (general universal laws) only in those instances when the particular culture in question is totally independent of other cultural systems. (White 1959:30), a rare situation and one certainly not applicable to this study of French-Indian interaction. What White was saying cannot really be thought of as false, but it is of little use if it does not say anything about specific cases. My study is not concerned with the formulation of general laws of cultural processes and so White's approach will concern us no further.

At the same time White was examining the global ramifications of cultural evolution, Julian Steward was trying to make evolutionary theory more applicable to, and understandable in terms of, specific cultures. Steward's work (1936; 1937; 1938; 1955) was in many ways a fusion of the earlier historicist

approach with new developments, much of which he pioneered, in cultural evolution. Like White, he emphasized material factors but, similar to the "Boas school", he followed a relatively narrow scope in his studies, confining interpretations largely to local scenes rather than sweeping global generalizations. The distinction in his approach from all predecessors was the emphasis on local environmental factors. Steward's emphasis on man-habitat relationships in the study of cultural process was a quite radical departure from the earlier historical perspective. Boas and his students were aware of the affect of environment upon peoples, but felt that no two cultures would ever respond in an identical manner to the same environment (Boas 1911:163; 1930 in 1940:241-242; Hays 1968:262). To the historicist, the importance of studying environment is to understand its limiting and modifying factors (Boas 1936 in 1940:306). However, they felt that these factors are often quite broad and allow for a great deal of variation, not to mention that people often tend to do things in spite of, rather than because of, their environment (Boas 1910:381-382; 1911:162; Harris 1968:266). Thus, the physical environment was of little concern to their study of cultural institutions (Hatch 1973:266), diffusion being a much more important factor.

Steward was aware of the role of diffusion, but felt that it plays a secondary role, the physical environment being of much greater importance in the parallel developments that are observed in different cultures (Steward 1955:209). An example used to show this is Steward's analysis of potlatch among several

Athabaskan Indian groups. The Carrier Indians, a western branch of the Athabaskans whose main subsistence was salmon, picked up the potlatch system from Indian cultures along the Northwest Coast. Other Athabaskans, east of the continental divide, also picked up the potlatch system, but after a very short time abandoned it. The reason for the eventual rejection is that the latter group's main subsistence was caribou, a food staple which, unlike salmon, could not produce a surplus (a necessary factor for the successful operation of the potlatch). Steward stressed that the environment was the principal factor in the eastern Athabaskan rejection of the potlatch system, a reaction which (according to Steward) could not be explained by Diffusion Theory (Steward 1955:chapter 10).*

As a result of Steward's work in compiling the Handbook of South American Indians (1946-1950), he discovered that a great deal of similarities between cultures could be attributed to the relationships they have with their physical environment. Two concepts created by Steward are "culture core" and "multilineal evolution". "Culture core" is defined as:

...the constellation of features which are most closely related to subsistence activities and economic arrangements. The core includes such social, political, and religious patterns as are empirically connected with these arrangements (Steward 1955:37).

Steward felt that the key features of both the habitat and

* In defense of Boas, I believe he would interpret the above situation as a perfect example of the limiting capacity of the environment, as opposed to its creative nature.

the culture core are to be empirically determined by the analyst in each particular case study. He approached the problem of documenting change process so as to allow evolutionary conclusions, rather than local cultural histories, by employing an inductive strategy within an ecological framework. A sequence of changes in similar culture cores, all of which are situated in similar local habitats, is compared to determine whether or not there are any developments which can be posed as evolutionary (Bee 1974:163). He demonstrated this approach in his study of small horticultural villages in semiarid climates which progressed through almost identical sociocultural stages (Steward 1955:178-209). The similar developments were evidence to him of "multilinear evolution." In this, cross-cultural studies are dealt with to see if some aspects of the various cultures follow evolutionary patterns and to determine the reasons which make these elements follow analagous developments. The similar adaptations of man to his environment do not necessarily occur because the environments are similar, but because the people's attitude toward their environment is the same in each area (e.g., identical subsistence problems). As stated above, this multilinear evolutionary approach differs from White's universal evolution in that it can be applied to individual cultures.

White was often criticized because he failed to clarify the level of analysis to which he was referring in some of his sweeping statements on cultural evolution. Several of his students, trying to clear up their mentor's statements and at the

same time take advantage of recent developments in cultural ecology from Steward, made significant contributions to our understanding of cultural processes through evolutionary theory. Marshall D. Sahlins and Elman R. Service presented a number of noteworthy concepts in their volume, Evolution and Culture (1960). The distinction between "specific" and "general" evolution is of fundamental importance, because the difference between these two quite different levels of analysis is something White was never able to explain (Bee 1974:145-146). "Specific evolution" refers to the historical events of a particular culture. Improvement is relative to the adaptive problem, and advance and divergence can characterize its development (Sahlins 1960). This is what White referred to as "historical process" (Bee 1974:128). White's "evolutionary process" is called "general evolution" in Sahlins' scheme. No specific culture can apply to this level of analysis. Rather, there is a global cultural progression from less to greater energy exploitation, all-round adaptability, and levels of integration. There are no "ups" and "downs" in general evolution, but always "ups". Sahlins exemplified the difference between these concepts in a discussion of feudalism. Feudalism was a specific evolutionary stage in the history of western civilization, but the general evolutionary sequence proceeded from China/Sumer to Roman to Modern Civilization (Sahlins 1960).

Several major contributions of Elman Service to cultural evolutionary theory are the "Law of Cultural Dominance" and

the "Law of Evolutionary Potential". The former merely states that a cultural system which most affectively exploits an environment will tend to spread there at the expense of less effective systems. An example is the often cited deevolution of subsistence systems on the Great Plains from one of agriculture to one of buffalo hunting by means of the horse. The latter form of subsistence procurement replaced agriculture in this area because it more effectively exploited the environment (Service 1960 a).

The "Law of Evolutionary Potential" states that the more specialized a particular culture is at a given evolutionary stage, the smaller is its potential for advancing to the next stage. Included under the law are the corollaries, "Phylogenetic Discontinuity of Progress" (an advanced form will not normally give rise to the next stage of advance)*, and "Local Discontinuity of Progress" (if successive stages of progress are not likely to lead from one culture to its next descendent, then the advances will most likely not occur in the same locality) (Service 1960b).

The above laws and corollaries are closely associated with biological evolutionary phenomena. Service saw "specific evolution" as analagous to a species increasingly adapting to its evironment. It eventually will become non-progressive,

* This law is closely related to the innovative potential of a people: "...innovative potential is usually quite high in situations of disaster among groups who feel themselves to be rejected, devalued, or humiliated by other groups in the same sociocultural system (Bee 1974:180)."

evolution continuing only because new forms come into being which are not highly specialized (Service 1960b ; see also Goldschmidt 1959:137). Sahlins agreed with Service and added that cultures which become over-specialized will lose their potential to accept alternate responses and/or tolerate changes in the world. These are conservative cultures which mold the environment around their structures, rather than modifying their structures when confronted by environmental changes. New economic opportunities are allowed to slip by in order to preserve the old social regime. He felt that advanced cultures usually do generate further advance, but that the advances are made along the ethnic borders rather than in the developed centers. The classic example of this hypothesis is the barbarian invasion of Rome (Sahlins 1964).

A major contribution of the new cultural ecologists is that, in addition to the natural features of the habitat, the relations between cultures and the history of the cultures are taken into consideration in the search for evolutionary patterns (Sahlins 1960 ; Wolf 1964). As stated earlier, the "closed-system" ecology, created by Steward, has an anti-diffusionist bias. Other cultures are not treated as important components in each other's environment. There is a tendency to examine only "core" traits that pertain to structure (adaptive features), while "non-core" traits, such as art styles, are ignored. The "open-system" ecology, presently in vogue, argues that all traits are part and parcel of culture and must be dealt with. This approach assumes that a cultural system is

an adaptation to the total environment of natural elements and other cultures. The "whole" cannot be reconstructed from any one single part. Nor can the traits be separated into "core" and "non-core". Every aspect of culture which can be reconstructed must be. In addition to subsistence and economics, modern cultural ecologists examine trade, communication, political organization, warfare, population movements, religious beliefs, settlement patterns, etc. They are cognizant that an entire cultural system can never be totally reconstructed, but by the "open-system" approach they are coming much closer to their goal of understanding cultural processes (Trigger 1970).

Various anthropologists have proposed evolutionary sequences, concentrating on one or more of the various sociocultural systems and trying to draw the rest of the systems around it. For example, Morton Fried (1967) dealt with political institutions and devised a scheme leading from "Egalitarian Societies", to "Rank Societies", to "Stratified Societies", and to "The State". Elman Service concentrated on social organization and constructed a sequence starting from the "Band" level of integration and leading through "Tribes" to "Chiefdoms" (1962). He later presented the evolutionary stages of "Egalitarian Society", "Hierarchical Society", and "Archaic Civilization or Classical Empire" (1971). Robert Bellah (1964) traced the development of religious evolution through the "Primitive", "Archaic", "Historic", "Early Modern", and "Modern" stages, and many more evolutionary sequences, reminiscent of Morgan's "Savagery", "Barbarism", and "Civilization" are bound

to appear in the future. Criteria which all neo-evolutionists seem to have agreed upon is that an increase in both population density and technological productivity are necessary prerequisites for advancement to higher stages, but, as yet, each analyst has failed (or neglected) to explain the increases themselves. This is a major problem which has not progressed much beyond that provided by the 19th century evolutionists (Bee 1974:161-162).

My study of French-Indian interaction and sociocultural change in the Yazoo Bluffs region does not follow any of the above evolutionary approaches to the study of cultural processes. The neo-evolutionary methods lack the particularism of the historicists, the emphasis being more on the similarities and trends through extended temporal periods. The time period for this research is much too short for an evolutionary study, but besides this, even though the "open-system" ecology has attempted to improve the cultural ecological approach, there still remains a relative deemphasis of the diffusion process in neo-evolutionary theory. With the exception of a few works (e.g., Geertz 1963; Service 1971:10-11), there has been a major emphasis on system-natural habitat relation without seriously taking intercultural dominance into account (Bee 1974:163-169). The emphasis on environment is not appropriate for examining sociocultural change in the Yazoo Bluffs region as the physical environment is identical for all of the groups being considered, and, from what can be discerned from the historical accounts, the manner in which the various groups envisioned their

environment (food, shelter, etc.) was very similar, if not identical. The differences in the two culture contact situations in the Yazoo Bluffs region ("Missionary period"/"Trader period") appears to have been of greater importance as to how and why change occurred in the various sociocultural systems.

Acculturation and Other Approaches to Culture Contact Situations

As discussed earlier, the historicist approach has concentrated on the contact situation as a stimulus for sociocultural change, an emphasis which is not shared by their evolutionary predecessors or the later cultural ecologists. The problem with the historicist approach, however, is that the practitioners were primarily interested in the actual traits transmitted between cultures and the times at which they were transmitted. With but few exceptions (e.g., Spier 1921), they were concerned little with how the transmitted traits fit into the pre-existing cultural systems of the recipients. The acculturation approach to the study of sociocultural change has the latter as its principal concern (Bee 1974:25). Boas defined acculturation in 1920, long before it became an established anthropological concept. He saw it as being the process by which foreign elements are remodeled according to the patterns prevalent in their new environment. Boas interpreted the neglect of these studies as being due to the

difficulties encountered in following up inner developments as compared to tracing trait movements (Boas 1920 in 1940: 284-285). Acculturation was later defined as culture change which is initiated by the conjunction of two or more autonomous cultural systems. In this definition, an autonomous cultural system is one which has mutually adjusted and interdependent parts and which requires no other system for continued functioning. In other words, it is self-sustaining (SSRC 1954: 974). Recently, Bee defined the acculturation approach as one in which:

...the dynamics of change were to be sought in the modifications within cultures resulting from contact with alien lifeways (Bee 1974:96).

The emphasis in acculturation on the culture contact situation, and the interest in what occurs after contact is made, makes this theoretical perspective an obvious selection for the study of French-Indian interaction and sociocultural change in the Yazoo Bluffs region. However, as noted by Bee (Ibid:224), no approach can be labeled exclusively as "acculturational", "ecological", or "evolutionary", as all of these have a high degree of overlap in the manner in which they are used.

Acculturation studies began en mass in the late 1920's/early 1930's with the works of Bronislaw Malinowski (1929), Ralph Beals (1932), Margaret Mead (1932), and R. C. Thurnwald (1932), culminating in the "Memorandum for the Study of

Acculturation" in 1936 (Redfield et al.) and the "Social Science Research Council Summer Seminar on Acculturation" seventeen years later (SSRC 1954). The scholars who participated in the latter seminar provided a framework in which to study sociocultural change, using the acculturation approach. There are four principal facets of acculturation which require investigation in any particular study. They are: 1) a characterization of the properties of two or more cultural systems which came into contact; 2) a study of the "Contact Situation"; 3) an analysis of the "Conjunctive Relations" established between the cultural systems when they came into contact; and 4) a study of the "Cultural Processes" which occurred as a result of the conjunction of the systems (Ibid: 975). In regard to the first consideration, members of the seminar saw three variable properties of cultural systems that appear to effect the course of acculturation. Included are the boundary-maintaining mechanisms which are found in "closed" as opposed to "open" systems; the relative "rigidity" or "flexibility" of the internal structure of the cultural systems; and the nature and functioning of self-correcting mechanisms in the cultural systems. Their conclusions were that a cultural system least susceptible to acculturation is one which has many boundary-maintaining mechanisms, a rigid internal structure, and self-correcting mechanisms which function smoothly,* while one most susceptible to acculturation has few

* It was also noted that cultural systems of this nature can

or no boundary-maintaining mechanisms, a flexible internal structure, and is in a state of disequilibrium* (Ibid:975-977).

The second condition to be studied is the "Contact Situation". This consists of such criteria as the ecological and demographic characteristics of the sociophysical environment. An example of the effect of the ecological situation was given in the analysis of Western European contact with Australian aborigines. There was little acculturation in this instance because the dominant cultural system had little to add to subsiding in this particular environment. In other instances, where such things as Western technology can contribute to subsistence improvement, the rate of acculturation will probably increase. The authors thus encouraged analyzing the main types of possible relationship to resources at each pertinent technological level. Demographic conditions could also effect the acculturation rate. For example, if the sex of the dominant member in the contact situation is always male, the rate of acculturation among the recipients will probably differ over sexual lines. Similarly, Western civilization, as presented through male members, would have a smaller theoretical effect on a population with matrilineal exogamous clans than on one with

completely disintegrate under certain conditions of extreme acculturation pressure.

- * It is also possible that a cultural system of this sort may "ingest" a great quantity of alien cultural material and yet still preserve many of the pre-existing patterns and beliefs.

a patrilineal kinship system (Spoehr 1947; SSRC 1954:979:980).

The third phenomena to study in culture contact situations are the "Conjunctive Relations" (see Fortes 1936; Honigmann 1952). This is a very important concern in my study of French-Indian interaction, and one which will be dealt with in greater detail in the following chapter. Included in the study of conjunctive relations are "Intercultural Roles" and "Intercultural Communication". According to the participants of the SSRC Seminar (1954), cultures never meet. Individuals, the carriers of culture, do meet and it is through the stimuli of their contact that acculturation occurs. These individuals know only a portion of their entire culture and that which they share with a member of the other autonomous cultural system is conditioned primarily by the reasons for making contact. Thus, an analyst has to examine the roles of the individuals who came into contact in order to understand the changes which occurred in the respective cultural systems. "Intercultural Communication" is directly related to the form of the "Intercultural Role" network. Communication transmission lines between the two cultures results from the individuals making contact, but the channeling of the communication can be specific or diffuse, depending upon whether the cross-cultural message applies to all or just certain members of a receiving group. Who the message is going through (e.g., a headman, as opposed to an ordinary group member) would greatly affect the transmission of the message and consequently its acculturative force (SSRC 1954:981-984).

The last factor to be studied, by far the principal concern of the acculturationists, are the "Cultural Processes". The authors were aware that all autonomous cultural systems are constantly changing, but felt that external change resulting from contact, "stimulates change more adventitiously, more generally, and more rapidly than do internal forces (Ibid:984)."

However, the form and rate of acculturation depends on what happens internally in the cultural system after the contact is made. Included under "Cultural Processes" are the concepts of "Intercultural Transmission" and "Cultural Creativity". The former is merely a substitute for "diffusion". This concept is the main contribution of the historicists to the acculturation approach of studying sociocultural change, but the focus has shifted to studying the transmission of new traits within a given culture. The diffusion of traits from one culture to another is seen as only one of several major foci in the acculturation approach:

What the acculturation analysts have been cutting out for examination are not traits such as moccasin styles or arrow-release techniques or girls' puberty ceremonies but larger, more inclusive segments now called "systems" within a cultural system, or patterns: economic systems, kinship systems, residence patterns, religious systems, value systems, leadership patterns. And processes of change are no longer hunted down in studies of trait distribution in space or time by acculturation analysts but in studies of how some or all of these patterns or systems have been altered by contact with alien cultures. In the acculturation approach, change mechanisms are the reactions of systems or patterns to external stimuli. To be sure, diffusion is also a process or mechanism, but it is not change itself; it is the means by which new stimuli are introduced into pre-existing systems or patterns (Bee 1974:114-115).

The seminar participant saw two principal factors operating on the diffusion of traits, the first being that the pre-existing values and patterns of the receiving culture function as selective screens (some elements will be enthusiastically accepted, while others will be firmly rejected), and the second is that the transmitted elements undergo transformations in the recipient cultural system (and perhaps also in the intercultural network while in the process of being transmitted).*

These transformations are also probably intimately related to the value systems of receptor cultures. These value systems may be conceptualized as operating with gyroscope-like qualities; that is, the cultural elaborations of the system are kept going in certain "directions" and the cultural materials ingested appear to fall into place within the pre-existing framework (SSRC 1954:985; see also "Drift" as defined by Sapir 1921, and "Cultural Drift" in Herskovits 1966:204-208).

"Cultural Creativity" refers to the advantageous effects of acculturation, the relation which occurs as a result of not forcing introduced elements upon a recipient cultural system. Forced acculturation does not permit selection and reinterpretation, and so is usually accompanied by the elimination of

* Related to these factors are Herskovits' concepts of "Cultural Focus" and "Reinterpretation". Herskovits noted the tendency of every culture to have a focus, some aspects which are of great complexity and variation. As the people of a given culture are constantly concerned (consciously or unconsciously) with their "Cultural Focus" new introduced ideas, related to that focus, meet little resistance. Those phases of life which are taken for granted tend to be more resistant to change. "Reinterpretation" is the process by which new elements are

certain institutions and sometimes disintegration of the entire cultural system:

Provided the shock of contact is not too unsettling, it may be assumed that a system operating under its own controls is able to absorb alien materials just as it adjusts to internal changes under the force of its own adaptive mechanisms (SSRC 1954:986).

In situations where a culture is allowed to select, a number of different acculturation developments may ensue. Along the "continuum of culture" between subordinate and dominant, the former could become either totally "assimilated", whereby it becomes completely assimilated and has full and free access to the same opportunities as the dominant peoples (Broom and Shevky 1952), or a third culture develops which is aligned somewhere between the two systems. The latter situation is called "Cultural Fusion." The cultural system which develops must exhibit the attributes of uniqueness and autonomy possessed by the parent systems (SSRC 1954:987). Ralph Linton saw "cultural fusion" as analagous to chemical fusion:

Due to the modification of borrowed elements and the adjustment of other parts of each culture to them, the product of culture fusion resembles a chemical rather than a mathematical mixture. The resulting culture will not be a simple aggregate of elements all of which can be traced to one or the other of the parent cultures, but a new thing many of whose patterns cannot be directly referred to either (Linton 1940:491).

given old meanings or, conversely, new meanings are given to old forms. (Herskovits 1966:chapter 11)

The transformation of the transmitted elements are particularly important to the development of cultural fusion. Borrowed forms are not simply accepted along with the associated or demonstrated meanings. Rather, they are invested with a combination of meanings from the old replaced forms with meanings from the new, the old meanings usually predominating. The modified innovations often have a culture content quite different from that which was originally intended. Edward Spicer used the example of the Jesuits introduction of religious forms to the Yaquis Indians to demonstrate the process of "cultural fusion". In general, there was a fusion of new forms with both new and old meanings. Not only was the entire religious system affected, but so also were the political, economic, and kinship systems of the Yaquis (Spicer 1958:434).

The participants of the Social Science Research Council included "assimilation" and cultural fusion" under the more inclusive concept, "Progressive Adjustment". A number of alternative developments may also occur under non-forced acculturation. One alternative is "stabilized pluralism". This is seen as either arrested fusion or incomplete assimilation, as the two cultures in contact fail to completely lose their autonomy (Bruner 1953; Gillin 1945; Linton 1940:510-511; SSRC 1954:990). Another term used to describe the affects of culture contact is "amalgamation". This refers to the capacity of a cultural system to absorb traits, the pre-existing systems changing little from the introductions (Ellis 1954:678). Another situation which occurs is "compartmentalization". This

process, "may be described as analagous to [Linton's] mechanical action in which two elements are combined without losing their separate identities (Barker 1958:453)." Whereas the blending of aboriginal and Spanish elements among the Yaquis is seen as "cultural fusion", the interaction between the Spanish and Pueblo Indians was more one of "compartmentalization" (Spicer 1954:665). The amount of material borrowing has little to do with the resulting degree of acculturation, the form depending more on the nature of the contact situation. Spicer demonstrated that even when there are very similar recipient cultural systems to begin with (Yaquis and Pueblo), the shifts in orientation are more related to the conditions, rather than the intensity, of contact. The Spanish Franciscan missionaries among the Eastern Pueblos used a great deal of force and suppression of native rituals. Rather than disappearing, these rituals went into hiding, and still exist in relatively "pure" Indian form to the present - "Compartmentalization" occurred.* The Spanish Jesuits, on the other hand, in dealing with the Cahita groups (Mayo and Yaquis), broke down their settlement patterns and hence reorganized the spatial organization of these

* Spicer defined "compartmentalization" in this situation as "the tendency of all the Eastern Pueblos to accept from the Spanish certain traits and trait complexes which remained peripheral to their major cultural interests and to resist traits which would have altered the main orientations of their culture, and we are referring to the ultimate result of Spanish contact as a native culture added to and modified in limited ways but not changed in fundamental structure (Spicer 1954:665)" (See Barker 1958 and Redfield 1941:chap.IV for other examples of compartmentalization).

Indians. They did not suppress native rituals during this fluid period, but rather, offered substitutions for them. The Cahita groups were allowed to rework forms and there was subsequently a persistence of old meanings for the substitutions - "Cultural fusion" occurred.*

The various forms of "Progressive Adjustment" have been considered by some (e.g., Ellis 1954:678) to merely be one process of integration operating at different rates of change. Others (e.g., Barker 1958:453; Dozier 1954:680-684) felt these forms represent distinct processes of sociocultural change, any of which could occur depending upon the acculturative conditions. It is also possible, under less than overwhelming conditions, that "Reactive Adaptation" could occur (SSRC 1954:987). Bee (1974:106-107) saw this as a variant of the "compartmentalization" process. It differs in that the emphasis in "Reactive Adaptation" is more on trying to maintain the coherence of a declining pre-existing system than on keeping foreign elements at arm's length. If acculturative pressure is felt to be uncomfortably heavy to the recipients, they might grasp on to some aspect of their traditional culture (e.g., ritual), hoping that a reversal of the acculturative trend will

* Spicer described "fusion" in this situation: "Among these people many traits in all aspects of culture were accepted and modified to greater or lesser extent in form and/or meaning, to result in complexes which often appear to be new and not clearly assignable to either Spanish or Indian sources (Spicer 1954:665)."

occur. In a situation of "Reactive Adaptation", "nativistic movements" may occur. These are characterized by a strong emphasis on the elimination of alien customs, values, and/or material (Linton 1943). Fred Voget discussed three types of "nativism". "Dynamic nativism" is basically that which has been described by Linton (1940:1943), the subordinated groups having a feeling of deprivation and frustration which eventually precipitates hostility. "Passive nativism" refers to passive resistance to the beliefs and values imposed upon the subordinate group by the dominant society. Acculturative effects are retarded in "nativism" of this sort, but the process is not a creative one. The third type, which Voget felt is characteristic of the American Indian, stands intermediate to the "dynamic" and "passive" forms. This is called "reformative nativism" and is characterized by a conscious attempt of a subordinate group to attain a personal and social reintegration by selective rejection, modification, and synthesis of both traditional and alien cultural components. "Reformative nativistic" movements, as represented by the Iroquois Gaiwio (or "Great Message"), Peyotism in the Plains, and Shakerism in the Pacific Northwest, are stable, enduring developments. They are a fulfillment of long term needs, yet, through time, membership is lost. Eventually the creative force of the movement is spent and the lingering members withdraw from public contact and envelop themselves in a shroud of secrecy (Voget 1956).

Anthony Wallace included "nativistic movements" under the

general category "revitalization movements". These he described "as deliberate, conscious, organized efforts of members of a society to create a more satisfying culture (1956:265)." A number of other movements resulting from culture contact situations are also included in this category: "revivalistic movements", best seen in the rapid spread of the Ghost Dance Religion (Mooney 1892-1893), emphasize the reestablishment of old customs and values thought to have been held by previous generations, but no longer in existence; "cargo cults", as in the Vailala Madness, emphasize the importation of alien values, customs, and material into a culture, these traits being expected to arrive as a ship's cargo (Williams 1923; 1934); "vitalistic movements", closely related to "cargo cults" but without ship or cargo, are characterized by members consciously attempting to incorporate related aspects of an alien culture in contact with it (Smith 1954); and "millenarian" (Worsley 1957) or "messianic movements" (Wallis 1918; 1943) which are usually, although not always, characterized by a "hero" ("messiah", "prophet", etc.) who emerges with a new religion, one in which the superhuman powers will enable the subordinates to drive the dominant group from their country and subsequently teach the natives the arts and sciences of the Europeans (Burridge 1969;1975). All of the above movements differ from the classic processes of sociocultural change (i.e. evolution, drift, diffusion, historical change, acculturation etc.) in that change is not a gradual chain-reaction effect, but is rapid and drastic.

Wallace described the world-wide structural characteristics of "revitalization movements". Important in his analysis is the concept of the "mazeway". He defined this as a person's mental image of the society and its culture, as well as of his own body and its behavioral regularities, so that he is able to act in ways which reduce stress in the regularity of patterned behavior (Wallace 1956:266 ; see also Hallowell 1954). In a situation of heavy dominance, an individual is under constant stress which is not reduced by his "mazeway". He either chooses to tolerate the stress or changes the mazeway in order to reduce it. "Changing the mazeway involves changing the total Gestalt of his image of self, society, and culture, of nature of body, and of ways of action (Wallace 1956:267)." The "mazeway" of a mature individual tends to change only insofar as is necessary to attenuate new or different sources of stress. It may then be necessary to change the "real" system to bring about congruence between an individual's "Mazeway" and "reality". This can be done with the collaboration of other individuals who have had a similar "mazeway" change. No two "mazeways" are identical among members of the same sociocultural system. The system works because there is a measure of predictability to public behavior (Bee 1974:183). When the "mazeway" of other individuals in the same sociocultural system are aligned, a "revitalization movement" occurs. Only the leader, and perhaps a few of his followers, undergo a complete "mazeway" resynthesis. The multitude of followers can easily revert to the pre-existing "mazeway" if stimuli for the movement terminates.

Hence, revolutionary leaders have the tendency to continually remind the rank and file that the stresses which gave rise to the movement are still in existence (Bee 1974:185-186; Wallace 1961:154-155). These movements proceed from a 1) steady state; to a 2) period of increased individual stress; to a 3) period of cultural distortion; to a 4) period of revitalization; and finally, to 5) the establishment of a new steady state (Wallace 1956:268-271).

The particular type of "revitalization movement" which occurs depends upon the degree of domination. Wallace saw the native-white relationship in North America as having been one of "revival" whereas relations in Melanesia were of "importation" (i.e., "cargo cult"). The American Indians were:

...less dominated, as individuals, by whites, even under defeat and injustice. Their response to this different situation has by and large been an identification with a happier past. This would suggest that an important variable in choice of identification is the degree of domination exerted by a foreign society, and that import-oriented revitalization movements will not develop until an extremely high degree of domination is reached (Wallace 1956:276).

"Revivalistic movements", or for that matter, any form of "revitalization movement", has not been observed historically in the Lower Mississippi Valley. True, major upheavals occurred in 1729 with the uprising of the Natchez and Yazoo Indian populations, but these were not deliberate conscious activities designed to bring about sociocultural change. The natives of the Lower Mississippi Valley never got beyond period 3 in Wallace's structure of the "revitalization movement". They never

entered the "period of revitalization".

This process of deterioration can, if not checked, lead to the death of the society. Population may fall even to the point of extinction as a result of increasing death rates and decreasing birth rates; the society may be defeated in war, invaded, its population dispersed and its customs suppressed; factional disputes may nibble away areas and segments of the population. But these dire events are not infrequently forestalled, or at least postponed, by a revitalization movement (Wallace 1956:270).

Virtual extinction of the Lower Valley groups occurred before "revitalization" could take place. Such movements are thus not applicable to French-Indian interaction in the Yazoo Bluffs region.

One thing which is apparent from studies of "revitalization movements" is the tremendous effect individuals can have on the rate and direction of sociocultural change. To understand processes we have to look more closely at the structure of the "cultural transmission" and at what types of people were participating in the contact situation. We cannot understand the acculturative effect of diffused traits (including materials) upon a population, or determine what would be accepted or rejected until we have investigated the structure of the contact situation (Spicer 1954:675-676). For information concerning how materials, beliefs, and values were transmitted between the French and Indians of the Yazoo Bluffs region we must examine both the role and status of the individuals who came in contact and the result of this contact on the two cultural systems.* Edward

* Linton (1936) defined role as being the dynamic aspect

Spicer's theme in his article, "Social Structure and the Acculturation Process", seems appropriate enough to quote in full:

...the social structure of contact situations is an important determinant of the cultural change which goes on when two societies with differing cultures come into contact. This proposition is certainly not new or revolutionary, but it often seems neglected. If it is taken seriously, it does not permit one to advocate such generalizations as, for example, that under contact conditions material culture changes more readily than other aspects of culture, that core values (whatever they may be) are the most resistant elements to change, or even that traits from one culture which are incompatible with traits in another are resisted by participants in the latter. It promotes abandonment of this type of generalization simply because it requires any general statement about sequences of change in acculturation to include some reference to the structure of cultural transmission. It directs attention to the nature of the social relations through which contact is maintained and suggests that they have a determinable influence on the character of the innovations offered, on the acceptance and diffusion of these, and on the modifications of the innovations which take place. The view implied is not that social structure is the major determinant. It is rather that no instance of acculturation can be adequately described so long as the social structure of contacts is omitted, and hence that no change sequence can be explained without some consideration of the nature of the social structure (Spicer 1958: 433).

In the discussion on "Conjunctive Relations" (see p. 359)

the participants of the Seminar on Acculturation argued that cultural traits are not passed between whole cultures, but

of status, while status is the static aspect of role. Rights and duties exist for role, whereas status is merely a position in society. This definition will be followed here.

through individuals representing different aspects of their cultural system. Lewis Binford has repeatedly stressed that culture is not necessarily shared; rather, it is participated in by men. People, things and places are just components of a cultural system (Binford 1965:205). Similarly, Alfred Schutz has demonstrated that an individual knows only a portion of the totality of his respective culture (1962), and those traits (both material and non-material) which are passed to an individual of another cultural system depend on the role and status of the contacting individuals. In the particular situation of contact, the two individuals must exhibit complementary behavior if the result of the contact is to be beneficial to both parties (SSRC 1954:981). What occurs in the minds and behavior of the participants in this instance is a very complicated process, one which is far from understood, and one which can only briefly be mentioned here. It is first necessary to consider what happens in general social interaction, a subject to which George H. Mead devoted a lifetime. Mead felt that social structure is not based on shared human values, but rather is founded upon individual and joint acts.*

* I find Schutz's definition of "act" to fit very closely the manner in which Mead used the term. To Schutz "act" is closely related to "conduct", which is defined as subjectively meaningful experiences. "Conduct" can be reduce to "overt conduct" (mere doing) and "covert conduct" (mere thinking). "Action" is "conduct" (either "overt" or "covert") which is devised in advance, and "performance" is "action" which is put into effect. Any "overt action" is a "performance", while an example of "covert action" is the solving of a mathematical puzzle. The latter action is revocable as it

These acts are dependent upon the meaning attributed to objects, the objects themselves having meaning only insofar as people behave toward them. Mead was concerned with symbolic social integration. When one individual meets another he interprets and defines (not merely responds directly, as this is non-symbolic) another's gestures and acts on the basis of his interpretation. Joint action is collective action and results from fitting together the lines of behavior of the participants. Each individual identifies the social act and, at the same time, also interprets each other's acts in forming the joint act. Mead's view of society was hence not one of an established structure, but a formation dependent upon human actions. It is a diversified social process in which people are engaged in forming joint actions to deal with situations confronting them. Mead was aware, however, that men are social and do have some common values or else people would never come together in the first place (Blumer 1966).

Having examined social interaction between members of the same cultural system, we can now examine the interaction between individuals of two different cultural systems. It is important to remember that behind each act made by the two individuals, there is a complex of beliefs and attitudes. These

changes nothing in the outer world. "Overt action" is not revocable. "Action" is always based on a preconceived project and it is this project which makes both the "acting" and the "act" meaningful (Schutz 1962).

are not necessarily (and usually are not) the same, but there are mutually understood expectations founded upon reciprocal rights and obligations. The performance of an act by one of the contacting individuals evokes a supporting response from the other, and the acts are conditioned by the reasons for making the contact:

...particular roles demand specific purposes and entail specific expectations. In the expansion of western European culture, the roles of the administrator, the entrepreneur and the missionary have established a stereotype in accordance with the principal incentives activating the expansion. Important subsidiary roles in this movement have been those of the educator and the physician. At the same time, going along with this master plan for contact, there have been innumerable subordinate or incidental projections of occidental culture as its representatives have individually varied in background, capacity, and purpose (SSRC 1954:981).

One thing which also requires investigation, in all forms of social interaction, are the "motives" of the participants. C. Wright Mills defined motive as one in which to the actor and to the other members of a situation is an unquestioned answer to functions concerning social and lingual conduct. Motives are social implements. The individual verbalizes motives, observes reaction, and changes his verbalized motives accordingly. The process is one of influencing others (Mills 1940). Motives are very difficult to perceive. Dennis Wrong (1961) has shown how interpretations of motives for man's behavior is often tainted by the times at which the interpretations are made. For example, in order to get away from the Hobbesian view of man, the security-seeker, and the Machiavellian view of the self-

preserving man, modern-day sociology has incorporated the Freudian view of the guilt-ridden man if he does not heed societal norms. Similarly, Karl Polanyi (1947) demonstrated the fallacy of economic motives governing man's actions, an interpretation arrived at by 19th century philosophers living under a market economy. Not only do motives vary in both content and character in different historical epochs and over different cultural systems, but to understand any intercultural transmission we must also be aware that the real motives are not always the same as the verbalized ones. A donor may not intend that the inter-cultural message be accepted at its face value meaning. He may wish to conceal its real significance. Mills (1940) outlined the difficulty in determining real motives from verbal acts, as the acts greatly depend upon time and context, but he felt that it is possible to determine the real motives by studying the motives actually and usually verbalized by actors in specific situations. The next chapter in this volume is devoted to the examination of specific roles and statuses of the individuals in the contact situation, the intention being to shed light on what the individuals were trying to do, the techniques used in satisfying their motives, and the natives' reaction to the contact. I am of course dealing with historical accounts in this investigation. Malinowski (1965) pointed out the limitations of searching for meaning in sentences in written form, as these are divorced from the context of other sentences, gestures, facial expressions, etc. I am aware of the limitations, but hope, as Kroeber so often stated (1943) in

1952:89) that pattern (and hopefully "truth") will emerge from a rigorous persual of the data at hand.

An important component of intercultural communication is hence the range of presented fact and how it relates to the ulterior motives of the donor, but another extremely important component is the cross-cultural interpretation of the presented fact. In the culture contact situation it is the perceptual organization of the receptor rather than the evaluation of the donor which determines the acculturative affect of the traits which are passed (SSRC 1954:984-984). What is happening in the mind of the individual receiver, what he does with the trait, and how he convinces other members of his cultural system of its worth are of tremendous importance to understanding sociocultural change. Homer Barnett referred to this entire process as "innovation". Two assumptions underlying the innovation process are 1) material and non-material traits are not discrete inflexible wholes, but can be subdivided into attributes of form, meaning, function, and operating principle, any of which can be modified by recipient peoples: and 2) the processes of incorporation and modification occur in the minds of individuals (Barnett 1942: 1953). Change to Barnett consists of changes in ideas (not material items), and multi-individual ideas are susceptible to the same principles as idiosyncratic ones. The emergence of new ideas (whether internally or externally derived) allows sociocultural change to take place, but whether it actually does take place depends on the acceptance of the novelties by the group. It is individuals who change their

habits of doing and believing under the influence of alien forms, but only societies are acculturated (Bee 1974:173-174; SSRC 1954:975).

The analyst of sociocultural change following the innovation approach concentrates on how the new ideas emerge in individuals. New ideas can come from without or within a society and, as stated, initially comes from a single individual. For an individual to create an innovation, he must be able to assign some sort of meaning to it. It must have significance for him and it must possess some advantage which he does not enjoy previous to accepting it. If these conditions are not met, the innovation will probably be rejected. Once the individual accepts the innovation, he must convince others of its worth in order for sociocultural change to take place. Acceptance usually depends upon how and by whom the novelty is being advanced to the rest of the group. Members of elite status do not always make good advocates as they may be the objects of hatred, rather than of emulation, by potential acceptors. It is also possible the elites may fear a loss of status if they endorse the changes in the sociocultural system (Barnett 1953: 404; Bee 1974:181). In order for others to accept the innovation, the potential acceptors must once again assign meaning to the innovation. They first analyze the novelty in terms of their own relevant pre-existing configurations. The components of the new are then matched or identified with those of the old and, according to the acceptors' criteria of evaluation, the decisions are made as to whether or not substitute the new

configuration for the previous one. It is important to remember however that the novelty for the innovator is not the same as that for the acceptors, as the mental configurations of the people are never identical. The acceptors even add to the novelty of the innovator's "new" idea (Barnett 1953:chaps. XII-XIV; 1964; Bee 1974:176-177).

Barnett's scheme is a reasonable approximation of the source of sociocultural change, but because the study of living individuals is fundamental to the innovation approach, an analyst is apt to be in danger if he tries to employ it in studying change in the distant past. However, in this study of French-Indian interaction, it may not even be of much utility to concentrate on innovation. Robert Bee has mentioned the serious limitations of this approach:

Innovation, strictly speaking, is not behavior; it is a mental process that may or may not lead to behavior (Bee 1974:196).

...the concepts describe what must take place, but they often cannot reveal how in fact the processes do (or did) take place in a specific instance. They depend on sociocultural, biological, and natural environmental factors for their specific qualities. This larger context is so important that, without extraordinary detailed data, a general knowledge of how innovation and maze-way resynthesis operate is helpful but virtually incidental to processual analysis of a given sociocultural change (Ibid:187).

After all, innovation is not sociocultural change; it is a source of change whose inner workings, in the absence of data of unusual detail, can only be assumed. It is, in fact, rather difficult for the analyst to get his teeth into the innovation process itself, accept, when data permit, to be able to reconstruct what pre-existing configurations were combined to produce innovation "X". Barnett told us how new ideas originate, and did it in a convincing manner, I think. But the crucial consideration for

sociocultural change seems less the process of innovation than factors affecting its nature, rate, and eventual acceptance of its products by the group. To understand these factors, described by Barnett in some detail (1953), it is necessary to consider the sociocultural context within which innovations take place; and it is also important to consider the biographical and psychological backgrounds of advocates (those who urge acceptance of the innovation by the group) and of acceptors (Ibid:179).

I will not deal with innovation in this study because I do not believe the psychological factors affecting sociocultural change some 250 years ago can ever be reconstructed. As Robert Bee (1974:196-197). Fredrik Barth (1967b:668) and Edward Spicer (1958:433) have repeatedly stated, the course of change is not simply cognitive. It is social and interactional and to study it one must concentrate on the sociocultural context within which change takes place. Thus, in the contact between French and Indians we must examine most closely the individuals making the contact. Recent concern with individuals in culture contact situations have dealt a good deal with the roles of "entrepreneurs" and "cultural brokers". "Entrepreneurs" are agents of change. They make innovations which affect the communities in which they are active (Barth 1967b:664). "Cultural brokers" are a restricted type of entrepreneurship, one particularly common in acculturation situations (Wolf 1965). "Entrepreneurs" often bring about new conversions between forms of goods which previously were not directly convertible, thereby creating new paths for the circulation of goods which often cross barriers between formerly discrete spheres of circulation (Barth 1967a). The actions of "entrepreneurs" are based upon the "maximization"

model, which basically states that all human beings choose personal action which will give them the greatest benefit (or least cost) with the smallest expenditure of resources (Bailey 1960; Barth 1963; 1966; 1967b; Erasmus 1961; Kunkel 1970; McClelland and Winter 1969).* "Entrepreneurs" tend to take greater risks than others in the group. They take advantage of new opportunities and if they are successful in their risk, they may be copied by others who also wish to maximize their conditions. If this occurs, sociocultural change may also occur. Barth has explained this process:

The comparative rates of pay-off of alternative allocations, which determine the course of institutionalization, must be seen from a point of view of actors or of other concrete units of management that dispose over resources and make allocations. Individual actors will naturally make frequent misjudgements of what the pay-offs of their allocations will be; but as the outcomes become apparent through experience, they can be realistically evaluated. If the pay-offs are great, one can expect the behavior to be emulated by others; if, on the other hand, the results are not desirable for the actor, he will not be emulated, and he will also himself attempt to revert to older allocations (Barth 1967b:668).

"Entrepreneurs", or "brokers", are thus significant in sociocultural change, "only to the extent that they have an effect on the behavior of others in the group (Bee 1974:200).

* Robert Bee has pointed out the ambiguities in the terms "greatest benefit" and "expenditure of resources" and the danger of looking at maximization in narrowly economic terms (Bee 1974:198-199).

An example of the role of a "broker" as an agent of sociocultural change occurs in the contact situation in the meeting of "patron" and "client". A "patron" has been defined as being the source of decisions and favors; a "client" being the receiver of such favors (Paine 1971a:5; Zelenietz and Kravitz 1974:231). The main purpose for both parties in the patron-client relationship is to gain access or control over some resources belonging to the other party (Paine 1971b:10; Szwed 1966:152). The "patron" desires to impart his values to the "client", but does not expect to receive the "client's" values in return. The acceptance of the "patron's" values is either the ultimate goal, an example being the role of a missionary, or as a means to achieve a goal, an example being the role of a trader. As in any contact situation, the "patron" may dispense a great many values, but the "client" will be selective, seeking or accepting only a particular set of those offered. The "patron" has the power over his "client" because he controls a scarce resource which is valued and desired by the "client". However, this particular resource may not be primary in the "patron's" scale of values (Freeman 1971:34-35).

The "broker" may serve as a middleman between "patron" and "client". He is an individual of one or the other cultural system, but knows enough of the other system to be able to provide for a smooth and easy exchange of desired resources. In this role, a "broker" can be a very strong acculturative force. In cases of European-native contact the values transmitted

by "brokers" are not their own, but those of the west in general. However, they can selectively choose which values to impart (Maude 1968), and this factor illustrates their power in affecting the course of sociocultural change. The role of the "broker" is one in which the individual, "while purveying values that are not his own, is also purposely making changes of emphasis and/or content (Paine 1971b:21)." The messages or instructions are filtered through the "broker" who is at the same time engaged in activities which will serve his own ends (Ibid:6). Thus, the "client" selects from the "broker".

The manner in which the "broker" presents himself to the two parties is also of some interest. In the case of Ponapean beachcombers, who served as "brokers", they engaged in what is called "impression management" (Briggs 1971). Each "broker" presented himself to the chief as a go-between (one who faithfully transmits messages) in order to preserve his status and life, and at the same time presented himself to the ship's captain as a "patron" (the source of all goods) (Zelenietz and Kravitz 1974:232). In this particular situation the beachcombers served as "brokers" between the ship's captain (patron) and chief (client), but as soon as the ship left, the beachcombers reverted to being "clients" in a patron/client relationship (Ibid).

One can readily see the importance of studying the roles of the participants in a culture contact situation. What the individuals were trying to do (both verbalized and ulterior motives) directly affected their techniques in dealing with the

native populations. What the latter accepted and reinterpreted into the pre-existing configurations of their cultural system was directly related to what was offered them and how it was presented. This study of French-Indian interaction and socio-cultural change in the Yazoo Bluffs region concentrates on the structure of cultural transmission. The roles of the "patrons", their objectives and techniques, the reactions of their "clients", and the overall acculturative affect of the contact are dealt with in the following chapter.

Chapter 11 - French Agents of Sociocultural Change

Introduction

It has been repeatedly emphasized in this thesis that the nature and direction of sociocultural change is largely a product of the individuals who come into contact. What ideas or materials are exchanged and how they are exchanged depends upon who is involved in the transactions. In this study I have isolated four roles in the French cultural system (explorers, administrators, traders, and missionaries) which were involved in French-Indian interaction in colonial Louisiana. Obviously, the roles of the Indians involved in the conjunctive relations are also important. In the majority of cases, however, the principal role is the chief, and so it seems that differences in the course of aboriginal sociocultural change are probably more related to the French agents of acculturation.

To try to deal with the various roles as independent entities in their interaction with the natives is in some ways misleading. A complex interaction network guided the actions of the members of each role. For example, the missionary figured into both the administrators' and explorers' Indian policy, but he was employed differently by each. The administrator used him for political advantage, whereas the explorer was more concerned with the material benefits which could be derived as a result of a missionary's presence (Delanglez 1935:413). The reader is

hence warned that the divisions presented below are in many ways arbitrary. Some of the explorers (e.g., d'Iberville and Bienville) were also provincial administrators. In some instances I have considered them as explorers whereas in others they are dealt with as administrators. The objectives in dealing with the Indians and the techniques for attaining these objectives are examined for each role. The colonial administrators seldom had direct contact with the Indians, but as they did affect the actions of traders and priests, it is important to this study to understand what they were trying to do and how they intended to accomplish it. Although the other roles fit into the administrators' plans, explorers, traders, and missionaries also had certain independent objectives which in part colored their relations with the Indians. This section examines in detail the motives and actions of members of these various roles in colonial Louisiana, with the hope that the nature of French-Indian interaction and sociocultural change in the Yazoo Bluffs region will be understood more fully.

Explorers

The first Frenchman historically recorded to have explored lower Louisiana was Robert Cavelier Sieur de la Salle in the early 1680's. Explorers are usually considered to be the first people to enter and describe a region, but I have expanded on this definition in this section. La Salle passed rapidly

through the region and, similar to De Soto some 200 years his predecessor, appears to have had no great effect on the aboriginal population. The way in which he was treated was closely paralleled by the way d'Iberville and Bienville were received at the turn of the 18th century. The contact situations described by the members of the above expeditions reflect protohistoric (if not prehistoric) rules of etiquette involved in the meeting of peoples of different cultural systems. I thus have extended the definition of explorer to cover those personages who made contact with specific Indian groups prior to them having extensive relations with French or other European peoples.

The explorers themselves were high ranked individuals, but the members of their expeditions were of lesser status. When La Salle made his request for members, he particularly stressed men of different trades. He did not want regular troops as he felt that the men would become soldiers when it was necessary to do so. The success of the expedition depended more on the experience of the leader than on the bravery of those who were to obey him (Cox 1905:181-182). La Salle's, and no doubt the other explorers', aspirations were seldom met:

The Sieur de la Salle had also given orders at Rochelle to engage three or four mechanics in each trade; the selection was, however, so bad that when they came to the destination and they were set to work it was seen that they knew nothing at all (Le Clerq n.d. b in Cox 1905:209-210).

Undoubtedly there was a multitude of reasons why each explorer was personally interested in securing French control

of Louisiana, but one reason which was most commonly offered to the King was the discovery and exploitation of mines (particularly silver) (Cox 1905:176-180). The Indians figured into the explorers' plans in a number of ways. It cannot be denied that the teaching and spreading of Catholicism was an objective. La Salle felt that the Indians of the Mississippi Valley could be easily converted, because they already had temples and a form of worship which centered on the sun (Ibid: 27, 193, 205-207). More important to the explorers' aims, however, was the political influence of the Indians. La Salle felt that they could be used against other European powers who wished to take possession of the Mississippi Valley. He had:

...no doubt that in a short time they will become good French subjects, so that, without drawing any considerable number of men from Europe, they will form a powerful colony, and will have sufficient troops to act in any emergency and for the execution of the greatest enterprises (LaSalle 1684 in Cox 1905:179-180).

These objectives were rephrased when presented to the Indians. La Salle informed the chief of the Taënsa in 1682, that he wished to make an alliance with him (Swanton 1911:259), and to the Illinois Indians, who he met several years later, he said that the French have come:

...only to give them a knowledge of the true God, to defend them against their enemies, to bring them arms and other conveniences of life (Le Clerq n.d. a in Cox 1905:102).

It must have been very difficult for the first explorers

to make their objectives clear however. Being the first Frenchmen in the area, the languages were seldom understood by members of the expedition. An example of the problems La Salle and the other explorers of Louisiana must have encountered is seen in Sieur de la Vérendrye's first visit to the Mandan Indians:

Unfortunately the Assiniboin squaw of whom Vérendrye's Cree interpreter was enamored departed with the rest, and there was no holding back the interpreter after that. Even with his assistance, interpretation had at best been sketchy. Vérendrye had spoken French to his son, who had spoken Cree to the interpreter, who had spoken Assiniboin to any Mandan who happened to understand it (Bakeless 1961:167).

Vérendrye noted in his journal that he made himself perfectly understood, but this was probably an overstatement. Missionaries were relied on heavily as interpreters. Few expeditions were without them, but they appear to have been of little use in the initial explorations of Louisiana. D'Iberville used Indians as guides and presumably also as interpreters. As he went from one group to another in his ascent of the Mississippi River he took Indians from the group he was visiting to lead him to the next. They would then return and he would take others from the new group to lead him on farther.* In

* This method was employed at an earlier date by Hernando de Soto. It had little success at this time as the guides were unwilling companions and were treated little better than slaves (Bourne 1905).

meeting the Oumas (Houma), he related:

...nor did we fail to take four of them as guides in place of the four Bayagoulas, whom we sent back. Thus, we changed from one nation to the other, in order not to fatigue them; and, at the same time, in arriving among them, they would have less fear and distrust by seeing other Indians with us (French 1869:56).

The French explorers took great care not to arouse the fear of the Indians they visited. For this reason, they always carried a calumet (see pp. 262-264) with them. They knew the importance, if not the meaning, of this pipe and presented it immediately upon meeting new peoples (e.g., Cox 1905:78,136). The importance of having a calumet is particularly evident in the one time La Salle was without it. In October of 1679 his men took some corn from a deserted Illinois Indian village, leaving goods in exchange. He later met up with the inhabitants of this village:

...twenty of them, armed with axes, small guns, bows and clubs, advanced near the place where we stood; whereupon M. de la Salle, with four men, very well armed, went toward them to speak with them, and desired them to come near us, for fear a party of our men who were gone a-hunting should meet with them and kill them. They sat down at the foot of the eminence where we were posted, and M. de la Salle spoke to them all the while concerning his voyage, which he told them he had undertaken for their good and advantage. This was only to amuse them till our three men returned, who, appearing with the calumet of peace, the savages made a great shout and began to dance. We excused our taking some of their corn, telling them that we had left the true value of it in goods, which they took so well that they sent immediately for more, and gave us next day as much as we could carry away in our canoes (Hennepin n.d. in Cox 1905:78-79).

La Salle was careful to always carry a calumet in later meetings with Indians. He presented one to the Quinipissa in 1682 (Cox 1905:147-148) and his lieutenant, M. de Tonti, similarly offered a calumet to the Natchez in this same year (Swanton 1911:187). Later explorers soon learned the value of these pipes. A number of groups, including the Biloxi (French 1869:37-41), the Bayagoula (Ibid:53-54), the Houma (Swanton 1911:285), the Natchez (Ibid:190-191), and the Pascagoula (Ibid:302), received d'Iberville and Bienville with the calumet. These explorers also probably carried calumets with them on all their journeys as d'Iberville is reported to have presented one in return to the Natchez chief (Ibid:190-191).

The calumet ceremony and the manner of receiving foreigners were strikingly similar among all the Lower Mississippi Valley groups. It will be useful to consider each of the initial contact situations in some detail in order to derive a general set of rules as to how these conjunctive relations were conducted. In March of 1682 La Salle encountered an Arkansas group and gave tobacco and other goods to their chiefs. In return, he was feasted and given provisions. These Indians even built cabins for La Salle's party and supplied them with wood for fuel (Cox 1905:137). Shortly after leaving the Arkansas, La Salle's expedition came upon the Taënsa. Tonti was the first to meet the Taënsa chief and, after telling him of their wish to make an alliance, gifts were exchanged. The chief offered provisions while Tonti "gave the chief a knife, which he received as a very considerable present (Tonti in Swanton 1911:259)." The Taënsa

chief went to visit La Salle shortly after the meeting with Tonti. According to the latter, the chief "came with wooden canoes, to the sound of the tambour and the music of women (Ibid:261). Father Zenobius Membré, the Recollect priest who accompanied La Salle on this expedition, provided more detail concerning this occasion:*

It is sufficient to tell you that the chief of the Taënsa coming to see M. de la Salle, a master of ceremonies came two hours before with five or six flunkeys whom he made sweep with their hands the road over which he must pass, prepare a place for him, and spread out a rug, which consisted of a cane mat very delicately and artistically made. The chief who was coming was clothed in a very beautiful white cloth. Two men preceded him, in state, with fans of white feathers, as if to chase away the evil spirits; a third was loaded with a sheet of copper and a circular plaque of the same material. Never did a man comport himself so gravely as this chief on this visit, which was full of confidence and demonstrations of friendship... (Father Membré in Swanton 1911:262; see also Cox 1905:140).

The approach of the chief apparently required great preparation. Of some interest in the above account is the mention of copper materials, perhaps a holdover from the Southeastern Ceremonial Complex in which copper was a very important ritual material (Waring and Holder 1945 in Williams 1968:17-18; Hamilton et al. 1974). According to Tonti, the elaborate ceremony was repeated a month later in La Salle's

* It should be mentioned that Father Membré's manuscript was written in Paris long after the journey and for propoganda purposes. His statements must hence be regarded with some caution (Delanglez 1948a; Wedel 1976:15).

return voyage up the Mississippi River:

We heard people say: 'There is a chief coming', and we went to meet him. We noticed that two hundred of his people put themselves in line, and cleared the place over which he passed with their hands. He entered the cabin of M. de la Salle, who gave him a gun and many other presents, and after having given great marks of friendship, and when they had loaded us with all kinds of refreshments, they had the canoes put into the water in order to leave the 3rd of May. The chief uttered a prayer to the sun in order to wish us a good voyage, and had tobacco thrown into the water in order that the river might be peaceful (Tonti in Swanton 1911:263).

Father Membre wrote of this last encounter:

We went to bid good-by to the chief, and he had the canoe returned to us and a quantity of provisions given to us. He came, accompanied by 30 canoes, to see M. de la Salle, and brought him so many provisions that it was necessary to throw some of them away, the canoes being overloaded. Savages swept the earth over which their chief was going to pass. He spoke with M. de la Salle, seated on a mat. M. de la Salle gave him an old dressing gown of calico and a little Mosopolea slave, which had been obtained from the Acansa; the chief gave his robe or covering, similar to cotton (Membre in Swanton 1911:264).

Again there is the reference to an elaborate procession, the giving of food, exchanges of small gifts between the main participants, and the seating of mats. Shortly after the initial visit with the Taënsa, Tonti encountered some Natchez Indians. He described the meeting as follows:

As soon as I had set foot to earth on the other side where the savages were they sat down. I made them smoke the peace calumet, and gave a knife to an old man who appeared to me to be the chief. He put it promptly inside of his blanket as if he had committed

a theft. Joining my hands I imitated him, because that signifies in their manner that people are friends (Tonti in Swanton 1911:187).

With a reaction such as the above man demonstrated, it is probable that he was not a chief. The Quinipissa Indians, who La Salle met near the mouth of the Mississippi River, seem also to have been "commoners". They attacked the expedition and four of their women were later captured by La Salle's party:

After dinner some pirogues came toward us to brave us, but the Sieur de la Salle having advanced in person with the calumet of peace, on their refusal to receive it a gun was fired, which terrified these savages, who had never seen firearms. They call it thunder, not understanding how a wooden stick could vomit fire and kill people so far off without touching them. This obliged the Indians to take flight, although in great force, armed in their manner. At last the Sieur de la Salle followed them to the other side and put one woman on the shore, with a present of axes, knives and beads, giving her to understand that the other three should follow soon if she brought some Indian corn (Membre n.d.bin Cox 1905:147-148).

The refusal of the calumet was an obvious sign of hostilities, and the French were well aware of it. Their relations with the Quinipissa affected the second meeting between La Salle and the Koroa, who were allies of the Quinipissa. The reception ritual was followed as usual. According to Tonti:

When we came in sight of the village we perceived very few people on the banks. The chief came before us, and when M. de la Salle had given him the scalps he appeared very much surprised, and having made a sign for us to follow him in order to eat, we mounted the cliff, where there were cane mats in the middle of the open space ready for us, on which

he made us sit, and as they were bringing us food to eat we were surprised to see ourselves surrounded by more than a thousand men (Tonti in Swanton 1911: 327).

The ill reception displayed by the Koroa may also be related to La Salle's refusal of food, as described by Nicholas de la Salle:

The chief of the nation was at the foot of their bluffs, where there was a great beaten road. The chief of the nation was at the edge of the water with three of his men. He paid a thousand attentions to M. de la Salle. For some time they refused the meal they [the Koroa] offered in order to make them think they had no need of it; but hunger obliged them to take it. They had prepared a feast in the open space of their village (Nicholas de La Salle in Swanton 1911:328).

In the meeting between La Salle and the Taënsa, it is apparent that the giving of food was an integral part of the ceremony. Perhaps La Salle's refusal to take food was as bad a mistake as refusing to smoke the calumet. His neglect of ritual, combined with the presentation of Quinipissa scalps, may perhaps have convinced the Koroa that they were to be treated in a manner similar to their allies.

The first contact between d'Iberville and the Indians of Louisiana 17 years later is reminiscent of the reception described by members of the La Salle expedition. The first natives encountered by d'Iberville were the Pascagoula Indians. A group of them rowed to his ship. They were treated kindly and were given clothing (French 1869:22). Shortly thereafter, in February of 1699, Andre Penicaut described the initial

meeting of the French and the Biloxi, a contact situation which is perhaps typical of what occurred elsewhere in colonial Louisiana:

...they [some Biloxi Indians] examined them for a long time from their place of concealment behind the trees, wondering at the color of their faces, and the manner of their clothing. Some of the soldiers, seeing them, made signs with their hands to approach without fear. They then spoke to them in the Iroquois language - as the greater portion of our men were Canadians, and were familiar with the language of that nation. After a long parley, they approached us, after being reassured, and were conducted to M. D'Iberville, who received them very kindly, and gave them something to eat and drink. But, either their taste was not suited, or, from fear of us, they refused to eat or drink anything offered them. They appeared wholly intent with gazing at us, and greatly astonished at seeing people whose skin was white, wearing long beards, and some without hair upon their heads, such as they saw among us, and so different from themselves, whose skin is of a swarthy color, with heads covered with long black hair, which they are careful to preserve, and without beard. This nation called themselves Biloxi; ...They remained with us two days. M. D'Iberville gave them several presents - such as awls, knives, mirrors, rings, beads, and vermilion. He showed them the use of these articles, which they carried to their village as presents to the chief. Very soon the rumor of the arrival of the French spread among the neighboring nations; and, in about eight days, great numbers of them came, with their chiefs at their head, to smoke the calumet and sing the song of peace, according to the Indian custom of treating all strangers who arrive among them, and with whom they desire to form an alliance and friendship...The chiefs of the savages, composed of five different nations, called Pascagoulas, Colapissas, Chicachas, Pensacolas, and Biloxis, came with great ceremony to our fort, singing, and holding out to M. D'Iberville the calumet, who smoked it after the manner of the Indians. They then, as a mark of honor, rubbed his face with white earth, as they also did the faces of the brother of M. D'Iberville, and several other officers. The feast of the calumet continued three days, during which time they danced and sung three times a day.

The third day they erected a post in front of the gates of the fort, around which they danced; they then sought M. D'Iberville, who underwent the following ceremony: One of the Indians having presented his back, he mounted upon his shoulders, whilst another sustained his feet. They carried him to the place where the post was erected, keeping time to the sound of their chichicóis [rattles] ... When they arrived before the post, they seated M. D'Iberville upon a deer-skin on the ground. One of the chiefs then seated himself behind his back, and patted him as you would a child that you desired to put asleep. They had spread upon the ground more than three hundred deerskins, upon which the officers and soldiers were seated. After all were properly placed, the Indians, with their bows and arrows, which they carried in bundles on their backs, and wooden shields covered with beaver-skins in their right hands, went, by turns, to strike the post with their shields, at the same time singing over their deeds and actions in the wars in which they had been engaged. It is even permitted to everybody, women as well as boys, to go through the same ceremony.

The French then proceeded to the royal magazine, by order of M. D'Iberville, and brought knives, beads, vermillion, guns, lead, powder, mirrors, combs, kettles, cloaks, hats, shirts, breechings, rings, etc.... Pickaxes and hatchets were also presented them. After which, M. D'Iberville then returned to his lodgings, leaving the savages in the square of the fort, who divided among themselves the presents distributed to them, scrutinizing them all with astonishment, and but little comprehending the uses of them. It really gave us pleasure to witness their embarrassment. Some went to tell M. D'Iberville, who returned with the other officers to the square of the fort, and who could not restrain themselves from laughter. He directed that the use of each article should be pointed out to them. We then showed them how to wear their shirts, hats, breechings, and leggings. We sewed up their breechings and leggings so that they could wear them upon their hips... We placed powder in the pans of the guns which had been given to them, which were then loaded, and afterwards fired; but, when they saw the flash of the powder, they let go the gun, which fell to the ground, from the fear they had of them. M. D'Iberville ordered the men to fire off blank cartridges before them, which reassured them; and, as he found some among them bolder than the rest, one of the Indians made a sign that he wanted the guns reloaded, indicating that he would fire them.

In place of leaning forward, as is customary, he held the gun to his shoulder, leaning backwards; the consequence was, the concussion knocked him head over heels, the gun going in one direction and the Indian in another. It was some fifteen days after this accident before any of them would again touch a gun. We fixed handles in their hatchets and pickaxes, and showed them how to use them. They testified to us, by signs, that they were highly pleased (Pénicaut 1698-1722 in French 1869:37-41).

The important events in this meeting seem to have been the calumet ceremony, which also included a dance and feast, a ceremony consisting of the warriors striking a post and the boasting of their heroics, and the dispersal of gifts. Also note the use of deerskin mats to seat the participants and the practice of rubbing the face of the principal Frenchman, a practice which will be discussed in greater detail in a later section (see pp. 523-527). Physical contact between the participants is noted also by Bienville in his reception by the Pascagoula Indians in the summer of 1699:

...the chief of the Pascagoulas came to sing the peace calumet to us. He had in his following seven men of the same nation. I have never seen savages less embarrassed. They embraced us, a thing I have never seen the others do. They only pass the hand over the breast of their arrival, after having raised their arms to heaven. They brought me a present of deer skins, which I at once gave to our hunters in order to make Indian shoes (i.e., moccasins), a little dried meat, and part of a deer. They parted after having received their presents, like the others (Bienville in Swanton 1911:302).

The Pascagoula were apparently well satisfied by the exchange, because they visited M. Sauvolle repeatedly in the following months:

I had it in my instructions to treat these nations kindly if any of them came, and to give them a gun, which I did. They undoubtedly go to visit the Spaniards, for this chief had one of their muskets; besides the gun, I gave him a saber, an embroidered hat, a hooded cloak, a plume, and other presents for his people; they are so well treated among us that there are no savages who, having been here, have not returned many times (Sauvolle in Swanton 1911:302-303).

When d'Iberville visited the Pascagoulas a year later, they built a new cabin for him in their village (Swanton 1911: 304). He was not so readily received by the Bayagoula, however. The latter fled from him when first encountered in February of 1700. He sent some people to overtake them and assure them of his peaceful intentions. They then presented d'Iberville with the calumet as well as flour, bread, fish, and meat. They also offered "a woman for each man", which d'Iberville refused. He offered in return "presents of some bagatelles, such as mirrors, rings, pick-axes, etc., which they beheld with admiration, and afterwards we showed them how to use them (French 1869:53-54)." After this initial contact, d'Iberville visited the combined Bayagoula-Mugulasha village in March of 1699. The ceremony was characterized by the now familiar practice of sitting on mats, a repast, and the exchange of gifts:

They came to receive me at the entrance of the village, and conducted me in front of the cabin of the (Chief of the) Mugulasha, where they made us sit down in a very warm sun on cane wattles. There I made them a present - considerable, for them - of axes, knives, mirrors, needles, shirts, coverings. They made me one also of their greatest riches, which were 12 very large skins of deer, the

greater part pierced, which I gave to my people to make shoes. They regaled us on hominy made of bread (d'Iberville in Swanton 1911:275).

D'Iberville received a similar, but more elaborate, greeting from the Houma Indians shortly after the above events. Having reached the landing place of the Houma village:

I found five men, three Oumas and Quinipissas (Acolapissas), who awaited me with the peace calumet having come from the village when they heard the report of the swivel gun. As far off as they discovered us they sang, and the Bayagoulas whom I had sang for me. Landing, we embraced and carressed each other after their manner, and smoked together. At 11 I set out for the village, the Bayagoulas and these people escorting us the entire way. The deputies of the Oumas walked in front, singing continually, although we had to pass over a very bad road, filled with very steep hills or little mountains for almost the whole distance. One hour after midday we came in sight of the village, where, at 400 paces, I met three men deputed to bring me the calumet. It was necessary to smoke in form, seated on a mat, which fatigued me much, I never having smoked.* These three new singers conducted me up a height, where there were three cabins, at 300 paces from the village, where they had me stop and sent to inform the chief of my arrival, waiting a reply as to what we should do. A man came to tell us to enter. On entering the three singers walked in front, singing, presenting to the village the calumet of peace, raised as high as their arm would reach. The chief and two of the most important persons came before me at the entrance of the village, each bearing a white cross in the hand, and saluted me in their manner, taking me by the arms, leading me to the middle of their square (and placing us) on mats, where all the village was assembled, where they smoked anew,

* This is a curious statement as Pénicaut stated d'Iberville smoked with the Pascagoula (see p. 395), and he certainly must have smoked with other groups in his earlier travels.

and showed me many marks of friendship. I made them a little present in advance of what I wished to give them from my boats (d'Iberville in Swanton 1911:285).

Included as gifts were axes, knives, mirrors, etc. and d'Iberville received provisions, a dance and a repast in return (Ibid:286-287). The ritual followed in the above encounter was closely adhered to. Delegations were sent out to meet the French party and they stopped at designated intervals where "mini-receptions" were held, the final reception being with the head personages. The procession must have seemed exceedingly tedious to the Frenchmen, but as we have seen with the Taënsa (see pp. 390-392), the complex proceedings leading up to the actual meeting between French and Indian, was highly stressed. A similar situation occurred when the Chitimacha made peace with Bienville in 1718. Le Page du Pratz noted that it took these Indians almost half an hour to traverse a space of not more than a hundred paces (Swanton 1911:340-341). In addition to the long march to the village, the meeting between d'Iberville and the Houma chief was again characterized by embraces, smoking a calumet, the presentation of gifts, the seating on mats, a repast and a dance.

The mention of crosses in the possession of the chief and other important persons is of particular interest. When d'Iberville visited the Natchez in March of 1700, he noted that in return for a gun, powder and lead, a covering, a cloak, some axes, knives and beads, the chief gave him and his principle companions a pearl "which was not at all handsome" and a little

white cross (d'Iberville in Swanton 1911:190-191). Crosses may reflect earlier unrecorded contact by French and/or Spanish priests or, more probably, their presence is indicative of some holdover from the Southeastern Ceremonial Complex. Most prehistoric Southeastern groups participated in this "religion" to some degree. The possibility that there were vestiges of this complex among historic Louisiana groups has been alluded to earlier in discussing the Taënsa (see p. 391), and it seems that the Complex, in some debased form, continued among the Houma and Natchez. Antonio Waring noted that the "Cross" and the "Sun Circle" were the most frequently used motifs of the entire Complex (Waring 1940-1945 in Williams 1968: 33). The meaning which the cross had to Indians and Frenchmen was certainly different, yet each party realized its religious significance and rever_ed it. The behavior associated with this symbol was probably the same and so the participants in the contact situation undoubtedly thought the meanings behind the behavior were also equivalent. More will be said about the cross and its significance to the natives in the section dealing with the role of the missionary (see pp. 469-473).

There are certain behavioral patterns which have occurred in almost all of the above contact situations. The meeting between head personages of different groups, in these cases French and Indian, was charac^terized by elaborate ritual. Usually a long drawn-out procession preceded the actual contact. This is particularly seen in the meeting between La Salle and the Taënsa chief (Cox 1905:140; Swanton 1911:262) and between

d'Iberville and the Houma chief (Swanton 1911:285). In almost all cases the calumet was smoked. In one situation, a reception arranged by a delegation of Biloxi, Pascagoula, and several other groups, d'Iberville was carried to the ceremony (French 1869:39). The seating of the principal personages on mats was typical. The Taënsa (Cox 1905:140; Swanton 1911:262) and Koroa (Swanton 1911:327) placed La Salle on cane mats, as did the Bayagoula in receiving d'Iberville (Ibid:275). The Biloxi used deerskin mats (French 1869:39), but there is no record of the material used by the Houma (Swanton 1911:285). In a number of cases there was physical contact between the two parties. D'Iberville and his officers had their faces rubbed with white earth, and d'Iberville also had his back patted (French 1869:39). Bienville was embraced by the Pascagoula chief (Swanton 1911:302), as was d'Iberville by the Houma and the Acolapissa (Ibid:285).

Once the initial formalities ended, there was an exchange of gifts. On the natives' part, their contribution was generally in the form of a feast and the presentation of provisions. The Illinois gave La Salle a large quantity of corn and other food (Cox 1905:78-79). The Arkansas offered a feast and other provisions, collected wood for their French visitors, and built cabins for them (Ibid:137). The Taënsa overwhelmed the expedition with provisions and the chief gave La Salle a robe or covering (Swanton 1911:263). The Quinipissa reluctantly provided La Salle with corn and a feast (Cox 1905:147-148) and the Koroa prepared a feast for these French visitors (Swanton 1911:327-328). A small delegation of Biloxi, Pascagoula and other groups gave

d'Iberville a feast which lasted three days (French 1869:39). Bienville received deerskins, a little dried meat, and part of a deer from the Pascagoula, and they built a cabin for d'Iberville (Swanton 1911:302-304). From the Bayagoula, d'Iberville was supplied with flour, bread, fish, meat, deerskins, and hominy, and was even offered women (French 1869:53-54; Swanton 1911:275). The Houma gave a feast and provisions and may, like the Natchez, have offered white crosses to d'Iberville (Swanton 1911:285). In addition to crosses, the Natchez presented a pearl to each high-ranking French personage (Ibid:259).

The Indian gifts on these occasions were hence fairly standard. In return for their hospitality, and to win their affection, the French explorers presented European materials to the Indian chiefs. The assemblage offered was quite variable and, as this thesis is designed to examine the differences in both the material and immaterial aspects of French-Indian interaction as exhibited by the various French roles, it will be valuable to review the explorers' gifts in some detail. Guns were an important gift. La Salle made a request in 1684 for 600 muskets in order to arm 400 Indians. Included in his request were 4,000 or 5,000 pounds of gunpowder (Cox 1905:187). He also gave guns on his earlier expeditions (Ibid:174,184; Swanton 1911:263), a Taënsa chief being one of the recipients (Swanton 1911:263). A number of other materials were brought on the La Salle expeditions. As indicated by what he gave Father Hennepin for the latter's use and Indian gifts, La Salle carried

knives, shoemakers' awls or bodkins, Martinico tobacco, beads and needles (Cox 1905:86). When some Illinois men visited him in 1679, he gave them axes, knives and several little toys for their wives (Ibid:79). A year later he is reported to have given Martinico tobacco and axes to this same aboriginal group (Ibid:82). Tonti gave to the chief of the Naouadiché's wife a small box in which he had put some ammunition (Ibid:48). Clothing was also distributed. In addition to a little Mosopolea slave, La Salle gave a Taënsa chief an old calico dressing gown (Swanton 1911:264). Beads and knives must have been some of the most popular items. Tonti carried many yards of glass beads when he visited the Taënsa (Ibid:261), and he offered their chief a knife (Ibid:259). He also gave a knife to an old Natchez man (Ibid:187). Knives and beads were included in La Salle's gift to the Quinipissa, as were axes (Cox 1905:147-148). D'Iberville felt that knives, axes and a poitou-cloak of blue serge, observed among the Bayagoula in his 1699 visit, were originally secured from the Tonti expedition (French 1869:23-24). In addition to presenting items as gifts, members of the La Salle expeditions traded European items for native merchandise. Tonti carried awls and needles for exchange (Swanton 1911:259), and in 1682 he purchased a slave from a Taënsa chief for knives and kettles (Ibid:261). In another situation he traded seven hatchets and a string of large glass beads to the Naouadiché chief for four Spanish horses (Cox 1905:49). La Salle himself purchased 14 pearls from the Koroa in exchange for a boxwood comb (Swanton 1911:328).

Guns, knives, beads, axes and clothing continued to be popular gifts in the French explorations at the turn of the 18th century, but a number of other items were added. D'Iberville gave the delegation of Biloxi, Pascagoula, and other groups awls, knives, pickaxes, hatchets, kettles, mirrors, combs, rings, beads, vermilion, guns, lead, powder, cloaks, hats, shirts, breeches and leggings (French 1869:37-41), and shortly after this occasion M. Sauvolle gave to the Pascagoula chief a gun, a saber, an embroidered hat, a hooded cloak, a plume and other presents for his people (Swanton 1911:302-303). D'Iberville gave beads, axes and "other little things" to the Tomé and Mobile chiefs in 1700 (Rowland and Sanders 1929:9). To the Bayagoula he presented pickaxes, knives, needles, mirrors, rings, shirts and coverings (French 1869:54; Swanton 1911:275), and the Houma received axes, knives, mirrors, etc. (Swanton 1911:287). A similar assemblage, including a gun, powder, lead, some axes, knives, beads, a covering and a cloak were given to the Natchez chief (Ibid:190-191).

The principal way in which the later explorations differed from the earlier ones was in the variety of materials relating to personal adornment. La Salle carried beads, but there are few indications that he had mirrors, rings, combs and the like. Curiously, there is no mention of bells, an item which was typically carried in early Spanish expeditions (Brain 1975b) and was a very common English and French trade material throughout the 18th century (Brown 1977a;n.d. b). Arms and tools were common in the two expeditions. Clothing for the Indians was

distributed by both parties, but d'Iberville seems to have carried a greater variety of apparel. Although there may have been a slight change on the French side, in terms of variety and quantity of material, there does not appear to have been a significant difference in the way the respective Indian groups reacted to the two periods of exploration. The contact situations were remarkably similar in each case. The nature of French-Indian interaction changed as the intensity of contact increased and as members of other French roles entered the social arena.

Administrators

The objectives of the explorers and their subsequent relations with the Indians must be understood in terms of a large interaction network. The various explorers required funding and approval to visit these westerly regions, and so much of what they set out to do was conditioned by the French government. Once the Louisiana government was set up, the freedom of missionaries and traders in dealing with the Indians was in part restricted by the wishes of particular administrators. France maintained a firm control on the actions of the provincial government. Throughout the 18th century Louisiana was staffed with two high ranking officials who at any one time were more often than not at odds with each other. These incompatible administrators inevitably informed the superiors of their

counterpart's wrongdoings, and so in this way the home government had knowledge of all detrimental activities occurring in the colony. The lack of cooperation did not provide for a very efficient provincial government, however, as each officer knew that the merest infraction would perhaps lead to his dismissal. The principal administrator's job was not an easy one. His primary purpose was to maintain French control over Louisiana and to make the colony productive.

Colonial resources were particularly important to both home and provincial governments as obviously, had there been none, they would not have been there in the first place. The search for mines was a constant endeavor, but the fur trade was also important. Beaver did not have the importance it did in the north, because this animal was of an inferior species in Louisiana. D'Iberville encouraged the hunting of buffalo and persuaded voyageurs to induce the Illinois and other Indian groups to change their emphasis to this animal (Surrey 1916:335). Even more important than a source of furs was Louisiana's potential as a port. La Salle very early stressed the value of a southern port, the Indians of the Upper Mississippi region and points west and northwest finding the trek to Hudson's Bay quite arduous. As stated earlier (see p. 38), New France was not willing to relinquish control of the fur trade so easily. Colonial disharmony over the traffic in furs, in combination with the glut on the beaver market at the turn of the 18th century and the War of the Spanish Succession, did little to

insure economic dependency of the Indian on the French of Louisiana. Yet in order to maintain control of the colony, the administrators had to have native allegiance.

La Salle had originally wanted to make an army of Indians to prevent English and Spanish expansion, but with only meager gifts at their disposal, the administrators of Louisiana had to resort to other measures in winning aboriginal allegiance. First and foremost was to convince the Indians of French friendship and the benefits which would ensue were they to be allies. One way to achieve respect of French civilization was to actually take individuals to France. This technique was employed early in the history of New France (Dickason 1976), an example being Champlain's taking a young boy who would later serve as an interpreter (Bakeless 1961:126). D'Iberville initiated this policy in Louisiana by taking a Bayagoula youth with him on his return voyage (Swanton 1911:277). This policy was not always successful, as Bienville could not induce any Choctaw or Tunica to make the trip to France in 1725 (Rowland and Sanders 1929:463). The effects were generally well worth the effort expended, however (Delanglez 1935:411; Rowland and Sanders 1929:352; Thwaites 1896-1901;68:202-203):

As the purpose was to impress the Indians with the power of France, they were shown the sights of eighteenth-century Paris: the kitchen of the Hotel des Invalides, the Opera, Versailles, the Zoo at the Trianon, Marly, Fontainebleau where they were lionized by princes and princesses "who were anxious to see what Savages looked like, and whom they were surprised to find as full of esprit and common sense as ordinary men." They were presented to the King, to the Duke of Orleans, and to the officials of the

Company of the Indies. Everywhere speeches and harangues were made, everywhere people were delighted... (Delanglez 1935:104-105).

Bienville strongly supported the practice of sending chiefs to France, but it was some twenty years before the procedure became commonplace (Ibid:104). The fact that the practice was so long in being implemented on a regular basis necessitated other ways in which to secure Indian loyalty. Bienville was aware of the importance of learning more about the native cultures, as understanding their behavior and beliefs would permit better control of their actions. Fundamental to learning their culture was understanding their language. One of Bienville's greatest strengths was his expertise with native tongues (Swanton 1911:27). Even Bienville could not learn all the languages, however, and very few of his successors mastered the art of dealing directly with the Indians. They most often relied on a missionary's capabilities:

Father Baudouin was Bienville's interpreter at Mobile, just as he had been Biron's at Chickasawhay when the Jesuit's knowledge of the language and of the character of the Choctaws saved the day for the blundering commandant (Delanglez 1935:468, see also 472).

The missionary fit nicely into the role of interpreter as the colony developed, but in the first few years the administrators relied upon young boys. These youths learned the languages fast, a quality of which the colonial officials were well aware. D'Iberville and Bienville applied themselves first to discovering the most powerful nations, those which could

be of greatest benefit to the colony or do the French the most harm. They then sent young men to these groups to learn their language and inform them about what the people were doing (Rowland and Sanders 1929:125-126). D'Iberville left one with the Bayagoula to serve as an interpreter for Frenchmen passing their way (French 1869:54,59). According to Pénicaut, a Chickasaw chief asked Bienville for a young French boy, apparently with the same purpose in mind (Ibid:83). D'Iberville sent one to the Chickasaw (Swanton 1911: 27) as did Bienville in 1708 (Rowland and Sanders 1929:41). D'Iberville also promised a boy to the Natchez chiefs (French 1869:59) and they apparently received one as Father Gravier met a young French lad among them in his visit (Swanton 1911:139; Thwaites 1896-1901;65:140-142).

The administrators needed good interpreters to control the actions and movements of Louisiana's Indians, and missionaries and youths served admirably in this function. The colonial government hoped to use the Indians politically as a military force in preventing the western expansion of English influence. To form an effective buffer zone, the Indian groups had to be arranged at strategic points. The dispersed settlement pattern, so typical among the natives of Louisiana, was not conducive for such an aim. D'Iberville hoped to gather the various groups into large centralized communities:

He [D'Iberville] had evoked a scheme to gather the Indians scattered in the Valley and use them as a buffer between the French and the English. The two most important tribes were the Choctaws and the

Chickasaws. D'Iberville realized that their friendship was indispensable if the French did not wish to see repeated in the south the mishaps of the north, where the Iroquois more than once jeopardized the very existence of Canada (Delanglez 1935:54).

In order to centralize the Indians, maintain their alliance, and generally keep them in line, France had a number of alternatives. One was to build forts among the groups and send troops to watch over them. Another was to open up trading posts and bind them economically to French interests. A third option was to send missionaries to live among the natives. The construction and manning of forts was too expensive, and in the early days of the colony the revenue was not such that trading posts could be established. Missionaries were the obvious choice, as sending them to the colony required little expense (Ibid:54-55). D'Iberville relied heavily on missionaries for centralizing the Indians, the practice being to bring the groups together around a mission located in a strategic position (Ibid:17,31,37).* Father Davion revealed the role of the missionary in the administrators' plans:

One thing is absolutely necessary, without which it is impossible to do anything worth while in these missions: the Indians must be gathered (in a few villages). M. d'Iberville has doubtless

* Centralizing Indians at strategic locations, particularly around a mission, was practiced by the French in the Upper Mississippi Valley, the Illinois country, and the Great Lakes region. Lamothe de Cadillac's foundation of Detroit is one example of the centralizing plan (see p. 37).

spoken to you of the missions among the Choctaws and the Chickasaw (Davion in Delanglez 1935:54).

It is interesting that Davion refers to this practice. I have discussed earlier that an examination of the different historical accounts suggests there was a movement of the aboriginal groups in the Yazoo Bluffs region at the turn of the 18th century (see pp. 74-75). Perhaps the movement of the Tunica upriver was a response to the central positioning of Davion's mission. It is not definite that the move actually occurred, as the discrepancies in locational information may merely be the result of faulty observation, but the suggested movement fits in well with French policy of the period.

The moving of Indians to strategic positions continued in Louisiana throughout the early 18th century. Father Du Ru encouraged the Chetimacha to settle near the Bayagoula, as he was in the process of establishing a mission in the latter's village:

Du Ru in keeping with the policy of d'Iberville engaged him to come with his tribe to settle near the Bayagoula village. A few days later, having met the chief's escort, he writes: "I did my best to make them understand they would do well to come and settle here as soon as possible...They told me they would, at least I thought that was what they said (Delanglez 1935:17).

When d'Iberville visited the Taensa in April of 1700, he tried to persuade them to settle closer to the banks of the Mississippi River (French 1869:58). In a situation similar to the English at Charles Town, Bienville was able to convince a

number of aboriginal groups to move closer to Mobile (Rowland and Sanders 1929:129). Many of these groups wanted to get away from Spanish influence:

He [Bienville] has attracted to Louisiana the rest of the Apalachees and Choctaw Indians who were established near the Spaniards. The governor of Pensacola offered very considerable presents to the chiefs of these two nations to make them return which they refused saying that the French assisted their allies better than did the Spaniards, the French furnishing arms, in addition to the fact that they were not masters of their wives among the Spaniards and that among the French they were at rest as to that (Le Moyne de Bienville 1706 in Rowland and Sanders 1929:25).

In the peace concluded between the French and Chitimacha in 1718, one of the conditions Bienville imposed upon them was that they abandon the villages where they currently reside and move to a designated spot on the Mississippi River (French 1869: 144; Swanton 1911:340). Father Poisson, missionary to the Arkansas, similarly endeavored to mobilize his congregation for French benefit. He was killed in Natchez in 1729 while on his way to see Governor Perier "to adopt with him proper measures to enable the Quapaw to descend to the banks of the Mississippi for the accomodation of the voyageurs (Swanton 1911: 225)." Frontier commandants also tried to maintain a surrounding buffer of friendly groups. Diron d'Artaguiette reported in July of 1723 that M. Livilliers, in charge of the Yazoo Post in the absence of M. Degrave, had not only persuaded the "Aufaugoulas", "Couroye" and "Yazous" to remain in the area, but had also engaged the "Tapoucha" Indians, a small group living

40 leagues upriver, to move to the region in the autumn (Mereness 1916:87).*

The moving around of aboriginal groups to provide strong forces at strategic points may, on the surface, seem to have been a good policy. Not only would the groups offer resistance to English expansion, but their new locations (principally on the Mississippi River) were easily accessible to French traders. The policy failed, however, because the French administrators did not take native boundaries into consideration. In referring to the Bayagoula Indians in 1699, the Journal of the frigate Le Marin states that, "The chiefs have their hunting grounds bounded, and when one goes upon their lands ahead of them war breaks out (Swanton 1911:276)." Trouble inevitably resulted from one group moving into territory claimed by another. M. Duclos criticized Lamothe de Cadillac having given permission to some Indians to settle on the Mississippi River:

This was granted to them without paying attention to the fact that Mr. De Bienville told him several times that this new establishment would give offense to a nation that lived on territory adjacent to that which he was giving them, and that it would be necessary to send for the chiefs of this nation and reconcile them with the newcomers or else give them another tract farther away, otherwise they would be killed by the first (Duclos 1713 in Rowland and Sanders 1929:128).

* The "Tapoucha" were probably the Taposa, a group which resided on the Yazoo River above the Chakchiuma. They apparently were allies of the Chickasaws and were probably eventually absorbed by them (Swanton 1911:296).

Hostilities did indeed occur as a result of the French policy of resettling aboriginal groups. In 1713* the Acolapissas killed a group of Natchitoches Indians who settled among them on the banks of the Mississippi (Rowland and Sanders 1929:203). A similar situation occurred when the Tunica settled among, and later rose against, the Houma in 1706 (Swanton 1911:289,311), and when the Taensa established themselves among the Bayagoula in this same year and later killed their hosts (Ibid:270). The practice of powerful groups peacefully adopting smaller ones (e.g., Natchez adopting Tioux and Grigra) occurred throughout the 18th century, but this situation is not the same as groups of equivalent size and power being suddenly thrust together to serve French interests. The peoples moved by the French were soon reduced through warfare, disease, and other means to such small numbers that they were of little political or economic value.

In mobilizing the various Indian groups and maintaining their allegiance, administrators and missionaries required more than persuasion. Gifts were needed to seduce the chiefs into following French design. Shipments of European goods were sent to the colony for the Indians' annual presents. This was, in fact, tribute (Delanglez 1935:411; Rowland and Sanders 1927:74). Overall, this policy was bad, because the Indians would abandon the French for anyone who offered more goods (Delanglez

* 1714 according to Swanton (1911:283).

1935:106). Once started, however, the distribution of annual gifts became an expected and therefore necessary practice. To implement it the administration decided upon missionaries as the most expedient and inexpensive control (Ibid:412-413). The task of present distribution also fell to post commandants.

In the first years of the colony, during the War of the Spanish Succession, Louisiana was severely neglected. It hence took a great deal of capable administration to compensate for the meager goods presented to the Indians. To prevent the natives from throwing their lot in with the English, Bienville resorted to somewhat devious measures. The young boys distributed among the various groups informed him as soon as their respective hosts were approached by the English:

Mr. De Bienville took care before these presents had their effect to ask to speak and consequently to send for the principal chiefs of this nation to which the Englishman had carried his presents, and not being in a position to give them similar ones, he would show them great friendship, regale them and very often succeeded by this means with the assistance of the Indian language which he speaks perfectly, for these Indian chiefs delighted to see a French chief caress them and have them eat with him, to which they are very susceptible especially when they are offered a great deal to eat because ordinarily they come forty or fifty leagues hunting and without bringing any provisions, would return home with a few little presents that Mr. De Bienville would give them and would assure their people that the French nation was the best nation in the world and that they must not quarrel with it or consequently destroy its allies (Duclos 1713 in Rowland and Sanders 1929:125-126).

Flattery, offering of gifts and perhaps most importantly the giving of a repast were all instrumental elements in the

ritual of distributing annual presents. M. Duclos, the commissary general of Louisiana during Lamothe de Cadillac's tenure as governor, wrote to Count de Ponchartrain in 1713 emphasizing the procedures necessary to hold Indian alliance:

...the presents that are given them, the justice that is done them and even more the food that one must not let them lack when they come on visits, together with caresses and evidences of friendship to the extent to which it is necessary to give them to an Indian (Ibid:125-126).

Bienville was well respected for his administration of justice. He was careful never to break his word to the various Indian groups and made an effort to protect the smallest and feeblest groups in addition to catering to those which were most powerful. The French method of justice was, for the most part, alien to the natives. When disputes arose between members within a group or between groups:

Mr. De Bienville wished to be the judge of their quarrels and for this purpose as soon as he learned that any of them were in a quarrel he would have them come to him, listen attentively to their arguments and would condemn the one that appeared to him to be in the wrong to give satisfaction to the other, and when he was unwilling to submit to it he would oblige him to do so by force by putting him in prison or in irons until the other one was satisfied. Sometimes this absolute manner of doing justice, a thing that they were not yet acquainted with, would displease one nation, but as they often have quarrels with each other one would arise in which the latter would be right and he would in the same way have justice done to it by the other and this would reconcile it with him (Ibid:127).

Bienville also made sure that Frenchmen were punished for injustices to the Indians (Ibid:127-128), something which his

successors often failed to observe. Bienville's diplomacy was not always of the highest order, however. If Indians courted by the English failed to maintain French allegiance, even after Bienville's flattery and bountiful reception, he resorted to the following technique:

...he would stir up secretly some other powerful nations to which he would furnish powder, bullets and the greatest number of guns that he could to make war on the one that he saw was moved by the English and especially to bring him many prisoners from that nation for whom he would give them something. He would send these prisoners back home free, sending word to their chiefs that he had done all that he had been able to do to prevent the others from making war on them, but that not being able to accomplish it he had at least rescued their men whom he was sending back to them to show them that the French nation was a friend of theirs and that he himself was glad to protect them as far as it was in his power to do so, that he hoped that henceforth their nations would pay more attention to the messages that he would send them (Ibid:127).

Once the wavering group had come back to French allegiance as a result of Bienville's seemingly generous actions on their behalf, he would bring the warring aboriginal groups together (which he had actually forced apart in the first place) and make peace between them. With techniques of this sort, and others referred to above, Bienville managed to maintain a precarious Indian allegiance throughout the critical period of the War of the Spanish Succession. Other administrators also exhibited some ability to mobilize Indians according to French interest. As mentioned earlier (see p. 41), hostilities between the Choctaw and Chickasaw had deep historic roots. Governor P erier increased their animosity by giving many more gifts to

the Choctaw. Chickasaw attacks increased as a result of jealousy and the Choctaw were thus forced to throw all their weight against the Chickasaw (Rowland and Sanders 1927:74).

Although there were exceptions, few were as capable as Bienville in juggling gifts to control the Indians. Part of the problem was that most of the administrators were interested in personal gain. Private trade "was the unforgivable sin in the eyes of the [French] Government (Delanglez 1935:51)," but most colonial officers were involved in it. Both d'Iberville and Bienville were accused by their enemies of participating in personal trade, and undoubtedly they did to some degree, but an examination of their overall accomplishments in Louisiana reveals that the economic development of the colony was their first concern. Others did not have as strong an attachment to the colony and were out to make their fortunes. As stated earlier (see p. 416), annual presents were supposed to be distributed by the missionaries and/or post commandants to the local chiefs, but only rarely were goods dispersed in this manner. It was customary for the native recipients to give agricultural products and other merchandise in return for the European materials, and most administrators wished to profit from the transactions. The Indian chiefs normally had to trek long distances to Mobile or New Orleans to receive presents directly from the principal administrators. M. de la Tour, commandant at Fort Toulouse, wrote in 1717:

I have difficulty in conceiving for what better occasion Mr. De L'Epinay wishes to reserve the

presents, of which he still has more than two thirds, as I am assured. I have not meddled with them, since the council has ordered that it was for him alone to dispose of them. The only reason which it seems to me could have prevented him from giving presents for distribution to these officers in command in these posts is because he would not have got for himself the presents that the nations give in their turn to those who give to them. It is for this reason that he wishes the chiefs of the Indians, who are more than two hundred leagues distant, to come and receive from himself the presents that he gives them, which consists most often of a gun, a coat, a blanket and ten pounds of powder and the same amount of bullets. The Indian does not like to fatigue himself for so little, which does not give them enough to feed themselves during the journey, since there are always ten to twelve Indians who accompany the chief (M. de La Tour 1717 in Rowland and Sanders 1929:250).

The Indians were understandably disturbed at the distances traveled for so little merchandise, but their dissatisfaction appears to have been more related to the way in which the conjunctive relations were structured. The colonial administrators, excepting Bienville, more often than not failed to abide by ritual in the relations between the principal members of different groups. Lamothe de Cadillac, for example, would not receive chiefs unless they brought some gifts for him, and the quantity of merchandise offered by him was directly related to the amount received:

...the sentinel that is at his [Cadillac's] door prevents them [the chiefs] even by his order from entering his house unless they come with an interpreter and have themselves announced. In this case he has them enter when the fancy strikes him but always when they bring him some presents of poultry, of game or something else (Duclos 1713 in Rowland and Sanders 1929:131).

The flour will serve to feed the people of his

[Cadillac's] household and the Indians will receive very little of it or none at all, and he will have that which is intended for the presents given to those who will bring him the most game or Indian corn, under different pretexts of the services which he will find that they render to the needs of the colony, but in fact to his own private needs (Ibid:129).

The conjunctive relations between the principal Indians and Frenchmen were seemingly turning into trading situations, something which the chiefs neither expected nor apparently wished. Governor de l'Epinau was particularly unaware of the appropriate reception structure:

The majority of the Indian nations are not pleased with the reception that Mr. De L'Epinau has given them. The Indian wishes stability; besides, the presents that he gave them were of no importance in comparison with the quantity of goods that were taken from Mr. Crozat's warehouse for this purpose and with the presents that are also made by the Indians who receive (presents). Several are very dissatisfied and they say among themselves that Mr. De L'Epinau was an old mangy dog whom the Great Chief on the other side of the great lake had sent to this country, because he was dying of hunger in his village, and he was an old woman, that he never went out of his house, that he made a big noise but that his words did not go beyond the door of his room; these are the Indian expressions. The contempt for the chief is reflected at the same time on the nation. The Indians are savages only in name. They have as much discernment and shrewdness as can be expected from people without education. They talk little, but very much to the point (Hubert 1717 in Rowland and Sanders 1929:249).

Diron d'Artaguiette, commandant at Mobile in the 1720's, was also carrying on a very lucrative trade with the Indians, particularly the Choctaw (Delanglez 1935:456-457; Rowland and Sanders 1929:612). He jeopardized the security of the colony

by the manner in which he distributed the annual presents:

In 1737, Bienville, in bed with rheumatism, was unable to go to Mobile for the usual distribution of presents. He delegated Diron to take his place. Diron got rid of the Choctaws quickly by giving a whole lot to each village chief, who, instead of distributing the presents equally or according to the merits of the warriors, shared the gifts with relatives and partisans (Delanglez 1935:471).

Some administrators, like Diron d'Artaguiette, paid particular attention to chiefs who were leaning towards the English. They lavished these Indians with gifts to keep them in French interest. Bienville was opposed to this practice as not only did the ill-disposed chiefs become haughty in the belief they were feared, but the friendly chiefs became alienated as their loyalty was not rewarded (Delanglez 1935:465; Rowland and Sanders 1929:9). Father Raphael similarly complained, in 1725, of the treatment of the Apalachee Indians:

I should like for a little more consideration to be shown them than is shown, both because they deserve it and because the good treatment that would be given them would attract their neighbors to Christianity. The contrary is the practice for while considerable presents are given to the pagan nations we are content to pay this one a very modest salary for its work. This makes others say that if they should become Christians, they would become slaves of the French like the Apalachees (Raphael 1725 in Rowland and Sanders 1929:484).

The administrations' treatment of local friendly groups was undoubtedly noted by Indians wary of allying themselves with the French. The inoffensive friendly Chaouchas Indians paid for the Natchez and Yazoo Massacres:

I [Governor Perier] saw with great sorrow that people were less French in Louisiana than elsewhere. Fear had so powerfully taken the upper hand that even the Chaouchas who were a nation of thirty men below New Orleans made our colonists tremble, which made me decide to have them destroyed by our Negroes, which they executed with as much promptness as secrecy. This example carried out by our Negroes has kept the other little nations up the river in a respectful attitude. If I had been willing to use our Negro volunteers I should have destroyed all these little nations which are of no use to us, and which might on the contrary cause our Negroes to revolt as we see by the example of the Natchez (Périer 1730 in Rowland and Sanders 1927:64).

The distribution of presents to the various aboriginal groups thus required great tact. It was dangerous to favor one chief over another as the offended chief would subsequently invite English traders into his community (Delanglez 1935:411-412). Standard presents were hence offered to each chief. As stated earlier (see pp. 419-420), M. de l'Épinay in 1717 gave to each a gun, a coat, a blanket, ten pounds of powder and an equivalent amount of bullets (Rowland and Sanders 1929:250). Between 1718 and 1727 the provincial administration gave to each first chief of the Chickasawhays:

...A coat, a gun, a pair of leggings, a breech-clout, a blanket of limbourg cloth or a white blanket, two shirts, a hat, two axes, a tomahawk, two pickaxes, a medoir, two pocket-knives, some beads, a pair of scissors, a comb, some nails, two awls, some needles, several gunflints, some powder, some bullets, some vermilion, some vermilion boxes, some brass wire, twelve small bells, etc. (Regis du Roullet 1729 in Rowland and Sanders 1927:45).

In order to maintain the balance of power, the government had to lavish the Indians with gifts. They often had to pay

dearly for bad skins, just to keep the Indians in French interest (Surrey 1916:349-350). In 1713 only 4,000 livres of merchandise were requested by the provincial government for Indian gifts (Rowland and Sanders 1929:147), but fifteen years later Diron d'Artaguette was asking 19,000 livres worth of presents for Mobile alone (Ibid:580). It cost the government 62,000 livres in 1749 to maintain the Choctaw and Creek alliance. Only 9,621 livres worth of peltry were acquired four years earlier, and by 1754 Governor Kerlérac obtained 30,000 livres worth of pelts, but ended up purchasing 62,000 livres worth of merchandise for Choctaw presents (Surrey 1916:360-362). It is obvious that Louisiana had become an economic liability for France, but its political importance remained steadfast.

Unlike the missionary and trader, who had direct and for the most part continual interaction with the Indians, the contact between Indians and French administrators was very infrequent and usually only chiefs were involved in the interaction. However, the affect of administrators in producing aboriginal sociocultural change cannot be underestimated. As alluded to earlier (see p. 418), the giving of European merchandise was often used to mobilize Indian groups against other groups. Those which earlier may have been friends, on the basis of kinship ties or other sociocultural phenomena, became enemies as a result of French intervention. The severing of old ties and the formation of new ones undoubtedly wrought certain changes among the respective groups. The reception of European goods hence often served as a catalyst for changes in social relations:

...they [the French] were a people of great penetration.. they were brave, and could bring over by their presents, all the Warriors of the other nations (Le Page du Pratz 1774:80).

Administrators also wrought changes by interfering with native rituals, examples being d'Iberville's prevention of the Taënsa throwing more than a few babies into their burning temple (Swanton 1911:266-268), and the principal officers at the Natchez Post preventing deaths at the Tattooed-serpent's mourning ceremony (Ibid:153). Perhaps of greater importance were the effects the administrators probably had in occasioning social disorganization. I have mentioned earlier (see p. 422) the foolish practice of Diron d'Artaguiette giving merchandise to chiefs alone and expecting them to distribute it evenly. This practice not only served to create Indian resentment against the French, but it probably did little to enhance affection towards the chiefs. Similarly, when French administrators desired anything, they inevitably applied directly to the chiefs. In dealing with the Natchez, they confronted the Great Sun. If hunters or rowers were needed to accompany Frenchmen on long journeys, the Great Sun would give them all the men they wanted and would receive, "payment, without giving any part to those unfortunatè individuals, who are not permitted even to complain (Le Petit in Swanton 1911:103)." The result of such practices was a great amount of wealth coming into the hierarchy, with increasing burdens inflicted on the masses. The authority of the Great Sun no doubt existed long before the French appeared and was perhaps even more paramount,

but it is doubtful that it was used in the manner of the French-Natchez relations described above. Few aboriginal groups had the ability to court the Great Sun with materials better than those which he already had. Similarly, few would have ever applied to him for slave labor, as visiting dignitaries from distant areas undoubtedly were accompanied by their own entourage of hunters and oarsmen. The rapidly expanding differential wealth, combined with the increasing burden on the general populace, probably contributed much to the erosion of native sociopolitical structure.

The role of the administrator must hence be examined in any contact study. Not only did the French officials often directly affect the native inhabitants, but they also controlled, in part, the actions of other roles which had more continuous interaction with the Indians. Understanding the objectives and techniques of the administrators has been of value to this study of French-Indian interaction in the Yazoo Bluffs region, because a movement of groups which is suggested by the historic accounts is supported by the knowledge that such centralizing movements were an integral aspect of colonial policy. The provincial government was obviously concerned with the control of Louisiana, and the largest body of people capable of insuring French control were the Indians. To make them an effective force they had to be centralized in strategic positions. The smaller groups were accordingly moved, but the policy failed because native boundaries were not taken into consideration. With few exceptions, the administrators rarely tried to

understand aboriginal culture, and so their grand schemes seldom amounted to much. Some officials, like Bienville, learned the ways in which to deal with Indians, and when receiving visits from the various chiefs made sure that ritual was observed. The conjunctive relations were little changed from those experienced by the explorers. Administrators who failed to observe ritual not only attracted wrath upon themselves, but overall aboriginal respect for the French settlers decreased. The officials thus had a tremendous responsibility to the colony. A simple failure to offer a feast or distribute annual presents evenly made enemies of very powerful groups. The way in which merchandise was offered was a very strong weapon, because it not only affected aboriginal social organization, but it made enemies of friends and friends of enemies. The administrators, therefore, occupied a position of wielding significant aboriginal sociocultural change.

Traders

The role of the trader must obviously be examined in any study of sociocultural change. Most materials first passed through administrative control, but to the Indians the French traders were the direct source of goods. What was presented and the manner in which it was presented undoubtedly had some effect on the course of aboriginal sociocultural change in colonial Louisiana. Joyce Wike has stressed the importance of

understanding the economies of the two cultural systems and the ways in which transactions were made in making sense of the fur trade:

A threefold task faces us in the analysis of this type of change. The essential economic relationship within the native society must be delineated, the nature and role of the European economy has to be understood, and most importantly, we must see the way that the relationship between these two economies both changes and determines the final position in which the native peoples will find themselves. If the relationships of the tribes and of the individuals involved in the trade are clearly defined we may be able to make sense out of the fur trade, even though we can never determine how much the total cultures were, or were not, enriched (Wike 1958:1093).

In chapters 5 and 6 I have dealt with both the aboriginal and the Louisiana French economic organization, but made little mention of the ways in which the networks meshed. This section is devoted to that subject. I first consider the goods, primarily in the form of produce, which passed from the Indians to the settlers. This is followed by a discussion of what the natives were receiving in return. There is then an examination of the Frenchmen who were involved in the transactions and, finally, an evaluation of the overall French-Indian economic relationship in colonial Louisiana.

Trade in itself was obviously nothing new to the Indians of the Southeast. Extensive interaction networks were in existence during the late Meso-Indian era (Sears 1954; Winters 1968), the early Neo-Indian era with the Poverty Point culture (Brain 1971:43-54; Ford et al. 1955; Ford and Webb 1956; Gibson

1974; Smith 1976), throughout the early and middle Woodland periods with Adena and Hopewell influenced cultures (Brain 1971: 54-58 ; Caldwell 1964; Griffin 1958; Struever and Houart 1972; Toth 1966), as well as in late prehistory (Griffin 1966; Phillips 1940; Porter 1969; Waring and Holder 1945). Undoubtedly the bulk of materials traded between groups consisted of perishables. Archaeology had demonstrated the transference of lithics, pottery, shells and other such hardy substances over extensive areas, but of course has seldom revealed the exchange of perishable goods.

One such material which figured large in historic transactions and probably also had strong prehistoric roots, is salt (Cox 1905:45; Swanton 1911:264). The Natchez Indian and neighboring groups received their supply of salt directly from Caddoan groups to the northwest. Many groups traveled to the region of the Black River in Arkansas in the winter where major salt deposits were located (Swanton 1911:78). The French of Lower Louisiana received salt from France and the Illinois country, but probably received most of this mineral from the Indians. The Cadodaquian provided the French with 200 pounds of salt in 1719 (Surrey 1916:279-280). The Tunica figured into the French-Indian salt trade as middlemen. When Bienville was among the Tunica in 1716, M. de Richebourg indicated they were provided with "fresh bison and deer meat." The reference to fresh bison is interesting. The Tunica might have received this meat from more westerly groups as M. de Richebourg continued to relate that while they were at the Tunica village, some Natchitoches

Indians appeared in a pirogue loaded with salt to sell (Swanton 1911:204). The Tunica certainly loomed large in the French-Indian salt trade, but there is also evidence that other groups dealt directly with the French in the salt trade. I would not go as far as Jeffrey P. Brain to say:

...the Tunica were entrepreneurs of the first order. They were excellent traders who apparently held their own in matters of commerce with Indian and European alike. Perhaps they held an advantage, because they seem to have controlled the production and exchange of some vital resources, such as salt. Altogether, their success may be measured by the unusual accumulation of material goods (Brain n.d.a).

The Tunica also traded horses and poultry to French settlers, their chief apparently profiting from the transactions:

He [Cahura-Joligo] carries on a trade with the French, supplying them with horses and poultry, and is very expert at business. He has learned from us the art of laying up money, and is accounted very rich (Charlevoix 1923:262).

Similarly, the Avoyel Indians were a major source of horses, oxen, and cows for the colonists. This livestock was secured originally from Caddoan peoples and more westerly groups who had plundered them from Spanish settlements (Swanton 1911:273). In addition to salt and livestock, the French settlers received much of their meat from the local natives. Expeditions often took Indian hunters along to live off the land on the journey. As mentioned above, the Tunica are recorded to have traded in deer and bison meat. The Natchez also sold deer meat to the settlers (Ibid:71-72). The Avoyel, when encountered by Bénard

de la Harpe on the Red River, exchanged meat and fish for two guns (Ibid:273). Geese and ducks were also generally traded to the colonists (Ibid:90). A principal trade produce was bear's oil (Surrey 1916:98; Swanton 1911:90). The settlers found it to be an excellent substitute for salads:

The French of Louisiana learned from the natives to use bear's oil and soon began to substitute it for olive oil. It was claimed by some to be quite as good for salads as the best grades of the latter (Surrey 1916:262).

The Natchez Indians traded bear's oil in large deer-skin containers. Le Page du Pratz received one which contained 31 pots of the measure of the country (62 pints Paris measure) (Le Page du Pratz 1774:42). The Ofo, and perhaps the other Indians in the Yazoo Bluffs region, traded bear's oil in ceramic pots:

...the Yazoos and Koroas after the attack went to find the Ofogoulas who were three or four leagues from there occupied with making earthen jars in which to put their bear grease and that they traded to the French, and told them the news about what had just happened at the fort (M. de Lusser 1730 in Rowland and Sanders 1927:99-100).

Pots such as these may have been the ones found in Fort St. Pierre's moat (see. p. 183). The settlers were certainly fond of bear's oil and were willing to pay exorbitant fees for it. In at least one instance the French at the Natchez Post traded a gun, an ell of cloth, or items of equivalent value for a faon (deerskin container) of oil from the Indians (Swanton 1911:69). The demand for bear's oil began quite early in the colony's

history and increased markedly over the years. When Father Gravier passed Fort Prudhomme in the fall of 1700, he noted that a great many bears had been killed there in the previous year (Thwaites 1896-1900,65:113). The Arkansas Indians furnished New Orleans with something like 2,500 or 3,000 pots of oil in 1721 but, having severely depleted the resource, had none to sell in the following year (Surrey 1916:262). Father Gravier noted that Tunica men and women did not grease or oil their hair as did the Indians of Canada (Thwaites 1896-1900,65:131), and I have found no reference to indicate that other Lower Mississippi Valley Indians did otherwise. One wonders what function bear's oil had in the aboriginal economy prior to French demand, as the great reduction which occurred certainly must have occasioned some changes in their economic organization.

The Louisiana Indians also grew vegetables to trade to the French settlers. In 1719 B nard de la Harpe met a group of Natchitoches Indians at the mouth of the Red River who were taking their products to New Orleans. He purchased five barrels of corn from them (Surrey 1916:269). Corn was also purchased by the French at the Natchez Post (Swanton 1911:207). B nard de la Harpe bought some "Apalaches" beans from the Tonic [Tunica?] (Surrey 1916:271), while the New Orleans settlers received a portion of their bean supply from the Choupetoulas Indians (Rowland and Sanders 1929:314-315). The Natchez also provided the colonists with persimmon bread (Swanton 1911:77), and sold them their basket work:

With the skin which they take from the upper

part of the canes they make very fine sifters (Tamis). They also make some with larger openings which serve as sieves (cribles), and they work others without openings which take the place of winnowing baskets (van). They sell these little pieces of work to the French, who obtain them for trifles. They also make hampers (paniers) worked very neatly, and baskets for corn (LePage du Pratz in Swanton 1911:62).

According to Surrey, the most common Indian trade items were bear's oil, corn, beans, horses, furs and slaves (1916:93). As mentioned a number of times, the Indian slave trade was particularly vigorous in the late 17th/early 18th century. The English seem to have been most active in encouraging the traffic, but the French made little effort to end it. Not until large numbers of Negro slaves entered the colony, did the French traffic in Indian slaves terminate. Many Indians raised export crops, such as the Natchez who grew tobacco (Rowland and Sanders 1929:533), but peltry was unquestionably the most important Indian contribution to the export trade. Brown and gray beavers existed in the Lower Mississippi Valley. The latter was more abundant, yet the brown beaver was more valued (Le Page du Pratz 1774:127-131). The quality of the available beaver, as well as the fact that Antoine Crozat's patent allowed him to deal with all but beaver skins, resulted in the animal figuring little into French-Indian transactions. The most popular animals appear to have been deer, bear and bison (Rowland and Sanders 1929:461; Swanton 1911:90). Kid and otter skins were also purchased in later years, and even beaver eventually became important (Surrey 1916:357-358). The Indians in the

Yazoo Bluffs region contributed a significant portion of deerskins to the export trade. Whereas the Tunica and Arkansas sent 1,000 deerskins to the Company of the Indies in 1725, the Yazoo and Ofo sent 2,000, "of a very good quality (Ibid:348)."

In return for these products, the Indians received a large assortment of European merchandise. The basic means of exchange at the frontier posts were, "French trinkets such as beads or bright colored cloth (Delanglez 1935:389)." In exchange for hunting, guns, powder, balls, lead, vermilion, limbourg and kettles were given to the Indians (Swanton 1911:90). In 1739, 50,000 deerskin pelts were received by the French in exchange for bullets, powder, guns, flints, blankets, vermilion, mirrors and hardware (Surrey 1916:357). Five years later deerskin, buffalo, kid, otter and beaver pelts were traded for guns, powder, bullets, knives, needles, razors, vermilion, woolen goods, ribbons, blankets, shirts, blue and red limbourg and brandy mixed with water (Ibid:357-358).

Most inhabitants of the frontier posts participated, to some degree, in trade with the local native populations. Their trade goods were received from the Company of the Indies' warehouses (e.g., Rowland and Sanders 1929:240-241). There are very few records indicating the type and amount of merchandise stored within these warehouses. In complaining of the wretched condition in which the one in New Orleans was kept, M. de la Chaise noted in 1723 that much of the merchandise, including guns, iron tools, nails and bells, was exposed to the elements (Ibid:300). The colonists were all but forced to trade with the

Indians, as the Company of the Indies often failed to provide enough supplies (Le Page du Pratz 1774:32). Members of La Salle's expeditions participated in trade (Cox 1905:73-74), and in the war against the Fox Indians in 1716, one of the inducements for getting Frenchmen to enlist was the opportunity for conducting private trade (Wittry 1963:55).

To other men, trade was a business. The actions of private traders were often restricted by local and provincial administrators, however (e.g., Rowland and Sanders 1929:293). The power of the administration is obvious. They in large part controlled what was traded and, in certain cases (e.g., beaver), restricted the type of products obtained. Sometimes post commandants and officers also restricted free exchange between settlers and Indians. Many military officials came to Louisiana to make their fortunes, and it was not unusual to see commandants open shops and saloons to supplement their salaries (Delanglez 1935:388). Officers at frontier posts were in very lucrative positions for becoming involved in the fur trade. Men competed for these assignments, because in the space of a few years an officer could amass a small fortune (Eccles 1969:116). M. Layssard, a resident at the Arkansas Post in 1758, was forbidden to buy corn from the Indians to feed his only cow. He complained that:

M. de Gamon - the Commandant of the post - saying that nobody but himself had the right to go to the (Indian) village to buy or sell, and that all trade belonged to him (M. Layssard in Delanglez 1935:445).

Le Page du Pratz was concerned by the way trade was conducted at the various frontier posts. The way in which transactions were made was often detrimental to French-Indian relations. He discussed the Yazoo and Natchez Posts in light of this problem. First, there was too much familiarity between settlers and Indians. He felt that the settlements should not be too close to the Indian villages, yet not so far away that there was no interaction at all. Second, neither soldiers nor inhabitants should be allowed to go to the Indian villages to trade, as the competition which results lessens the monetary value of the merchandise received from the Indians. Rather, the Indians should come to the fort where merchants could be gathered to trade at the same price (Le Page du Pratz 1774:96-98). The implication in Le Page du Pratz's complaint is that the soldiers and ordinary settlers at the Yazoo Post competed for trade at the Indian villages, the Indians profiting more than the French. This situation apparently created a certain amount of friction between the French and local natives, because Le Page du Pratz also noted that:

This post [Yazoo] was very advantageously situated...for the commerce with the natives, if our people knew how to gain and preserve their friendship (Ibid:56).

Trade in Louisiana was not conducted solely by settlers, however. There must have been many individual traders, unbeknownst to history, who traveled up and down the Mississippi hoping to make their fortunes. There is no evidence of

Europeans living among the Indians of the Yazoo Bluffs region prior to the advent of the French missionaries, but this does not rule out the possibility that they were there. We must hence consider the role individual traders may have had in their dealings with the Indians. Zenietz and Kravitz (1974) presented a model of the role of beachcombers on the Pacific Island of Ponape. Beachcombers typically were the dregs of European society. Rejected by the latter, they thus made a life for themselves among the natives. These beachcombers served as clients in a patron-client relationship with the Ponapeans.* The chief was the patron and served the beachcombers basically in permitting them to remain alive. These men became useful to the chief when whaling vessels, laden with European merchandise, visited the island. Roles changed, in that the chief and the natives became the clients, the Europeans on the ship became the patrons, and beachcombers became brokers. The latter served as middlemen between the two parties, because they knew the values of each culture (the European values were of course better known to them), and hence what each group desired. The roles returned to the former state once the ship departed.

It is obviously impossible to know if a similar situation existed in the Yazoo Bluffs region. That individual Frenchmen were often incorporated into Indian groups at a very early period

* See p. 381 for a discussion of patron-client relationships.

cannot be denied. M. de Tonti, in 1690, found deserters from La Salle's expeditions living peacefully among both the "Naoudiches" and "Couroas" almost twenty years after leaving the exploring parties (Cox 1905:53-57). Swanton similarly noted that the Natchez region was a convenient stopping place for parties going up and down the Mississippi River, it being probable that numerous voyageurs visited these Indians long before the French settlement was established (1911:192). Had individual traders visited or lived among the Yazoo Bluffs groups, their role may have been similar to that played by the beachcombers of Ponape. I will not carry this further, for fear of stepping into Radcliffe-Brown's "conjectural history".

Missionaries definitely served as brokers in the French fur trade. In bringing Indians to traders and traders to Indians, they played a significant role as middlemen (Clark 1968:9; Conkling 1974:11). In this role they were also able to maintain control of the values passed along with the merchandise. The traders themselves generally learned only enough of the Indian languages which was necessary to conduct trade (Thwaites 1896-1901;67:254-255). Some traders dealt directly with the Indians, but there is unfortunately little information on the ways in which the transactions occurred. M. de la Vente, in 1708, compared the Indian and French traders:

Their honesty regarding that which one sells to them is inviolable on their part, and it would be desirable that the French had as much good faith in their trading as they use themselves in what they trade to us (M. de la Vente in Swanton 1911:50).

Many Frenchmen took advantage of the Indian's ignorance of the power of European merchandise:

For example, for 1,000 crowns worth of fine beaver skins they paid a small amount of powder which they told the Indians was a new variety that, if planted, would produce all the powder they would want. As soon as the natives discovered that they had been defrauded they were infuriated against the French in general, believing them in sympathy with the behavior of the traders (Surrey 1916:362).

Some traders went a bit too far, and no doubt regretted their dishonesty:

Sometimes they carried their exhortations to the extent of offending the Indians by the ridiculously low prices they offered. One such trader had the temerity to offer an Indian one charge of powder and a bullet for a beaver skin, whereupon the Indian replied by burying a hatchet in the head of the trader (Ibid:99).

English competition undoubtedly curbed the abuses of French traders. Indeed, in most cases the Indians often got the better of the deal. The French commercial monopolies did little to encourage individual traders. The Company officials paid so little for peltry during Crozat's tenure that many traders sent their skins to New France or even sold them to the English. Most stopped taking their furs to Mobile. An illicit trade existed for some time with any vessels which happened to cruise along the coast (Surrey 1916:341). In the 1720's, the provincial administration made a strong effort to make sedentary settlers out of wandering traders. At the same time, the traders continually raised the price of French goods. Understandably,

the Indians relied increasingly on English entrepreneurs (Ibid:347).

As a result of conditions in Europe, English traders were better equipped to provide the natives with materials (see p. 39). When the hunt was bad, they even gave goods on credit, something which the French were unable to do. French traders usually had a small stock and could ill afford to issue credit. Powder and lead were the only items the French were able to supply to the Indians in abundance. Perhaps because of transportation difficulties, the English could not meet the demand in these materials (Delanglez 1935:459-460; Rowland and Sanders 1927:32-33). To compensate for their inability to provide abundant and high quality gunpowder, the English gave the Indians rum. They hoped it would be used to incite the Indians against the French living among them (Surrey 1916: 358-359). Their hopes were indeed satisfied, but the French traders did little to alleviate the problem. They found that the Indians used the guns primarily to hunt, and subsequently to sell skins to the British, whereas it was hoped they would use the arms in fighting enemies of the French. In order to persuade the Indians to use their guns accordingly, the French sold them brandy (Delanglez 1935:459-460). The provincial administration, in 1717, made it illegal to sell brandy to the Indians, because of the disorder which inevitably resulted. The law did little to curtail its distribution, however (Surrey 1916:273). Governor Vaudreuil complained of the ill affects of the liquor trade on colonial welfare:

...they are obliged to turn to us for powder and lead, which it is very hard for them to get from the English, plus the brandy sent from here (New Orleans) in great quantity, which, however, is having a very bad affect upon them. This liquor makes them wild and often causes fights, not only among themselves but also with the French who are selling it to them, and upon whom they throw themselves when they are refused. It has happened several times that soldiers, officers and even missionaries have been obliged, in their very house, to use violence against violence, for the Savages are capable of doing anything when they are drunk; they rob, strike, or even kill anyone they meet. Once sober they admit that brandy makes them miserable, and that (having spent all they have) they cannot buy what they need. The English are making use of their sad plight. When the Indians have spent everything for drink, they sell them on credit in order the better to entice them (Vaudreuil in Delanglez 1935:484-485).

The provincial administrators isolated the liquor trade as being at the heart of the problem. Governor Vaudreuil:

...complained of the lack of merchandise to sell the Indians, and when there was something to sell, it was so dear in comparison with the price asked by the English that the Indians did not want to buy. Brandy trade had to be allowed, and the drunken Indians were a constant danger for the French residing in the Alibamon country. More goods must be sent. Hazeur wrote a new list of what was needed; when these goods arrived, the brandy trade would be stopped (Ibid:484).

The French administrators did not see the circularity in the problem. Brandy traffic was indeed detrimental to the colony's welfare, but the initial trade of powder and lead made the liquor traffic inevitable. The more powder and lead sold, the more the Indians supplied the English with peltry. Traders from Charles Town hence profited and could afford to grant credit to the natives. In order to regain Indian allegiance

and have them fight for the French, the latter had to persuade the natives with brandy. The settlers then suffered from the activities of intoxicated Indians (e.g., Swanton 1911:210). As the powder and lead transactions increased, so also did the brandy traffic, and the safety of the French colonists accordingly decreased. The point is, once the ammunition was given, the liquor had to be. It does not appear that the French were totally aware of the mechanics of this system. It would have been interesting to see what would have happened had the colonial officials emphasized stopping the powder and lead traffic, as the English apparently could not meet this demand. It is possible that the French would have been in an equal if not better position than the English.

The problem was never resolved and, as discussed earlier (see pp. 423-424), the colony ended up giving more and more, and receiving less and less in return. At the same time, the security of Louisiana was in an increasingly precarious position.

The trader obviously had a significant effect on the nature of aboriginal sociocultural change in the Yazoo Bluffs region. The resources he asked for and the materials given in exchange must have considerably altered certain aspects of the native way of life. The general changes will be discussed in Chapter 12. We unfortunately know very little concerning the actual interaction between traders and Indians, but we do know that many different peoples participated in these activities. Louisiana settlers received a good deal of their supplies from

the Indian trade, and it is probable that the residents of the Yazoo Post did also. Commandants and officers participated in, and often monopolized, the local Indian trade. There is no evidence of this having occurred in the Yazoo Bluffs region, but there is some evidence that the settlers went directly to the native villages to trade. We know the Indians traded bear's oil and it is probable that they also dealt in meat, skins, and various vegetables. There is no evidence concerning what materials the French settlers gave in return, but beads, knives, axes, etc. were probably included. The competition between the French traders seems to have been intense, and, combined with the constant English pressure, the Indians may have profitted in many instances. That there were problems between the participants is evident, especially as the Yazoo Bluffs groups at one time threatened to abandon the region (see p. 413). The problems may have resulted from the dishonest dealings of individual French traders or they may have been a product of the liquor trade. Whatever the case, these Indians severed their economic ties with the French settlers in the winter of 1729.

Missionaries

Missionaries had very close and continuous contact with the Indians of the Southeast. Traders and administrators sometimes dealt directly with the natives, but most often went

through the intermediary of a priest. The administration was acutely aware of the importance of the missionary role in Indian relations:

Nothing so quickly civilizes the nations, no matter how savage they are, as Religion does. This was the policy of the Romans, it is that of the Spaniards and is a very satisfying one. Any Religion, but the true Religion above all others, creates certain bonds which are not easily broken. New missionaries, then, should be sent to this country (M. Lemaire in Delanglez 1935:413).

The missionary, working side by side with the natives, became a part of Indian society (e.g., Delanglez 1935:155). As a result, they had the potential of winning strong personal affection from the Indians, and were in a much better position to gain converts and secure allegiance for France. In trying to win support for Jesuit missions, Father de Beaubois stressed that missionaries could 1) hold Indian loyalty better than annual presents; 2) keep the French government informed on the machinations of the English; and 3) serve as intermediaries between Indians and French traders to forestall or smooth over any difficulties (Ibid:106). The arguments were convincing, and missionaries were hence sent to the colony and established among native groups in frontier zones. These were precarious positions and the priests often had to distribute large amounts of merchandise to attain their objectives (e.g., Father Baudouin among the Choctaw; Ibid:473).

The primary purpose for having sent missionaries to Louisiana was political, but the missionaries' own objectives and actions

were not totally motivated by political concerns (Ibid:410). References are few as to what objectives were addressed to the Indians. The Recollects, who visited the Lower Mississippi Valley groups in 1698 and 1699, announced that their purpose was to secure peace between the Indians:

We told the chief that the black robes, like ourselves, were not warriors, that we had not come to see them in that spirit, and that on the contrary we exhorted everyone to peace (Montigny 1699 in Swanton 1911:22).

Father de Montigny, among the Taënsa in 1698, noted the prevalence of nudity and announced that one of his objectives was to clothe the natives (Swanton 1911:265). This is obviously but one part of the overall goal of civilizing, or "Frenchifying", the Indians. Their immediate objective, however, was to teach the Indians about the "great spirit" (Thwaites 1896-1901,67:250-251). The ways in which the missionaries succeeded and failed in accomplishing these objectives is the subject of this section. As an agent of Indian acculturation, the missionary was obviously the most important French role, and so the role requires an in-depth examination. A historical sketch on the Louisiana missions is offered first. This is followed by a number of short sections outlining missionary policy. The final portion is a somewhat lengthier discussion of the ways in which missionaries fit into native society and their potential in affecting sociocultural change as a result of this position.

History of the Louisiana Missions

The first historically known missionary to have entered the Mississippi Valley was the Jesuit Father Jacques Marquette in 1673. He went no further south than the mouth of the Arkansas River (Shea 1861:126; Thwaites 1896-1901,65:116-117). La Salle and Tonti took a number of Recollect missionaries with them on their numerous expeditions. Included were Father Zenobius Membré, Father Louis Hennepin, Father Gabriel and Father Anastasius Douay (Cox 1905; Swanton 1911:20). Father Douay also accompanied the first d'Iberville voyage to Louisiana, but no sooner had he arrived than he wished to return to France. D'Iberville was understandably frustrated by his experience with the Recollect order, and, as he needed missionaries to serve as Indian interpreters, he subsequently applied for Jesuit priests (Delanglez 1935:5-9). Father Joseph de Limoges was the first Jesuit in Louisiana since Marquette's short visit. He left France for Canada in 1698, arrived at Cahokia in March of 1700, and in November of the same year settled among the Houma Indians (Ibid:27-30; Thwaites 1896-1901,65:148-149). He deserted his mission in 1702 and left Louisiana for good in October of the following year (Delanglez 1935:33-36).

The Jesuit Father Paul Du Ru accompanied the second d'Iberville voyage, arriving in the colony in January of 1700 (Ibid:11). He visited a number of Indian villages in his travels on the Mississippi River, and even laid the foundation for

churches among the Houmas and Bayagoulas (Ibid:15). His missions had promising beginnings, but they came to ruin when he left Louisiana with d'Iberville in February of 1702. Father Dongé, also a Jesuit, took Du Ru's place as chaplain of the newly founded Mobile. Dongé remained in this position until 1704 when he died in an epidemic (Ibid:33-37).

Troubles between the religious sects plagued the early growth of the colony. D'Iberville, Bienville and Ponchartrain all wanted to give Louisiana to the Jesuits, but their wishes conflicted with larger political problems. At the turn of the 18th century the Jesuit order and the Foreign Missions (Recollects or Capuchins) were competing for the Illinois country (the Tamarois Affair). The Jesuits were also in disfavor with the Directors of the Seminaire in Paris at this time, and the latter were very influential in court. As a result, the Jesuits were recalled from Louisiana and the district fell to the Foreign Missions. The Jesuit missions among the Houma, Bayagoula and Acolapissa were hence abandoned (Delanglez 1935:44,48,52; Rowland and Sanders 1929:30-31). The situation was unfortunate for both the colony and the Indians. Unlike Canada, where there was constant friction between administration and Jesuit missionaries, the governors of Louisiana (Bienville, Perier, Vaudreuil and Kerlerec) heartily supported the Jesuits. The potential of the missions was never realized, however, because of the larger political problems (Delanglez 1935:382).

The Recollect fathers were at first quite active in Louisiana affairs. Fathers Francois Jolliet de Montigny, Antoine

Davion, Jean Francois Buisson de St. Cosme and La Source left Quebec for the Lower Mississippi Valley in 1698. Father de Montigny was the Superior and Vicar-General of the Bishop of Quebec. While he, Davion, and La Source continued south, Father St. Cosme remained in the Illincis country (Ibid:21-22). The expedition got as far as the Taënsa and Tunica in 1698, but returned shortly thereafter to the Arkansas Post (Swanton 1911:20). Early in 1700, at the same time Father Du Ru was building his churches among the Houma and Bayagoula, Father de Montigny transferred his mission from the Taënsa to the Natchez. Father Davion had meanwhile begun his mission among the Yazoo River groups (Delanglez 1935:15; Swanton 1911:20). Both Davion and de Montigny were at Fort Maurepas in May of 1700. The latter left for France at this time, while Davion returned to his mission (Delanglez 1935:19-25).

Father Foucault was among the Arkansas in late 1700, but he did not get along too well with his hosts. He was murdered by some Koroa Indian guides in July of the following year. Both Father de Limoges and Davion saw fit to abandon their missions as a result of this event (Ibid:33-36). Father St. Cosme was the second martyred missionary. When Father de Montigny left for France, St. Cosme took his place among the Natchez. St. Cosme lost his life in 1706 to a party of Chitimacha Indians who had planned to make war on the Bayagoula. Finding them absent, they released their hostility on this French missionary who, at the time, was descending the

Mississippi. The Natchez mission was abandoned and never reopened (Delanglez 1935:63; French 1869:84-85).

The early missionary endeavors failed for a number of reasons. The Jesuits were most suitable for running them, and even had the local political support, but they lacked substantial support in France. The Directors of the Séminaire in Paris did not want the Jesuits to win control of the area but, at the same time, they did not wish to devote their energy to sending and supplying members of the Foreign Mission. The Indians, and consequently the colonists, suffered as a result of these conflicting interests. After the initial surge of Jesuit activity, only three Jesuits remained in the colony, all of whom were located among the Illinois Indians (Delanglez 1935:60). One of these men was Father Gravier. He descended the Mississippi in October of 1700, spent a few days among the Tunica, Houma, and Bayagoula and then settled at Fort Mississippi (Fort de la Boulaye) as the post chaplain (Delanglez 1935:27-30; Shea 1861:115-163; Thwaites 1896-1901,65:100-179). He left Lower Louisiana for the Illinois country in February of 1702 and died there in April of 1708 (Delanglez 1935:33,64).

The Directors of the Séminaire sent only four Recollect priests to Louisiana between 1704 and 1719. Father Lemaire arrived in 1707, and left the colony sometime between 1719 and 1724 (Ibid:71-73). Father Dominique Marie Varlet arrived with Lamothe Cadillac in 1713 (Ibid:73). Father de la Vente and Huvé both arrived in July of 1704 (Ibid:52-53). La Vente was installed as cure of Fort Louis in Mobile. He apparently

retained this position until he left Louisiana in June of 1710 (Ibid:65). In the period of Recollect domain, Father Huvé and Lemaire paid occasional visits to the Apalachee, but the major groups (Choctaw, Chickasaw and Natchez) never received missionaries. The only mission which held together, but only on an intermittent basis, was Davion's among the Tunica. The Recollect priests essentially devoted all of their energy to the French settlers at Dauphin Island, Mobile and Biloxi (Ibid:48). Even Davion was derelict in his missionary duties. He took Father de la Vente's place in Mobile in 1710 and remained there until 1715. He returned to the Tunica at this time, but could not have been with them very long, because in September of 1722 he is reported to have been curé of Biloxi. He left for France in the following year (Ibid:71,75,96,98).

Two Jesuits, Fathers Le Boullenger and Loyard, arrived in March of 1717. One was supposed to go to the Wabash, the other to the Yazoo. They left the colony in the following year, leaving only three priests (Recollects) in all of Lower Louisiana just prior to when the Company of the Indies started to send settlers over (Ibid:77,80,93). The Jesuit Father Jean Marie de Ville left the Illinois mission in 1719. He spent the winter of 1719-1720 at the Natchez settlement, as he was too sick to return to his mission. He died the following spring (Ibid:81-83). The next Jesuit missionary to arrive in the colony was Father Laval. He remained but a month and then returned to France (Ibid:83). Father Charlevoix traveled through Louisiana in 1721 and 1722 (Charlevoix 1923), and Father

Le Boullanger passed through the area in 1722 and 1723 (Delanglez 1935:90).

Any attempt by the Jesuits to establish missions was illegal, and so the actions of these priests were severely restricted. Louisiana was divided into three ecclesiastical districts in 1720. The Capuchins (Recollets) received control of the area from the mouth of the Mississippi to the Ohio. The Illinois settlement and the country along the Missouri River were given to the Jesuits, while the Discalced Carmelites were granted Mobile and the Alabama River. Three Carmelites, Fathers James of St. Martin, Matthew of St. Anne, and Charles of St. Alexis, arrived in Louisiana in August of 1720. One died shortly thereafter and the other two were recalled in 1722 when their area was given to the Capuchins (Ibid:93-94,97). Fathers Bruno de Langres and Philibert, of the Capuchin order, arrived in the colony in September of 1722 and were assisted by three additional Capuchin priests who arrived in the following April (Ibid:96,98).

Jesuit control of the Mississippi Valley began to expand when, in 1723, they were given jurisdiction south to the latitude of the Yazoo Post (Ibid:99). Father de Beaubois, who had been at the Illinois mission since 1720, visited France and, through great persuasion, convinced the Company of the Indies to open Louisiana to Jesuit missionaries. The documents granting such rights were signed in August of 1724 (Ibid:112,117). Two Jesuit mission centers developed, one at Kaskaskia in the Illinois country, and the other at New Orleans (Ibid:3). The

Indians were left to the Jesuits, but the Capuchins continued to be placed in French settlements (Ibid:124). Fathers John Claude Juif and Nicholas Darquevaux were chaplains at the Yazoo Post (see pp. 88-89), and Father Philibert was chaplain at the Natchez Post. Father Maximin later replaced Philibert at Natchez and, by his good fortune, was absent at the time of the massacre in 1729 (Ibid:249-251).

Although the Jesuits received permission in 1724 to establish missions in Louisiana, Father de Beaubois and his fellow priests did not arrive in the colony until 1727 (Ibid:138). Six Jesuits accompanied Father de Beaubois. They were Fathers de Guyenne, Dumas, Du Poisson, Le Petit, Souel, Tartarin and Doutreleau, and Brothers Parizel and Crucy (Ibid:378). Du Poisson and Crucy went to the Arkansas Post (Ibid:234) and remained there for two years. Du Poisson was killed in the Natchez Massacre (Ibid:250-251), while Crucy died of a sunstroke just prior to this event (Ibid:437). As discussed earlier (see pp. 89-91), Father Souel settled among the Yazoo River groups and was subsequently killed in 1729. Father Doutreleau was destined for the Chickasaw, but there is no indication he ever started a mission among them. He was wounded in the Yazoo Massacre (Ibid:252-256,456). Fathers Dumas and Tartarin were sent to the Illinois mission (Ibid:378), while Father Le Petit became the Choctaw's first missionary. He arrived among them in 1728, but left to fill Father Beaubois' position as Superior when the latter was recalled to France. Father Michael Baudouin, from the Illinois country, took Le Petit's position

among the Choctaw and remained there until 1747 when the Choctaw Civil War broke out (Ibid:247,265,454). Ironically, the Tunica, the closest friends the French ever had in Louisiana, were never supplied with a missionary after Father Davion's departure. The reason for the neglect is because they provided no threat to French interests in the Southeast. The Taensa and Natchitoches were neglected for the same reason (Ibid:416). The French soon regretted their failure to supply the Natchez with a missionary, however.

Sisters from the Ursuline convent, under the direction of Mother Marie Tranchepain de Saint Augustin, also arrived in New Orleans with Father de Beaubois and the initial shipment of Jesuit missionaries. Their job was to establish a convent, a school, and most importantly, a hospital. The convent was not started until 1730 and they did not move into it until July of 1734, seven years after they arrived in the colony (Ibid:131-136). Father de Beaubois and Brother Parizel established themselves in New Orleans (Ibid:378), but trouble soon broke out between the Jesuit Superior and both Father Raphael of the Capuchins and the ordonnateur, M. de la Chaise. Father de Beaubois was recalled to France in August of 1728 and finally left in April of the following year. He did not return until 1732, when Bienville was reinstated as governor (Ibid:246, 263-264). As stated above, Father Le Petit served as Jesuit Superior in the interim.

Missions among the Choctaw, Alabama and other groups were developed and continued after this period, but as this thesis

is concerned largely with the late 17th and first three decades of the 18th century, the historical sketch of these missions will stop at this point. In all, the first intensive missionary efforts were shared by Recollects and Jesuits. They made great inroads with the Indians at the turn of the 18th century, especially among the Yazoo River groups, Arkansas, Natchez, Houma and Bayagoula. Political problems in Europe resulted in the recall of the Jesuits and the colony thus fell to the less than capable Recollects. For the next twenty years the Recollects (Capuchins) largely served as chaplains for the settlers. The colony was reopened for Jesuit missionaries in 1724 and a large number of them started operations in 1727. These Jesuits were very devoted and extremely disciplined. The only problem was that they came too late to smooth or drastically alter the course of Louisiana French-Indian history.

Methods in Dealing With the Indians

Language

The ability to speak fluently in the native tongues was a prerequisite for the French missionary. The success or failure of his mission was most often related to his personality and the skill of his orations. The Onondaga Iroquois in 1655, for example, in listening to the Frenchman Chaumonot speak of

Christianity, related that:

If he had spoken all day, "said the delighted auditors, "We should not have had enough of it." "The Dutch," added others, "have neither brains nor tongues; they never tell us about Paradise and Hell; on the contrary; they lead us into bad ways." (Parkman 1894:67).

The missionaries were, for the most part, aware of the necessity of speaking directly to the Indians. Just as the Mobilian trade language later served in communication between the French and unrecorded aboriginal groups, the first Recollect missionaries with La Salle used the Illinois language. Father Membre employed the latter for some natives, and made others understand by using gestures and some terms in their language which he was able to pick up in his short visits. He was not at all convinced of his success, however (Cox 1905:158-159). The first missionaries inevitably relied on interpreters. Father Gravier used one in his encounter with the Arkansas chief in 1700 (Thwaites 1896-1901,65:119). Father St. Cosme apparently did also. Having applied himself to learning the language, he began to write the catechism and prayers in the native tongues (Swanton 1911:22). Similarly, Fathers Du Ru, Du Poisson, Le Petit and Souel all first searched for natives willing to teach them the languages of their respective missions (Delanglez 1935: 384-385; Thwaites 1896-1901,67:254; Ibid;68:184,194,218). Father de Montigny told the Natchez they would one day well know his objectives, once he has learned their language (Swanton 1911:22). Father Du Ru expressed similar sentiments in regard to the

Taënsa:

It is a pity one does not know their language sufficiently well to instruct them. If one would want to ask God for a miracle in their favor, it would be the gift of tongues (Du Ru 1700 in Delanglez 1935:15).

The ability to learn languages quickly and fluently was a strict policy of the Jesuits. They had learned from centuries of missionary activity that success or failure pivoted on this ability:

...the primary intellectual quality of those destined for the Indian missions was an ability to learn quickly the native tongues. No matter how strong physically the missionary might be to withstand the hardships of life in the wilderness, no matter how holy and virtuous, without this gift, success, naturally speaking, was impossible (Delanglez 1935:384).

The Recollects did not lay much stress on this quality, and for this reason their missions were basically unsuccessful. Bienville criticized this oversight in Recollect policy:

The Jesuits are incomparably better fit, on all scores, than the Priests of the Foreign Missions. During the last fifteen years these have been in Mobile, they have made no progress whatsoever. They have at their doorsteps three Indian villages, erstwhile baptized and instructed by the Spaniards. These Indians are begging for missionaries, but none of them has taken the trouble to learn as much as one word of their language (Le Moyne de Bienville 1718 in Delanglez 1935:78).

Father Davion's mission among the Tunica was the most successful of all the Recollect missions, but even his failed. He had great difficulty with the Tunica language and was

considered too old to master it (Thwaites 1896-1901, 65:128-129). He later gave up altogether in trying to learn it (Delanglez 1935:34). The Jesuit Father Gravier criticized both Fathers Davion and Huvé for their failure to meet the first requirement of a successful mission:

...monsieur huvé, who knows not a single word in the Savage tongue, although he has been here 4 years. He has, it is true, been for some time in the apalaches' village, 4 leagues from Here; but he knows not a word of their language, and he hears confessions, baptizes, marries, and administers Communion and extreme unction, without understanding the savages. What would be said if a Jesuit were to do as much? The Apalaches have driven him away twice, - both because he does not learn their language, and because he is very particular about his food, for they have given him a house and a chapel, and they feed him. Monsieur Dar(v)ion has abandoned his mission, through fear of the English and of the Savages, their enemies. This flight does him no credit, in having thus forsaken His flock. He has not accomplished much there during 9 years, as he has no more great talent for learning languages (Gravier 1708 in Thwaites 1896-1901, 66:130-131).

It is unfortunate for the colony that the Jesuits were for so long prevented from establishing missions, as both the provincial administration and the Indians realized their special linguistic capabilities:

There is not one in the colony who does not get along much better with the latter [Jesuits], and, moreover, they have a special talent for the Indian languages; the Indians are asking for them in preference to the gentlemen of the Foreign Missions (Le Moyne de Bienville 1718 in Delanglez 1935:78; see also Delanglez 1935:386).

In addition to linguistic ability, the French missionaries were aware of the importance of age to the Indians. Father Davion was considered too old to learn the Tunica language when he was among them at the turn of the 18th century (Thwaites 1896-1901,65:128-129), and one wonders just how old he was twenty years later when he finally left the colony. Father Gravier was 56 years old in 1707 (Ibid,66:122-123), and Father Gabriel, a member of the La Salle expedition, was 70 years old at the time of his death in 1680 (Cox 1905:124). Middle-aged and elderly priests were sent because of the Indian's respect for old age. Bienville stressed the importance of age in a letter to Count de Ponchartrain:

It is necessary to be careful to recommend to the Foreign Mission to send only well made priests because the Indians have little respect for those who are young and of false constitution. There is one at Mobile who will have difficulty in becoming accustomed to the life of the Indians and in learning their language without which it is impossible to succeed among them (Le Moyne de Bienville 1706 in Rowland and Sanders 1929:28).

The guardian of the Natchez temple discussed the subject of age with Le Page du Pratz, and made it quite clear that young Frenchmen were not regarded highly by the Indians:

Ought you to be astonished that the French warriors are ignorant of these things? They are young; and what can they teach them except what they themselves have learned from their mothers? And what do their mothers know? Nothing at all. The old men who keep the ancient word (it must be remembered that this is the tradition) never speak before the women. Even among the men they choose to teach it to those whom they recognize as having the most intelligence (Le Page du Pratz in

Swanton 1911:169).

Converting the Indians

The ultimate goal of the missionaries was to make good Christians of the Indians. Spanish missionaries had great success in this endeavor. They simply threw holy water over the crowds and claimed the conversion of thousands. The French missionaries in Louisiana were a bit more hesitant as to whom they baptized. Had the objective of the missionaries solely been one of persuading the Indians to believe in the truths of Christianity, "conversions" would have been quite numerous, but the missionaries also stressed a severe moral code. They insisted that the Indians lead "pure lives" after their baptism (Delanglez 1935:409). The Indians commonly reneged on their vows which, to the missionaries, was equivalent to a double sin. They thus hesitated to baptize adults (Ibid:409-410). Father Membré, among the Illinois Indians in 1680 and 1681, described such a case:

We baptized some dying children and two or three dying persons who manifested proper dispositions. As these people are entirely material in their ideas, they would have submitted to baptism, had we liked, but without any knowledge of the sacrament. We found two who had joined us and promised to follow us everywhere; we believed that they would keep their word and that by this means we would ensue their baptisms; but I afterwards felt great scruples when I learned that an Indian named Chassagouaché, who had been baptized, had died in the hands of the medicine

men, abandoned to their superstitions, and consequently doubly a child of hell (Father Membré n.d. a in Cox 1905:115).

For this reason, baptisms were largely confined to infants and dying adults. Evidence for this is abundant. Father Du Ru baptized a young boy, age six or seven, from an Onguilousa (Okelousa) village (Delanglez 1935:14). Father de Montigny similarly baptized quite a few people among the Taënsa:

He [Father de Montigny] had left a note with the Great Chief of the Natchez saying that he had baptized more than 180 children, he does not say whether he baptized any adults, except a few dying persons. He must have found among the fathers and the mothers of these children a great eagerness to receive this sacrament, for he baptized the children on the word of the parents (Father Du Ru 1700 in Delanglez 1935:23; see also Delanglez 1935:15).

Father de Montigny performed similar acts among the Tunica in 1698:

We have not yet made any great conversions, nevertheless we have the consolation of having baptized several dying children and a very distinguished chief of the Tonicas, whom we instructed by interpreters. We were surprised to see such judgement in an Indian and dispositions as Christian as he had. As he was in extremis we baptized him and gave him the name of Paul. He died the next day, after performing acts of religion that greatly edified us (Father de Montigny 1699b in Shea 1861:78).

The Tunica chief's willingness may have been more related to economic gain than religious edification however:

One of the chiefs being about to die, M. de Montigny asked him through an interpreter whether he wished to be baptized, to which he replied that

he desired to be. Having given also some tokens of his desire he was baptized, and died the same day (La Source 1698 in Shea 1861:81).

In the spring of 1700, de Montigny baptized 185 Natchez infants who were from one to four years old (Swanton 1911:190). In the same year, Father Gravier baptized a three day old Houma infant who died several days later (Delanglez 1935:29; Thwaites 1896-1901,65:148-149), and a dying two year old child among the Bayagoula (Thwaites 1896-1901,65:170-171). There are other examples, but the above cases suffice to show that youths and dying individuals were most often thought worthy of conversion by the French missionaries.

Concentrating on Children

In addition to baptism, the missionaries of Louisiana devoted most of their time to teaching the native youths. A classic example of this emphasis is the Jesuit Father André's work among the Menomini in 1671:

The Father's first chore was to visit all the cabins, teach the children, and explain on every occasion the mysteries of our religion. The days were all too short for satisfying the holy curiosity of all these people, who did not give him leisure even to take his meals until very late; or to perform his devotions, except in some remote spot, whither they persisted in following him...

The reason why he was so eagerly sought was found in certain spiritual songs that he was wont to have the children sing to French airs, which pleased these Savages extremely...This success....made him

resolve to assail the men through the children, and to combat idolatry with souls of extreme innocence. In short, he composed songs against the superstitions that we have mentioned, and against the vices most opposed to Christianity; and after teaching the children to sing them to the accompaniment of a sweet toned flute, he went everywhere with these little Savage musicians, to declare war on Jugglers, Dreamers, and those who had several wives...(Keesing 1939:60).

The missionaries were no doubt aware of the enculturation process, in that behavior patterns learned early in life are more resistant to change than those learned in later years (Bruner 1956b; Herskovits 1966:151-152). Changing the behavior and values of children can have a tremendous impact on a society's existing values and standards of conduct (Bee 1974: 138-139). W. E. Moore demonstrated how minor variations in the enculturation of youths can, within a single generation, alter in a minor but distinctive way the socialization patterns of the population. If the variations perpetuate, a total breakdown can occur, resulting in a major reassessment of existing values (Moore 1963:17). After several hundred years of working with peoples of different cultures, the French missionaries (particularly the Jesuits) undoubtedly realized that emphasis on children would expedite the achievement of their goals.

Contribution to Material Culture Change

Like the trader and administrator, the missionary contributed significantly to changes in the material culture of the

Louisiana Indians. We have seen how the administration often used the missionary for the distribution of annual presents, but the missionaries also had their own reasons for the giving of European goods. In some cases materials were used to win the natives' confidence. Father de Guyennés found that it was not to his advantage to look like a priest in his first visit to the Kawitas:

As we did not think it advisable to send the latter [de Guyenne] to the Indians immediately in the quality of a missionary, without knowing first whether they would tolerate him among them it was agreed that this Father should go to them in a secular dress with an interpreter and a servant and that he should remain there three or four months in order to dispose them to receive him in another costume. He expects to succeed in it by means of some little presents (Périer and de la Chaise 1729bin Rowland and Sanders 1929:643; see also Delanglez 1935:481).

Father Du Ru similarly gave a present to the Houma chief in his first visit (Delanglez 1935:16), as did Father de Montigny among the Natchez (Swanton 1911:22). Father Gravier gave a knife and half a box of vermilion to some Taógría Indians in 1700, and received a large piece of meat in return (Thwaites 1896-1901,65:115). To the chief of the Quapaw, an Arkansas group, he gave:

...a present of a little lead and powder, a box of vermilion wherewith to daub his young men, and some other trifles, which greatly pleased him; (Gravier 1701 in Thwaites 1896-1901,65:121-123).

In the first decade of the 18th century, Illinois was cut off from Canada as a result of the War of the Spanish Succession.

Supplies for the missions, including goods for the Indians, hence arrived via Mobile (Delanglez 1935:60-61). Father Gravier, in 1708, requested a number of items for the Illinois mission. Included were gunpowder, beads, vermilion, clasp-knives, bells, wine, shoes, and cassocks (Thwaites 1896-1901,66:132-135). The last three items, and a portion of the gunpowder, were probably for the missionaries themselves, but the rest of the materials were undoubtedly for the Indians. Materials presented by the missionary were, in general, for personal adornment (beads, bells, vermilion), or were small utilitarian items like knives. The only reference I have found indicating firearms having been given is Father Membre's statement that the Illinois Indians in 1680, "had as yet no firearms; we gave them some (Father Membre n.d. a in Cox 1905:112)." It is difficult to know whether he was referring to his gift or La Salle's gift, however.

Missionaries were not supposed to trade the materials they received from France, but they inevitably did so (Delanglez 1935:68). Father Raphael, of the Capuchin order, complained that the Jesuit missionaries:

...took what they thought proper from the warehouses and carried in a trade which brought them in a great deal beyond their salaries (Raphael 1726 in Rowland and Sanders 1929:518).

Accusing particular missionaries of personal trade was a common ploy of the opposing religious order. Certain administrators also accused missionaries of trading. The missionaries were often too successful in winning the affection

of the Indians, thus arousing jealousy in post commandants. The latter were in an inferior position as they normally had to converse with the Indians through the medium of a missionary interpreter. Missionaries often took the side of the Indians when conflicts arose between the parties. The post commandants avenged their grief by accusing the missionaries of participating in private trade, an accusation which was false in the majority of cases (Delanglez 1935:386-387). Not always false, however, as Father Marquette traded a cubit of tobacco to Illinois Indians for three fine ox (bison) skins (Thwaites 1896-1901, 59:175). The transactions were generally not for profit. The Louisiana missionaries most often bartered for personal consumption, as the cost of necessities in New Orleans was outrageous, and was even higher at the frontier posts:

The missionaries bartered with the Indians and gave them French trinkets for a few beaver skins which, in turn, they exchanged for tools, implements, furniture or other commodities they could not otherwise secure for lack of money. This was known, and no one in a responsible position in the colony found any fault with it. These officials understood that the missionaries had to barter if they wanted to subsist (Delanglez 1935:388).

There was considerable ambiguity in the colonial laws when it came to missionaries. Each mission was entitled to a plot of land but, according to land laws, they would lose it unless they farmed it.* At the same time, there was no provision for

* Father Davion owned and cultivated a farm among the Tunica (Rowland and Sanders 1929:518).

what they should do with the surplus crop. Understandably, they exchanged it for colonial products (Ibid:388-389). The trouble arose mainly because the missionaries, who were not out to make a gain, gave the Indians good prices for their products. Father Le Petit, among the Choctaw in 1728, exchanged knives (with horn handles) and beads for peltries and corn. Diron d'Artaguiette, commandant at Mobile, complained of this private trade, but the administration at New Orleans realized there was little else a missionary could do in order to survive (Delanglez 1935:454-455; Rowland and Sanders 1929:594,613).

Moving the Indians

As discussed earlier, the missionary figured strongly in the administration's plans for moving the various aboriginal groups into strategic positions. This procedure also meshed well with the general missionary operations. The Spanish Jesuits among the Yaquis Indians moved their people into centralized strategic positions. By breaking down their settlement patterns, these missionaries were able to wield change more easily in other aspects of their culture (Spicer 1958). It was also easier for the missionary to deal successfully with the people if they were all grouped together, particularly if they spoke the same language. For example, St. Cosme attempted to combine the Taensa and Natchez into a single mission (Swanton 1911:22), and, as discussed earlier

(see pp. 412-413), both Fathers Du Ru and Davion tried to move Indian groups. Davion may even have succeeded in mobilizing the Yazoo River groups.

The Jesuits had learned, from their experience in Canada, the importance of keeping Indian and White separate (Delanglez 1935:106). The Jesuits in Illinois centralized their constituents in a new location distant from the French settlements:

The Jesuits found the secret, by presents and diplomacy, to attract the Indians and to transfer the greatest number of them a few leagues from this mission to a new settlement, where these Fathers thought they would have exclusive authority (Ibid:45).

The problem of course was the liquor trade, an item which the missionaries constantly strove to keep apart from the Indians. The missionaries did not have as much trouble in Louisiana as in Canada, because not only was the provincial administration against the brandy traffic, but the government also made it illegal for Frenchmen to establish themselves among the Indians. The purpose of the latter law was to aid the missions (Ibid:113,403-406).

The Effect on Native Religion

It is difficult to assess the effect of French missionaries on native religion. Once we start to evaluate changes in Indian

beliefs and value systems, we begin to step on shaky ground, especially when our knowledge derives primarily from the writings of the missionaries. There are certainly a number of instances in which missionaries did affect the Indian religion, but their success appears to have come largely from symbol similarity, rather than the introduction of a new religious system. The initial meeting between missionaries and Indians generally ran smoothly, and the former usually were quite optimistic in the future success of their missions. Father Membre, among the Taënsa in 1682, commented on the promise of converting the Indians:

The mind and character of this people appeared on the whole docile and manageable, and even capable of reason. I made them understand all I wished about our mysteries. They conceived pretty well the necessity of a God, the creator and director of all, but attribute this divinity to the sun. Religion may be greatly advanced among the, as well as among the Arkansas, both these nations being half-civilized (Father Membre n.d. b in Cox 1905:141).

The initial success seems to have resulted from the similarity in symbols but, as the missionaries were soon to learn, the meanings behind the symbols were different to each cultural system. The church and the cross are two symbols which meshed well with Indian religious beliefs.

Church

The church, a house of worship, was equivalent to Southeastern Indian temples. Far from finding these unusual, the Indians allowed and even helped the various missionaries to build churches within their villages. Father de Montigny built a house among the Taensa in 1700 and also planned to erect a church (Swanton 1911:266). Similarly, Father Du Ru persuaded the Houma to allow him to construct one in the middle of their public square. He made a small model of what he wanted and then left his servant behind to direct the Houma in building it. The finished chapel was 50 feet long and was constructed opposite the Houma temple (Delanglez 1935:16,29; Thwaites 1896-1901,65:149-150). Du Ru also had a church built among the Bayagoula. These Indians worked very hard on it at first, but soon tired of the novelty of building it (Delanglez 1935:16).

Cross

The cross symbol was a major element of the Southeastern Ceremonial Complex, as discussed earlier (see pp. 400-401). The erection of wooden crosses by missionaries in prominent places in the Indian village obviously had some significance to the Indians. The meaning they attributed to these crosses was no doubt different from the priests' interpretation of their value. A missionary usually raised a cross as one of his first deeds in meeting an aboriginal group. Father de Montigny, among the

Quapaw in 1698, erected a cross on a hill forming a steep bank overlooking the Mississippi River (Thwaites 1896-1901,65:117). Father Du Ru planted one in the Bayagoula village in the middle of his purchased land, behind the church (Delanglez 1935:16). It fell down in a flood and Father Gravier replaced it with a new one raised to a height of 20 feet (Thwaites 1896-1901,65:156-159). Du Ru also erected a cross in the public square of the Houma village. It attained a height between 35 and 40 feet (Delanglez 1935:29; Thwaites 1896-1901,65:148-149). D'Iberville planted a cross at the Houma Landing in 1699, the reaction of the natives being of some interest:

...the chiefs, each holding a wooden cross in his hand, made a circuit processionally of the cross which we had planted, throwing tobacco upon and around it, and singing after their manner (Journal of the frigate Le Marin in Swanton 1911:287).

They then went through the calumet ceremony with d'Iberville, who was leaving the next day to ascend the Mississippi in his exploratory travels. They danced around the cross again on the day of his departure and when he returned:

...the chief of the Houma and two of his principal men came with a little wooden cross and sang about the great cross for the third time, after which provisions were brought and axes, knives, mirrors, etc. given in exchange (Ibid).

The cross was similarly revered by the Acolapissa. Father Du Ru planted one in the middle of the larger of their two villages, and reported:

I am delighted to see the instrument of our salvation

an object of veneration by these barbarians, but at the same time, I cannot help deploring that it is still a useless instrument for these poor benighted people; for, although, they see this salutary cross, several among them will perish miserably for not knowing its virtue (Du Ru 1700 in Delanglez 1935:18).

Father Membré, of the La Salle expedition, recorded the erection of crosses among the Natchez (Cox 1905:143), and the Akansa (Arkansas):

He [La Salle] planted a cross and set up the king's arms at which the Indians showed a great joy. You can talk much to Indians by signs, and those with us managed to make themselves a little understood in their language. I took occasion to explain something of the truth of God and the mysteries of our redemption, of which they saw the arms. During this time they showed that they relished what I said by raising their eyes to heaven and kneeling as if to adore. We also saw them rub their hands over their bodies after rubbing them over the cross. In fact on our return from the sea we found that they had surrounded the cross with a palisade (Membré n.d. b in Cox 1905:138).

Enclosing the area around the cross with a palisade is of particular interest. A common practice of Southeastern Indians was to surround hallowed ground with a stockade. This is seen prehistorically in the treatment of mounds at ceremonial centers - Cahokia (Fowler 1969) and Hiwassee Island (Lewis and Kneberg 1970) being classic examples - and historically in the case of the Taënsa's treatment of their temple (Swanton 1911:260).

The wooden crosses erected by the missionaries undoubtedly had some religious significance to the Indians of Louisiana. The meaning attributed to this symbol may have derived from the Southeastern Ceremonial Complex, or the large wooden crosses

may have been associated with another important prevalent feature of aboriginal life - the slave posts. M. de La Salle observed in his visit to an Illinois Indian village that:

There is a post placed in the midst of the assembly, where those who wish to make known their great deeds in war, striking the post, declaim on the deeds they have done. This ceremony takes place in presence of those with whom they wish to make friendship, the calumet being the symbol of peace (Tonti 1693 in Cox 1905:4).

As discussed earlier (see p. 396) in the meeting between d'Iberville and members of the Pascagoulas, Colapissas, Chicachas, Pensacolas and Biloxi groups, these Indians raised a post during the calumet ceremony, and each warrior came up to it, struck it and sung of his war heroics (French 1869:37-41). The Natchez had a similar post which they employed in the same manner (see p. 510 : Swanton 1911:120-121). As indicated in an illustration by William Bartram, the Creeks had two slave posts and a "chunk pole" situated in their public square (Swanton 1928:172).* The Bayagoula also had two slave posts. They were 40 feet in height, were situated in front of their temple, and had two scalps on them when observed by d'Iberville

* This tradition apparently had deep roots, as the 1560 Tristan De Luna Expedition through Alabama noted that:

"All the towns have a good-sized plaza outside the town, in which there is a pole like the rollo of Spain; they are very tall, and they have them for their sports (Sauz in Priestley 1928, quoted in Lankford 1977:18-19)."

in 1699 (Swanton 1911:276). The Chakchiuma erected large posts in the center of their forts from which they suspended "scalps, beads, bones, and other savage paraphernalia (Kalbert in Swanton 1911:295). The priests' crosses no doubt resembled the typical slave posts, and it is possible that the meanings attributed to the latter were reinterpreted to these newly introduced forms. The reverence given the crosses both surprised and overjoyed the early missionary endeavors, but they were soon to learn that the symbols did not have equivalent meanings and the job of converting the Indians was destined to be a difficult one.

Reverence Given to Individual Missionaries

Individual missionaries were revered as much, if not more, than the symbols of religion they offered. The respect the Indians had for the priests is clearest in contact situations. Father Gravier, in 1700, was treated by the Taögria Indians in the following manner:

He who seemed the most notable among them could say a few words of Illinois, and spoke the Chaouanoua tongue. He made me sit on a Bearskin spread in front of his Traveling cabin, and offered me some sagamite to eat...I gave him a Knife and half a box of vermilion, he made me a present of a very large piece of meat, the produce of his hunting (Father Gravier 1701 in Thwaites 1896-1901, 65:115).

A similar reception was given to Gravier by the Kappa

Akansea (Quapaw):

Toward noon, we came upon 4 pirogues of Akansea; when my Canoe approached the bank, an old man entered the water and carried me upon his Shoulders to the land. The Chief made me sit on a large Bearskin, and the french on Willow branches, which he had caused his young men to cut. He made me a present of 2 loaves of piakimina, which I distributed among the french. And, as I was grieved because they would not listen to me when I wished to speak of God, I withdrew to pray for them while the Kettles were boiling. I was Served with a dish of Sagamite made of green indian corn; and another of whole ears of green corn, seasoned with excellent squashes. I gave a small present to the Chief of the party (Ibid:115-117).

Both situations are characterized by elaborate ritual. The use of deerskin mats, the offering of food, and exchange of small gifts, are reminiscent of the native reception of explorers. An interesting parallel with the contact between d'Iberville and the Biloxi is the carrying of Father Gravier on a man's shoulders (see p. 396). Gravier apparently had a higher status to the Indians, as the Other Frenchmen were merely placed on willow branches. There is also some indication in the meeting with the Quapaw that business was not to be discussed until the ritual was finished. Father Poisson's visit to the Southouis Arkansas in 1726 and 1727 was very similar to Gravier's reception:

We were not far distant from these villages when a party of litle Savages, having perceived us, gave a great shout and ran toward the Village; a French pirogue which had preceded us by a day had given notice of our coming. We found all the people of the Village assembled at the landing; as soon as we had stepped ashore a Savage asked one of our

men - whom he knew, and who understood the language - how many moons the black chief would remain among them. Always, answered this Frenchman; Thou liest, rejoined the Savage. The Frenchman replied that he did not lie, that there would be always one of the black robes among them, that they might be taught to know the Great Spirit, as was the case among the Illinois. The Savage believed him, and said: My heart laughs when thou sayest that. I had this same Frenchman guide me to the village of the Southouis by land; before reaching it, we found the Chief under his antichon (this is the name that the French give to a sort of cabin, open on all sides, that the Savages have at their desert - their clearing - and where they go to take the air). He invited me to rest upon his mat, and offered me sagamite; he spoke a word to his little child who was there; the latter immediately uttered the savage cry, and screamed with all his might, panianga sa, panianga sa, "The black chief, the black chief!" In an instant, all the Villagers surrounded the antichon, I had them told with what design I had come. I heard from all sides only this word, igaton; my interpreter told me that it signified That is good. This whole company, uttering loud shouts, led me to the water's edge, a Savage made us cross the river in his pirogue, and, after walked an eight of a league we came to the French habitations (Father Poisson 1727 in Thwaites 1896-1901, 67: 318-321).

When Father Marquette was among the Quapaw Arkansas some 30 years prior to Gravier's visit, they danced the calumet for him. They also wished to do it for Gravier, which the latter interpreted as a ruse to obtain gifts from him. He thus refused, using as an excuse that he had to leave (Father Gravier 1701 in Thwaites 1896-1901, 65:121-123). Father Poisson similarly refused to have the Arkansas sing the calumet for him. Whereas the provincial administration readily gave gifts to win Indian allegiance, the Jesuits made an effort to prevent themselves from buying souls. Father Poisson told the Arkansas that his purpose was to teach them of the Great Spirit and he thus

carried only those items which were necessary to accomplish this goal:

I answered them [the Indians who came to sing the calumet] that I was not like the French Chiefs, who command warriors, and who come with booty to make them presents; that I had come only to make them know the great spirit, whom they did not know; and that I had brought only the things necessary for this purpose (Father Poisson 1726 in Thwaites 1896-1901, 67:250-251).

Poisson was opposed to the giving of presents:

...because there would be danger of their hearing me speak of Religion only from interested motives; and because elsewhere we have learned by experience that the more we give the Savages, the less cause have we to be satisfied with them, as gratitude is a virtue of which they have not the slightest idea (Ibid:252-255).

As I discussed earlier, however, to the Indians gift exchanges were an integral part of the contact ritual. When Father Poisson turned down the presentation of the calumet, several chiefs of the Southouis Arkansas village visited him a few days later to persist in its presentation:

Two days afterward, the Chiefs came to make the same inquiry - adding that it was without design that they wished to dance the calumet in my presence; without design signifies among them that they are making a present without any anticipation of return. I had been informed of all this; I knew that the hope of gain was making them very attentive, and that when the Savage gives, even without design, double must be returned to him, or he will probably be displeased (Ibid:250-251).

Father Poisson continued to act improperly by refusing the calumet a second time. The Indians persisted in at least

allowing their men to perform the reconnoiter dance (a dance used when reconnoitering the enemy). Poisson grudgingly gave permission, and just as unwillingly provided the Indians with food after their efforts. He simply was not playing the game. His reaction was unfortunate as it is apparent that the Indians regarded the missionary quite highly. Several Indians wished to be adopted by Poisson, and the situation which developed reveals a significant difference between the ways in which missionaries and traders were regarded by the natives:

This man asked me if I were inclined to adopt him as my son; if so, when he returned from the hunt he would cast, without design, his game at my feet and I should not say to him as other Frenchmen did: For what dost thou hunger? (This means, "What dost thou wish me to give for that?") but I should make him sit down, and should give him food as to my own son; and when he returned a second time to see me, I should say: "Sit down, my son; look here are vermilion and powder." You see the spirit of the Savages; they wish to appear generous in giving without design, and they nevertheless wish to lose nothing... Day before yesterday I received a visit from a Chief, and I offered him a pipe; to fail in this would be to fail in politeness. A moment after, he went for a mataché buckskin - which he had left in the entry of the house in which I live - and put it upon my shoulders; this is their way when they make presents of that sort. I begged a Frenchman to ask him, without appearing to do it for me, what he wished that I should give him: I have given without design, he answered, am I trading with my father? ("Trading" here means "paying") Nevertheless, a few moments afterward he said to the same Frenchman that his wife had no salt, and his son no powder; his aim was that this Frenchman should repeat it to me. A Savage gives nothing for nothing, and we must observe the same rule toward them; otherwise we should be exposed to their contempt (Ibid:256-257).

Poisson, Gravier and undoubtedly other missionaries

interpreted the Indians' actions as devious means of achieving economic gain. They were looking at the outcome rather than the procedure involved in the transactions. Just as common produce trade among the Trobrianders and the chickle trade among the Yucatan Indians was not ritually valued (Malinowski 1961: Redfield 1941), transactions made between Indians and missionaries were on a much higher level than between Indians and traders. In essence, Poisson was made a relative. One does not trade with a relative. Rather, merchandise is exchanged. The above situation is an example of Marshall Sahlins' (1965:147-152) and Morton Fried's (1967:35-36) "balanced reciprocity". Each member gives and neither gains significantly over the other. This is contrasted with "negative reciprocity" in which the purpose of exchange is to get the best of the deal. The latter characterizes Indian-trader relations in colonial Louisiana. Father Poisson was being honored, and yet he thought he was being deceived.

It is possible that the missionaries were considered to be more than just the messengers of the Great Spirit. An interesting event, observed by Father Poisson, suggests that he and other missionaries were highly revered by the natives. Engravings depicting religious events were commonly used in Canada to teach the Indians of Christianity. The priests discovered that graphic representations were much more adapted to reaching the minds of the Indians than were harangues (Thwaites 1896-1901, 11:89; 12:107-109; 40:123-125). This tradition persisted in the Louisiana missions (Delanglez 1935:435).

Father Poisson made use of this technique in instructing the Arkansas:

This [using pictures] is one of the best means that we can employ to give some idea of the mysteries of our religion to the Savages; they are in ecstasies when they see the picture of saint Régis that I have in my room, which was engraved by Monsieur Cars; they put the hand over the mouth, which is a sign of admiration among them. Ouakantaqué, they exclaim, it is the Great Spirit! I tell them that they are wrong; that he was a chief with a black robe like me; that while he was alive he faithfully heard and obeyed the word of the Great Spirit, and that after death he went to him in Heaven. Some of them pass the hand several times over the face of the Saint, and then place it on their own face; this is a ceremony that they perform when they wish to show one a mark of veneration. Then they place themselves in different parts of my room and say, each time smiling: He is looking at me; he almost speaks, he needs only a voice (Father Poisson 1727 in Thwaites 1896-1901, 67:322-325).

The Indians' confusion between missionary and God is of some interest. If this reverence was a common aboriginal feature, the individual missionary must have had great potential in wielding sociocultural change. Success or failure depended upon the ways in which the Indians were treated.

Success and Failure of the Missionary as an Agent of Sociocultural Change

Very few European roles were as successful as the missionary in bringing about changes in Indian culture.

Indian culture change during this phase [18th century] was most intensive. With the impact of a

new religion the whole value system and all related patterns of the native culture were under attack (Brasser 1971:83).

Changes were not always in the natives' religion, however, although the missionaries' efforts obviously were concentrated on this institution. Several centuries of experience taught the missionaries, particularly the Jesuits, how best to deal with converting the Indians. Most of their techniques, including language expertise, centralizing groups, etc., are discussed above. Success in accomplishing objectives was not guaranteed, however. The results were inevitably conditioned by the ways in which each missionary dealt with the groups assigned to him. Edward Spicer stressed that the success of the Spanish Jesuits among the Yaquis rested solidly on the role which each missionary assumed in the Yaqui communities. The innovations which they offered were selected from the total inventory of Spanish cultural elements, but even these elements were not distributed evenly to the Yaqui population. Certain individuals, such as the village officials, approached most closely the missionaries own understanding of the ritual innovations, but the general populous, who came in contact with the missionary only during mass and other formal rituals, had abundant opportunity for attaching old meanings to new forms. The Jesuits among the Yaquis attained a degree of success, because they did not force the innovations upon the Indians. They preached new meanings for native ceremonies, rather than attempting to suppress the latter. Reinterpretation was both allowed and encouraged, a fusion of the native and Catholic religions

occurring as a result (Spicer 1958:438-440).

The French missionaries in Louisiana do not appear to have been as quick to encourage a blend of the religions. Nor do they seem to have been as successful as the Spanish Jesuits in dealing with the native officials. Homer Barnett observed that elites do not always make good advocates of sociocultural change, either because they fear loss of status or because the change is focused directly against them (Barnett 1953:404). Both situations are reflected in the ethnohistorical record of colonial Louisiana. Father Gravier's account of his visit to the Bayagoula in 1701, suggests that some Indian chiefs feared the attention being given to the missionaries. Gravier noted that the church built by Father Du Ru was in ruins and his cross had been washed away. He also lamented that the potential of the missionary was very much limited by the presence of the chief. The Indians:

...promised me to restore the Chapel, and to do everything that I asked from them; but, unless the Chief is very far away, There is not much for a missionary to do (Gravier 1701 in Thwaites 1896-1901,65:158-159).

The presence of the missionary was an immediate threat to the authority of shamans, a role which was important among the Indian groups of Louisiana (pp. 118-119):

From the viewpoint of culture change, however, the main significance of healing rests with the attitude toward new and old techniques. What is new is not simply an addition to the tribal repertoire; on the contrary, the new technique supercedes the old. Traditional cures are outmoded.

and even dangerous to society, for they are practiced by those now known to be perverted by false beliefs and wicked aims. Inevitably, then, the reformative leader and his followers are brought into conflict with the tribal shamans and upholders of the ancient ceremonies, who must either be converted or destroyed (Voget 1956:251-252).

The Missionary could even move into the role previously occupied by the shaman. Robert Conkling (1974) described such a situation in reference to the Wabanaki Algonkian. Prior to the arrival of French missionaries, voluntary obedience was given to the shaman-sagamoeres of the various northeastern Algonkian bands. The shaman's authority was charismatic and was in large part due to his power in curing diseases, assisting friends, and harming enemies. The French missionaries had to not only discredit the shamans' relations to the divine but, at the same time, had to demonstrate their own. The missionaries were in a strong position to do this. Wherever they went they were accompanied by (European) diseases. The Indians were certainly aware of this association, but the ability to harm was an accepted power. The missionaries also had the medicinal knowledge to cure the Indians of these particular diseases, something which the shamans did not possess. The ultimate power was the ability to bring the Indians benefits - trade goods - far beyond the shamans' capabilities. The missionaries saw their own role as winning converts, but if serving as middlemen improved this role, they were not adverse to do so. The Wabanaki voluntarily gave their obedience. The missionaries' power was legitimate authority, because they met the Wabanakis'

own idea of charismatic qualifications for an authoritative role in their society. From this position the missionaries were capable of, and did, wield sociocultural change:

...in a significant number of cases the strength of the missionaries charismatic authority was such that they were able not just to plead for or demand the new order but to persuade the Wabanaki to accept it voluntarily and be obedient to it as a matter of duty. Through their own designs and the luck of circumstances, the missionaries were able to bring about a revolutionary change in the forms of Wabanaki social life (Conkling 1974:19).

There is some evidence to suggest that the missionaries of Louisiana similarly threatened the native shamans. Curing was an important qualification of the shaman, and at least some, if not all, of the missionaries were trained to combat sickness (e.g., Thwaites 1896-1901, 67:260-261). As will be discussed in a later section, the Indians of Louisiana were well-trained in fighting illness, but their training may not have been as capable as the Frenchman's in curing European diseases. The Indians received more than their share of the white man's germs, often accidentally, sometimes intentionally:

There are here [New Orleans], Gentlemen, a number of women to whom nations are given as well as to some children, who are useless and who do nothing but cause disorder. The majority of these women are ruined with pox and ruin the sailors. It is necessary that you be so good as to order the Council to have them go into the interior among the Indians (M. de la Chaise 1723 in Rowland and Sanders 1929: 315).

The ability to cure put the missionary in direct competition with the shaman. Felix Keesing noted this situation among the

Menomini of Wisconsin. These Indians categorized the Jesuit in the realm of the supernatural, fitting nicely with their idea of the shaman. The notions of good and evil were comprehensible to the Menomini, as were the concepts of prayer, chant and sacrifice. The priest's pack of religious paraphernalia meshed nicely with the shaman's medicine bundle. The major difference was that the missionary's power was much more potent, as he had access to the superior material equipment of the strangers (Keesing 1939:79-80). There are some suggestions that the Louisiana Indians believed the missionaries possessed supernatural powers. The Arkansas, for example, were convinced that Father Poisson knew their language perfectly, even before he had any contact with them (Thwaites 1896-1901, 67:254-255). M. de la Vente similarly indicated that the reverence once given to shamans (jugglers) was afterward yielded to Christian missionaries whom they regarded as "oracles" (Swanton 1911:180).

The French missionaries in Louisiana thus possessed remarkable potential to wield sociocultural change, but they rarely succeeded. As discussed earlier, failure was partially due to not taking advantage of missionary expertise, that is, sending Recollects instead of Jesuits. Failure was ultimately due, however, to the disregard of native culture in trying to make changes. The attempt to end promiscuousness among the Indians was a continual battle. Little concern was paid to the fact that among some groups like the Natchez, native custom dictated that young women should dispose themselves well with the boys (Swanton 1911:94). The French settlers certainly did

little to convince the Natchez of the fallacy of this belief and, as the last chief of the Natchez was supposedly the son of Father St. Cosme, it appears that some of the missionaries may also have needed reminding (Le Page du Pratz 1774:80). In some cases the power of the shamans was found to be stronger than that possessed by the missionary. As mentioned earlier (see p. 459), Father Membré lamented that their Illinois converts finally decided to return to traditional beliefs and, if situations such as the burning of the Taënsa temple (1700) continued, the missionaries would have soon lost all credibility:

They had the custom, at the death of their chief, of killing 15 or 20 young men or women to accompany him, say they, in the other world and serve him. Many, according to what is said, are enchanted to be of this number. I doubt it very much. The old man of whom I spoke above said that the Spirit was angry, because at the death of the last chief no one had been killed to accompany him, and that he was angry himself, so that he had had the temple burned, accusing the French that it was they who had been the cause of this misfortune, because M. de Montigny, being at the village at the time of the death of this chief, had prevented them from killing anyone, at which all the people in the nation appeared very well satisfied except the guard priest (d'Iberville in Swanton 1911:267).

The Taënsa were understandably impressed by the event and heeded the old man's words by throwing children into the flames of the burning temple. D'Iberville interfered by stopping this activity (Ibid:266). In other situations the shaman's power surpassed the priest's. In one such case in the Yazoo Bluffs region, the post chaplain even lost the confidence of his French congregation. A bad drought plagued the area in the

summer of 1723:

There was then at the grant of the late M. le Blanc at the Yazoos a chaplain named l'Abbé Juif...In this public calamity this pious ecclesiastic ordered a general fast with orisons for forty hours in the chapel of the grant, and he started processions to bend the anger of God and obtain from His mercy the assistance of which there was need. Heaven was inexorable to their prayers. Despairing of assistance from that quarter, the one who commanded this post had the chief of the jugglers of the Yazoo Nation come, of whom he asked if he would be able to bring water. The savage promised it to him for next day, and I can certify that it rained not only that day, but even the day following (Dumont dit Montigny in Swanton 1911:178).

The failure of the missionaries to accomplish their objectives most often resulted from attempting to force the Indians to change. Edward Spicer (1954) and Edward Dozier (1958) described such a situation in the Franciscan missionary endeavors among the Eastern Pueblos. These missionaries were generally disliked. They failed to learn the Pueblo language and were thus unable to conduct prayers and other rituals in the native tongue. Unlike the Spanish Jesuits among the Yaquis, the Franciscan missionaries suppressed the native rituals. The kachina masks of the Eastern Pueblos were burned to eliminate idolatry. This action only served to increase hostility, however. Native religion went into hiding and compartmentalization (see p. 364) occurred (Scholes 1942:98; Spicer 1954:667-668).

The reader should recognize the obvious parallels between the Franciscan missionaries and the Recollects. The latter similarly failed to learn the native languages and, at times, so aroused the animosity of their constituents that they were

forced to leave their missions (see p. 457). Evidence for interfering with aboriginal ritual is abundant (Swanton 1911: 139-140, 267, 309; Thwaites 1896-1901, 65:140-143), and it is possible that native religion was compartmentalized. Shamans are not discussed in any great length in the historic accounts, but their existence is alluded to throughout the 18th century and still persisted in 20th century legends (p. 119). Even the Tunica chief, who for twenty years had been under the influence of Father Davion's teachings, had a shaman (Tioux) called in to cure his dying son (Swanton 1911:336). It is interesting that, although iron implements were readily available, these shamans continued to employ their traditional tools:

The alexis never use lancets to draw blood, but when they have a sick person who they think needs to be bled they take a splinter of flint with which they make many incisions in the flesh of the sick person in the place where he feels the pain (Dumont dit Montigny in Swanton 1911:80; see also Le Page du Pratz in Swanton 1911:81).

There is some evidence that religious compartmentalization occurred among the Natchez. Le Page du Pratz was able to learn a great deal about Natchez religion from the guardian of their temple, but the significance of the stone figures within the temple was never revealed to him (Swanton 1911:162). Father St. Cosme, among the Natchez in 1700, at a time when they perhaps were not so defensive of their religious beliefs, learned that the figures were the actual relatives of the sun (the creator of their religion), who were transformed into stone. Swanton noted the secrecy which later enshrouded these figures, the

Natchez no doubt having realized the French attitude concerning idols (Ibid:172-173).

The destruction of the kachina masks by the Eastern Pueblos has a striking parallel in Father Davion's activities in the Yazoo Bluffs region. Father La Source stated that the Tunica temple contained, "earthen figures which are their manitous (La Source 1698 in Shea 1861:81)." If these figures were as important to the Tunica, as the ones mentioned above were to the Natchez, one can well understand their rage when they discovered that Davion:

...entered their temple, overthrew the "idols" there, and broke them in pieces. Those which he was unable to break he carried into his house. Next morning, when the Indians discovered what had been done, they ran to his house to kill him, but his life was saved by the great chief, who was particularly fond of him (Swanton 1911:309).

It would seem that an event such as this would have been a sufficient catalyst for compartmentalization. The Tunica could not afford to kill Davion for this atrocity, as such an action would not only cut off the flow of European materials, but would subject themselves to French revenge. What they could do, however, is enshroud their religion in secrecy. The possibility of the latter alternative having occurred is suggested by Father Gravier's statement:

They [the Tunica] are so secret regarding all the mysteries of their religion that the missionary can discover nothing about them (Gravier 1701 in Thwaites 1896-1901, 65:130-131).

Diron d'Artaguiette visited the Tunica in January of 1723

and reported that Father Davion had had some success in his mission:

There are some of them who have a smattering of Christianity, but just as they were commencing to appreciate the Word of God, Father Davion left them, to such a degree did his own interest outweigh those of charity (Diron d'Artaguiette 1722-1723 in Mereness 1916:44).

Father Charlevoix, at least, congratulated Davion on persuading the Tunica to refrain from building a temple in their move to the mouth of the Red River:

I have already observed, that they had a missionary whom they greatly esteemed, but have since learned they once expelled him, on account of his setting their temple on fire, which, however, they have not rebuilt or rekindled its fire, a certain proof of their indifference with respect to religion: soon after they even recalled the missionary, but he in turn has now left them, on finding they listened to all he was able to say with an indolence which he was unable to get the better of (Charlevoix 1923:263; see also Swanton 1911:313).

Charlevoix was wrong in his observations, however, as the Tunica did indeed construct another temple. It was of a more modest size and was not placed atop a mound (Brain n.d.a). The Tunica perhaps did not wish to attract undue attention to their new temple, having already suffered from having a prominent one in their occupation of the Yazoo Pluffs region. Charlevoix continued to state that:

...the Tonicas, who for several years have had a missionary whom they love and esteem, and would even have chosen for their chief, but who has not been able, notwithstanding all this, to persuade one

single person to embrace Christianity (Charlevoix 1923:260).

Even Cahura-Joligo, the chief of the Tunica, was influenced little by Davion's teachings:

...he bears no mark of being a Christian but the name, a medal, and a rosary (Father Poisson 1727 in Thwaites 1896-1901, 67:308-309; see also Swanton 1911:313).

Le Page du Pratz, among the Tunica in 1720, recorded Father Davion's own evaluation of the success of his mission after two decades of work:

I asked him, if his great zeal for the salvation of the natives was attended with any success; he answered me, that notwithstanding the profound respect the people shewed him, it was with the greatest difficulty he could get leave to baptize a few children at the point of death; that those of an advanced age excuse themselves from embracing our holy religion because they are too old, say they, to accustom themselves to rules, that are so difficult to be observed (Le Page du Pratz 1774:23).

It appears that although the missionary role had a great potential for fitting into the authority structure and subsequently affecting sociocultural change, the missionaries of colonial Louisiana failed to develop this potential. Political problems, inexperience, impatience and the lack of concern for native customs may have brought about compartmentalization of religion among the Indian groups. Hence, the missionary experience in Louisiana was ultimately a failure.

Summary of French Roles in the Yazoo Bluffs Region

Very little historical information has survived concerning French-Indian relations in the Yazoo Bluffs region. Our knowledge of the activities of specific French roles in this area is confined to scattered, often terse, statements of contemporary travelers. Were it not for the fact that we have excellent information regarding French roles in the whole of Louisiana, the references to certain activities in the Yazoo Bluffs region would make very little sense. The activities of Frenchmen and their affect upon the native populations of this area has been dealt with under the respective roles described in detail above, but it will be of some value to summarize the information at this point in respect to the two periods ("missionary" and "trader") outlined in Chapter 2.

The "missionary" period had a duration of only eight years (1698-1706). Within this interval missionary activity was quite strong among the Yazoo River groups. Father Davion was the priest delegated to the region and, had he acted in the manner characteristic of other Louisiana missionaries, one of his first deeds was probably the erection of a cross and a church within his mission. It has been argued in this thesis that both the cross and church fit nicely into the socio-religious symbolism of the Louisiana Indians, and the friendly reception of the missionaries in the Yazoo Bluffs region suggests also that the presented innovations outwardly meshed well with native customs.

In chapter 4 I suggested that at the establishment of Father Davion's mission a relocation of aboriginal settlements

occurred. Admittedly, the evidence is slim, but it gains some support from the knowledge that moving Indian groups into centralized strategic positions was a policy of both administrators and missionaries. Missionaries also made it a part of their policy to limit baptism to children and dying adults. This policy, which does indeed appear to be the case in the Yazoo Bluffs region, was designed to prevent Indians from breaking their vows and returning to heathen beliefs. The souls of dying Indians were saved by death, whereas children were saved by education. There is abundant evidence indicating that French missionaries concentrated their efforts largely on aboriginal children, and such was probably the case in Davion's labors among the Tunica. Missionaries appear to have been respected and in some cases revered by the native populations. Many felt they possessed supernatural powers, a feature ordinarily characterizing aboriginal shamans. As with the symbols of the church and cross, missionaries appear to have had the potential of fitting into a role already existent in aboriginal society. Not only were they able to harm (by carrying European diseases), but they were also able to help (medicinal knowledge). Missionaries had an added advantage over a shaman in being a source for European goods. Even the ages of the French missionaries were appropriate (exemplified by Father Davion), as the Indians bore much more respect for elderly or middle-aged men than they did for youths.

With such potential for working into a power position in aboriginal society, the missionaries of Louisiana had the means

of wielding significant sociocultural change. They failed for a number of reasons. Perhaps the primary reason was due to the French home government not realizing the potential of the missionary in holding Indian allegiance. By the time their importance was recognized, foreign influence (English) among the Indians was too well-established. This was not so much the case in the Yazoo Bluffs region, as missionaries were introduced at a very early time. More critical perhaps to the failure of this mission was the fact that Recollects, rather than Jesuits, were in control. Jesuits appear to have been much better qualified to deal with the Indians, undoubtedly due to several centuries of experience in the Old and New Worlds. Their most important trait was the ability to rapidly learn native languages, something the Recollects (Father Davion included) failed to do. The fate of the French mission among the Yazoo River groups was directly related to the activities of Father Davion. Instead of attempting to understand the customs of the Tunica so that he could learn how best to approach changing their sociocultural values, he apparently became impatient and tried to "civilize" the natives too fast. The destruction of the idols within their temple seems to have been the catalyst for compartmentalization. Davion was not killed for this atrocity. The chief is reported to have befriended him and prevented his execution, but the actual reason may have been because of his instrumental role in securing European merchandise. His destruction of the Tunica idols was not very effective, however. Instead of a fusion

between aboriginal and French religious practices and beliefs, native religion seems to have gone into hiding. After two decades of missionary work among the Tunica, various Frenchmen still commented that little was known of the Tunica religion. Davion himself lamented his failure to Christianize his constituents.

The "missionary" period in the Yazoo Bluffs region was hence characterized by a very promising beginning. That which was presented by the missionaries, both materially and in the substance of their own persons, was accepted by the natives because they fit into pre-existing customs and concepts. The symbol similarity had little depth, however, as Father Davion apparently soon realized. His frustrated efforts to expedite changes appears to have worked the opposite. The Indians wished him to live and remain among them because of the material benefits, but at the same time refused his socioreligious teachings and protected their own by hiding them.

The "trader" period corresponds to the occupation span of Fort St. Pierre (1719-1729). During this period trading seems to have been the greatest form of interaction between Frenchmen and the aborigines of the Yazoo Bluffs region. Surely some trading must have occurred prior to this period, both during and before the "missionary" period, but we have no records of these transactions. A number of reasons, including the glut on the beaver market and the war-time shortage of trade goods, argues against the significant activity of traders during the "missionary" period. Conversely, the missionary role was of

little significance in the "Trader" period. Chaplains were in evidence at the Yazoo Post, but they primarily served the colonists. They even appear to have been somewhat ineffective in this role, as in at least one instance the colonists relied on aboriginal shamans to perform supernatural functions. A missionary, in the person of Father Scuel, did arrive late in the period (1727), but appears to have had little effect on the native population. The reason why the Yazoo Indians received a missionary at all was purely political. It was the administrators' desire to buffer the Yazoo Bluffs region from English penetration, and the presence of a missionary was believed to be the most effective means to achieve this goal. Other more deserving groups, such as the Tunica, did not receive missionaries at this time, because their physical position and status bore no threat to Louisiana's fate. Many groups, perhaps including the Yazoo River Indians, found that it was not to their advantage to favor one European power over another. With the exception of Bienville, most colonial administrators gave more merchandise to wavering groups in order to win their allegiance. The Yazoo River groups were included in this roster and so they received a missionary.

The Yazoo missionary perhaps fit into the administrators' policy in the distributing of annual gifts. The post commandants may have given annual presents too, but it is also possible that the chiefs had to venture to New Orleans to receive their presents. This of course depended upon whether or not the particular colonial administrator desired to achieve

personal gain from the transactions. The Yazoo River groups may also have been encouraged to relocate themselves. The policy of moving Indians into strategic locations continued through the "trader" period and, although we do not know whether such a request was delivered to the Indians of the Yazoo Bluffs region, at least one group (Tapoucha) was invited into the area. The centralizing of Indian groups served not only as a protective buffer, but aided individual French traders. The activity of French traders in the Yazoo Bluffs region is quite obscure, but we do know that they often went directly to the Indian villages. Competition between traders appears to have been quite severe, the Indians often profiting over the Frenchmen. Lists of materials traded in this region are unknown, but we at least know that the Indians were trading great quantities of deerskins and bear's oil to the settlers. Materials given in return were undoubtedly much the same as that given throughout Louisiana. Guns, powder, lead, clothing, trinkets and tools were probably included. Liquor, no doubt, was an integral item in the trade.

The actual personal relationship between Indian and trader in the Yazoo Bluff region is not known but, if similar to other areas in colonial Louisiana, it is probable that the trader was not well respected. In these transactions the purpose of material exchange was to receive the objects themselves. This differed from transactions between Indian and missionary in that the latter exchanges were designed not only to obtain merchandise, but to cement kin-like relationships.

The missionary commanded much more respect than the trader. Although the Indians of the Yazoo Bluffs probably received much more merchandise in the "trader" period, it is doubtful that the trader, on a personal level, could match the potential of the missionary in wielding sociocultural change. Quantity and kinds of materials, in all of Louisiana French-Indian relations, does not appear to have been as important as the ways in which European material were passed. Once received, the manner in which goods were used and valued could vastly affect the course and rate of sociocultural change. To that subject we now turn.

Chapter 12 - Louisiana Indians - Sociocultural Change and Stability

Introduction

Having examined the agents of acculturation and the effect of various French roles on aboriginal society and culture. It is now necessary to investigate the results of such contact. This section is devoted to the study of the material and nonmaterial phenomena which were accepted or rejected by the Indians of colonial Louisiana. Also examined is the significance of the innovations to the aborigines. Significance is a difficult concept to handle properly, as items which we might consider to have been of little importance in occasioning sociocultural change, may indeed have been responsible for large scale disruptions. A series of minor, perhaps initially undetected, changes in the material circulation system can often cumulatively result in significant sociocultural changes (Deetz 1972:112; Mandelbaum 1941:24-25; Vogt 1960). For example, steel axes distributed among the Australian Yir Yoront could do no more tasks than their stone predecessors, but the importance of stone axes revolved around status and regional economic cooperation, more so than in a purely functional manner (Sharp 1952; 1975). Similarly, iron hoes among the people of Southern Zambia transcends their simple functional design in being a high-ranking non-Western money whose value drives from

the fact that they are generally conserved within their own highly valued sphere of use (Lancaster 1974: 1975).

Function itself is a complex term. Lewis Binford has demonstrated how the same object can function in completely different ways (technomic, socio-technic, and ideo-technic) when observed under different situations (Binford 1962a). Even if just technomic function is examined, specific use is questionable - a hearth, for example, being used for heating, smoking, cooking, or lighting (Fritz 1972:142). The actual function of accepted materials or concepts must hence be examined in order to understand why they were accepted and what possible ramifications the acceptance may have had on aboriginal society. Reasons for the rejection of innovations are most often complex, and in the majority of cases we do not even know if the innovations were ever offered. Historically, it is known that some societies have rejected innovations for the very simple reason of their being non-traditional. The Yir Yoront rejected canoes, a form of transportation which would have been extremely valuable to them, simply because they believed their ancestors did not possess them (Sharp 1952; 1975). Such a situation may also explain why many innovations fail to diffuse, even when the socio-physical environment appears to be accomodating (e.g., Heider 1971:393).

Even if an innovation is overwhelmingly accepted by a group of people, the sociocultural effect of the acceptance is variable. We know through the ethnohistorical records that the Fox Indians in 1668 possessed iron axes, knives and bodkins in

very small quantities. Within only a few years these tools had almost entirely replaced the earlier stone axes, knives and scrapers (Wittry 1963:50-51). The natural conclusion would be that Fox culture underwent changes of an equivalent order. As Karl Heider has demonstrated for the Dugum Dani of New Guinea, however, drastic changes in the total tool assemblage of a people does not necessarily result in major repercussions in the overall culture. Similar to the Fox Indians, the Dugum Dani used stone tools almost exclusively in 1961. Two years later they had converted almost entirely to iron and yet no significant changes occurred in Dani culture as a whole (Heider 1971:389). A revisit to these people in 1970 confirmed this interpretation (Heider-pers. comm.). Eric Reed similarly pointed out, in his analysis of Spanish-Indian contact in the Southwest, that even after extensive borrowing of European material culture, especially among the Eastern Pueblo, very little or no change occurred in their non-material culture (Reed 1944:67).

Even when more efficient materials are accepted and used technomically, efficiency in itself does not imply cultural progression. A people may adopt a technological innovation which produces twice as much, but consequently expend only half as much time in labor (Sahlins and Service 1960:chap. 2). Cultural stability, defined as the antiprogressive character in general progress (Ibid:chap. 3), opposes the sociocultural effect of each introduced item. A culture will undergo specific changes only to the extent of, and with the effect of preserving

unchanged its fundamental structure and character:

The actual conditions of human existence for most purposes could perhaps more accurately be conceived as an infinite series of adjustments between tendencies toward both change and persistence. A layman's knowledge of human behavior tells us that people do not often or voluntarily toss the cultural accumulation of countless generations into the Pacific Ocean; nor are they able to resist the attraction of the new or the improved forever (Bee 1974:13).

The above cases must stand as warnings, but it would be foolish to ignore the fact that in many situations the introduction of large quantities of material has had a tremendous impact on the institutions and values of cultural systems. An old Natchez man, just prior to the 1729 massacre, spoke of the vast changes he had seen since the French settled among them:

We have a long time been sensible that the neighborhood of the French is a greater prejudice than benefit to us: we, who are old men, see this; the young see it not. The wares of the French yield pleasure to the youth; but in effect, to what purpose is all this, but to debauch the young women, and taint the blood of the nation, and make them vain and idle (Anon. in Le Page du Pratz 1774:76).

The above complaint may in part be the common phenomenon of "old" versus "young", the elderly disapproving of deviations from the traditions of earlier generations (Herskovits 1966: 142), but there is abundant historical evidence to support the claim that introduced items were severely affecting Indian culture. The actual ways in which sociocultural phenomena are affected has been an issue of much debate. Edward Spicer

conceded that material culture does not always change as fast as social or religious institutions, but he felt, as a general statement in regard to six Indian cultures, that technological changes far outdistanced changes in language and social structure when examined over the entire span of contact (Spicer 1961:543). In cases of Western dominated contact with American Indians there was a general sequence of integrating processes beginning with simple incorporation of novel items, followed by incorporation of a more complex nature, leading to eventual replacement as the contact situation continued through time (Ibid:539). Others have similarly supported the contention that technological systems, or systems of economic production change first in contact situations (e.g., Ogburn 1957) but, as noted in the 1954 summer seminar on Acculturation, this interpretation may in part be related to our Western World emphasis on technology (SSRC Seminar 1954:990). Elman Service has argued that in some societies ideological concepts have been picked up faster than technology (Service 1960b:118-119). Lynn White discussed a similar situation in her article, "The Historical Roots of Our Ecological Crisis" (1967). She felt that a transition from living with our environment to exploiting it occurred in Middle Age Europe with the transition from paganism to Christianity. Established with the latter was a dualism between man and nature.* Along with Christianity

* This was, to Robert Bellah (1964), the change from an Archaic to a Historic religion.

came the philosophy that it was God's will that nature be exploited for man's needs. It was at this time that the change from scratch plowing to deep plowing occurred. Whereas the former did not turn the earth, the latter greatly disturbed it. Paganism provided a life in which the physical environment was an integral feature of one's existence, but by destroying pagan animism, a feeling of indifference to nature ensued. ~~Thus~~ with the advent of Christian dogma, science and technology could be advanced and accepted, the result being man's mastery over nature. According to White's view, it would seem that Christianity, or some other religion which stressed dualism between man and nature (a separation which was non-existent in Southeastern Indian cultures), had to be accepted and understood before technological advancements, particularly in the realm of agriculture, could occur. Individual items, a product of Western technology, were picked up, but probably had neither the same significance nor were used in exactly the same way by the Indians. It is hence important to understand how each European artifact type was used and valued, or rather, how the innovations fit into the overall cultural complex. This is an inordinately difficult task, but one which needs examination before any interpretation of the significance of archaeological materials can be made.

There are a number of ways in which the anthropologist can discover what materials were being offered and accepted by aboriginal populations. In the last chapter concerning French roles, I primarily used ethnographic information from historical

accounts. David Baerreis encouraged archaeologists to study the records of trade good transactions. He noted the success of George Quimby's analysis of Natchezan culture (1942) using such information, and stressed that:

Such data could be brought into conjunction to measure the extent to which items purchased by a particular tribal group at a particular time are preserved in their sites...

The records of the traders clearly permit a quantitative analysis of a changing economic system which could profitably be compared with the details of our archaeological assemblages or studied as an independent investigation (Baerreis 1961:60-61).

I have spoken in chapter 2 of the limitations of using trade lists alone in measuring sociocultural change. Even when used in conjunction with archaeology, there is the implicit assumption that the excavated materials were originally those secured by traders. As we have seen in the last section, this role was but one of the many involved in French-Indian interaction in the Southeast. Trade lists also do not reveal who has the chief input in their construction. We assume that market demand controlled the requested material, but we cannot be sure. Nor can we conclude that all materials on specific lists actually went to the Indians (e.g., see pp. 420-421). Archaeological evidence provides a fuller picture, because it reveals what the Indians received (through whatever medium), and not merely what they were supposed to have obtained, but the problem with archaeology is that the materials collected are such a small sample of the original assemblage in the

Indians' possession. A further problem with trade list use, one which is only slightly minimized in archaeology, is that the Indians' use and value of the goods is not revealed.

We must similarly be careful of reading too much into trade lists and archaeology in interpreting sociocultural change. Major changes in material culture which are apparent when examining short time intervals, may disappear if larger temporal units are considered. For example, research conducted on European and American clothing over a three-century period revealed that women's fashions were cyclical in their patterns, ranging between points of maximum exposure and maximum cover in intervals of about 50 years. Variations occurred yearly, but the basic feminine pattern of a loose-fitting skirt, with the upper part of the dress fitting close to the body contours, remained stable through the duration of the study (Kroeber 1948: 332-333); Richardson and Kroeber 1940). Had the authors selected a period of time less than 50 years for their research, their final interpretation may have been that clothing changed drastically in a linear, rather than cyclical, manner (Bee 1974: 10-11). The reader is reminded that the period of study for this particular research is but 30 years. We do, however, have the added feature of strong external forces being responsible for the observed changes, and so our calculations of sociocultural change have greater validity.

In diminishing the role of trade lists and archaeology, we are still faced with the problem of interpreting the value of introduced items to the Indians. Robert Bee defined "values"

as "...the conceptions of what is good, desirable, or proper shared among group members (1974:201)." Included are the goals that an individual should strive toward and the basis for calculating the relative payoffs of the various behavioral alternatives at his disposal. Working against this, however, are the set limitations on the range of alternatives and on the nature of the payoffs. Bee gave the example in our society that it is good to have money, but there are differences between ways in which one can become wealthy, the robbing of a bank being an unacceptable alternative (Ibid). A peoples' values are synonymous with the "meanings" which they give to the customs they, as individuals, practice. This is different from "function", which refers to how an objective observer interprets the role of custom to the society. Function always embraces more than meaning, yet meaning (values) plays more of a role than the former in the willingness of a people to change (Goodenough 1963:80).

Determining what was changing in the material culture of a people and relating this to the values of their cultural system is an inordinately complex task. We might be able to have some confidence in an early French historian's statement that steel axes were replacing stone ones, or guns were replacing the bow-and-arrow, but what do we do with such statements as, "The natives put as great a value on a pipe of peace as on a gun (Le Page du Pratz 1774:42)." Obviously, this is a subjective statement, tempered by both the specific situation and the cultural background of the man making the declaration. The

statement itself is rather puzzling, because it compares unlike elements - one being related to war and/or subsistence, the other to peace and/or war. It is statements such as the above which the anthropologist constantly meets in the ethnohistorical record. Although they are undoubtedly significant to studies of sociocultural change and stability, each statement must be scrutinized closely and compared with many other related statements.

Another problem in relying too heavily on primary observers' judgements is that function and value were often misunderstood. I previously mentioned the probability of Louisiana Indians confusing crosses and other religious paraphernalia with items already existent in their own cultures. The same appears to have been true of the French. For example, Le Page du Pratz believed chairs were only recently adopted by the Indians:

The natives have small seats or stools on which they sit. I do not know whether they made use of them before having our axes. I much doubt it when I consider their small inclination to sit on them. These seats are only 6 or 7 inches high. The feet and the seat are of the same piece (Le Page du Pratz in Swanton 1911:61).

It is possible that this Frenchman confused form with function. The objects looked like chairs, so they were naturally thought to have been used as such. Further evidence of confusion centers around native medicinal practices. Shamans (jugglers or alexis) were very common among the Indians, and curing was a part of their responsibility (Swanton 1911:178-180).

Those among the Natchez (Ibid:80-81) and Houma (Thwaites 1896-1901,65:150-151) used a splinter of flint to make incisions in the flesh where the pain was felt. The blood was then sucked out, either with the mouth or with the end of a bison horn. Dumont dit Montigny considered this practice to be bleeding, a form of medicine quite commonly practiced in France. However, it is more probable that this aboriginal custom was part of a widespread Indian practice of drawing out a malignant spirit or some other supernatural object which was causing a disturbance (Levi-Straus 1967a; Swanton 1911:80-81). Once again, similarity of form may have led to faulty interpretation.

There is thus a problem of placing too much weight on European interpretation of aboriginal reaction to events and materials, and, more importantly, to their values and beliefs. The nature of interaction with Indians often confused Frenchmen. Wax and Thomas (1961) and Basso (1970) discussed the importance of interactional silence among most Indian groups (Louisiana Indians included - Swanton 1911:92); silence which was most often viewed by Whites, looking through their own cultural filters, as evidence of a passive, dull or dumb nature. The Louisiana Indians were just as confused by French presentation of self. The over friendliness, smiling, constantly talking and shaking hands of the Europeans, all designed to put the other at ease, does just the opposite when addressed to an Indian, because this type of behavior indicates a person is trying to hide something (Bee 1974:103-104). The lack of comprehension of outward character manifestation surely must

have hindered the understanding of values and beliefs.

Overt, subjective comments have too many problems to be dealt with exclusively as reliable guages of aboriginal values, but I believe we can obtain an idea of the function of new materials and the values imparted to them through the analysis of statements not meant to be value judgements. For example, Le Page du Pratz informed us that the Indians were not very fond of the color yellow (Swanton 1911:66), but in examining ethnohistorical accounts it becomes apparent that this color was often used. Father Gravier described the Houma temple as having grotesque figures, painted white, black, red and yellow, attached to it (Thwaites 1896-1901, 65:146-148). Similarly, d'Iberville referred to the three eagle figurines mounted atop the Taënsa temple as being painted red, yellow and white (Swanton 1911:269). In extremely rare cases, actual aboriginal requests for merchandise have survived, the assumption being that such merchandise was considered of importance to the Indians themselves. In return for the release of several men, women and children following the 1729 massacre, the Natchez demanded:

...two hundred guns, two hundred barrels of powder, two hundred barrels of balls, two thousand gun-flints, two hundred knives, two hundred hatchets, two hundred pickaxes, twenty quarts of brandy, twenty casks of wine, twenty barrels of vermilion, two hundred shirts, twenty coats with lace on the seams, twenty hats bordered with plumes, and a hundred coats of a plainer kind (Le Petit 1730 in Thwaites 1896-1901; 68:190-191).

Such a list has some use, but it tells us little of the relative value of materials. A similar listing of European

merchandise, as related to aboriginal activity, occurs in Dumont dit Montigny's discussion of the Natchez harvest feast. A dance followed this ceremony, during which time a post was set up with a calumet attached to the top. Each warrior was expected to run up to the post, throw presents at its base, and recite his heroics or the feats which he expected to perform in the future.* Some of the presents were guns, shirts, knives, mirrors, war clubs and packets of beads or of vermilion (Dumont dit Montigny in Swanton 1911:120). This information is valuable in terms of adding to our knowledge of European materials possessed by the Indians, but it again adds little to our understanding of relative importance of merchandise. It is doubtful that all the warriors would be inclined to lose their most valued possessions. Fortunately, if scrutinized close enough, valuable information is not lacking in the ethnohistorical records. Dumont dit Montigny, in describing the manner in which a Natchez man took a wife, stated that:

If they [the girl's parents] grant it [his demand for their daughter] to him he does not fail, some days afterward, to make a present to his future father-in-law of a gun, for example, and to his mother-in-law of a complete covering of Limbourg, and if the girl he is going to marry has sisters, it is also necessary for him to give them vermilion, beads, bracelets (Ibid:97).

In this particular situation it is unwise to suppose that

* Similar practices were observed among other Louisiana groups (see pp. 471-472).

a gun was more valuable than a covering of limbourg, because we would be comparing across sexual lines, but we can be fairly sure, from this example, that a covering of limbourg had greater value than vermilion, beads and bracelets. In fact, guns and limbourg coverings seem to have been the most valued types of European material. In the Natchez harvest feast Dumont dit Montigny stated that the Great Sun offered his subjects a gun and an ell of limbourg for the victors of the ritual ball game (Ibid:119). The value of this merchandise appears also in the Great Sun's account of the Tattooed-serpent's funerary arrangements:

If the French had not spoken the road from my brother's cabin to the temple would have been strewn with the dead...And what will the chief of the spirits say if he sees him come entirely alone? He will say this is not a chief, and he will drive him from before his face. Besides, his two wives have always walked and eaten with him. They must go with him, and when 20 guns and 20 coverings of Limbourg shall be given they will not seek to avoid death (Ibid:154).

It is also possible to gauge the value of European merchandise in relation to aboriginal goods and services. During the nightly dance of the Natchez harvest feast, the young men and women often wandered into the woods for a dance of another sort. Frenchmen also participated in these peripheral ceremonies and the Indians' value of such sexual services can be determined through the material costs:

There in the darkness of the night on the fresh grass tête-à-têtes and secret conference are held with which none is displeased. On separating, the

young man gives his goddess a little vermilion, a bead necklace, a copper or iron bracelet, or some other similar trifle, and she is satisfied beyond all expression (Ibid:121).

As related by André Pénicaut, such dances and sexual encounters occurred quite often:

Their dance is almost like the new cotillon de France, with this difference: That when a youth has danced in that manner with the girl at his side or in front of him, he is permitted to lead her to the end of the village, into one of the groves on the prairie, where he dances another cotillion with her à la Mississippienne, when they return to the village square to dance in their turn as before. They continue their dances thus until broad daylight, so that in the morning the boys especially are like disinterred bodies, as much through loss of sleep as through being fatigued with dancing with the girls (Pénicaut in Swanton 1911:121).

It is possible to trace such material or service exchanges over time in order to achieve some idea of value change and stability. For example, M. Tonti, among the Taénsa in 1682, declared that one could obtain a hen for an awl or needle (Swanton 1911:259). Exchanges of this sort are reflections of the value of European merchandise to these people at this particular point in time. To understand Taénsa value changes, information is needed on material equivalency in later years.

One can also observe relative value at a single point in time by studying aboriginal gambling games. The Natchez, for example, wagered powder, guns, skins and limbourg on the chunky game (Ibid:202-203).

This game, like many others, begins with little

and often ends in the ruin of one of the players. In the beginning they stake only some single beads, then entire strings. When they have lost their beads they go stealthily to search for those of their wives, and sometimes lose them also. Then the game becomes animated. The loser goes to find his garment of cloth or skin. Everything is good, so that it helps to satisfy his fury for playing. If he loses this sole garment he is ruined as much as the person who plays and loses his silver, his wardrobe, and his equipage. The settlers do not like native gamblers, because after this loss they go to their houses, under some false pretext, to buy another garment, which they seldom pay for (Le Page du Pratz in Swanton 1911:91).

Valued objects can be arranged in relative order in this particular situation from an individual's single beads, to his string of beads, to his wife's beads, to his own garment, to finally settlers' garments, as no other native would give his clothing for some other person to gamble with. A similar order of betting was observed by Benard Romans among the Choctaw Indians:

Their favorite game of chunke is a plain proof of the evil consequences of a violent passion for gaming upon all kinds, classes and orders of men; at this they play from morning till night, with an unwearied application, and they bet high; here you may see a savage come and bring all his skins, stake them and lose them; next his pipe, his beads, trinkets and ornaments; at last his blankets and other garments, and even all their arms, and after all it is not uncommon for them to go home, borrow a gun and shoot themselves; an instance of this happened in 1771 at East Yazoo a short time before my arrival (Romans in Swanton 1931:155).

This section is devoted to an investigation of ethnohistoric sources, such as the above, to determine how French merchandise and nonmaterial concepts were accepted, used

and valued by the Indians of Louisiana. General, necessarily summarized, sociocultural changes will be dealt with first, followed by a discussion of each type of material object either traded or given to the Indians. The task is to examine what elements were accepted and used by individuals, how they were used, and how the behavior, and ultimately beliefs, of the individuals were modified as a result of this acceptance. Dealing with individuals alone, however, does not delineate sociocultural patterns. The final analysis of reconstructing changing patterns of the total cultural systems must be elevated to a level higher than the individual, Robert Bee expressed this task well:

In the detection of processes, the observation is of actor's behavior, of course, but a multitude of individual cases of behavior in a given context, say, "religion", are pulled together and the common elements are abstracted as "the religious system." The system includes the making and use of ritual objects such as altar materials, rattles, special costumes; beliefs such as in the omnipotence of God; and rituals such as fiestas to honor a particular saint. Alien elements can enter into any or all of these aspects of the religious system. It is the analyst's task to decide what those elements are and how they have affected the behavior and belief systems of the individual actors. To the extent that the effects have been common among a significant number of individuals, the analyst is justified in assuming that the "system" has been modified in a specified way. The methodological point here is simple: the analyst is observing individuals behaving or talking about their beliefs; but his end result will be phrased in terms of systems or patterns, not in terms of individual behavior. In the description of processes, it is the systems or patterns that are the focal points, not the individual behavior (Bee 1974:115-116).

In many cases sociocultural change is unintentional. The donors often do not realize the effect a simple innovation may have on a recipient culture. In some situations, however, aboriginal sociocultural change was directly pursued by the French. The teaching of Christianity is an obvious example but, on a more mundane level, Frenchmen often spent time teaching Indians the function and importance of material objects. D'Iberville's men, for example, after having amused themselves for some time over the Biloxis' confusion, taught the specific use of each European item given to the natives (see pp. 395-396). Similarly, Le Page du Pratz instructed his Indian guides in the use of a mariner's compass in directing their way through unfamiliar areas (Le Page du Pratz 1774:119). The written word was recognized as being very powerful to the Indians and Frenchmen often took advantage of it in directing sociocultural change. Le Page du Pratz instructed the guardian of the Natchez temple as to how God created woman:

I did not fail on this subject, any more than on that of the aerial spirits and the prayers which they addressed to them, to rectify his ideas and to direct them to the truth which our religion teaches and that the sacred books have transmitted to us. He heard me with great attention and promised to teach all I had said to the old men of his nation who would certainly not forget it, adding that we were fortunate to be able to retain such beautiful things by means of the "speaking stuff". It is thus they name papers that have been written on and books (Le Page du Pratz in Swanton 1911:169).

The above examples, however, are specific individual changes. General alterations in aboriginal lifestyle seem to

have been more the result of the accumulation of minor changes in systems which were interconnected with other systems. All aspects of society were eventually affected. To be dealt with here are some of the most marked changes in Louisiana Indian society and culture as a result of French contact. The discussion can be relegated to the headings of economic, political and social organization.

Economic Organization

Felix Keesing has argued that the Indian came into contact with only a segment of the larger commercial and industrial world of the White man. Many of his needs, such as food, clothing, shelter and transportation, continued to be met in pre-existing manners (Keesing 1939:107). This is certainly true in regard to some aspects of aboriginal economy. Wild pigs were in evidence since the De Soto period, and yet there is no reference to this new food resource having been hunted by the Louisiana Indians. Similarly, chickens were introduced to Louisiana by Frenchmen (possibly earlier) and were in some abundance among the natives, yet it appears that this particular fowl contributed little to their diet (Le Page du Pratz 1774:74; Swanton 1911:289). The Natchez Indians seem to have been reluctant in accepting certain foreign foods. According to Le Page du Pratz, they would only eat French dishes which were boiled or roasted. Soups or ragout were shunned, as were

salads or anything else (excluding fruit) which was uncooked. They would only drink pure water or brandy (also had to be pure) and they supposedly disliked wine (Le Page du Pratz 1758 in Swanton 1911:78). This is a curious statement, however, because it will be remembered that the Natchez demanded twenty casks of wine from the French after the 1729 massacre (see p. 509). Several French foods, such as bread, apparently won wide approval among the Indians. According to M. Duclos:

...in addition to the presents that one cannot avoid giving them it is equally necessary to give them something to eat especially to the chiefs when they come to Fort Louis which they happen to do rather often...This is the reason that I ask in the attached statement for fifty hundredweight of flour under the heading of presents to be given to them and to be used to give them bread when they come here which is the thing they like the best because they do not eat any at all at home (Duclos 1713 in Rowland and Sanders 1929:132).

Although Indian tastes, for the most part, remained fairly conservative, Keesing's statement that economic organization remained basically unchanged as a result of European contact cannot be so readily supported. In general, the fur trade had a severe effect on the economy of aboriginal populations (Leacock 1954; Norton 1974; Ray 1974). A number of changes desired by European traders could, over time, have made significant changes in Indian society. For example, Le Page du Pratz noted that the natives altered their method of preparing skins in order to satisfy their European customers:

The skins of deer, which were purchased in early times from the natives and which take at Niort,

where they are perfected, the name of doeskins, did not please these manufacturers at all, because the natives changed the quality of the skins in dressing them, but since these skins have been demanded without any preparation except the removal of the hair, they take more of them and give them to a better market than before (Le Page du Pratz 1758 in Swanton 1911:65).

Were such a change to be prolonged over a long period, it is possible that the aboriginal methods of dressing skins for clothing would be lost; particularly when European cloth provided a ready substitute. Moreover, the above quote suggests that deer hunting increased markedly, the activity of skin preparation no longer slowing down the process. Through time, much like the beaver in more northerly regions, deer probably became increasingly scarce. There is evidence that other animal resources, such as bear (see pp. 431-432), were also depleted as a result of French trade requirements. Disappearing resources and ever increasing trade demands undoubtedly necessitated hunters traveling to more distally regions to satisfy requirements. Not only might this upset economic organization, in that men were spending increasingly more time performing trade related activities, but other sociocultural phenomena were no doubt affected by the ever more frequent separation of men from the central group. According to Goodenough (1963:89), if more and more members of a small closely-knit community spend time away from home, such as when engaged in entrepreneurial activities, there is increasing social disorganization in the village.

Political Organization

In terms of overall structure, political organization appears to have remained essentially unchanged since protohistoric times, but there is some evidence to suggest that a deterioration of respect for native hierarchy was occurring as a result of French contact. I suggested earlier (pp. 425-426) that the ready willingness of the Natchez chiefs to mobilize commoners for French demands, as well as the rapidly increasing wealth (with little redistribution) coming into the hierarchy, may have put severe pressures on the general populace. The growing dissatisfaction may be reflected in the difficulty the Natchez hierarchy had in finding people to serve as retainers for deceased rulers. Such disorganization does not appear to have been characteristic of only the Natchez, however, as the Taénsa population did not severely contest d'Iberville's prevention of sacrifice at the death of their own chief (see p. 485). One wonders how the Tunica commoners reacted to the changing role of their chief. In 1721 Father Charlevoix stated that the Tunica chief's cabin:

...is very obscure within doors, and I could see nothing in it but chests, full, as I was told, of goods and money. The chief received us very politely, he was dressed after the French fashion, and seemed in no way incommode with his cloath...He carries on a trade with the French, supplying them with horses and poultry, and is very expert at business. He has learned from us the art of laying up money, and is accounted very rich. He has long left off wearing the Indian habit, and takes great pride in appearing always well-dressed (Charlevoix 1923:262).

Warfare, the game of the elite, also witnessed marked changes as a result of French contact. Fortifications certainly were not new to the Indians of Louisiana (Swanton 1911:133). Many prehistoric Mississippian sites, such as Cahokia and Hiwassee Island (see p. 471), had extensive palisaded fortifications, but such defended areas most often were restricted to revered areas like principal mounds. The historic Taénsa, described by M. Tonti in 1682, had their temple similarly defended:

This temple is inclosed in a kind of redoubt, where they put upon the wall the heads of their enemies who they have killed in war. They keep watch there day and night. This fort is not at all regular, but is very well flanked at each angle; there are sentry boxes of hard wood (Tonti in Swanton 1911:260).

Although the idea of fortified areas existed, the Indians had much to learn of defensive warfare, and their French neighbors contributed significantly to this education. As noted earlier (see p. 47), the Natchez provided the labor for the construction of Fort Rosalie in 1716. The knowledge acquired from such activity was no doubt repeatedly drawn from in the establishment of their own two forts (Fort de la Farine and Fort de la Valeur) in 1729. Frenchmen often willingly contributed to the Indians' knowledge of fortification. Sieur de Tisnet, commandant of the Natchez Post several years prior to M. Chopart, taught the natives how to build palisaded forts in the manner of the French, in order to win their friendship (Swanton 1911:217). The Natchez readily accepted this aid. Le Page du Pratz

described their fortification improvements:

The best instructed of these people, as were the Natchez by our soldiers, make about 5 feet above this banquette [a wall of earth inside the palisade] a kind of penthouse (auvent) with fragments of trees in order to cover themselves from grenades. They also have loopholes which have only one opening outside and two within which correspond to the one. These loopholes are immediately above the banquette (Le Page du Pratz in Swanton 1911:133).

The actual manner of conducting warfare appears also to have changed as a result of foreign influence. Dumont dit Montigny described the Natchez pattern of warfare, and those of surrounding groups, as having as its immediate goal the securing of some scalps so as to make proof of bravery. The purpose was not to kill many of the enemy. That is why when two opposing war parties met on the road, they inevitably retreated. For this reason, Dumont felt that Indians, when shut up in their palisaded forts, would never make sorties against the enemy (Swanton 1911:127). The Natchez failed to abide by this pattern in their final war with the French. A number of sorties were conducted against the French besiegers, a technique no doubt learned from their adversaries (Ibid:238-239, 244-245). The Natchez apparently also realized the power of French weapons. They stole three cannon from Fort Rosalie during the 1729 massacre and set them up in their own forts. They were used against the French in January of 1730, but the Indians' inexperience with such weapons resulted in them being totally ineffective (Ibid:238). From these and other examples, it can be seen that the Natchez and other Indians of Louisiana

necessarily adapted to a new form of warfare in which the rules were no longer the same.

Social Organization

Traditional marriage and sexual relations appear to have remained largely unchanged as a result of European contact. Much to the chagrin of missionaries, the behavior of Frenchmen not only reinforced native promiscuity, but seems to have been responsible for its amplification. Natchez women, prior to marriage, were encouraged to have sexual relationships with men. Fair exchange occurred and it thus became possible for women to amass a significant dowry, large enough to attract a worthy suitor:

When the boys and girls have arrived at the age of puberty they associate with each other familiarly, and have the liberty of doing so. The girls, forewarned that they will no longer be mistresses of their own hearts after they are married, know how to dispose of them to their advantage in forming their wardrobe as the price of their pleasures, for in that country, as elsewhere, the rule is nothing for nothing. Her intended, far from finding fault with this, on the contrary values his future wife in proportion to the fruits which she has produced (Le Page du Pratz in Swanton 1911:95).

The appearance of a highly valued stock of goods, along with Frenchmen willing to take advantage of this particular aboriginal custom (see p. 511), no doubt contributed to increasing native promiscuity in the early 18th century. It appears that

some Europeans did not honor the native marriage rules, however. In the early 1730's a Choctaw chief complained that the Frenchman, Lesueur, was debauching his wife. The chief presented a box of trinkets to Diron d'Artaguiette at Mobile, gifts which he claimed Lesueur had given his wife for carnal pleasures. The missionary, Father Baudouin, was of little help in this case as he even solicited the woman to leave her husband (Delanglez 1935:466-467).*

It seems that traditional forms of etiquette were also modified as a result of French contact. In the last section I discussed a number of situations in which conjunctive relations consisted of physical contact between participants. The rubbing of hands over parts of either one's own or the visitor's body was a very common native form of greeting. In some instances, the custom appears also to have had a certain amount of religious significance. Father Membré, among the Arkansas in 1682, planted a cross in their village and noted that the Indians rubbed their hands over their bodies after rubbing them on the cross (Cox 1905:138). Father Membré referred to other such practices in his description of the Taensa temple:

One of the Frenchmen entered it, almost in spite of the guards, one of whom followed him and wiped with his hands the earth on which the Frenchman had set his feet, and afterward rubbed his body with his hand...

* The truth of this event is not definite, but it serves to demonstrate the effect of Frenchmen on native social organization.

...Every night there are inside two lighted torches. We saw that the women presented their children to the sun and that they rubbed their bodies with their hands that they had also shown to the sun (Membré in Swanton 1911:263).

It is interesting to note that the cross, sun and hand were three of the most important symbols of the late prehistoric Southeastern Ceremonial Complex (Waring and Holder 1945 in Williams 1968). The holdover of certain aspects of this "religion" among historic Lower Mississippi Valley groups has been referred to several times in this manuscript (see pp. 400-401, 469-473).

The "rubbing" greeting also occurred in d'Iberville's 1699 reception by delegates of the Biloxi and various other groups. The greeting was incorporated in the calumet ceremony with d'Iberville, Bienville, and several officers having had their faces rubbed with white earth. D'Iberville also had his back patted while he observed the ceremony (French 1869:37-41). In this same year, Bienville was embraced by the Pascagoula Indians. He noted that they, "only pass the hand over the breast on their arrival, after having raised their arms to heaven (Le Moyne de Bienville in Swanton 1911:302)." D'Iberville referred to an almost identical greeting in his contact with the Bayagoulas:

Having come to the place where my brother stood, the chief, or captain, of the Bayagoulas came to the edge of the ocean to show me friendship and civility in their manner, which is, being near you, to stop, pass the hands over one's own face and breast, and then pass their hands over yours, after

which they raise them toward heaven, rubbing them on themselves again and embracing (Le Moyne d'Iberville in Swanton 1911:92).

Like the Taënsa, the Acolapissa, described by Pénicaut in 1706, also possessed a "rubbing" ritual in association with their temple:

[They] have a round temple, before which they present themselves evening and morning, rubbing their bodies with white earth and raising their arms on high; they mutter some words in a very low voice during a quarter of an hour (Pénicaut in Swanton 1911:282).

The ritual was similarly observed among the Natchez. Dumont dit Montigny described the Great Sun's rage at being prevented from killing himself at the death of his brother, the Tattooed-serpent:

"What do these Frenchmen wish? Why do they come here? Am I not chief, then? Am I a Stinkard?" No one answered him. A moment later he descended from his mound and approached the cabin of his brother, where he had his people called, and I saw that after he had spoken to them they rubbed him with their hands and also rubbed themselves (Dumont dit Montigny in Swanton 1911:155).

The tradition of "rubbing" was also witnessed by Father Poisson, among the Southouis Arkansas in 1727. Several Indians wished to be adopted by him, and it was observed that one of these men, before leaving:

...passed his hand over my face and shoulders, and afterward did the same to himself. After all these agios he went away with a contented air (Poisson 1726 in Thwaites 1896-1901, 67:254-255).

The "rubbing" ritual between French and Indian thus persisted well into the 18th century, but it is interesting that one of the latest incidences of it occurred with a man with whom the Indians desired to establish unusually close contact. Otherwise, there is abundant evidence suggesting that the form of greeting between French and Indian was changing. Le Page du Pratz observed that in the peace concluded between the French and Chitimacha in 1718, Bienville, "placed his hand in that of the chancellor as a sign of friendship, and sent them back satisfied (Le Page du Pratz in Swanton 1911:342)." Le Page du Pratz noted that, in general, when the natives meet a Frenchman, "they grasp the hand and shake it a little, bending the head slightly and saying to them always in their language, 'Is it you, my friend?' (Ibid:92)."

This form of greeting had obviously changed enormously since the initial contact period, the ritual becoming more aligned with the French form of salutation. However, there is some evidence that the native method of greeting among themselves remained essentially the same. Father Charlevoix visited the Natchez in the early 1720's and described a calumet ceremony between they and dignitaries from another aboriginal group:

Then they fill a calumet with tobacco, and holding fire in one hand they advance all together toward the great chief, and present him the calumet lighted. They smoke with him, and blow toward the sky the first whiff of their tobacco, the second toward the earth, and the third round about the horizon. When they have done this they present their calumets to the relations of the great chief and the subaltern chiefs. Then they go and rub with their hands the

stomach of the great chief, after which they rub themselves all over the body; and lastly, they lay their calumets on forks over against the great chief, and the orator of the embassy begins his speech, which lasts an hour (Charlevoix in Swanton 1911:134).

The stability of the "rubbing" ritual among themselves, but a change when dealing with Frenchmen, may be an indication of compartmentalization. The contact with Father Poisson makes sense when viewed as such, because the Arkansas were trying to make him a relative. It is also possible that the Louisiana Indians were conforming to the French greeting ceremony simply because it was easier to do so, proper Frenchmen no doubt being taken aback by bodily contact. Karl Heider noted a similar situation among the Dugum Dani, the people of this group going so far as to speak a simpler form of their language in order to communicate with the anthropologist. When among themselves, however, they continued to communicate using more complex linguistic forms (Heider 1970).

It is also feasible that the "rubbing" ritual remained stable as a result of its incorporation in the calumet ceremony. Father Le Petit described the Natchez calumet ceremony in 1730:

When they [native ambassadors] have entered the circle, they dance about the chair on which the Chief is seated, they rub him with their calumets from his feet even to his head, and after that go back to find those who belong to their suite...

The ceremony having been finished, the Ambassadors, as a token of alliance, rub themselves over the whole body; they then place their calumets before the Chief on small forks, while the person among the Ambassadors who is particularly charged with the orders of his Nation, delivers a harangue which lasts for an entire hour...

That same evening at Sunset, the Ambassadors, with the calumet in their hands, go with singing to find the great Chief, and having raised him on their shoulders, they transport him to the quarter in which their cabin is situated. They spread on the ground a large skin, on which they cause him to sit down. One of them places himself behind him, and putting his hands on the Chief's shoulders he agitates all his body, while the others, seated in a circle on the ground, chant the history of their distinguished deeds (Le Petit 1730 in Thwaites 1896-1901, 68:158-161).

Such an account as the above would fit in nicely with the rituals experienced by the French explorers of the late 17th century (see pp. 385-406, especially pp. 395-397), but it is surprising to see such activity after 30 years of intensive French contact. The ritual of the calumet ceremony appears to have remained fairly conservative, but there is abundant evidence supporting the view that its meaning was rapidly becoming lost. Father Gravier, in 1700, described the importance of the calumet to the Indians of Louisiana:

There is nothing among these Indians that is more mysterious or more revered. No such honors are paid to the crowns and scepters of Kings as those that they pay to it. It seems to be the God of Peace and of War, the arbiter of life and of death. It suffices for one to carry and to show it, to walk in safety in the midst of Enemies, who in the hottest of the Fight lay down their weapons when it is displayed (Gravier 1701 in Thwaites 1896-1901, 65:123).

It seems that most Indians in these early times realized the significance of the calumet and honored the rules associated with its use (see pp. 389-390). The actions of foreigners in regard to the calumet must have confused the natives. La Salle

was confounded by the hostility of the Natchez on his return trip up the Mississippi River in 1682. The reaction may have been due to his earlier hasty departure from their territory. Not waiting for the chiefs of the other Natchez towns, who had been sent to smoke the calumet with him, must have been an unthinkable departure from the etiquette demanded in the calumet ceremony (Swanton 1911:218-219). Similarly, although the events of the First Natchez War were in no doubt inspired, if not instigated, by the English among them, the Natchez explained their hostile acts as being due to the failure of Governor Lamothe de Cadillac to smoke the calumet with them. His refusal convinced the Natchez that the French were going to make war on them (Ibid.:193).

Double dealings by the French may also have brought about a lack of confidence in the meaning of the calumet ceremony. Le Page du Pratz indicated that it would be absurd for any group to fail to honor the calumet. To give insult to ambassadors from an enemy group would be ridiculous as the latter would then be assured of finding many allies to exact a vengeance equivalent to the insult it had received (Le Page du Pratz in Swanton 1911:128). He was obviously referring to an earlier time, however, as Dumont dit Montigny did not share a similar regard for its value to the natives:

There are few persons who have not heard of the famous calumet of peace. It was formerly the symbol of friendship among the savages, and with this passport one might travel in safety among all these barbarous nations. But I would not advise one to trust it now. The sad experience our French people have had with it, as I will tell presently, proves that the savages often abuse this sign of peace to expedite the blackest and most barbarous designs (Dumont dit Montigny in Swanton 1911:136).

In many instances the French themselves did not honor the calumet, a factor which undoubtedly hastened its disintegration. With all his vast knowledge of Indian behavior, Bienville should have realized the importance of respecting the calumet ceremony. As revealed in his treatment of the Natchez Suns (chiefs) in 1716, however, he contributed greatly to its loss of meaning among the natives:

As he knew all the ceremonies of the savages perfectly, he ordered part of his people not to show themselves, but to hold themselves in readiness, with their arms, in the guardhouse, and the other part to remain unarmed about his tent and the landing place, in order to take the arms from those savages as fast as they disembarked. He commanded to have admitted into his tent only the 8 first chiefs, whom he named, knowing them all by their war names, and to make the others sit down at the door of the tent. All this was carried out to perfection. All 8 chiefs entered, singing, calumet in hand, which they passed at different times over M. de Bienville from head to foot as a mark of union, and afterward, passing their hands over his stomach without rubbing it, and then over theirs. This terminated, they presented it to him to smoke. He pushed back their calumets with contempt and told them that he wished to understand their harangues and know their thought before smoking. This disconcerted these chiefs, who went out of the tent and presented the calumets to the sun. One of them, high priest of the temple, spoke into the air, his eyes fixed on the sun, in order to invoke it. His arms extended above his head, and then they reentered and presented the calumets anew. M. de

Bienville repeated to them in a tone wearied with their ceremonies that they must tell him what satisfaction they would give him for the five Frenchmen whom they had murdered. This speech stunned them. They lowered their heads without replying. Then M. de Bienville gave the sign to seize them and conduct them all into the prison which he had prepared for them. They put them there in irons. In the evening they gave them bread and meat. They did not wish to eat at all. All sang their death songs (Richebourg in Swanton 1911:199).

To have treated Suns like this in the first place was unthinkable, but to have used such a solemn occasion as the calumet ceremony to deceive these chiefs was, from their point of view, beyond belief. Such action could only mean they were to die. In actuality, two Suns were killed. The Natchez themselves were not totally innocent in contributing to the loss of significance of the calumet, as related by Pénicaut in 1714:

I found, among the Natchez, some slaves belonging to the nation of the Chauanons (Shawanees), who had been captured by a strong party of Chicachas, Yazous, and Natchez, who, under the pretext of visiting their village for the purpose of dancing the calumet of peace, had attacked them in the most base and treacherous manner, and killed their Grand Chief, with most of his family, took eleven prisoners, among whom was the wife of the chief, and brought them to the Natchez (Pénicaut 1698-1722 in French 1869:123-124).

The English may have inspired this atrocity as Pénicaut observed three Englishmen among the Natchez who had come with the purpose of purchasing slaves (Ibid:124). Whatever the case, it is apparent that continued aboriginal relations with Europeans were rapidly bringing an end to their own value of the calumet. The French settlers in the Yazoo Bluffs region

suffered as a result of this disintegration. In 1729 the Yazoo Indians approached Fort St. Pierre with a calumet, were admitted entrance, and proceeded to massacre the inhabitants (Delanglez 1935:253; Thwaites 1896-1901,68:174).

As mentioned above, although the meaning of the calumet appears to have rapidly been lost, the ceremony itself seems to have remained essentially intact. One variation, however, is that European merchandise eventually replaced native material in the gift transactions of the ceremony. Father Charlevoix noted that when ambassadors came to the Natchez to sing the calumet, and thus make peace, presents were given at the expense of the Great Sun's subjects (Charlevoix in Swanton 1911:134). When the Natchez and Taënsa were at war around the turn of the 18th century, the only presents exchanged when peace was concluded were six muskrat blankets given by the Natchez delegation to the Taënsa (Swanton 1911:135). Similarly, Dumont dit Montigny only made mention of native products in the calumet gift exchanges. Groups seeking peace with the Natchez would deliver to the Great Sun, "dressed bison and deer skins, bear's oil, sometimes one or two slaves." In return, the ambassadors would receive, "different dishes prepared expressly for them by the savage women of the village (Dumont dit Montigny in Swanton 1911:137-138)." Dumont may have been referring to earlier practices, however, as Father Le Petit in 1730 recorded the presents exchanged in calumet ceremonies as consisting of kettles, hatchets, guns, powder, balls, etc. (Le Petit in Thwaites 1896-1901,68:160-163).

French materials and influence rapidly seeped into other aboriginal social ceremonies. The increasing power of the French in controlling the economic activities of the Indians enabled them to have more influence in socioreligious ceremonies. Native chiefs, particularly among the Natchez, were formerly the uncontested authorities in mobilizing the activities of their subjects. The ability of Frenchmen to effectively contest this authority increased over time. It has been noted earlier that missionaries, explorers, and local administrators all did their bit to prevent what seemed (to the French) to be needless human sacrifices at the time of drastic events (e.g., burning of Taënsa temple) and at the death of chiefs. The explorers and early missionaries were able to do very little to hinder such activities, their satisfaction largely coming from their efforts to save a few and baptize the remainder. Through time, French influence in the secular economic sphere of the Indians enabled them to obtain greater control in matters of sacred significance. Compare, for example, the mourning ceremonies of Natchez Suns. Pénicaut observed the ritual performed at the funeral of the great female Sun around the turn of the 18th century. Father de Montigny unsuccessfully attempted to prevent further deaths, but the ritual ended up involving the sacrifice of 12 infants and 14 adult retainers (Swanton 1911:139-141). When the Tattooed-serpent, the principal war chief, died in 1725, Le Page du Pratz indicated that the mourning ceremony consisted of the death of his two wives, his chancellor, his doctor, his head servant, his pipe bearer, one infant and three

old women. Two of the last were so old that they had totally lost the use of their limbs. One had entirely white hair, a feature quite unusual for an Indian. Le Page du Pratz was convinced her age was over 100 (Ibid:145-147). The vitality of the victims in the two ceremonies, and their ability to serve as reliable retainers in the afterlife, certainly had decreased by the time of the Tattooed-serpent's death. The Great Sun of the Natchez, brother to the Tattooed-Serpent, complained bitterly of French influence in this matter:

"If the French had not spoken the road from my brother's cabin to the temple would have been strewn with the dead. Only the old women will die. I have already sent back more than 30 young people who wished to die. After all, is not my brother precious? Is he a stinkard? And what will the chief of the spirits say if he sees him come entirely alone? He will say this is not a chief, and he will drive him from before his face" (Great Sun in Dumont dit Montigny in Swanton 1911: 154).

It appears that the French were also attaining a degree of influence in other socioreligious events. Le Page du Pratz described the harvest feast ("the feast of the tun of importance" or "the Feast of Grain") of the Natchez as uncontestably the solemnest of all feasts (Le Page du Pratz in Swanton 1911:113-118). One would expect a great deal of conservatism and adherence to ritual in such a ceremony, yet Dumont dit Montigny, in describing this feast, indicated abundant change resulting from French contact. The Great Sun was the central figure in this ceremony, but it appears that a great deal of attention previously given to him alone, was being deflected

to the local French administrators. After having been carried to the feast on a litter, the Great Sun was served:

...more than 350 dishes of all shapes and of all kinds, of wood, of earth, round, oval, filled with all kinds of viands...he had prepared a table in his cabin with benches all around it, where he seated himself with the French commander and his officers, whom he treated in the French manner as best he could. It is true that they had brought with them wine and brandy (Dumont dit Montigny in Swanton 1911:119).

Summary

Trying to determine what was happening to aboriginal lifeways as a result of French contact can be seen to be an enormously difficult task. In this short section I have presented the basic patterns of change which I believe are evident in the historic accounts. Although sociocultural change and stability is discussed under the headings "economic", "political" and "social", the reader should be aware of the fact that the changes occurring were indirectly affecting all systems of aboriginal culture. The French control of economic activities relating to trade not only affected other aspects of economic organization, but did much to disintegrate the native hierarchy. The large amount of European merchandise absorbed by the upper echelon further alienated the lower ranks from their leaders, and made the latter more dependent upon the French. The French themselves, as a result of their increasing

power, were able to more and more control the sacred rituals of the Indians, control which formerly was under the absolute power of their leaders. Certain rituals, such as the calumet ceremony, appear to have overtly remained unaffected by French contact, yet the meaning associated with the ceremony gradually became lost. The social disorganization which occurred is reflected in the Indians' own decreasing value of their way of life. A legend related to Father Raphael by a Taënsa Indian ran as follows:

Long ago, said he, and so long ago that the winters can no longer be counted, that is to say the years, there were three men in a cave, one white, one red and one black. The white man went out first and he took the good road that led him into a fine hunting ground...The red man who is the Indian, for they call themselves in their language, "Red Men," went out of the cave second. He went astray from the good road and took another which led him into a country where the hunting was less abundant. The black man, who is the negro, having been the third to go out, got entirely lost in a very bad country in which he did not find anything on which to live. Since that time the red man and the black man have been looking for the white man to restore them to the good road (Raphael 1725 in Rowland and Sanders 1929:485-486).

Conservatism and Change in Material Aspects of Aboriginal Society

In any archaeological study of sociocultural change, there is the underlying assumption, or hope, that materials found in the ground will reflect alterations in non-material phenomena of the people being studied. How materials change qualitatively

and quantitatively is thought to bear some relation to the actual changes in a people's lifestyle. Arthur Ray has recently demonstrated the problems with such an assumption. In the fur trade of the sub Arctic and northern Plains, major transformations in Indian culture appear as simple changes in the archaeological record (Ray 1978). In order to understand the effect of introduced materials on any people, it is necessary to investigate how and by whom the merchandise was transmitted, and how the recipients, in turn, used and valued the goods. In regard to the Yazoo Bluffs region in particular and the Louisiana Indians in general, the source of the trade goods has been dealt with in Chapter 11. The function and value of this material, to the Indians, is the subject of this section.

European materials, recovered archaeologically in the Yazoo Bluffs region, are discussed in Chapter 9 according to functional groups outlined by Stanley South (1977). This ordering is logical, because most of the material is from St. Pierre. Although artifacts were no doubt sometimes used in ways other than those intended by the makers, most materials found on European sites were probably employed in the manner for which they were originally intended. Such is not necessarily true of Indian sites, however. In order to understand how European materials were actually used by the Indians, and what meanings they attributed to them, the ethnohistorical record must once again be closely examined.

For ease of comparison, I have continued to discuss European materials used by Indians in the order presented in

Chapter 9. They are not, however, assigned to functional groups. I have refrained from "pigeon-holing" materials into "Aboriginal Functional Groups", because such a procedure would be misleading. Many artifacts had numerous functions, depending upon the context in which they were used. An axe, for example, was definitely used in construction. At other times it served as an integral part of a warrior's arms, and when captives were taken it was often fired red hot and used in torture. To discuss this item under one functional group, in regard to the Indian, would negate the purpose of this section - that is, to determine the range of ways in which European materials were used by the Louisiana Indians, what these items meant to them, and how they might have contributed to changes in aboriginal lifestyle. This information is sadly lacking in the ethno-historical literature of the Yazoo Bluffs region, but is adequate when the whole of French Louisiana is considered.

European Ceramics

There is abundant evidence that native wares were of considerable importance to the prehistoric Indians of the Lower Mississippi Valley. Archaeologically this is revealed by the skillfully made vessels deposited in graves. The former importance of such materials is reflected in some of the early historic accounts:

Nothing can be cleaner than their Cabins. One never sees in them either clothes, or bags, or Kettles, or hatchets, or guns; They carry everything with them, and their sole wealth consists of fairly-made earthen vessels - especially small varnished jars, as pretty as any that can be seen in France (Gravier 1701 in Thwaites 1896-1901, 65:132-133).

With the introduction of European ceramics and other suitable containers, it is probable that the skills involved in making native wares, and the meanings attributed to these wares, started to disappear. For example, according to Le Page du Pratz, the Natchez used to boil bear flesh and fat in large ceramic pots. They stopped making these vessels when iron kettles were introduced (Swanton 1911:86-89). Similarly, large native vessels formerly were made at salt licks for the purpose of evaporating salt. Iron kettles also terminated such practices (Ibid:78). A change such as the above may be reflected archaeologically by decreasing native ceramic rim diameters over time.

The rapid loss in the function of native wares may have also lessened the value of such materials to their makers. In support of this, it has long been noted archaeologically that there was an aesthetic degeneration of aboriginal pottery in historic times. With increased contact, Indians even started to copy French ceramic forms. Le Page du Pratz reported that the Natchez copied dishes and plates (Ibid:62), but he was obviously unaware of the deep roots of such forms.

Archaeology has revealed the presence of plates and dishes as early as the Anna phase in the Natchez region (Steponaitis

1976; see Figure 30). Other forms, however, were probably adopted from the Europeans. The Tunica at the Trudeau Site (29-J-1) copied French pitchers (Brain et al. n.d. b), while the Indians at Fort Toulouse made pots resembling kettles (Heldman 1973:fig.46F). In some cases, Frenchmen were responsible for the imitations. Le Page du Pratz asked some Natchez women to make a set of vessels using his own earthenware as a model. They did so and painted the vessels red (Swanton 1911:62).

It appears that European ceramics fit nicely into pre-existing categories of aboriginal culture, but the value imparted to earlier forms may have been lost in historic times. French vessels must have had some significance to the Indians, however, as there was a conscious effort to copy them. It is probable that as European imports increased, aboriginal ceramic skills decreased.

Bottles

Bottles and bottle glass should naturally be put under the Kitchen Group on European sites, because they contain consumable liquids. Although Indians rapidly learned to drink and enjoy the contents of such bottles, there is strong indications that bottle glass found on early historic Indian sites may have had a completely different function and meaning to the occupants. When Tonti visited the Taënssa in 1682, he

reported a small cabinet within the temple (which he was not allowed to look into) which contained:

...treasure, such as fine pearls which they fish up in the neighborhood, and European merchandise (Tonti 1693 in Cox 1905:22).

Father Le Petit, in speaking of the 1699 Natchez temple,* suggested the nature of this merchandise. The temple contained:

...a bottle and the foot of a glass, which they guarded as very precious (Le Petit 1730 in Thwaites 1896-1901, 68:124-125).

D'Iberville, among the Bayagoula in 1699, also noted the presence of a double glass bottle in their temple. He felt that Tonti must have given them this item several decades earlier (Swanton 1911:275). It is possible that the glass in the Taënsa temple may have taken on a significance which had formerly been given to rock crystals. The latter material was similarly revered and was found in both the Taënsa temple (Swanton 1911:269) and the Natchez temple (Thwaites 1896-1901, 65:140-141) at the turn of the 18th century. Interestingly, two quartz crystals, one of which has a groove on its top, were found at the historic Bayou Goula Site (Quimby 1942:270, pl.XVII5-6).

In terms of function and meaning, there is ample evidence suggesting that bottle glass had a religious significance when

* which Swanton believed was really the Taënsa temple (Swanton 1911:164,269).

first introduced to the Indians of the Lower Mississippi Valley. Through time it no doubt approached more closely a function relating to subsistence. The findings in the Yazoo Bluffs region have also revealed that glass at times was employed as a substitute for lithics in the manufacture of tools.

Kettles

Kettles appear to have been a popular early trade item. Tonti, in 1682, purchased a "little slave" from the Taënsa for two knives and a small kettle (Swanton 1911:261). Such items must have been accepted quite readily into the aboriginal material assemblage as Father Gravier was served from one in his visit among the Arkansas in 1700 (Thwaites 1896-1901,65:117-119). As mentioned above (see p. 539), kettles rapidly substituted for functions normally performed by large native vessels, boiling bear flesh and evaporating salt being two such functions recorded historically. Whereas late prehistoric Indians were usually buried with one or more ceramic vessels, kettles fit into such contexts in historic times (Swanton 1911:138; Thwaites 1896-1901,68:156-157). The latter function has been repeatedly demonstrated archaeologically (Brain ^{et al.} n.d. b; Ford 1936:57,137; Stowe 1975). One burial at Haynes Bluff was even provided with a kettle (Brain 1975a). In all, the kettle appears essentially to have substituted, along with European ceramics, for native wares in cooking. Their introduction no doubt contributed to

the degeneration of aboriginal pottery noted archaeologically.

Knives

Knives were considered very valuable in the early contact period. As stated earlier, Tonti gave a Taënsa chief two knives and a small kettle for a "little slave" (Swanton 1911:261). Tonti noted that a gift of a knife to one Taënsa chief was, "received as a considerable present (Tonti in Swanton 1911:259)." Prior to the introduction of iron, the Taënsa used knives made of stone (Ibid). Other groups, like the Natchez and Choctaw, used cane knives. The latter were split into four pieces, each piece being used until it was exhausted (Rowland and Sanders 1927:139; Swanton 1911:58). There is some evidence suggesting that, although iron knives were readily adopted, other jobs continued to be performed with stone tools. For example, Dumont dit Montigny, in describing the Natchez manner of dressing skins, indicated that they cut holes around the skin with a knife (in order to attach the skin to a wooden frame) and then rubbed and scraped the skins with a flint which had been forced into a cleft in one end of a stick (Swanton 1911:64). There is no mention of the sex of the person performing this task, but hide scraping was mainly a woman's job among Southeastern Indians. It is possible that the retention of stone tools among women is an indication of differential sociocultural change between the

sexes (see Deetz 1968). Whatever the case, the acceptance of iron knives appears to have mainly been one of substitution for an already existing form among the Indians of Louisiana.

Nails

The use of nails among the Indians of the Lower Mississippi Valley has already been mentioned (see p. 330). I have found no mention in the ethnohistorical record of such merchandise being employed for architectural purposes. The only record of its function is Le Page du Pratz's statement that the Natchez effectively made use of nails in torture. They would place the nails in a fire until they turned red hot, and would then pierce various portions of their victim's body (Swanton 1911:132).

Gunpowder

As discussed earlier (see pp. 440-442), France had an advantage over English traders in regard to the quantity and quality of gunpowder available (Surrey 1916:358-359). There was a tremendous demand for this material (e.g., Thwaites 1896-1901,66:132-133), as naturally guns were not too effective without it. The Indians of Louisiana, however, had other uses for gunpowder. Prior to its introduction, Indians used pine charcoal to produce a black pigment in tattooing. Gunpowder,

dissolved in water, made a fine substitute in this practice (Swanton 1911:56). Although primarily belonging to the Arms Group, gunpowder would also have to be placed in the Personal Group in regard to the Indians of Louisiana.

Guns

Prior to the introduction of guns, the bow and arrow was the principal weapon used by the Indians of the Lower Mississippi Valley. The Natchez made their bows of acacia wood while cords were formed out of tree bark or sinew. Points were generally fire hardened acacia wood, but bone splinters were employed when hunting deer or bison. Garfish scale points were commonly used on war arrows (Swanton 1911:58). From the ethnohistoric accounts, it is obvious that the Indians of Louisiana were unfamiliar with guns prior to La Salle's expedition (Cox 1905:144-146,157,173). Even D'Iberville found the aborigines to be quite unaware of the use of such weapons (see pp. 395-397). As with glass bottles, guns appear to have been placed in reverent places when first introduced. Nicholas de la Salle, for example, observed an old Spanish sword and three old guns in the Taënsa temple (Swanton 1911:258,263).

Once introduced in quantity, both guns and glass rapidly lost whatever religious significance they previously had. There is also abundant evidence of the rapid acceptance of firearms. They were known and used by the Natchez long before a French

post was established among them, as only shortly after Crozat established his post in 1715, Pénicaut noted that the Natchez were well-armed with guns (Ibid:194). Gun parts were no doubt used in various manners,* but they mainly served in hunting and warfare. It is not known, however, if warfare increased as a result of gun introduction. There are numerous world-wide ethnographic examples indicating an opposite effect. The natives of Ponape made good use of firearms in hunting but, realizing their deadly effect in battle, used guns only in a limited manner (Zelenietz and Kravitz 1974:241-244). Similarly, the Dugum Dani of New Guinea knew of the potential of guns, yet did not use them in their wars with enemy groups (Heider 1970). Even some North American Indians were slow at making the transition from bow and arrow to the gun. The Menomini, for example, continued to use the bow because it was lighter to carry and was silent (Keesing 1939:114).

In terms of hunting, the gun merely substituted for the bow and arrow among Southeastern Indians. The Natchez hunted deer with a deer head decoy. The hunter would imitate the movements of the deer in attracting his prey. When it came in reach he merely:

...lets the deer head fall to the earth, passes his ready (bandé) gun from his left hand to his right

* Old gun barrels, for example, were heated and used by the Koroa in torturing war captives (Swanton 1911:331).

hand with admirable skill and rapidity, shoots the animal and kills it, for he very rarely misses it (Dumont dit Montigny in Swanton 1911:70).

The gun primarily made hunting more effective, something which may have had drastic effects on aboriginal economic organization, as discussed on pages 517-518. In warfare, the gun was an integral part of a warrior's outfit (Swanton 1911:126). Arranged around the death-bed of the Tattooed-Serpent, war chief of the Natchez, were a double-barreled gun and a pistol, in addition to a war club, a bow, and a quiver full of arrows (Ibid:144).

As a result of such functions, the Indians apparently attributed great value to the gun. Through time, firearms became a part of ceremonies which on the whole tended to be rather conservative. In the Natchez "Feast of the Sun of importance", Dumont dit Montigny described the ceremony of placing the Great Sun on the litter as being accompanied by, "the noise of many guns which the savages discharged from time to time (Dumont dit Montigny in Swanton 1911:118)." According to Le Page du Pratz, to the Natchez a gun was equivalent in value to an ell of cloth and a faon (deerskin container) of bear's oil (Swanton 1911:69). This equivalency was also suggested by the Natchez ball game, the victors receiving a gun and an ell of limbourg (Ibid:119). Some Frenchmen apparently misunderstood the importance of the gun to the Indians. Governor Perier's attempt to cheat the natives in 1729 may have been part of a series of events leading up to the Natchez Massacre. He

and M. de la Chaise asked for:

...some very light and very cheap trade guns which will not exceed six to seven livres each at the price in France... because ...the Indians...are never troubled at all about what a gun or an ell of limbourg cloth will cost that is given them either gratis or in barter for their skins... (Périer and M. de la Chaise 1729 in Rowland and Sanders 1929 :613).

Fabric

Father Gravier provided a good idea of what native clothing was like prior to the introduction of European fabric. He described the Tunica woman's attire in 1700:

Their Shirt is very decent, extending from the waist to below the knees; it has a fringe that is very neatly worked, - as is also their mantle, which is either quite plain, or worked in lozenges, or in squares, or in ermine; they usually wear it over one shoulder, and seldom over both (Gravier 1701 in Thwaites 1896-1901,65:131).

The men wore only:

...a scanty Deerskin. They, as well as the women, sometimes wear cloaks made of Turkey feathers or of Muskrat skins, well woven and well worked (Ibid: 131-133).

European fabric was no doubt subjected to a number of uses. Natchez sacrificial victims, for example, tied a red ribbon around one of their legs for eight days preceding their death (Swanton 1911:142). Similarly, strips of Rouen cloth were tied

to the arms of friendly Natchez Indians during the Third Natchez War (1723) to distinguish them from foes (Ibid:211). The main European fabric - limbourg - was primarily used in garments. There is some evidence that the Louisiana French were receiving this material indirectly from England. Governor Périer and M. de la Chaise, in 1729, suggested that:

We do not think it advisable to get limbourg cloth from England. It would be better to have it made in France of a more ordinary quality the price of which would be considerably lower, being careful to have the borders made similar to those of the English in the manner explained in the list of goods necessary for the trade (Périer and M. de la Chaise 1729 in Rowland and Sanders 1929 :613).

Indian men who lived near the French posts wore breechcloths made of limbourg:

The latter are made of a quarter of an ell of cloth, which, being an ell and a quarter wide, makes a breechcloth five quarters long by one quarter wide. In this way there is some binding at each end. To sustain this breechcloth they have a belt about the hips, into which they pass one end, at a height of 4 inches above the loins. The rest, passing between the thighs, comes up into the belt next the skin, and the end, to the length of about a foot and a half falls back on the thighs (Le Page du Pratz in Swanton 1911:53).

Indian women also adopted this material in their clothing, but used deerskins when it was not available:

The women in the warm season wear only half an ell of limbourg, with which they cover themselves. They wind this cloth about their bodies, and are well covered from the belt to the knees. When they have no more Limbourg they employ for the same purpose a deerskin (Ibid:53).

Similarly, when available, the Natchez would use woolen blankets on their beds. Otherwise, they would resort to using bison skins (Swanton 1911:61). It is evident that most Indians were pleased to make the transition to wearing European cloth if and when it was available. According to Dumont dit Montigny, many of the Indians at the Natchez "Feast of the tun of Importance" were dressed in deerskins, whereas others wore coverings of limbourg (Ibid:121). This material appears to have been particularly desirable to the chiefs:

The richest - that is to say, the most skillful hunters - have shirts which they usually wear on their bodies without ever washing them. Some wear over this shirt one of the great coverings of which I have spoken when it is cold and go bare except for their shirts during the hot season. The others, as the chiefs, wear clothing of cloth of Limbourg, which we give them ready made. The modest colors are not to their taste (Anon. in Swanton 1911:132-133).

The Great Sun of the Natchez, at the "Feast of the tun of importance" was dressed in the French manner in all but the absence of shoes (Swanton 1911:118). This modification may have been a matter of comfort. French hats also do not appear to have been highly valued by the Indians of Louisiana. Governor P rier and M. de la Chaise requested of the Company of the Indies in 1717 that no more trade hats be sent as they had enough to last more than two years (Rowland and Sanders 1929:559). With the exception of shoes mentioned above, it is probable that the Great Sun considered the French style of dressing quite fashionable, and copied it for his own attire. The chief of the

Tunica appears to have done likewise. Father Charlevoix, in visiting the Tunica in December of 1721, reported that:

The chief received us very politely, he was dressed after the French fashion, and seemed in no-ways incommoded with his cloaths...He has long left off wearing the Indian habit, and takes great pride in appearing always well-dressed (Charlevoix 1923:262).

There is other evidence that the changes in clothing were a conscious effort of the Indians to copy Europeans. Father Charlevoix, visiting the Acolapissa Indians in January of 1722, reported:

I was surprised, on advancing towards the village, to see the drummer dressed in a long fantastical parti-coloured robe. I enquired into the origin of this custom, and was informed that it was not very ancient; that a governor of Louisiana had made a present of this drum to these Indians, who have always been faithful allies; and that this sort of beadle's coat was of their own invention (Ibid:268-269).

As stated above, common men and women also wore limbourg when it was available, and they preferred either red or blue cloth:

These people go almost naked. The men wear only a kind of belt, through which they pass a fourth of a piece of red or blue cloth, which in that country is called Limbourg, which serves to conceal their nudity (Dumont dit Montigny in Swanton 1911:52).

When they have red or blue Limbourg they take pleasure in dressing themselves up, whether with blankets or mitasses (leggings) (Le Page du Pratz in Swanton 1911:53).

...two young girls of the savages presented themselves at the settlement with 10 chickens, asking in exchange

a blue petticoat (jupe) to give to their mother, who was going to die (Dumont dit Montigny in Swanton 1911:153).

The provincial government was obviously aware of the aboriginal preference for blue and red limbourg, because in 1736 they asked for 7,000 ells of cloth of these colors for the Indian trade. White or black was ruled out, as they could only be used for the Black slaves (Surrey 1916:356). The Indians must have considered French cloth to be quite valuable. As stated earlier, an ell of limbourg and a gun were the prizes in the Natchez ball game (Swanton 1911:119), and these Indians supposedly considered an ell of this material to be equivalent to a gun or to a faon of bear's oil (Ibid:69). Natchez girls would willingly enslave themselves to a Frenchman for a month in return for an ell of limbourg, which was worth 16 pounds in notes in Louisiana (Ibid:94). It is thus obvious that this cloth was more important to the Indians than beads, vermilion, and bracelets, as the latter materials were given for but a night's worth of the above services (Ibid:120-121). In 1735, the natives of the Lower Mississippi Valley traded five large or ten medium-sized deerskins for but an ell and a half of this valued material (Surrey 1916:354).

In all, European cloth substituted for native clothing, but it perhaps acquired more importance than that ever attributed to Indian garments. The widespread acceptance of limbourg no doubt contributed to the decline of aboriginal skills in working hide for purposes of clothing.

Tinklers

Tinklers appear to have been used by the Indians primarily as a clothing decoration which made noise. When d'Iberville was among the Bayagoula in 1699, it was noted that they wore bird feathers of different colors in their hair:

They put others of these above their buttocks, which are like tails of horses, which hang behind with rattles and miserable little pieces of copper, like the ends of our chandeliers, but much thinner, in such a manner that when they dance that makes a noise so that one would say that a messenger had just arrived in the village (Anon. in Swanton 1911:276).

D'Iberville also noted that many of the Houma dancers who celebrated his visit:

...had pieces of copper in the form of flattened plates, two and three together fastened to their belts, and hanging as far down as the knee, which made a noise and assisted in marking the time (D'Iberville in Swanton 1911:286).

It is probable that the French took advantage of this obvious aboriginal taste for tinkling cones and soon had them made as an integral part of the trade good assemblage, but in early historic times there is ample evidence that the Indians were making their own by cutting up brass and copper kettles (see pp. 301-302). In all, it is probable that tinklers substituted for something which was already existing in aboriginal culture, and thus had little effect on sociocultural change.

Glass Beads

Most of the glass beads sent to the New World during the Colonial Era derived from Venice (Woodward 1965:4-6), but during and after the 17th century many were manufactured in Amsterdam (Karklins 1975; Sleen 1967:108). Beads were sent to the colonies in casks, barrels, and boxes (DeJarnette and Hansen 1960:55). Others were strung, particularly the smaller kind. Strings of beads were commonly sold by the mass, or by what the French traders called the brasse. The latter originally measured 5.318 feet, but in the 18th century was reduced to 18 inches. A mass of beads usually consisted of a dozen strands (Woodward 1965:9). Small "seed" beads were generally sold in bunches of five or six strings, each of which were 6 inches long and weighed four or five bunches to the pound (Orchard 1929:87). There were two principal bead categories - the rassades, which applied to round beads (both white and colored) of porcelain or glass, and the canons which were tubular beads (Rowland and Sanders 1927:45).

The Indians of Louisiana had a multitude of uses for glass beads. They sometimes substituted for little stones in their rattles (Swanton 1911:37), but generally they were employed in personal adornment. The Great Sun of the Natchez wore beads in his feather crown. The cap, which held a diadem surmounted by large feathers, was made of black threads. The diadem was red and was embellished with either hard white seeds or little

beads (Ibid:106). The Choctaw chief also used beads in their headresses. These materials hung from the outer ends of ostrich feathers, which were placed at the top of their headresses (Swanton 1931:102). In the Lower Mississippi Valley women often wore their hair braided in tresses:

These tresses are ordinarily interlaced by way of ornament with strings of blue, white, green, or black beads (made of glass),... (Dumont dit Montigny in Swanton 1911:51).

The Lower Mississippi Valley Indians also wore beads on their necks and in their ears:

Their greatest ornament consists of bead necklaces of different colors, with which they load the neck and the ears, where they have holes, as well as the men, large enough to pass an egg through, which the size and weight of what they put there from infancy greatly enlarges (Anon. in Swanton 1911:133).

Natchez men also wore glass beads in necklaces like the women, and sometimes carried fans in their hands (Swanton 1911:55). It is probable that glass beads replaced similar native ornaments made of shell or stone (Ibid:56). The Chitimacha, in prehistoric times, are reported to have had beads of these materials (Ibid:345), whereas the Choctaw used wooded beads, "as big as acorns" prior to receiving glass beads. They also strung chinquapin nuts together. These were dyed with the same colors used on baskets. Seeds of red haw also served as beads (Swanton 1931:43). Pearls appear to have been common in proto-historic times. The Indians of Louisiana received these items from the Gulf Coast:

I noticed that he [the chief] had 16 fine pearls hung at his ears, and, having told our interpreter to ask where they had found them, he replied that it was at the sea, in shells, and that he had many of them (Tonti in Swanton 1911:259).

Tonti noted that these pearls were ruined, because they had been pierced with a red hot fire. The chief presented these pearls to him after Tonti gave a gift of a bracelet (Ibid:260). Such beads must have been considered quite valuable as one of the wives of a Taënsa chief would not part with a pearl necklace, even for ten yards of glass beads:

I saw that one of his [the Taënsa chief] wives wore a pearl necklace. I presented her with 10 yards of blue glass beads - exchange for it. She made some difficulty, but the chief having told her to let me have it, she did so (Ibid:261).

Such pearls appear to have had religious significance, as they were kept in a small cabinet in the Taënsa temple:

These old men showed me a small cabinet within the wall, made of mats and cane. Desiring to see what was inside, the old man prevented me, giving me to understand that their god was there. But I have since learned that is the place where they keep their treasure, such as fine pearls, which they fish up in the neighborhood, and European merchandise (Ibid:260).

There is some indication that there were qualitative differences between pearls used in protohistoric times. They were not totally the property of elites, as Nicholas de la Salle, who accompanied Robert de la Salle in the latter's 1682 expedition, recorded that many Taënsa Indians had small pearls on their necks and in their ears (Swanton 1911:261). This type

of pearl beads was not valued as highly as those owned by the elites and kept in the temple. They may have been the kind which were traded (14 specimens) by the Koroa for, "a mean little boxwood comb" during the La Salle expedition (Ibid:328).

The above reference of Tonti having offered 10 yards of blue glass beads suggests that early explorers carried great quantities of this merchandise with them to trade or give to the Indians. It appears, however, that these artifacts may not have had a significant effect on the earlier forms prior to intensive European contact. In 1698, about two decades after La Salle's journeys, Thaumur de la Source noted that the Taënsa had fine pearls which they pierced to string them (Ibid:265). The importance of certain types of pearls apparently remained intact, as evidenced by a gift to d'Iberville and his companions when they first visited the Natchez in 1700. They were each given a pearl which d'Iberville considered, "not at all handsome (d'Iberville in Swanton 1911:190)." Pénicaut described the significance of these pearls to the Natchez;

They have similarly a necklace of fine pearls, which they received from their ancestors; but they are all spoiled, because they have pierced them by means of a hot fire. Two or three are placed around the necks of the infant nobles when they come into the world; they wear them to the age of 10 and then they are replaced in the temple. At all the audiences of the female chiefs this necklace is placed around their necks until the ceremony is finished. Then they take it back to the temple. It is kept in a coffer as a very precious relic (Pénicaut in Swanton 1911:159).

Father Gravier, among the Natchez in 1700, also commented on the importance of these pearl beads:

It is a fact that the chief's wife has some small pearls, which are neither round nor well pierced, but about seven or eight of which are as large as small peas, which were bought for more than their value after a good deal of seeking (Gravier in Swanton 1911:158).

As time passed, it is possible that the ready availability of glass beads served to undermine the social significance of pearl prototypes. It is perhaps significant that pearl beads are not mentioned in the ethnohistoric accounts after Gravier's travels. Glass beads were not as valuable to the Indians as other European materials. They were the first items to be bet in gambling in the Chunky game - first individual beads and then whole strings (Swanton 1911:91). It is obvious, however, that they did have a certain amount of importance to the aborigines. Young Natchez girls, for example, would provide sexual services for a bead necklace (Ibid:120), and women would take great precautions to prevent the loss of these items (Ibid:62). There are also indications that certain bead colors and sizes were preferred by the Indians of the Lower Mississippi Valley. Father Gravier, at the Illinois mission in 1708, ordered 10 livres (2 ounces) of white beads (large-sized and olive-shaped) and 4 livres of small blue, green, and white beads (Thwaites 1896-1901,66:132-133). Le Page du Pratz also noted the preference for certain beads:

When they have beads (rassade) they make necklaces composed of one or more rows. They make them long enough for the head to pass through. The rassade is a bead of the size of the end of the finger of a small infant. Its length is greater than its

diameter. Its substance is similar to porcelain. There is a smaller one, ordinarily round and white. They value it more than the other. There is a blue one and one of another style which is banded (bardelée) with blue and white. The medium sized and the smallest are strung to ornament skins, garters, etc. (Le Page du Pratz in Swanton 1911:56).

The historical references to Indians selecting beads is supported archaeologically. The Indians who utilized the St. Ignace Ossuary in Huronia failed to deposit polychrome or brightly colored monochrome beads with the burials (Quimby 1966: 136). Similarly, the burial at the Anglo Site in the Yazoo Bluffs region, was accompanied only by white and blue beads, all of the same size. The preference for white beads above all others is supported by both the written record and archaeology. Plain white beads of simple construction (var. IIA1) are, by far, the most common beads in the Yazoo Bluffs region.

In sum, although glass beads were undoubtedly subjected to a number of functions, their main utilization among the Indians of Louisiana was in bodily adornment. There is some evidence that qualitative differences existed in the prototypes which glass beads eventually replaced. Pearl beads were used by commoners, but a certain type of pearl bead appears to have had strong socioreligious significance to some Lower Mississippi Valley groups. It is possible that the introduction of glass beads contributed to socioreligious disorganization, because after intensive contact, members of both the elite and the lower "classes" all wore the same kinds of glass beads.

Bells

Bells were employed in a number of manners. Nineteenth century Choctaw Indians attached them to the necks of their ponies (Swanton 1931:53,179), and some Southeastern Indians tied bells to their war pipes (Swanton 1928:435). For the most part, however, bells were associated with bodily adornment. Lower Mississippi Valley warriors often wore bells into battle (Swanton 1911:127). Ambassadors of enemy groups who came to make peace with the Natchez are reported to have worn bells (Ibid:137). Similarly, little bells were worn by two Indians who came to chant the calumet to Father Poisson in 1726 (Thwaites 1896-1901,66:132-133). The Catawba Indians of South Carolina tied bells to their ankles and knees in dancing (Hudson 1970:2), while Lower Creek dancers strung them, along with rattles, around their waists (Mereness 1916:220). Archaeology has revealed that bells were often strung with glass or copper beads (Brown n.d. a). Some were used as pendants or necklaces. Supporting the ethnohistorical record is the common discovery of bells around femurs, knees, ankles, and ears of skeletons (Brown 1977a). In all, bells probably substituted for other forms of "noise-makers" existing in protohistoric times. There is no evidence suggesting the introduction of bells contributed to sociocultural change.

Springs

As with bells, the Indian males of the Lower Mississippi Valley wore springs as bodily decoration:

The warriors may also have the lower parts of the ears slit, in order to pass through them iron or brass wire in the form of worm screws, a full inch in diameter (Le Page du Pratz in Swanton 1911:55).

Women, however, continued to wear shell ornaments:

The women ornament themselves with earrings. made of the core of a great shell called "burgo", of which I have spoken. This pendant is as large as the little finger and at least as long. They have a hole in the lower part of each ear large enough to insert this ornament. It has a head a little larger than the rest to prevent it from falling out (Ibid:55).

It is possible that, as with certain metal implements, aboriginal women tended on the whole to be more conservative in some aspects of Indian culture. Such a phenomenon is no doubt related to whom and how contact was made between French and Indian (see pp. 358, 543-544). Springs appear to have been merely a substitute for protohistoric items with similar functions.

Bracelets

Bracelets were introduced quite early in the Lower Mississippi Valley. Tonti gave one to a chief of the Taënsa in exchange for a string of 16 pearls (Swanton 1911:260). Young Natchez girls were said to have exchanged sexual services for copper or iron

bracelets (Ibid:121), but there is some evidence suggesting that these materials were not as desired as other European objects. Le Page du Pratz, for example, indicated that Natchez men would wear vermilion and glass beads and then:

...put on bracelets made of the ribs of deer which they have worked down very thin and bent in boiling water. These bracelets are as white and as smooth as polished ivory outside (Le Page du Pratz in Swanton 1911:55).

Vermilion

In 1708, Father Gravier of the Illinois mission ordered, "5 livres of good vermilion" to be mixed, when well ground, with an equal amount of "Red chalk or red lead" (Gravier 1708 in Thwaites 1896-1901,66:133-135). The Indians used vermilion as a pigment. Previous to its introduction, red ochre was employed, and the latter continued to be used when vermilion was not available (Swanton 1911:54). The Natchez used vermilion to paint the stems of calumets (Ibid:137), and it also served, along with gunpowder, in the practice of tattooing (Ibid:56). It was mainly employed as a body rouge:

The youths [Natchez] are as vain as elsewhere, and are charmed to vie with one another in seeing who shall be most dressed up, so much so that they put Vermilion on themselves very often (Le Page du Pratz in Swanton 1911:55).

Young men of the Arkansas daubed it on their bodies

(Thwaites 1896-1901,65:123), while the Bayagoula, in 1699, rubbed their face around the eyebrows with vermilion (Swanton 1911:276). Indian women also wore vermilion on their faces, as well as on the shoulders and stomach (Ibid:54). This material must have had some value, as young Natchez girls offered sexual favors for its possession (Ibid:121).

In addition to bodily adornment, red pigment was also associated with death. At the death of the Great Female Sun of the Natchez at the turn of the 18th century, vermilion was used to daub the faces of the sacrificial victims (Ibid:140). Similarly, the Tattooed-Serpent (an important Natchez Sun) had his face covered with vermilion at his funeral, some twenty years later (Ibid:144). A man who was to be sacrificed at this time was said to have had some vermilion and red earth in a little sack which contained utensils necessary for the ceremony (Ibid:147).

Vermilion appears to have largely substituted for material which had been used in prehistoric times. The ethnohistoric literature does not reveal evidence for any effect on aboriginal sociocultural change.

Axes

Prior to the introduction of iron axes, the Indians of the Lower Mississippi Valley employed stone axes. Tonti, among the Taénsa in 1682, referred to the use of flint specimens (Swanton

1911:259). Le Page du Pratz provided an excellent description of the deep gray fine-grained axes of the Natchez. These were ground down on pieces of sandstone:

These stone axes are fully an inch thick at the head (or butt), and half an inch thick three quarters of the way down. The edge is beveled, but not sharp, and may be 4 inches wide except that the head is only 3 inches wide. This head is pierced with a hole large enough to pass the finger through in order to be better bound in the cleft at one end of the handle, and this end itself is well bound so as not to split further (Le Page du Pratz in Swanton 1911:58).

The introduction of iron axes hastened tasks and apparently made the procedures involved more flexible:

These [native] axes...could not cut wood neatly, but only bruise it. For this reason they always cut a tree close to the ground so that the fire that they built at the foot of the tree would more easily consume the filaments and fibers of the wood which the axe had mashed. Finally, with much trouble and patience, they managed to bring the tree down. This was a long piece of work, so that in those times they were much busier than at present, when they have the axes we sell them. From this it happens that they no longer cut a tree down at the base, but at the height which is most convenient (Ibid:66).

Axes, however, were not solely employed in construction activity. Included in the warrior's equipment of the Natchez were a gun, a warclub, an axe, and bells (Swanton 1911:126-127). According to Le Page du Pratz, a warrior has either a native-made war club or a French-made axe. The latter he described as:

...a little ax, the edge of which is ordinarily 3 inches long. The ax is light, and is placed in the belt when one is loaded or traveling (Le Page du Pratz in Swanton 1911:127).

As with most other iron implements of European derivation, axes were also heated by fire and used in torturing captives (Swanton 1911:331). Primarily axes served in construction and warfare. To put archaeological specimens in one functional group, as was done in Chapter 9, ignores the actual situation of there having been a number of uses for these items. In warfare the axe appears to have primarily served as a substitute for a war club, but in construction the substitution was one of a more effective implement. The effect it had on socioeconomic organization cannot be evaluated, however, because greater efficiency could either mean progress or (as suggested above) increased leisure time.

Hoes

This item of material culture does not appear to have been readily accepted by the Indians of the Lower Mississippi Valley. Pénicaut noted, in his visit to the Pascagoula in 1699, that the Indians practice a swidden form of horticulture using large sticks to dig holes in the ground:

They even, at the present time, use their wooden instrument in preference to those of iron, which we have given them, because they are lighter (Pénicaut 1698-1722 in French 1869:50).

A considerable number of hoes were found at the Trudeau Site (29-J-1), occupied by the Tunica Indians in the second

quarter of the 18th century (Brain et al. n.d. b). The actual use of these archaeological specimens in agricultural practices is not known, however. My suspicion is that they were not involved in such activities, but microscopic wear analysis of these objects should be conducted.

Summary

A review of the ethnohistorical literature concerning Louisiana Indians has revealed a number of ways in which introduced European items were used. The functions often differed significantly from that which was intended by the donors of such objects. Some items appear to have been accepted very slowly - nails, hoes, hats, and shoes being the principal items. The rejection or slow acceptance of such materials is no doubt related to the absence of aboriginal prototypes. Other items were rapidly accepted, but seem to have merely substituted for native forms. They thus had little effect in sociocultural change. Included in this category are knives, tinklers, bells, springs, bracelets, vermilion, and axes. There is some indication that although iron knives were accepted, other stone forms (like scrapers) continued unchanged. Axes appear to have been substitutive in terms of warfare, but as regards construction, they were much more efficient than earlier stone forms and may have contributed to changes in economic organization.

Other European items certainly contributed to such changes.

Kettles were rapidly accepted. Copper forms were often cut up to make tinklers, but iron kettles did much to make large native ceramic vessels obsolete. European ceramics probably also contributed to the degeneration of native ceramic skills, but not to the extent of kettles. There is abundant evidence suggesting that Indians would have gladly accepted European ceramics if they were available, but they no doubt had to compete with French settlers for these items. Transportation difficulties seem to have limited the amount of European wares carried to distant posts. The scarcity of such materials has been recorded archaeologically at Fort St. Pierre, where native-made wares were used more often by French settlers in the latter half of the fort's occupation (see p. 275-276, 329). The scarcity of European ceramics appears to have occasioned some Frenchmen to have Indians make vessels copying French forms (see p. 540).

The two most valued items of European culture were guns and fabric. Both were, for the most part, rapidly accepted. Guns substituted for the bow and arrow in both hunting and warfare. It is not known whether or not warfare increased as a result of this introduction, but hunting certainly became more efficient. Improved ways of depleting local faunal resources no doubt contributed to changes in economic organization. Fabric was also readily accepted and would have, like European ceramics, resulted in severe changes in economic organization were it not for the fact that clothes rapidly wore out and France lacked the capability of keeping the Indians supplied with fabric. The natives, therefore, constantly had to resort to using their own

resources and skills. As the 18th century progressed, with increasing amounts of fabric and European ceramics introduced, native skills regarding such activities probably decreased.

A number of European items were given functions and meanings totally unrelated to that which was intended by the donor culture. There is some indication that guns, for example, were put in revered places in the initial contact period. Bottle glass was definitely so placed, and it appears that the latter was given a meaning which had formerly been given to another material (rock crystal). As contact increased and bottles did also, glass appears to have lost its socioreligious meaning and approached more closely a function relating to its originally intended use. However, there is no mention of what, if anything, replaced this material in a religious context. Rock crystals are not mentioned after the turn of the 18th century. Similarly, one type of pearl beads seems also to have had socioreligious importance to the Indians. The introduction of glass beads, given equally (apparently) to elites and commoners, appears to have eroded the cultural significance which pearl beads had in protohistoric times. In this manner, bottle glass and glass beads may have contributed to social disorganization.

Summary - Relationship of Material to Non-Material Changes in
Aboriginal Society

A number of studies have dealt with changes in the ethnohistorical record, as reflected in material remains (Heizer

and Mills 1952; Kraus 1944; Laguna 1960; Wedel 1936), but few scholars have rigorously addressed the problem of how socio-cultural change can be revealed in the archaeological record. There are exceptions. James Deetz has shown differential rates of change across sexual lines in his study of the La Purisma mission (Deetz 1968). A similar lag is suggested in the literature regarding the usage of historic materials by the Indians of Louisiana but, as yet, this has not been demonstrated archaeologically. In another study, Deetz effectively showed the relationship between historically documented social disorganization and archaeological patterning (Deetz 1965), but no one as yet has been able to plot out, in specific terms, what changes would be observed on Indian sites whose occupants were becoming increasingly acculturated. An early, generally neglected, attempt to measure sociocultural changes through the study of museum collections was George I. Quimby's and Alexander Spoehr's article, "Acculturation and Material Culture - I" (1951). The authors set up two major divisions of materials, each with a number of categories, and ranked the categories as representative of different degrees of acculturation. John White recently revived and refined the above study in accord with his own investigations at the Russian settlement of Fort Ross, California (White 1975). These two studies are reviewed and examined below, in light of the recent archaeological work in the Yazoo Bluffs region.

The first division set up by Quimby and Spoehr consists of (A) New types of artifacts introduced through contact. Category

A.1 includes trade goods which are accepted without modifying their forms. According to the authors, there may or may not be a change in the use and meaning of such materials. An example they offered is the substitution of a gun for a bow and arrow. They suggested a change in both use and meaning as compared to its significance in European society. White added metal knives, trade beads, and European porcelain (where a pottery tradition already exists) to this category. All three authors are in agreement that the acceptance of the above objects falls mainly in the realm of substitution and are hence evidence of a low degree of acculturation. This is a simplistic conclusion, however, because there is no consideration of the manner in which the materials were transmitted, how they were used, and how they were valued by the recipients. The above statements are so general that they cannot explain what was occurring in specific situations. In Louisiana, for example, guns do appear to have merely substituted for the bow and arrow or the club in warfare, but its role in making hunting more efficient no doubt brought about significant sociocultural changes. Whether the latter are indicative of acculturation - that is, aboriginal culture approaching French culture - cannot be determined, but there were certainly processes at work which must be examined if one is to understand what was happening to the Indians as a result of French contact. Similarly, European ceramics could have led (although I do not believe they actually did in Louisiana) to the loss of native pottery skills, a significant sociocultural change. Even glass beads,

generally assumed to have merely replaced pre-existing forms, appear to have played a significant role in social disorganization in the Lower Mississippi Valley. In protohistoric times there seems to have been socioreligious distinctions between certain bead forms. The widespread distribution of glass beads to all aboriginal "classes" no doubt affected social organization within specific aboriginal groups.

The second category (A.2), set up by White,* consists of unmodified European artifacts which have no native counterparts. The items are hence additive and imply a greater degree of acculturation, because the culture must develop a context in which the new artifacts will have function and meaning. White offered glass bottles as an example of this category. Even if European bottles had no aboriginal counterpart in the Lower Mississippi Valley (which they did), it would be impossible to measure acculturation by counting glass on archaeological sites. In terms of percentages, the Lockguard Site in the Yazoo Bluffs region has a much higher amount of glass represented than does the earlier Portland Site. It cannot be said, however, on the basis of the archaeology alone, that the occupants of Lockguard were more acculturated than the people who lived at Portland. The ethnohistorical accounts reveal that glass bottles had several different functions and meanings to the Indians of Louisiana. There is, to date, no way of knowing

* Quimby and Spoehr did not have an equivalent for this category.

how a glass fragment at Portland compared in use and value to one recovered at Lockguard. Similarly, hand wrought nails, having no aboriginal counterpart, would fit within category A.2. Lockguard has a much larger amount of nails, compared to Portland, yet this is not an indication of acculturation. Nails did not have an aboriginal counterpart in terms of construction, but they did have many counterparts in regard to torture. The latter was at least one use to which nails were employed by the Indians of Louisiana.

White's category A.3 is equivalent to Quimby and Spoehr's A.2. This consists of new artifact types which are made from native materials, but are copies of introduced models. White further subdivided this category by separating a) the techniques are introduced along with the new artifact (such as the skills necessary for making pottery); from b) the techniques come from the recipient groups (such as the construction of a stone bullet mold in copying an introduced iron model). He considered materials of category A.3 to be reflective of a high degree of acculturation. In the Yazoo Bluffs region, aboriginal gunflints (Table 6), and a ceramic copy of a glass bead (p. 308) fall under this category. Again, in comparing Portland (the earlier Indian site) to Lockguard, there is evidence of acculturation according to the above scheme. Portland has three aboriginal gunflints out of eleven total (27%), whereas Lockguard has two out of four (50%). The numbers are so low, however, that they have no statistical significance.

White's fourth category (A.4), equivalent to Quimby and

Spoehr's category A.3, consists of new artifact types where the introduced model is decorated in the native manner. European clothing with shall pendants or sewn-on beads are offered as examples. He felt that artifacts of this category indicate a high level of acculturation:

The rationale is that, to use a tool is one thing, to impart to it a decorative distinction associated with values common to the adopting groups is another. The endowing of the adopted article with native value associations is in the nature of a signature of cultural acceptance (White 1976:158).

In the Yazoo Bluffs region, a European ceramic from Lockguard has some red pigment (vermillion?) rubbed into its surface (see p. 275). This fits into category A.3 and, to White, would be an indication of strong acculturation. As far as I know, there is no ethnohistorical basis for assigning strong acculturation to modifications of the above sort. White's example of clothing is a bad one to use for the Louisiana Indians, because it is apparent that clothing was readily accepted at all historic times. Certain items, like shoes and hats, were refused, probably because of the lack of aboriginal counterparts, but whenever available, European fabric was happily received. It seems only natural that the Indians should have decorated these foreign fabrics with elements from their native repertoire. I would think that the total absence of such additions would be a more convincing sign of acculturation.

The fifth category (A.5) consists of new types of

introduced forms where materials and techniques are imported, but local manufacture is involved. White interpreted this category to be the highest reflection of acculturation. There is no evidence of such materials in the Yazoo Bluffs region.

Division B, set up by Quimby and Spoehr, consists of native types of artifacts which are modified as a result of contact. The first category (B.1) consists of native artifacts which are modified by the substitution of an imported material for a local material, the latter being either inferior in its physical properties or lacking in prestige. White offered glass projectile points, glass scrapers, and gaming pieces of porcelain as examples. As the techniques involved in adapting new materials to pre-existing forms remains the same, all three authors interpreted this category as evidence of a low-level of acculturation. Included in this category in the Yazoo Bluffs region are retouched glass (pp. 272), beads made out of pipe stems (pp. 315-316), and a perforated brass disk (p. 319). All three pipe stems and one glass projectile point were found at Portland, whereas no materials fitting this category were recovered at the later Lockguard Site. According to the above authors, as regards this category, Portland is less acculturated than Lockguard. Although I have no specific qualms with the category, I hesitate to support this interpretation on the basis of but four artifacts.

The second category in Division B (B.2) consists of native artifacts which are modified by new materials whose incorporation requires different technological skills. The old

forms are modified accordingly. Examples, to White, are metal projectile points, scrapers, etc. All authors considered materials of this category to be representative of a higher degree of acculturation than B.1. There are no artifacts of this category in the Yazoo Bluffs region.

The last category (B.3) consists of old types of artifacts modified by the introduction of a new element of subject matter. Included in this category are foreign design elements on pottery and baskets. Such materials are considered to represent a high level of acculturation, comparable in intensity to category A.4. There are no such artifacts in the Yazoo Bluffs region.

To summarize, Quimby and Spoehr were somewhat conservative in their interpretations as to what the observed differences in the materials actually mean. They noted that generally in the earliest stages of culture contact most artifacts are of the B.1 category (new materials being incorporated into old forms using the old technology). They also stressed the persistence of both old and new forms. The native artifacts are modified by increased contact, but the forms tend to show great stability, even when local materials are used. White stepped beyond Quimby and Spoehr's interpretations by stating that sites which have a lot of artifacts of categories A.3, A.4, A.5, B.2, and B.3, and few of A.1, A.2, and B.1 will have had more acculturation than sites with the opposite.

Based on the ethnohistorical records for the Lower Mississippi Valley, categories A.1 and A.4 are not acceptable

guages of acculturation. Similarly, A.2, as it presently stands, is unreliable. It can be a useful category, if the actual use of the materials can be demonstrated archaeologically. Categories A.5 and B.2 (and possibly B.3) are, I believe, better markers of acculturation, but none of these are represented in the Yazoo Bluffs region. A.3 and B.1 are the only categories left which are compatible with the ethnohistorical record, and the artifacts do indeed show a transition from less acculturation at Portland (more B.1) to greater acculturation at Lockguard (more A.3). The results are statistically meaningless, however, as less than a dozen artifacts are considered.

The important point, which must be stressed, is that changes in materials alone, are not an indication of sociocultural change. To understand cultural processes in the French-Indian relations of the Yazoo Bluffs region, archaeology must be used in conjunction with ethnohistorical documents and a strong foundation in theoretical concepts of cultural anthropology. To understand the observed material changes, both quantitatively and qualitatively, and how they are related to changes occurring in non-material aspects of aboriginal culture in a specific area, it is imperative that the researcher understand: 1) the roles of the transmitters of material culture; 2) the nature of the contact situation; 3) and the use and 4) the value of the transmitted materials to the Indians. Once the above are understood, it may be possible to eventually construct a model of acculturation (such as Quimby's, Spoehr's,

and White's) for a given culture area.

Part V - Conclusion

The purpose of this thesis was to investigate the nature of French-Indian interaction in the Yazoo Bluffs region. The area is unique historically, because it received two short bursts of culture-contact and was then totally ignored. The prehistoric and protohistoric occupation of the Yazoo Bluffs was of moderate intensity. The French interests in the area, largely in terms of a buffer zone, started in 1698 with the exploration of several missionaries and the eventual establishment of a mission. Thus began the "missionary" period, an eight-year interval in which French-Indian interaction in the region was quite intense. Approximately fifteen years passed before the French again turned to the region, but this time the emphasis was more on the creation of a settlement and fort (St. Pierre). Relations between the French and Indian during the next ten years (1719-1729) appears to have been more economic than religious. This interval has been referred to in this work as the "trader" period. It was hoped that the discovery and excavation of Indian and French sites dating to these two tightly controlled periods would provide information which would reveal sociocultural change over the three decades of French-Indian interaction in the Yazoo Bluffs region.

The Portland Site is believed to be a Tunica Indian site of

the "missionary" period, whereas Lockguard is thought to be either a Yazoo, Ofo, or Koroa settlement of the "trader" period. St. Pierre and Lonely Frenchman are French sites of the "trader" period. The remaining sites - Anglo and Wright's Bluff - fall sometime within the early 18th century, but cannot be dated to either of the two periods. An analysis of the archaeological artifacts from all but the latter two sites has revealed that there is a significant change in the European materials on aboriginal sites in the Yazoo Bluffs region with the Lockguard Site approaching, qualitatively and quantitatively, material assemblages represented on contemporary French sites (St. Pierre and Lonely Frenchman). Using only archaeology, it could be interpreted that the Indians of the Yazoo Bluffs region were rapidly becoming acculturated.

Sociocultural change, in fact, cannot as yet be demonstrated by using archaeology alone. The course of this thesis, in investigating sociocultural change, has been one of acculturation. To understand if and how the latter occurred in the Yazoo Bluffs, where historical information is minimal, it was necessary to study in detail the roles of the French people involved in culture contact situations throughout Louisiana. Explorers, administrators, missionaries, and traders had different purposes in dealing with Indians and so the way in which they met their objectives conditioned the contact situation. The exchange of material in each contact situation was only one small part of the changes which occurred in aboriginal culture. Each role had different potentials in

wielding change. The administrator was a powerful role, because he could mobilize all other roles. For example, many governmental decisions were implemented through missionaries. The missionary role was perhaps the most important role in bringing European concepts and ideals to the Indians. This role had an unfortunate history in Louisiana, however, as a result of political problems. In the Yazoo Bluffs region, the missionary appears to have had strong potential initially for affecting aboriginal culture, but impatience, poor training, etc. resulted in the compartmentalization of Indian religion and the ultimate failure of the mission. The trader role, so strong in the "trader" period was not as powerful an agent of change, and it is doubtful that the Indians of the Yazoo Bluffs region were greatly affected by this impersonal role.

The trader brought a rapidly increasing influx of material goods to the Indians, but it cannot be assumed that he was therefore instrumental in wielding sociocultural change. As Edward Spicer so ably demonstrated, a great deal of material culture coming into a group, as with the Eastern Pueblo, may in actuality result in very little change in the non-material culture of the groups - even with intense European contact (Spicer 1954: 677 - 678). In other cases, characterized by minimal contact, a total reorientation in the social institutions of a group can come about. The Navaho and Apache, for example, accepted very few materials from the Spanish, but what they did accept (horses, metal tools, weaving in wool, and textiles), they accepted on their own terms. It was not so much the number of diffused

cultural elements which brought about the change in orientation of their culture, but the profound influence of these cultural elements. Their whole economic lifestyle was affected, which in turn brought about changes in other social institutions (Ibid: 674-675).

The amount of artifacts, therefore, bears little relation to the nature and degree of sociocultural change. Nor can qualitative changes in material over time be considered a reliable indicator of change. Many have argued that the use of trade objects in unmodified forms implies a higher degree of sociocultural change than their use in modified forms. Even if such changes can be arranged chronologically in a region, as they can in many cases (Brain et al. n.d. b; Deetz 1965:16-18), they are not necessarily indicative of changes in non-material culture. Arthur Ray demonstrated, for example, that major sociocultural changes occurred in the western sub-Arctic and the Northern Plains long before the appearance of large quantities of materials in unmodified form. Without the documentary data on the Indian middleman, concerning the transmission of trade goods, archaeology would give a completely different picture of what was actually happening to aboriginal culture in this area (Ray 1978). James Deetz's study of the Arikara is successful, not so much because it reveals social disorganization, but because it reflects and elucidates changes which are known to have been occurring as a result of the ethnohistorical literature. Had the latter information been unavailable, Deetz would not have argued so strongly for the

interpretations suggested archaeologically (Deetz-personal communication).

Archaeology is not, however, a "poor stepchild" of cultural anthropology and history. Nor is it simply a device to verify events which we know to have happened historically. And it is not merely a testing ground for hypotheses generated in cultural anthropology. If used properly, archaeology should be able to contribute its share to a better understanding of the mechanisms of culture processes. Edward Spicer noted that there is a general trend in the domination of Western Europe over Indian cultures from the initial incorporation of novel items, to the incorporation of elements of a more complex nature, to eventual replacement as contact continues through time (Spicer 1961). Such a trend can be observed in qualitative changes of archaeological materials (Quimby and Spoehr 1951; White 1975), but the trend of course is meaningless unless it can be applied to specific situations. Without explicit statements concerning the conditions of contact, the natures of the cultures, and the use and value of the materials to the Indians, quantitative and qualitative material changes observed archaeologically are indeed of little use.

Historical archaeology has a significant edge over prehistoric archaeology, in that a documentary source of data is available. The groundwork has now been provided in the Yazoo Bluffs region for a rigorous investigation of cultural processes. Changes in the archaeological materials are small compared to what has been revealed in the ethnohistorical

accounts, but their study has definitely contributed to our understanding of the material culture of the French and Indians, and has in some small ways managed to elucidate and/or question changes recorded in the documents. What is needed now in the area is a more rigorous archaeological examination of settlement patterns, subsistence patterns, and the like. As yet, we have only a slight clue as to what these people were actually eating, and our knowledge of house plans and village layouts of the Yazoo Bluffs Indians is confined to but one floor plan at the Haynes Bluff Site (Brain 1975a). Such information, derived from archaeology, can, in combination with studies of the material remains and the documentary record, with a strong background in anthropological theory, lead us to a closer approximation of sociocultural change in the Yazoo Bluffs region, and cultural processes in general. This is the ethnohistorical approach.

Appendix 1 - Louisiana Forts

Fort Maurepas (Fort of Biloxi)

This construction was not only one of the most impressive forts in the newly founded Louisiana colony, but it was also one of the first. It was erected by Iberville in 1699 near the present-day city of Biloxi. According to Father Gravier, who visited it in the following year, it was built in the proper manner, was manned by 120 men, and had 12 pieces of cannon and an equal number of swivel-guns mounted on the bastions (Thwaites 1896-1901;65:162-167). Iberville described the work involved in constructing this fort:

I put ten men to squaring logs for the bastions made of "piece sur piece," a foot and a half thick...The work goes slowly. I have no men who know how to hew; most of them are a day in felling a tree, which are in truth quite large - hard walnut and oak. I have had a forge set up to repair the axes which are always breaking...The 14th...I sent a half league from here to cut stakes for the palisade; every day the sloop brings eighty to a hundred of them. I am having work done to build an oven and to dig the ditches for the palisades. The bastions are advancing... The 19th, 20th and 21st, I have had work done squaring stakes and reducing them to three inches thick for flooring the bastions that I have had erected nine feet high, on which I have put the cannons, with a four foot parapet...The 24th I had the cannons mounted on the bastions and entirely finished the fort. The 25th I set up the magazines and completed the lodgings for the garrison.

(d'Iberville in Wilson 1965:108)

The bastions were impressive constructions. Two were made

of pieces of squared wood, from $1\frac{1}{2}$ to 3 feet thick, laid one on top of the other, while the other two were of a double palisade design. The former were 9 feet in height (French 1869:30-31; Wilson 1965:108). The site of the fort was poorly chosen and so it was abandoned in 1702 when the capital was moved to Mobile.

In 1717 a fort at New Biloxi, apparently in the general vicinity of the earlier one, was built upon the arrival of Governor L'Epainay in order to provide a good anchorage for ships arriving from France (French 1869:135). There are few references to this fort, but the home government apparently intended to develop this region as M. le Blond de la Tour was sent to Louisiana in 1720 to make plans for an elaborate fortified town which was to be the capital. The operation failed in 1722 when the capital was moved to New Orleans (Wilson 1965:112-114).

Fort de la Boulaye (Fort Mississippi)

With Fort Maurepas well underway, Iberville and Bienville constructed another fortification on the east bank* of the Mississippi River, 50 miles from its mouth. According to Marcel Giraud, its only defenses were cannon placed upon the elevated bank (1974:40). Father Gravier, who visited the installation

* Father Gravier said the south side (see p. 585).

in December of 1700, was not too impressed with its development:

At last on the 17th of December, I reached Fort Mississippi...This first post is on the South side of the river, 18 leagues from its mouth; There is neither fort, nor bastion, nor intrenchments, nor redoubts, - it consists of only a battery of 6 pieces of Cannon, and of 6 or 8 placed on the edge of the Hill; and of 5 or 6 Cabins detached from one another and roofed with palm-leaves. The Commandant, Monsieur de Bienville, has there a small and very neat house.
(Gravier 1701 in Thwaites 1896-1901;65:160-162)

D'Iberville, being responsible for its construction, was naturally more impressed with the progress, as indicated by him in February of 1700:

I continued the work of clearing and squaring logs with which to build the house and have been working on a powder magazine 8 feet square, raised 5 feet above the ground, made of wood and covered and surrounded with 1-½ feet of mud plaster...* On the bank was the edge of a wood, fifty paces deep of oaks, ash, elms, planes and poplars...I have set to work to cut down these trees and square them in order that we may build a square house twenty-eight feet on each face, two stories with machicolations, with four four-pound and two eighteen-pound cannons, with a moat twelve feet across.
(d'Iberville in Wilson 1965:109-110)

Another house at this fort is described by d'Iberville's chaplain:

The walls are of cane laid cross-wise between large poles. The roof is made of palm (palmettos) whose leaves are flat and arranged like a fan. All this

* This powder magazine was two-stories high (Delanglez 1935: 12; Wilson 1965:110)

is well tied together and firmly supported. The building, which is about twenty feet square, is intended to serve as a magazine (warehouse) until there is a better one...
(Anon. in Wilson 1965:110)

The fort was abandoned in late 1704 or 1705.

Fort Louis

When the capital shifted from Biloxi to Mobile, a fort was naturally built at the latter location. It was erected in 1701 and three years later Nicolas de la Salle described it as having four bastions in which were mounted 16 cannons of 12 and 8 pounds calibre (Rowland and Sanders 1929:18). Details of its buildings are presented by Pénicaut:

Within were four buildings, situated about fifteen feet within the curtains, and afterwards appropriated for a chapel, governor's house, and officers' quarters. The barracks for the soldiers were built outside of the fort, one hundred and fifty paces from the fort, on the banks of Mobile River...
(Pénicaut 1698-1722 in French 1869:76)

The location of the fort and settlement proved unsatisfactory due to flooding conditions and so a new site was chosen with Fort Louis being abandoned about 1711. The new fort became known as Fort Condé (Wilson 1965:111).

Fort Condé

Fort Condé was known as Fort Louis until 1720. Its construction began in 1709 under the direction of Bienville (Rowland and Sanders 1929:169). It was quite some time before Fort Condé developed into an impressive military installation. Lamothe Cadillac described it in 1716 as being a fairly dilapidated structure:

There is only a poor stockade at Fort Louis without sheathing, without bastions, without galleries in the curtains, without embrasures, without mounted cannons. There is only a poor guard-house destitute of everything where neither wood nor light is furnished although this post is exposed to the inroads of the Indians.
(Lamothe Cadillac 1716 in Rowland and Sanders 1929: 220)

The Company of the Indies decided to have the fort constructed of stone and brick. M. Devin was placed in charge of the fortifications, but was rather slow in its erection. Governor Périer and M. de la Chaise described it in 1729:

The fort of Mobile is protected against every insult since the covered way is finished. Only a bastion remains to be finished and it would be finished if the contractor for the bricks had not ceased to furnish any on account of a long illness that he had, but he is going to continue. The foundations have been made of stone that has been found opposite Mobile...
(Périer and de la Chaise 1729a in Rowland and Sanders 1929:614)

The fort was still undergoing construction in 1730 (Rowland and Sanders 1927:80) and M. Devin was working on it just prior to his death in the autumn of 1735 (Rowland and Sanders 1929:392). When finished, Fort Condé was quite an

impressive structure. According to Benjamin French:

It was reconstructed with brick, after the manner of Vauban, with bastions, half-moons, deep ditches, covered way, and glacis, with houses for the officers and barracks for the soldiers, and was mounted with sixteen cannon.

(French 1869:104)

The fort was manned throughout the remainder of French control of Louisiana.

Fort on Dauphin Island

At around the same time the first palisaded Fort Condé was being built, a small fortification was being constructed on Dauphin Island at the mouth of Mobile Bay (French 1869:104). In 1713 Lamothe Cadillac, as usual, had nary a good word to say about it:

There is already a little fort of poor cedar piles with four little bastions. It is not sheathed and has no scaffolding, the cannons are at the water's edge; in a word it could not be in a worse condition.
(Lamothe Cadillac 1713 in Rowland and Sanders 1929: 165)

Plans were made in 1715 to rebuild this fort of stone in a pentagonal shape with radial streets. However, nothing came of these plans (Wilson 1965:111).

Fort Rosalie

A fort was planned for the Natchez area for quite some time, but the occasion to perform these plans did not occur until the First Natchez War (see p. 47). In 1716 Bienville had the Natchez Indians supply labor for its erection. 2,500 posts of acacia wood, 3 feet long and 10 inches in diameter, were cut for its construction, as were 3,000 pieces of bark from cypress trees to cover the lodgings. Indians were employed in its general construction, including covering the magazine, powder magazine, guardhouse, and barracks with bark. Implements used in its construction included axes, spades, pickaxes, nails, and other iron tools (French 1869:132; Swanton 1911:202-204). When finished, Dumont dit Montigny described it as being:

...merely a plot 25 fathoms long by 15 broad, inclosed with palisades, without any bastions. Inside, near the gate, was the guardhouse, and 3 fathoms off along the palisade ran the barracks for the soldiers. At the other end, opposite the gate, a cabin had been raised for the lodging of the officer on guard, and on the right of the entrance was the powder magazine.
(Dumont dit Montigny in Swanton 1911:205; see also pl. 7a)

Fort Rosalie was never a very impressive structure. The absence of bastions was definitely out of character and occasioned some authors to only reluctantly refer to it as a fort. Le Page du Pratz had little to say of Fort Rosalie:

This fort covered the settlement of the Natchez, and protected that of St. Catherine, which was on the banks of the rivulet of the Natchez; but both the defence and protectio it afforded were very

inconsiderable; for this fort was only palisadoed, open at six breaches, without a ditch, and with a very weak garrison.

(Le Page du Pratz 1774:33)

Father Charlevoix visited the post in December of 1721 and described Fort Rosalie as follows:

From this first bank we go up a second, or rather a hill, whose ascent is tolerably easy, on the summit of which stands a redoubt, enclosed by a simple palisade. The name of a fort has been given to this entrenchment.

(Charlevoix 1923:236)

Bénard de la Harpe, a month later, described it as being:

...composed only of bad, decayed posts, so that it admits of no defense.

(Swanton 1911:207)

In January of 1723, Diron d'Artaguiette offer his own brand of criticism:

The fort of Natchez is a rather sorry fort of piles the size of a leg, where there are two small, mounted pieces of iron cannon, with only a brass swivel gun. Its form is square, having four bastions. It is situated at the top of a hill, which is nearly 400 feet high.

(Diron d'Artaguiette 1722-1723 in Mereness 1916:45)

Contrary to Dumont dit Montigny, the fort is said to have had bastions in 1723. I tend to put more faith in Diron d'Artaguiette's account as his purpose in this journey was to examine the various military installations in the colony. However, almost all accounts are in agreement that the fort was in bad need of repair. M. Desliettes came before the Council

in March of 1725 and stated:

...that it is very necessary to have another fort built at the said place of the Natchez because the one that is there is completely decayed; that it would be advisable to have it made of earth because it would last longer; that more than six months ago he informed the Council of it and that M. De Pauger, chief engineer, had written him that he would go to the spot to see in what way it would be reestablished; that it would be very necessary to make a road for the transportation of the goods from the bank of the river along the hill.
(Minutes of the Council 1725 in Rowland and Sanders 1929:421)

The Council apparently did not act on the recommendation as the following year Father Raphael noted that:

There is a fort on the first eminence with a garrison of about thirty men, if however, an enclosure of poor piles, half rotten, that permit free entrance almost everywhere can be called a fort. There are several pieces of cannon but very useless because this would-be fort, being at a distance from the edges of the eminence, cannot command any of the approaches, and if it were attacked, the enemy would be at the palisade before a shot could be fired at him. I think that they are going to have work done to put themselves in a position of greater security.
(Raphael 1726b in Rowland and Sanders 1929:525)

Father Raphael was quite right in his predictions, but still the administration did not react. Finally in June of 1729, several months prior to the Natchez Massacre, Governor Perier's plan to reconstruct Fort Rosalie was approved (Rowland and Sanders 1929:649). The fort was totally destroyed at the time of the massacre and was later replaced, although not on the same location, by the Natchez Fort. This last one was built of embankments and terraces rather than palisades

(Le Page du Pratz 1774:84; Swanton 1911:241-243).

Fort Toulouse

Fort Toulouse was built at the junction of the Coosa and Tallapoosa Rivers in Alabama. According to Fénicaut, it was erected in 1714 (French 1869:128), but other records indicate 1717 as the date of initial construction (Heldman 1973:22). The fort was about 300 feet square and was equipped with lodgings for both officers and soldiers, and a large magazine for ammunition and provisions (French 1869:128). In 1718 a garrison of 25 soldiers was sent to this post, the number being increased to 40 by 1724. M. Pechon, commandant at Fort Toulouse, complained to M. de la Chaise of the poor condition the fort was in in 1723:

This officer writes me that the fort of the Alabamas is in a bad situation...that it is of the utmost importance if we are to maintain ourselves there to determine to fortify ourselves well there without loss of time and to send an engineer there with funds to have work done, that the late Mr. De La Tour, the lieutenant General, had given him instructions to have work done on the fortifications with a sum of one thousand livres which has not been handed to him or supplied to the warehouse so that the instructions have remained unexecuted, so much the more because this fort is entirely destroyed, because the four bastions are rotten and incapable of defense, because all the houses that are in the fort are partly unroofed and rotten... (de la Chaise 1723b in Rowland and Sanders 1929: 383-384).

Fort Toulouse was rebuilt in 1751 because a portion of it was destroyed in a flood. According to historical accounts, the

second fort was also a 300 foot square, but archaeology has revealed it was slightly oblong. The distance from the salient angle of each bastion to adjacent bastions was 340 feet and 240 feet, and the parade ground measured 215 feet by 150 feet. The fort had a dry moat and each log of the palisade was held in place by perpendicularly nailed lathes, with dirt, rock, and other debris used to pack the upright posts (Heldman 1973:21-22). This fort was occupied through the remaining years of French dominion.

Fort St. Pierre

See Text (pp. 78-96, 132-136)

Fort on the island of Balize

In December of 1721 the provincial administration received orders to build a fort at the mouth of the Mississippi River. It was to be constructed on the island of Balize, as were a warehouse and lodgings for 50 men (Rowland and Sanders 1929:254). M. le Blond de la Tour drew the original plans for this fort and these were later developed by M. de Pauger, with M. Deverges constructing it (Wilson 1965:118;fig.6-7). Le Page du Pratz described the fort:

Balise is a fort built on an island of sand, secured

by a great number of piles bound with good timber-work. There are lodgings in it for the officers and the garrison; and a sufficient number of guns for defending the entrance of the Mississippi. (Le Page du Pratz 1774:139)

Being on an island, the fort had an irregular shape (Ibid:47). Two additional forts of the "horseshoe type" were to be established at the entrance of the river, by order of the Company of the Indies in 1722, but these were not of as high a priority as Fort Balize (Rowland and Sanders 1929:255; Wilson 1965;fig.8). Fort Balize was still in use in 1734, but by this time the island was located $\frac{1}{2}$ league within the river (Le Page du Pratz 1774:116).

Appendix 2a

Ceramics

Addis Plain

On the basis of an extensive sample of plain sherds from the Natchez region, Vin Steponaitis was able to distinguish a number of ceramic varieties. He included them within the revived type Addis Plain, thus depriving the overgrown Baytown Plain of a number of its varieties, and virtually putting an end to the type Bell Plain in the Natchez Region. He described Addis Plain as follows:

Addis Plain as we define it is characterized by the heterogeneous composition of its paste, containing not only grit and clay, but a considerable amount of organic substance as well. This organic component can consist of plant materials, shell, and even bone, though not necessarily all three in every case. It is not the presence of one particular element in the paste that defines Addis Plain; rather, it is the presence of a variety of elements, both inorganic and organic, that is diagnostic. The allowance for the occasional presence of shell inclusions makes Addis Plain inconsistent with the concept of Baytown Plain as defined by Phillips, and justifies its reinstatement as a separate type (Steponaitis 1974:116).

Addis Plain, var. Addis (Figure 13)

Sample - 2575 sherds

Provenience (Table 11)

Portland (106 sherds)
 St. Pierre (2328 sherds)
 Lonely Frenchman (56 sherds)
 Lockguard (40 sherds)
 Wright's Bluff (7 sherds)
 Anglo (38 sherds)

Description

This is the established variety (Phillips 1970:48-49) that contains no shell inclusions...In our region [Natchez], the common vessel forms are the simple bowl, the carinated bowl, the plate, the bottle, the straight sided beaker, and a jar-like beaker with an outflaring rim and slightly defined shoulders. Punctated, notched or scalloped rims occur, with or without an incision along the interior of the lip. "Tunica" rims (Hally 1972:fig.59) are not uncommon. Rim straps also occur, either on the interior of shallow bowls, or the exterior of a jar-like beaker (ref. C).

A jar, with a rim diameter of 23.7 cm, was found within the moat at St. Pierre (Figure 13).

Chronological Position

Addis occurs in the Gordon through the Natchez phases in the Natchez region (ref. C) and in the Crippen Point and Winterville phases in the lower Yazoo Valley (ref. D). The appearance of an Addis vessel in a historic context at St.

Pierre suggests that the variety reappears in the Russell phase in the Yazoo Bluffs region. Its reappearance may be due to a cultural refuge in this area or, more probably, greater interaction with more southerly areas in historic times.

References

- A - Phillips 1970:48-49 (discussed under Baytown Plain, var. Addis)
- B - Quimby 1951:107-109 (discussed as Addis Plain)
- C - Steponaitis 1974:118
- D - Williams and Brain n.d.

Addis Plain, var. Greenville

Sample (1506 sherds)

Provenience (Table 11)

Portland (24 sherds)
St. Pierre (1378 sherds)
Lonely Frenchman (33 sherds)
Lockguard (46 sherds)
Wright's Bluff (14 sherds)
Anglo (11 sherds)

Description

Brain originally assigned var. Greenville to a separate type (Greenville Plain) intermediate to Addis Plain and Holly Bluff Plain, and described it as being, "marginal to both but is neither one nor the other (ref. A)." The paste, which is the attribute by which Greenville Plain is classified (also applies to the Greenville variety) is described by Brain as follows:

Like Addis, a wide array of tempering agents are utilized: including angular bits of clay, grit, ground up sherds and shell. The one cohering feature of Greenville is that shell is always included, although in greatly varying amounts and particle size. But while shell is always present (even if it is only in the ground up sherds which provide the real temper!), it is not the only tempering agent, and is usually not even the predominant one, being combined with clay, grit and/or sherds (ref. A).

Even in the Lake George report, Brain had trouble deciding whether or not to include Greenville in Bell Plain (which incorporates Holly Bluff in Phillips' work - 1970:58-61) or group it with the Addis variety of Baytown Plain (ref. C). Steponaitis resolved the problem by making Addis, Greenville, and Holly Bluff three different varieties of Addis Plain. As separate varieties listed under the same type they are kept distinct, and yet their close relationship is still exhibited (ref. B).

Chronological Position

Anna through Emerald phases in the Natchez region (ref. B) and the Winterville phase in the southern Yazoo Basin (ref. A and C).

References

- A - Brain 1969:158-162 (discussed as Greenville Plain)
- B - Steponaitis 1974:118-119
- C - Williams and Brain n.d.

Addis Plain, var. Holly Bluff

Sample - (145 sherds)

Provenience (Table 11)

Portland (43 sherds)
St. Pierre (95 sherds)
Lockguard (6 sherds)
Anglo (1 sherd)

Description

As defined by Phillips (ref. A) but, as with the closely related St. Catherine variety (Steponaitis 1974:121-122), is now

a variety of Addis Plain instead of Bell Plain (see discussion under var. Greenville).

Chronological Position

Lake George and Wasp Lake phases.

References

A - Phillips 1970:60

Addis Plain, var. Ratcliffe

Sample - 129 sherds

Provenience (Table 11)

Portland (1 sherd)
St. Pierre (120 sherds)
Lonely Frenchman (4 sherds)
Lockguard (1 sherd)
Anglo (3 sherds)

Description

As defined by Steponaitis:

Generally, a rather coarse ware. The paste is chunky with large white (and sometimes black) inclusions clearly evident. Shell or bone inclusions may also be present. Surface color usually ranges from a medium shade of reddish-brown to an orange-red or even a purplish-red. The surface is most often uneven, hardly being smoothed. The ware generally occurs in jars and simple bowls (ref. A).

Distribution

Ratcliffe is found on numerous historic sites throughout the eastern bluffs of the Lower Mississippi Valley. Its range stretches from the mouth of the Red River to the Yazoo Bluffs region, its heaviest occurrence being in the Natchez region.

Chronological Position

Emerald and Natchez phases in the Natchez region, and the Russell phase in the Yazoo Bluffs.

References

A - Steponaitis 1974:120-121

Alligator Incised, var. Oxbow

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y560A

Description

As defined by Phillips (ref. A).

Chronological Position

Deasonville phase (ref. B).

References

- A - Phillips 1970:39
- B - Williams and Brain n.d.

Anna Incised

Phillips (1970:102) classified Anna as a variety of L'Eau Noire Incised. Following Brain (Williams and Brain n.d.) and

Steponaitis (1974:122-123), I have elevated it to a type of its own in this report. Only two sherds of this type was found, both of which are from St. Pierre. Neither could be sorted as to variety (Table 11).

Avoyelles Punctated

This type is defined in Phillips (1970:41-42). Varieties Avoyelles and Dupree are evident in the Yazoo Bluffs region. An additional five sherds from St. Pierre could not be sorted as to variety (Table 11, Plate 35 c-d).

Avoyelles Punctated, var. Avoyelles

Sample - 1 sherd

Provenience

Portland (1 sherd) - Y510B

Description

As defined by Phillips (ref. A).

Chronological Position

Aden phase (ref. B).

References

- A - Phillips 1970:42
B - Williams and Brain n.d.

Avoyelles Punctated, var. Dupree (Plate 35a-b)

Sample - 10 sherds

Provenience

St. Pierre (10 sherds) - Y550E1; Y558-9(Y578); Y558-20;
Y566A; Y592A; T15B; Y601A; Y660A; W76B; W122A

Description

As defined by Phillips (ref. A). The majority of the specimens in the Yazoo Bluffs sample have punctations in the form of jagged commas rather than dots. The beaker vessel form

is represented.

Chronological Position

Crippen Point phase (ref. A).

References

A - Phillips - 1970:42

Barton Incised

This type was originally defined on the original Lower Mississippi Valley survey volume (Phillips et al. 1951:114-119). The type was too inclusive, however, and so Phillips (1970:43-47) later broke it down into six varieties. Only one (Arcola) of those varieties is evident in the Yazoo Bluffs sample described here. Four additional varieties of Barton Incised are discussed below, one (Midnight) defined on work at the Winterville Site (Brain 1969) and three (Charlevoix, Davion, Portland) based on materials from the sites reported upon in this volume. A considerable number of sherds could not be specified as to variety (Table 11).

Barton Incised, var. Arcola

Sample - 25 sherds

Provenience

Portland (9 sherds) - Y500A(2); Y501B; Y502AF.1(2); Y505A2;
 Y506B; Y506C2; Y510B
 St. Pierre (15 sherds) - Y550E1; Y558-9A; Y558-31F; Y559A;
 Y560A; Y577A; Y641B; Y910; W10A; W49A; W50A; W52B;
 W60A1; W72A; W98A
 Lockguard (1 sherd) - W374A

Description

As defined by Phillips (ref. A) in terms of the placement of the rectilinear lines on the shoulder of shell-tempered jars, but the treatment of the design is considerably broken down and not at all similar to the sherds of this variety found at the Lake George Site (Brain -pers. comm.).

Chronological Position

Lake George and probably Wasp Lake phases (ref. B).

References

A - Phillips 1970:45
 B - Williams and Brain n.d.

Barton Incised, var. Charlevoix (Plate 36a)

Sample - 28 sherds

Provenience

Portland (11 sherds) - Y500A; Y501A; Y501B; Y502A(3);
 Y506C(2); Y506C1; Y506C2; Y506C3
 St. Pierre (12 sherds) - Y550E1; Y558-9(Y550F.1); Y574A;
 T1L; W12A; W18A1; W20A; W23A; W55A; W61A; W64A1;
 W120AB
 Lockguard (2 sherds) - W363A; W366A
 Wright's Bluff (3 sherds) - W325A(2); W330A

Description: New Variety'

A number of sherds originally classified as Barton Incised, var. Estill, Arcola, and Unspecified were found on resorting to have a ware equivalent to Mississippi Plain, var. Montfort. Montfort is commonly found on Tunica sites in the Angola Farm region of Louisiana, and so it is fitting that it is found at most of the historic sites in the Yazoo Bluffs sample. In setting up Charlevoix, I decided to make the distinction on the basis of paste rather than the area of the vessel on which the

design occurs. However, in the tradition of Estill and Davion, the design occurs mainly on the neck. In some cases it extends to the shoulder area. The decoration is generally consistent with var. Davion, that is oblique parallel lines running around the vessel neck, but at least two of the sherds (Y506C2; W12A0) have line-filled triangles. A rim sherd from Wright's Bluff (Plate 36a) has a small conical lug which appears to have been prefabricated and luted on. One sherd (Y55CE) has been painted red, equivalent to Old Town Red, var. Ballground.

Sorting Criteria

Same as Barton Incised, var. Davion, except ware is equivalent to Mississippi Plain, var. Montfort.

Distribution

Thus far recorded only in the Yazoo Bluffs region.

Chronological Position

Russell phase diagnostic.

References

None

Barton Incised, var. Davion (Plate 36 b-e)

Sample - 61 sherds

Provenience

Portland (30 sherds) - Y501A; Y501B; Y503AF.1; Y505B2;
Y505C2; Y506A; Y506B(8); Y506C(13); Y506C1(2);
Y506C2

St. Pierre (31 sherds) - Y550B1; Y551A; Y558-12(3); Y561A;
Y573A; Y578A; Y593A; Y594A; Y641B; Y642B(2);
Y646B(2); Y647B; Y909(2); W10A; W22A; W26A;
W26B(3); W35A; W45A; W50A; W54A1; W63A; W77A;
W94A

Comments - 1 sherd from Y506B and 5 from Y506C same
vessel (Brown 1976f:Fig.2b)

3 sherds from Y506B same vessel
Y505B2 and Y505C2 same vessel
2 sherds from Y558-12 same vessel
2 sherds from Y642B same vessel
2 sherds from W26B same vessel

Description: New Variety

When Barton Incised was first defined, Griffin noted that the type starts to lose its distinctiveness the further south it occurs in the Yazoo Basin. It gradually melts into Arcola Incised (Phillips et al.1951:114-119). Phillips set up variety

Estill to account for this intermediate decoration and defined the pottery as having close-spaced, steeply-pitched, line-filled triangles. Cross-hatching drops out and the placement of incisions are primarily on the rim, but comes down on to the shoulder in anticipation of Arcola (Phillips 1970:45-46)* A reexamination of the sherds from Portland and St. Pierre revealed that the decoration for this variety has done more than just slip down the vessel at these sites. With the exception of three sherds from St. Pierre (and even these are not convincing examples), there is a noticeable absence of alternating line-filled triangles. In fact, triangles themselves are absent, only two specimens from Portland having them. The major pattern is a series of slanted parallel incisions arranged around the vessel, emerging several centimeters below the lip, and continuing down to the shoulder (Brown 1976e: Fig.2b). In one case, a line marks the upper border of the design. Both jars and bowls are represented. The rims vary from widely flaring and tapered, to straighter with more squared lips, to tapered with a small exterior fold. No appendages have been observed.

Sorting Criteria

- * Phillips also included alternating triangles of punctations in this variety, but sherds with these designs are now classified as Owens Punctated, var. Widow Creek.

Parallel oblique lines forming a band on the necks of Mississippi Plain, var. Yazoo jars and bowls.

Distribution

Estill is found throughout the southern part of the Yazoo Basin, grading into Barton in the north, whereas Davion is essentially confined to the southernmost part of the entire region. Sherds of this variety are not illustrated in Phillips (1970) survey volume, even under the Estill discussion. Material similar to Davion has been classified as Barton Incised, var. Campbell at the Pocahontas Site (Rucker 1976:43-46, fig.10a,b) and one, classified as Estill, is without question Davion (Ibid: fig. 10d) It is also represented at the Menard Site (Ford 1961:PL.23D).

Chronological Position

Estill appears in the late Winterville phase and continues through the Lake George phase (Williams and Brain n.d.). However, the appearance of Davion at three historic sites, combined with its rarity on prehistoric sites, suggests it is a marker for the historic Russell phase.

References

None

Barton Incised, var. Midnight (Plate 37)

Sample - 7 sherds

Provenience

Portland (2 sherds) - Y506C; Y506C2
St. Pierre (5 sherds) - Y550D1; Y558-10(2); W117A(2)

Description

Brain (ref. A) first described this variety (without defining it as such) in his report on the Winterville Site excavations. Similar to Arcola, the decoration consists of relatively well-executed close-spaced rectilinear designs. It differs in that the design is placed on the rim, rather than on the shoulder, of small thin-walled vessels.

Chronological Position

Lake George and Wasp Lake phases in the Yazoo Valley (ref. B).

References

- A - Brain 1969:188
 B - Williams and Brain n.d.

Barton Incised, var. Portland (Figure 256, Plates 38-39)

Sample - 40 sherds

Provenience

Portland - (28 sherds) - Y500A(7); Y502A; Y503A(2); Y506A;
 Y506B(2); Y506B1(2); Y506C(8); Y506C1(1); Y506C2(2);
 Y506C3(2)

St. Pierre (12 sherds) - Y400(2); Y404; Y550A1; Y550A2;
 Y559A; Y567A; Y571A1; Y571A'1; Y577A; Y641A;
 W87A1

Comments - 2 sherds from Y400 same vessel
 3 sherds from Y500A same vessel
 2 sherds from Y503A and 1 from Y506C3 same vessel
 2 sherds from Y506B1 same vessel
 2 sherds from Y506C2 same vessel (Figure 256)
 2 sherds from Y506C same vessel

Description: New Variety

Portland is a further breakdown of Barton Incised, var.
Estill, as defined by Phillips (1970:45-46). It is a new variety
 which has been set up largely on the basis of finds at the type

site. Phillips described Estill as having close-spaced line-filled triangles incised at a steep angle on standard Mississippian jars. Portland has the added distinction of having blank triangles alternating with line-filled ones. With the one exception discussed below, the line-filled triangles have their base on the shoulder of the vessel. The lines within the triangles either radiate out from the vertex of each triangle like the spokes of a wheel, or they are all arranged parallel. With few exceptions, the incisions were made with a thin pointed instrument. Whereas Estill has incisions executed on a fairly dry paste, Portland generally exhibits wet paste incisions.

The standard Mississippian jar is the most common vessel form, but the variety also occurs on bowls. Rims are generally flaring and are in all cases tapered. A variation on this is tapering with a slight squaring of the lip and tapering with a slight exterior rolling of the lip. There are no appendages on the sample examined from the Portland Site. The sherds of the Portland variety from St. Pierre appear somewhat cruder than those from the type site, and the specimens from St. Pierre exhibit only tapering as a rim treatment. On one sherd the lip is interiorly beveled. Interior beveling on Barton Incised is rare, being pretty much confined to the Memphis area (Phillips et al. 1951:116).

One sherd from St. Pierre (Plate 38e) is noticeably different from the above description of Portland, in that the vertex of the line-filled triangles, rather than the base,

points toward the shoulder. This sherd is a crude approximation of the varietal definition. I include it under Portland, instead of Estill or var. Unspecified, because I believe the alternating blank and line-filled triangles are the most important criteria.

Sorting Criteria

Crudely incised steep alternating blank and line-filled triangles on the necks and widely flared rims of Mississippi Plain, var. Yazoo jars and bowls.

Distribution

In addition to the Yazoo Bluffs region, Phillips (1970: fig.94e) illustrated a sherd of this variety from the Lake George Site. A good example of it appears at the historic Menard Site in Arkansas (Ford 1961:Pl.23A).

Chronological Position

The variety appears to be a marker for the Russell phase. Its total absence in features dating to the occupation of Fort St. Pierre suggest it is associated with the early part of this

phase, perhaps with the Tunica. Portland has recently been found at the Bloodhound Hill Site (29-J-19), a historic Tunica Site in the Angola Farm region (Brain-personal communication).

References

None

Baytown Plain, var. Thomas

Sample - 4 sherds

Provenience (Table 11)

Portland (1 sherd)
St. Pierre (2 sherds)
Lonely Frenchman (1 sherd)

Description

As defined by Phillips (ref. A).

Chronological Position

Marksville period and probably later (ref. A).

References

A - Phillips 1970:54-55

Baytown Plain, var. Valley Park

Sample - 791 sherds

Provenience (Table 11)

Portland (34 sherds)
St. Pierre (734 sherds)
Lonely Frenchman (1 sherd)
Lockguard (12 sherds)
Wright's Bluff (2 sherds)
Anglo (8 sherds)

Description

As defined by Phillips (ref. A).

Chronological Position

Coles Creek period. Aden and Kings Crossing phases
(ref. A).

References

A - Phillips 1970:55-57

Baytown Plain, var. Vicksburg

Sample - 137 sherds

Provenience (Table 11)

Portland (2 sherds)
St. Pierre (122 sherds)
Lockguard (9 sherds)
Anglo (4 sherds)

Description

As defined by Phillips (ref. A).

Chronological Position

Kings Crossing phase.

References

A - Phillips 1970:56-57

Beldeau Incised, var. Beldeau

Sample - 3 sherds

Provenience

St. Pierre (2 sherds) - W30A1; W95A
Lockguard (1 sherd) - W358A

Description

As defined by Phillips (ref. A).

Chronological Position

Kings Crossing phase (ref. B).

References

- A - Phillips 1970:58
- B - Williams and Brain n.d.

Beldeau Incised, var. Bell Bayou (Plate 40a)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - W86A

Description

The main differences between Beldeau and Bell Bayou, as defined by Brain (ref. A), is that incisions and punctations are more carelessly executed in the latter. A perhaps more important distinction is that the ware of Bell Bayou is Addis Plain, var. Addis.

Chronological Position

Crippen Point phase (ref. A).

References

A - Williams and Brain n.d.

Carter Engraved, var. Carter (Plate 40b)

Sample - 3 sherds

Provenience

St. Pierre (3 sherds) - Y558-31D; W21A; W102A1

Description

Phillips (ref. A) included Carter as a variety of L'Eau Noire Incised. He described it as having multiple parallel lines arranged in curvilinear patterns on the exterior of simple and carinated bowls, the lines being either incised on a dry paste or engraved. Brain (ref. C) noted that the lines actually are engraved, the variety thus not belonging in an "Incised" type. He hence made the variety a type of its own and described it as having curvilinear designs in which two motifs prevail:

(1) the meander, or running scroll, placed against

a background which is usually hatched, but may be plain, (2) the whorl, or interlocked scroll, which is usually paneled (ref. C).

The sample from the Yazoo Bluffs region, which occurs on Addis Plain, var. Addis, fits the exterior engraving criteria, but the designs are not curvilinear. The sherds are small, however, and represent but a portion of the total design. They may hence conform to the hatched background of the first motif described above. One sherd has vertical lines continuing up to its tapered lip, the decoration being similar to specimens illustrated by Phillips (Ref. A:fig.381) and Rucker (ref.B:fig. 26).

Chronological Position

Winterville phase (ref. C).

References

- A - Phillips 1970:103 (included in L'Eau Noire Incised)
- B - Rucker 1976:62 (included in L'Eau Noire Incised)
- C - Williams and Brain n.d.

Carter Engraved, var. Mud Lake (Plate 40c)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - W30A1

Description

Brain described this variety as consisting of:

Fine engraving arranged in curvilinear and rectangular patterns, and incorporating zones of fine punctations, on the exterior of simple bowls or beakers. The ware is equivalent to the finer examples of the Addis and Vicksburg varieties of Baytown Plain (ref.A).

The one Mud Lake sherd from St. Pierre is on Addis paste and has minute comma-shaped punctations which average slightly less than 1 mm in length.

Distribution

Other than St. Pierre, pottery fitting this description has thus far only been noted at the Lake George Site (ref. A).

Chronological Position

Lake Kings Crossing and/or Crippen Point phases (ref. A).

References

A - Williams and Brain n.d.

Chevalier Stamped

In Phillips (1970:64-65) introductory remarks to this type he noted that more varieties would need to be established as the type covers a very long period of time. Brain (Williams and Brain n.d.) followed this suggestion in establishing three new varieties of Chevalier Stamped, two of which (Lulu and Perry) are present in the Yazoo Bluffs region.

Chevalier Stamped, var. Chevalier (Plate 40d-e)

Sample - 4 sherds

Provenience

St. Pierre (3 sherds) - W41A; W49A; W94A
Lonely Frenchman (1 sherd) - W304B

Description

As defined by Phillips (ref. B). The main criteria in distinguishing this variety from the other varieties in this type is the occurrence of parallel vertical tracks of plain rocker stamping on ware equivalent to Baytown Plain, varieties Valley Park and Percy Creek (ref. C). Two (W41A; W49A) of the sherds from the Yazoo Bluffs region, although small, clearly show the stamping continuing right up to the lip. Such a design appears to have been fairly common at the Greenhouse Site (ref. A:pl.18,A-B,D-F), but it is characteristic of only one sherd illustrated by Phillips for the southern Yazoo Valley (ref. B:fig.374,e). All other illustrated specimens are confined to a band, their upper border being an incision located a short distance beneath the lip.

Chronological Position

Aden phase (ref. C).

References

- A - Ford 1951:81
- B - Phillips 1970:64-65
- C - Williams and Brain n.d.

Chevalier Stamped, var. Lulu

Sample - 3 sherds

Provenience

St. Pierre (3 sherds) - Y571C1, W56A, W80A

Description

Brain reduced Quimby's (ref. A) Lulu Linear Punctated to a variety of Chevalier Stamped and defined it as:

Rocker "stamping" with a forked instrument so that only the points of the arcs are impressed in the clay...Occasionally, the fork may have been lifted rather than rocked, but this is difficult to distinguish, and the decorative intent remains the same. The ware falls within the range of the Addis variety of Baytown Plain Addis Plain in this report (ref. C).

The Yazoo Bluffs sample corresponds to this definition.

Distribution

When Brain set up this variety it was recognized only from the Lake George Site (21-N-1) and Quimby's Medora Site (31-L-6), locations separated by 200 air miles. Steponaitis' (ref. B) one specimen from the Emerald Site (26-L-1) and my

three from St. Pierre (23-M-5) serve to close in the gap somewhat, but not very impressively.

Chronological Position

Crippen Point phase and perhaps later (ref. C).

References

- A - Quimby 1951:121-122
- B - Steponaitis 1974:128
- C - Williams and Brain n.d.

Chevalier Stamped, var. Perry

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y573A

Description

The sorting criteria for this variety is set forth by Brain:

The rocker stamping is somewhat sloppier than that characterizing the established variety...but the most significant difference is that the decoration is more open. Unlike Chevalier, where the arcs of the stamping are usually close together and the rows almost touching, the stamping has a broader swing to it in Perry and the rows are usually at least as far apart as they are wide. Thus, while the former gives a textured effect, the latter expresses a more linear decorative intent (ref. A).

This variety occurs on ware equivalent to Addis Plain, var. Addis, and the most common vessel form is the large flared rim jar. The single sherd from St. Pierre fits the criteria, but only just. The decoration is so poorly executed that it was almost not recognized as rocker stamping. Similar to the rim sherds classified as Chevalier, the stamping continues right up to the lip. The rim is tapered and the lip is flattened, with a slight internal rolling. The vessel form appears to be a beaker.

Chronological Position

Crippen Point phase (ref. A).

References

A - Williams and Brain n.d.

Chickachae Combed

One sherd (Plate 40f) from St. Pierre is of this type (Phillips 1970:65-66), but differs from the established variety in that its multiple combed lines are on ware equivalent to Addis Plain, rather than on a sandy-textured ware.

Chicot Red

Brain (1969:166-168) defined this type on the basis of the Winterville excavations, but later (Williams and Brain n.d.) included it as a variety of Larto Red. Steponaitis (1974:128-130) resurrected Chicot Red as a type and described it as a red slip on ware equivalent to Addis Plain. One sherd from St. Pierre (W119A) is of an unspecified variety of this type.

Churupa Punctated, var. Thornton (Plate 40g)

Sample - 1 sherd

Provenience

St. Pierre - Y558-27

Description

As defined by Phillips (ref. A).

Chronological Position

Issaquena phase (ref. B)

References

- A - Phillips 1970:68-69
- B - Williams and Brain n.d.

Coleman Incised

The establishment of Coleman Incised as a type was a last minute decision by Phillips (1970:69). A sizeable quantity of sherds from the southern Yazoo Basin fit the decorative criteria of Winterville Incised, the exception being that they lacked shell as a tempering agent. He thus set up a new type to include curvilinear incised sherds on pastes other than Mississippi Plain. Only one variety was set up and this naturally was called Coleman. Sorting criteria consisted of incised or "trailed" lines in simple curvilinear patterns on Baytown Plain, var. Addis paste. Hally (1972:280-294) did not find the criteria of temper to be sufficient enough reason to

rationalize a new type in the Tensas Basin, so he classified the clay-tempered forms under Winterville Incised, varieties Winterville and Belzoni, depending upon the width of the incisions. Brain (Williams and Brain) retained Coleman Incised, preferring not to cross temper lines. Unlike Hally, he did not distinguish between width of incisions, but he did separate the "trailed" from the wet paste incisions, the former being sorted as Leland Incised, var. Bethlehem. This is a useful refinement, because Winterville Incised, Coleman's close relative according to Phillips, is characterized by wet paste incisions alone in Phillips' report. Steponaitis (1974:130-132) continued to refine the type, breaking it down into two varieties. The varieties Coleman and Bass were set up according to the width of the incisions (after Hally) but, following Brain, Coleman Incised was retained as a type because of his unwillingness to cross temper lines. I share this unwillingness.

Coleman Incised, var. Coleman

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - W53A

Description

Steponaitis (ref. C) described this variety according to the criteria set forth by Hally:

Decoration is exclusively by incision with a narrow pointed tool in wet paste. Lines average about 1 mm in width and are at least that deep. Wet, burred lines are quite characteristic. Occasionally, the burr is smoothed over. Festoons consistently arranged in an imbrication pattern is the sole design that has been identified (ref. A).

Coleman's main distinction from Winterville Incised, var. Winterville is that its ware is equivalent to Addis Plain, var. Addis. The single specimen from the Yazoo Bluffs region fits the above criteria, but adds little information on design or vessel form.

Chronological Position

Anna phase in the Natchez region (ref. C) and Crippen Point and perhaps continuing into the Winterville phase in the southern Yazoo Valley (ref. D).

References

- A - Hally 1972:280-284 (included under Winterville Incised, var. Winterville)

- B - Phillips 1970:69
- C - Steponaitis 1974:131-132
- D - Williams and Brain n.d.

Coleman Incised, var. Bass (Plate 41a)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y592A

Description

This is the "clay-tempered" equivalent of Winterville Incised, var. Belzoni, which Hally (ref. A) included as such in his work in the Tensas Valley. Steponaitis (ref. B) noted temporal distinctions between it and Coleman Incised, var. Coleman, and so established a new variety. The sorting criteria is as follows:

Broad, curvilinear incisions, carelessly made in a wet paste. These incisions are usually from 2-3 mm wide and generally have rough, burred edges. The design consists of multiple parallel lines in short areas, or "festoons", arranged in an overall imbricated pattern. The only vessel form identified thus far is the large beaker-like jar with a slightly flaring rim and a faintly constricted neck (ref. B).

The ware in Steponaitis' sample is equivalent to Addis Plain, varieties Addis and Junkin (see Steponaitis 1974:119-120). The single specimen from St. Pierre indicates this variety also occurs on Addis Plain, var. Greenville.

Distribution

Steponaitis recorded this variety as occurring in only the Natchez region and the Upper Tensas Basin. Although the Yazoo Bluffs sample contributes little to the defining criteria of Bass, it does extend its known range somewhat to the north.

Chronological Position

Foster phase in the Natchez region (ref. B).

References

- A - Hally 1972:280-284 (included under Winterville Incised, var. Belzoni)
- B - Steponaitis 1974:132

Coles Creek Incised

Phillips (1970:69-76) set up this type to include all "clay-tempered" pottery with incised lines running parallel to the rim. This greatly expanded the original definition of this type (Phillips et al.1951:96-97; Ford et al.1955:95), yet at the same time he included within it twelve varieties which served to break the temporal and spatial dimensions into more discrete units. Brain (Williams and Brain n.d.) continued to refine the type in creating additional varieties for the southern Yazoo Basin. Seven Coles Creek Incised varieties are represented in the Yazoo Bluffs sample.

Several sherds are classified as Coles Creek Incised, var. Unspecified (Table 11), either because they are too small to be identified, or because they are just plain anomalous. Two (Plate 43d-e) of the latter have the "Six Mile" treatment, a decoration consisting of a series of punctations beneath an incised line. This mode is typically seen on Baytown Plain and Larto Red sherds (Phillips 1970:fig.62g-m). The two sherds in this collection have an incised line situated between .7 cm and 1.0 cm beneath the rim, the punctations located directly beneath it. Brain (Williams and Brain n.d.) set up a new variety of Coles Creek Incised called Phillips. This variety is very much like Hunt (Phillips 1970:74-75), in that each are characterized by lines running parallel to the lip which are incised with a pointed instrument. They also are contemporary, they being the first Coles Creek designs to appear in the Yazoo Valley. They differ, however, in that Hunt has two or more lines whereas Phillips has only one. Furthermore, Phillips

often has a line incised in the lip, an attribute not shared by Hunt. Brain elevated this rim mode to variety status and noted:

That we have chosen to set it off [from Hunt] recognizes reality, as well as what might be a further evolution in our classification that might lead to varietal status for such other rim modes as the Six Mile treatment (Williams and Brain n.d.).

The similarities between the two Unspecified sherds in the Yazoo sample and variety Phillips is striking, but they do not have incisions in the lip. They are probably contemporary with Phillips and Hunt (Bayland phase), but as there are so few specimens represented thus far in the Yazoo Bluffs region, I hesitate to similarly elevate them to varietal status.

Coles Creek Incised, var. Coles Creek (Plate 41 c-d)

Sample - 16 sherds

Provenience

Portland (2 sherds) - Y501A; Y504B
 St. Pierre (13 sherds) - Y660A; W14A; W20A; W21A; W31A;
 W39A(2); W40A; W49A; W71B1; W80B; W113A1; W122A
 Lonely Frenchman (1 sherd) - W301G

Description

As defined by Phillips (ref. A). Vessel shapes represented in the Yazoo Bluffs sample are beakers and bowls.

Chronological Position

Aden phase (ref. B).

References

- A - Phillips 1970:70
- B - Williams and Brain n.d.

Coles Creek Incised, var. Blakely (Plate 41e-f)

Sample - 4 sherds

Provenience

St. Pierre (4 sherds) - Y569A; Y574A; Y663A; W69A

Description

As defined by Phillips (ref. A). The beaker vessel form

is represented in the Yazoo Bluffs sample.

Chronological Position

Kings Crossing phase (ref. B).

References

- A - Phillips 1970:70-71
- B - Williams and Brain n.d.

Coles Creek Incised, var. Campbellsville (Plate 41g)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y660A

Description

As defined by Phillips (ref. A), except that the first

incised overhanging line in the single specimen from the Yazoo Bluffs does not occur some distance below the lip, as in Coles Creek Incised, var. Greenhouse (Phillips 1970: 72-73). Rather, it begins immediately below the lip. There are two incised lines in the lip of this sherd.

Chronological Position

Aden phase (ref. B).

References

- A - Phillips 1970:71
- B - Williams and Brain n.d.

Coles Creek Incised, var. Hardy (Plate 42 a-c)

Sample - 17 sherds

Provenience

St. Pierre (16 sherds) - Y558-31C; Y561A; Y565A; Y576A; TLH; T6A; W1A; W7A; W11A; W21A; W23A; W24A; W51A; W66A1; W72B; W98A

Lockguard (1 sherd) - W366A

Description

As defined by Phillips (ref. A), the only difference being that none of the sherds in the Yazoo Bluffs sample have a row of punctations beneath the bottom line. This absence may of course in part be related to the size of the sherds.

Chronological Position

Crippen Point phase (ref. D).

References

- A - Phillips 1970:73-74
- B - Steponaitis 1974:133-134
- C - Rucker 1976:53
- D - Williams and Brain n.d.

Coles Creek Incised, var. Mott (Plate 42d-f)

Sample - 22 sherds

Provenience

Portland (2 sherds) - Y501A; Y506B
 St. Pierre (19 sherds) - Y561A; Y578A; Y662A; W5A(2); W14A;
 W17A1; W19A1; W27A; W36A; W39A; W41A; W43B; W49A;
 W51A; W59A1; W61A; W63A; W70A
 Lockguard (1 sherd) - W362A

Description

Phillips described Mott as a "close-spaced Coles Creek," the difference being that there is a less of a tendency for the lines to overhang, and the rims are thinner than Coles Creek and taper toward the lip. Phillips noted the trouble he had in originally deciding whether sherds (now designated as Mott) should be sorted as a late variant of Coles Creek or a "close-spaced Hardy." Even with the creation of the Mott variety, the problems do not abate, as I find myself continually debating between whether a sherd should be sorted as Mott or Coles Creek, or as Hardy or Mott. With the exception of a few sherds, the specimens classified as Mott in the Yazoo Bluffs sample do not share the excellence of those illustrated in Phillips' volumes (ref. A:fig.24a-m;182h-k). However, I assume Phillips depicted those sherds which most ideally reflect the Mott variety. The main criteria by which I have classified Mott are the relative close-spacing of the lines and a slight overhang. The first is to distinguish it from Coles Creek and the second from Hardy.

I do not see the paste as being equally important. Had the sherds been undecorated, most would have been sorted as Baytown Plain, var. Vicksburg (as they should be), but some would have unhesitatingly ended up in Baytown Plain, var. Valley Park and others would have been thrown in an Addis Plain box.

Vessel shapes represented in this collection are beakers and jars. Eight of the specimens have their rims intact. Four of the rims taper and end in a flat lip, two of which have a very slight exterior roll. Three other rims do not taper, but do end in a flat lip. The last rim similarly fails to taper and is rounded.

Chronological Position

Kings Crossing phase (ref. B).

References

- A - Phillips 1970:75-76
- B - Williams and Brain n.d.

Coles Creek Incised, var. Stoner (Plate 43a-b)

Sample 5 sherds

Provenience

St. Pierre (5 sherds) - Y558-31H; Y566A; Y577A; W27B; W51A

Description

Phillips (ref. A) described Stoner as having a single overhanging incised line placed low beneath the lip of large shallow bowls. Also characteristic of this variety is an incised line on a broad flat lip. The sample in this study conforms to the first part of the classification, yet lacks an incision in the lip. There are only two lips in the sample, one of which is squared (Plate 43a). The other thickens slightly about 7 cm beneath the lip and then rapidly tapers, resulting in a thin flat lip (Plate 43b).

Chronological Position

Bayland phase (ref. B).

References

- A - Phillips 1970:76
- B - Brain and Williams n.d.

Coles Creek Incised, var. Wade (Plate 43c)

Sample - 2 sherds

Provenience

St. Pierre (2 sherds) - W14A; W80B

Description

Phillips (ref. A) described Wade as a, "Not altogether satisfactory variety." I agree! The criteria of classification consists of two to three horizontal lines showing a tendency to overhang, the implement of incision being a pointed instrument. Occasionally a row of punctations is placed below the bottom line. The similarity between Wade and Coles Creek Incised, var. Chase (Phillips 1970:71-72) is obvious, the latter differing only in that the lines are placed on a narrow rim strap. Brain (ref. B) noted that Chase can have a line incised within the lip, but Wade does not.

One sherd (W14A) in the Yazoo Bluffs sample poses a dilemma, for there are two incised slightly overhanging lines located beneath the lip, but not on a rim strap - obviously Wade. However, there are no punctations beneath the last line and

there is an incision in the lip. I have classified it as Wade as it seems to fit this variety best.

Another sherd (Plate 43c) is a mixture of Wade and Stoner (see p.642), for there are two overhanging incisions (characteristic of Wade but not of Stoner) and the placement is located low beneath the lip (typical of Stoner but not of Wade). It was an arbitrary decision as to how this sherd was sorted.

The blend of these three varieties, as represented in these two sherds, is a nice reflection of their close relationship. Brain (ref. B) placed them all in the same set as contemporary varieties, so it is understandable that there is some sharing of the various attributes.

Chronological Position

Bayland phase (ref. B).

References

- A - Phillips 1970:76
- B - Williams and Brain n.d.

Cracker Road Incised

The decision for creating this new type was not an easy one.

As the collections started to come in from Portland in 1974, it was noticed that a good deal of material exhibited typical Fatherland Incised, var. Fatherland designs, yet had as a ware Mississippi Plain, var. Yazoo. This was an exciting discovery because it began to become apparent that the Yazoo Bluffs region was a frontier in which a blending of a southern decoration with a northern ware had occurred in the late Mississippi period. Material was sorted as "Fatherland (on Yazoo)" in both the artifact files and in my Master's Thesis (Brown 1975), with the notation that this unwieldy classification would eventually have to be broken down and set up as a new variety of Fatherland Incised. When emphasis was shifted to the site of St. Pierre in 1974, "Fatherland (on Yazoo)" continued to be found in some quantity, as well as a new variant - "Fatherland (on St. Pierre)" which was believed to be related to the red-painted treatment of Fatherland Incised so common at the type site (see discussion of Fatherland Incised, var. Snyder's Bluff).

When the time finally came to establish new varieties of Fatherland Incised, it was discovered that such a move would be glaringly inconsistent with the overall typology. Paste distinctions led Brain, Phillips, and Steponaitis to separate identical decorations on the type level of analysis, such as Grace Brushed vs. Plaquemine Brushed (Williams and Brain n.d.) and Pouncey Ridge-Pinched vs. Hollyknowe Ridge-Finched (Phillips 1970:88-90; 154-155), as well as on the varietal level, such as Coleman Incised, var. Bass vs. Winterville Incised, var. Belzoni (Steponaitis 1974:130-132). To cut across temper lines

in regard to these shell-tempered variants of Fatherland Incised would not only be inconsistent, but it would tend to minimize significant deviations from Fatherland Incised which may be important on the type level. The new type is Cracker Road Incised, named after the ridge road passing through the Yazoo Bluffs region. It was used by the "Yankees" during the siege of Vicksburg and hence acquired this name. Variety Cracker Road is equivalent to what I earlier called "Fatherland (on Yazoo)" and var. Souel is equivalent to "Fatherland (on St. Pierre)." Three sherds from St. Pierre, which otherwise would have been classified as Cracker Road, occur on Mississippi Plain, var. Montfort. For now I have recorded them as var. Unspecified, but eventually a new variety may be created to accomodate them.

Cracker Road Incised, var. Cracker Road (Figures 15 & 16; Plate 44)

Sample - 113 sherds

Provenience

Portland (22 sherds) - Y500A(3); Y501A(2), Y501B(4);
 Y502AF.1(3); Y505A1; Y506B(2); Y506C(2); Y506C2(3);
 Y506C3(2)
 St. Pierre (84 sherds) - Y550A1; Y558-9A(4); Y558-14(Y574);
 Y558-31B(13); Y558-31D; Y558-31F(16); Y558-31H(4);
 Y559A; Y561A; Y565A; Y566A; Y567J; Y567Q; Y575A(2);
 Y76A; Y577A; Y578A(4); T4A; T8A; Y600A; Y601A(4);
 Y603A; Y604A; Y640A(2); Y641A(2); Y645A; Y646A;

Y646B(2); Y647B; Y660A; W13A; W16A; W45A;
 W49A; W50A; W61A; W63A; W122A; unlabeled(3)
 Lockguard (4 sherds) - W358A; W365A; W367A; W370A;
 Wright's Bluff (3 sherds) - W330A(2); W334B
 Comments - 13 sherds from Y558-31B (and 67 sherds classified
 as Mississippi Plain, var. Yazoo) same partial
 vessel (simple bowl: rim diameter - 15.0 cm;
 depth - 9.2 cm)
 16 sherds from Y558-31F and 4 sherds from Y558-31H
 same partial vessel (simple bowl; rim
 diameter - 16.5 cm; depth - 10.7 cm)

Description: New Variety

Similar to Fatherland Incised, var. Fatherland, Cracker Road has multiple parallel lines incised with a pointed instrument. The incisions are generally cruder than that observed on Fatherland, but are similarly no greater than 1 mm in width. The "sun burst" motif of lines radiating out from circular incisions in scroll-like patterns is particularly typical, but rectilinear decorations are equally as common, the curvilinear and rectilinear treatments often occurring on the same vessels (Figure 15). The combination of angular and curvilinear designs is characteristic of Chickachae Combed, but on a sandy-textured ware (Phillips 1970:65-66). These two treatments have also been observed on Fatherland from the Fatherland Site (Ford 1936:fig.12K; Neitzel 1965:fig.19e,g, i, j, l, o, p; Quimby 1942:pl.Xiii6, 7, 9), from Angola Farm (Ford 1936:fig.27e; Quimby 1942:pl.XIVI), from Bayou Goula (Quimby 1942:pl.XIII5), from Natchez Fort (Ford 1936:fig.13a), and from the Trudeau Site (Brain et al. n.d. b), but not in any

great frequency. Perhaps what is being observed in the Yazoo Bluffs region is the merging of ceramic elements from northern, southern, and eastern regions. Similar to Steponaitis (1974: 136-137), I have decided not to distinguish, on the varietal level, between the number of lines used in forming the design. As with Fatherland Incised, var. Fatherland, 2 - line and 3 - line treatments often occur on the same vessel (Figure 15). However, it may be of some use to others using this material to know the number and provenience of the different treatments. They are listed below:

Treatments

2-line - Sample - 44 sherds

Provenience

Portland (3 sherds) - Y501A(2); Y502F.1
 St. Pierre (41 sherds) - Y550A1; Y558-31B(13); Y558-31F(16);
 Y558-31H(4); Y567J; Y575A; Y578A; Y603A; Y645A;
 Y647B; Y660A

3 - line - Sample - 33 sherds

Provenience

Portland (9 sherds) - Y500A; Y501B(2); Y502F.1(2); Y505A1;
 Y506B; Y506C; Y506C3
 St. Pierre (22 sherds) - Y558-31D; Y559A; Y561A; Y567Q;
 Y576A; Y578A(3); T4A; T8E; Y600A; Y601A; Y640A(2);
 Y641A(2); Y646A; Y646B(2); W45A; unlabeled(2)
 Lockguard (1 sherd) - W358A
 Wright's Bluff (1 sherd) - W330A
 Comments - 2 sherds from Y646B same vessel

4 - line - Sample - 4 sherds

Provenience

Portland (1 sherd) - Y501B
 St. Pierre (3 sherds) - Y604A; W13A; W16A

The 2-line treatment is the most common, particularly at St. Pierre, but this is because of the two partial vessels found in the moat (Figure 15 & 16). The 3-line treatment also has a healthy representation, but the 4 (or more) - line variant is rare. The simple bowl is the only vessel form represented. Rims are slightly restricted and lips are squared or rounded. In at least one case there is a slight interior folding of the lip.

Sorting Criteria

Same as defined for Fatherland Incised, var. Fatherland, except the ware is equivalent to Mississippi Plain, var. Yazoo.

Distribution

Two sherds of Cracker Road were found at the Foster Site (26-K-3) in the Natchez region and a jar of this variety was found at the Keno Site on the Ouachita River by Clarence B. Moore (Steponaitis-personal communication). I have also examined an effigy bowl of this type at the Leflore Site (18-P-3) (Brown 1978a). It is obvious that much still remains to be learned about its distribution. On the basis of its strong presence in the Yazoo Bluffs region, I believe we are not too far removed from its center of distribution. An interesting spatial distribution occurs at the St. Pierre Site, almost the entire sample being confined to the area of the 1974 excavations. Such an arrangement also characterizes Leland Incised, var. Williams.

Chronological Position

Russell phase and possibly late Wasp Lake phase.

References

None

Cracker Road Incised, var. Souel (Plate 45a-c)

Sample - 9 sherds

Provenience

St. Pierre (9 sherds) - Y550E1; Y558-3; Y560A; Y576A; Y578(2);
W20A; W41A; W43A

Description: New Variety

This is hardly a dramatic sample to warrant the establishment of a new variety, but I believe there is some utility in its existence. Soon after excavations began at St. Pierre in 1974, sherds started to appear which had a paste ranging from a "broken-down" Addis Plain, var. Holly Bluff to a Mississippi Plain, var. Yazoo, and which had been painted with a substance which had turned pink upon firing. Vin Steponaitis hypothesized that the substance was vermilion, an interesting suggestion and one that still requires testing. Whatever it is, I soon started to call sherds possessing these characteristics Old Town Red, var. St. Pierre. Not long after, sherds with a Fatherland Incised design on this pink paint started to appear. These were hence classified as "var. Fatherland (on St. Pierre)", a somewhat unwieldy designation. Once Cracker Road was set up to handle the shell tempered variants of Fatherland, the decision to establish another variety under this new type was but one

step removed. The variety is named after the Jesuit missionary who was killed at the Yazoo Post in 1729.

Sorting Criteria

Finely executed narrow multiple incisions made with a pointed instrument in designs probably (?) similar to Fatherland Incised, var. Fatherland. Ware ranges from a debased form of Addis Plain, var. Holly Bluff to Mississippi Plain, var. Yazoo and the vessels are painted with a thick pink paint comparable to Old Town Red, var. St. Pierre. Forms represented at the site of St. Pierre are small simple bowls.

Distribution

Thus far, this variety has only been found at the site of St. Pierre. Its absence at Portland is of some interest because, it is believed on the basis of other ceramics (see Winterville Incised, var. Tunica and Owens Punctated, var. Redwood) that the terminal occupation of Portland dates at least 15 years earlier than the initial occupation at the fort. Souel may hence be a marker for the local aboriginal occupations (Yazoo, Koroa, Ofo) contemporary with the Yazoo Post. It is also of some interest that the variety has not been found at the Haynes Bluff site (Brain-personal communication).

Chronological Position

Russell phase

References

None

Evansville Punctated, var. Evansville (Plate 45d-f)

Sample - 5 sherds

Provenience

St. Pierre (5 sherds) - W13A; W44A; W65A1; W71B1(2)
Comments-2 sherds from W71B1 same vessel

Description

As described by Phillips (ref. A). All sherds, but one, of this variety in the Yazoo Bluffs sample have punctations formed by use of an instrument other than fingers.

Chronological Position

Baytown period (ref. B).

References

- A - Phillips 1970:78-79
- B - Williams and Brain n.d.

Evansville Punctated, var. Braxton (Plate 46a-b)

Sample - 2 sherds

Provenience

St. Pierre (2 sherds) - W80A; W102A1

Description

As defined by Phillips (ref. A).

Chronological Position

Issaquena phase (ref. B).

References

- A - Phillips 1970:79-80
- B - Williams and Brain n.d.

Evansville Punctated, var. Rhinehart (Plate 46c-d)

Sample - 11 sherds

Provenience

St. Pierre (10 sherds) - Y558-3; Y558-10; Y558-31F; W30A1;
W39A; W45A; W50A; W96A(2); W117B
Lockguard (1 sherd) - W360A1

Description

As defined by Phillips (ref. A).

Chronological Position

Kings Crossing phase (ref. B).

References

- A - Phillips 1970:80-81
- B - Williams and Brain n.d.

Evansville Punctated, var. Sharkey

Sample - 5 sherds

Provenience

St. Pierre (5 sherds) - Y566A; W40A; W47A; W66A1; W110A

Description

As defined in Phillips (ref. A).

Chronological Position

Crippen Point phase (ref. B).

References

- A - Phillips 1970:81
B - Williams and Brain n.d.

Fatherland Incised

Fatherland Incised has been a very lively type. It was described first by Ford and Willey (1940:56) and continued through the archaeological literature in such works as Jennings (1941:178), Quimby (1942:263-264; 1957:123) and Neitzel (1965:19-20). Based upon design similarities, Phillips (1970:106) reduced this type to a variety of Leland Incised. As a result of several seasons work in the Natchez region, the area where Fatherland designs are most popular in the Mississippi Period, Steponaitis (1974: 134-138) noted a good deal of diversity and felt compelled to resurrect this short-lived variety to its former type status. His decision seems a useful one, and I will not tamper with it much in this volume. As discussed earlier, a number of shell-tempered varieties of Cracker Road Incised have been set up. These are, to all intents and purposes, identical to Fatherland Incised,* the difference being that the ware is Mississippi Plain. The reason for not setting up additional varieties of Fatherland Incised has been discussed earlier (see pp. 645-647). The creation of a new type does not confuse

* Although not identical to var. Fatherland.

the literature because, to my knowledge, sherds which have been classified as Cracker Road Incised have not been found in any frequency outside the Yazoo Bluffs region. Nor does this new type put the revived Fatherland Incised in jeopardy, because I have done nothing to detract from Steponaitis' work. Once the shell-tempered forms in the Yazoo Bluffs sample were separated from those on ware equivalent to Addis Plain, the remaining sherds conformed remarkably well with the established Fatherland variety.

Red-painted Fatherland Incised sherds have been classified as var. Snyder's Bluff, but a number of sherds could not be sorted as to variety (Table 11). Two of the Unspecified specimens deserve some mention. One (Plate 48c) has a large finely incised oval on ware equivalent to Addis Plain, var. Greenville. The other (Plate 48b) would have unhesitatingly been classified as Fatherland had it not been for some combing filling the space between sets of multiple incisions.

Fatherland Incised, var. Fatherland (Plate 47)

Sample - 122 sherds

Provenience

Portland (14 sherds) - Y500A(3); Y501B(2); Y502AF.1(4);

Y505C2; Y506A(2); Y506B; Y506C3
 St. Pierre (109 sherds) - Y550A1; Y550C1; Y550F1; Y550H1(3);
 Y553A; Y558-3; Y558-9(Y550F1); Y558-9(Y578)(3);
 Y562A; Y565A; Y569A; Y571A1; Y575A(4); Y576A(2);
 Y578A(2); Y579A(6); Y593A; T5D; T8F(2); T9B1;
 T9E; T11B(2); T12E(2); T12F; Y601A(4); Y603A(2);
 Y604A(3); Y640A; Y640B; Y641A; Y641B; Y642A;
 Y643A; Y646A(2); Y647B(2); W1A; W5A(2); W11A;
 W20A; W21A(2) W27B; W32A; W39A; W40A; W41A(2) W43A;
 W43B; W44A; W45A(2); W50A; W52A; W53A; W55A; W55B;
 W58A1; W59A1(2); W63B; W69A; W71B1; W72A(2); W72B;
 W74A(4); W76A; W77A; W80A; W80B; W97A; W110A;
 W117B; W12A(2); W120AB; W122A(2); unlabeled(1)
 Comments - 2 sherds from Y550F1 same vessel
 Y550H1 and Y579A same vessel
 2 sherds from T11B same vessel
 2 sherds from T12E same vessel

Description

In addition to making Phillips' Leland Incised, var.
Fatherland (ref. A) a variety of Fatherland Incised, Steponaitis
 (ref. B) got rid of the two-lined Natchez variety (Phillips
 1970:107) by including it along with the three-lined variant
 under Fatherland. Following Steponaitis, the sorting criteria
 for Fatherland now consists of crude multiple (2 or 3) narrow
 incisions, less than 1 mm wide and sometimes a mere scratch,
 arranged in simple running scrolls and meander patterns on ware
 equivalent to all the varieties of Addis Plain. His decision
 to lump variety Natchez under Fatherland was based upon the
 lack of stratigraphic distinction between the two and three-
 lined treatments. He noted that in at least one case the
 two treatments occur on the same vessel. A similar situation
 exists in the Yazoo Bluffs region. The sherd illustrated in

Plate 47d has both treatments, this being the only specimen in the collection which has the two-lined treatment at all. The rest of the material has either three lines or the sherds are broken at a point where the amount of lines cannot be discerned.

By far the majority of Fatherland has been found at the St. Pierre Site. Portland has a fair ~~sample~~ of this variety, but the sherds are somewhat distinct from those recovered at St. Pierre. The surface of the sherds are very hard and have been polished. The incisions were made when the paste was dry and the tracks are thus very rough and somewhat deeper than the majority of those from St. Pierre. Fatherland vessel forms represented at St. Pierre are simple and restricted bowls and an olla. Straight rims are most typical and a slight interior thickening occurs on one of the rims.

Two anomalous Fatherland sherds were recovered from St. Pierre. One (Plate 47f) has randomly placed ill-executed lines running perpendicular to the meandering incisions. Another has broadly-spaced incisions on the exterior of what was probably a plate, but the typical 3-line design on the interior. Had the interior decoration been absent, this sherd would have been classified as Fatherland Incised, var. Stanton (Steponaitis 1974:138). The idea of making interior and exterior incisions on the same vessel is equivalent to the earlier Ieland Incised, var. Bovina. This demonstrates the hazy border between these types and the unwillingness of past populations to let us have a tidy typology.

Distribution

Phillips noted that Fatherland occurs primarily in the area between the Bayou Goula Site (32-L-1) and the Natchez region, with only scattered finds occurring to the north and east. The Fatherland sample recovered from the Yazoo Bluffs region is more than a "scattered find". There is actually quite a bit in comparison to most other ceramic varieties. This area does, however, "appear" to be its northern limit.

Chronological Position

Fatherland has been dated stratigraphically to the Emerald and Natchez phases in the Natchez region (ref. B). The core Natchez area (i.e. sites surrounding the city of Natchez) and the Glass Site (24-M-2) do appear to be the areas where this variety originated, was most popular in, and spread out from. Fatherland occurs in the Wasp Lake phase (ref. D), but it does not seem to be a significant marker for this phase. This variety is more common in the Yazoo Bluffs region in the historic Russell phase.

The high frequency of Fatherland at Fort St. Pierre, as compared to surrounding Indian sites, is of particular interest. As discussed in the text (see pp. 183, 431), a considerable amount of native material came into the fort from the local

aboriginal population, but some probably also came from the south. Contact between the Natchez and Yazoo Bluffs regions increased as a result of French settlement, including the moving around of Indian women as slaves and/or wives (see p. 153). I believe that a good deal of the Fatherland material could have been coming up from the Natchez region as a result of this increased interaction. Cracker Road Incised, var. Cracker Road, most certainly a historic pottery, may be the local copy of this southerly design.

References

- A - Phillips 1970:106
- B - Brain et al. n.d.a
- C - Steponaitis 1974:136-137
- D - Williams and Brain n.d.

Fatherland Incised, var. Snyder's Bluff (Plate 48b-c)

Sample - 3 sherds

Provenience

St. Pierre (2 sherds) - Y550E1, Y558-14(Y571B,C)
 Lockguard (1 sherd) - W352A

Description: New Variety

The attribute of red paint on vessels of Fatherland Incised has long been noted in the literature. It was a very common find at the Fatherland Site (ref. A and B), but curiously, neither Steponaitis (1974) nor Cotter (1951) made mention of it being at the Emerald, Foster, or Anna Sites, three of the principal Mississippi period mound complexes in the Matchez region. A recent discussion with Steponaitis has revealed that several red-painted Fatherland sherds were recovered in Cotter's excavations at Emerald (Steponaitis-personal communication). Not enough, however, to seriously refute the interpretation that it is primarily a historic treatment. The decision to set up the addition of red paint as a new variety of Fatherland Incised was prompted by the separation of Cracker Road Incised, var. Souel from var. Cracker Road. Souel appears to have spatial distinctions from Cracker Road within the historic Russell phase, and may be reflective of ethnic differences. Once this separation was made, it was an obvious next step to separate red-painted Fatherland Incised from the established Fatherland variety. As yet, the distinction between the painted and non-painted forms of Fatherland has not been demonstrated stratigraphically, but the heavy concentration at the Fatherland Site, with only minor occurrence at one of the other major mound centers in the same vicinity, suggests there are chronological distinctions between the varieties. The

establishment of Snyder's Bluff facilitates a more rigorous investigation of their relationship.

Sorting Criteria

Same as for the established Fatherland variety (Steponaitis 1974:136-137), but with the addition of red paint.

Distribution

This variety is associated with historic Indian (Natchez, Tunica, etc.) sites stretching from the area around the mouth of the Red River in Louisiana north to the Yazoo Bluffs region.

Chronological Position

Russell phase in the Yazoo Bluffs region, and Natchez and perhaps Emerald phases in the Natchez region.

References

- A - Neitzel 1965:46-47; Fig. 20n (included in Fatherland Incised)

B - Quimby 1942:263-264 (included in Fatherland Incised)

French Fork Incised, var. McNutt (Plate 48d-e)

Sample - 2 sherds

Provenience

St. Pierre (2 sherds) - W64A1; W86A

Description

As defined by Phillips (ref. A).

Chronological Position

Kings Crossing phase (ref. B).

References

- A - Phillips 1970:86
- B - Williams and Brain n.d.

Grace Brushed

Phillips (1970:152-153) included in the type Plaquemine Brushed a "clay-tempered" variety (Plaquemine) and a shell-tempered variety (Grace), but noted that the crossing of temper lines is inconsistent with the general typology. He felt their inclusion in the same type is justified on the basis of stratigraphic continuity. Brain (Williams and Brain n.d.) and Steponaitis (1974:140) preferred to highlight the distinctions, as well as follow the "rules" of the typology, and so they established Grace Brushed as a type.

Grace Brushed, var. Grace (Plate 49a)

Sample - 10 sherds

Provenience

Portland (7 sherds) - Y501B; Y506B(4); Y506C3(2)
St. Pierre (3 sherds) - Y603A; W27A; unlabeled (1)

Description

As described in Phillips (ref. A).

Chronological Position

Brain (ef. C) dated Grace to the Winterville phase in the southern Yazoo Basin. Steponaitis (ref. B) dated it to Anna and probably the Foster phase in the Natchez region. Phillips (ref. A) recorded it as being a late Mississippi period marker. On the basis of the frequency of its discovery at Portland, and especially the size of some of the specimens in the trash pits, I believe this variety continues (or perhaps reappears) into historic times in the Yazoo Bluffs region.

References

- A - Phillips 1970:153
- B - Steponaitis 1974:140-141
- C - Williams and Brain n.d.

Grace Brushed, var. Warren (Plate 49b)

Sample - 2 sherds

Provenience

Portland (1 sherd) - Y506C1
St. Pierre (1 sherd) - Y600A

Description

Jeffrey P. Brain has recently set up the variety Warren to account for incised lines occurring on brushed ceramics which would normally be classified as Grace:

Brushing occurs in rectilinear patterns on the exterior surface of coarse shell-tempered pottery. Incisions occur at varying intervals often at a slight angle to the brushing, sometimes forming triangular patterns (Brain - personal communication).

In the Yazoo Bluffs sample, the one sherd from Portland would have been classified as Leland Incised, var. Williams, were it not for the brushing.

Chronological Position

Wasp Lake phase (Brain - personal communication)

References

None

Harrison Bayou Incised, var. Harrison Bayou (Plate 49c-f)

Sample - 11 sherds

Provenience

St. Pierre (11 sherds) - Y566A; Y600A; Y642B; Y643B; Y645A;
W11A; W12A; W13A; W19A1; W41A; W72A

Description

As defined by Phillips (ref. A). The oblique cross-hatched lines were executed with a pointed instrument on a plastic paste on ware equivalent to Addis Plain, var. Addis. Similar to the sample collected at Pocahontas Mound A (ref. B), most of the designs are neatly executed. Rucker had a problem in classifying his material from Pocahontas. With the exception of having shell temper, all of the sherds sorted as Barton Incised, var. Barton, are identical typologically and stratigraphically to Harrison Bayou. A similar situation occurred at the Lake George Site, some of the Harrison Bayou sherds being recorded as having inclusions of shell in the temper (ref. D). What appears to have occurred is that Coles Creek period people, decorating their pottery with what we call Beldeau Incised, var. Beldeau (and later var. Bell Bayou), through time discarded the punctations and picked up shell tempering. That they sometimes used shell and at other times did not, even during the same phase, is a typological rather than a historical problem.

Steponaitis (ref. C), working in the Natchez region, and I

in the Yazoo Bluffs have not had to contend with this problem as our samples occur on Addis Plain, var. Addis paste.* Two of the Harrison Bayou sherds in the Yazoo Bluffs collection are rims. One has an incision occurring about .4 cm beneath the lip, below which are the cross-hatched lines. The other has incisions continuing up to the lip, the lip itself having a slight exterior rolling. The first mode is observed at Pocahontas (ref. B: fig. 22c, 23e) and is illustrated by Phillips (ref. A: fig. 33d, e, g). The second mode has similarly been recognized at Pocahontas (ref. B; fig. 23b-c) and elsewhere in the southern Yazoo Basin (ref. A: fig. 33a-c, j). Five of the specimens from the Yazoo Bluffs region could be measured, their lines ranging between .5 cm and 1.2 cm apart - fairly close-spaced cross-hatching.

Chronological Position

Crippen Point phase (ref. D).

References

A - Phillips 1970:87-88

* I do share an analogous problem in regard to Fatherland Incised and Cracker Road Incised, however.

B - Rucker 1976:57-60
C - Steponaitis 1974:141
D - Williams and Brain n.d.

Hollyknowe Ridge Pinched, var. Patmos (Plate 50a-c)

Sample - 5 sherds

Provenience

St. Pierre (4 sherds) - Y571B; Y575A(2); W108A
Lonely Frenchman (1 sherd) - W301F

Description

As defined in Phillips (ref. A).

Chronological Position

Late Crippen Point and early Winterville phases (ref. B).

References

A - Phillips 1970:90

B - Williams and Brain n.d.

Indian Bay Stamped, var. Shaw

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - W77A

Description

As defined by Phillips (ref. A).

Chronological Position

Marksville period (ref. A)

References

A - Phillips 1970:93

Larto Red, var. Larto

Sample - 2 sherds

Provenience

St. Pierre (2 sherds) - Y553A; Y558-31E

Description

As defined by Phillips (ref. A).

Chronological Position

Deasonville phase (ref. B).

References

- A - Phillips 1970:99
- B - Williams and Brain n.d.

Leland Incised - var. Leland (Plate 50d-e)

Sample - 21 sherds

Provenience

Portland (8 sherds) - Y501A(3); Y506B(2); Y506C; Y506C2(2)
St. Pierre (13 sherds) - Y554A; Y558-31D; Y558-76(3); Y561A;
Y564A; Y569A; Y577A(2); Y600A; Y641B; W30A1
Comments - 3 sherds from Y558-76 same vessel

Description

As defined by Phillips (ref. A). Phillips noted that the characteristic Leland rim has a narrow rounded strap with one or more horizontal lines on the exterior and one on the interior. All of the rim sherds from St. Pierre have one exterior line located directly beneath the roll of the rim. This roll, in all but two cases, has been somewhat flattened, much more and it would have been a rim strap. None of the rim sherds have interior incisions. One rim (Plate 50e) is merely squared, with a flat lip. This sherd is painted red on the interior and exterior.

Chronological Position

Winterville and Lake George phases (ref. B)

References

- A - Phillips 1970:104
B - Williams and Brain n.d.

Leland Incised, var. Bethlehem

Sample - 6 sherds

Provenience

St. Pierre (5 sherds) - Y558-31A; Y574A(2); T4B; W14A
Lockguard (1 sherd) - W377A

Description

In Phillips (ref. A) description of Coleman Incised, var. Coleman, he included both curvilinear incised and "trailed" decorations on Baytown Plain, var. Addis in his criteria. Brain removed the "trailed" forms from this type and set up a new variety of Leland Incised - var. Bethlehem. The sorting criteria is as follows:

Relatively crude "trailing" (i.e. incising with a blunt pointed instrument in "leather-hard" paste)

arranged in curvilinear patterns. The lines are not polished over. Favored motifs...include the whorl, meander and running scroll (ref. B).

The most important criteria in separating Bethlehem from Leland Incised, var. Foster (Steponaitis 1974:144-145) is the presence of a small amount of shell in the former. Ware is equivalent to Addis Plain, var. Greenville. According to Brain (ref. B), Bethlehem vessel forms are exclusively bowls.

Chronological Position

Winterville phase (ref. B).

References

- A - Phillips 1970:69 (included in Coleman Incised, var. Coleman)
- B - Williams and Brain n.d.

Leland Incised, var. Blanchard (Plate 50f-j)

Sample - 16 sherds

Provenience

Portland (9 sherds) - Y500A(2); Y501B; Y502A; Y506C;
 Y506C1(4)
 St. Pierre (6 sherds) - Y558-3; Y560A; W5A; W60A1; W64A;
 W94A
 Lockguard (1 sherd)
 Comments - 3 sherds from Y506C1 and Y506C same vessel
 W60A1 and W64A same vessel

Description

As defined by Phillips (ref. A), except that the sample from the Yazoo Bluffs region not only occurs on a slightly coarser ware than Addis Plain, var. Holly Bluff, but in some cases (e. g. Plate 50j) it also occurs on Mississippi Plain, var. Yazoo. The difference in ware warrants the creation of a new variety, but on the basis of the present sample size, I am not in a position to do so. The plate form is represented in the Yazoo Bluffs sample. One of the vessels (Plate 50j) has a tapered lip and a slight exterior roll which has small notches in it.

Chronological Position

Wasp Lake phase (ref. B).

References

A - Phillips 1970:105
 B - Williams and Brain n.d.

Leland Incised, var. Bovina (Plate 51a-d)

Sample - 15 sherds

Provenience

Portland (9 sherds) - Y500AF.1; Y501A; Y501B(2); Y502A(2);
 Y506B; Y506C1; Y506C2
 St. Pierre (6 sherds) - W20A; W42A(2); W59A1; W70A; W113A1
 Comments Y500AF.1 and 1 sherd from Y501B same vessel

Description

Jeffrey P. Brain (personal communication) defines this variety as consisting of simple curvilinear designs on both the interior and exterior surfaces of fine to medium textured, mixed shell-tempered pottery. The incisions are "trailed" and many are polished over.

The ware of the sample from the Yazoo Bluffs region is primarily Addis Plain, var. Holly Bluff, but the ware of some specimens is of a more degenerate form, a ceramic trend typical overall in protohistoric and historic times in this area. Similar to all the Leland varieties, the exterior rolled rim is

common. Some are rounded, others slightly flattened. As with var. Blanchard, festoons are the most common interior design.

Chronological Position

Wasp Lake phase (Brain - personal communication)

References

None

Leland Incised, var. Foster (Plate 51e)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - W86A

Description

As defined by Steponaitis, Foster is essentially the Addis

Plain, var. Addis equivalent of Leland:

...curvilinear designs similar to those found on var. Leland (Phillips 1970:104) carried out in trailed incisions, usually polished over, most commonly occurs on bowls of ware comparable to Addis Plain, var. Addis, var. Greenville, or var. St. Catherine (ref. A).

Distribution

Foster is commonly found in the Natchez region, but is rare this far north. The one sherd from the Yazoo Bluffs region emphasizes this scarcity.

Chronological Position

Foster phase and perhaps earlier in the Natchez region (ref. A).

References

A - Steponaitis 1974:144-145

Leland Incised, var. Russell (Plate 51f-k)

Sample - 77 sherds

Provenience

Portland (15 sherds) - Y415; Y500A; Y501A; Y502A(2); Y503A;
 Y505A1; Y505B2; Y506B(2); Y506C2(2); Y510B(3)
 St. Pierre (59 sherds) - Y558-4; Y558-9(Y550F1); Y558-9(Y578)
 Y558-20; Y558-31B(2); Y561A(2); Y566A; Y567P;
 Y570A; Y571B; Y577A; Y578A; Y592A; T1H; T4B; T4D;
 T8A; T9E; T18A; Y600A; Y642A; Y643A; W4A; W20A(3);
 W21A(3); W22A(2); W26A; W27A(2); W35A; W40A;
 W41A; W47A; W51A; W54A1; W58A1; W59A1(2); W61A(2);
 W62A1; W63A; W64A1; W70A; W76A; W77A(3); W96A;
 W108A; W120B(2)
 Lockguard (2 sherds) - W353A; W361A1
 Wright's Bluff (1 sherd) - W325A
 Comments - 2 sherds from Y502A same vessel
 2 sherds from W120B same vessel

Description

Brain (ref. B) subdivided Leland Incised, var. Dabney (ref. A) into two new contemporary varieties - Russell and Williams. Similar to Phillips' Dabney, the decorative treatment of Russell is essentially like that of Leland, in that parallel lines make up the design. It differs in that the lines tend to "wander". The ware is generally equivalent to Leland, but on the coarser end of the range. The only certain vessel form is the simple bowl.

Russell is common in the Yazoo Bluffs region, being particularly well represented at St. Pierre. The rims are generally the same as described for Leland, with a few notable exceptions. Most rims have been exteriorly rounded and, in some cases (as with Leland), have been flattened so that they

appear to have rim straps. Whereas interior incisions do not occur in the Leland sample from the Yazoo Bluffs, several Russell sherds do exhibit this attributed. One sherd (Plate 5lg) has an exterior lip punctation, while another (W27A) has oblique notches in the lip. One sherd (Plate 5lj) is interiorly thickened, a trait characteristic of Leland Incised, var. Foster (Steponaitis 1974:144-145).

Chronological Position

Wasp Lake and Russell phases (ref. B).

References

- A - Phillips 1970:105 (included in Leland Incised, var. Dabney)
- B - Williams and Brain n.d.

Leland Incised, var. Williams (Figure 246, Plate 52)

Sample - 52 sherds

Provenience

Portland (30 sherds) - Y415(8); Y502A(2); Y506B; Y506C(7);
 Y506C1(2); Y506C2(8); Y506C3; unlabeled(1)
 St. Pierre (22 sherds) - Y550A1; Y558-4(2); Y558-9(Y550F1);
 Y558-9A; Y571B; Y571C1; Y574A; Y576A; Y577A;
 Y578A; Y579A(4); T12G; Y604A; Y646B; W27B; W76A;
 W117A; W120A
 Comments - 8 sherds from Y415 same partial vessel
 7 sherds from Y506C and Y506C3 same vessel
 2 sherds from Y558-4, Y558-9A, and Y604A same
 vessel
 Y578A and 1 sherd from Y579A same vessel
 2 sherds from Y579A same vessel

Description

This is the shell-tempered equivalent of Leland Incised, var. Russell. When Brain (ref. B) subdivided Phillips' (ref. A) var. Dabney, Williams was sorted out as Leland decorations on Mississippi Plain, var. Yazoo. In terms of decorative technique, Williams is similar to Leland Incised, var. Deep Bayou (Phillips 1970:106), except that incisions are not as wide and, for the most part, fall within the range of Leland. The only known vessel form, according to Brain, is the large simple bowl. Heavy squared rims are typical. The Yazoo Bluffs sample essentially conforms to the above definition. Rims are squared, but not "heavy". The simple bowl and jar are the only forms represented. Designs composed of two parallel lines are most common, but three and more lines also occur. The jar from Portland, depicted in Figure 24b, has the typical scroll characteristic of Leland Incised, but the incisions were executed in a wetter paste than is usual for Williams. The

vessel comes close to Wallace Incised, var. Wallace, yet I feel still falls within the Williams range.

Distribution

Williams is equally represented at Portland and St. Pierre, unlike Russell which is most heavily represented at St. Pierre. As with Cracker Road Incised, var. Cracker Road, the distribution of Williams at the fort site is of some interest. It is almost entirely confined to the region of the 1974 excavations. Here, the Williams sherds are often found in sealed features and, compared to those few scattered throughout the rest of the site, are of quite a large size.

Chronological Position

Wasp Lake and Russell phases.

References

- A - Phillips 1970:105 (included in Leland Incised, var. Dabney)
- B - Williams and Brain n.d.

Maddox Engraved, var. Silver City (Plate 55a)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y646A

Description

As defined by Phillips (ref. A).

Chronological Position

Late Lake George phase (ref. B).

References

- A - Phillips 1970:109
- B - Williams and Brain n.d.

Marksville Incised

Only one Marksville Incised (Phillips 1970:110-111) sherd

was found. This was recovered from St. Pierre (W55A) and is of an Unspecified variety.

Marksville Stamped, var. Troyville (Plate 55b)

Sample - 4 sherds

Provenience

St. Pierre (4 sherds) - Y550C1; Y550F.1; Y558-42; Y575A

Description

As described in Phillips (ref. A).

Chronological Position

Issaquena phase (ref. B).

References

A - Phillips 1970:125-127

B - Williams and Brain n.d.

Mazique Incised

When Phillips (1970:129-130) set up the varieties Mazique, Kings Point, and Manchac of Mazique Incised, he noted that the varieties developed into each other in that order, paralleling a development observed in the transition of the Coles Creek Incised varieties, Coles Creek, Mott, and Hardy. However, the latter development took place in one period (Coles Creek), whereas the Mazique development started in the Coles Creek period and persisted into historic times. Phillips was aware of the extended duration of var. Manchac, and indicated that there is considerable room for its subdivision. Brain (Williams and Brain) did not further refine Manchac, because he found that the sample from the Lake George Site is essentially confined to the Crippen Point phase. Steponaitis (1974:148-152), working with a sample which mostly dates to the latter end of Phillips' Manchac, altered the typology by using Hally's (1972:310) variety Preston of Mazique Incised. He set this up as the variant of Manchac found at Lake George, and redefined Manchac to account for the later manifestations of Mazique Incised. He then went on to set up three variants within the Manchac variety, but decided not to break them up into additional varieties.

The separation of Preston from Manchac is a useful

distinction, because there is a significant temporal gap between their use (Winterville phase in the southern Yazoo Basin and Anna phase in the Natchez region). As Steponaitis readily admitted, however, the two varieties can be separated only if rims are in the sample. The only rims of Mazique Incised in the Yazoo Bluffs sample which approach his definition of the Preston rim are comfortably settled in the Kings Point pile and, on the basis of their decoration, I choose to leave them where they are. Thus, Preston is not represented in the sample from the Yazoo Bluffs region. Some of the body sherds, on the basis of paste, may be sorted as such, but I decided to throw them all into Manchac. Some of the rim sherds conform to Steponaitis' variants of Manchac and these will be discussed under this variety. A number of Mazique Incised sherds could not be sorted into varieties (Table 11). One sherd (Y550F1) looks almost as if it had been stamped.

Mazique Incised, var. Mazique

Sample - 4 sherds

Provenience

St. Pierre (4 sherds) - Y558-31H; W6A; W64A1; unlabeled(1)

Description

As defined by Phillips (ref. A).

Chronological Position

Aden phase (ref. B)

References

- A - Phillips 1970:129
 B - Williams and Brain n.d.

Mazique Incised, var. Kings Point (Plate 53a-d)

Sample - 24 sherds

Provenience

St. Pierre (23 sherds) - Y550C1; Y550L1; Y558-9(Y550F1)(2);
 Y558-9(Y578)(2); Y561A(2); Y571A1; Y577A; Y578A;
 Y603A; Y647B; Y910; W19A1; W25A; W26A; W27B;
 W33A1; W44A; W64A; W76A; W115A
 Lockguard (1 sherd) - W376A

Description

As defined by Phillips (ref. A).

Chronological Position

Kings Crossing phase (ref. B).

References

- A - Phillips 1970:129
- B - Williams and Brain n.d.

Mazique Incised, var. Manchac (Plate 53e-j)

Sample - 64 sherds

Provenience

St. Pierre (63 sherds) - Y550H1; Y550J1; Y558-3; Y558-9 (Y578); Y558-9(Y579); Y558-9A(5); Y558-10; Y558-31A; Y558-31E; Y559A; Y560A; Y565A(2); Y567H; Y574A; Y575A; Y576A; Y578A; T4C; T9B1; T9D; T10E; Y600A(2) Y601A; Y602A; Y604A; Y641B; Y642B; Y647B(2); Y662A; W2A; W7A; W11A(3);

W14A; W18A; W22A; W23A; W28A; W28B; W34A(2);
 W41A(2); W43A(2); W47A; W51A; W56A; W59A1;
 W61A; W63A; W69A; W80B(2); W106A
 Wright's Bluff (1 sherd) - W335B
 Comments - 1 sherd from Y600A and Y601A same vessel
 2 sherds from W80B same vessel
 Middle variant - Y550H1; Y558-9A(3); Y574A;
 Y578A; Y600A(2); Y601A

Description

In addition to separating the early variant of Manchac into Mazique Incised, var. Preston, Steponaitis (ref. B) set up a middle variant of Manchac which he described as follows:

The middle variant of Manchac is characterized by a broad and sloppy wet paste incision. In some cases, the lines are so broad and shallow and close-spaced that at first glance the sherd appears to have been brushed. Closer examination, however, always reveals that the lines were made individually. Diagnostic of middle variant is a broad exterior rim strap. Sometimes, the strap tends to be narrower and more rounded, and has the appearance of being "rolled"...The vessel form is invariably the beaker-like jar, with a faintly defined neck and a slightly outflaring rim. Decoration is limited to the upper half of these vessels, and usually extends all the way up to the base of the rim strap. The design most often consists of line-filled triangles. Alternately, one may find horizontal bands of parallel oblique incisions forming a herringbone pattern (see Neitzel 1965:pl.10E). A third pattern consists of diagonal bands filled with parallel vertical incisions (see Cotter 1952:fig.56-57). All these vessels have an Addis paste, although a few particularly fine examples from Foster have a ware that comes close to Junkin.

Listed in the "Comments" above are nine sherds from St. Pierre which fit Steponaitis' criteria for this middle variant

in terms of rim mode, but the lines are not close-spaced.

The third variant also has poorly executed wet paste incisions. Decoration consists of line-filled triangles on the shoulder area of globular jars with a well-defined neck and outflaring rim. The individual incisions are usually wide-spaced. The remainder of the sample from the Yazoo Bluffs does not fit this description. Incisions are, for the most part, widely-spaced, but decoration continues right up to the lips of the vessels. The beaker and jar forms are in evidence. Lips range from tapered, to squared, to slightly thickened, with the square form being the most common. Most of the rims exhibit a slight exterior roll. A reexamination of Steponaitis' definition of Preston suggests that these rims may fit his criteria, but as I am not sure and as I am certainly not sure of the body sherds, I feel safer classifying the lot as Manchac.

Chronological Position

Brain (ref. C) felt Manchac dates only to the Crippen Point phase in the southern Yazoo Basin. Steponaitis' (ref. B) early variant (var. Preston) of Manchac dates to the Gordon phase in the Natchez region, but the Middle variant dates to the Foster and Emerald phases. If contemporary in the Yazoo Bluffs region, this would be the Lake George and Wasp Lake phases. The third variant of Manchac appears sometime in the Foster phase and continues through the historic Natchez phase, but there is

no evidence of this variant in the Yazoo Bluffs region. Most of the material I have classified as Manchac probably dates between the Crippen Point and Wasp Lake phases. There is no indication of its having been employed in historic times.

References

- A - Phillips 1970:129-130
- B - Steponaitis 1974:148-152
- C - Williams and Brain n.d.

Mississippi Plain, var. Montfort

Sample - 10 sherds

Provenience (Table 11)

St. Pierre (8 sherds)
Wright's Bluff (2 sherds)

Description

This variety has been around for several years now, but has not as yet appeared in print. Jeffrey P. Brain describes it as

follows:

This late (protohistoric-historic) variety of Mississippi Plain is distinguished primarily by the noticeable sand content of the paste. This must have been a purposeful addition which correlates with the sand tempered Chickasaw and Choctaw wares to the east. A secondary characteristic is that Montfort is usually highly oxidized, which distinguishes it from the gray reduced ware of [Mississippi Plain] var. Yazoo (Brain - personal communication).

Distribution

Montfort is rare in the Yazoo Bluffs region, its principal area being the mouth of the Red River.

Chronological Position

Protohistoric-historic periods.

References

None.

Mississippi Plain, var. Yazoo (Figure 14; Plate 54)

Sample - 6352 sherds

Provenience (Table 11)

Portland (1507 sherds)
St. Pierre (4413 sherds)
Lonely Frenchman (5 sherds)
Lockguard (300 sherds)
Wright's Bluff (108 sherds)
Anglo (19 sherds)

Description

As defined in Phillips (ref. A). Four partial Yazoo vessels, one from Portland and three from St. Pierre, were recovered in our excavations. The one from Portland is a small bowl. Vessels of similar size have been found on sites along the Big Black River (Ford 1936:127), in the St. Francis area (Moore 1910:331) and in the Tchula-Greenwood Bluffs region (Brown 1978a). These vessels are believed to be toys, as they are often found with child burials (Moore 1910:331,353,360). Two of the partial vessels from St. Pierre were found in features associated with the fort's occupation. The deep bowl from the moat has two double-noded lugs in the shape of breasts. Its rim diameter is 33.4 cm and its depth 25.6 cm (Figure 14). A large fragment of another breast-lug vessel was found in a feature below the embankment along the northwestern edge of the site

(Plate 54). The fourth vessel, found in Trench 15A, has not been reassembled.

Chronological Position

Lake George through Russell phases.

References

A - Phillips 1970:134-135

Mound Place Incised, var. Mound Place (Plate 55c-e;56)

Sample - 15 sherds

Provenience

St. Pierre (14 sherds) - Y558-9(Y578); Y558-11; Y558-13;
Y567M; Y574A(2); Y579A; Y646B; W27B; W62A1; W92A;
W94A; W115A(2)

Lockguard (1 sherd) - W369A

Comments - W92A and W94A same vessel
2 sherds from W115A same vessel

Description

When Mound Place Incised was first set up, the authors (ref. B) noted it was a tentative decision, because the principal type characteristics could be nothing more than a simple decorative treatment. Unlike most ceramic types, we know little more of Mound Place Incised now than we did 20 years ago. Phillips had the same trouble with the established variety, it being defined as:

...two or more parallel horizontal incised lines on shell-tempered bowls (ref. A).

Brain (Williams and Brain) set up the variety False River as a further subdivision of the type but, from what I can tell, there is little difference between his definition and that for the established Mound Place variety. The Yazoo Bluffs sample has thus been sorted as the latter. This sample unfortunately adds little more to its definition. The most popular treatment is two parallel lines, although one and three (possibly more) lines also occur. Three sherds (Y567M; W92A; W94A) have a black pigment within the incisions. The latter two sherds (Plate 55c; 56) form a rim of the same vessel. The lip has an incised line in which perpendicular nicks are spaced between .2 cm and .3 cm apart. A thickening, appearing triangular when viewed from above the vessel, occurs in the rim with the apex toward the exterior of the vessel. The interior at this point has been pushed in just beneath the lip. The incised line in the rim stops 1.3 cm on both sides of the center of this triangular projection. This projection is not a lug, but is probably the

tail of an effigy vessel. If so, the exterior lines do not dip down, as is so characteristic of this type (ref. B), but continue on the same plane.

Chronological Position

Mississippi Period (ref. A).

References

- A - Phillips 1970:135
- B - Phillips et al. 1951:147-148

Mulberry Creek Cord Marked, var. Edwards (Plate 57a)

Sample - 23 sherds

Provenience

St. Pierre (23 sherds) - Y646B(22); W2A
Comment - 22 sherds from Y646B same vessel

Description

As defined by Phillips (ref. A). Although almost all of the sherds are from the same vessel, there are no rims and the body sherds simply refuse to go together. I am thus uncertain of the vessel form represented.

Chronological Position

Deasonville phase (ref. B).

References

- A - Phillips (1970:137)
- B - Williams and Brain n.d.

Nodena Red and White, var. Poisson (Plate 57b-c)

Sample - 2 sherds

Provenience

St. Pierre (2 sherds) - Y571B; Y579A

Description: New Variety

Little can be said of this new variety. Were it not for the creation of Old Town Red, var. St. Pierre, the above two sherds would have simply been classified as Nodena Red and White, var. Unspecified. The only distinguishing characteristic of Poisson, from what can be told from the limited sample, is the combination of pink and white painted areas.

Sorting Criteria

Same as for Old Town Red, var. St. Pierre, with the addition of zones of white paint.

Chronological Position

Russell phase and, as with St. Pierre and Cracker Road Incised, var. Souel, is believed to be an ethnic marker for Yazoo, Koroa, and/or Ofo of the "Trader period".

References

None.

Old Town Red

Two new varieties of Old Town Red (Phillips 1970:144-147) have been established as a result of work in the Yazoo Bluffs region. A number of sherds could not be sorted as to variety (Table 11).

Old Town Red, var. Ballground (Plate 57d-g)

Sample - 197 sherds

Provenience

Portland (24 sherds) - Y415; Y501A(2); Y502A(4); Y505A1;
Y505C2; Y506B(5); Y506C1(2); Y506C2(4); Y506C3(4)
St. Pierre (166 sherds) - Y550H1(2); Y550J1; Y553A;
Y558-9(Y550F1) (2) Y558-9(Y578); Y558-11; Y558-14;
Y558-31D; Y559A(3); Y563A; Y565A(2); Y566A; Y567H;
Y567Q; Y568A; Y569A; Y571A1; Y573A(2); Y575A(2);
Y577A(4); Y578A(3); Y579A(4); Y592A(2); T1I(2);
T1Q; T8B1; T8D; T8E; T8G(2) T8H; T9B1(2); T9D;
T9E; T12G; Y601A; Y640A(2); Y641A(5); Y642A(5);
Y643A(3); Y643B; Y644A(2); Y645A(6); Y646A(3);
Y647B; Y908; W1A; W10A; W14A(2); W18A; W21A; W22A(5);
W23A(2); W25A(2); W26B; W34A; W35A; W36A; W39A;
W40A; W43A(2); W44B; W45A; W50A(2); W51A(3); W52A;
W53A(2); W54A1(2); W55A; W59A1; W62B1(2); W63A(2);
W64A(6); W64A1(2); W69A; W70A; W71A1; W71B1(2);
W72A(2); W72B(2); W74A(7); W76A(2); W77A(3); W80A;
W80B; W85A; W102A1; W117A(6); W120A; W120AB
Lockguard (7 sherds) - W355A; W363A; W364A; W366A(2)
W375A; W377A

Description: New Variety

Jeffrey P. Brain (Personal communication) set this variety

up on the basis of his recent excavations at Haynes Bluff (22-M-5). He described it as consisting of a heavy red slip on a coarse-textured sandy shell-tempered pottery equivalent to Mississippi Plain, var. Montfort. The slip is applied to the exterior and sometimes the interior surfaces.

I have little to add to Brain's description, except that a high percentage of the above sherds have the slip applied to both surfaces. Even with a sample of this size, rim sherds are few, and so it contributes minimal information concerning vessel form. There are four rims, most of which are flaring. All exhibit a slight exterior roll and two have a tapered lip. The lips of the other sherds have been squared.

Sorting Criteria

Heavy red slip on ware equivalent to Mississippi Plain, var. Montfort.

Distribution

This variety has thus far only been found in the Yazoo Bluffs region. It has a fair representation at Haynes Bluff and is especially abundant at St. Pierre. It occurs minimally at Portland, but the fact that it is found there is of some importance. I had at first felt that the marked quantitative

difference between Portland and St. Pierre was significant, and that Ballground may be a marker for groups contemporary with the "Trader period (i.e. Yazoo, Koroa, and Ofo). This hypothesis would indeed be supported by the finds at Lockguard. Although the size of the sample at the latter site seems somewhat small, its significance gains a bit when it is realized that Ballground is the most common decorated ceramic at Lockguard. There is a problem though. If Ballground is contemporary with the fort's occupation, it is hard to explain its almost total absence in the moat and other features unquestionably associated with the fort. Something is being revealed by this patterning, but I am at a loss in explaining what it is.

Chronological Position

Russell phase.

References

None.

Old Town Red, var. St. Pierre (Plate 57h-j)

Sample - 35 sherds

Provenience

St. Pierre (32 sherds) - Y550H1; Y555A; Y558-9(Y578);
 Y558-9A(2); Y558-13; Y558-60; Y561A; Y565A(2);
 Y567J; Y568A(2); Y569A; Y575A(5); Y578A; Y579A;
 Y602A; Y603A; Y604A; Y642B; W11A; W19A1; W36A;
 W43A; W45A(2); W54A1
 Lockguard (3 sherds) - W363A(2) W377A

Description: New Variety

A problem with most ceramic classification is that the sherds one gets to examine are inevitably of a small size. Were some of the sherds a bit larger, they would have certainly been sorted differently. Such is the case with var. St. Pierre. This variety consists of pottery which has been painted with a substance which turned pink upon firing.* The ware ranges from a "broken-down" Addis Plain, var. Holly Bluff to Mississippi Plain, var. Yazoo. Nodes occur (Y555A), but there are too few rims to say anything else about vessel form. It is probable that some, if not all, of these sherds are from either Nodena Red and White, var. Poisson or Cracker Road Incised, var. Souel vessels but, as it is impossible to be certain, it is best to split now and wait for more data.

* Vin Steponaitis suggested that the substance is vermilion, an interesting thought and one which requires testing.

Sorting Criteria

A pink paint on wear ranging from a "broken-down" version of Addis Plain, var. Holly Bluff to Mississippi Plain, var. Yazoo.

Distribution

With the puzzling exception of one specimen from the Humber-McWilliams Site (15-N-12) in the northern Yazoo Basin (Brown 1978c), this variety has only been found in the Yazoo Bluffs region. It is well represented at St. Pierre, minimally represented at Lockguard, and occurs in ample amounts at Haynes Bluff (Brain - personal communication). The strong representation at St. Pierre, with a corresponding total absence at Portland, is extremely important. On the basis of other ceramics (see Owens Punctated, var. Redwood and Winterville Incised, var. Tunica), it is hypothesized that Portland was a Tunica occupation dating to the turn of the 18th century. The bulk of the historic aboriginal assemblages at the St. Pierre Site is most likely contemporary with the fort. The heavy representation of var. St. Pierre during the "trader" period, as compared to the "missionary" period, suggests that the type is a diagnostic of the Yazoo, Koroa, and/or Ofo, and not of the Tunica Indians. This is extremely important, because St. Pierre is one of the

keys for establishing contemporaneity between the fort and local Indian sites. Although minimally represented at Lockguard (as are all materials), the appearance of St. Pierre at this location suggests an Indian population lived there when the fort was occupied, perhaps trading ceramics to the fort for European materials (see discussion under buttons - p. 299). The distinction in the distribution of St. Pierre suggests also that the closely related varieties Souel and Poisson are diagnostic ceramic markers for Indians of the "trader" period.

Chronological Position

Russell phase and may be narrowed even more temporally as a Yazoo, Koroa, and/or Ofo marker for the "trader" period. Its appearance in a protohistoric context at Humber-McWilliams (15-N-12) cannot as yet be explained.

References

None.

Owens Punctated

Phillips (1970:145-150) set up two varieties of Owens

Punctated. One of them (Menard) is represented in the Yazoo Bluffs region. Two additional varieties (Poor Joe and Widow Creek), set up on the basis of the Lake George excavations (Williams and Brain n.d.), also occur. The Redwood variety is a product of the present work in the Yazoo Bluffs. A number of Owens Punctated sherds could not be separated into varieties (Table 11, Plate 58c).

Owens Punctated, var. Menard (Plate 58a)

Sample - 1 sherd

Provenience

Wright's Bluff (1 sherd) - W335D4

Description

Brain tightened up Phillips' (ref. A) definition of this variety and described it as having:

Rather careless punctating and incising arranged in zoned patterns (punctated zones alternating with plain ones), usually curvilinear, on the exterior body surface of coarse, shell-tempered pottery (ref. B).

The one sherd in the Yazoo Bluffs collection has an incised curvilinear line, .2 cm to .3 cm wide, which was made when the paste was wet. Punctations are deep and also range between .2 cm and .3 cm in diameter, having probably been executed with the same instrument.

Distribution

Menard is a historic marker for the Quapaw (ref. B). Its center is the Arkansas River lowland, but it occurs also on scattered sites along the Ouachita and Red Rivers (ref. A). Brain was reluctant to classify the sample from Lake George as Menard, as this site is 100 miles away from the center, but he was unable to recognize any typological distinctions in the material to warrant setting up a new variety. He observed that the roots of Menard run deep in the late prehistoric period, and its appearance in the Yazoo Bluffs region demonstrates it also runs wide. This sherd, which was found in a sealed context in a dark linear stain between 50 cm and 60 cm below the surface of the ground, could be either the remains of a trade vessel or the product of a people who once had closer relations with the Arkansas groups. It is impossible to say for sure, but the appearance of just one sherd does not argue too strongly for the latter possibility.

Chronological Position

Wasp Lake phase (ref. B).

References

- A - Phillips 1970:149-150
- B - Williams and Brain n.d.

Owens Punctated, var. Poor Joe (Plate 58b)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y558-13

Description

Brain (ref. A) set up this variety to account for sherds of Parkin Punctated which have what seem to be accidental incisions running through a field of punctations. These sherds occur in great frequency at the Lake George Site, which suggests that more than an accident is responsible for their presence. These incisions do not zone the punctations. Both incisions

and punctations are in general more crudely executed than in other varieties of Owens Punctated. The only vessel form recognized is the Mississippi Plain, var. Yazoo jar.

Distribution

Thus far recorded only from Lake George and St. Pierre. Perhaps because of its accidental appearance, it has been overlooked in collections from other sites.

Chronological Position

Wasp Lake phase (ref. A).

References

A - Williams and Brain n.d.

Owens Punctated, var. Redwood (Figure 25a)

Sample - 11 sherds

Provenience

Portland (11 sherds) - Y502A; Y506C; Y506C1; Y506C1-1;
 Y506C1-2(5); Y506C1-3; Y506C2
 Comments - Y506C; Y506C1; Y506C1-1; Y506C1-2(5); Y506C1-3
 all same partial vessel

Description: New Variety

This variety is based on a single large bowl found at Portland. Varieties should generally not be established on the basis of such meager evidence, but in the tradition of Phillips' Leland Incised, var. Ferris (1970:106), I believe this vessel is important enough to warrant the formation of a new variety. Its decoration consists of a broad band of crudely incised triangles with incisions (less than 1 mm wide) tending toward curvilinear. A different instrument was used to make the punctations. These large shallow circular punctations, .5 to .6 cm in diameter, were made with the end of a cane, a small nipple occurring in the middle of each. Incisions and punctations were made when the paste was wet. The ware is equivalent to Mississippi Plain, var. Yazoo. There are correlations between Redwood and a number of other ceramic varieties. The most apparent parallel is with Owens Punctated, var. Menard. Menard, however, is characterized by alternating zones of punctations and plain areas, and in most cases the incisions in Menard are much wider than in the above vessel from Portland. Manley Punctated (Phillips et al. 1951:146-147) or rather, Matthews Incised, var. Manley by the current

terminology, is similar in decorative layout to Redwood. Manley usually consists of a single line meandering around the vessel forming triangular patterns and having an arcaded effect (Phillips 1970:128-129); Phillips et al.1951:147;fig.87n-q). This variety is very similar to Pocahontas Punctated, var. Pocahontas (Phillips 1970:154; Quimby 1942:pl.XIV6), but Phillips decided to separate the two typologically because of their great spatial and perhaps temporal distributions. Manley is a Late Mississippi period variety, at home in the St. Francis-Little River Lowlands, whereas Pocahontas (found only at the Angola Farm Site) is a historic marker at the mouth of the Red River. The Yazoo Bluffs region falls right in between the two areas, and so may be thought to bridge the gap, but there are enough differences between Redwood and the above two varieties to raise the possibility of their being unrelated. Whereas both Pocahontas and Manley have punctate-filled triangles alternating with plain ones, the Redwood vessel from Portland has only punctate-filled triangles. Perhaps of more importance is that the decoration in Redwood is largely confined to the neck, with a slight extension on to the shoulder, while the decoration in Manley and Pocahontas is on the shoulder alone. Not feeling happy with either of the above varieties, nor the criteria for the types Matthews Incised and Pocahontas Punctated, the obvious decision was to create a new variety of Owens Punctated, a type which is well represented in the Lower Yazoo Basin. I believe the roots for both this variety and Pocahontas will eventually be traced back to the proto-Quapaw

of the Arkansas River area.

Sorting Criteria

Narrow single incised lines forming triangular zones of large shallow punctations on the necks of Mississippi Plain, var. Yazoo vessels. The only vessel form recognized thus far is the bowl with flaring rim.

Distribution

Redwood is recorded for only the Yazoo Bluffs region, but, as noted above, it resembles material from the Arkansas River area, the St. Francis-Little River Lowland, and Cairo Lowland areas, as well as from historic sites in the Angola Farm region.

Chronological Position

Russell phase. Its association with Winterville Incised, var. Tunica, and the presence of the related variety Pocahontas on a later Tunica site suggests that Redwood is a diagnostic ceramic marker for the Tunica. On the basis of this one vessel and parts from two others, this hypothesis must obviously remain rather tenuous.

References

None.

Owens Punctated, var. Widow Creek (Plate 59a-e)

Sample - 8 sherds

Provenience

Portland (6 sherds) - Y500A(4); Y505D1; Y506C3
St. Pierre (2 sherds) - Y571B; Y577A
Comments - 2 sherds from Y500A same vessel

Description

Limiting Phillips' (ref. A) definition of Barton Incised, varieties Arcola and Estill to just incised decorative zones, Brain (ref. B) set up var. Widow Creek to account for those specimens of Barton Incised which have occasional zones of punctation. The sorting criteria consists of multiple incisions alternating with zones of punctations on the necks of Mississippi Plain vessels. Technique ranges from careless to quite fine. The variety occurs on the full range of Yazoo

vessel forms. Small handles are a minor mode which relates this variety to Arcola.

The sample from the Yazoo Bluffs region corresponds with the above definition. The two sherds from St. Pierre are closely related to Barton Incised, var. Portland, and would have been classified as such did they not have fields of punctations. Curiously, although the line-filled triangles, so typical of Estill, are absent at the Portland Site, resulting in my creation of the new variety Davion, the triangular zones of incisions persist in both Widow Creek and Portland at this site.

Chronological Position

Late Lake George and possibly Wasp Lake phases (ref. B).

References

- A - Phillips 1970:45-46 (included in Barton Incised, varieties Arcola and Estill)
- B - Williams and Brain n.d.

Parkin Punctated, var. Hollandale (Plate 59 f-g)

Sample - 24 sherds

Provenience

Portland (4 sherds) - Y501A(2); Y506B; Y506C2
St. Pierre (17 sherds) - Y550E1(2); Y553A; Y554A; Y556A;
Y558-31A; Y560A; Y567J; T15E; Y603A; W5A(2);
W26A(2); W45B; unlabeled (2)
Lonely Frenchman (2 sherds) - Y924A(2)
Lockguard (1 sherd) - W363A

Description

As defined by Phillips (ref. A).

Chronological Position

Late Winterville and Lake George phases (ref. B).

References

A - Phillips 1970:152
B - Williams and Brain n.d.

Parkin Punctated, var. Transylvania

Sample - 2 sherds

Provenience

St. Pierre (2 sherds) - W89A1; W117A

Description

As defined by Phillips (ref. A).

Chronological Position

Late Winterville and Lake George phases (ref. B).

References

- A - Phillips 1970:153
- B - Williams and Brain n.d.

Plaquemine Brushed, var. Plaquemine (Plate 60a-e)

Sample - 32 sherds

Provenience

Portland (7 sherds) - Y500A; Y501B; Y506B; Y506C; Y506C2;
 Y506C3(2)
 St. Pierre (22 sherds) - Y558-20; Y558-31D(2); Y558-31F(4);
 Y569A; T1H; T6D; T8A; T11B; Y642B; W27B; W29A;
 W34A; W43A; W54A1; W55B; W59A1; W61A; W119A
 Lonely Frenchman (2 sherds) - W301G; W307B
 Lockguard (1 sherd) - W376B
 Comments - 4 sherds from Y558-31F same vessel

Description

As defined by Phillips (ref. A). According to Phillips, Plaquemine has a long temporal span and a wide distribution, one which needs to be further subdivided. Both Brain (ref. C) and Steponaitis (ref. D) followed this suggestion by removing the Grace variety from the type (see Grace Brushed). Each noted the difficulty in further refining the Plaquemine variety. Steponaitis did, however, observe two distinct rim treatments in the Natchez region which have temporal significance. The first, the most common in the above area, he dated to the Anna phase and described it as consisting of:

...a slightly flaring rim with a lip that is either rounded or somewhat squared. The brushing on the exterior extends all the way up to the lip.

The second treatment, which dates somewhat later:

...is characterized by a clearly defined undecorated zone directly below the lip. Most often, this zone consists of a rather broad exterior rim strap, although sometimes the rim may be just slightly thickened. Often associated with this late variant is brushing that is carried out in a herringbone pattern, with the horizontal bands being separated by rows of punctations or by incisions (ref. B).

There are only three rims in the sample from the Yazoo Bluffs, all of which conform to the early variant described above. The ware is equivalent to Addis Plain, varieties Addis and Greenville, but one sherd (W61A) is on var. Ratcliffe.

Chronological Position

Phillips (ref. A) dated Plaquemine to the Mississippi and contact periods. Brain (ref. C) dated it to late Crippen Point and early Winterville phases at the Lake George Site. Steponaitis (ref. B) placed it primarily in the Anna phase, with the later treatment continuing into the Foster phase. The similar early rim treatment in the Yazoo Bluffs region suggests that the bulk of these sherds date to the Winterville phase (Contemporary with Anna), yet the frequency of Plaquemine at the Portland Site is rather curious. This site has very few ceramics from the trash pits which are not historic markers. It will be noticed that Grace Brushed, var. Grace, Plaugemine's shell-tempered equivalent, is also fairly heavily represented at Portland. I tend to agree with Phillips that both Plaquemine and Grace do continue through the contact period in the Yazoo Bluffs region (Russell phase). I say this with some trepidation, but as we know so little of the material culture of the very mobile historic aboriginal groups who shifted in and out of the Yazoo Valley in the 18th century, the possibility of brushing lasting so late among some of them should not be too

startling.

References

- A - Phillips 1970:152-153
- B - Steponaitis 1974:154-156
- C - Williams and Brain n.d.

Pouncey Ridge Pinched, var. Patosi (Plate 60f)

Sample - 1 sherd

Provenience

St. Pierre (1 sherd) - Y550A2

Description

Phillips (1970:154-155) hesitated to set up a Lower Yazoo equivalent of Pouncey Ridge Pinched, var. Pouncey, so common in the Lower St. Francis Basin. On the basis of more recent work, Brain (ref. A and B) established a new variety (Patosi) which is similar to the established variety, but differs in a few respects. One variation is that although linearity is always

apparent, ridges are not necessarily formed. There is also a deemphasis on patterning and the motifs may be curvilinear, a feature distinctive to Patosi. Decoration occurs on the exterior body surface of jars.

Chronological Position

Early Winterville phase (ref. B).

References

- A - Brain 1969:198-199
- B - Williams and Brain n.d.

Salomon Brushed

One sherd (T15E) of Salomon Brushed from St. Pierre fits the criteria for the established variety (Phillips 1970:158-159) in all respects, except that the ware is not Baytown Plain, var. Reed. The paste of this sherd is certainly a variety of Baytown Plain, hence, its inclusion in this type instead of Plaquemine Brushed, but I hesitate to say which variety.

Wallaced Incised, var. Wallace (Plate 60g-h)

Sample - 20 sherds

Provenience

Portland (1 sherd) - Y415
 St. Pierre (18sherds) - Y558-9(Y579); Y558-10; Y558-13;
 Y579A; Y594A; T1H; T1J; T12D; T15A; Y601A;
 Y642B; Y662A; W8A; W41A; W55B; W77A; W79 A(2)
 Unlabeled (1 sherd)
 Comments - 2 sherds (W8A; W77A) occur on Old Town Red, var.
Ballground

Description

As defined in Phillips (ref. A). One sherd (Plate 60g) has widely-spaced curvilinear lines, some of the spaces being brushed. This is a trait which occasionally occurs on this type as a background treatment. It brings out the design by contrasting smooth and roughened areas (ref. B).

Distribution

When Wallace Incised was originally defined, the authors (ref. B) noted that the type is present only on a half dozen sites in the Lower Arkansas - White River area. The recorded distribution has not increased much in subsequent years, as Phillips (ref. A) noted in his 1970 volume that the type drops

off sharply below the mouth of the Arkansas River. He did not observe any of this material in the southern Yazoo Basin, yet related material was discovered at the Oliver Site (16-N-6), which may be associated with a Quapaw occupation. This material does occur in the Yazoo Bluffs region, especially at the Haynes Bluff Site (Brain - personal communication), in such a quantity that it rules out the possibility of trade vessels. Its presence fits nicely, however, with our knowledge of a protohistoric movement of peoples from more northerly portions of the Yazoo Valley (adjacent to the Quapaw area) to the Yazoo Bluffs region (see p. 72).

Chronological Position

Phillips (ref. A) dated this variety to the terminal Mississippi and historic periods, and associated it with the Quapaw. It is a Russell phase diagnostic in the Yazoo Bluffs region, perhaps deriving from an immigrant group which moved from more northerly regions.

References

- A - Phillips 1970:168-169
- B - Phillips et al. 1951:134-136

Winterville Incised

In the original establishment of this type, Phillips (1970: 172-174) set up two varieties (Winterville and Belzoni), separable on the basis of line width. Brain (et al.n.d. b) established a new variety (Tunica) which is a historic period marker. These three varieties are evident in the Yazoo Bluffs region. In addition, there are two sherds (Y558-11; y565A - see Plate 41b) from St. Pierre which are similar to Belzoni yet occur on Mississippi Plain, var. Montfort paste. They certainly date to the Russell phase and may in the future be worthy of a varietal status of their own. For now they have been sorted as Winterville Incised, var. Unspecified. A number of other Winterville Incised sherds could not be sorted into varieties (Table 11).

Winterville Incised, var. Winterville (Plate 61a-d)

Sample - 94 sherds

Provenience

Portland (8 sherds) - Y501B; Y502AF.1; Y503AF.1; Y505A1;
 Y505A2; Y506B; Y506C; Y506C3
 St. Pierre (85 sherds) - Y550C1; Y550I1; Y551A; Y553A;
 Y558-9A(3); Y558-13; Y558-31C; Y558-31D(2);

Y558-31 F(2); Y560A; Y565A(2); Y567Q; Y573A;
 Y574A(4); Y575A(3); Y576A; Y577A(2); Y578A(2)
 Y579A(3); T8H(2); T12E; Y604A(3); Y641B(2);
 Y646B(6); W6A; W11A; W15A; W17A1-1; W18A1;
 W23A; W26B; W27A; W28A; W29A; W34A(2); W36A;
 W39A; W40A(2); W45A; W48A; W49A; W52A; W59A1(3);
 W61A; W62A1(2); W64A; W69A; W71A1; W85A;
 W88A1; W94A(2); W108A(2); W117A; W117B(2)

Wright's Bluff (1 sherd) - W339A

Comments - 2 sherds from T8H same vessel

2 sherds from Y604A same vessel

Description

As defined by Phillips (ref. A).

Chronological Position

Late Winterville and Lake George phases (ref. B).

References

- A - Phillips 1970:173
- B - Williams and Brain n.d.

Winterville Incised, var. Belzoni (Plate 61e-g)

Sample - 14 sherds

Provenience

Portland (2 sherds) - Y505A1; Y506A
St. Pierre (11 sherds) - Y558-9A; Y558-31C; W10A; W13A1(2);
W26A; W39A; W65A; W74A; W94A; W105A1
Lockguard (1 sherd) - W360A1
Comments - 2 sherds from W13A1 same vessel

Description

As defined by Phillips (ref. A).

Chronological Position

Late Lake George and Wasp Lake phases (ref. B).

References

- A - Phillips 1970:173-174
- B - Williams and Brain n.d.

Winterville Incised, var. Tunica (Figure 24a; Plate 62)

Sample - 34 sherds

Provenience

Portland (18 sherds) - Y501B; Y502A; Y503A(2); Y506B;
 Y506B4(7); Y506C; Y506C1; Y506C2(4)
 St. Pierre (12 sherds) - Y558-9A; Y558-10; Y558-31B;
 Y558-31D(2); Y576A; W26B; W34A; W39A; W40A; W43A;
 W55A
 Lonely Frenchman (4 sherds) - W301F(4)
 Comments - 7 sherds from Y506B4 same partial vessel
 (Figure 24a)
 2 sherds from Y506C2 same vessel
 4 sherds from W301F same vessel

Description

Included in the Tunica Treasure (ref. A) are a number of pots which have a Winterville Incised decoration, but do not fall under the established variety defined by Phillips (1970:173). On the basis of these pots, Brain created the Tunica variety and described it as follows:

Narrow incisions, rather carelessly executed on wet or leather-hard surface. The design featured exclusively is the simple whorl, which is placed on the body and shoulder of small to medium jars. These jars are either medium sub-globular forms with gently sloping shoulders, which carry most of the decoration, or small to medium globular forms decorated on the body and surmounted by plain vertical necks. The first form features a node in the center of each whorl, and both forms usually exhibit a single, double, or occasionally triple row of round or square punctations immediately above the incised decoration. This punctated border is thus on the rim just below the lip on the first form, and at the bottom of the neck on the second. The ware is coarsely shell tempered, falling in the later range of Yazoo, and tending towards Skillikalia and sometimes Montfort (ref. A).

The sample from the Yazoo Bluffs region is not particularly large, yet the discovery of a large portion of a Tunica vessel in a trash pit at the Portland Site suggests the pits derived from a Tunica Indian occupation. All of the Tunica sherds from this site are from sealed contexts in the trash pits, and a good proportion of those found at St. Pierre similarly are from features. These last materials could of course pre-date the fort, but the partial vessel from Portland was undoubtedly used by the people who filled the pits. The jar form is represented in this sample.

Distribution

In addition to the Yazoo Bluffs region, this variety has been found at historic Tunica sites around the mouth of the Red River, including Trudeau (29-J-1), Angola Farm (29-J-2), and Bloodhound Hill (29-J-19).

Chronological Position

Russell phase and is believed to be a diagnostic marker of Tunica occupation.

References

A - Brain et al. n.d. b

BAYTOWN PLAIN var. Chesas	1	2	3	6	7	12	3	9
BAYTOWN PLAIN var. Valley Park								
BAYTOWN PLAIN var. Vicksburg								
BAYTOWN PLAIN var. Unspecified								
BEUDEAU INCISED var. Baldeau		2	14					
BEUDEAU INCISED var. Bell Bayou								
CARTER ENGRAVED var. Carter								
CARTER ENGRAVED var. Mud Lake								
CHEVALIER STAMPED var. Chevalier								
CHEVALIER STAMPED var. Lulu								
CHEVALIER STAMPED var. Parry								
CHICKACHAE COMBED var. Unspecified								
CHICOT RED var. Unspecified								
CHURUPA PUNCTATED var. Thornton								
CHURUPA PUNCTATED var. Unspecified								
COLEMAN INCISED var. Coleman								
COLEMAN INCISED var. Bass								
COLES CREEK INCISED var. Coles Creek								
COLES CREEK INCISED var. Blakely								
COLES CREEK INCISED var. Campbellville								
COLES CREEK INCISED var. Hardy								
COLES CREEK INCISED var. Kott								
COLES CREEK INCISED var. Stoner								
COLES CREEK INCISED var. Wade								
COLES CREEK INCISED var. Unspecified								
CRACKER ROAD INCISED var. Cracker Road								
CRACKER ROAD INCISED var. Sover								
CRACKER ROAD INCISED var. Unspecified								
EVANSVILLE PUNCTATED var. Evansville								
EVANSVILLE PUNCTATED var. Braxton								
EVANSVILLE PUNCTATED var. Rinehart								
EVANSVILLE PUNCTATED var. Unspecified								
FATHERLAND INCISED var. Fatherland								
FATHERLAND INCISED var. Snyder's Bluff								
FATHERLAND INCISED var. Unspecified								
FRENCH FORK INCISED var. McNut								
GRACE BRUSHED var. Grace								
GRACE BRUSHED var. Warren								
HARRISON BAYOU INCISED var. Harrison Bayou								
HOLLYMOVE RIDGE PINCHED var. Patmos								
INDIAN BAY STAMPED var. Shaw								
LARTO RED var. Larto								
IELAND INCISED var. Leland								
IELAND INCISED var. Bethlehem								
IELAND INCISED var. Blanchard								
IELAND INCISED var. Ewira								
IELAND INCISED var. Foster								
IELAND INCISED var. Russell								
IELAND INCISED var. Williams								
MADDOX ENGRAVED var. Silver City								
MARKSVILLE INCISED var. Unspecified								
MARKSVILLE STAMPED var. Troyville								
MAZIQUE INCISED var. Mazique								
MAZIQUE INCISED var. Kings Point								
MAZIQUE INCISED var. Varcac								
MAZIQUE INCISED var. Unspecified								
MISSISSIPPI PLAIN var. Montfort								
MISSISSIPPI PLAIN var. Yacco								
MISSISSIPPI PLAIN var. Unspecified								
MOUND PLACE INCISED var. Young Place								
MULBERRY CREEK CORD-MARKED var. Edwards								
MODEMA RED AND WHITE var. Folsom								
OLD TOWN RED var. Ballground								
OLD TOWN RED var. St. Pierre								
OLD TOWN RED var. Unspecified								
OMENS PUNCTATED var. Menard								
OMENS PUNCTATED var. Poor Joe								
OMENS PUNCTATED var. Redwood								
OMENS PUNCTATED var. Widow Creek								
OMENS PUNCTATED var. Unspecified								
PARKIN PUNCTATED var. Hollandale								
PARKIN PUNCTATED var. Transylvania								
PLAQUEMINE BRUSHED var. Plaquemine								
POUNCEY RIDGE-PINCHED var. Patois								
SALONCEY BRUSHED var. Unspecified								
WALLACE INCISED var. Wallace								
WINTERVILLE INCISED var. Winterville								
WINTERVILLE INCISED var. Belton								
WINTERVILLE INCISED var. Tunica								
WINTERVILLE INCISED var. Unspecified								

TOTAL

8 15 3 40 45 4 2 3 1 1 3 34 61 218 771 76 109 100 7 6

BAYTOWN PLAIN var. Valley Park	3	17	39	1	9	1	25	16	2	19	15	20	9	28	19	125	1			
BAYTOWN PLAIN var. Vicksburg	3																			
BAYTOWN PLAIN var. Unspecified	16																			
BELDEAU INCISED var. Beldeau																				
BELDEAU INCISED var. Bell Bayou																				
CARTER ENGRAVED var. Carter																				
CARTER ENGRAVED var. Mud Lake																				
CHEVALIER STAMPED var. Chevalier																				
CHEVALIER STAMPED var. Lulu																				
CHEVALIER STAMPED var. Perry																				
CHICKACHAE COMBED var. Unspecified																				
CHICOT RED var. Unspecified																				
CHURUPA PUNCTATED var. Thornton																				
CHURUPA PUNCTATED var. Unspecified																				
COLEMAN INCISED var. Coleman																				
COLEMAN INCISED var. Bass																				
COLES CREEK INCISED var. Coles Creek																				
COLES CREEK INCISED var. Bickely																				
COLES CREEK INCISED var. Campbellsville																				
COLES CREEK INCISED var. Hardy																				
COLES CREEK INCISED var. Mott																				
COLES CREEK INCISED var. Stoner																				
COLES CREEK INCISED var. Wade																				
COLES CREEK INCISED var. Unspecified																				
CRACKER ROAD INCISED var. Cracker Road																				
CRACKER ROAD INCISED var. Souel																				
CRACKER ROAD INCISED var. Unspecified																				
CRACKER ROAD INCISED var. Evansville																				
EVANSVILLE PUNCTATED var. Evansville																				
EVANSVILLE PUNCTATED var. Braxton																				
EVANSVILLE PUNCTATED var. Rhinehart																				
EVANSVILLE PUNCTATED var. Sharkey																				
EVANSVILLE PUNCTATED var. Unspecified																				
FATHERLAND INCISED var. Fatherland																				
FATHERLAND INCISED var. Snyder's Bluff																				
FATHERLAND INCISED var. Unspecified																				
FRENCH FORK INCISED var. McNutt																				
GRACE BRUSHED var. Grace																				
GRACE BRUSHED var. Warren																				
HARRISON BAYOU INCISED var. Harrison Bayou																				
HOLLYHOCK RIDGE PINCHED var. Patmos																				
INDIAN BAY STAMPED var. Shaw																				
LARTO RED var. Larto																				
LELAND INCISED var. Leland																				
LELAND INCISED var. Bethlehem																				
LELAND INCISED var. Blanchard																				
LELAND INCISED var. Bovina																				
LELAND INCISED var. Foster																				
LELAND INCISED var. Russell																				
LELAND INCISED var. Williams																				
LELAND INCISED var. Silver City																				
MADDOX ENGRAVED var. Unspecified																				
MARKSVILLE INCISED var. Unspecified																				
MARKSVILLE STAMPED var. Troyville																				
MAZIQUE INCISED var. Mazique																				
MAZIQUE INCISED var. Kings Point																				
MAZIQUE INCISED var. Kanchac																				
MAZIQUE INCISED var. Unspecified																				
MISSISSIPPI PLAIN var. Montfort																				
MISSISSIPPI PLAIN var. Yazoo																				
MISSISSIPPI PLAIN var. Unspecified																				
MOUND PLACE INCISED var. Mound Place																				
MULBERRY CREEK CORD-MARKED var. Edwards																				
NODENA RED AND WHITE var. Polsson																				
OLD TOWN RED var. Ballground																				
OLD TOWN RED var. St. Pierre																				
OLD TOWN RED var. Unspecified																				
OWENS PUNCTATED var. Nenard																				
OWENS PUNCTATED var. Poor Joe																				
OWENS PUNCTATED var. Redwood																				
OWENS PUNCTATED var. Widow Creek																				
OWENS PUNCTATED var. Unspecified																				
PARKIN PUNCTATED var. Hollandale																				
PARKIN PUNCTATED var. Transylvania																				
PLAQUERINE BRUSHED var. Plaquemine																				
POUNCEY RIDGE-PINCHED var. Patosl																				
POUNCEY RIDGE-PINCHED var. Unspecified																				
SALOMON BRUSHED var. Unspecified																				
WALLAGE INCISED var. Wallace																				
WINTERVILLE INCISED var. Winterville																				
WINTERVILLE INCISED var. Belmont																				
WINTERVILLE INCISED var. Tunica																				
WINTERVILLE INCISED var. Unspecified																				
TOTAL	64	7	51	131	13	122	5	80	83	14	78	14	39	22	99	56	162	20	120	18

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
BAYTOWN PLAIN var. Valley Park																		
BAYTOWN PLAIN var. Vicksburg																		
BAYTOWN PLAIN var. Unspecified																		
BELDEAU INCISED var. Baldeau																		
BELDEAU INCISED var. Ball Bayou																		
CARTER ENGRAVED var. Carter																		
CARTER ENGRAVED var. Mud Lake																		
CHEVALIER STAMPED var. Chevalier																		
CHEVALIER STAMPED var. Lulu																		
CHEVALIER STAMPED var. Perry																		
CHICKACHAE COMBED var. Unspecified																		
CHICOT RED var. Unspecified																		
CHURUPA PUNCTATED var. Thornton																		
CHURUPA PUNCTATED var. Unspecified																		
COLEMAN INCISED var. Coleman																		
COLEMAN INCISED var. Bass																		
COLES CREEK INCISED var. Coles Creek																		
COLES CREEK INCISED var. Skakely																		
COLES CREEK INCISED var. Campbellsville																		
COLES CREEK INCISED var. Hardy																		
COLES CREEK INCISED var. Mott																		
COLES CREEK INCISED var. Stoner																		
COLES CREEK INCISED var. Wade																		
COLES CREEK INCISED var. Unspecified																		
CRACKER ROAD INCISED var. Cracker Road																		
CRACKER ROAD INCISED var. Unspecified																		
CRACKER ROAD INCISED var. Souel																		
CRACKER ROAD INCISED var. Unspecified																		
EVANSVILLE PUNCTATED var. Evansville																		
EVANSVILLE PUNCTATED var. Braxton																		
EVANSVILLE PUNCTATED var. Rhinehart																		
EVANSVILLE PUNCTATED var. Sherkey																		
EVANSVILLE PUNCTATED var. Unspecified																		
FATHERLAND INCISED var. Fatherland																		
FATHERLAND INCISED var. Snyder's Bluff																		
FATHERLAND INCISED var. Unspecified																		
FRENCH FORK INCISED var. McNutt																		
GRACE BRUSHED var. Grace																		
GRACE BRUSHED var. Warren																		
HARRISON BAYOU INCISED var. Harrison Bayou																		
HOLLYKNOWE RIDGE PINCHED var. Patmos																		
INDIAN BAY STAMPED var. Shaw																		
LARTO RED var. Larto																		
LELAND INCISED var. Leland																		
LELAND INCISED var. Bathlehen																		
LELAND INCISED var. Blanchard																		
LELAND INCISED var. Boyina																		
LELAND INCISED var. Foster																		
LELAND INCISED var. Russell																		
LELAND INCISED var. Williams																		
MADDOX ENGRAVED var. Silver City																		
MARKSVILLE INCISED var. Unspecified																		
MARKSVILLE STAMPED var. Troyville																		
MAZIQUE INCISED var. Matique																		
MAZIQUE INCISED var. Kings Point																		
MAZIQUE INCISED var. Kanchac																		
MAZIQUE INCISED var. Unspecified																		
MISSISSIPPI PLAIN var. Montfort																		
MISSISSIPPI PLAIN var. Zaroo																		
MISSISSIPPI PLAIN var. Unspecified																		
MOUND PLACE INCISED var. Mound Place																		
MULBERRY CREEK CORD-MARKED var. Edwards																		
NODEVA RED AND WHITE var. Poisson																		
OLD TOWN RED var. Ball Ground																		
OLD TOWN RED var. St. Pierre																		
OWENS PUNCTATED var. Unspecified																		
OWENS PUNCTATED var. Venard																		
OWENS PUNCTATED var. Poor Joe																		
OWENS PUNCTATED var. Redwood																		
OWENS PUNCTATED var. Widow Creek																		
OWENS PUNCTATED var. Unspecified																		
PARKIN PUNCTATED var. Hollandale																		
PARKIN PUNCTATED var. Pennsylvania																		
PLAQUEMINE BRUSHED var. Plaquemine																		
POUCEY RIDGE-PINCHED var. Patosl																		
SALOMON BRUSHED var. Unspecified																		
WALLACE INCISED var. Wallace																		
WINTERVILLE INCISED var. Winterville																		
WINTERVILLE INCISED var. Belzoni																		
WINTERVILLE INCISED var. Tunic																		
WINTERVILLE INCISED var. Unspecified																		
TOTAL	11	7	3	4	2	2	56	1	2	124	10	10	37	11	51	22	4	15

Aboriginal Pipes (Plates 63-64)

Sample - 3

Provenience

Portland (1) - Y502AF.1
St. Pierre (2) - Y558-31A; W39A

Description

The specimen from Portland is a disk pipe (Plate 63). The material is a soft limestone. The disk itself is oval in shape and has a biconvex cross-section. It varies between 4.1 cm and 4.7 cm in diameter, the hole in the middle having a diameter of 1.4 cm. A wedge-shaped appendage, 4.3 cm long, occurs on the bottom for the insertion of a cane tube. A small area, 1.5 cm long, has been grooved out to receive the cane. The hole in this groove is $7/64$ th inch, or 0.28 cm, in diameter.

One of the pipes from St. Pierre is of an unidentified black stone. Only a fragment of the bowl is left. It has an flattened lip which is 0.2 cm thick. The material of this pipe is similar to a serrated polished ornament from this same site (see p.1014). The other specimen (Plate 64), made of clay, is

the bowl of an elbow pipe. Bowl depth is 3.1 cm, the diameter of the bowl opening is 3.1 cm, and the thickness at the rim is 0.4 cm.

A catlinite elbow pipe was found in the Wright's Bluff Burial Collection. I observed it only briefly and so a detailed description of it is impossible. Its stem is approximately 5.0 cm long, and its bowl height is 4.5 cm. The end of the stem away from the bowl has a grooved rectangular protrusion along the same plane as the bowl. A hole is drilled through it.

Appendix 2b

Aboriginal Artifacts

Lithics

I Projectile Points

Provisional Type 1 (Plate 65g-h, Table 12)

Sample - 2

Provenience

Lockguard (1) - W365A
Wright's Bluff (1) - W335A

Description

As is obvious by the name, Provisional Type 1 requires further refinement. It is presently a catchall of small to large straight stemmed points which do not conform with other type

descriptions (ref. A).

The specimen found at Lockguard (Plate 65g) is quartzite. It is crudely chipped, slightly asymmetrical, and has excurvate blade edges. The shoulders are tapered and the stem is broad. The latter has straight edges and a straight base. The cross-section of the point is basically biconvex, and quite thick at the stem, tapering towards the point.*

The Wright's Bluff specimen (Plate 65h) is brown chert. Its blade edges are slightly excurvate. One shoulder is tapered, the other expanded. The stem edges are straight, but the base is slightly incurvate. The stem has a planoconvex cross-section.

Chronological Position

Large straight stemmed points fitting the general description have been found in Archaic strata at the Flint Creek Rock Shelter (Cambron and Waters 1961), but the form also occurs later (ref. A).

References

A - Cambron and Hulse 1975:129

* Nomenclature follows Cambron and Hulse 1975.

Table 12
Projectile Points from the Yazoo Bluffs

Types	Sites	Provenience	Plate
Provisional Type 1	Lockguard	W365A	65g
	Wrights Bluff	W335A	65h
Broad Gary Stemmed	St. Pierre	W27A	65i
Collins, <u>var. Claiborne</u>	St. Pierre	W21A	66a
	St. Pierre	T1H1	66b
Knight Island	St. Pierre	W95A	65j
Nodena	St. Pierre	Y558-31D	66c
Madison	Portland	Y505C2	66d
	Portland	Y502AF.1	66e
	Portland	Y506B	66f
	Portland	Y506B	66g
	Portland	Y506B	66h
	Portland	Y506B	66i
	St. Pierre	W80A	66j
	Wrights Bluff	W336A	66k
Guntersville	Lockguard	W368A	66l
	St. Pierre	W21A	66m
Unclassified	St. Pierre	W76A	66n
	St. Pierre	W6A	66o
	St. Pierre	T3F	66p
	St. Pierre	W13A	66q
	St. Pierre	T15F	66r

Table 12
Projectile Points from the Yazoo Bluffs Region

Sites	Provenience	Plate	Maximum Lgth(cm)	Maximum Wdth(cm)	Maximum Thks (cm)	Wght (gm)
Lockguard Wrights Bluff	W365A	65g	5.8	3.0	1.3	19.3
	W335A	65h	6.7	3.0	1.0	18.0
St. Pierre	W27A	65f	?	4.2	1.0	?
St. Pierre	W21A	66l	3.1	1.9	0.6	3.0
	T1H1	66n	2.9	1.5	0.6	1.6
St. Pierre	W95A	65a	4.3	2.7	0.7	9.0
St. Pierre	Y558-31D	66i	3.3	1.2	0.6	2.0
Portland	Y505C2	66a	3.6	1.7	0.4	2.1
Portland	Y502AF.1	66b	3.0	1.7	0.4	1.1
Portland	Y506B	66c	3.0	1.2	0.3	0.7
Portland	Y506B	66d	2.7	2.1	0.4	1.6
Portland	Y506B	66e	1.9	1.1	0.4	0.3
St. Pierre	W80A	66f	2.7	1.9	0.5	1.7
Wrights Bluff	W336A	66g	2.8	1.6	0.6	1.9
Lockguard	W368A	66h	?	1.6	0.4	?
St. Pierre	W21A	66j	3.7	1.5	0.4	2.0
St. Pierre	W76A	65b	5.6	3.9	1.0	18.3
St. Pierre	W6A	65c	?	?	0.8	?
St. Pierre	T3F	65d	4.9	2.3	1.1	11.0
St. Pierre	W13A	65e	?	3.3	1.1	?
St. Pierre	T15F	66k	3.8	1.0	0.5	1.6

Broad Gary Stemmed (Plate 65f; Table 12)

Sample - 1

Provenience

St. Pierre (1) - W27A

Description

Gary Stemmed is defined by Alex Krieger as a dart point which is generally heavy and has a stem contracting to a sharp or rounded tip. Chipping is rather crude and the blade tends to be thick in cross-section (Newell and Krieger 1949:164). William Haag refined this general type by establishing a number of variants. Broad Gary Stemmed is one such variant, and is described as having all the characteristics of the original type except that the blade is broad. Workmanship is good and some specimens exhibit fine retouching along the blade edge. Length ranges between 4.5 cm and 7.0 cm, and width varies from 3.2 cm to 4.8 cm (ref. A).

The broken specimen from St. Pierre is light gray chert. Its blade edges are excurvate and its shoulders are horizontal. It has a rounded stem and a biconvex cross-section.

Chronological Position

The typical Gary Point is a late Archaic - Woodland artifact, being widely distributed throughout the Southeast and Texas (Cambron and Hulse 1975:57). It closely resembles Adena Points, which date to the same period (Ibid:3;ref. A).

References

A - Ford et al.1955:127-128

Collins, var. Claiborne (Plate 661,n; Table 12)

Sample - 2

Provenience

St. Pierre (2) - T1H1; W21A

Description

Phillips (ref. B) referred to this point type and variety

in his Southern Yazoo Basin volume, but did not describe them. Brain (ref. A) illustrated several in his synthesis of Lower Mississippi Valley prehistory and described them in the Lake George report (ref. E). These are small "fishtail" arrow points with excurvate blade edges, shallow side-notching, and either a flat or auriculated base. They have long been known in the area. Quimby discussed points of this sort in his description of Natchezan culture (ref. C) and in his report on the Bayou Goula Site (ref. D), but did not give them a name.

One specimen (Plate 66l) from St. Pierre is brown and white chert and has a straight base. The other (Plate 66n) has bands of white, pink and brown chert, and has an auriculated base.

Chronological Position

Period III (AD 300 - AD 700) of the Neo-Indian Era (ref. A).

References

- A - Brain 1971:62;fig. 12d-e
- B - Phillips 1970:fig.79a-d
- C - Quimby 1942:269;pl.XVI
- D - Quimby 1957:128-129;fig.42
- E - Williams and Brain n.d.

Knight Incised (Plate 65a; Table 12)

Sample - 1

Provenience

St. Pierre (1) - W95A

Description

Points of this type, so common in Northern Alabama, are thin, medium-sized, and side-notched. Blade cross-section is generally flat and edges are usually excurvate. Shoulders are straight or inversely tapered. The basal edge is straight, but can also be slightly incurvate. Length varies between 4.0 cm and 6.0 cm with an average of 4.9 cm; shoulder width is between 1.5 cm and 2.0 cm with an average of 1.8 cm; and thickness is between .3 cm and .6 cm with an average of .5 cm (ref. A).

The specimen from St. Pierre is a bit wider and thicker than the Alabama specimens, but otherwise seems to fit the type criteria. It is made of tan chert and has a slightly incurvate base.

Chronological Position

Late Woodland period in Alabama (ref. A).

References

A - Cambron and Hulse 1975:76

Nodena (Plate 66i; Table 12)

Sample - 1

Provenience

St. Pierre (1) - Y558-31D

Description

This is a small to medium-sized lanceolate point with a rounded base. The cross-section is biconvex, the blade edges are excurvate and the base is generally rounded, but may be acute (ref. B).

The St. Pierre specimen is pink chert and has a slightly asymmetrical shape. Its cross-section is median-ridged. Blade edges are excurvate and slightly incurvate at the tip.

Distribution

Heaviest distribution occurs in eastern Arkansas along the Mississippi, St. Francis and Arkansas Rivers (ref. A).

Chronological Position

Late prehistoric times, from approximately AD 1400 to AD 1600 (ref. A).

References

- A - Bell 1958
- B - Cambron and Hulse 1975:97

Madison (Plate 66a-h; Table 12)

Sample - 8

Portland (5) - Y502AF.1; Y505C2; Y506B(3)
St. Pierre (1) - W80A
Lockguard (1) - W368A
Wright's Bluff (1) - W336A

Description

This is a small, thin, triangular point. Its cross-section

is flattened. Blade edges and base are generally straight, although some variations occur (ref. C). Length varies between 1.7 cm and 3.3cm, with an average of 2.6 cm; width between 1.2 cm and 2.1 cm with an average of 1.6 cm; and thickness between .3 cm and .6 cm, with an average of .4 cm (ref. A).

The specimens from the Yazoo Bluffs region fit the description nicely, although one point (Plate 66a) is somewhat large. It is made of light brown quartzite, has two steeply beveled slightly serrated blade edges and one minute shoulder, reminiscent in form of Colbert Dalton points (Cambron and Hulse 1975:37; DeJarnette et al.1962) and Wheeler Triangular Points (Cambron 1955; 1957; Cambron and Hulse 1975:127). Its base is a bit deeply indented, but I believe it still belongs in the Madison type. The other Madison points from the Yazoo Bluffs region are dark gray chert (Plate 66b), light gray chert (Plate 66c,g), banded gray chert (Plate 66d,f), dark brown chert (Plate 66e), and tan chert (Plate 66h).

Distribution

Small triangular points are common throughout the Southeast in the Mississippi period. Madison points are particularly frequent in the Lower Mississippi Valley (Brain 1971:fig.13d-e), being found in considerable numbers at Jaketown (ref. B), Menard (Ford 1961:pl.29,H-N), and at the historic Fatherland Site (Neitzel 1965:pl.12BB). In addition to its relatively

high frequency at Portland, Madison points are commonly found at the Haynes Bluff Site in the Yazoo Bluffs region (Brain 1975a).

Chronological Position

Mississippi period (ref. C) but in some areas, like the Big Warrior drainage (Jenkins and Nielsen 1974), may have been in use since late Woodland times.

References

- A - Cambron and Hulse 1975:84
- B - Ford et al. 1955:131; fig. 53q-r
- C - Scully 1951

Guntersville (Plate 66j; Table 12)

Sample - 1

Provenience

St. Pierre (1) - W21A

Description

This is a small to medium-sized lanceolate point with a straight base and excurvate blade edges. Length ranges between 3.3 cm and 5.0 cm with an average of 3.5 cm; width ranges between 1.0 cm and 1.8 cm with an average of 1.4 cm; and thickness ranges between .4 cm and .6 cm with an average of .5 cm (ref. B).

The St. Pierre specimen is light gray chert.

Chronological Position

Brain (1975) refers to specimens of this form as Russell points, named after the historic Russell Site in the Yazoo Bluffs region where many such points were found. Points of similar shape have also been found at the Fatherland (Neitzel 1965:pl.12W-AA) and Menard (Ford 1961:pl.29D) Sites. However, from the type descriptions, there is no apparent distinction between Russell and Gunterville points. Nor do they appear to be temporally distinct, as Cambron and Hulse (ref. A) reported their occurrence in Mouse Creek, Dallas, and historic Cherokee sites in eastern Tennessee. A date of AD 1300 and AD 1800 is suggested. Similar to the Yazoo Bluffs region, Gunterville points are often found in association with Madison points. Cambron and Waters (1959) recovered these two types in association

with historic burials in the Gunter'sville Basin.

References

A - Cambron and Hulse 1975:62

Unclassified Points (Plate 65b-e; Plate 66k; Table 12)

Sample - 5

Provenience

St. Pierre (5) - T3F; T15F; W6A; W13A; W76A

Description

Five points could not be classified as to type. They will thus be described individually:

Plate 65 b - tan chert point with a broad blade and excurvate edges; plano-convex cross-section and barbed shoulders; stem is expanded with a straight to slightly excurvate base.

Plate 65c - blue gray and brown chert broken point; fine percussion flaking with some pressure flaking along blade edges; latter are straight with slight serration; blade has a flattened cross-section; barbed shoulders and a contracted stem with a straight truncated base.

Plate 65d - light brown chert; poorly chipped with cortex adhering to one whole side; biconvex cross-section and excurvate blade edges; tapered shoulders and an irregularly-shaped pointed base; stem edges are straight to slightly incurvate.

Plate 65e - grayish-brown broken chert point; poorly chipped; biconvex cross-section with straight blade edges; expanded shoulders and expanded stem with slightly incurvate stem base.

Plate 66k - small, narrow brown chert point with median-ridged cross-section and straight blade edges; tapered shoulders and excurvate base.

II Scrapers

Side Scrapers (Plate 69a; Table 13)

Sample 1

Table 13

Lithic Tools from the Yazoo Bluff

Tool	Site	Provenience	Plate	Lgth
Side Scrapers	St. Pierre	T15D	69a	2.8
Discoidal Scrapers	St. Pierre	Y550J1	67a	3.4
	St. Pierre	T12F	67b	
	St. Pierre	W48A	67c	
	St. Pierre	W59A1	67d	
	St. Pierre	W119A	67e	
	Lonely Frenchman Anglo	W303A W428	67f	
Hafted Side Scrapers	St. Pierre	W27A	69b	6.2
	St. Pierre	W40A	69c	6.2
Double Side Scrapers	St. Pierre	W71A1	69e	2.8
	St. Pierre	W1A	69d	2.8
Hafted End Scrapers	Portland	Y506A	71a	3.4
	Portland	Y506B	71b	1.8
	Portland	Y506B	71c	2.8
	Portland	Y506C3	71d	2.1
	St. Pierre	W79A	69g	5.2
	Lockguard	W375A	69f	2.7
Side - End Scrapers	St. Pierre	Y571C	71e	4.1
	St. Pierre	W42A	71f	2.8
	Wrights Bluff	W335B	71g	2.5
Hafted Side - End Scrapers	Portland	Y506C3	71h	2.1
	Lockguard	W369A	71i	6.1
Double Side - End Scrapers	St. Pierre	T3B	72a	4.1
	St. Pierre	Y661A	72b	3.6

Table 13
Lithic Tools from the Yazoo Bluffs Region

Site	Provenience	Plate	Lgth	Diam	Wdth	Thck	S.P. Wdth	Wght
St. Pierre	T15D	69a	2.8		2.1	1.6		2.2
St. Pierre	Y550J1	67a		4.6		1.6		27.1
St. Pierre	T12F	67b		4.6		1.7		33.1
St. Pierre	W48A	67c		4.8		2.3		37.9
St. Pierre	W59A1	67d		4.8		2.2		40.2
St. Pierre	W119A	67e		3.5		2.9		24.0
Lonely Frenchman Anglo	W303A W428	67f	3.4	3.9	3.3	1.6 2.0		28.8
St. Pierre	W27A	69b	6.2		3.0	1.5		23.5
St. Pierre	W40A	69c	6.2		2.2	1.2		15.6
St. Pierre	W71A1	69e	2.8		2.0	0.6	0.2	2.9
St. Pierre	W1A	69d	2.8		1.9	0.6		2.0
Portland	Y506A	71a	3.4		2.2	0.9	0.2	6.1
Portland	Y506B	71b	1.8		1.4	0.5	0.1	0.6
Portland	Y506B	71c	2.8		2.0	0.6		2.3
Portland	Y506C3	71d	2.1		1.9	0.7	0.3	2.2
St. Pierre	W79A	69g	5.2		3.5	1.3	0.5	23.1
Lockguard	W375A	69f	2.7		2.5	0.7	0.5	4.4
St. Pierre	Y571C	71e	4.1		2.6	0.5		4.3
St. Pierre	W42A	71f	2.8		2.5	0.7	0.4	4.4
Wrights Bluff	W335B	71g	2.5		2.4	0.5	0.3	2.4
Portland	Y506C3	71h	2.1		1.5	0.5	0.2	1.5
Lockguard	W369A	71i	6.1		3.9	1.8		?
St. Pierre	T3B	72a	4.1		3.7	0.8	0.4	9.9
St. Pierre	Y661A	72b	3.6		1.1	0.3	0.2	1.2

Table 13 (Cont.)

Tool	Site	Provenience	Plate	Lgth	D
End Scraper Borers	St. Pierre	W53A	72c	2.7	
Double Side Scraper-Borers	St. Pierre	W55A	72d	2.7	
	Wrights Bluff	W335A	72e	2.8	
Hafted Double Side Scraper-Borers	St. Pierre	W43A	72f	7.7	
Hafted Side Scraper Knife-Borers	St. Pierre	T5B	72g	6.4	
Side Scraper- Spokeshaves	Anglo	W406	72h	3.6	
Double Side Scraper Spokeshaves	St. Pierre	W62A1	72i	2.5	
Hafted Side Scraper Knife-Spokeshaves	Lockguard	W355A	72j	3.9	
Knives	St. Pierre	&908	73a	7.5	
Hafted Knives	Portland	Y506B	73d		
	St. Pierre	Y662A	73b	7.6	
	St. Pierre	Y571A1	73c	7.2	
	St. Pierre	W79A	73e	5.6	
	St. Pierre	W27A	73f	5.6	
Burins	St. Pierre	Y601A	74a	1.8	
	St. Pierre	W74B	74b	2.9	

Table 13 (Cont.)

Site	Provenience	Plate	Lgth	Diam	Wdth	Thck	S.P. Wdth	Wgth
St. Pierre	W53A	72c	2.7		2.3	0.6	0.5	2.5
St. Pierre	W55A	72d	2.7		2.0	0.6		2.5
Wrights Bluff	W335A	72e	2.8		2.4	0.4	0.2	2.0
St. Pierre	W43A	72f	7.7		4.1	3.2		21.8
St. Pierre	T5B	72g	6.4		4.9	1.4	0.5	19.2
Anglo	W406	72h	3.6		2.8	1.0	1.0	7.4
St. Pierre	W62A1	72i	2.5		2.2	0.4	0.3	1.6
Lockguard	W355A	72j	3.9		2.2	0.6		5.2
St. Pierre	&908	73a	7.5		4.0	1.4		36.5
Portland	Y506B	73d		1.9		0.6		1.6
St. Pierre	Y662A	73b	7.6		5.3	3.3	0.2	30.0
St. Pierre	Y571A1	73c	7.2		2.8	1.2		21.5
St. Pierre	W79A	73e	5.6		3.6	1.5		30.6
St. Pierre	W27A	73f	5.6		2.7	1.0		17.6
St. Pierre	Y601A	74a	1.8		1.2	0.3		
St. Pierre	W74B	74b	2.9		1.4	1.2		

Table 13 (Cont.)

Tool	Site	Provenience	Plate	Lgth
Drills	Portland	Y506C2	74f	?
	St. Pierre	W31A	74c	5.9
	St. Pierre	T12H	74d	7.6
	St. Pierre	Y579A	74e	?
Spokeshaves	St. Pierre	W54A1	74g	2.1
	St. Pierre	W32A	74h	2.8
	Wrights Bluff	W335A	74i	4.9
Engravers	Anglo	W410	74j	4.8
Adzes	St. Pierre	T15A	76a	5.2
	Anglo	W409	76b	?
Hoes	St. Pierre	W39A	76c	?
Celts	St. Pierre	W54A1	76d	6.7
	St. Pierre	W17A1	76e	5.1
Choppers	St. Pierre	Y568A	76f	?

Key

Lgth - Maximum length (cm)
 Diam - Maximum diameter (cm)
 Wdth - Maximum width (cm)
 Thck - Maximum thickness (cm)
 S.P. Wdth - Striking platform width (cm)
 Wght - weight (gm)

Table 13 (Cont.)

Site	Provenience	Plate	Lgth	Diam	Wdth	Thck	S.P. Wdth	Wght
Portland	Y506C2	74f	?		?	?		?
St. Pierre	W31A	74c	5.9		3.7	1.4		20.7
St. Pierre	T12H	74d	7.6		?	1.2		14.8
St. Pierre	Y579A	74e	?		?	?		?
St. Pierre	W54A1	74g	2.1		1.1	0.7		1.0
St. Pierre	W32A	74h	2.8		2.4	0.6	0.3	2.9
Wrights Bluff	W335A	74i	4.9		3.9	1.2		26.7
Anglo	W410	74j	4.8		2.7	0.6		6.0
St. Pierre	T15A	76a	5.2		3.3	1.5		25.2
Anglo	W409	76b	?		4.4	2.4		?
St. Pierre	W39A	76c	?		3.2	1.4		?
St. Pierre	W54A1	76d	6.7		3.1	1.5		29.6
St. Pierre	W17A1	76e	5.1		3.6	1.9		29.5
St. Pierre	Y568A	76f	?		3.5	2.2		?

- Maximum length (cm)
- Maximum diameter (cm)
- Maximum width (cm)
- Maximum thickness (cm)
- Wdth - Striking platform width (cm)
- weight (gm)

Provenience

St. Pierre (1) - T15D

Description

This specimen is banded tan chert. Its shape is generally triangular, the longest sides converging to a blunt point. The left lateral edge has steep retouch and exhibits wear on the dorsal working edge. The tip is not retouched, yet a series of small step flakes have been removed on the ventral surface at this point.

Discoidal Scrapers (Plates 67-68; Table 13)

Sample - 7

Provenience

St. Pierre (5) - Y550J1; T12F; W48A; W59A1; W119A
Lonely Frenchman (1) - W303A
Anglo (1) - W428

Description

St. Pierre

Plate 67a (Y550J1) - This specimen is bifacially-chipped gray chert with a crude circular shape. The convex (or dorsal) side has a small portion of cortex adhering to it. Most of the edge has steep retouch, but on one short section it is acute. Wear is exhibited along the entire edge, except where the tool is truncated. The heaviest wear occurs on the dorsal surface, but several step flake scars have been removed along the ventral edge. The tool was probably employed as an unhafted scraper.

Plate 67b (T12F) - This is a bifacially-chipped red and white chert tool with a biconvex cross-section. Cortex adheres to the dorsal surface along a portion of the edge. Most of the wear consists of a series of small step flake scars, but unlike Y550J1, the scars are primarily along the ventral working edge. The tool was again probably employed for scraping, but the direction of tool use was undoubtedly different.

Plate 67c (W48A) - This is a bifacially-chipped tan chert discoidal. It has a thick almost diamond-shaped cross-section, but the median ridge is not well defined. Similar to the above scrapers, cortex adheres to the dorsal surface. Again, there is one small section of the tool edge which lacks evidence of wear. Overall, the tool was used minimally. Instead of a series of step flake scars, the tool edge exhibits in a number of places minute gouges running perpendicular to the working edge. If utilized as a scraper, as I believe it was, it was discarded soon after its initial use.

Plate 67d & 68 (W59A1) - This is a bifacially-chipped grayish-brown chert tool. It is ovoid or roughly rectangular in shape. Its cross-section is biconvex, but the dorsal surface is much more convex than the ventral. Cortex adheres to the dorsal surface. The edges are heavily crushed, steep flake scars occurring on both dorsal and ventral surfaces. Polishing occurs for a distance of 1.8 cm on the

small end of this tool.

Plate 67e (W119A) -

This is a bifacially-chipped tan chert pebble tool. It has a thick biconvex cross-section and cortex occurs on both surfaces. As the tool is not designed from a flake, there is no true discoidal surface.

However, in keeping with the pattern of the other discoidal scrapers from St. Pierre, I am calling the surface with the most cortex (which covers in this case $\frac{1}{2}$ the surface) the dorsal side. Very little wear is exhibited along the edges of this tool. Only a few step flakes have been removed on both surfaces at some of the projections. The tool was discarded after minimal use.

Lonely Frenchman

(W303) -

This is a bifacially-chipped banded gray and white chert tool. Its shape is square and was produced by rough percussion chipping. Wear analysis was not performed.

Anglo

Plate 67f (W428) - This is a bifacially-chipped tan chert tool with a biconvex cross-section, the dorsal surface being of greater convexity. The distal end of the tool, also its thickest portion, has been truncated and does not exhibit wear. Wear occurs along the left lateral edge on both surfaces. It is especially evident on the ventral surface in the form of a series of small step flake scars. There are also short sections of alternating wear along the right lateral edge, the portion closest to the distal end having step flakes removed on the dorsal face, then ventral, then dorsal, and finally ventral near the proximal end of the tool. Uniform scraping is suggested for the left edge, but the right lateral edge wear suggests the tool may have been used in scraping a thin hard object (perhaps a stick), the tool itself being held in the hand and operated back and forth across the object. Such an interpretation, of course, requires experimentation.

Although the discoidal scrapers from the Yazoo Bluffs region appear very similar in form, there is quite a bit of variation in the way these tools were used. The tools are all bifacially-chipped and are generally of a discoidal shape. Cross-section varies between biconvex and plano-convex. The dorsal surface, in almost all cases, has greater convexity and often has cortex adhering to it. Maximum diameter of these tools ranges between 3.3 cm and 4.8 cm, with an average of 4.2 cm. Maximum thickness ranges between 1.6 cm and 2.3 cm, with an average of 1.9 cm; and weight ranges between 24.0 gm and 40.2 gm, with an average of 31.9 gm. Wear is confined to the edge of the tools, sometimes along just the left or right edges, but most often around the entire perimeter, excepting one short section. This section is most often truncated and may have been blunted for a finger rest. Wear sometimes occurs on the dorsal surface of the edge and sometimes on the ventral edge. In my own experiments in scraping chert, I have found that the greater wear occurs on the surface farthest removed from the direction of force. For example, if the user holds the scraper ventral face down and pushes it away from him along some object (I used wood), the wear will appear mostly on the ventral surface. If he pulls the scraper towards him, wear will occur primarily on the dorsal surface (Brown 1975d). It is apparent that some of these scrapers (Plate 67a) were pulled towards the user, while others (Plate 67b) were pushed away. Some (Plate 67d,f) exhibit use in both manners, and wear on one tool (Plate 67f)

even suggests the nature of the object which was scraped. Some of these tools (Plate 67 c,e) exhibit little wear, they probably having been discarded after minimal use.

Hafted Side Scrapers (Plate 69b-c; Table 13)

Sample - 2

Provenience

St. Pierre (2) - W27A; W40A

Description

Plate 69b (W27A) - This is a crude assymetrical leaf-shaped tan chert biface. It is too modified by percussion flaking to determine which surface is ventral or dorsal, but I am referring to the dorsal surface as that face with the median ridge. The lateral edges of the tool are quite steep and poorly shaped. Step flakes have been removed on the ventral surface along the edges, suggesting pressure from use as

a scraper. As wear does not begin until approximately 2.0 cm from the proximal end, the tool was probably hafted. Only minor traces of wear occur on the tip, so the point was probably not used in boring.

Plate 69c (W40A) - This is a crude bifacially-chipped tan chert tool. The implement was designed out of a curved flake, the result being an asymmetrical leaf-shaped object with a small (1.4 cm long) tang at its proximal end. The cross-section is diamond-shaped and thick, resulting in steep lateral edges. Part of the left lateral edge is acute, however. Some cortex adheres to the dorsal surface. Steep flake scars appear on both faces adjacent to the working edge, suggesting that the tool was used in both directions in a scraping manner. The step flake scars on the dorsal surface are larger and extend farther away from the edge, perhaps reflective of a greater use of the tool in the direction of the person. Similar to the above, only minimal wear occurs at the tip.

As with hand-held discoidal scrapers, hafted side scrapers appear to have been used in a number of directions. One of the specimens (Plate 69b) seems to have been utilized in scraping away from the user, while the other (Plate 69c) was employed in both ways, the greater use being toward the user. Although the points were sharp and capable of having been used, they were employed minimally. Such is not the case with knives (see p. 808). These scrapers have approximately equivalent dimensions. Maximum length is 6.2 cm; maximum width ranges between 2.2 cm and 3.0 cm; maximum thickness ranges between 1.2 cm and 1.5 cm; and weight ranges between 15.6 gm and 23.5 gm.

Double Side Scrapers (Plate 69d-e; Table 13)

Sample - 2

Provenience

St. Pierre (2) - W1A; W71A1

Description

Plate 69d; 70 (W1A) - This is a triangular-shaped brown chert flake tool. The point is

unmodified, some of the cortex still adhering to it. Steep retouch occurs on both lateral edges, but it is not continuous. On the right edge it appears along the dorsal surface just above the distal end. The rest of the right edge is retouched on the ventral surface. The left edge has retouching on the ventral surface just above the distal end, and exhibits a series of very small step flake scars on the ventral surface at the proximal end. This double side scraper was obviously used in a number of different manners.

Plate 69e (W71A1) - This is a red chert flake implement. Delicate retouching occurs along both lateral edges, perhaps from use. Very little wear occurs on the dorsal surface, but on the ventral surface, adjacent to the lateral edges are a series of fine linear cracks running parallel to the edges. The motion of the tool's use may have, for at least one activity, run parallel with the edge, as with a knife. Retouching does not occur on the distal end.

Discussion

A minimal amount of work went into the designing of these tools. The working edges were formed to fit the task, but the overall appearance of the tools had changed little from the original chert flakes removed from a core. The wear on these two specimens suggests that the kinetics involved in their use were quite variable. The size of the two flakes are almost identical. Maximum length is 2.8 cm; maximum width varies between 1.9 cm and 2.0 cm; maximum thickness is 0.6 cm; and weight varies between 2.0 gm and 2.9 gm. The striking platform width for one (Plate 69e) is 0.2 cm.

Hafted End Scrapers (Plate 69f-g; 71a-d; Table 13)

Sample - 6

Provenience

Portland (4) - Y506A; Y506B(2); Y506C3
St. Pierre (1) - W79A
Lockguard (1) - W375A

Description

Portland

Plate 71a (Y506A) - This is a small ovoid banded gray and brown chert flake implement. The thickest part of the flake occurs at the distal working end. The dorsal surface of the tool has been steeply retouched at this point. A notch occurs 1.4 cm below the proximal end on the right lateral edge, undoubtedly for a hafting support. Some minimal wear, in the form of steep flake scars, occurs on the right and left lateral edges. The distal working edge is rounded and polished, apparently from scraping a soft substance. This tool was probably employed in skin scraping.

Plate 71b (Y506B) - This is a light brown chert tool, almost identical to Y506A in form. The thickest point occurs at the distal end, which similarly exhibits steep retouching. Minimal wear occurs along the lateral edges, but a series of minute retouching was executed on the ventral surface of the left lateral edge .5 cm below the proximal end. This was either for hafting support or is a product of the

friction of the haft against the stone. The distal working edge exhibits a series of small, sharp step flake scars. Polishing does not appear but, at X250 magnification, fine striations are observed on the ventral surface running perpendicular to the edge. The hafted end scraper was probably employed against a hard substance, such as wood.

Plate 71c (Y506B) - This is a brown chert flake tool, again bearing steep retouch on the dorsal surface of its distal end. Wear, apparently from hafting, occurs .8 cm below the proximal end on the right lateral edge. Slight polishing occurs along the distal working edge, but the edge is still sharp and has been used minimally. The tool probably was used against a soft substance, such as skins.

Plate 71d(Y506C3) - This is a light brown chert flake tool, the thickest part occurring at the distal end. Steep retouching also occurs on this end. With the exception of a small amount of wear 1.0 cm below the proximal end on the right lateral edge, presumably the result of hafting, wear is entirely

confined to the distal end. A series of step flake scars occur on the dorsal surface at this point, and on the immediate working edge there is a slight degree of polishing. The latter occurs heaviest on the left side of the distal end. The tool was perhaps used against both skin and wood, primarily the latter.

St. Pierre

Plate 69g (W79A) - This tan chert tool is larger and cruder than the Portland specimens, but its basic form and function appears very similar. Cortex occurs on the dorsal surface below which, on the left lateral edge, is a shallow groove. Directly opposite on the right lateral edge is another groove. These are between 1.6 cm and 1.9 cm from the distal end of the tool. It appears that most of the tool was hafted, only the distal end sticking out. Several step flakes had been removed on the dorsal surface of the left lateral edge, but there is no apparent retouching. Steep retouching and heaviest wear are confined to the dorsal surface of the distal end. Some step flakes have

been removed from the ventral surface on the left side of the distal end and along a portion of the right lateral edge. The tool was apparently used against a hard substance, like wood.

Lockguard

Plate 69f (W375A) - This is a finely chipped light brown chert tool, wear being almost entirely confined to its steeply retouched distal end. Minute step flake scars occur along the immediate dorsal surface at this point, with no noticeable wear along the ventral surface. The tool was probably used on a substance harder than skin, but it did not receive heavy duty.

Discussion

With the exception of the St. Pierre specimen (Plate 69g), all of these tools are designed on small chert flakes. Such tools are commonly called "Thumbnail" scrapers. The distal end is the thickest part of the tool. This part is steeply retouched and received heaviest use. Wear varies considerably, however, even among the Portland specimens, which are most likely contemporary (historic) tools. Some scrapers (Plate 69f-g;71b)

appear to have been used against a hard substance like wood, while others (Plate 71a-c) were most likely employed against skins. One specimen (Plate 71d) may have been used against both material. Measurements of maximum length varies between 1.8 cm and 5.2 cm, with an average of 3.0 cm; maximum width ranges between 1.4 cm and 3.5 cm, with an average of 2.3 cm; maximum thickness ranges between 0.5 cm and 1.3 cm, with an average of 0.8 cm; striking platform width ranges between 0.1 cm and 0.5 cm, with an average of 0.3 cm; and weight varies between 0.6 gm and 23.1 gm, with an average of 6.5 gm.

Side - End Scrapers (Plate 71e-g; Table 13)

Sample - 3

Provenience

St. Pierre (2) - Y571C1; W42A
Wright's Bluff (1) - W335B

Description

St. Pierre

Plate 71e (Y571C) - This is a light brown chert flake tool.

The left lateral edge bears steep retouch and is slightly concave. The right edge has not been worked. These edges taper to a squared chisel-like point which similarly has steep-angled retouch. A great deal of wear occurs on the dorsal surface of this point. Very little wear occurs on the ventral surface of the tool.

Plate 71f (W42A) - This is a red chert flake tool. Steep retouch and wear occurs along the dorsal surface of the right lateral edge and the distal end.

Wright's Bluff

Plate 71g (W335B) - This is a dark brown chert flake tool. Steep retouch occurs on both the dorsal surface of the distal end and on the right lateral edge. Wear is exhibited on the dorsal surface in the form of tiny step flake scars. Wear is not apparent on the ventral surface.

Discussion

If the interpretation of scraper use is correct (Brown 1975d-

see p. 781), these scrapers would have been employed in a motion toward the user. The step flake removal suggests a hard substance such as wood. Two of these side-end scrapers have retouch on the right lateral edge, the other (Plate 71e) on the left edge, perhaps suggesting right and left-handedness, respectively. Maximum length varies between 2.5 cm and 4.1 cm, with an average of 3.1 cm; maximum width varies between 2.4 cm and 2.6 cm, with an average of 2.5 cm; maximum thickness varies between 0.5 cm and 0.7 cm, with an average of 0.6 cm; striking platform varies between 0.3 cm and 0.4 cm; and weight varies between 2.4 gm and 4.4 gm, with an average of 3.7 gm.

Hafted Side - End Scrapers (Plate 71h-i; Table 13)

Sample - 2

Provenience

Portland (1) - Y506C3
Lockguard (1) - W369A

Description

Portland

Plate 7lh - This is a small brown chert flake tool. Steep retouching occurs along the dorsal surface of the distal end and on the right lateral edge. A shallow notch appears 0.9 cm below the proximal end on the right lateral edge, the retouching occurring below this point. The retouched area is characterized by a series of small step flake scars, wear probably resulting from the use of this object in scraping wood or some other hard substance.

Lockguard

Plate 7li - This is a tan chert pebble tool. A good deal of cortex adheres to what I am calling the dorsal surface near the distal end. A blunted shallow notch occurs on the left lateral edge approximately 2.3 cm below the proximal end, presumably for hafting. Very little wear occurs on this edge. A great deal of wear, in the form of steep flake scars, occurs on the dorsal surface of the left portion of the distal end. The right portion exhibits minor wear of the same nature. The right lateral edge exhibits wear of similar degree, but it occurs on the ventral surface. The tool was apparently pulled toward the user when the scraping surface was the distal end. When the right side was

used, the observed wear would have been produced by a right-handed person holding the haft and drawing the tool toward him over the object. In both cases a hard substance, like wood, appears to have been the object being scraped.

Discussion

Both of these tools exhibit wear typical of woodscraping, the larger Lockguard specimen obviously receiving a heavier degree of use. These two specimens differ radically in their dimensions, the Portland specimen fitting in nicely (but with the added dimension of lateral edge retouch) with the hafted end scrapers from that site (pp. 782-784).

Double Side - End Scrapers (Plate 72a-b; Table 13)

Sample - 2

Provenience

St. Pierre (2) - T3B; Y661A

Description

Plate 72a (T3B) - This is a light brown chert flake tool. Two of the three edges have steep dorsal retouching forming a retouched point with a triangular cross-section. Wear occurs only along the dorsal working edge. The third edge has not been retouched, but some step flakes have been removed from its ventral surface.*

Plate 72b (Y661a) - This is a light brown and red chert blade tool. Steep retouching occurs on the dorsal surface of the distal end and on both lateral edges. Wear is almost entirely confined to the dorsal working edge, but a series of minute step flake scars appear on the ventral surface of the distal end.

Discussion

* The longest dimension of this tool is recorded as its length, but if length is considered to be the distance from the proximal end to the distal end, the length and width measurements in Table 13 should be reversed.

For both of these tools the principal movement appears to be toward the user. However, the distal end of the tool may have been subjected to a number of scraping actions.

III Combination Tools

End Scraper - Borers (Plate 72c; Table 13)

Sample - 1

Provenience

St. Pierre (1) - W53A

Description

This is a gray chert flake tool. Very delicate steep retouching occurs along the dorsal surface of the right side of the distal end on the lower portion of the right lateral edge. A sharp point is thus formed. A small depression, similar to what is observed in drills and borers (Semenov 1976), occurs on the ventral surface of this point. The implement was probably used for scraping and boring.*

* Footnote on p. 796 applies also for this tool.

Double Side Scraper - Borers (Plate 72d-e; Table 13)

Sample - 2

Provenience

St. Pierre (1) - W55A
Wright's Bluff (1) - W335A

Description

St. Pierre

Plate 72d (W55A) - This is a brown chert flake tool. Steep retouching occurs on the left and right lateral edges forming a very sharp point. Wear is exhibited on the dorsal surface in the form of many very small step flake scars at the immediate working edge. The point is retouched, but no noticeable wear appears on it. It may, however, have served in boring.

Wright's Bluff

Plate 72e (W335A) - This is a purple chert flake tool. Steep

retouching occurs along the dorsal surface of both the left lateral edge and the distal end. The right lateral edge exhibits retouching on the ventral surface. The point on the right side of the distal end has thus been retouched on both surfaces. With the exception of one small area along the dorsal surface of the right lateral edge having minute step flake scars, all wear is confined to the retouched surfaces.*

Hafted Double Side Scraper - Borers (Plate 72f; Table 13)

Sample - 1

Provenience

St. Pierre (1) - W43A

Description

* Footnote on p. 796 applies also for this tool.

This is a long, narrow light brown chert implement. It is bifacially-chipped and has a thick cross-section. Some of the pebble cortex still adheres to the dorsal surface above the distal end. The proximal end has a tang 1.8 cm long. It is roughly shaped and exhibits no wear, suggesting its use as a hafting support. The ventral surface of the tool lacks shaping, but several large step flakes have been removed, undoubtedly due to pressure against the dorsal surface in scraping. The lateral edges of the tool are steeply retouched and minute step flakes occur at the distal tip suggesting use in boring.

Hafted Side Scraper - Knife - Borers (Plate 72g; Table 13)

Sample - 1

Provenience

St. Pierre (1) - T5B

Description

This is a bifacially-chipped gray chert flake tool. Its shape is an asymmetrical isosceles triangle, its cross-section, plano-convex. The dorsal surface toward the proximal end exhibits

minimal shaping. A median ridge occurs on the dorsal surface toward the distal end and this surface exhibits fine percussion flaking in this area. The ventral surface is flat and has similarly been shaped by fine percussion flaking. The right lateral edge is acute, whereas the left edge is steep. Wear occurs most heavily along the lateral edges toward the distal end. A haft presumably encased the proximal end for a distance of 4.3 cm. The left lateral edge was probably used as a scraper, whereas the right was employed as a knife. Heavy wear occurs on the tip suggesting its use as a borer. Polishing, perhaps resulting from friction, occurs on both the ventral and dorsal surfaces in the area below where the haft would have been.

Side Scraper - Spokeshaves (Plate 72h; Table 13)

Sample - 1

Provenience

Anglo (1) - W406

Description

This is a tan chert flake tool. Its form is basically

triangular. Steep retouching occurs along the ventral surface of both lateral edges. The distal end, part of which is covered by cortex, has not been retouched. The right lateral edge has a series of notches in it. The left lateral edge is more regular, with tiny step flake scars occurring on the immediate working edge.

Double Side Scraper - Spokeshaves (Plate 72i; Table 13)

Sample - 1

Provenience

St. Pierre (1) - W62A1

Description

This is a light purple chert flake tool. Delicate steep retouching occurs on the dorsal surface of both lateral edges. The distal end has two small notches which exhibit wear. Wear is not apparent on the ventral surface.

Hafted Side Scraper - Knife - Spokeshaves (Plate 72j; Table 13)

Sample - 1

Provenience

Lockguard (1) - W355A

Description

This is a brown, mottled with purple, chert flake tool. It exhibits bifacial and unifacial chipping. The left lateral edge is bifacially flaked at an acute angle. Wear, in the form of tiny step flake scars, occurs along this edge on both its dorsal and ventral surfaces. The right lateral edge has steep unifacial retouch on its dorsal surface for its entire length, except that halfway between the two ends is a small notch. The notch has been chipped out on the ventral surface. Minute step flake scars occur on the immediate right lateral edge of the dorsal surface, but not on the ventral surface. Wear occurs only within the notch on the ventral side of this edge. The distal end was not shaped, although wear retouch occurs on both surfaces at this point.

IV Additional Tools

Knives (Plate 73a; Table 13)

Sample - 1

Provenience

St. Pierre (1) - Y908

Description

This is a crudely shaped bifacially-chipped rhyolite tool. The ends are truncated, giving the tool a rectangular shape. Its cross-section is biconvex. The lateral edges are acute. Wear, which is apparent on both edges but occurs heaviest along just one, consists of the crushing of protruberances. The edges must originally have been jagged, being worn down from use as a knife. The tool may have been hafted, but there is no evidence (in terms of wear) to suggest such was the case.

Hafted Knives (Plate 73b-f; Table 13)

Sample - 5

Provenience

Portland (1) - Y506B

St. Pierre (4) - Y571A1; Y662A; W27A; W79A

Description

Portland

Plate 73d (Y506B) - This is a bifacially-chipped grayish-brown chert tool whose shape is discoidal. A large flake has been removed from the proximal end on the dorsal surface, presumably for hafting. Polishing occurs along the right lateral edge at the proximal end, apparently from the rubbing of the binding. All other edges of the discoidal are serrated, and a multitude of small step flakes have been removed from both the ventral and dorsal surfaces. The sharpness of the protrusions and the wear on both sides suggests a cutting or chopping activity rather than scraping.

St. Pierre

Plate 73b (Y662A) - This is a bifacially-chipped light brown chert flake tool. The proximal end of the implement is at the point, a portion

of the striking platform still intact. The tool's cross-section is plano-convex. An off-centered median ridge occurs on the dorsal surface, as does a large flute on its distal end. This end has been truncated and probably supported a haft. The edges are acute, but on the higher end of the scale. Wear is exhibited along both lateral edges.

Plate 73c (Y571A1) - This is a dark brown to purple chert tool. It is a long asymmetrical leaf-shaped biface with a plano-convex cross-section and a median ridge on its dorsal surface. The ventral and dorsal surfaces both exhibit fine percussion flaking. The chipping extends over the entire ventral surface, the bulb of percussion having been removed. The proximal end, which has been truncated, is poorly chipped for its first 2.2 cm. Part of the cortex still adheres to the dorsal surface in this area. It probably supported a haft. The lateral edges are acute and exhibit wear below the location of the haft. The tip is broken, but polishing around the edges suggests it may have been used in boring.

Plate 73e (W79A) - This is a rather crudely chipped brown chert oblong biface. Its lateral edges vary from acute to steep and are slightly serrated. A notch occurs on one end. The tip adjacent to the notch has been crushed, undoubtedly associated with hafting. The lateral edges exhibit wear, as does the end opposite the notch, which is at an even more acute angle than the lateral edges.

Plate 73f (W27A) - This tool is light to dark brown chert, mottled with red. It is a finely chipped rectangular biface, with a biconvex cross-section. A notch occurs on one end, perhaps for haft support or maybe for use as a spokeshave. The lateral edges are acute and both exhibit wear. One edge in particular received heavy duty, a series of step flake scars occurring along both faces for the entire length of the edge. The other edge has the same wear pattern, but not to as great an extent. The end opposite the notch is very acute, very sharp, yet exhibits little wear. The end with the notch has been used all along the edge,

the tip being crushed in the same manner as the notch.

Discussion

The principal difference between these knives and the scrapers is that the edge angle of knives is much more acute, often serrated, and wear occurs in the form of tiny step flake scars on both surfaces of the working edge. Semenov (1976) said striations running parallel to the working edge appear on tools used as knives. Theoretically, this seems reasonable, but I did not observe such wear at any magnification. Scrapers tend to have steep unifacial retouch and generally have wear on one surface. In some cases wear, in the form of tiny step flake scars and polishing, appears on both surfaces. Most, perhaps all, of the knives from the Yazoo Bluffs region were hafted, a notch being chipped out of one end of several specimens (Plate 73e-f) to hold the binding. Others have large flutes removed on one end for the same purpose (Plate 7b,d). The lateral edges received heaviest use, but for some specimens the end opposite the haft was also utilized. The maximum length of these tools varies between 1.9 cm and 7.6 cm, with an average of 5.6 cm; maximum width varies between 1.9 cm and 5.3 cm, with an average of 3.3 cm; maximum thickness varies between 0.6 cm and 3.3 cm, with an average of 1.5 cm; and weight varies between 1.6 gm and 30.6 gm, with an average of 20.3 gm.

Burins (Plate 74a-b; 75; Table 13)

Sample - 2

Provenience

St. Pierre (2) - Y601A; W74B

Description

Plate 74a (Y601A) - A burin blow was struck along the edge of this red chert flake forming a strong chisel-like edge. The platform for the blow was first prepared by delicate pressure flaking. Wear is minimal along the edges of the burin flake scar, but at X250 magnification it can be observed in the form of minute gouges running perpendicular to the edge. Burins are thought to have been used in engraving, but the wear on this specimen suggests the object was used in a direction perpendicular to the burin flake scar.

Plate 74b (W74B) - This is a light brown chert flake on

which two burin blows were struck to produce a steep sharp edge. The edge was used, wear appearing in the form of a series of tiny step flake scars.

Drills (Plate 74c-f; Table 13)

Sample - 6

Provenience

Portland (1) - Y506C2
St. Pierre (5) - Y579A; T12H; W31A; W37A1; W56A

Description

Portland

Plate 74f (Y506C2) - This is a broken banded red and gray chert drill. It has a plano-convex cross-section and exhibits alternating beveled chipping.

St. Pierre

A number of drills, or borers, were found at St. Pierre.

Two (W37A1; W56A) occur on chert flakes.
The others deserve more detailed description.

Plate 74c (W31A) - This is a light brown chert tool which was shaped by percussion flaking. Its point is off-center, probably having been designed for use in the hand for drilling or boring. The point has a triangular cross-section and a steep median ridge. The tip is very sharp, has a triangular section, and is highly polished. Striations were not observed.

Plate 74d (T12H) - This is a finely made gray chert cruciform drill. One of its arms is broken. The lateral edges of the drill have been crushed, purposeful dulling. The tip is oval-shaped, with a slight ridge on one side and a depression on the other. Minute step flakes occur within the latter. Polishing is observed on the tip, but there are no striations.

Plate 74e (Y579A) - This is an unfinished red chert drill. It has a median-ridged cross-section.

Discussion

Semenov (1976) observed that stone drills have a slight ridge on one side of the tip and a depression on the other, with circular striations occurring as a result of the drilling motion. Pits and ridges are seen on the drills from St. Pierre, but neither revealed striations, even at X250 magnification.

Spokeshaves (Plate 74g-i; Table 13)

Sample - 3

Provenience

St. Pierre (2) - W32A; W54A1
Wright's Bluff (1) - W335A

Description

St. Pierre

Plate 74g (W54A1) - This is a red and gray chert tool. Steep retouching occurs on its dorsal surface forming a notch. The tool was probably employed as a spokeshave.

Plate 74h (W32A) - This is a tan and red chert tool. A

small notch occurs on the ventral surface of the left lateral edge. Small steep retouching occurs on the protruberance between the notch and the distal end. The distal end exhibits use retouch along the dorsal working edge. The right lateral edge has a large notch which occurs on the dorsal surface. An even larger protruberance exists between this notch and the distal end, and this too has retouching on its dorsal surface. The tool was probably used as a spokeshave.*

Wright's Bluff

Plate 74i (W335A) - This is a brown chert tool. Steep dorsal retouching occurs along the distal end and right lateral edge of the tool. The irregular shallow notch on the former and the two shallow notches on the right lateral edge suggest the tool was employed as a spokeshave rather than a scraper. The notch on the distal end is heavily crushed, step flakes having been removed from its ventral surface. Wear does not appear along the ventral surface of the right lateral

* Footnote on p. 796 applies also for this tool.

edge, but a series of small step flake scars border the immediate edge on the dorsal surface.*

Discussion

These flake tools range in maximum length between 2.1 cm and 4.9 cm, with an average of 3.3 cm; in maximum width between 1.1 cm and 3.9 cm, with an average of 2.5 cm; in maximum thickness between 0.6 cm and 1.2 cm, with an average of .08 cm; and in weight between 1.0 gm and 26.7 gm, with an average of 10.2 gm.

Engravers (Plate 74j; Table 13)

Sample - 1

Provenience

Anglo (1) - W410

* Footnote on P. 796 applies also for this tool.

Description

This is a light gray chert tool. Its distal end has been truncated and is bifacially-flaked. Long step flake scars appear on both surfaces, indicating that this point was sharpened by some heavy blows. A slight polish occurs on the tip and I believe, although I'm not totally convinced, that striations run parallel to the distal end. The tool was probably used as an engraver.

Adzes (Plate 76a-b; Table 13)

Specimens - 2

Provenience

St. Pierre (1) - T15A
Anglo (1) - W409

Description

St. Pierre

Plate 76a (T15A) - This greenish-gray ovoid-shaped tool

exhibits fine percussion chipping. It has a plano-convex cross-section with a median range occurring on the dorsal surface. The widest part of the tool occurs just above the working edge at the distal end of the implement. The proximal end was hafted, as both lateral edges exhibit shallow crushed areas 2.4 cm below this end. Step flake scars appear below the crushed areas along both edges, but they do not occur above these areas. The working edge is acute, step flakes having been removed on both surfaces. Polishing is also seen on the dorsal surface for a distance of 0.6 cm from the edge. There is no polishing on the ventral surface. Striations are not observed at any magnification.

Anglo

Plate 76b (W409) - This is a broken light brown quartzite tool. Its cross-section is oblong, being slightly flatter on one side. The entire tool was first pecked into shape, with grinding later being applied to the wide surfaces. The edges still remain in their pecked form. The tool has received rough treatment, several large flake scars

appearing on both surfaces. Many very thin striations (or shallow grooves), visible at X60 magnification, occur on the flatter surface of the tool. They run perpendicular to the working edge for a distance of not more than 3.2 cm. They are not the result of grinding, as they do not appear on the other, more convex, surface. They must be the result of wear. In form, the tool appears to have been a hafted adze, but if such is the case, heaviest wear should theoretically be observed on the more convex base, that which was opposite the hafted wooden support (Semenov 1976). There is obviously much we need to know about the use of these particular tools.

Hoes (Plate 76c; Table 13)

Specimens - 1

Provenience

St. Pierre (1) - W39A

Description

This is a broken bifacially-ground metamorphic rock, commonly called a "greenstone celt". The tool has a biconvex cross-section and was first roughly pecked into shape, later having its working edge ground to a point. The working edge exhibits very little wear. Only at high magnification (X120) do minute perpendicular gouges appear on the immediate working edge. The tool was used, but the substance must have been very soft. It may have been employed as a hoe, but perpendicular and diagonal striations do not occur, as they should (Semenov 1976). The tool certainly was not utilized as a celt (ax), as wood would have made a deeper impression on its surface. Tentatively, I have classified it as a hoe.

Celts (Plate 76d-e; Table 13)

Specimens - 2

Provenience

St. Pierre (2) - W17A1; W54A1

Description

Plate 76d (W54A1) - This is a light brown chert tool, mottled with red. It is slightly curved and has a biconvex to median-ridged cross-section. Fine percussion flaking occurs on one face, the other being somewhat more crudely shaped. A flute emerges from one end and runs for about $2/3$ the length of the tool. The two ends and the lateral edges are bifacially-flaked. A shallow notch occurs on one lateral edge 2.9 cm below the end which has the flute. Both the notch and the flute appear to have been of use in hafting. Wear does not occur in this area, but it does appear along the lateral edges below the notch and on the other end of the tool. It probably served as a celt.

Plate 76e (W17A1) - This is a light brown, mottled with gray, chert tool. It is ovoid in shape, with the widest point occurring just above the working edge. The tool's cross-section is biconvex. A notch on one edge of the tool and a drilling of the opposite edge approximately 1.6 cm below the proximal end, suggests

the tool was hafted. Wear does not occur above these notches. There are some step flake scars along the lateral edges, but large ones occur only on the distal end of the tool. They occur evenly on both surfaces of the working edge. Equal wear suggests equal contact and this, combined with the shape of the tool, suggests it is a celt.

Choppers (Plate 76f; Table 13)

Specimens - 1

Provenience

St. Pierre (1) - Y568A

Description

This thick, crudely chipped, red and white chert biface has been subjected to fire. It has a median-ridged cross-section and some cortex still adheres to the tool's surface. The lateral edges exhibit a great amount of wear, having been crushed for

their entire length. The steepness of the edges argues against its use as a knife, the edges probably having been employed in a pounding fashion.

Hammerstones (Plates 77 and 78; Table 14)

Sample - 56

Provenience

Portland (1) - Y501B
 St. Pierre (47) - Y558-9A; Y558-31E; Y561A; Y565A; Y577A;
 T1G; T1J; T8D; T9A; T11B; T15D; T15E; Y600A(2);
 Y647B(2); Y660A(2); Y663A(3); Y672A; Y914; W4A;
 W6A; W8A W11A; W37A1; W42A; W50A; W60A1(2);
 W63A; W64B; W70A; W72A; W92A; W97A; W98A; W107A;
 W11A; W112A(2); W119A(2); W427; unlabeled (1)
 Lonely Frenchman (1) - Y915
 Lockguard (2) - W353A; W365A
 Wright's Bluff (3) - W325A; W326A; W335C
 Anglo (2) - W406(2)

Description

The Indians living at the St. Pierre Site apparently used any handy piece of rock for hammerstones. With the exception of two quartzite specimens (Y660A; W42A), all of the St. Pierre hammerstones are made of local cherts, ranging in color from gray, to tan, to brown, to red, and to purple, with much blending

Table 14

Hammerstone Weights

Sites	Category 1	Category 2	Category 3	Total
Portland	1			1
St. Pierre	32	9	6	47
Lonely Frenchman	1			1
Lockguard	2			2
Wright's Bluff	1		2	3
Anglo	1		1	2
Total	38	9	9	56

822

of the tints. Hammerstones from St. Pierre are abundant, no doubt a result of more intensive excavations at this site. The other Yazoo Bluffs region sites also yielded hammerstones, again mostly made of chert. A quartzite hammerstone from Anglo (W406) and two of the same material from Wright's Bluff (W325A; W335C) bear mentioning, however. The latter specimens are the largest hammerstones in the total collection. Overall, hammerstones range in size from miniscule (.2 gm) to colossal (482.3 gm). I have tentatively divided the collection into three categories; 1 (0 gm - 79 gm); 2 (80 gm - 159 gm); 3 (160 gm and above). Most of the specimens fall within Category 1 (Table 14).

V Miscellaneous Tools

Worked Bifacial Tool Fragments (Table 15)

Sample - 30

Provenience

Portland (3) - Y506C(2); Y506C3
 St. Pierre (25) - Y560A; Y565A; Y566A; Y571B; Y574A; Y577A;
 T3B; T3D; T5C; T8A; T15F; Y603A; Y661A; Y672A;
 W12A; W41A; W49A; W52B; W56A; W76A; W85A; W94A;
 W112A; W116A; W120A

Lockguard (1) - W366A
 Anglo (1) - W428

Crude Bifaces (Plates 79 and 80; Table 15)

Sample - 56

Provenience

Portland (3) - Y500A; Y506B; Y506C
 St. Pierre (46) - Y551A; Y555A; Y558-20; Y558-31A; Y558-31D;
 Y576A; Y578A; Y579A(2); Y602A; Y603A; Y604A;
 Y643B; Y644A; Y660A; Y662A; Y911(2); W2A; W7A;
 W11A(2); W12A; W23A(2); W29A; W35A; W36A; W39A;
 W40A; W43A; W44A; W47A; W48A; W52A; W59A1; W60A1;
 W70A; W72A; W85A; W87A1; W90A; W96A; W98A; W104A;
 W117A
 Lonely Frenchman (2) - Y924B; W301E
 Lockguard (5) - W359A; W363B; W366A; W372A; W377A

Description

A considerable number of pebbles were found which have crude bifacially-chipped edges. Most cover the full range of local chert, but several are quartzite (St. Pierre - Y660A; W11A; W60A1; Lonely Frenchman - W301E) and one from St. Pierre is sandstone (W11A). Most of the cortex still remains on these tools, the pebbles having been little modified from their original shapes. The Indians apparently chipped an edge for an immediate specific

function, without being overly concerned with the appearance of the tool. Probably few, if any, of these crude bifaces were hafted. Some have edge angles acute enough to have been employed as knives, but most are fairly steep and very sturdy. They would have been particularly useful as choppers, as the hand fits nicely over the unworked portions of most of these tools. A description of the shape and weight of each tool is not offered, the reason being that such description would merely be a tabulation of pebble form.

Biface Retouch Flakes (Table 15)

Sample - 18

Provenience

St. Pierre (16) - Y550D1; Y558-31D; T11; T12G; Y600A; Y602A;
Y672A; W21B; W28B; W36A; W67A; W87A1; W106A(2);
W117A; unlabeled (1)
Lonely Frenchman (1) - W307B
Wright's Bluff (1) - W338A

Description

These are waste flakes which result from the edge

resharpening of bifacial tools. All of the specimens are of local chert.

Pebbles and Flakes with Unifacial Retouch (Table 15)

Sample - 37

Provenience

Portland (3) - Y506C2; Y506C3(2)
 St. Pierre (28) - Y550B1; Y557A; Y558-9A; Y571C1; Y578A;
 T6B; T11A; Y647B; Y672A; W1A; W3A; W4A; W11A;
 W36A; W44A; W45A; W50A; W61A; W67A(2); W80A;
 W86C; W92A(2); W110A; W119A; W413; unlabeled(1)
 Lonely Frenchman (2) - Y924B(2)
 Lockguard (3) - W352A; W369A; W373A
 Anglo (1) - W409A

Description

With the exception of one rhyolite specimen from Lockguard (W373A), all of the above artifacts are made of local chert.

Uniface Retouch Flakes (Table 15)

Sample - 6

Provenience

St. Pierre (5) - T12E; W8A; W28B; W44A; W122A
 Wright's Bluff (1) - W331A

Description

As with bifaces, unifacial tools dull with use. Some were merely thrown away, but others were resharpened. The above are the waste products of the latter process. They are all made of local chert.

Cores (Plate 81; Table 15)

Sample - 48

Provenience

Portland (2) - Y502A; Y504A
 St. Pierre (41) - Y551A; Y558-9(Y579); Y558-11; Y558-31F;
 Y558-76; Y563A; Y573A; Y575A(2); Y578A; T6B; T8H;
 T9E(2); T10B; T10E; T15E; Y601A; Y640A; Y647B;
 Y663A; Y672A; Y911; Y920; Y950; W2A; W12A; W15A;
 W16A; W40A; W43A; W48A; W50A; W53B; W64A; W72A;
 W86A; W89A1; W95A; W106A; W112A
 Lonely Frenchman (1) - Y924B
 Lockguard (2) - W354A; W363B
 Wright's Bluff (1) - W333A
 Anglo (1) - W410

Description

Quite a lot of pebbles were found at St. Pierre, many of which have several flake scars on their surface. Most of these scars occur randomly, but in some cases there appears to be a degree of regularity. The Indians were obviously removing flakes from these pebbles for various functions, but it is equally obvious they did not worry too much about how the flakes were removed. Some did, however. As indicated by a core rejuvenation flake found at St. Pierre, prismatic blade cores were used at the site. A detailed study of the cores from the Yazoo Bluffs sites would undoubtedly reveal a higher degree of sophistication than what is apparent from a quick study of these materials. Such an investigation would also necessitate a rigorous examination of the utilized flakes recovered from the sites (Table 15). The thought of such an undertaking overwhelms me at this moment, but perhaps a more ambitious person will confront the task in the future. With the exception of two quartzite cores (T15E; Y672A) and one rhyolite core (Y950) from St. Pierre, all of the specimens from the Yazoo Bluffs region are made of chert. One core from Lonely Frenchman is made of a non-local gray chert (Y924B), but all other cores are of local material.

Core Rejuvenation Flakes (Table 15)

Sample - 1

Provenience

St. Pierre (1) - Y564A

Description

This flake was struck from a prismatic core in order to establish a new striking platform. It is light brown chert and has a weight of 12.3 gm.

VI Aboriginally - Worked Glass

Projectile Points (Plate 66m and 82)

Sample - 2

Provenience

Portland (1) - Y506B
St. Pierre (1) - W11A

Description

Portland (Y506B) - This is a bifacially retouched fragment of clear glass, used either as a projectile point or a knife.

St. Pierre (W11A - Plates 66m and 82) - This green glass point is crudely chipped. It has a triangular cross-section and excurvate blade edges. The sides are straight, as is the truncated base. The shoulders are expanding. It has a maximum length of 1.7 cm; a maximum width of 1.0 cm; and a maximum thickness of 0.3 cm.

Scrapers (Plate 83b-c and 84)

Sample - 2

Provenience

St. Pierre (2) - T6A; W5A

Description

Plate 83b(T6A) - This is clear glass, exhibiting no cloudiness nor evidence of having been blown. It would have ordinarily been sorted as recent glass, were it not for the fact that its edge has been finely retouched for use as a scraper. This suggests that other clear glass fragments were incorrectly sorted. The artifact is slightly arched, the steep retouching occurring on the upper surface.

Plate 83c; 84 (W5A) - Steep retouching occurs on the upper surface of this arched olive green bottle neck. It was first roughly chipped by percussion flaking, followed by fine pressure retouch. The edge is not as uniform as the scraper from T6A, but it is nevertheless a good working surface.

Spokeshaves (Plate 83a)

Sample - 1

Provenience

St. Pierre (1) - T2B

Description

This piece of bluish-green glass has a unifacially-retouched notch. As with scraper T6A above, this glass would have been classified as recent had it not been for the purposeful retouching. The glass is arched, the steep retouching occurring on the upper surface of the arch.

Glass with Unifacial Retouch

Sample - 1

Provenience

St. Pierre (1) - W6A
Comments - clear glass; blown, but not cloudy

Portland (22-M-12)

	PORTLAND	Y12	Y16	Y17	Y24	Y25	Y26	Y36	Y42	Y44	Y45	Y50CA	Y501A	Y501B	Y502A	Y502AF
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Nedena																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes																
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes																
Unutilized Fire-Cracked Chert Flakes																
Unutilized Rhyolite Flakes																
Unutilized Quartzite																
Unutilized Fossilized Wood																
Unutilized Limestone																
Unutilized Sandstone																
Unutilized Ironstone																
Pebbles																
Unclassified Lithics																
TOTAL									2				37	26	27	4

Portland (22-M-12)/
St. Pierre (23-M-5)

	Y506C1	Y506C2	Y506C3	Y510A	Y510B	TOTAL	ST. PIERRE	Y45	Y46	Y47	Y48	Y401	Y404	Y407	Y550A1	
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island						5										
Nedona																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers						4										
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments							3									
Crude Bifaces							3									
Biface Retouch Flakes					1	2	3									
Pebbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes							2									
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes			8	2	11	2	1	62								
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																6
Unutilized Chert Flakes	62	136	93	19	13	636										
Unutilized Fire-Cracked Chert Flakes	18	39	8	9	14	208		2			2					
Unutilized Rhyolite Flakes				2		15										
Unutilized Quartzite																
Unutilized Fossilized Wood																
Unutilized Limestone				6	57	8	85									
Unutilized Sandstone																
Unutilized Ironstone																
Pebbles																
Unclassified Lithics																
TOTAL	90	182	126	88	37	1044			2	1	3	1	2	1	1	

St. Pierre (23-M-5)

	Y557A	Y558-1	Y558-2	Y558-3	Y558-4	Y558-5	Y558-6	Y558-7	Y558-8	Y558-9 (Y558-9E)	Y558-9 (Y570)	Y558-9 (Y579)	Y558-9A	Y558-10	Y558-11	Y558-12
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Nodona																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes										2	1	2		10	3	
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes	5	4	1	12	3				2	6	13	5	21	4	1	
Unutilized Fire-Cracked Chert Flakes		2		4	1				1	4	7	2	6	5	1	
Unutilized Rhyolite Flakes				3							3	1				
Unutilized Quartzite	1			1						1	2		2	1		
Unutilized Fossilized Wood	1															
Unutilized Limestone	2															
Unutilized Sandstone	2	1	1	4	5					2	8	1	8	2	2	
Unutilized Ironstone											3		5			
Pebbles			2	5	1	1	1			5	3	2	6	2		
Unclassified Lithics											3					
TOTAL	14	10	2	30	9	2	1	3	2	20	45	12	63	18		

St. Pierre (23-M-5)

	Y558-31E	Y558-31F	Y558-31H	Y558-33	Y558-35	Y558-38	Y558-42	Y558-57	Y558-58	Y558-60	Y558-67	Y558-76	Y559A	Y560A	Y561A	Y562A	
PROJECTILE POINTS																	
Provisional Type 1																	
Broad Gary Stemmed																	
Collins var. Claiborne																	
Knight Island																	
Modena																	
Madison																	
Guntersville																	
Unclassified																	
SCRAPERS																	
Side Scrapers																	
Discoidal Scrapers																	
Hafted Side Scrapers																	
Double Side Scrapers																	
Hafted End Scrapers																	
Side-End Scrapers																	
Hafted Side-End Scrapers																	
Double Side-End Scrapers																	
COMBINATION TOOLS																	
End Scraper-Borers																	
Double Side Scraper-Borers																	
Hafted Double Side Scraper-Borers																	
Hafted Side Scraper-Knife-Borers																	
Side Scraper-Spokeshaves																	
Double Side Scraper-Spokeshaves																	
Hafted Side Scraper-Knife-Spokeshaves																	
ADDITIONAL TOOLS																	
Knives																	
Hafted Knives																	
Burins																	
Drills																	
Spokeshaves																	
Engravers																	
Adzes																	
Hoes																	
Celts																	
Choppers																	
Hammerstones																	
MISCELLANEOUS TOOLS																	
Worked Bifacial Tool Fragments																	
Crude Bifaces																	
Biface Retouch Flakes																	
Pebbles and Flakes with Unifacial Retouch																	
Unifacial Retouch Flakes																	
CORES																	
Core Rejuvenation Flakes																	
MISCELLANEOUS LITHICS																	
Utilized Chert Flakes		2	3	5											1	2	4
Utilized Rhyolite Flakes																	1
Utilized Quartzite																	1
Utilized Fossilized Wood																	2
Utilized Limestone																3	2
Ground Sandstone																	2
Unutilized Chert Flakes		5	20	5		2	1	1									2
Unutilized Fire-Cracked Chert Flakes		2	3	3		1		1									2
Unutilized Rhyolite Flakes																	2
Unutilized Quartzite			2														1
Unutilized Fossilized Wood																	1
Unutilized Limestone										1	1						2
Unutilized Sandstone			6	1													6
Unutilized Ironstone						1											1
Pebbles		5	8	5													2
Unclassified Lithics																	1
TOTAL		15	44	19	1	3	1	2	1	1	1	1	2	5	9	18	8

St. Pierre (23-M-5)

	Y5670	Y567P	Y567Q	Y568A	Y569A	Y570A	Y571A	Y571A'	Y571B	Y571C	Y572-2	Y572-9	Y572-11	Y572-12	Y573 A	
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Modena																
Madison																
Centersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Unifacial Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes						7					3	5				
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes		3	2	1		24	2	4	2	14	1					
Unutilized Fire-Cracked Chert Flakes			1		4	13		3		3	6					
Unutilized Rhyolite Flakes																
Unutilized Quartzite																
Unutilized Fossilized Wood																
Unutilized Limestone																
Unutilized Sandstone		1		1		9	3			3						
Unutilized Ironstone																
Pebbles					2	11		2		3	5					
Unclassified Lithics																
TOTAL	4	3	3	10	68	6	13	2	28	33	1	1	3			

St. Pierre (23-M-5)

	T1E	T1F	T1G	T1H	T1I	T1J	T1K	T1L	T1M	T1N	T1P	T1Q	T2A	T2B	T2C
PROJECTILE POINTS															
Provisional Type 1															
Broad Gary Stemmed															
Collins var. Claiborne															
Knight Island															
Nedena															
Madison															
Guntersville															
Unclassified															
SCRAPERS															
Side Scrapers															
Discoidal Scrapers															
Hafted Side Scrapers															
Double Side Scrapers															
Hafted End Scrapers															
Side-End Scrapers															
Hafted Side-End Scrapers															
Double Side-End Scrapers															
COMBINATION TOOLS															
End Scraper-Borers															
Double Side Scraper-Borers															
Hafted Double Side Scraper-Borers															
Hafted Side Scraper-Knife-Borers															
Side Scraper-Spokeshaves															
Double Side Scraper-Spokeshaves															
Hafted Side Scraper-Knife-Spokeshaves															
ADDITIONAL TOOLS															
Knives															
Hafted Knives															
Burins															
Drills															
Spokeshaves															
Engravers															
Adzes															
Hoes															
Celts															
Choppers															
Hammerstones															
MISCELLANEOUS TOOLS															
Worked Bifacial Tool Fragments															
Crude Bifaces															
Biface Retouch Flakes															
Pebbles and Flakes with Unifacial Retouch															
Uniface Retouch Flakes															
CORES															
Core Rejuvenation Flakes															
MISCELLANEOUS LITHICS															
Utilized Chert Flakes	6	4	3	4	1	3			3						2
Utilized Rhyolite Flakes															
Utilized Quartzite				1											
Utilized Fossilized Wood															
Utilized Limestone															
Ground Sandstone															
Unutilized Chert Flakes	15	8	3	14	1	16	4	9	13	1	2		6	1	
Unutilized Fire-Cracked Chert Flakes	6	4	2	2	2	6		2	5			3	3	4	1
Unutilized Rhyolite Flakes															
Unutilized Quartzite	1			2			1		3	1	1				
Unutilized Fossilized Wood	1														
Unutilized Limestone															
Unutilized Sandstone	2	3	3	4		3		2	1	2			6		
Unutilized Ironstone	1	1													
Pebbles	9	5	1	13	1	10	5	5		3		1	2	1	
Unclassified Lithics															
TOTAL	41	25	14	39	7	40	11	19	29	10	3	4	19	8	1

T1E	T1F	T1G	T1H	T1I	T1J	T1K	T1L	T1M	T1N	T1P	T1Q	T2A	T2B	T2C	T2D	T3A	T3B	T3C	T3D	T3E	T3F	T4A	T4B	T4C	T4D	T5A	T5B	T5C	T5D
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

aves

Retouch

akes

6	4	3	4	1	3			3			1	2			1	1	1	1		2	1	2	1	1			1	4		
15	8	3	14	1	16	4	9	13	1	2		6	1		5	1	3	7	1	5	6	4	13	7	12	6	4	12	8	
6	4	2	2	2	6		2	5			3	3	4	1	2	2		4	1	2	2		3	6	3	5	8	9	6	
1			2			1		3	1	1								1			1					1	1			
1								2	2												2	1	4	2	2			3	1	
2	3	3	4		3		2	1	2			6									1								5	
1	1				1																3	3	4	12	1	17	6	3	6	
9	5	1	13	1	10	5	5		3		1	2			3	2	4	2											6	
41	25	14	39	7	40	11	19	29	10	3	4	19	8	1	11	2	4	15	13	4	12	14	13	37	14	39	23	14	41	30

St. Pierre (23-M-5)

	T6A	T6B	T6C	T6D	T6E	T7A	T7B	T7C	T7D	T8A	T8B	T8B1	T8C1	T8D	T8E	T8F	T8G
PROJECTILE POINTS																	
Provisional Type 1																	
Broad Gary Stemmed																	
Collins var. Claiborne																	
Knight Island																	
Nedana																	
Madison																	
Guntersville																	
Unclassified																	
SCRAPERS																	
Side Scrapers																	
Discoidal Scrapers																	
Hafted Side Scrapers																	
Double Side Scrapers																	
Hafted End Scrapers																	
Side-End Scrapers																	
Hafted Side-End Scrapers																	
Double Side-End Scrapers																	
COMBINATION TOOLS																	
End Scraper-Borers																	
Double Side Scraper-Borers																	
Hafted Double Side Scraper-Borers																	
Hafted Side Scraper-Knife-Borers																	
Side Scraper-Spokeshaves																	
Double side Scraper-Spokeshaves																	
Hafted Side Scraper-Knife-Spokeshaves																	
ADDITIONAL TOOLS																	
Knives																	
Hafted Knives																	
Burins																	
Drills																	
Spokeshaves																	
Engravers																	
Adzes																	
Hoes																	
Celts																	
Choppers																	
Hammerstones																	
MISCELLANEOUS TOOLS																	
Worked Bifacial Tool Fragments																	
Crude Bifaces																	
Biface Retouch Flakes																	
Pebbles and Flakes with Unifacial Retouch																	
Unifacial Retouch Flakes																	
CORES																	
Core Rejuvenation Flakes																	
MISCELLANEOUS LITHICS																	
Utilized Chert Flakes		2	2	1		1		5	1	1	3						2
Utilized Rhyolite Flakes																	1
Utilized Quartzite																	
Utilized Fossilized Wood																	
Utilized Limestone																	
Ground Sandstone																	
Unutilized Chert Flakes		14	17	7	19	8	11	12	8	2	9	8				7	11
Unutilized Fire-Cracked Chert Flakes		10	8	4	13	16	5	5	5	1	6	5				7	4
Unutilized Rhyolite Flakes																	
Unutilized Quartzite			1		1			2	2		1					1	1
Unutilized Fossilized Wood																	
Unutilized Limestone							2	1									
Unutilized Sandstone		5	1	2	4	3	2	1		1			1	1	2	4	
Unutilized Ironstone		2	1	1		1	1	1				10	3				1
Pebbles		11	8	4	4	11	7	6	9	1	10	3			1	11	8
Unclassified Lithics																	
TOTAL	44	40	24	41	43	27	33	25	6	32	16	1	2	33	31		

St. Pierre (23-M-5)

	T11C	T11D	T11E	T11F	T12D	T12E	T12F	T12G	T12H	T15A	T15B	T15C	T15D	T15E	T15F	T18A
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Nedena																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Unifacial Retouch Flakes																
CORNS																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes	2	1	2		3	5	2	4	4	1	4	2	1	7	1	
Utilized Rhyolite Flakes									1							
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes	16	16	9	4	8	12	7	15	26	11	7	9	5	25	6	
Unutilized Fire-Cracked Chert Flakes	2	5	4	5	6	15	8	6	4	4	4	1	3	5	5	
Unutilized Rhyolite Flakes																
Unutilized Quartzite	1		1		2			2				1	3			1
Unutilized Fossilized Wood												2				
Unutilized Limestone											2					
Unutilized Sandstone	4		2	1	7	2	7		3	2	1	3	2	3		
Unutilized Ironstone									2	1					3	1
Pebbles	6	12	5	6	3	5	1	1		6	2	5	1	16	3	
Unclassified Lithics																
TOTAL	31	36	23	17	30	41	24	33	42	28	21	23	14	61	19	

T11C	T11D	T11E	T11F	T12D	T12E	T12F	T12G	T12H	T15A	T15B	T15C	T15D	T15E	T15F	T18A	T18B	T18C	T18D	T18E	T18F	Y600A	Y601A	Y602A	Y603A	Y604A	Y640A	Y640B	Y641A	Y641B	Y642A
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

Flakes

Retouch

Flakes

2	1	2	3	5	2	4	4	1	4	2	1	7	1	1	1	5	1	1	18	12	22	11	17	19	6	15	22	19		
2	5	4	5	6	15	8	6	4	4	4	1	3	5	5	1	5	1	1	4	9	4	2	1	4	2	2	4	3		
1	1	2		2		2		1	3		1				1			3	4	10	5	2	1			4	1	2		
4	2	1	7	2	7	3	2	1	3	2	3	3	1	3	1	2	2	7	8	4	7	2	1	1	6	4	7			
6	12	5	6	3	5	1	1	6	2	5	1	16	3	3	1	2	1	7	8	4	7	2	1	1	6	4	7			
31	36	23	17	30	41	24	33	42	28	21	23	14	61	19	6	1	10	1	4	3	39	56	43	37	33	36	10	32	47	32

St. Pierre (23-M-5)

	Y642B	Y643A	Y643B	Y644A	Y644B	Y645A	Y645B	Y646A	Y646B	Y647A	Y647B	Y660A	Y661A	Y662A	Y663A	Y672A
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collings var. Claiborne																
Knight Island																
Modena																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers												2	2			3
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Unifacial Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes	4		6	2		3		3	22		21	9	9	5	5	
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes	36	10	23	6	6	15	2	20	104	5	92	25	20	12	8	
Unutilized Fire-Cracked Chert Flakes	3	2	1	5	2	8	2	5	6	3	6	14	9	10	12	
Unutilized Rhyolite Flakes																
Unutilized Quartzite	1	1	2						2		2	2	1	1	1	
Unutilized Fossilized Wood										2						
Unutilized Limestone							2									
Unutilized Sandstone		3	3	1		4	1	2	4	1	4	9	9	1	6	
Unutilized Ironstone																
Pebbles	6	2	3	5	2	12	4	4	5	4	8	15	4	5	9	
Unclassified Lithics																
TOTAL	51	18	39	20	11	44	9	37	156	14	153	79	53	37	48	

St. Pierre (23-M-5)

	W2A	W3A	W4A	W5A	W5AI	W6A	W6AI	W7A	W7AI	W8A	W10A	W11A	W12A	W12AI	W13A	W13AI
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Modena																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments															2	1
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Unifacial Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes		7	5	1	13			4	3	3		2	4	6	6	1
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone		3	2													
Unutilized Chert Flakes		32	19	35	30		16	3	19	2	39	15	34	28		
Unutilized Fire-Cracked Chert Flakes		15	16	13	18		7	1	14	1	11	8	13	25	1	
Unutilized Rhyolite Flakes		2			2											2
Unutilized Quartzite					5		2									2
Unutilized Fossilized Wood									2							
Unutilized Limestone		10	3	5	6		7	3	10	2	3	6	11	4		
Unutilized Sandstone		4	4	4	3		4		1		2			4		
Unutilized Ironstone		17	12	11	31		12		21		17	5	22	34		
Pebbles																
Unclassified Lithics																
TOTAL	86	62	72	108	1	54	11	73	5	75	40	97	107	2		

	W2A	W3A	W4A	W5A	W5AI	W6A	W6AI	W7A	W7AI	W8A	W10A	W11A	W12A	W12AI	W13A	W13AI	W14A	W15A	W16A	W17A	W17AI	W18A	W18AI	W19AI	W20A	W20B	W21R	W21B	W22A	W23A	W23B	
Flakes	3	2		30	16	3	19	2	39	15	34	28	34	1	19	13	24	4	17	17	45	14	22	27	17	7						
	32	19	35	18	7	1	14	1	11	8	13	25	24	2	11	10	10	2	7	5	10	7	14	3	9	13	1					
	15	16	13	18	2								4		3	3	1	3				2	1	2	3							
	2		5	2	2								3												2	2						
							2						7		8	5	8	1	2	1	3	12	1	6	1	3	2					
	10	3	5	6	7	3	10	2	3	6	11	4	3		2	4	1															
	4	4	4	3	4		1	2	2	1	4		1		2	4	1															
	11	12	11	31	12		21		14	5	22	34	37		13	24	25	6	12		12	19	6	17								
	86	62	72	102	1	54	11	73	5	75	40	97	107	2	118	3	64	67	77	22	1	42	2	40	91	32	76	9	56	46	13	

rs
s
shaves

ial Retouch

St. Pierre (23-M-5)

	W24A	W24B	W25A	W25B	W26A	W26B	W27A	W27B	W28A	W28B	W29A	W30A	W30A2	W31A	W32A
PROJECTILE POINTS															
Provisional Type 1															
Broad Gary Stemmed															
Collins var. Claiborne															
Knight Island															
Nodena															
Madison															
Guntersville															
Unclassified															
SCRAPERS															
Side Scrapers															
Discoidal Scrapers															
Hafted Side Scrapers															
Double Side Scrapers															
Hafted End Scrapers															
Side-End Scrapers															
Hafted Side-End Scrapers															
Double Side-End Scrapers															
COMBINATION TOOLS															
End Scraper-Borers															
Double Side Scraper-Borers															
Hafted Double Side Scraper-Borers															
Hafted Side Scraper-Knife-Borers															
Side Scraper-Spokeshaves															
Double Side Scraper-Spokeshaves															
Hafted Side Scraper-Knife-Spokeshaves															
ADDITIONAL TOOLS															
Knives															
Hafted Knives															
Burins															
Drills															
Spokeshaves															
Engravers															
Adzes															
Hoes															
Celts															
Choppers															
Hammerstones															
MISCELLANEOUS TOOLS															
Worked Bifacial Tool Fragments															
Crude Bifaces															
Biface Retouch Flakes															
Pebbles and Flakes with Unifacial Retouch															
Unifacial Retouch Flakes															
CORES															
Core Rejuvenation Flakes															
MISCELLANEOUS LITHICS															
Utilized Chert Flakes	4					4	2	14	6	8	3	9		2	4
Utilized Rhyolite Flakes															
Utilized Quartzite															
Utilized Fossilized Wood															
Utilized Limestone															
Ground Sandstone										3					
Unutilized Chert Flakes	11	1	7	9	17	14	27	29	29	6	15	5	7	19	
Unutilized Fire-Cracked Chert Flakes	8	1	6	3	9	5	11	12	12	2	21	6	9	10	
Unutilized Rhyolite Flakes															2
Unutilized Quartzite															
Unutilized Fossilized Wood															
Unutilized Limestone	4	1	5	3	1	5	5	9	12	2	4	2	3	4	
Unutilized Sandstone							2	2	4	3	1				2
Unutilized Ironstone	14	1	9	4	3	9	15	12	13	2	18	5	9	20	
Pebbles															
Unclassified Lithics	42	6	32	20	37	40	82	72	81	19	73	20	32	63	
TOTAL															

W24A	W24B	W25A	W25B	W26A	W26B	W27A	W27B	W28A	W28B	W29A	W30A1	W30A2	W31A	W32A	W32A1	W33A1	W34A	W35A	W35A1	W36A	W37A1	W37A1-1	W39A	W40A	W40A1	W41A	W42A	W42A1	W43A	W43B
------	------	------	------	------	------	------	------	------	------	------	-------	-------	------	------	-------	-------	------	------	-------	------	-------	---------	------	------	-------	------	------	-------	------	------

rs
s
shaves

ial Retouch

Flakes

4	1	1	4	2	14	6	8	3	9	1	2	4		3	3	10	8	6	9	1	9	6	12								
11	1	7	9	17	14	3	27	29	29	6	15	5	7	19	2	2	8	11	13	3	27	13	1	24	19	5	2	33	15	23	
8	1	6	3	9	5	11	12	12	2	21	6	9	10	6		8	10	7	1	22	12		3	2	19	18	1	24	9	22	
			2	2									2	2		3				1	2		3	2				1	3	6	
4		5	3	1	5	9	12	2	2	2	3	4			1	5	6			14	4		9	9				2	11	6	
14		9	4	3	2	2	4	3	1	1	2	1		2	1	2	8	12	3	2	2	3	2	12	27	4	4	3	36	19	25
42	6	32	20	37	40	82	72	81	19	73	20	32	63	18	3	22	38	43	9	118	67	1	78	88	15	123	66	1	103	6	

St. Pierre (23-M-5)

	W44A	W44B	W45A	W45B	W47A	W48A	W49A	W49A1	W50A	W51A	W51A1	W51B	W52A	W52B	W53A	W53B
PROJECTILE POINTS																
Provisional Type 1																
Broad Gory Stemmed																
Collins var. Claiborne																
Knight Island																
Nedena																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeslaves																
Double Side Scraper-Spokeslaves																
Hafted Side Scraper-Knife-Spokeslaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeslaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes	7	1	3	1	4	1	9		7	11			4	1	1	
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone	2								2							
Unutilized Chert Flakes	8		20	4	23	16	30	1	12	20					3	
Unutilized Fire-Cracked Chert Flakes	13	1	13	1	11	14	22		11	18	2	2	4	5		
Unutilized Rhyolite Flakes															4	
Unutilized Quartzite																
Unutilized Fossilized Wood																
Unutilized Limestone																
Unutilized Sandstone	7	1		1	11	11	9		6	12			1	6	1	
Unutilized Ironstones	4				3	4	6			2				1	13	
Pebbles	17		22	7	28	27	40		13	25	1	4	12			
Unclassified Lithics																
TOTAL	62	4	60	15	85	80	124	1	54	92	3	12	40	24		

W44A	W44B	W45A	W45B	W47A	W48A	W49A	W49AI	W50A	W51A	W51AI	W51B	W52A	W52B	W53A	W53B	W54AI	W54BI	W55A	W55B	W56A	W56B	W58AI	W59AI	W60AI	W61A	W62AI	W62BI	W63A	W63B	W64A
------	------	------	------	------	------	------	-------	------	------	-------	------	------	------	------	------	-------	-------	------	------	------	------	-------	-------	-------	------	-------	-------	------	------	------

aves

Retouch

Flakes

7	1	3	1	4	1	9	7	11	4	1	1	3	4	3	5	1	2	4	6	3	1	3	4	7							
2	8	20	4	23	16	30	12	20	2	2	4	5	6	7	10	2	11	12	14	18	4	13	11	13	2	10					
13	13	1	11	14	22	11	18	2	2	4	5	6	7	10	2	11	12	14	18	4	13	11	13	2	10						
1	1	1	2	1	4	1	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
7	4	17	22	7	28	27	40	13	25	1	4	12	13	2	7	4	2	3	58	8	26	9	15	14	12	3	8				
62	4	60	15	85	80	124	1	54	92	3	12	40	24	28	4	32	3	42	2	45	63	35	83	29	59	41	1	37	19	38	

St. Pierre (23-M-5)

	W64A1	W64B	W65A	W65A1	W66A1	W67A	W68A	W69A	W69A1	W70A	W71A1	W71B1	W72A	W72B	W72C
PROJECTILE POINTS															
Provisional Type 1															
Broad Gary Stemmed															
Collins var. Claiborne															
Knight Island															
Nedena															
Madison															
Guntersville															
Unclassified															
SCRAPERS															
Side Scrapers															
Discoidal Scrapers															
Hafted Side Scrapers															
Double Side Scrapers															
Hafted End Scrapers															
Side-End Scrapers															
Hafted Side-End Scrapers															
Double Side-End Scrapers															
COMBINATION TOOLS															
End Scraper-Borers															
Double Side Scraper-Borers															
Hafted Double Side Scraper-Borers															
Hafted Side Scraper-Knife-Borers															
Side Scraper-Spokeshaves															
Double Side Scraper-Spokeshaves															
Hafted Side Scraper-Knife-Spokeshaves															
ADDITIONAL TOOLS															
Knives															
Hafted Knives															
Burins															
Drills															
Spokeshaves															
Engravers															
Adzes															
Hoes															
Celts															
Choppers															
Hammerstones															
MISCELLANEOUS TOOLS															
Worked Bifacial Tool Fragments															
Crude Bifaces															
Biface Retouch Flakes															
Pebbles and Flakes with Unifacial Retouch								2							
Uniface Retouch Flakes															1
CORES															
Core Rejuvenation Flakes															
MISCELLANEOUS LITHICS															
Utilized Chert Flakes					5	7	4	12	8			2	4		5
Utilized Rhyolite Flakes															1
Utilized Quartzite															
Utilized Fossilized Wood															
Utilized Limestone															
Ground Sandstone															
Unutilized Chert Flakes		1	5	3	6	16	8	20	7			21	7	2	11
Unutilized Fire-Cracked Chert Flakes					6	11	6	18	8			20	2	1	3
Unutilized Rhyolite Flakes															
Unutilized Quartzite															
Unutilized Fossilized Wood															
Unutilized Limestone															
Unutilized Sandstone		2			5	4		5	1			11	2	1	2
Unutilized Ironstone															
Pebbles		4	1	4		1	10	14	27	8		22	2	1	4
Unclassified Lithics															
TOTAL	9	9	7	24	54	40	93	40	1	96	21	7	34	13	

St. Pierre (23-M-5)

	W85B	W85C	W86A	W86C	W87A	W88A	W89A	W90A	W91A	W92A	W94A	W95A	W96A	W97A	W98A	W99A
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Nodona																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes				10		5	3	1	1	3	4	3	2	6	1	6
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes				1	25	2	6	10	2	2		4	9	17	6	7
Unutilized Fire-Cracked Chert Flakes				19		6	6	3	7	4		4	9	11	11	10
Unutilized Rhyolite Flakes																
Unutilized Quartzite																
Unutilized Fossilized Wood																
Unutilized Limestone																
Unutilized Sandstone				1	6		2		4	2	1		7	1	3	
Unutilized Ironstone					4											
Pebbles				17		3	16	4	4	2		7	3	8	5	4
Unclassified Lithics																
TOTAL	1	2	82	3	24	38	15	23	12	25	34	53	37	25	5	5

St. Pierre (23-M-5)/
Lonely Frenchman (23-M-11)

	W119A	W120A	W120B	W120BI	W120AB	W122A	W122B	W400	W403	W412	W413	W414	W415	W416	W420	W427
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Modena																
Madison																
Gunthersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones															2	
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Pebbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes																
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes		11	7	9	1	2	3	1	6	1	3				1	5
Unutilized Firs-Cracked Chert Flakes		21	2	2			3	1		1						2
Unutilized Rhyolite Flakes																
Unutilized Quartzite		2	2	1		1	2	1								
Unutilized Fossilized Wood																
Unutilized Limestone		7	2			1		1								
Unutilized Sandstone																
Unutilized Ironstone			2													
Pebbles		8	5	1			4	1	2							
Unclassified Lithics																
TOTAL	57	24	16	4	4	8	17	5	8	2	4	2	2	1	4	

-11)

	W119A	W120A	W120B	W120B1	W120AB	W122A	W122B	W400	W403	W412	W413	W414	W415	W416	W420	W427	UN-LABELED	TOTAL	LONELY FRENCHMAN	Y915	Y923A	Y923B	Y924A	Y924B	W301A	W301B	W301C	W301D	W301E	W301E1
																		2												
																		5												
																		5												
																		2												
																		2												
																		2												
																		2												
																		1												
																		1												
																		1												
aves																		1												
																		4												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2												
																		2					</							

Lonely Frenchman (23-M-11)/
Lockguard (22-M-17)

	W301F	W301G	W302A	W302C	W303A	W303C	W304A	W304B	W305A	W306A	W306B	W307B	W308A	W308B	TOTAL
PROJECTILE POINTS															
Provisional Type 1															
Broad Gary Stemmed															
Collins var. Claiborne															
Knight Island															
Modena															
Madison															
Guntersville															
Unclassified															
SCRAPERS															
Side Scrapers															
Discoidal Scrapers															
Hafted Side Scrapers															
Double Side Scrapers															
Hafted End Scrapers															
Side-End Scrapers															
Hafted Side-End Scrapers															
Double Side-End Scrapers															
COMBINATION TOOLS															
End Scraper-Borers															
Double Side Scraper-Borers															
Hafted Double Side Scraper-Borers															
Hafted Side Scraper-Knife-Borers															
Side Scraper-Spokeshaves															
Double Side Scraper-Spokeshaves															
Hafted Side Scraper-Knife-Spokeshaves															
ADDITIONAL TOOLS															
Knives															
Hafted Knives															
Burins															
Drills															
Spokeshaves															
Engravers															
Adzes															
Hoes															
Celts															
Choppers															
Hammerstones															
MISCELLANEOUS TOOLS															
Worked Bifacial Tool Fragments															2
Crude Bifaces															1
Biface Retouch Flakes															2
Pebbles and Flakes with Unifacial Retouch															1
Uniface Retouch Flakes															1
CORES															
Core Rejuvenation Flakes															
MISCELLANEOUS LITHICS															
Utilized Chert Flakes				1	1	2									4
Utilized Rhyolite Flakes															1
Utilized Quartzite															1
Utilized Fossilized Wood															1
Utilized Limestone															1
Ground Sandstone															1
Unutilized Chert Flakes	7		2		1		4	1	1			3		2	4
Unutilized Fire-Cracked Chert Flakes		1	2	1			5	1		1					14
Unutilized Rhyolite Flakes															1
Unutilized Quartzite			2				2	2							2
Unutilized Fossilized Wood															1
Unutilized Limestone													3		10
Unutilized Sandstone															1
Unutilized Ironstone															1
Pebbles	6	1	1					3	3	1					3
Unclassified Lithics															1
TOTAL	13	2	9	2	4	1	14	7	2	2	1	7	2	3	11

Lockguard (22-M-17)/
Wrights Bluff (22-M-15)

	W363 B	W363 BI	W364 A	W365 A	W366 A	W367 A	W368 A	W369 A	W370 A	W371 A	W372 A	W373 A	W374 A	W375 A	W376 A	W376 B
PROJECTILE POINTS																
Provisional Type 1																
Broad Gary Stemmed																
Collins var. Claiborne																
Knight Island																
Modena																
Madison																
Guntersville																
Unclassified																
SCRAPERS																
Side Scrapers																
Discoidal Scrapers																
Hafted Side Scrapers																
Double Side Scrapers																
Hafted End Scrapers																
Side-End Scrapers																
Hafted Side-End Scrapers																
Double Side-End Scrapers																
COMBINATION TOOLS																
End Scraper-Borers																
Double Side Scraper-Borers																
Hafted Double Side Scraper-Borers																
Hafted Side Scraper-Knife-Borers																
Side Scraper-Spokeshaves																
Double Side Scraper-Spokeshaves																
Hafted Side Scraper-Knife-Spokeshaves																
ADDITIONAL TOOLS																
Knives																
Hafted Knives																
Burins																
Drills																
Spokeshaves																
Engravers																
Adzes																
Hoes																
Celts																
Choppers																
Hammerstones																
MISCELLANEOUS TOOLS																
Worked Bifacial Tool Fragments																
Crude Bifaces																
Biface Retouch Flakes																
Febbles and Flakes with Unifacial Retouch																
Uniface Retouch Flakes																
CORES																
Core Rejuvenation Flakes																
MISCELLANEOUS LITHICS																
Utilized Chert Flakes				2	5	7	1	1	7	1	5	2				
Utilized Rhyolite Flakes																
Utilized Quartzite																
Utilized Fossilized Wood																
Utilized Limestone																
Ground Sandstone																
Unutilized Chert Flakes	4		6	34	16	2	11	8	10	7	7	8	7	9	8	
Unutilized Fire-Cracked Chert Flakes	1		3	63	43	50	20	38	30	34	28	11	15	4	1	
Unutilized Rhyolite Flakes				2												
Unutilized Quartzite				7	5		2	1	1	2	1	1				
Unutilized Fossilized Wood				2	1	1	1									2
Unutilized Limestone				1	1											
Unutilized Sandstone				3	1	1	4	2	2		3	1	1			
Unutilized Ironstone																
Pebbles	8		7	180	121	70	41	70	79	56	33	36	28	4		
Unclassified Lithics																
TOTAL	21	1	20	300	197	125	83	128	123	105	76	61	51	20	1	

Wrights Bluff (22-M-17) /
Anglo (22-M-16)

	W331A	W331B	W331C	W332A	W333A	W334-2A	W334-2B	W335A	W335B	W335C	W335D2	W335D4	W335E2	W335E3	W335F3
PROJECTILE POINTS															
Provisional Type 1															
Broad Gory Stemmed															
Collins var. Claiborne															
Knight Island															
Nedena															
Madison															
Guntersville															
Unclassified															
SCRAPERS															
Side Scrapers															
Discoidal Scrapers															
Hafted Side Scrapers															
Double Side Scrapers															
Hafted End Scrapers															
Side-End Scrapers															
Hafted Side-End Scrapers															
Double Side-End Scrapers															
COMBINATION TOOLS															
End Scraper-Borers															
Double Side Scraper-Borers															
Hafted Double Side Scraper-Borers															
Hafted Side Scraper-Knife-Borers															
Side Scraper-Spokeshaves															
Double Side Scraper-Spokeshaves															
Hafted Side Scraper-Knife-Spokeshaves															
ADDITIONAL TOOLS															
Knives															
Hafted Knives															
Burins															
Drills															
Spokeshaves															
Engravers															
Adzes															
Hoes															
Celts															
Choppers															
Hammerstones															
MISCELLANEOUS TOOLS															
Worked Bifacial Tool Fragments															
Crude Bifaces															
Biface Retouch Flakes															
Pebbles and Flakes with Unifacial Retouch															
Uniface Retouch Flakes															
CORES															
Core Rejuvenation Flakes															
MISCELLANEOUS LITHICS															
Utilized Chert Flakes										7	4	8			1
Utilized Rhyolite Flakes															
Utilized Quartzite															
Utilized Fossilized Wood															
Utilized Limestone															
Ground Sandstone															
Unutilized Chert Flakes		2	2		3		2		32	36	23				2
Unutilized Fire-Cracked Chert Flakes							6		12	32	12		1	1	3
Unutilized Rhyolite Flakes											3	2			
Unutilized Quartzite															
Unutilized Fossilized Wood															
Unutilized Limestone															
Unutilized Sandstone															
Unutilized Ironstone															
Pebbles			4	1		1	3	1	1			2	1		
Unclassified Lithics															
TOTAL	4	6	2	3	2	12	1	57	76	51	2	1	2	6	

Anglo (22-M-16)

	W409	W409A	W410	W428	TOTAL
PROJECTILE POINTS					
Provisional Type 1					
Broad Gary Stemmed					
Collins var. Claiborne					
Knight Island					
Madona					
Madison					
Guntersville					
Unclassified					
SCRAPERS					
Side Scrapers					
Discoidal Scrapers					
Hafted Side Scrapers					
Double Side Scrapers					
Hafted End Scrapers					
Side-End Scrapers					
Hafted Side-End Scrapers					
Double Side-End Scrapers					
COMBINATION TOOLS					
End Scraper-Borers					
Double Side Scraper-Borers					
Hafted Double Side Scraper-Borers					
Hafted Side Scraper-Knife-Borers					
Side Scraper-Spokeshaves					
Double Side Scraper-Spokeshaves					
Hafted Side Scraper-Knife-Spokeshaves					
ADDITIONAL TOOLS					
Knives					
Hafted Knives					
Burins					
Drills					
Spokeshaves					
Engravers					
Adzes					
Hoes					
Celts					
Choppers					2
Hammerstones					
MISCELLANEOUS TOOLS					
Worked Bifacial Tool Fragments					1
Crude Bifaces					
Biface Retouch Flakes					
Pebbles and Flakes with Unifacial Retouch					1
Uniface Retouch Flakes					
CORES					
Core Rejuvenation Flakes					
MISCELLANEOUS LITHICS					
Utilized Chert Flakes	2			11	14
Utilized Rhyolite Flakes					1
Utilized Quartzite					
Utilized Fossilized Wood					
Utilized Limestone					
Ground Sandstone					
Unutilized Chert Flakes	17		3	27	47
Unutilized Fire-Cracked Chert Flakes	8				11
Unutilized Rhyolite Flakes					1
Unutilized Quartzite				3	4
Unutilized Fossilized Wood					
Unutilized Limestone					
Unutilized Sandstone					1
Unutilized Ironstone					
Pebbles					
Unclassified Lithics					
TOTAL	30	2	5	48	111

Appendix 2c

European Artifacts

Kitchen Group

European Ceramics (Plates 85, 86, & 87)

Series I - Tin-Enameled Earthenware (Faience)

Two classes make up this series. I have separated the cream-colored buff paste from the orange-colored buff paste as classes. The types are established on the basis of decoration, or lack of such. The various designs are, for the most part not described, but those sherds which are large enough to reveal decorative patterns are illustrated.

Class A - Cream-colored Buff Paste

In the first report on the faience from St. Pierre (Brown 1975a, I set up "blue tinted white enamel" and "white enamel without tint" as two types of this class. Such a procedure seemed logical at the time as there were very few sherds and they

easily sorted into nice piles. A number of varieties were then set up on the basis of nine decorated sherds. After an additional two years of excavation, the samples have increased somewhat and, as should have been expected, the sherds no longer fit so easily into these varieties. Some of the same designs have been found, but many more have been added to the collection. So many in fact that it no longer seems appropriate to formulate a new variety for each design. With the increased sample it also became obvious that the blue tint is almost exclusively associated with sherds bearing blue designs, the plain sherds possessing this tint no doubt having originally been part of such vessels. A number of reasons, including the smearing of dyes during firing, could account for this association.

Type 1 - Polychrome (more than one color against a white background) (Plate 85g-h)

Sample - 4

Provenience

St. Pierre (4) - T4D; Y558-31E; W21A; W45A

Description

The colors on these sherds are purple, blue and yellowish-brown. The letters "Ia_" are painted in purple on one of the specimens (Plate 85g), an inscription which approaches my name a bit too close for comfort. The only vessel form represented is a pitcher (Plate 85h).

Type 2 - Blue decoration against a white background (Plates 85a-f; 87)

Sample - 51

Provenience

Portland (1) - Y505B2

St. Pierre (49) - Y550B1; Y551A; Y558-7; Y558-13; Y558-31A; Y558-31D; Y571B; Y574A; Y575A; Y576A; Y577A; T12F; T12G; Y600A; Y640A; Y642A; Y644A(2); Y645A; Y908(2); W1A(2); W7A; W23A(2); W28B; W37A1(2); W41A; W42A; W43A; W44A(3); W50A; W56A; W62A; W74A(2); W79A; W80A; W85B; W86A; W98A; W117A; W416; unlabeled (1)

Lockguard (1) - W335A

Comments - Y558-31A; T12F; T12 are burned
Y558-31D same partial vessel; also T12G; Y644A(2); and unlabeled appear to be from this same vessel
2 sherds from W1A same vessel; also Y600A appears to be from this same vessel
2 sherds from W37A1 same vessel
W13A; W74A appear to be same vessel
W79A; W416 appear to be same vessel

Description

A number of different designs occur in this type, some of which bear mentioning. The partial vessel (Plate 87) is a deep bowl with a diameter of about 21.0 cm and a depth of 6.0 cm. Two lines and a band of festoons encircle the interior directly beneath the lip. Within and between the festoons are floral designs. The exterior of the bowl has a more elaborate rendition of the same pattern, as well as an additional double line and a band of "waves" at the base.

Another common design is a broken-down lattice pattern referred to as the "dot-and-diaper" motif. This decoration consists of a pale blue band of cross-hatching encircling the interior rim border. The specimens at St. Pierre have a series of gilded dots placed randomly within the cross-hatching, but contained within the band (Brown 1975a; plate 3, No. 1). The central decoration on these vessels is usually a basket, vase, bowl, or spray of flowers (Noël Hume 1960:559-561).

The vessel form most commonly found with the "dot-and-diaper" design is a deep bowl with a scalloped back. Some of these bowls have ring bases. Also represented are a cup or jar with flaring rim and shallow bowls. One vessel of the latter form has a flaring rim with a slight exterior folding.

Discussion

The lattice pattern is typical of French faience and is a most common decoration of the Rouen potteries. Examples of it

can be seen in Ivor Noël Hume's (1969a:fig.53) and Stanley South's (1968) works. Such a design on faience has been found in a context dating to between 1724 and 1731 at Fort Condé (Harris 1971:fig.4a). It has also been recovered at Fort Desha (McClurkan 1972:fig.1b), at Fort Toulouse (Heldman 1973:fig.61c) and is represented in the "Tunica Treasure" from the Trudeau Site (Brain et al.n.d. b). Similar designs appear on Delftware from English contexts at both Fort Michilimackinac (Miller and Stone 1970:fig.13h-f) and Fort Ligonier (Grimm 1970:pl.68, No.2). Either Lambeth or Bristol were producing this particular decoration by the mid-18th century (Miller and Stone 1970:31). Similar patterns are also seen on export porcelain from Fortress Louisbourg (Ibid: Appendix B;fig.2f).

Type 3 - Plain white glaze

Sample - 232

Provenience

St. Pierre (231) - Y550B1(2); Y550D; Y550I1; Y553A;
 Y558-31A(2); Y558-31B(5); Y558-31C; Y558-31D(2);
 Y558-31F(2); Y562A; Y574A; Y575A(4); Y579A;
 T4B(2); T4C(2); T4D(2); T8B(2); T8E; T8G; T8H;
 T9A; T9B; T9B1; T9E; T12F; T12G; T12H(2); Y600A;
 Y602A; Y603A; Y640A; Y642A; Y643A; Y644A; Y645A;
 Y646A; Y646B; W1A(5); W2A; W3A(6); W4A(6);
 W5A(7); W6A; W7A(3); W8A(11); W10A(10); W13A(4);

W14A(4); W15A(7); W16A(4); W17A1; W18A(3);
 W19A1(3); W20A(2); W21A; W22A(2); W23A; W24A;
 W24B; W25A(2); W25B; W26A(4); W27A(3); W28A;
 W28B; W31A; W32A(3); W33A1(7); W34A(3); W35A(4)
 W36A(7); W37A1(2); W39A(4); W40A(6); W41A(4);
 W42A(4); W43A(3); W44A; W48A(2); W49A; W50A;
 W51A; W53A; W55A(3); W58A1(2); W59A1(3); W63A;
 W69A; W70A(2); W72A; W73A1; W74A; W85A(2);
 W86A; W117A(2); W122B; W425(2); W437(2);
 unlabeled (2)

Lonely Frenchman (1) - W301E

Comments - Burned pottery - Y558-31A; Y575A(2); Y602A;

Y646B; W63A; W122B

3 from Y558-31B same vessel

Description

Almost all of this pottery is heavily crazed. Represented in the Yazoo Bluffs sample are deep bowls, shallow bowls, punch bowls with scalloped exterior ridges, and small-mouthed jars or cups. A portion of a large handle is still attached to one sherd. A variety of bases exist, including simple flat bases and flat bases with heels.

Discussion

It is interesting that this type of faience occurs most heavily around Structure B, the commandant's headquarters (Figure 17). This distribution may be a reflection of status, or it could be related to the fact that this building was inhabited during the first part of the fort's occupation. With the

exception of the partial faience vessel (Type 2 - Plate 87), faience is very rare in the moat, a feature which absorbed a considerable amount of the materials used just prior to the massacre. Historic aboriginal pottery, whole and fragmentary, is much more abundant in this feature than is French faience. There is hence the suggestion that faience was more plentiful in the earlier part of the fort's occupation, aboriginal wares becoming increasingly used, perhaps relating to the heavier reliance of Frenchmen on local products.

Class B - Orange-colored buff paste

Type 1 - Polychrome (more than one color against a white background) (Plate 86a-d)

Sample - 5

Provenience

St. Pierre (5) - Y912; W6A; W18A; W32A; W66A1
Comments - all appear to be same vessel

Description

The polychrome decoration on these sherds consists of a

number of different shades of blue forming a floral design. The petals are repainted with a gild color. Both sides of this vessel have elaborate decoration. The overall form of the single vessel is unknown, but its ring base has been drilled (Plate 86c). The vessel was probably designed as a wall ornament, but its actual use at the fort is not known.

Type 2 - Blue decoration against a white background

This type has not yet been found in the Yazoo Bluffs region, but a space in the typology is ready for it if and when it appears.

Type 3 - Plain white glaze

Sample - 19

Provenience

St. Pierre (19) - Y409; Y553A; Y558-13; Y558-31A; Y575A;
Y593A; Y602A(3); Y603A; Y641A; Y642A; Y909; W27A;
W34A; W56A; W59A1; W117A; W429
Comments - burned pottery - Y602A(3)

Description

Two rims are rounded, flare out and bend sharply into the vessel forming very thin necks. They may be ointment jars. Another vessel has a straight rim with a slight exterior fold. It is either a cup or a jar. Vessels with flat bases and small heels are represented.

Series II - Lead-Glazed Earthenware

In my Master Thesis (Brown 1975a), I divided lead-glazed earthenware into classes on the basis of paste color, cream-colored being sorted as Class A and pink-colored as Class B. With a larger sample to work with, it is now obvious that these colors grade into one another, often even within the same sherd. Whereas I have persisted in separating the sherds in Series I according to paste distinctions, in the event that the divisions may be culturally significant, I no longer believe it justifiable to separate the lead-glazed earthenware according to such criteria. The reader comparing the two volumes will thus notice a considerable bit of "lumping" in the discussion of this series.

Class A - Very hard paste ranging in color from cream to pink

Type 1 - Green glaze with a white slip between the glaze and the body.

Provenience

St. Pierre (6) - Y550H1; Y550I1; Y558-13; Y571B; Y602A;
Y646B

Type 2 - Various shades of green lead-glaze without a white slip
(Plate 86e-i)

Sample - 76

Provenience

Portland (1) - Y510A

St. Pierre (68) - Y550D; Y551A; Y553A; Y555A; Y569A; Y571C;
Y573A; Y577A; Y590A(2); Y592A; T11L(2); T10E; T12D;
T12E(3); T12F(2); T12G; T12H(2); Y600A; Y640A;
Y641B; Y642A; Y645A; Y908; W22A; W25B(2); W26B;
W28A(2); W36A; W45A; W52A; W54A1; W61A; W62A1;
W64A(2); W67A; W70A; W72A(2); W74A(3); W76A(3);
W79A; W80B; W86A(2); W117A(9); W120AB; W122A;

Lockguard (7) - W352A; W354A; W355A; W357A; W359A(2); W363A

Comments - Burned pottery - St. Pierre - T10E; T12D; T12E(2);
T12F(2); T12H(2); Y600A; Y641B; Y645A; Y908;
W28A; W45A; W61A; W67A; W72A; W74A(2); W76A(2);
W86A(2); W117A(3); W120AB, Lockguard - all
specimens

Description

This is the typical French utilitarian ware, the vessels
being poorly made. Bases are flat, with either flared corrugated

sides, forming shallow bowls (Plate 86i), or with heels similar to some of the tin-glazed forms. The platter, with a short base and a short tapered rim occurs (Plate 86e-f), and a jar with a flaring rim is also represented. The bowl rims have lips which are frequently scalloped, a "pie-crust" effect being the result. These lips are either interiorly beveled or are broad with an incised line (Plate 86g-h). One sherd from Lockguard has a flat base and corrugated flared sides. A pink substance, identical to the color of Old Town Red, var. St. Pierre, has been rubbed into the sherd's surface.

Discussion

It is interesting that one sherd from Lockguard has a pink substance on its surface, as Old Town Red, var. St. Pierre and other native products which have this coloring (Cracker Road, var. Souel; Nodena Red and White, var. Poisson) are believed to date to the occupation of the fort. This is further evidence of the contemporaneity of Lockguard and St. Pierre.

Very few sherds of this type of utilitarian ware were found in Structure B (the commandant's headquarters) at St. Pierre, whereas faience was frequently discovered in association with this building (Figure 17). Such a distribution is consistent with what would be expected if status is being reflected in the material culture. Most lead-glazed sherds are from the western half of the site, the area of the fort occupied at the time of the massacre. Many of these sherds are missing their glaze,

perhaps the result of being subjected to fire. Some are definitely burned as their glaze has crinkled up into tiny nodules like sandpaper. Those sherds which were definitely subjected to fire are listed above - quite a sample, as compared to the amount of burned faience (see p. 856). The scarcity of burned faience correlates well with its distribution. Heavy faience use appears to date early in the fort's occupation, whereas lead-glazed earthenware seems to have had essentially stable use through time, with Indian ceramics apparently on the increase. Such a conclusion must remain tenuous, however, as two dimensions are being examined by the artifact distributions - synchronic status distribution and temporal distribution. An additional problem arguing against the heavy use of lead-glazed wares at the time of the massacre is the total absence of this material in the fort's dry moat (Figure 12).

Class B - Smooth-textured orange paste

Type 1 - Yellow-green lead-glaze with a white slip between the body and the glaze

Sample - 7

Provenience

St. Pierre (7) - Y558-9(Y579); Y559A; Y566A(2); Y575A;
Y600A; Y603A

Description

Four of these sherds have a "circle-and-dot" motif. The type corresponds to Marwitt's Ware 2 (1967). The St. Pierre specimens have red dots against a yellow-green background (Brown 1975b:plate 3, No.10).

Discussion

Earthenware with the "circle-and-dot" motif is quite common on French-related sites. At Fortress Louisbourg it is found on dishes, plates, bowls, and porringers (Marwitt 1967:56; Walker 1968:fig.8; Miller and Stone 1970:Appendix B, fig.2). It is also observed on vessels in the "Tunica Treasure" from the Trudeau Site (Brain et al. n.d. b).

Class C - Sandy-textured orange paste

This is a new class. It corresponds with Series III, Class A (unglazed earthenware) in my Masters Thesis (Brown 1975a; 1975b: plate 3, Nos.12-13). The sherds classified as unglazed at that

time are now put in Type 1 of Series II Class C, as I believe the brown glaze wore off these specimens. No other pottery from the site has this brick-like sandy orange paste.

Type 1 - Thin dark brown glaze

Sample - 23

Provenience

St. Pierre (22) - Y550C; Y550E; Y555A; Y556A; Y558-3;
Y558-9; Y565A(2); Y567J; T1J; Y603A; Y909; W2A;
W22A; W27A; W40A; W64A; W64A1; W77A; W78A; W85A;
W86A
Lockguard (1) - W433

Description

The brown glaze has worn off some of the specimens. The only vessel forms represented are the small-necked bottle and the bowl.

Discussion

Brown-glazed earthenware is generally believed to be of late

18th century vintage in the Lower Mississippi Valley (Jeffrey P. Brain - personal communication). It is well represented at St. Pierre, whereas the principal late 18th century ceramic diagnostics (Pearlware and Creamware) are not. I hence believe this brown-glazed earthenware to be contemporary with the fort's occupation. The specimen recovered at Lockguard is further evidence of the site's contemporaneity with Fort St. Pierre.

Class D - Rough sandy-textured light brown paste with a heavy mica content

Type 1 - Yellow glaze

Sample - 31

Provenience

St. Pierre (31) - Y641A; Y642A; W25B; W26B; W27B; W44A; W44B; W51A(2); W64A(2); W71A; W72A(2); W73A1; W76A(2); W77A(2); W79A(3); W85A(2); W86A(2); W120A; W120AB; W122A(2); unlabeled (1)

Discussion

I was not at first convinced this material was French

pottery. Throw marks do not appear and the paste is very similar to Indian pottery (heavy mica content) I have handled on historic sites in central Alabama. However, a few sherds have minor traces of yellow glaze, the sherds apparently not holding glaze very well.

Miscellaneous Earthenware

Sample - 2

Provenience

St. Pierre (2) - Y558-9A; W51A
Comments - each has a high sand content and one (Y558-9A) has been heavily burned. The color of its glaze and paste cannot be discerned. The other lacks its glaze

Series III - Stoneware

Class A - Dark brown paste

Sample - 1

Provenience

St. Pierre (1) - Y558-9(Y578)

Comments - This sherd is the base of a small vase or cup
(Brown 1975b:plate 3, No.14)

Wine Bottles and Case Bottles (Plates 88 and 89:Table 16)

Olive Green Glass - French

Sample - 640

Provenience

Portland (7) - Y12; Y502AF.1; Y506A(2); Y506C(2); Y506C2

St. Pierre (620) - see Table 16

Lockguard (13) - W351A; W352A; W354A; W359A; W362A; W363A;
W364A(2); W367A(2); W368A; W370A; W376A

Comment - All the fragments from Lockguard have heavy
patination and many have severe pitting, evidently
a result of fire.

Olive Green Glass - Recent (19th - 20th centuries)

Sample at St. Pierre - 138*

* Other sites have recent olive green glass, but only St.
Pierre is considered here for comparison with distribution
maps.

Provenience

St. Pierre - Y558-31C; Y558-31D; T1F; T1H(3); T1I; T92(2);
 T9B; T10E; T11A; T11B; T11F(2); T15A; Y641A;
 Y647B(3); Y662A; Y908; W1A(6); W2A(3); W3A(5);
 W4A(4); W5A(10); W6A(3); W7A; W8A(2); W10A(2);
 W11A(4); W12A(6); W14A; W15A(2); W16A(5); W18A(2);
 W20A(4); W22A; W23A(2); W26A(2); W29A(6); W30A1;
 W30A2; W31A(12); W33A1; W35A(3); W36A(3); W37A1;
 W39A; W40A(2); W41A(4); W45A; W47A; W56A; W59A1;
 W68(4); W73A1; W120A; W400; W415(2); W416;
 unlabeled(1)

Description

Little can be said of the majority of these bottle fragments, but a few pieces reflect form or cultural information and hence deserve some descriptive attention.

St. Pierre

Plate 88a;89 (Y558-31C) - This is a wine bottle seal. It has the shape of a slightly irregular circle, with a maximum diameter of 2.9 cm. Two Indians, naked except for a shirt, stand on either side of a raised slightly egg-shaped inner circle (maximum diameter - 1.6 cm). This last circle is bisected, the upper half having two rows of fleur-de-lis (four on the upper and five on the lower). An Indian, apparently deceased, lies face upward in a semi-flexed position in

the lower half of the inner circle. He holds indistinguishable objects in each hand. A crown with five points lies on top of the inner circle, each of the standing individuals having one hand on the crown, the other extended downward. Beneath their feet is a raised linear line and a winged cherub, a common feature of New England gravestone architecture (Deetz and Dethlefsen 1965:1967), differing only in that the cherub's wings are backwards (Deetz - personal communication).

Case Bottle (Not illustrated) (Y558-31A(8); Y558-31B(39); Y558-31C; Y558-31D(2) - This case bottle was well distributed over the moat, further evidence of this feature being filled at essentially a single point in time. It is a lighter shade of green than the other bottle glass and is on the whole thinner, flatter, and broken in large pieces. It was possible to reconstruct part of this vessel. It has a tall rectangular shape. It is 22.5 cm long from the base to the shoulder, 10.0 cm wide, and at least 2.7 cm thick. No portion of the neck or lip was recovered. The exact source of such bottles are unknown, but they are believed to be French commercial containers. Ones like that from St. Pierre were

phials used for medicines, cosmetics, and perfumes. They were generally protected by a jacketmade of rushes.

Plate 88c (W1A; W6A; W18A; W66A1) - This is a reassembled rim from an extremely large bottle. The pieces of the rim were widely scattered. A poorly applied strip of glass circumscribes the lip, the two ends of the strip failing to join. The strip varies between 0.8 cm and 1.5 cm wide. It is approximately 0.3 cm thick, and is situated between 0.4 cm and 1.7 cm beneath the flattened lip of the bottle. The lip itself is 0.6 cm thick, the interior rim diameter being 3.8 cm. The exterior of the lip has been severely chipped, evidence of heavy use.

Lockguard

Plate 88b (W370A) - This also is a bottle rim. The applied string lip is circular, has a diameter of 0.4 cm, and is situated 0.9 cm beneath the lip. As with all the glass from Lockguard, this specimen is heavily pitted from fire.

Tumblers

Table 16
 French Olive Green Glass - St.

Provenience	Total #	Total Wt. (gm)
Y558-3	2	?
Y558-9A	2	1.2
Y558-31A	9	76.2
Y558-31B	42	309.7
Y558-31C	9	49.5
Y558-31D	3	34.1
Y558-31F	2	1.5
Y558-31H	1	2.0
Y561A	1	?
Y566A	1	?
Y576A	1	?
Y594A	1	?
T1F	1	22.7
T1I	1	5.8
T3C	1	1.5
T3D	1	2.5
T4A	1	0.7
T4B	4	12.2
T4C	6	15.0
T4D	8	68.6
T5B	1	6.8
T8A	7	8.9
T8E	1	4.3
T9A	2	14.4
T9B	3	12.9
T9E	1	1.6
T9F	2	3.2
T10C	2	26.8
Y602A	1	0.5
Y640A	1	1.9
Y643A	1	1.0

Table 16
 French Olive Green Glass - St. Pierre

Total #	Total Wt. (gm)	# Burnt	Burnt Wt. (gm)
2	?	2	1.2
2	1.2		
9	76.2		
42	309.7	2	4.4
9	49.5		
3	34.1	1	5.2
2	1.5		
1	2.0	1	2.0
1	?		
1	?		
1	?		
1	?		
1	22.7		
1	5.8		
1	1.5		
1	2.5		
1	0.7		
4	12.2		
6	15.0		
8	68.6		
1	6.8		
7	8.9		
1	4.3	1	4.3
2	14.4		
3	12.9	2	6.6
1	1.6		
2	3.2	2	3.2
2	26.8		
1	0.5	1	0.5
1	1.9	1	1.9
1	1.9	1	1.0
1	1.0		

Table 16 (Cont.)

Provenience	Total #	Total Wt. (gm)
Y643B	2	7.0
Y644A	1	3.8
Y645A	1	1.2
Y646B	2	6.3
Y661A	1	0.9
Y663A	1	4.8
Y672A	1	7.6
W1A	23	67.3
W2A	14	33.8
W3A	8	9.0
W4A	20	105.8
W5A	23	83.1
W6A	14	89.6
W6A1	1	3.1
W7A	21	81.2
W7A1	1	10.0
W8A	30	89.5
W10A	15	89.0
W11A	16	62.8
W12A	19	101.2
W13A	6	19.1
W14A	9	42.5
W15A	13	32.9
W16A	14	46.2
W17A1	3	3.7
W18A	8	52.8
W19A1	6	11.4
W20A	5	50.2
W21A	1	1.9
W22A	4	16.9
W23A	1	3.0
W25A	2	13.6
W25B	1	3.8
W26A	6	22.3
W28A	2	7.1

Table 16 (Cont.)

Total #	Total Wt. (gm)	# Burnt	Burnt Wt. (gm)
2	7.0	1	3.8
1	3.8	1	1.2
1	1.2	2	6.3
2	6.3	1	0.9
1	0.9		
1	4.8		
1	7.6		
1	67.3		
23	33.8		
14	9.0		
8	105.8		
20	83.1		
23	89.6		
14	3.1		
1	81.2		
21	10.0		
1	89.5		
30	89.0		
15	62.8		
16	101.2		
19	19.1		
6	42.5		
9	32.9		
13	46.2		
14	3.7	1	5.7
3	52.8		
8	11.4		
6	50.2		
5	1.9		
1	16.9	1	3.0
4	3.0	1	11.5
1	13.6	1	3.8
2	3.8	3	11.1
1	22.3		
6	7.1		
2			

Table 16 (Cont.)

Provenience	Total #	Total Wt. (gm)
		32.0
W29A	9	24.5
W30A1	5	8.4
W30A2	5	162.1
W31A	32	21.8
W32A	4	11.2
W33A1	5	23.6
W34A	9	19.3
W35A	8	18.9
W36A	12	8.5
W37A1	2	13.2
W39A	6	2.4
W40A	1	41.6
W41A	11	6.6
W42A	4	1.7
W43A	2	0.6
W44A	1	20.7
W45A	4	25.5
W47A	8	11.4
W48A	3	6.7
W49A	3	8.8
W50A	2	9.8
W51A	5	3.0
W54A1	1	2.0
W55A	1	2.7
W56A	2	9.8
W59A1	2	1.9
W61A	2	6.8
W62A1	2	5.3
W64A	2	5.8
W64A1	1	1.0
W65A	1	15.0
W66A1	6	43.1
W68A	20	15.6
W69A	4	

Table 16 (Cont.)

Total #	Total Wt. (gm)	# Burnt	
		1	2.9
9	32.0		
5	24.5		
5	8.4		
32	162.1		
4	21.8		1.3
5	11.2	1	
9	23.6		1.1
8	19.3	1	
12	18.9		
2	8.5		
6	13.2	1	1.2
1	2.4	1	0.8
11	41.6		
4	6.6		0.6
2	1.7	1	1.5
1	0.6	1	
4	20.7		4.3
8	25.5	1	2.1
3	11.4	1	2.1
3	6.7	1	0.4
2	8.8	1	
5	9.8		2.0
1	3.0	1	1.9
1	2.0	1	
2	2.7		1.9
2	9.8	2	6.8
2	1.9	2	3.8
2	6.8	1	5.8
2	5.3	1	
2	5.8		
1	1.0		
1	15.0		
6	43.1		
20	15.6		
4			

Table 16 (Cont.)

Provenience	Total #	Total Wt. (gm)
W70A	1	3.3
W72A	1	4.1
W73A1	1	1.6
W74A	1	0.7
W74B	1	2.7
W76A	1	7.0
W77A	3	8.2
W79B	1	1.4
W80A	1	1.3
W86A	1	2.3
W117A	1	1.4
W120AB	1	1.2
W122A	1	1.8
W411	1	3.3
W412	1	1.9
W414	1	1.7
W429	1	1.4
unlabeled	2	?
Total	620	

Table 16 (Cont.)

Total #	Total Wt. (gm)	# Burnt	Burnt Wt. (gm)
1	3.3	1	3.3
1	4.1	1	4.1
1	1.6	1	1.6
1	0.7		
1	2.7	1	2.7
1	7.0	1	7.0
1	7.0		
1	7.8	2	7.8
3	8.2	1	1.4
1	1.4	1	1.3
1	1.3	1	2.3
1	2.3	1	1.4
1	1.4	1	1.2
1	1.2	1	1.8
1	1.8		
1	3.3		
1	1.9		
1	1.7		
1	1.4		
1	?		
2			
620		58	

Clear Glass

Sample

Provenience

St. Pierre (10) - Y573A; Y578A; T8B; T9B1; T11A; Y642B; W13A;
W27B; W49A; W67A

Spoons (Plate 90a)

Sample - 1

St. Pierre (1) - Y641A

Description

This iron spoon has a tapered tang for support of a now missing bowl. The tang and handle is 15.8 cm long. The other end is flared and has a stepped outline with a dome at the very top. The flared end has a maximum width of 2.5 cm, whereas the rest of the handle has a fairly constant width of 1.0 cm. The tang is 2.8 cm in length.

Knives

Clasp Knives (Plates 91a-b and 92)

Sample - 12

Provenience

Portland (1) - Y506B
St. Pierre (9) - Y412; Y558-1; Y558-9(Y579); Y558-9A; Y561A;
Y575A; Y576A; T8G; Y646B
Lonely Frenchman (1) - Y924B
Wright's Bluff (1) - unlabeled

Description

Portland (Y506B) - This is the tip of a "hawk-billed" shape clasp knife. It has a maximum width of 2.4 cm.

St. Pierre

The specimens from this site are all of the "hawk-billed" shape. Those which can be distinguished as to overall form correspond to Stone's CI, GI, TI, Ve knives, in which the blade back and edge are not parallel and the back tapers sharply to

the tip (Stone 1974:266, fig. 160J).

(Y412) (Brown 1975b:plate 5, No.13) - This tip of a knife has a maximum width of 2.1 cm, the taper occurring 2.0 cm from the point of the knife.

(Y558-9 in Y579) (Brown 1975b:plate 5, No.12) - Traces of wood appear on the hole and clasp of this partial knife. The artifact has a maximum and minimum width of 2.2 cm and 1.7 cm respectively.

(Y575A) (Brown 1975b:plate 5, No.11) - This partial blade has a maximum and minimum width of 2.2 cm and 1.9 cm respectively. The broken knife blade was at least 9.0 cm long.

Plate 91a (Y558-9a) - The blade of this knife presently measures 9.6 cm in length, being broken at the tip. The tip is rounded and is the widest part of the blade (2.3 cm). It has not been cleaned.

Plate 91b(T8G) - This is a knife tip, its maximum blade width being 2.5 cm.

The remaining four specimens are just segments of "hawk-billed" clasp knives. Y576A is a tip section, its maximum width above the taper being 2.2 cm. Y561A and Y646B are clasp sections, the maximum widths being 1.5 cm and 2.5 cm respectively. Y558-1 is also a clasp section.

Lonely Frenchman

The single specimen from Lonely Frenchman is the tip of a "hawk-billed" shape clasp knife.

Wright's Bluff

Plate 92 (unlabeled) - This complete "hawk-billed" shape knife blade was removed from the pothunter's backfill. Its length is 9.5 cm and it has a maximum width of 1.8 cm.

Distribution

"Hawk-billed" clasp knives have also been found at Lasanen (Cleland 1971:19-21, fig. 15AB, 16A1-2); Bell (Wittry 1963:35, fig. 25); Fatherland (Neitzel 1965:50, pl. 13xxz); Haynes Bluff (LMS Collections); Womack, where it corresponds with Harris and Harris' Type 2 (1965:348-349, fig. 21); Gilbert, where it corresponds with Jelks' Type 2 (Jelks et al. 1966: fig. 21e-g); Gros Cap Cemetery (Quimby 1966:132); Fort Michilimackinac (Stone 1974: fig. 160J); and Guebert (Good 1972:159, fig. 37a-b).

Discussion

All of the above sites have dates spanning the first quarter

of the 18th century, which conforms nicely with the Yazoo Bluffs collection. The complete and semi-complete "hawk-billed" shape blades in our collection are between 9.0 cm and 10.0 cm in length while width ranges between 1.5 cm and 2.5 cm.

Case Knives (Plate 91c)

Sample - 4

Provenience

St. Pierre (4) - Y558-9(Y550F); Y558-31D; Y558-31F; Y645A

Description

(Y558-9 in Y550F) (Brown 1975b:plate 5, No.14) - The off-centered tapered tang of this broken knife has a rectangular cross-section. Its length is 3.6 cm and the maximum width of the expanding blade is 2.9 cm. The blade was probably "hawk-billed" shape.

Plate 91c(Y645A) - The tapered tang of this specimen is in line with the broken blade back. Its length is

4.2 cm. The blade was probably "hawk-billed" shape.

(Y558-31D and Y558-31F) - These are two table knives from a matching set. The blades are "sword" shaped, but have blunt rounded tips. The complete specimen is 26.7 cm long, its tang having a length of 10.7 cm. The blade has a maximum width of 2.5 cm.

Distribution

Case knives similar to the "hawk-billed" examples from St. Pierre have been found at Mulberry Mound I (Rouse 1951:131, plate 8); Childersburg (DeJarnette and Hansen 1960:48, pl.12C3); Gilbert (Jelks et al.1966:fig.22f-g); Fort Michilimackinac, where it corresponds with Stone's CII, SA, Cat. 1 (1974:269, fig.163H); and Guebert (Good 1972:166, fig.39c).

Miscellaneous Knife Blade Fragments

Sample - 11

Provenience

St. Pierre (11) - Y45; Y558-31F(2); Y577A; T9B1; Y643A;
Y646B; Y647B; W48A; W85A; W117A

Whetstones (Plate 114c)

Sample - 1

Provenience

St. Pierre (1) - W77A

Description

This hard gray sandstone has been worked into the shape of a wedge. Grinding has occurred along all edges except the blunt tip. The broken whetstone has a maximum thickness of 0.7 cm.

Architectural Group

Hand Wrought Nails (Figure 34)

Sample - 3533

Provenience

Portland (5) - Y40; Y502AF.1; Y505C1; Y506A; Y506B
 St. Pierre (3479) - Y45(2); Y47(2); Y49; Y400; Y402; Y403;
 Y404(2); Y405; Y406; Y407; Y550A1(2); Y550B1(5);
 Y550C1(7); Y550D1(8); Y550E1(6); Y550F1; Y550H1(4);
 Y550I1; Y550L1(4); Y551A(12); Y553A(16); Y554A(4);
 Y555A(4); Y556A(9); Y557A(7); Y558-1; Y558-2(2);
 Y558-3(9); Y558-3A; Y558-4(4); Y558-5(3); Y558-7(2);
 Y558-9(Y550F)(9); Y558-9(Y578)(23); Y558-9(Y579)(2);
 Y558-9A(16); Y558-11(2); Y558-13(Y575)(4); Y558-14
 (Y571B,C)(6); Y558-20(37); Y558-31A(27);
 Y558-31B(109); Y558-31C(10); Y558-31D(133);
 Y558-31E(4); Y558-31F(46); Y558-31H(43); Y558-54;
 Y558-59; Y558-62; Y558-76(3); Y559A(5); Y560A(6);
 Y561A(5); Y562A(4); Y563A(8); Y565A(20); Y566A(12);
 Y567A(2); Y567I; Y567J(2); Y567L1; Y5670; Y567Q;
 Y569A(13); Y570A(2); Y571A1(3); Y571A'1(3);
 Y571B(4); Y571C1(2); Y572-1; Y572-3(2); Y573A;
 Y574A(6); Y575A(23); Y576A(13); Y577A(19);
 Y578A(14); Y579A(11); Y591A(4); Y592A(3); Y593A(2);
 Y594A(2); T1E; T1F(3); T1G(5); T1H(10) T1I(10);
 T1J(4); T1K(3); T1L(2); T1M; T1Q(2); T3B(2);
 T3C(2); T3E(3); T4B(5); T4C(8); T4D(9); T5A(6); T5B(9);
 T5C(9); T5D(2); T6B; T6C; T6D; T7C; T8A(9); T8B(5);
 T8D(6); T8E(10); T8F(16); T8G(13); T8H(5); T9A(9);
 T9B(30); T9B1(26); T9C(11); T9D(9); T9E(13);
 T10A(5); T10D; T10E(2); T11A(3); T11B(2); T11C(3);
 T11F(2); T12D(8); T12E(19); T12F(13); T12G(9);
 T12H(7); T15A(12); T15B(3); T15C(6); T15E(5);
 T15F(3); T18B; T18C; T18E; Y600A(16); Y601A(13);
 Y602A(12); Y603A(16); Y604A(14); Y640A(33);
 Y640B(14); Y641A(41); Y641 B(10); Y642A(24);
 Y642B(8); Y643A(27); Y643B(3); Y644A(24); Y644B(5);
 Y645A(21); Y645B; Y646A(34); Y646B(29); Y647A(26);
 Y647B(10); Y660A(14); Y661A(12); Y662A(9);
 Y663A(5); Y672A(3); Y909(9); Y911(3); Y918; Y927;
 Y950(3); W1A(18); W2A(7); W3A(26); W4A(15); W5A(14)
 W6A(21); W6A1; W7A(31); W8A(10); W10A(12);
 W11A(20); W12A(26); W12A1; W13A(14); W14A(11);
 W15A(10); W16A(18); W17A1(8); W18A(18); W19A1(15);
 W20A(17); W20B(34); W21A(30); W21B; W22A(15)
 W23A(23); W23B(3); W24A(18); W24B(12); W25A(14);
 W25B(4); W26A(18); W26B(49); W27A(53); W27B(50);
 W28A(50); W28B(19); W29A(8); W30A1(5); W30A2(4);
 W31A(11); W32A1; W33A1(12); W34A(12); W35A(11);
 W36A(24); W36A1; W37A; W37A1(14); W37A1-1;
 W37A1-2(2); W39A(21); W40A(17); W40A1; W41A(26);
 W41A1; W42A(18); W43A(40); W43B; W44A(23);

W44B(3); W45A(35); W45B; W47A(19); W48A(20);
 W49A(23); W50A(5); W51A(26); W51A1(2); W51B(3);
 W52A(25); W52B(4); W53A(8); W54A1(16); W54B1(4);
 W55A(15); W55B(7); W56A(21); W56B(5); W58A1(8);
 W59A1(26); W60A1(6); W61A(11); W62A1(16); W62B1(6)
 W63A(18); W63B(2); W64A(27); W64A1; W64B;
 W65A1(4); W66A1(9); W67A; W68A(19); W69A(4);
 W70A(16); W71A(2); W71A1(14); W71B1(12); W72A(32);
 W72B(6); W73A1(2); W74A(43); W74B(2); W76A(29);
 W76B(4); W76C(3); W77; W77A(39); W77B; W77B1(9);
 W78A(11); W78B(2); W79A(28); W79B; W80A(25);
 W80B(22); W85A(9); W85B; W86A(24); W88A1(4);
 W89A1(2); W90A(2); W91A1; W92A; W94A; W95A;
 W96A(3); W97A(3); W102A1; W104A; W105A1;
 W107A(2); W108A; W110A(4); W112A(4); W113A1(3);
 W115A; W116A; W117A(58); W117B(16); W119A;
 W120A(36); W120B(2); W120A,B(4); W122A(17); W122B
 Lonely Frenchman (18) - Y915(2); Y923A(3); Y923B(5)
 Y924A; Y924B(3); W301D; W301E; W303B; W304A;
 Lockguard (28) - W351A; W353A(2); W356A; W357A; W358A;
 W359A(3); W360A; W360A1(2); W363A; W364A; W368A;
 W375A; W377A; W431(2); W432(7); W433(2)
 Wright's Bluff (3) - W329A; W330A; W334-1A

Description

All but nine of the hand wrought nails in the above sample are of "rose head" form with drawn points. The only exceptions are from St. Pierre. Two (Y604A; W71B1) are of the "rose head" type, but have flattened points, three (Y604A(2); W27B) have L-heads, and one (W35A) has a thick square head. A large number of the specimens from St. Pierre have been burned, particularly those found in features 20 and 31 (the dry moat) and in W71B1.

Discussion

Length measurements were taken on the complete nails recovered in the 1976 excavations at St. Pierre to determine whether or not certain size nails were associated with different activity areas. The excavated area was divided into four principal zones (Dry Moat, Structure B, Structure C, and the Lead Shot Drop Area), and the squares, levels, and features associated with each of these zones were recorded. These are listed as follows:

Dry Moat - Y558-31A; Y558-31B; Y558-31C; Y558-31D;
Y558-31E; Y558-31F; Y558-31H; W1A; W2A; W3A; W4A;
W5A; W29A; W32A1; W34A; W39A; W47A; W48A; W58A1;
W59A1; W65A1; W66A1; W67A; W70A; W88A1; W89A1;
W95A; W98A; W102A1; W104A; W105A1; W106A; W107A;
W108A; W109A; W110A; W113A1; W115A; W116A; W119A

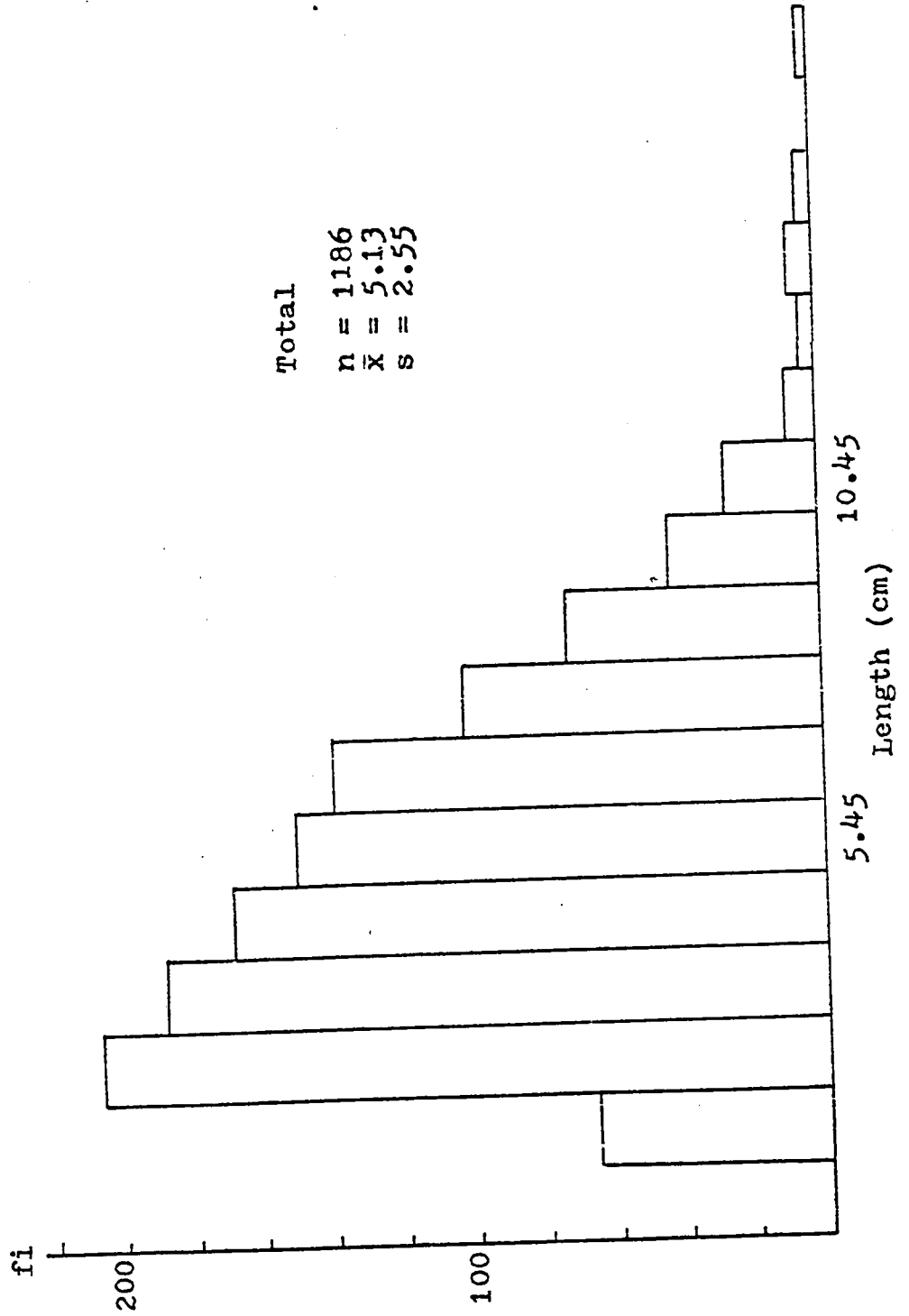
Structure B - Y558-33; Y558-34; Y558-35; Y558-40; Y558-42;
Y558-50; Y558-54; T8A1; T8B1; W6A; W6A1; W7A;
W7A1; W8A; W10A; W11A; W12A; W12A1; W13A; W14A;
W15A; W16A; W17A1; W17A1-1; W18A; W31A; W31A1;
W68A; W68A1; W69A; W69A1; W87A1; W112A

Structure C - W36A; W36A1; W37A1; W37A1-1; W37A1-2; W41A;
W41A1; W42A; W42A-1; W43A; W43B; W49A; W49A1;
W49A2; W50A; W50A1; W51A; W51B; W54A1; W54B1;
W54B1-1; W60A1; W61A; W62A1; W62B1; W63A; W63B

Lead Shot Drop Area - W23A; W23B; W24A; W24B; W27A; W27B;
W28A; W28B

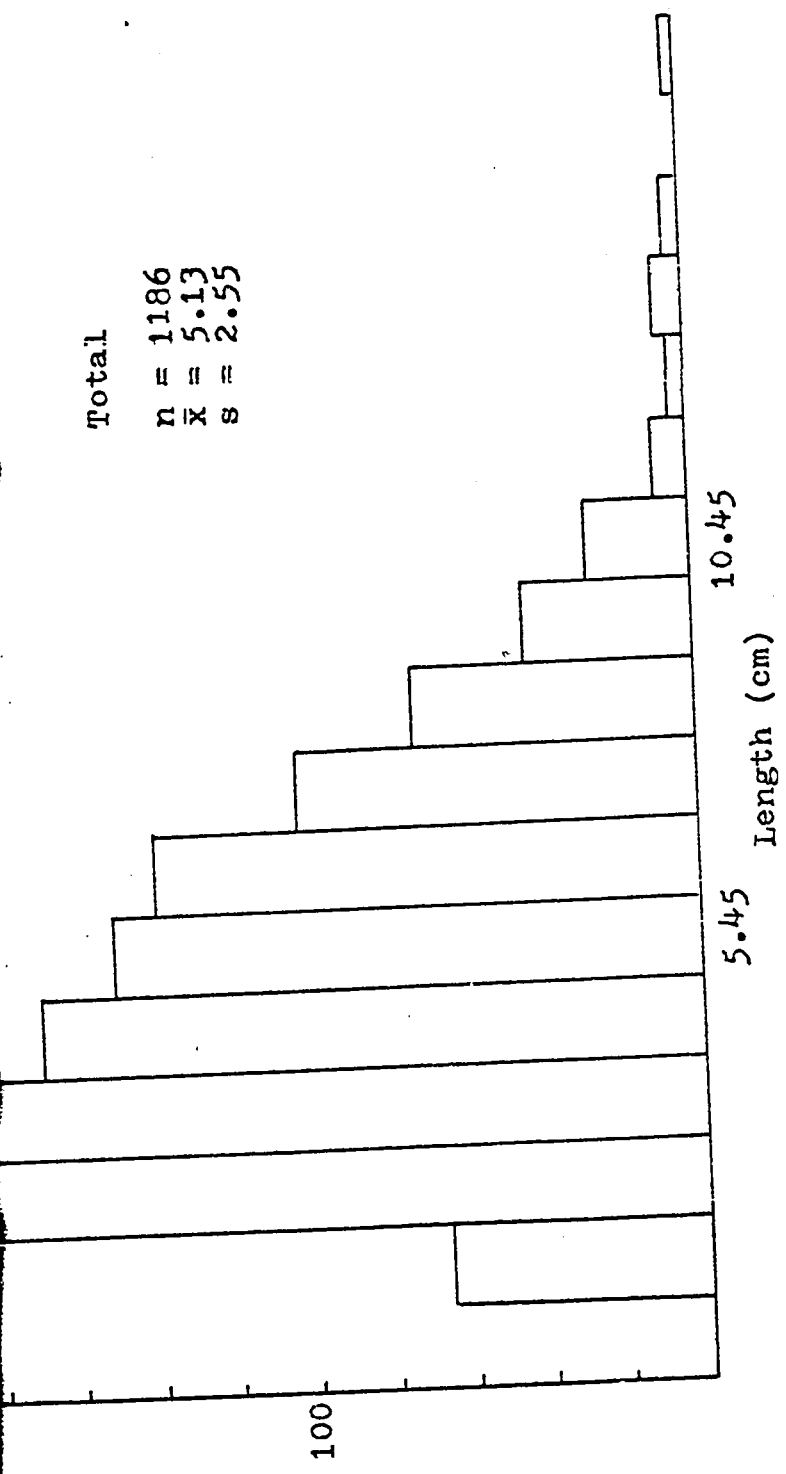
The nails associated with these zones were then tabulated, the number (n), mean (\bar{x}) and standard deviation (s) for each sample being calculated. Histograms of the results are presented in Figure 34. The sample of complete nails from the 1976 excavations numbered 1,186, or exactly 1/3 the total sample of nails recovered. The number of nails associated with the dry moat (319) more than doubles the amount associated with

Figure 34
Hand Wrought Nail Measurements - St. Pierre 1976 Excavations



Total

n = 1186
x̄ = 5.13
s = 2.55



Dry Moat

n = 319
x̄ = 5.01
s = 2.83

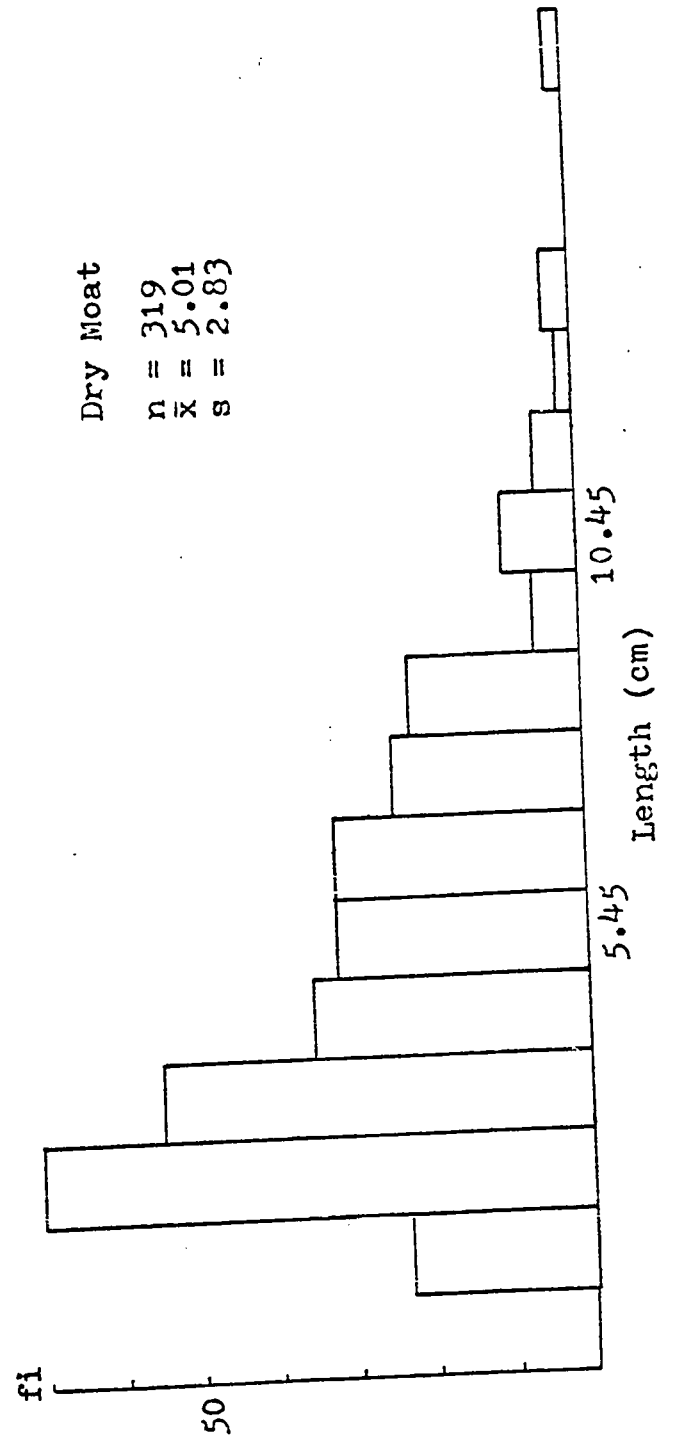
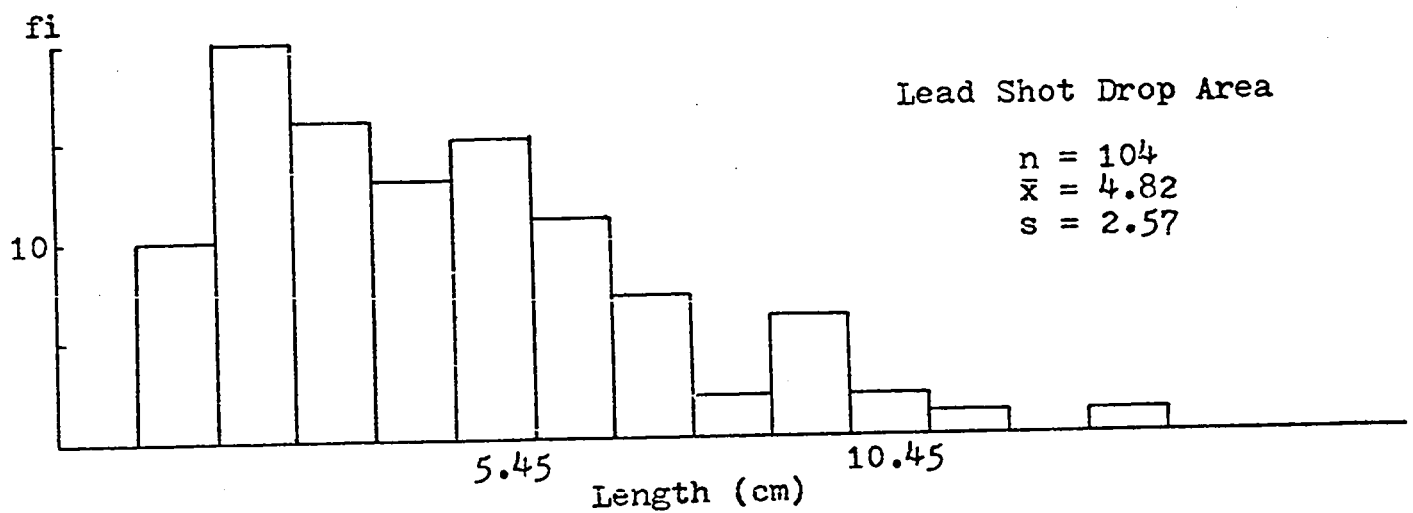
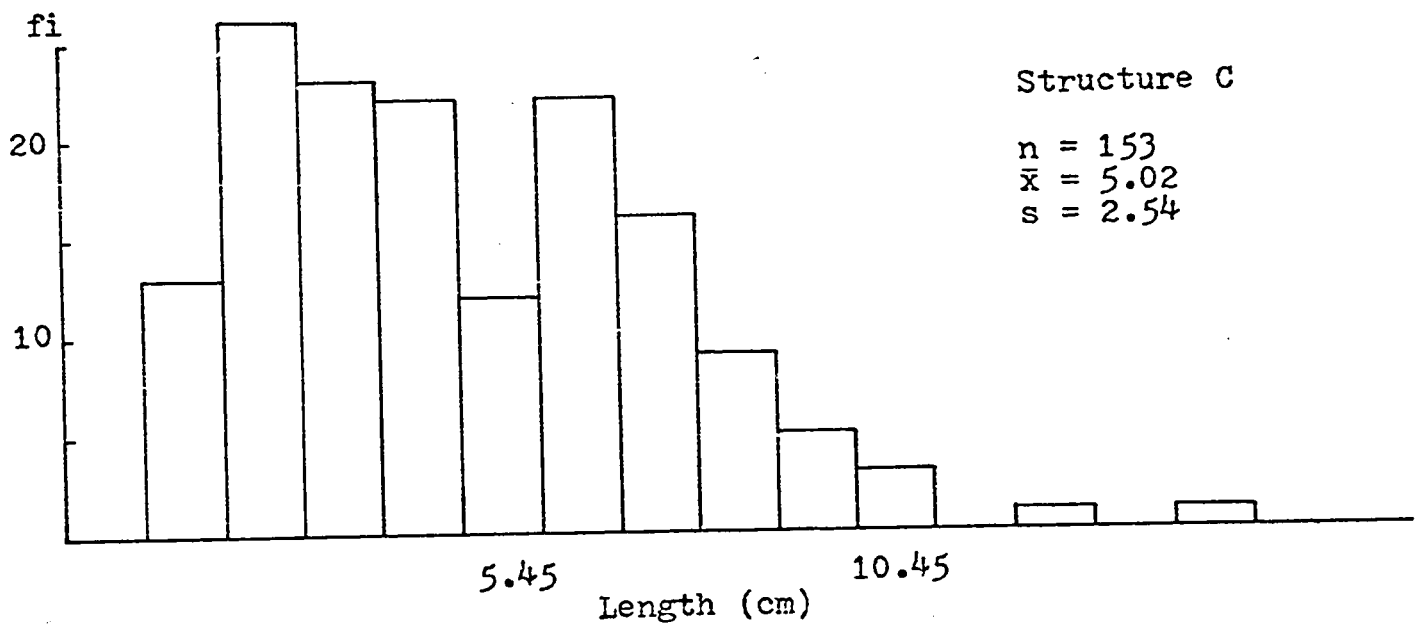
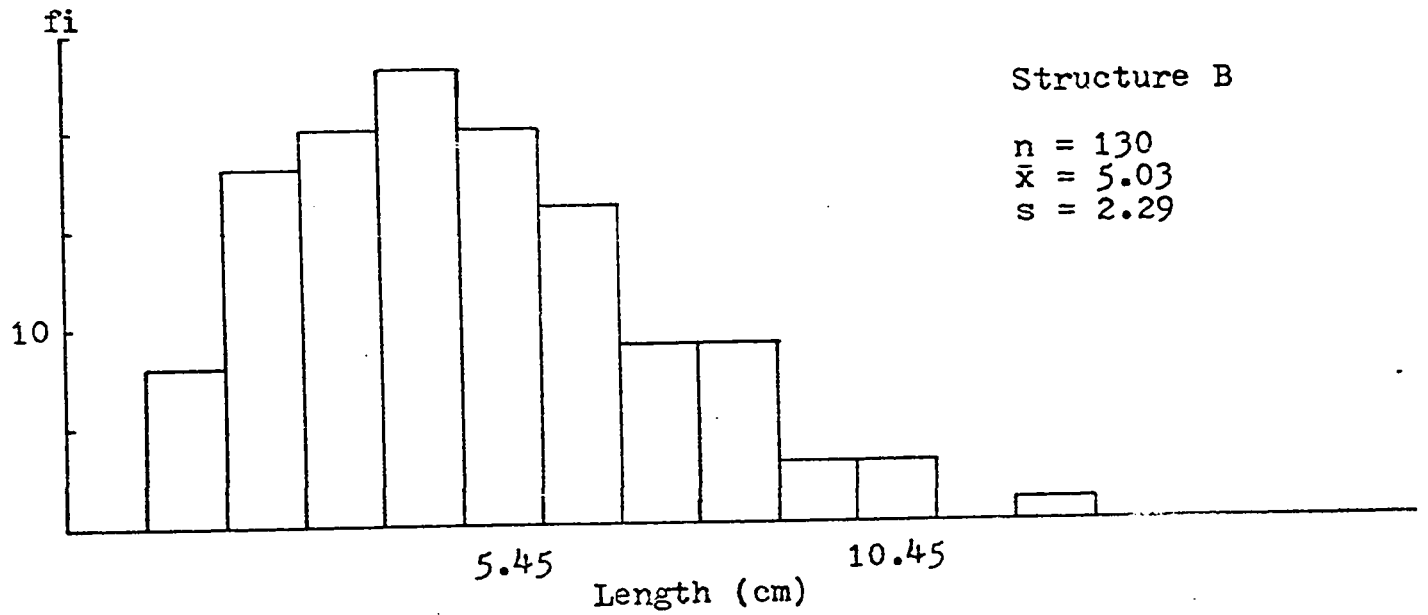


Figure 34 (Cont.)



Structure C (153). Structure B has 130 nails in association whereas the Lead Shot Drop Area has only 104. The order of sample size is commensurate with the space and depth involved in the various zones. The average nail length for the entire 1976 collection is 5.13 cm, the distribution curve being smoothly skewed to the right (Figure 34). The absence of polymodality, or peaks, in this histogram suggests that nails were not brought to the site in barrels of but two or three nail length sizes. A mixture of nail length were either brought into, or made at, the site. The average nail length of the moat (5.01 cm) is considerably below the total sample mean, but it is strikingly close to the means for Structure B (5.03cm) and C (5.02 cm). The only zone which does not follow the pattern is the Lead Shot Drop area (4.82 cm). For some reason, smaller-sized nails were preferred in this area. The dispersion of individual lengths from the mean is pretty much the same for Structure C (2.54 cm) and the Lead Shot Drop area (2.57 cm). when compared to the total sample, but there seems to be much greater variability of nail size in the dry moat (2.83 cm) and considerably less dispersion in Structure B (2.29 cm). The moat should be expected to have greater variability as it received nails from all over the site when it filled up, but why Structure B should have less nail size variability than Structure C is not known.

Hinges (Plate 93)

Sample - 9

Provenience

St. Pierre (9) - Y558-31A; T1I; T7A; T12G; Y662A(2); W27B;
W43A; W80B; unlabeled (1)

Description

Plate 93a (W43A) - This is one part of a self-contained hinge with a flared strap end. It corresponds with Stone's type 3 (1974:219, fig. 132I-K). A single hole, 0.5 cm in diameter, occurs in the center of the flanged end, 2.5 cm from its straight back. The flanged end has a maximum width of 3.9 cm. The other end has a deep notch. The length of the hinge is 9.6 cm.

Plate 93b (W80B) - This may also be a self-contained hinge, but it lacks the notch observed in W43A above. It is more probably the flared distal end of a rectangular pintle hinge strap element. It corresponds with Stone's type 2, variety a, category 1 (Ibid:fig.134D-H). The flanged end is 3.8 cm wide and has an incurvate edge. A single hole is located in the center of the flange 1.7 cm from the end.

(Y662A) - This also appears to be a pintle hinge strap

element. A two-stepped pyramidal flared end occurs forming a platform 1.8 cm wide. A hole occurs 6.3 cm from this end. The total broken blade length is 18.1 cm.

(unlabeled) - This too, although badly corroded, appears to be a pintle hinge strap element.

Plate 93c (Y662A) - This is a pintle hinge which is secured by driving or imbedding the shank into wood. The shank and hinge pin elements are separate elements and the pin is missing in this specimen. This hinge corresponds with Stone's Series B, type 1 pintle hinges, but it cannot be assigned to any of his varieties (Ibid:221). The ends of the shank were originally forged around the pin. They taper on two sides to a point. The maximum length of the hinge is 6.2 cm.

Plate 93e (T7A) - Similar to Y662A above, except the maximum length is 6.5 cm.

(T1I) - This is also similar to Y662A and T7A in that the ends taper on two sides to a point. Its maximum length is 4.0 cm.

(T12G) - This is a section of a hinge, but it is too fragmentary to break it down into finer categories.

Staples

Sample - 30

Provenience

St. Pierre (30) - Y558-20; Y565A; T1H; T5A; T11A; T15D;
Y661A(2); W8A; W13A; W17A1; W21A; W26A(2); W27B(2)
W37A1(3); W41A(2); W47A(4); W48A; W51A; W79A;
unlabeled (2)

Description

Both cut and hand wrought staples were found at St. Pierre. Only the latter are listed above. They have a mean length of 3.2 cm and a standard deviation of .33 cm.

Locks (Plate 94e-f)

Sample - 2

Provenience

St. Pierre (2) - Y950; W18A

Description

Plate 94e (W18A) - This is a "half-heart" shaped padlock.

The front face has been crushed. It is rectangular, 4.5 cm long and 3.5 cm wide. Viewed from the side, this specimen is trapezoidal. The edges run parallel for a distance of 3.0 cm below the top, the back face being sharply beveled to the front. A brass band, 1.0 cm wide, runs the full length of the front face. A key hole is situated near the top of one of the side plates and two hasp holes exist in the top of the lock. The hasp itself is missing. A metal protrusion hangs over the sides of the lock and rises up adjacent to the hasp holes.

Plate 94f (Y950) - This is the rear plate of a "heart" shaped padlock. A hole does not appear in its surface.

Discussion

The "heart" shaped padlock from St. Pierre corresponds with Stone's type 1 (1974:233,fig.143A) while the "half-heart" shaped specimen corresponds with his type 2, variety b which has a

ribbed front face (Ibid:211). Ivor Noël Hume indicated that although "half-heart" locks are illustrated by Diderot, other European countries were probably also making this form. According to Noël Hume, they occur on American sites in contexts dating as early as 1730 and as late as 1820. The braised reinforcement bands supposedly occur on both front and back in these early contexts, whereas in later contexts it occurs only on the front (Noël Hume 1969a;251-252). On the basis of the St. Pierre sample, we can now push the dating of these forms slightly before the 1730 beginning date and can now state that the bands on the front face alone also occur in the early 18th century.

Furniture Group

Hasp Locks (Plate 94d and 95a)

Sample - 3

Provenience

St. Pierre (2) - Y558-31D; W71B1
Lockguard (1) - W431

Description

St. Pierre

Plate 94d (W71B1) - This is an iron bolt attached to an iron plate. It is believed to be a lock element of a Lock-Form Hasp mechanism, as it is identical to one such lock from Fort Michilimackinac (type 1, variety a in Stone 1974 :195-197,fig.113A-B). Such a hasp lock would have had a separate spring mounted above the bolt.

Plate 95a (Y558-31D) - This is the stationary part of a hasp keeper element. It consists of a rectangular iron plate, 5.9 cm long and 4.1 cm wide, with a tall (2.3 cm) iron loop in its center.

Furniture Hinges (Plate 93d)

Sample - 1

Provenience

St. Pierre (1) - Y558-31A

Description

This is the staple end of a double element furniture hinge. The missing element is a pin with a loop which would have been fastened to the staple, each end then being drawn into the two pieces of wood to be joined. The staple has a maximum length of 8.8 cm and the ends taper on all four sides to a sharp point.

Handles (Plate 96a-d)

Sample - 4

Provenience

St. Pierre (4) - Y558-9A; Y603A; W29A; W117A

Description

These handles were probably attached to furniture, although one (Plate 96a) may have been a cup handle. It has a flattened spade-shaped attachment on one end and is bent slightly in the opposite direction on the other. Another specimen (Plate 96d) has a loop 4.0 cm long, the space between the two ends being 4.5 cm wide.

Arms Group

Ammunition

Musket Balls

Sample - 73

Provenience

Portland (5) - Y500A(2); Y501B; Y505A2; Y510A
 St. Pierre (65) - Y558-9(Y578); Y558-13(2); Y558-31A;
 Y558-31B; Y558-31C; Y558-31F; Y558-31H; Y561A;
 Y566A; Y571A; Y574A; Y575A(2); T1H; T4C; T8E;
 T9B1(2); T9E(2); T15A; Y641A; Y644A; W10A; W12A;
 W13A(2); W14A; W16A; W18A; W20A; W21A; W22A(2);
 W24A(2); W24B; W25B; W27B; W28A; W28B; W29A;
 W33A1; W37A1; W39A; W40A; W43A; W48A; W49A(2);
 W50A; W52B; W55A(2); W61A; W71A; W72A; W76A(2);
 W79A; W80A; W80B(2) W85A

Lockguard (2) - W361A1; W363B

Wright's Bluff (1) - W334-1B

Comments - Y566A; Y574A; Y575A(2); W13A(1); W40A; W48A; W80B;
 W85A; and W334-1B have been fired

T9B1(1); W361A1; and W363B have been melted
 1 from W13A has been slightly chewed (rodents)
 W22A; T9B1(1); W24A; W71A; and W72A have been
 chewed W18A; W20A; and W28B were mis-cast, the
 hemispheres overlapping

The musket balls from the 1975 collection were
 not measured.

Description

With the exception of one musket ball from St. Pierre, all were cast in bullet molds. The one exception is from W22A. It has a small hole in it, rather than a cut sprue, and mold seams are not apparent. This specimen bears similar manufacturing traits as the lead shot made at the site. It was also found near the Lead Shot Drop Area and may have been produced along with the smaller spherical lead bullets. Its caliber is .63. With the exception of specimens discussed in the Comments above, the caliber and weight of most of the musket balls in the Yazoo Bluffs region could be measured. The musket balls from Lockguard and Wright's Bluff could not be measured because they were either fired or melted. Those from Portland are primarily .56 caliber, although one is .53 caliber. The St. Pierre balls are fairly evenly divided between .56 caliber (22 specimens) and .63 caliber (18 specimens), with only two balls of anomalous sizes (.59 and .69 caliber). The .56 caliber balls from the entire Yazoo Bluffs sample totals 26, with a mean average weight of 249.4 grains and a standard deviation of 24.5 grains. The .63 caliber balls number 18 with a mean average weight of 265.1 grains and a standard deviation of 21.0 grains.

Shot

Sample - 637

Provenience

Portland (2) - Y505C2; Y506B
 St. Pierre (625) - Y558-31A(31); Y558-31B(4); Y558-31C;
 T9B1(5); Y602A; Y603A(4); Y641B(3); W3A; W10A;
 W11A; W12A1(19); W13A(4); W15A(6); W19A1(2);
 W20B(121); W21A; W22A; W23A(3); W23B(33); W24B(30)
 W25B; W26A; W26B; W27A(41); W27B(111); W28A(119);
 W28B(46); W33A1; W37A1; W43A(2); W52A; W52B(13);
 W54B1; W56A; W59A1; W69A(2); W77B1(3); W79B; W86A;
 W115A; W424; W429; W437(2)
 Lockguard (1) - W353A
 Wright's Bluff (9) - W330A(2); W334-1(6); W334-1A;
 Comments - All made of lead except W353A (iron)

Description

All of the lead shot appears to have been dropped by the technique referred to on pp. 200-201. The specimens often have little dimples on their surface, indicative of such a manufacturing process and many have a little hole on their surface, sometimes passing through the entire spheroid giving the objects the appearance of lead beads.

Lead Sprues

Sample - 7

Provenience

St. Pierre (7) - Y558-31A; Y558-31B(2); Y558-31C; Y600A;
 W4A; W117B

Description

These objects are the waste product of casting musket balls.

Lead Spillage

Sample - 70

Provenience

St. Pierre (64) - Y550E; Y558-9(Y550F1); Y558-12; Y558-13;
Y558-15; Y558-31A(32); Y558-31B(7); Y558-31D;
Y566A; Y600A; Y601A(2); Y602A; Y646A; Y647B;
W20B(5); W25B; W28B; W31A; W34A; W77; W80A; W98A
Lockguard (6) - W353A; W355A(2); W356A; W359A; W375A

Description

These objects are the melted lead spilled in the process of making ammunition.

Cannister Shot (Plate 95b-c)

Sample - 2

Provenience

St. Pierre (2) - W72A; W76B

Description

These are two heavy iron pellets. One (Plate 95b) is 2.8 cm in diameter and weighs 65.9 gm and the other (Plate 95c) has a diameter of 3.0 cm and a weight of 66.8 gm.

Shrapnel

Sample - 3

Provenience

St. Pierre (3) - W16A; W24A; W30A1

Powder Flasks (Plate 97)

Sample - 2

Provenience

St. Pierre (2) - Y641A; W97A

Description

These two objects are believed to be parts of a powder flask. The first (Plate 97) is a hollow bulbous vase-shaped object which is probably the spout of a flask, the hollow bulb holding the desired amount of powder. The bulb is 4.6 cm high, has a maximum width of 2.1 cm, a rim diameter of 1.2 cm, and sits on a brass disk. The latter has a maximum diameter of 4.3 cm. Three drilled rectangular protrusions are located on the bottom of the disk. A collar is raised 0.7 cm above the disk's upper surface and iron oxides cover both the collar and the base of the disk. The other object (W97A) is a small fragment of an animal horn which has been drilled. It may be recent or it could date to the fort's occupation.

Spout

Sample - 1

Provenience

St. Pierre (1) - Y646A

Description

This object is made of lead. It has a flared base with a raised lip and thread marks on its interior (six coils). The bottom is crushed so rim diameter cannot be ascertained. The object weighs 25.8 gm, is 4.4 cm tall, the long tapering nozzle having a length of 2.9 cm. It may have been a powder flask spout, but its actual function is unknown.

Gunflints

Gunflints number 124 in the Yazoo Bluffs sample. They are classified according to form - Spall, Blade, and Aboriginal being the types. Blade Gunflints are broken down into three varieties based on the cross-section of the blade - trapezoidal, triangular, and trapezoidal-triangular. The description of each gunflint is presented in Table 17, the format basically following Blanchette (1976 b). I have strayed from his format only to the extent of discussing the measurements first and in making gunflint cross-sections varieties of the type.

Type 1 - Spall Gunflints (Plate 99; Figure 32; Table 17)

Sample - 41

Provenience (see Table 17)

Portland (3)

St. Pierre (37)

Wright's Bluff (1)

Comments - 2 from Y558-31A same gunflint
Y558-31B and W33A1 same gunflint

Description

All specimens have rounded heels and correspond to Blanchette's variety A (1975:49;1976b). Flint color is primarily gray (28), but some are beige (8), black (2), and white (1). Three have been whitened by heat. Length ranges between 1.9 cm and 3.8 cm with an average (\bar{x}) of 2.61 cm and a standard deviation (s) of .42 cm. Width ranges between 1.7 cm and 4.3 cm with an average of 2.99 cm and a standard deviation of 0.53 cm. Thickness ranges between 0.6 cm and 1.2 cm with an average of 0.81 cm and a standard deviation of 0.14 cm. Sixteen of the specimens exhibit a small amount of wear, three are unused, two are worn to the point where length cannot be measured, and one is similarly worn so much that width cannot be measured. Ten were used as strike-a-lights.

Type 2 - Blade Gunflints

Table 17

Gunflints - Measurements and Description

Key - Descriptive categories are extracted directly from Blanchette (1976b). Numbers on the chart correspond to those listed below:

- 4 - Edge: single
- 5 - Edge: double
- 6 - Heel: round
- 7 - Heel: square
- 11 - Sides: with no retouch
- 12 - Sides: with small retouches
- 13 - Sides: with long retouches on all area of sides
- 14 - Sides: with presence of a lip on one side or two
(a lip is a crushed demi-cone)
- 15 - Sides: with presence of a demi-cone of percussion or ear on one side or two
- 16 - Bulb: located on opposite face of retouches
- 17 - Bulb: with éraillure (a small flake that is removed between the bulb of percussion and the bulbar scar as a result of soft hammer percussion (Crabtree 1972:44,60))
- 18 - Bulb: without éraillure
- 19 - No bulb.
- 20 - Color: blond
- 21 - Color: brown
- 22 - Color: beige
- 23 - Color: red
- 24 - Color: black
- 25 - Color: gray
- 26 - Color: white
- 27 - Color: whitened by heat
- 28 - Color: other
- 29 - Wear: no wear
- 30 - Wear: little wear
- 31 - Wear: worn to the point that length cannot be measured
- 32 - Wear: worn to the point that width cannot be measured
- 33 - Wear: used as a strike-a-light, according to Hamilton and Fry's criteria (1975:121-122)

Table 17 (Cont.)

	(in cm)			4	6	11	13	15	17	19	21	22
	Lth	Wth	Tck	5	7	12	14	16	18	20		
W26B	3.8	3.8	0.7									
W27A	2.7	3.2	0.8									
W29A	2.6	2.9	0.9									x
W37A1	?	?	1.0									
W48A	3.1	3.1	0.9									
W49A	?	?	0.8									
W69A	?	?	0.8									
W78A	2.0	2.7	0.7									
W79A	2.9	3.7	1.1									x
W79A	2.8	3.4	0.9									x
W80A	3.0	4.3	1.2									
Wrights Bluff												
W329A	2.3	2.7	0.7									
Blade Gunflints												
Trapezoidal												
Portland												
Y501A	2.1	3.2	?						x			
Y506C1	1.9	1.8	?						x			
Y506C2	1.7	2.6	?						x			
St. Pierre												
Y550C1	1.9	2.9	?						x			
Y558-31B	2.2	3.1	0.6		x		x		x		x	x
Y558-31B	2.5	3.4	0.9		x		x		x		x	x
Y558-31F	2.3	2.8	0.6	x		x		x	x		x	x
Y562F.8	2.4	2.9	?									
T9B1	?	?	0.6									
T9E	2.5	3.0	0.8	x	x			x				x
T12G	2.2	3.2	0.9		x		x					x
Y644A	1.9	2.2	0.6	x		x	x		x	x		x
W7A	3.0	3.8	0.9	x		x	x		x			x
W8A	2.2	2.4	0.5	x	x		x					x

Table 17 (Cont.)

(in cm)	4	6	11	13	15	17	19	21	23	25	27	29	31	33
Wth Tck	5	7	12	14	16	18	20	22	24	26	28	30	32	
3.8 0.7										x		x		
3.2 0.8										x			x	
2.9 0.9								x				x		
? 1.0									x				x	x
3.1 0.9										x			x	
? 0.8										x				
? 0.8											x			
2.7 0.7										x				
3.7 1.1										x				x
3.4 0.9								x				x		
4.3 1.2								x						x
2.7 0.7										x			x	
3.2 ?														x
1.8 ?											x			
2.6 ?														x
2.9 ?														x
3.1 0.6		x			x			x						
3.4 0.9		x			x			x					x	
3.4 0.9		x			x			x					x	
2.8 0.6	x		x		x			x						
2.9 ?														x
? 0.6														x
3.0 0.8	x	x			x			x						
3.2 0.9		x			x			x						
3.2 0.9		x			x			x						
2.2 0.6	x		x	x			x			x				x
3.8 0.9	x		x		x			x					x	
2.4 0.5	x	x			x			x					x	

Table 17 (Cont.)

	Lth	Wth	Tck	4	6	11	13	15	17	19	21	22
	(in cm)			5	7	12	14	16	18	20		
W13A	1.5	?	0.5	x	x		x				x	x
W17A1	1.9	2.0	0.7		x			x			x	x
W22A	2.6	3.7	1.0	x		x					x	x
W31A	2.2	2.5	0.6	x			x	x			x	x
W35A	2.3	3.0	0.6		x		x		x		x	x
W40A	2.3	3.4	0.8	x		x	x				x	x
W45A	2.6	2.8	0.7	x		x	x				x	x
W58A1	2.6	3.3	0.8			x	x		x	x	x	x
W61A	2.1	3.0	0.8		x		x	x			x	x
W63A	2.8	3.9	1.2		x		x				x	x
W74A	2.4	2.8	1.0	x		x		x	x		x	x
W77A	2.2	3.3	0.9	x		x		x			x	x
W80B	2.6	2.8	0.8	x		x	x		x		x	x
Wrights Bluff W329A	?	?	0.9									
Blade Gunflints												
Triangular												
Portland												
Y506B	2.0	3.2	?									
Y506C3	2.1	1.8	?									
St. Pierre												
Y553A	2.5	3.8	?							x		
Y555A	2.6	3.4	?							x		
Y558-9(Y578)	1.8	2.7	?									
Y558-9(Y578)	1.9	2.9	?									
Y558-9(Y578)	2.2	2.8	?									
Y558-31A	2.0	3.0	0.6	x		x	x	x		x		x
Y558-31A	2.9	3.4	1.0	x	x		x			x		x
Y558-76	1.7	2.2	0.7	x		x	x			x		x
Y574A	2.0	2.8	?									x
T11	2.3	2.7	0.7	x	x			x				

Table 17 (Cont.)

th	Wth (in cm)	Tck	4	6	11	13	15	17	19	21	23	25	27	29	31	33
			5	7	12	14	16	18	20	22	24	26	28	30	32	
.5	?	0.5	x	x		x				x					x	
.9	2.0	0.7		x						x					x	x
2.6	3.7	1.0	x		x					x					x	
2.2	2.5	0.6	x							x					x	
2.3	3.0	0.6		x						x						x
2.3	3.4	0.8	x		x	x				x						x
2.6	2.8	0.7	x		x					x					x	
2.6	3.3	0.8	x		x				x	x					x	
2.1	3.0	0.8		x						x						x
2.8	3.9	1.2		x						x					x	
2.4	2.8	1.0	x		x					x					x	
2.2	3.3	0.9	x		x					x					x	
2.6	2.8	0.8	x		x	x				x						x
?	?	0.9														
2.0	3.2	?														
2.1	1.8	?														
2.5	3.8	?								x						
2.6	3.4	?								x						
1.8	2.7	?														
1.9	2.9	?														
2.2	2.8	?														x
2.0	3.0	0.6	x		x					x					x	
2.9	3.4	1.0	x		x					x					x	
1.7	2.2	0.7	x		x	x				x					x	
2.0	2.8	?														
2.3	2.7	0.7	x		x					x					x	

Table 17 (Cont.)

	Wth (in cm)	Tck	4	6	11	13	15	17	19	21	23	25	27	29	31	33
			5	7	12	14	16	18	20	22	24	26	28	30	32	
0	3.6	0.9	x			x	x		x	x					x	
	2.9	0.8	x		x				x	x					x	x
4	3.5	1.1	x	x		x	x		x		x					
	?	0.6							x	x						x
3	3.2	0.8	x		x		x	x	x		x			x		
1	2.7	0.8	x			x				x						x
	?	9.7														
3	3.4	1.0	x	x		x			x		x				x	
9	2.5	0.5	x			x			x		x					

.1	3.1	0.9	x	x		x	x		x		x				x	
.4	3.4	1.0		x		x		x	x		x				x	
.8	2.0	0.8		x			x			x					x	
.8	2.5	0.6		x		x				x					x	x
?	3.5	1.1	x		x					x			x		x	
.6	2.9	1.0		x		x			x					x	x	
.1	2.9	0.6	x		x					x				x	x	
.2	2.9	0.9		x		x	x		x					x		

2.1	2.1	?											x			
2.2	2.4	?											x			
2.2	1.9	?											x			

These correspond to Blanchette's (1975:49; 1976b) Type 2 gunflints.

Variety A - Trapezoidal (Plate 100 a-e; Figure 32; Table 17)

Sample 28

Provenience (see Table 17)

Portland (3)

St. Pierre (24)

Wright's Bluff (1)

Comments - Y506C1; W40A; and W58A1 have cortex adhering
W63A and W80B are poorly made, the blades forming
the plateaus being broken off halfway
W80B has long flakes removed on all edges of the
bottom face

Description

These flints were called "Fine" by the French, because the parallel faces furnish a firm gripping surface for the lead or leather vise clamp which secures them to the jaws of the musket cock (Hamilton and Fry 1975:109, fig.4c). Most of the Yazoo Bluffs specimens are beige (15), but some are blond (2), and others are gray (1) and white (1). One is a mixture of gray and white and another is mixed beige and white. The color of those

recovered in the 1974 excavations was not recorded. The length of these trapezoidal Blade Gunflints ranges between 1.5 cm and 3.0 cm with an average (\bar{x}) of 2.27 cm and a standard deviation (s) of 0.34 cm. Width ranges between 1.8 cm and 3.9 cm with an average of 2.95 cm and a standard deviation of 0.52 cm. Thickness ranges between 0.5 cm and 1.2 cm with an average of 0.77 cm and a standard deviation of 0.18 cm. Fourteen of the flints have single edges and seven have double edges. Six have rounded heels while eight have square ones. Three flints lack retouching on the sides. Seven exhibit long retouches and 12 have small retouches. One specimen has a lip on one side while 12 have demi-cones of percussion. Five have a bulb of percussion on the opposite face of the retouching, while 19 specimens lack this feature. One trapezoidal gunflint from St. Pierre has an erailure, evidence of soft hammer percussion. Fourteen of the total sample exhibit minimal wear, while nine are heavily worn through use against a fire-steel.

Discussion

Stone did not know what to do with the few Blade Gunflints from Fort Michilimackinac which have a bulb of percussion, and so he set up a new Series (B) to account for the merging of the principal forms (1974:255). Blanchette (1976b) chose to include gunflints with such features with the Blade Gunflint type, and he believes their presence is an early characteristic

(late 17th century) of Blade Gunflint technology (Blanchette-personal communication). It is interesting that three of the five specimens from the Yazoo Bluffs region come from Portland. Such a distribution supports the early dating of this site.

Variety B - Triangular (Plate 100f-h; Figure 32; Table 17)

Sample - 21

Provenience (see Table 17)

Portland (2)

St. Pierre (19)

Comments - W25B and W79A have cortex adhering

Description

The French called gunflints of this form "Ordinary", as they were considered to be of a poorer class than those of the trapezoidal form (Hamilton and Fry 1975:109; fig.4b). Most of the specimens from the Yazoo Bluffs region are beige (10). Three are blond and one is gray. Length ranges from 1.7 cm to 2.9 cm with an average (\bar{x}) of 2.22 cm and a standard deviation (s) of 0.36 cm. Width ranges between 1.8 cm and 3.8 cm with an average of 2.97 cm and a standard deviation of 0.5 cm. Thickness ranges

between 0.5 cm and 1.1 cm with an average of 0.78 cm and a standard deviation of 0.18 cm. Six of the flints have single edges and five have double. Two have round heels while four have square. Five have small side retouches, five have long, and two completely lack side retouching. Seven flints have a demicone of percussion and three have bulbs of percussion on the face opposite the retouching. Ten definitely lack the latter attribute. Seven have been minimally used, one has been worn to the point where length cannot be measured, and four have been heavily used against fire-steels.

Variety C - Trapezoidal-Triangular (Plate 100i-k; Figure 32;
Table 17)

Sample - 8

Provenience (see Table 17)

St. Pierre (8)
Comments - W64A has cortex adhering

Description

Some portion of the plateau exists on gunflints of this form. Those in the Yazoo Bluffs sample are primarily beige (6).

One is beige and white and another has turned blue from heat. Length ranges between 1.8 cm and 3.4 cm with an average (\bar{x}) of 2.43 cm and a standard deviation (s) of 0.85 cm. Width ranges between 2.0 cm and 3.5 cm with an average of 2.9 cm and a standard deviation of 0.48 cm. Thickness ranges between 0.6 cm and 1.1 cm with an average of 0.86 cm and a standard deviation of 0.18 cm. Three flints have single edges and five have double. Three have rounded heels. Small side retouching occurs on seven specimens while three have long retouches. Two flints have lips and three have demicones of percussion. Two have bulbs of percussion on the face opposite the retouching. Six lack this feature. Minimal wear is presented on seven of the flints. One has been worn to the point where length cannot be measured and one has been used against a fire-steel.

Type 3 - Aboriginal Gunflints (Plate 101; Figure 32; Table 17)

Sample - 17

Provenience (see Table 17)

Portland (3)
St. Pierre (10)
Lockguard (2)
Wright's Bluff (2)

Description

All but four of the St. Pierre specimens are made of local chert. Two of the exceptions (Plate 100a,c) were originally Spall Gunflints, and the others (Plate 100f,i) were Blade Gunflints. The Lockguard gunflints (Plate 100l-m) were originally Spall, while those from Wright's Bluff (Plate 100j-k) were Blade. The Portland flints are foreign, but whether Spall or Blade was not recorded in their initial analysis (Brown 1975a). Most of the Aboriginal Gunflints are bifacially flaked, resulting in a thin biconvex cross-section. Exceptions are specimens from Portland, where all forms are plano-convex, and St. Pierre where two of the specimens (Plate 100b,d) are plano-convex in cross-section. The Aboriginal Gunflints are primarily beige (7) and gray (2). Two are red and gray, one is white and gray, and one is whitened by heat. Length ranges between 1.8 cm and 2.6 cm with an average (\bar{x}) of 2.11 cm and a standard deviation (s) of 0.19 cm. Width ranges between 1.9 cm and 3.2 cm with an average of 2.43 cm and a standard deviation of 0.33 cm. Thickness ranges between 0.5 cm and 1.0 cm with an average of 0.76 cm and a standard deviation of 0.14 cm. One of the specimens is worn to the point where width cannot be measured. Three were used against fire-steels.

Gunflint Debitage (Plate 100l)

Sample - 26

Provenience

Portland (2) - Y506C1(2)

St. Pierre (23) - Y558-31F(2); T9D; Y600A(2); Y643A; Y643B;
W3A; W8A; W22A; W23B; W25A; W27A; W29A; W35A;
W41A; W44A; W48A; W51A; W64A; W80B; W86A; W117A

Lockguard (1) - W355A

Comments - Y558-31F; T9D; Y643A; W3A; W48A; W51A; and W64A
all burned

Y600A is a large foreign gray flint nodule (Plate
1001)

Description

Some of these fragments were originally gunflints, but are currently too fractured to attempt classification. Others are actual debitage resulting from either Frenchman or Indians making gunflints. One specimen (Plate 1001) is a large nodule of foreign flint, closest in color to the Spall Gunflints of the Yazoo Bluffs sample. A large portion of cortex adheres to it. Its presence at St. Pierre suggests that raw materials were brought to the site, perhaps to be manufactured into gunflints.

Gun Parts

Lock Plate (Plate 102)

Sample - 1

Provenience

Lockguard (1) - W431

Description

Still attached to this banana-shaped lock plate are the pan, the frizzen spring, and the sear spring. The lock is presently 14.0 cm long, the tip of the tail being broken. The pan is faced, has a fence, is 2.2 cm wide where it joins the lock for a distance of 1.7 cm. The upper arm of the frizzen spring is 4.5 cm long and the lower arm, measured from the bulbous part, is 3.3 cm in length. It is 1.0 cm wide. The upper and lower arms of the sear spring are respectively 2.0 cm and 1.7 cm long. The width tapers for both arms, reaching its maximum (1.2 cm) where they join. The tumbler was unbridled.

Discussion

The discovery of a partial lock mechanism is not too surprising. According to Ted Hamilton (1976:20), complete locks are seldom found in contexts other than burials. This is

because still functioning parts were seldom thrown away by either European or Indian, but rather were adapted to new guns. Locks found in village debris are hence fragmentary. Apparently the parts still attached to this particular broken lock plate were not considered worthy enough to salvage. The lock plate is very similar in form to specimens from Fort Michilimackinac which post-date 1725 (Ibid.:fig.17H-I). The faceted pan, banana-like shape of the lock plate, and unbridled tumbler suggest the parts are from an early 18th century French gun (Ibid:20-24).

Musket Cocks

Sample - 2

Provenience

St. Pierre (2) - Y550A1; Y565A

Description

Both cocks have the usual "gooseneck" form. Y550A1 (Brown 1975b; plate 7, No.3) is 6.3 cm long from its base to the top of its broken comb, and 4.0 cm long from the socket base to the

lower vise. The comb is wide, flat, and grooved, typical of early 18th century cocks (Hamilton 1960b9). Its base is plano-convex in cross-section. Y565A (Brown 1975b:plate 7, No.4) presently lacks its comb. It measures 4.0 cm from the socket base to the lower vise. Its base has a flat cross-section and is beveled at the edges.

Distribution

Similar flat-based cocks are found at Womack, where the size (similar to Y565A) is thought to be suitable for a fusil class weapon (Harris and Harris 1965:320); Gilbert, where it corresponds to Nos. 2-7,9 and 10 (Jelks et al.1966:43); Angola Farm, where it is attached to a curved lock plate dating to the period 1690-1740 (Hamilton 1960bfig.2); and Guebert (Good 1972: 141, fig.30a,d-e).

Discussion

The flat-based musket cock is usually associated with a flat, rather than plano-convex, lock plate (Harris and Harris 1965:320). This type of cock became popular on French guns between the late 17th and mid 18th centuries, whereas contemporary English guns tended to have round base cocks on round locks. As a result of changes in the lock plate, flat-based cocks also

became characteristic of late 18th century French guns (Jelks et al.1966:43-47).* It is possible that both French (Y565A) and British (Y550A1) firearms were used at Fort St. Pierre as the French are known to have bought and traded English guns in the 18th century (Hamilton 1968:2).

Sears (Plate 103a-b)

Sample - 2

Provenience

St. Pierre (2) - W72A; W117A

Description

Plate 103a - The arms measure 2.2 cm and 2.4 cm

Plate 103b - The arms measure 2.0 cm and 2.7 cm

* There are many exceptions to this observation, early French guns having plano-convex cocks and contemporary English guns having flat cocks (Bill Wright - personal communication). As still useable parts were constantly being salvaged from non-working locks, it would be unreasonable to suppose that different combinations did not occur.

Both specimens are broken at the screw hole.

Sear Springs (Plate 103c)

Sample - 2

Provenience

St. Pierre (1) - Y565A
Wright's Bluff (1) - W329A

Description

St. Pierre

(Y565A) - The upper leaf of this specimen is broken. Its lower leaf measures 2.2 cm in a straight-line distance from the free end of the spring to the outside apex of the bend (Brown 1975b:plate 7, No. 7).

Wright's Bluff

Plate 103c - This specimen is broken at the screw hole. Its upper leaf has a length of 2.0 cm and its lower leaf is 1.8 cm long. It has a maximum width of

0.9 cm.

Tumbler Bridles (Plate 103i)

Sample - 1

Provenience

St. Pierre (1) - W48A

Tumblers

Sample - 5

Provenience

St. Pierre (2) - Y554A; W43A
Lockguard (2) - W363A; W431
Wright's Bluff (1) - unlabeled (1)

Description

The purpose of the tumbler is to enable the flint to be

carried at half cock (Noël Hume 1969a:213). One of the St. Pierre specimens (Y554A) and one from Lockguard (W363A) have two notches. The other specimen from Lockguard is very corroded and may also have two notches, but the remaining tumbler from St. Pierre and the unlabeled tumbler from Wright's Bluff, removed from the pothunters backdirt, have only one.

Mainsprings (Plate 103d-f)

Sample - 4

Provenience

St. Pierre (4) - W23A; W27B; W35A; W89A1

Description

All of the specimens are broken, making measurements useless. W89A1 (Plate 103d) has lost its temper as a result of being in a fire. Its spring has opened.

Frizzensprings

Sample - 1

Provenience

St. Pierre (1) - W25A

Description

Measurements on this broken artifact were not taken.

Trigger Assemblies (Plate 103g-h)

Sample - 7

Provenience

St. Pierre (5) - Y550H1; Y558-9A; Y603A; W56A; W61A
Wright's Bluff (2) - W334-1; W334-1B

Description

St. Pierre

(Y550H1) - This is a trigger plate. It is 7.0 cm long, .04 cm thick at the muzzle end and .01 cm thick at the butt end.

(Y558-9A) - This is a complete trigger assembly. The plate is 8.1 cm long. The trigger is 4.5 cm long and has a maximum width of 2.4 cm.

Y603A - This is a trigger. Its length and width are 4.9 cm and 2.1 cm respectively.

W56A and W61A - These are two triggers which are too corroded for measurements to be taken.

Wright's Bluff

Plate 103g (W334-1B) - This is a broken trigger assembly. The trigger is 2.3 cm wide and the screw which connects the plate with the stock is 2.0 cm long.

Plate 103h (W334-1) - This complete trigger is 5.0 cm long and 2.3 cm wide. The tail is 2.7 cm in length.

Sideplates (Plate 104a and 105)

Sample - 2

Provenience

St. Pierre (1) - W28B
Wright's Bluff - (1) - Unlabeled (1)

Description

St. Pierre

Plate 104a (W28B) - This is a simple iron naturalistic serpentine sideplate with a concave rear and a convex front. It has a straight-line length of 10.6 cm and a maximum width of 2.0 cm.

Wright's Bluff

Plate 105 (unlabeled) - This identical sideplate was removed from the pothunter's backdirt. It is 9.9 cm long and has a maximum width of 1.6 cm.

Discussion

Serpentine sideplates are common on both French and English trade guns of the 18th century. French types have a monster's head and a filigreed body (see plate 28), whereas English types are fairly simple and naturalistic (Hamilton 1968). The classic example of the latter is the brass sideplate of the Northwest and Hudson's Bay trade guns of the late 18th/early 19th centuries (Hamilton 1976:14, fig.G). Earlier English forms with this characteristic sideplate also occur, as represented in the Type G (1725-1770), H(1720-1740), P(1730-1750), and Q(1730-1750) guns, and it may occur on one type (O) of mid-18th century French firearm (Hamilton 1968). None of these forms are similar to the St. Pierre and Wright's Bluff specimens, however, as the latter

are rather wide, have but one simple curve in the body of the snake, and are generally of crude manufacture. The closest parallel I have found, is another iron sideplate in the Wright's Bluff Burial Collection (Plate 28), but this specimen also exhibits better workmanship than the above two forms. Lineality and crudity of form suggests English origin, but context argues for French derivation. Identical sideplates from St. Pierre and Wright's Bluff are supporting evidence for the contemporaneity of the two sites.

Triggerguards (Plate 104b-d and 106)

Sample - 10

Provenience

St. Pierre (9) - Y550A; Y551A; Y553A; Y577A; T12G; Y600A;
W77A; W86A; unlabeled(1)
Lockguard (1) - W431

Description

St. Pierre

(Y550A) - This is an iron bow. It has a set of opposing

triangular protrusions at its mid-section (Brown 1975b:plate 7, No.6).

(Y551A) - part of an iron trigger guard

(Y553A) - Iron trigger guard fragment (Ibid:plate 7, No. 8)

(Y557A) - This is a fragment of a brass trigger guard. It consists of the front tang, the tongue, and the foot of a trigger guard bow. The tongue is broken along the trim hole and the tang is beveled on both sides (Ibid:plate 7, No. 1).

(T12G) - part of an iron trigger guard tang.

Plate 106 (Y600A) - This is the front tang and partial finial of a brass trigger guard. It is beveled and finely made, perhaps part of the same bow as Y557A. The tongue is 1.2 cm long and 1.0 cm wide. An elaborate feline face occurs on the lower half of the finial.

Plate 104b (W77A) - This tongue from a brass trigger guard is 1.7 cm long.

Plate 104d (W86A) - This is a part of the rear tang of an iron trigger guard.

(unlabeled) - part of an iron trigger guard.

Lockguard

Plate 104c (W431) - This is a bow from a brass trigger guard. It is 2.2 cm wide and has a simple "chevrolet" design etched in it. The design is 4.1 cm long.

Distribution

Brass triggerguards with front tangs similar to Y557A from St. Pierre have been found on early 18th century French-related sites in Texas. They are represented by Nos. 4-6 at the Womack Site (Harris and Harris 1965:324-325, fig.12E-F) and Nos. 22-23 at the Gilbert Site (Jelks et al.1966:77-81,fig.39b). An identical guard was recovered from the Rosebrough Lake Site, a site believed to be the Nassonite Post established by Bénard de la Harpe in 1719 (Miroir et al.1975:147, fig. 11BB'). Feline faces, very similar to the one on Y600A from St. Pierre, occur on escutcheon plates from Fort Michilimackinac (Hamilton 1976: 16, fig.15A,D) and one is also seen on an escutcheon plate in the Wright's Bluff Burial Collection (Plate 30). The "chevrolet" design is commonly found on French trade guns (Hamilton 1968:7, 13). It occurs at the Fatherland Site (Ibid:fig.4E) at Angola Farm (Ibid:fig.4A), and at the Childersburg Site (Ibid:fig.5B). The triggerguards from the Gilbert Site discussed above also have the "chevrolet" pattern (Jelks et al.1966:77-81).

Discussion

French trade guns bearing the "chevrolet" design occur on Type C guns, which date between 1685 and 1730, and on Type D guns, dating between 1730 and 1760 (Hamilton 1968: 7-13). The

triggerguards from the Yazoo Bluffs region more closely resemble the Type C form. Guns of this type may have been traded to the local Indians, or they may have been used by the soldiers themselves. It is reported that the Louisiana troops in 1721, "were newly clothed but lacked military muskets and bayonets and were using trade muskets instead (Chartrand 1973:60)." The escutcheon plates with feline heads from Fort Michilimackinac are thought to be "probably English" (Hamilton 1976:16). The presence of such heads on a brass trigger guard from St. Pierre and an escutcheon plate from Wright's Bluff, whose assemblage in all other respects matches the Type C definition, argues for the design having also been employed by the French. The iron triggerguards are probably also from French firearms, as triggerguards on regulation English muskets were always made of brass after 1720 (Noël Hume 1969a:217).

Buttplates (Plate 104e)

Sample - 2

Provenience

Portland (1) - Y506A
St. Pierre (1) - W43A

Description

Portland

(Y506A) - This is a cast brass butt plate finial with an elaborate design. The motif is commonly known as an "acanthus leaf", a "potted plant", or an "exploding grenade". The finial, 3.4 cm long, broke off beneath the "pot". The "plant" is 2.2 cm long (Brown 1975b: plate 7, No. 19).

St. Pierre

Plate 104e (W43A) - This also is a finial from a brass butt plate. Its basic outline is triangular, with a flaring base and recurved sides. A nipple occurs at its end. It is 3.2 cm long and has a maximum width of 2.0 cm.

Distribution

"Potted plant" brass finials are typical of Type C French trade guns. A complete gun with such a finial was found at Angola Farm. This gun type also has a brass "monster head" sideplate, sometimes front and rear sights, and barrels ranging from 36 3/4 inches (93.36 cm) to 48 inches (121.92 cm) long, with a bore diameter of .5 inches (1.27 cm). These guns lack frizzen and tumbler bridles (Hamilton 1968:7-8, fig.4-5). Similar finials have also been found at Gilbert (Jelks et al. 1966:65, fig.37K);

Womack, where it corresponds to Harris and Harris' (1965:337-341, fig.16G-H) Nos. 7 and 8; Fish Hatchery (Gregory 1962:60-61); Guebert (Good 1972:141,pl.8); and the "Tunica Treasure" from Trudeau (Brain et al n.d. b). All of these finials are cruder than the one recovered from Portland, however. The buttplate finial from St. Pierre has been found on both iron and brass furniture from Fort Michilimackinac (Hamilton 1976:fig.2A, 4D).

Discussion

The iron buttplates from Fort Michilimackinac, bearing a flared-base finial with recurved sides, are assumed to be a variation of the Type D gun which is dated between 1730 and 1760. Hamilton, however, felt it could also be of French military use. The brass buttplate from Fort Michilimackinac has the cypher of Desjardins (Controller of the French Armoury at Maubeuge from 1718 to 1755) stamped on its reverse side. In addition to military arms, the Armoury at this time made trade guns for the American colonies, presumably issuing obsolete military furniture (Hamilton 1968:13; 1976:8-9).

Finials ending in "potted plants" were commonly used on French guns by at least 1710 (Hayward 1963:45) and the Type C guns recovered archaeologically, on which this ornament occurs, date between 1685 and 1730. Such guns are found only in areas dominated by French trade. There are two, possibly three, grades of Type C guns. All grades have "potted plants", but the

lower grades are crudely cast. Collectors' guns also often have the same type of finial, but the castings are of a high quality. The "plant" is generally spread out and shows much more detail (Good 1972:140; Hamilton 1968:7-8). The Portland specimen seems to fit the latter description. The higher quality firearms were probably Bourgeois' guns, rather than proper trade guns. Perhaps France was trading very fine firearms in the earlier period of contact in the Yazoo Bluffs region.

Rampipes (Plate 104g-h)

Sample - 7

Provenience

Portland (2) - Y502AF.1; Y506A
St. Pierre (3) - Y550E; Y558-31F; W37A1
Wright's Bluff (2) - W330A; W334-1B

Description

Three rampipes occur on the base of each barrel-loading gun in order to hold the ramrod when the latter is not in use.

Portland

(Y502AF.1) - This is an iron terminal section. Its total length is 5.6 cm, while the attachment length is 2.3 cm. It has a diameter of 0.7 cm (Brown 1975a:pl.7, No.20)

(Y506A) - This is a brass mid-section. It has a length of 2.2 cm and a diameter of 0.8 cm. Two grooves encircle each end of the rampipe (Ibid:pl.7, No.18).

St. Pierre

(Y550E) - This is a flattened brass mid-section. It is 2.5 cm long and lacks circumferential grooves on its end. The pin hole, used to attach the rampipe to the stock, is .25 cm in diameter. An additional hole has been drilled next to the pin hole (Brown 1975b; pl. 7 No.2).

(Y558-31F) - This iron mid-section is 3.4 cm long. Its hole is too corroded for diameter measurement.

(W37A1) - This is a broken iron mid-section.

Wright's Bluff

Plate 104g (W330A) - This broken brass mid-section has a length of 2.3 cm. It still contains a part of the ramrod.

Plate 104h (W334-1B) - This is a relatively complete iron mid-section. Its length and diameter are 3.3 cm and 1.0 cm respectively and its pin-hole

is slightly off-center.

Breech plugs (Plate 107)

Sample - 1

Provenience

St. Pierre (1) - T12H

Description

This plug has a total length of 6.0 cm. The tang is 1.3 cm wide and the screw threads are approximately 0.15 cm apart.

Barrels

Sample - 2

Provenience

St. Pierre (1) - Y558-23

Wright's Bluff (1) - unlabeled (1)

Description

The St. Pierre specimen (Y558-23) is a small section of a musket barrel (7.0 cm long). One end has been sawed-off. The bore diameter cannot be measured, because of corrosion. The barrel section from the pothunter's backdirt at Wright's Bluff has been broken as a result of faulty firing. It is 4.5 cm long.

Barrel Bands and Swivels (Plates 108 and 109)

Sample - 3

Provenience

St. Pierre (3) - Y558-76(2); Y600A

Description

Plate 108a (Y558-76) - The iron barrel band is about 1.5 cm wide and its hole has a maximum diameter of 3.3

cm. Originally, it may have been larger. The swivel has a square or circular cross-section, rather than a thin strap. Corrosion prevents accurate measurements, but its diameter is at least 2.2 cm.

Plate 108b (Y558-76) - This is probably from the same gun as the above. Only the iron swivel remains on this specimen. Corrosion prevents accurate measurements.

Plate 109 (Y600A) - This is a partial iron barrel band and swivel.

Lead Flint Patches

Sample - 4

Provenience

St. Pierre (4) - W28A; W34A; W44B; W70A

Description

These objects were used to hold the flint in place within the jaws of the musket cock. All are fragments of the original

patches.

Touchhole Picks (Plate 104f)

Sample - 3

Provenience

St. Pierre (3) - Y558-14; W27A; W50A

Description

(Y558-14) - This was originally thought to be an unusual Jews harp (Brown 1975a:211,pl.13,No.5). Unusual indeed, for it is actually an instrument for cleaning a gun's touch hole. Its length is 4.0 cm and its maximum width is 1.7 cm.

Plate 104f (W27A) - Length and maximum width of this specimen are 6.1 cm and 2.2 cm respectively. The diameter of its oval hole is 1.0 cm.

(W50) - Length and maximum width of this object are 3.1 cm and 1.3 cm respectively. The hole is too corroded to measure.

Screwdrivers (Plate 110)

Sample - 1

Provenience

Wright's Bluff (1) - W330A

Description

This fine screwdriver shaft was used on screws in lock mechanisms. It is 7.2 cm long and has a flattened cross-section. Its two sides taper to a very fine blunt point which is 0.15 cm wide.

Clothing Group

Buckles (Plate 111)

Sample - 12

Provenience

Portland (1)
St. Pierre (11) - Y557A; Y593A; T1H; T7C; T9E; Y646A; W13A;
W21A; W25A; W28A; W104A

Description

Portland

(Y506C1) - This specimen belongs to Stone's (1974) flanged or winged hook buckles - Class I, Series C, Type 6. A buckle of this class has a movable hook element which is attached to a pin or hinge bar and a movable tongue element which is attached to the same hinge bar at the center of the hook. The series consists of specimens with flanged hooks and the type includes only those buckles with iron hooks, tongues, hinge bars and rectangular frames (Ibid:26-29,fig.19Q-R). The Portland buckle (Brown 1975a:pl.4, No.3) is missing its iron tongue. Its size falls between Stone's varieties a and b. Its frame is 3.4 cm long (straight-line measurement), 2.8 cm wide, and 0.35 cm thick. The hook is 2.7 cm long and 1.8 cm wide at the hinge bar attachment. Its flange is 1.55 cm wide.

St. Pierre

(Y557A) - This complete iron buckle has an oval frame with

a maximum length and width of 3.5 cm and 2.9 cm respectively. The thick wire which forms the frame is 0.5 cm in diameter (Brown 1975b:pl.5 No.2).

(Y593A) - This is a buckle hook fragment. It was originally attached to a hinge bar and served to permanently secure the leather strap to the buckle. The prong which temporarily secures the loose strap is missing (Brown 1975a:pl.5 No.3). Too little of the hook remains to properly classify it as to type, but it belongs in Stone's Class I, Series A, Category I, varieties b-d (Stone 1974:28, fig.18F-H).

Plate 111a (T1H) - This is a broken iron buckle with a rectangular frame and rounded shoulders. It is 4.0 cm long and 3.1 cm wide. A tongue is attached to the middle of one long side and spans the width of the buckle.

Plate 111b (T7C) - This is similarly a broken iron buckle with a rectangular frame and rounded corners. Its length and width are 2.5 cm and 2.1 cm respectively. The tongue is attached to a moving pivot along one long side.

Plate 11c(T9E) - This is a complete iron buckle with a rectangular frame. The long sides (5.4 cm) are straight, but the short sides (3.7 cm) are slightly convex. A movable tongue is attached

to one of the longer sides.

Plate lllld (Y646A) - This is a complete iron buckle with a rectangular frame and straight sides. It has a maximum length and width of 9.3 cm and 4.4 cm respectively. The movable tongue, which once spanned the width of the buckle, is presently twisted back against one of the longer sides.

Plate lllle (W104A) - This is a complete iron buckle with a rectangular frame. Its tongue is permanently attached to the middle of one long side. A movable tube encircles the opposite side. The frame is 4.6 cm long and 3.3 cm wide.

The remaining buckles from St. Pierre are fragmentary. They are all rectangular and have rounded corners. Length cannot be measured, but their widths are 2.4 cm, 2.7 cm, and 2.8 cm.

Discussion

With the exception of the one specimen from Portland and the first two described above from St. Pierre, all of the buckles in this collection are harness buckles. Identical forms have been found at Fort Michilimackinac (Stone 1974:297,fig.180); at Fort Ligonier (Grimm 1970:56,pl.42,Nos.5 and 7) in a context dating half a century later than Fort St. Pierre, and at Fort Condé. The specimen from the latter site dates between 1812

and 1816 (Harris 1971:fig.13d). The harness buckle form has thus remained basically stable through time. As a result, little research has been devoted to this particular buckle form.

The buckle from the Portland Site, similar to one recovered in the Fatherland excavations (Neitzel 1965:50, pl.13JJ), is actually quite rare. Only three out of a total of 419 buckles were found at Fort Michilimackinac, and Stone dated this form to the early French occupation of the site, between 1715 and 1740 (or 1750). It served as either a knee, spur, or hat buckle (Stone 1974:29,33).

The first buckle described above from St. Pierre (Y577A) is a curious specimen. It is not represented at Fort Michilimackinac (Stone 1974). In form, it is similar to stock, knee, and hat buckles. These commonly have pivots which span the length rather than the width of the frame (Noël Hume 1969a: 86). In regard to size, however, this specimen is more likely to have been a harness buckle (Ibid:fig.20, No.11). The buckle hook fragment from St. Pierre (Y593A) was probably from a stock, belt, or knee buckle. This form is believed to date between 1740 and 1780 at Fort Michilimackinac (Stone 1974:29). Its presence at Fort St. Pierre, however, suggests an earlier date.

Buttons

Sample - 30

Provenience

St. Pierre (29) - Y407; Y550C1; Y550E(2); Y555A; Y558-7;
 Y558-9(Y578)(5); Y560A; Y561A; Y563A; Y565A;
 Y569A; Y575A; Y576A; T12E; W26A; W28A; W28B;
 W45A; W58A1; W68A(2); unlabeled(3)
 Lockguard (1) - W358A

Description

Two of the specimens from St. Pierre are brass Civil War Eagle buttons (W68A; unlabeled). Another unlabeled specimen is a crushed silver-colored (tin?) button cap. A raised beaded design encircles its edge, and a flower with many petals occurs in its center. A brass or copper cap was found in feature 7 (Y558-7). It may be a homemade button as the sheet metal appears to be wrapped around some sort of perishable material. The crown is 1.5 cm in diameter and the nub on its back has a diameter of 0.7 cm. A black substance occurs on the back and within the cap. Four specimens are iron disks (Y550E; Y558-9 (Y578); Y560A; unlabeled(1)). They may have been the center piece for cloth-wrapped buttons (Brown 1975b:pl.5, Nos.9-10).

The remainder of the buttons from St. Pierre and the one from Lockguard are made of brass and are of the same type (Ibid: pl.5, Nos.4-8). They all have a slightly concave back and a cast wedge-shaped attachment handle. The latter has gently converging sides, coming rapidly to a dome at the top. A hole

is drilled through the shank. The only decoration, which occurs on the face of most of the buttons, is a stamped ring encircling the edge. The following attributes were selected for measurement:

- a - diameter of the button
- b - height from the button back to the bottom of the hole in the attachment handle
- c - diameter of the hole in the attachment handle
- d - height of the attachment handle

The results are presented in Table 18. The buttons' diameters are listed in ascending order. Diameters range from 1.5 cm to 2.6 cm with an average of 1.82 cm and a standard deviation of .30 cm. Three size categories are apparent: small 1.5 cm - 1.8 cm; medium 2.2 cm - 2.3 cm; and large 6.6 cm. Most of the specimens are in the small category.

Distribution

A button cap similar to that from feature 7 was found at the Bell Site (Wittry 1963:18-19, fig. 11b). Brass buttons with wedge-shaped attachment handles have a wide distribution on colonial and historic aboriginal sites. They have been found at the Fatherland Site (Neitzel 1965:51, pl. 14i); International Paper (Brain et al. n.d. a); Haynes Bluff (LMS Collections); Site 1Ds53 (David Chase - personal communication); Womack (Harris and Harris 1965:354, fig. 22j); Fort Condé (Harris 1971:

Table 18
 Measurements of Cast Brass Buttons from the Yazoo Bluffs Region

Provenience	a	b	c	d
Y550C1	?	.15	?	?
Y561A	1.5	.20	.30	.60
Y565A	1.6	.10	.40	?
W358A	1.6	.15	?	?
Y563A	1.6	.20	?	?
W28A	1.6	.20	?	?
W26A	1.6	.25	?	?
T12E	1.7	.15	?	?
Y407	1.7	.15	.30	?
W58A1	1.7	.20	?	?
Y567Q	1.7	.20	.40	?
W68A	1.7	.25	?	?
Y575A	1.7	.25	.30	.80
Y550E	1.7	.25	.35	?
Y558-9	1.7	.25	.35	.80
Y569A	1.7	.30	?	?
Y555A	1.7	.30	.30	.80
Y558-9	1.8	.20	.35	?
W28B	2.2	.30	?	?
W45A	2.3	.30	?	?
Y558-9	2.3	.30	.40	?
Y558-9	2.3	.30	.40	?

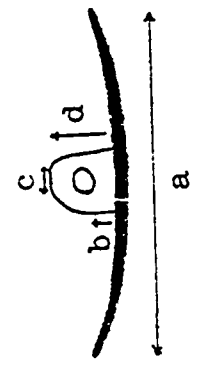
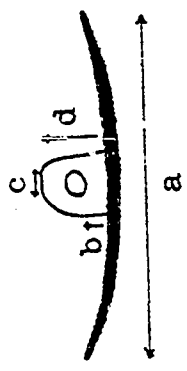


Table 18

Measurements of Cast Brass Buttons from the Yazoo Bluffs Region

Provenience	a	b	c	d
Y550C1	?	.15	?	?.60
Y561A	1.5	.20	.30	?
Y565A	1.6	.10	.40	?
W358A	1.6	.15	?	?
Y563A	1.6	.20	?	?
W28A	1.6	.20	?	?
W26A	1.6	.25	?	?
T12E	1.7	.15	?	?
Y407	1.7	.15	.30	?
W58A1	1.7	.20	.40	?
Y567Q	1.7	.20	?	?
W68A	1.7	.25	?	?.80
Y575A	1.7	.25	.30	?
Y550E	1.7	.25	.35	.80
Y558-9	1.7	.25	.35	?
Y569A	1.7	.30	?	.80
Y555A	1.7	.30	.30	?
Y558-9	1.8	.20	.35	?
W28B	2.2	.30	?	?
W45A	2.3	.30	?	?
Y558-9	2.3	.30	.40	?
Y558-9	2.3	.30	.40	?
Y576A	2.6	.50	.40	1.00



(measurements in cm)

fig. 10e); Gros Cap Cemetery (Quimby 1966:132); Guebert (Good 1972:132, pl. 7a-b); and perhaps also at the early 17th century Patawomeke Site in Virginia (Schmitt 1965:20, pl. 3a). Those found at St. Pierre came mostly from the northwestern portion of the site.

Discussion

With the exception of Patawomeke, brass buttons of this sort are absent on English-related sites. They are not represented on the Brunswick Town button chart, even though the site's dates overlap with Fort St. Pierre's (Noël Hume 1969a:91, fig. 23). According to René Chartrand (personal communication), these buttons were used only on post-1716 military uniforms. They are not represented at all, however, in the collection of 1,300 buttons from Fort Michilimackinac (Stone 1974:45-67). These buttons are most common in the Gulf States and perhaps were the principal uniform buttons for the troops stationed at the various Louisiana posts established by the Company of the Indies.

Cufflinks (Plates 112 and 113)

Sample - 3

Provenience

St. Pierre (3) - Y558-31B; W25A; unlabeled(1)

Description

Plate 112 (Y558-31B) - This is a square brass cufflink crown with beveled edges and a flat cross-section. An engraved floral design occurs on the crown, in the center of which is an iron plug. The latter is one end of the eye. The cuff link is 1.4 cm square and 1.5 cm thick. The eye is 0.2 cm thick and is raised 0.3 cm from the back. Its diameter cannot be measured. The closest cufflink parallel at Fort Michilimackinac is Stone's Class III, Series B, Type 3, Variety a (1974:71, fig.35Q).

(W25A) - This is a biconvex clear glass cufflink inset. It was once faceted, but is now worn smooth. It is 1.1 cm in diameter and has a thickness of 0.6 cm. It corresponds to Stone's Class IV (1974: 71-74).

Plate 113 (unlabeled) - This circular pewter (?) cufflink has a diameter of 1.4 cm. The profile of a man donning a wig is located in the center, and a

raised ridge runs parallel to the beveled edge of the crown.

Shoe Heels (Plate 114a-b)

Sample - 4

Provenience

St. Pierre (4) - T5B(2); T15E; Y558-20

Description

Plate 114a (Y558-20) - This heel has an arch shape. It is 4.5 cm long, 4.7 cm wide, and 0.9 cm thick. Three tack holes occur, one at the top of the arch and one on each side, a triangular pattern being the result. Two of the tacks are still intact.

Plate 114b (T5B) - This incomplete heel is spade-shaped. Two tack holes occur, and a third tack no doubt once completed the same triangular pattern.

The other specimens are fragments of heels.

Fabric

Sample - 1

Provenience

St. Pierre (1) - Y558-76

Pins (Plate 115)

Sample - 2

Provenience

St. Pierre (2) - Y558-31A; Y594A

Description

One of the pins is silver (?) - plated iron. It probably post-dates the fort's occupation. The other (Plate 115) is 2.8 cm long, and its discovery within the moat suggests it is of French origin and use.

Bale Seals (Plate 116)

Sample - 1

Provenience

St. Pierre (1) - W28B

Description

This circular lead bale seal corresponds to Stone's Series C seals (1974:292-295). It is 1.4 cm in diameter and 0.2 cm thick. The letters "FABA QUBEC" occur on one side and "BOV LAV" occur on the opposite.* A fleur-de-lis occurs on the latter face and encircling the edge are the letters "BAB_ _ _ _ CIS T LS".

Clothing Ornaments - Tinklers (Plate 117)

Sample - 12

* Underlined letters indicate uncertainty of designation.

Provenience

St. Pierre (12) - Y558-31D(8); W25B; W27B; W61A; W80A

Description

Two of the specimens from Y558-31D are attached by a leather cord (Plate 117c). One of these has a rectangular shape, but the remainder of the tinklers from St. Pierre have the shape of a cone. One specimen (W61A) has been unrolled. Two of the tinklers from feature 31D have drill holes through their base. They may have served as projectile points. Eleven tinklers could be measured. Length ranges between 1.1 cm and 3.9 cm, with an average of 2.73 cm and a standard deviation of 0.78 cm.

Clothing Ornaments - Glass Beads (Plate 118)

Class DI

This class consists of tubular beads which were not subjected to rounding by reheating and tumbling. Only 370 beads of this class, constituting two types and nine varieties, are represented in the "Tunica Treasure" from the Trudeau Site. As

no beads from the Yazoo Bluffs region fit the above criteria, the breakdown of this class will not proceed any farther.

Class DII

The beads of Class DII are identical to those of DI, except they are rounded on the ends. The beads are either monochrome or have surface decoration.

Type DIIA

Type A consists of monochrome beads of simple construction and no surface decoration. This is equivalent to Kidd and Kidd's (1970) Type III.

Variety DIIA1 (Plate 118, Nos. 1,11)

Definition

Almost all opaque white beads of simple construction are included in variety DIIA1. Size ranges from very small to large, and the shapes represented are round, oval, doughnut, and barrel. Stone referred to these beads as having "convex" or

"convex-elongate" shapes, and described them as being snapped instead of cut. Included within this variety are Stone's (1974) CI, SA, T2, Va; T3, Va; and T4, Va; and Kidd and Kidd's (1970) Types IIa13,14, and 15.

Dimensions

Length	0.1 cm - 1.9 cm
Diameter	0.1 cm - 1.0 cm
Perforation Diameter	.05cm - 0.3 cm

Sample - 175

Provenience

Portland (44) - Y505A2; Y505D2(2); Y506A; Y506B(16);
 Y506C(2); Y506C1(11); Y506C1-1; Y506C2(3);
 Y506C3(4); Y510B(3)

St. Pierre (121) - Y552A; Y558-3; Y558-9(Y550F1)(2);
 Y558-9(Y578)(2); Y558-9A; Y558-21; Y558-31A(32);
 Y558-31B(6); Y558-31E; Y558-31H; Y558-62; Y562A;
 Y575A; Y576A; T1Q; T4D; Y601A; Y602A; Y603A; Y640B;
 Y646B(5); Y647B; Y908; W3A; W6A; W13A; W24B; W25B;
 W27A(10); W27B(10); W28A(5); W28B(3); W29A; W35A;
 W36A; W40A; W43A; W45A(2); W48A(2); W53A; W55A;
 W59A1; W80A(2); W85A; W117B; W411; W412(2); W424;
 W425; W429; W436

Lonely Frenchman (1) - Y915

Lockguard (4) - W352A; W355A; W376A; W377A

Anglo (5) - W409; W409A(4)

Comments - W352A and W376A same bead

Description

Length measurements were taken of 98 specimens and diameter

measurements of 117. Length ranges between 0.15 cm and 2.2 cm with an average of 0.92 cm. Diameter ranges between 0.3 cm and 1.0 cm with an average of 0.51 cm. The shapes of 109 glass beads of this variety are as follows: convexo-elongate (47), convex (35), ring (26), and round (1). Fifteen convexo-elongate specimens are slightly incurvate at the center giving a peanut-shaped appearance. All of the examples from Anglo are convex and 19 of the 26 ring-shaped beads at St. Pierre are associated with the Lead Shot Drop area. Many beads of this variety have a compound appearance (Plate 118, No. 11). Good set this form up as a separate type (102) at the Guebert Site, but indicated that the compound appearance is probably due to the tumbling process (Good 1972: 118).

Distribution

Variety DIIAL beads are probably the most common beads found on historic sites. Those found at Chicoutimi are much smaller than the specimens recovered in the Yazoo Bluffs region (J-F Blanchette - personal communication). Ridley (1954:49) recorded this variety at the Frank Bay Site, and it has also been found at St. Ignace Ossuary (Quimby 1966: 135); Bell (Wittry 1963:31-32); Fatherland (MDAH Collections); International Paper (LMS Collections); Womack, where it comprises more than half of the 2,123 beads recovered and corresponds to Harris and Harris' (1965:308-313) types 1-3, 6, and 44-45; Fort St. Joseph

(Good 1972:118); Chota (Gleeson 1970:93-96); Childersburg (DeJarnette and Hansen 1960:57); Gilbert (Jelks et al.1966:99); Angola Farm (LSU Collections); Port Dauphin (Noel Read Stowe - personal communication); Gros Cap Cemetery (Quimby 1966:125); Lawton Plantation (Gregory and Webb 1965:24, fig.1, Nos.1 and 3-8); Fish Hatchery (Ibid:21-22); Southern Compress (Ibid:18); Fort Michilimackinac (Stone 1974:90-93); Fort Toulouse (Heldman 1973:132-134, fig. 55c); Los Adaes (Gregory and Webb 1965:28); Guebert (Good 1972:118); Trudeau (LMS Collections); Peterson (Duffield and Jelks 1961:43); Colfax Ferry (Gregory and Webb 1965:37); Wilkinson (Ibid:27); Kipp's Post (Woolworth and Wood 1960:280); and Conesoga (Good 1972:118).

Discussion

With the exception of Los Adaes, variety DIIA1 is virtually absent at sites associated with Spanish occupation. Although it is very common in areas included within the French trade sphere, it curiously is not represented at Haynes Bluff or Russell, two principal historic sites in the Yazoo Bluffs region. St. Pierre and Portland make up for this deficiency, however.

Variety DIIA2

Definition

This is a very small to large translucent amber drawn bead variety. It corresponds to Kidd and Kidd's (1970) types IIA18 and IIA19.

Dimensions

Length	0.1 cm - 0.7 cm
Diameter	0.1 cm - 0.6 cm
Perforation Diameter	0.05cm - 0.1 cm

Sample - 1

Provenience

St. Pierre (1) - Y645A

Description

The specimen from St. Pierre is opaque, rather than translucent, but otherwise corresponds with the above definition. It is very small and ring-shaped.

Distribution

Variety DIIA2 beads have been found at Pearson (Duffield and Jelks 1961:46); Fort Berthold (Smith 1953:47); Childersburg

(DeJarnette and Hansen 1960:58); Goodnow (Griffin and Smith 1948:12); Hiwassee Island (Lewis and Kneberg 1970:133); Chota (Gleeson 1970:93-96); and Womack (Harris and Harris 1965:313).

Discussion

This bead variety has been found on sites dating between 1700 and 1890. Brain gives it a median date of 1763 (Brain et al. n.d. b).

Variety DIIA4 (Plate 118, No.2)

Definition

The beads of this variety are opaque and light blue. They range in size from small to large, the smaller specimens being doughnut-shaped and the larger ones oval. This variety corresponds to Kidd and Kidd's (1970) types IIa46 and IIa47. It appears to be the same as Good's (1972) type 88.

Dimensions

Length	0.2 cm - 1.3 cm
Diameter	0.3 cm - 0.8 cm
Perforation Diameter	0.05cm - 0.2 cm

Sample - 1

Provenience

Portland (1) - Y506B

Distribution

In addition to Portland and Trudeau, variety DIIA⁴ has been found at Fatherland (Good 1972:116); Haynes Bluff (LMS Collections); Chota (Gleeson 1970:93-96); Gilbert (Jelks et al. 1966:103); Los Adaes (Gregory and Webb 1965:32); Guebert (Good 1972:116); Colfax Ferry (Gregory and Webb 1965:38); and at Wichita Sites dating between 1700 and 1767 (Good 1972:116).

Discussion

Variety DIIA⁴ is not well represented on historic sites. A considerable amount occurs in the "Tunica Treasure" from Trudeau (Brain et al. n.d. b), but this is still a small representation in terms of the overall collection. It was distributed mostly between 1700 and 1800, and its discovery at the Portland Site suggests it was being traded at least by 1706.

Variety DIIA5

Definition

This is a dark burgundy (black in appearance) drawn bead variety. Size ranges from small to large and the beads are generally doughnut-shaped. It corresponds to Kidd and Kidd's (1970) type IIA7.

Dimensions

Length	0.2 cm - 0.9 cm
Diameter	0.3 cm - 0.8 cm
Perforation Diameter	0.05cm - 0.2 cm

Sample - 2

Provenience

St. Pierre (2) - Y640B; W86A

Description

One of the beads is round in shape while the other is ring shaped. Length ranges from 0.4 cm to 0.45 cm while diameter ranges between 0.45 cm and 0.5 cm.

Distribution

Variety DIIA5 has a considerable distribution in North America and its rarity in the Yazoo Bluffs region is curious. It has been found at Tallapoosa (Burke and Burke 1936:55); Presidio Ahumada (Tunnell and Ambler 1967:52); Old Ft. Albany (Quimby 1966:191); San Xavier (Gilmore 1969:98); San Juan (Schuetz 1969:59); Los Adaes (Gregory and Webb 1965:37); Pearson (Duffield and Jelks 1961:45); Haynes Bluff (LMS Collections); Fort Berthold (Smith 1953:48); Childersburg (DeJarnette and Hansen 1960:57); Kipps Post (Woolworth and Wood 1960:281); Albert Ibaugh (Kinsey 1960:91); Goodnow (Griffin and Smith 1948:12); Hiwassee Island (Lewis and Kneberg 1970:133); Chota (Gleeson 1970:93-96); Guebert (Good 1972:127); Lasanen (Cleland et al.1971:78); Angola Farm (LMS Files); Bayou Goula (Quimby 1966:87); Rosebrough Lake (Miroir et al.1973:134); Deer Creek (Sudbury n.d.:126); Womack (Harris and Harris 1965:313); and Fort Michilimackinac (Stone 1974:90).

Discussion

Beads of this variety often have a shiny iridescent patination and faint rings encircle the ends. They are believed to have been made in Amsterdam (Karklins 1975:71). They have been dated between 1700 and 1740 (Bell and Bastian 1967: Stone

1974), but Brain has recorded their appearance on sites ranging in date from 1600 to 1890. He offers a median date of 1746 (Brain et al. n.d. b).

Variety DIIA6 (Plate 118, No. 3)

Definition

This is a small to large, translucent, dark blue bead variety. Specimens range in form from square to oval to doughnut-shaped. This variety included Kidd and Kidd's (1970) types IIA55, IIA56, and IIA57, and corresponds to Stone's (1974) CI, SA, T2, VB; T4, Vc; and T1Va, and to Good's (1972) type 56.

Dimensions

Length	0.2 cm - 1.3 cm
Diameter	0.2 cm - 0.8 cm
Perforation Diameter	0.05cm - 0.2 cm

Sample - 32

Provenience

Portland (16) - Y501BF.1; Y502AF.1(3); Y505A2; Y506B(3);
Y506C1(5); Y506C2(3)

St. Pierre (16) - Y558-9A(2); Y558-20; Y558-31A; Y558-31B;
Y558-31D; Y579A; T9B1; Y603A; Y604A; W24A; W42A;
W86A; W117A; W117B(2)

Description

Only the St. Pierre specimens were available for measurement. Length ranges between 1.1 cm and 1.7 cm with an average of 1.34 cm. Diameter ranges between 0.65 cm and 0.9 cm with an average of 0.75 cm. These beads are, on the whole, somewhat larger than the "Tunica Treasure" assemblage. The Portland specimens are also on the larger end of the scale (Brown 1975a:62). The only shapes apparent in the Yazoo Bluffs sample are convex and convexo-elongate. They each occur in about the same frequency.

Distribution

Variety DIIA6 has an extremely wide distribution. It occurs at Hiwasee Island (Lewis and Kneberg 1970:133); Goodnow (Griffin and Smith 1948:12); Factory Hollow (Good 1972:113); Chicoutimi (J-F Blanchette - personal communication); Bell (Wittry 1963:30); International Paper (LMS Collections); Haynes Bluff (LMS Collections); Womack, where it corresponds to Harris and Harris' (1965:308-313) types 13, 14, and 48;

Chota (Gleeson 1970:58); Gilbert (Jelks et al.1966:100); Angola Farm (LSU Collections); Port Dauphin (Noel Read Stowe - personal communication); Lawton Plantation (Gregory and Webb 1965: 25, fig.1, Nos.26-28); Fish Hatchery (Ibid:23); Southern Compress (Ibid:20); Fort Toulouse (Heldman 1973:132-134); Los Adaes (Gregory and Webb 1965:30); Guebert (Good 1972:113); Presidio Ahumada (Tunnell and Ambler 1967:49); Mission San Lorenzo (Ibid:60); the San Xavier Missions (Gilmore 1969: 98); San Juan (Schuetz 1969:59); Trudeau (LMS Collections); Fort Ligonier (Grimm 1970:49); Pearson (Duffield and Jelks 1961:44); Colfax Ferry (Gregory and Webb 1965:37); Wilkinson (Ibid:27); Kipp's Post (Woolworth and Wood 1960:279); and Cooks Ferry (LMS Collections).

Discussion

The heaviest distribution of this variety seems to have occurred between 1706 and 1800 (Brown 1975a:64, fig.3). According to Tunnell and Ambler (1967:59), dark blue translucent beads are commonly found on sites dating from 1700 to 1740, but decrease in the period from 1740 to 1767, disappearing after the latter date. Variety DIIA6 was at least in existence by 1615, as shown by its discovery at the Factory Hollow Site (Brown 1975a: fig.3).

Variety DIIA7 (Plate 118, No. 4)

Definition

The beads of this variety are opaque turquoise blue. Size ranges from very small to very large, while shape varies from doughnut to square to oval. Many of the beads have an irridescent patination. This variety corresponds to Kidd and Kidd's (1970) types IIA31, IIA40, IIA41, and IIA42, and to Good's (1972) types 90, 90a, and 92.

Dimensions

Length	0.05 cm - 1.7 cm
Diameter	0.05 cm - 1.2 cm
Perforation Diameter	0.03 cm - 0.4 cm

Sample - 3

Provenience

Portland (1) - Y506B
 St. Pierre (1) - Y558-9A
 Anglo (1) - W409

Description

These beads are large. Length ranges between 0.6 cm and 0.9 cm and diameter ranges between 0.6 cm and 0.9 cm. The

Portland specimen is convex in shape while the St. Pierre and Anglo beads are convexo-elongate.

Distribution

Variety DIIA7 is widely dispersed, although not to the degree of varieties DIIA1 and DIIA6. It has been found at the following sites: Goodnow (Griffin and Smith 1948:12); Albert Ibaugh (Kinsey 1960:91); Chicoutimi (J-F Blanchette - personal communication); Dann (Good 1972:117); St. Ignace Ossuary (Quimby 1966:135); Fatherland (Ibid:192); International Paper (LMS Collections); Pumpkin Lake (Ibid); Haynes Bluff, where 38 specimens of the same size as those found at Portland, St. Pierre, and Anglo were discovered in a breast pouch in Burial #2 (LMS Files); Russell (LMS Collections); Fort St. Joseph (Quimby 1966:192); Chota (Gleeson 1970:93-96); Childersburg (DeJarnette and Hansen 1960:58); Gilbert (Jelks et al.1966:99); Angola Farm, where most of which were "seed" beads, 35 being of the size encountered in the Yazoo Bluffs region (LSU Collections); Gros Cap Cemetery (Quimby 1966: 126); Guebert (Good 1972:117); Presidio Ahumada (Tunnell and Ambler 1967:50); The San Xavier Missions (Gilmore 1969:97); Trudeau, where 31,367 specimens of this variety are "seed" beads (LMS Collections); Pearson (Duffield and Jelks 1961:44); Conesoga (Good 1972:117); Cooks Ferry (LMS Collections); Tallapoosa (Burke 1936:54); and sites in northeast (Tunnell and Ambler

1967:50) and central (Watt and Meroney 1937:63) Texas.

Discussion

The period of greatest distribution of variety DIIA7 appears to have been between 1700 and 1764. It was in existence at least by 1663 (Brown 1975a:66, fig.3).

Variety DIIA8 (Plate 118, No. 5)

Definition

This is a large, opaque turquoise bead variety. The specimens have an oval shape and the ends appear to have been pinched-off after being rounded. This variety corresponds to Kidd and Kidd's (1970) type IIA42, and presumably also to Good's (1972) type 88. The surface of these beads is shiny. Wavy longitudinal lines appear on many, seemingly the result of impurities in the glass.

Dimensions

Length	0.9 cm - 1.2 cm
Diameter	0.6 cm - 0.9 cm
Perforation Diameter	0.2 cm

Sample - 15

Provenience

Portland (6) - Y505D2; Y506B(2); Y506C; Y506C1-1; Y506C2
Anglo (9) - W409(2); W409A(7)

Description

Individual measurements were only taken of the Anglo specimens. All are fairly equivalent in size. Length ranges from 0.9 cm to 1.3 cm with an average of 1.09 cm, and diameter ranges from 0.65 cm to 0.75 cm with an average of 0.69 cm. The dimensions of the Portland beads fall within the Anglo ranges. All of the Anglo specimens are convex in shape.

Distribution

Only 179 specimens of this variety are included in the enormous bead collection of the "Tunica Treasure" from the Trudeau Site. They have also been found at Childersburg (DeJarnette and Hansen 1960:58); Gilbert (Jelks et al. 1966: 100); and at Tallapoosa (Burke 1936:58).

Discussion

It is strange that this variety is so sparsely represented at Trudeau, while the very similar variety DIIA7 has such a high representation. The situation is reversed at Portland. The regularity of size, shape, and color of these beads at the Anglo Site, a situation also seen in the variety DIIA1 beads from this site, suggests that beads were selected at times on the basis of all three attributes. Variety DIIA8 beads were distributed between 1700 and 1825, but its rarity at Trudeau suggests they were most heavily dispersed in the first quarter of the 18th century. Their appearance at Portland suggests the variety was a part of the trade assemblage by at least 1706 (Brown 1975a:68,fig.3).

Variety DIIA13 (Plate 118, No. 6)

Definition

This is a large translucent turquoise bead with an oval shape. It corresponds to Kidd and Kidd's (1970) type IIa32. Tiny semi-circular fracture marks on the surface of the beads of this variety are common.

Dimensions

Length	1.1 cm
Diameter	0.6 cm
Perforation Diameter	0.3 cm

Sample - 3

Provenience

Portland (3) - Y506A; Y506C2; Y506C3

Description

These specimens range between 0.9 cm and 1.3 cm in length and between 0.55 cm and 0.8 cm in diameter.

Distribution

Only two specimens of this variety are in the "Tunica Treasure" from the Trudeau Site. The variety has also been recovered at Southern Compress, but the beads are smaller and more barrel or doughnut shaped than those from Trudeau and Portland (Gregory and Webb 1965:21, fig.1, Nos. 34,36); and at Pearson (Duffield and Jelks 1961:45).

Discussion

The probability of finding three beads of variety DI1A13

in such a small collection as Portland's would be rather low, unless this particular variety was fairly popular at the time this site was occupied (circa 1698 - 1706). Conversely, the discovery of only two beads of this variety at Trudeau, a site with over a quarter million beads, suggests that the popularity of this variety decreased by the time Trudeau was occupied (circa 1730 - 1760). Its absence at Fatherland, Angola Farm, and the early historic sites along the Red River indicates that its popularity may have centered around the turn of the 18th century.

Variety DIIA15 (Plate 118, No. 7)

Definition

This is a very small to large translucent dark green bead. It corresponds to Kidd and Kidd's (1970) type IIa27, described as "circular, clear, emerald green", or "oval, clear, dark palm green", and to Good's (1972) types 36 and 37. The small "seed" beads are doughnut shaped while the larger beads are square and oval. A white surface patination occurs on many of the beads.

Dimensions

Length	0.1 cm - 1.7 cm
Diameter	0.1 cm - 0.8 cm
Perforation Diameter	0.05cm - 0.2 cm

Sample - 12

Provenience

St. Pierre (12) - Y558-31D; Y558-31E(2); Y572-10; Y641A;
Y642B; Y646B; W10A; W27B; W55A; W117A(2)

Description

All but one of these beads are convexo-elongate in shape. The single exception is round. Length ranges between 0.75 cm and 1.5 cm with an average of 1.24 cm. Width ranges between 0.65 cm and 0.9 cm with an average of 0.78 cm. They are all of the larger kind, similar to Good's (1972) type 36.

Distribution

This variety is represented by 1,107 beads in the "Tunica Treasure", but only two of these are of the larger kind. The variety has also been found at Goodnow (Griffin and Smith 1948: 12); Bell (Wittry 1963:30); Chota (Gleeson 1970:93-96); Childersburg (DeJarnette and Hansen 1960:58); Gilbert (Jelks et al. 1966:103); Southern Compress (Gregory and Webb 1965:21, fig.1, Nos.35,37); Los Adaes (Ibid:33); Guebert (Good 1972:110);

Pearson (Duffield and Jelks 1961:46); Colfax Ferry (Gregory and Webb 1965:38); Kipp's Post (Woolworth and Wood 1960:281); Cooks Ferry (LMS Collections); Tallapoosa (Burke 1936:58); and on Wichita sites dating between 1740 and 1767 (Good 1972:110).

Discussion

The absence of variety DIIA15 at Fatherland, Portland, and Angola Farm, suggests that it was not too popular in the early years of the 18th century. With the exception of St. Pierre, most of the sites it has been discovered at have long occupation spans, thus making it difficult to narrow down the time at which this variety was most popular. It was in existence at least by 1729, as evinced by its appearance at St. Pierre, and it seems to have had its greatest popularity between 1717 and 1820 (Brown 1975a:72, fig.3).

Variety DIIA18

Definition

This is a new variety, not represented in the "Tunica Treasure". It is a dark rose brown drawn bead variety, corresponding most closely to Kidd and Kidd's (1970) type IIA61.

They describe beads of the latter type as being clear, but all specimens in the Yazoo Bluffs region are translucent. The only shape represented is round.

Dimensions

Length	0.3 cm - 0.45 cm
Diameter	0.5 cm - 0.6 cm

Sample - 5

Provenience

St. Pierre (5) - Y558-31A; W27A; W28A; W28B; W48A

Type DIIB

The beads of Type B have a complex construction, consisting of a single layer of glass with the addition of surface decoration. The latter can either be simple (one color against a background of a different color) or compound (more than one color against a background of a different color). Type B corresponds to Kidd and Kidd's (1970) types IIB, IIB', and IIBb.

Variety DIIB2 (Plate 118, No. 8)

Definition

The beads of this variety are large, opaque, and white with four dark blue longitudinal stripes. Shapes are round and oval. This variety corresponds to Kidd and Kidd's (1970) types IIb25 and IIb26, and to Good's (1972) type 142.

Dimensions

Length	0.6 cm - 1.5 cm
Diameter	0.5 cm - 0.8 cm
Perforation Diameter	0.1 cm - 0.2 cm

Sample - 1

Provenience

Portland (1) - Y505A2

Description

The length and width of this bead are 1.3 cm and 0.7 cm respectively. Its shape is convex.

Distribution

In addition to Portland and Trudeau, variety DIIB2 has been found at Haynes Bluff (LMS Collections); Womack, as represented by Harris and Harris' (1965:308-313) type 2; Fish Hatchery (Gregory and Webb 1965:23, fig.1, No. 17); Guebert (Good 1972:124); sites in central Texas (Watt and Meroney 1937:66); and on Wichita Sites dating between 1700 and 1740 (Good 1972:124).

Discussion

The rarity of this type at Trudeau, in comparison to its abundance at Fish Hatchery (Brown 1975a:table 6, figure 5), suggests that this variety was most heavily distributed prior to 1730, the estimated initial date of Trudeau's occupation. The wide dispersal of this bead variety in the Red River watershed suggests that it may have been carried by some of the early 18th century expeditions up this river - Bénard de la Harpe, for example, in 1719 journeyed up the Red River with 2,000 livres of merchandise to trade to the Wichita and other aboriginal groups along the route (Wedel 1971:42). Its discovery at Portland indicates that the variety was around at least by 1706.

Variety DIIB15 (Plate 118, No 9)

Definition

This newly defined variety is not found in the "Tunica Treasure" from the Trudeau Site. The variety consists of large translucent dark blue beads with eight longitudinal white stripes. The beads are barrel-shaped.

Dimensions

Length	0.6 cm - 0.7 cm
Diameter	0.7 cm - 0.8 cm
Perforation Diameter	0.2 cm

Sample - 2

Provenience

Portland (2) - Y50502; Y50601

Distribution

Variety DIIB15 has also been found at the Womack Site, where it corresponds to Harris and Harris' (1965:308-313) type 34, and at Southern Compress (Gregory and Webb 1965: 20, fig. 1, No.23).

Discussion

This variety is quite rare and little can be said about

it. It seems to date primarily between 1700 and 1730 and, as it was found at Portland, it was at least being traded by 1706.

Variety DIIB16 (Plate 118, No. 10)

Definition

This too is a new variety, not being represented in the "Tunica Treasure". The definition is based on a single medium-sized compound bead with an opaque white background. Decoration consists of three thick wavy green lines, with a single thin red stripe upon each green line. The bead is oval. It corresponds to Kidd and Kidd's (1970) type IIbb17.

Dimensions

Length	1.0 cm
Diameter	0.45cm
Perforation Diameter	0.15cm

Sample - 1

Provenience

Portland (1) - Y502AF.1

Distribution

Similar beads have been found at Lawton Plantation (Gregory and Webb 1965:25,fig.1, No.20) and Southern Compress (Ibid:20).

Discussion

Little can be said about this variety. Its period of heaviest distribution occurred between 1714 and 1803, but this is based on the date ranges of only three sites (Brown 1975a: fig.3). The absence of this variety at Trudeau suggests that distribution may have been more confined to the lower portion of the above range. It was at least in existence by 1706.

Class III

This class consists of hollow cane beads having a compound structure (two or more layers of glass). Also included in this class are composite beads (compound beads with surface decoration). These beads have neither been reheated nor tumbled to round the ends. As no beads from this class were found in the Yazoo Bluffs region, a discussion of the various types and varieties set up by Brain must await the final publication on the "Tunica Treasure" (Brain et al. n d. b).

Class DIV

These are compound or composite beads identical to the above, except that their ends have been rounded by reheating and tumbling.

Type DIVA

Type A consists of compound beads (two or more layers) with no surface decoration. It corresponds to Kidd and Kidd's (1970) type IVa. Beads of this type have not been found in the Yazoo Bluffs region.

Type DIVB

The beads of this type have two or more layers of glass with the addition of glass insets on either the surface or between the layers. It corresponds to Kidd and Kidd's (1970) type IVb.

Variety DIVB1 (Plate 118, No. 12)

Definition

This is a small to large bead variety, with longitudinal white stripes lodged between two layers of clear glass.

The beads are barrel-shaped, the smaller one having between 14 and 18 stripes and the larger ones having seven. Kidd and Kidd (1970) did not consider these composite beads, giving them the typological designation of IIb18. The variety corresponds to Good's (1972) types 154-159. These beads are commonly called "Gooseberry", because of their resemblance to this ribbed fruit.

Dimensions

Length	0.8 cm - 0.9 cm
Diameter	0.8 cm - 1.0 cm
Perforation Diameter	0.1 cm - 0.3 cm

Sample - 20

Provenience

Portland (1) - Y506C2
 St. Pierre (19) - Y558-31; Y558-31B(3); Y558-31C(2); T9B1;
 Y642B; W6A1; W11A; W15A; W22A; W25A(2); W28A;
 W28B; W69A; W117A; W117B

Description

Nine of the specimens are barrel-shaped and 10 are round. One is quite long and should have been two barrel-shaped beads. They were never disconnected, however, and a peanut-shaped bead

is the result. Lengths range between 0.55 cm and 1.6 cm with an average of 0.84 cm. Diameters range between 0.65 cm and 0.9 cm, with an average of 0.77 cm.

Distribution

The so-called "Gooseberry" bead has a phenomenal spatial and temporal distribution. In addition to Portland, St. Pierre, and Trudeau, a single specimen of this variety has been found on the site of a glass factory in Jamestown, Virginia, which was established in 1607. A second glass house was erected in Jamestown in 1622 for the purpose of manufacturing glass beads (Griffin and Smith 1948:29). The variety has also been found at Seven Oaks (Goggin n.d. :50); Wayland Smith (Good 1972:100); Goodnow (Griffin and Smith 1948:13); Chicoutimi (J-F Blanchette - personal communication); Fatherland (Quimby 1966:194); International Paper (LMS Collections); Haynes Bluff (LMS Collections); Fort St. Joseph (Good 1972:100); Chota (Gleeson 1970:93-96); Childersburg (DeJarnette and Hansen 1960:58); Lawton Plantation (Gregory and Webb 1965:24, fig.1, No.12); Fish Hatchery (Ibid:23); Guebert (Good 1972:126); True Mound (Goggin n.d.:50); Parrish Mound I (Ibid); Lake Butler (Ibid); Fountain of Youth Park (Ibid); Wichita Sites dating between 1700 and 1740 (Good 1972:100); English sites in Georgia and Alabama; and even as far away as Brazil in a Portuguese context (Goggin n.d.:50).

Discussion

The heaviest distribution of this variety seems to have occurred between 1698 and 1750 (Brown 1975a:fig.3), but it was in existence by the late 16th/early 17th centuries, by virtue of its discovery at Wayland Smith and Jamestown. The fact that this variety is found on so many sites in Florida, some of which definitely date to the 16th and 17th centuries, suggests that beads of this sort were fairly common Spanish trade items in this early period. The variety is not characteristic of Spanish-related sites of the 18th century, however. They are noticeably absent from the mission sites in Texas. French-related sites of the 18th century (Fatherland, Portland, St. Pierre, Fort St. Joseph, Trudeau, etc.) do have this variety and, as stated above, it seems as if Englishman also traded this bead at one time or another. Although variety DIVB1 beads were around for a considerable time, there seems to have been a major change as to which nationality traded them in different periods.

Variety DIVB2

Definition

This is a large drawn bead variety, a layer of dull opaque

white glass covering a gray-white layer. Four thick blue longitudinal stripes form the decoration. Bead shape varies between oval and convexo-elongate (peanut-shaped).

Dimensions

Length	1.1 cm - 1.5 cm
Diameter	0.6 cm - 0.7 cm
Perforation Diameter	0.15cm

Sample - 3

Provenience

St. Pierre (3) - Y558-31A; W14A; W27B

Distribution

In addition to Trudeau (Brain et al.n.d. b) and St. Pierre, this variety has also been found at Fatherland (Robert S. Neitzel - personal communication).

Variety DIVB3 (Plate 118, No. 13)

Definition

A bead of this variety is large and has a shiny off-white layer of glass over a core of blue-gray glass. Three sets of three thin blue longitudinal stripes form the decoration. The shape of the bead is oval. It corresponds to Good's (1972) type 140.

Dimensions

Length	1.2 cm - 1.6 cm
Diameter	0.5 cm - 0.7 cm
Perforation Diameter	0.1 cm

Sample - 7

Provenience

Portland (2) - Y502F.1; Y506C3
 St. Pierre (5) - Y558-62; Y558-76; Y602A; W62B1(2)

Description

Four of these specimens vary somewhat from the established definition, but they are close enough to warrant inclusion in this variety. One bead from Portland and another from St. Pierre have cores off-white in color, rather than blue-gray. The other bead from Portland has thick stripes instead of thin, and one bead from St. Pierre has two sets of three stripes but one

set of four. All but one of the beads are convex shaped. The exception is a convexo-elongate bead (peanut-shaped) from St. Pierre. Length ranges from 1.25 cm to 1.75 cm and diameter ranges from 0.6 cm to 0.9 cm.

Distribution

Only seven beads of this variety occur in the "Tunica Treasure" from Trudeau. It has also been found at International Paper (LMS Collections); Womack, where it corresponds to Harris and Harris' (1965:308-313) type 23; Angola Farm (LSU Collections); Fish Hatchery (Gregory and Webb 1965:23-24, fig.1, No.14); Guebert (Good 1972:124); and Pearson (Duffield and Jelks 1961:49).

Discussion

This bead variety seems to be primarily associated with French sites, but even then it is somewhat of a rarity. It was at least in existence by 1706, as it is found at Portland, and its heaviest distribution was probably between 1714 and 1764 (Brown 1975a:fig.3). The large collection of this variety at Fish Hatchery and its negligible presence at Trudeau (Ibid: table 6), suggest that it may have been more confined to the first quarter of the 18th century.

Variety DIVB9 (Plate 118, No. 14)

Definition

This new variety is not present in the "Tunica Treasure" from the Trudeau Site. The beads of this variety are large, oval, and very similar to variety DIVB2, in that a blue-gray glass core is covered by a layer of off-white glass. The difference between the two varieties is in the form of decoration. Instead of three sets of three blue lines, the beads of this variety have four sets of two. The shape of these beads is oval.

Dimensions

Length	?
Diameter	0.7 cm
Perforation Diameter	0.2 cm

Sample - 1

Provenience

Portland (1) - Y506C2

Distribution

To my knowledge, this variety has not been found elsewhere.

Variety DIVB10 (Plate 118, No. 15)

Definition

This new variety is not represented in the "Tunica Treasure" from the Trudeau Site. The beads are large and have a light blue-gray core covered by a dark blue-gray layer of glass. The decoration consists of three sets of two white stripes. Contained between each set of the latter is a single red stripe. This variety corresponds to Stone's (1974) CI, SC, T8, Va beads.

Dimensions

Length	1.1 cm
Diameter	0.75cm
Perforation Diameter	0.2 cm

Sample - 1

Provenience

Portland (1) - Y506C3

Description

One of the sets of two white lines has two red stripes between, indicating that some lines which appear to be single may have been made by applying more than one glass rod. According to Good (1972:96), it was a common practice to group minute glass rods together so that the design would appear solid when the glass was drawn.

Distribution

In addition to Portland, variety DIVB10 has been found at Womack, where it corresponds to Harris and Harris' (1965: 308-313) type 30; Angola Farm (LSU Collections); Gros Cap Cemetery (Quimby 1966:133); and Lawton Plantation (Gregory and Webb 1965:24, fig.1, No.18).

Discussion

The discovery of this variety at Portland suggests it was traded by at least 1706. Its heaviest distribution appears to have been between 1706 and 1760 (Brown 1975a; fig. 3).

Variety DIVB11 (Plate 118, No 16)

Definition

This new variety is not included in the "Tunica Treasure" from the Trudeau Site. The beads are large, dark blue, and translucent, with a core and outer layer of the same color. They are decorated with five twisted S-shaped white stripes. It corresponds to Good's (1972) type 30.

Dimensions

Length	0.9 cm
Diameter	0.8 cm
Perforation Diameter	0.25cm

Sample - 1

Provenience

Portland (1) - Y502AF.1

Distribution

This variety has been found at Fatherland (Good 1972: 109); Womack, where it corresponds to Harris and Harris' (1965:308-313) type 31; Fort St. Joseph (Good 1972:109); Guebert (Ibid); and Wichita sites dating between 1700 and 1740 (Ibid).

Discussion

Variety DIVB11 seems to be primarily associated with French-related sites, although the sample size is of course too small to be able to state this with any certainty. The variety was at least in existence by 1706, as it was found at Portland. The heaviest distribution seems to have occurred between 1700 and 1730 (Brown 1975a:fig.3).

Variety DIVB12

Definition

This is a new variety, not represented in the "Tunica Treasure". It shares decorative features with varieties DIIB2, but it has three blue stripes and a pale bluish-gray layer over a white core. The occurrence of but one bead is not enough data to establish dimensional criteria for the variety.

Sample - 1

Provenience

St. Pierre (1) - W3A

Description

This bead is convexo-elongate, 1.1 cm long and 0.7 cm in diameter.

Variety DIVBL3

Definition

This is a new bead variety, not represented in the "Tunica Treasure". It is a black composite bead with inner and outer layers of the same color and a decoration consisting of three sets of three stripes, one red between two white. It corresponds with Kidd and Kidd's (1970) type IIbb6.

Sample - 1

Provenience

St. Pierre (1) - Y558-31B

Description

This specimen is convexo-elongate (peanut-shaped), 1.75 cm long and 0.7 cm in diameter.

Class WI

The beads of this class are monochrome and have a simple shape and wire-wound construction. The glass is porcelain-like in texture and is of poor quality. The surface of these beads are pocked with tiny circular fracture marks and streaks, seemingly because the glass has both a high soda content and was blown at too low a temperature (Sleen 1967:111).

Type W1A

This type consists of simple round wire-wound beads.

Variety W1A5

Definition

This is a very large opaque white wire-wound bead variety. The surface of the beads is dull and like porcelain. It corresponds to Kidd and Kidd's (1970) type W1b2.

Dimensions

Length	1.6 cm - 1.7 cm
Diameter	1.0 cm - 1.9 cm
Perforation Diameter	0.3 cm - 0.4 cm

Sample - 1

Provenience

St. Pierre (1) - W4A

Distribution

This bead variety has been observed at Gilbert (Jelks et al. 1966:101); Childersburg (DeJarnette and Hansen 1960:57); Guebert (Good 1972:113); and Womack (Harris and Harris 1965:313). Brain (et al. n.d. b) provides a date range of 1700 to 1833 with a median of 1752.

Class WII

The beads of this class are monochrome and are of simple construction. They have more elaborate shapes than Class WI, due to pressing, molding, or other manipulation.

Type WIIA

These are faceted beads, formed by pressing the glass beads,

while still in a plastic state, against a flat surface. Most of these beads have eight facets and two flat ends. This type corresponds to Kidd and Kidd's (1970) type WIIC and to Stone's (1974) CII, SA, Tl.

Variety WIIA3 (Plate 118, No. 17)

Definition

This is a very large, translucent, dark blue bead with eight five-sided facets. It corresponds to Kidd and Kidd's (1970) type WIIC12, to Stone's (1974) CII, Sa, Tl, Va, and to Good's (1972) type 7.

Dimensions

Length	0.8 cm - 1.3 cm
Diameter	1.1 cm - 1.7 cm
Perforation Diameter	0.2 cm - 0.5 cm

Sample - 1

Provenience

Portland (1) - Y501B

Description

Unlike the specimens in the "Tunica Treasure", the Portland bead does not have a white surface patination. It is very carefully made, each facet having regular dimensions. Its length and width are 0.9 cm and 1.05 cm respectively.

Distribution

In addition to Portland and Trudeau, variety WIIA3 has been found at Bell (Wittry 1963:32); Fatherland (Quimby 1966:195); Womack, where it corresponds to Harris and Harris' (1965:308-313) type 40; Fort St. Joseph (Quimby 1966:195); Chota (Gleeson 1970:93-98); Childersburg (DeJarnette and Hansen 1960:57); Gilbert (Jelks et al. 1966:100); Gros Cap Cemetery (Quimby 1966:125); Guebert (Good 1972:106); Kipp's Post (Woolworth and Wood 1960:279); Whiteshell Provincial Park (Quimby 1966:195); Tallapoosa (Burke 1936:59); an unknown Oneida Iroquois site dating post 1710 (Good 1972:106); sites in central Texas (Watt and Meroney 1937:63); and at Wichita sites dating between 1700 and 1820 (Good 1972:106).

Discussion

Beads of this variety were traded throughout most of the

18th century, their heaviest distribution seemingly occurring between 1700 and 1781. The variety was at least in existence by 1706, as shown by its discovery at Portland (Brown 1975a:fig. 3).

Variety WIIA4

Definition

This is a large to very large translucent amber wire-wound bead variety with eight five-sided facets. It corresponds to Kidd and Kidd's (1970) types WIIa46 and WIIa47.

Dimensions

Length	0.9 cm - 1.4 cm
Diameter	1.0 cm - 1.6 cm
Perforation Diameter	0.3 cm - 0.5 cm

Sample - 1

Provenience

Lockguard (1) - W357

Distribution

Beads of this variety have been found at Bell (Wittry 1963:31); Tallapoosa (Burke 1936:59); San Xavier (Gilmore 1969:98); Childersburg (DeJarnette and Hansen 1960:58); Kaskaskia (Perino 1967:128); Chota (Gleeson 1970:93-96); Guebert (Good 1972:106); and Trudeau (Brain et al. n.d. b).

Discussion

The specimens in the "Tunica Treasure" all have a white surface patination, a characteristic of the Middle Historic Period (Quimby 1966:86). These beads are believed to have been made in Amsterdam (Karklins 1975:80) and Brain dates them between 1700 and 1833, with a median date of 1750 (Brain et al. n.d. b).

Variety WI1A11 (Plate 118, No. 18)

Definition

This is a new variety, not represented in the "Tunica Treasure". The beads are large, clear to light gray, and have eight five-sided facets. The variety corresponds to Kidd and Kidd's (1970) type WIIC2, to Stone's (1974) CII, SA, Ti, Vh and Vi, and to Good's (1972) type 6.

Dimensions

Length	0.8 cm - 0.9 cm
Diameter	1.05cm - 1.3 cm
Perforation Diameter	0.3 cm - 0.35cm

Sample - 2

Provenience

Portland (1) - Y505B2
Lockguard (1) - W354A

Description

The facets on both beads are pressed-in, giving the beads a lopsided appearance. The Portland specimen is broken in half longitudinally and the impression of the rod (w-shaped incisions) on which the glass was wrapped, shows up clearly inside.

Distribution

Variety WIIAll has also been found at Mulberry Mound (Smith 1956:51); Fatherland (Good 1972:105); Site 1Ds53 (Thompson 1974:2); Womack, where it corresponds to Harris and Harris'

(1965:308-313) type 41; Fort St. Joseph (Good 1972:105); Angola Farm (Ibid); Southern Compress (Gregory and Webb 1965:18, fig.1 No.10); Fort Michilimackinac (Good 1972:105); and Conesoga (Ibid).

Discussion

This variety seems to have been most heavily distributed between 1700 and 1730 and, being found at Portland, it was in existence at least by 1706 (Brown 1975a:fig.3).

Type WIIB

The beads of this type are commonly referred to as "raspberry" or "mulberry" beads. Along with "gooseberry" and "corn" beads, they were designed to resemble food (Orchard 1929:87). While still molten, these beads were probably rolled on a sculptured surface. Kidd and Kidd (1970:50) suggested they were pressed in a two-part mold, but mold seams do not appear on these beads. The knobs generally occur in two or three circumferential rows. These beads are believed to have been made in Amsterdam (Sleen 1967:110).

Variety WIIB2 (Plate 118, No. 19)

Definition

This variety of "raspberry" beads is large, clear, and transparent. It corresponds to Stone's (1974) CII, Sa, T2, Vf and to Good's (1972) type 26.

Dimensions

Length	0.3 cm - 1.2 cm
Diameter	0.7 cm - 1.0 cm
Perforation Diameter	0.3 cm - 0.4 cm

Sample - 3

Provenience

Portland (3) - Y502AF.1; Y506B; Y510B

Description

These specimens are clear, unlike the frosted ones in the "Tunica Treasure". The latter are apparently more typical on historic sites (Good 1972:109). The length of these three specimens is 0.7 cm and the diameter ranges between 0.7 cm and 0.8 cm. Perforation diameter ranges between 0.3 cm and 0.4 cm.

Distribution

In addition to Portland and Trudeau, variety WIIB2 has been discovered at Fatherland (Quimby 1966:196); Womack, where it corresponds to Harris and Harris' (1965:308-313) type 42; Fort St. Joseph (Quimby 1966:133-196); Chota (Gleeson 1970:93-96); Childersburg (DeJarnette and Hansen 1960:57); Gros Cap Cemetery (Quimby 1966:133); Southern Compress (Gregory and Webb 1965:20, fig.1, No.13); Guebert (Good 1972:109); Conesoga (Ibid); and at Tallapoosa (Burke 1936:58).

Discussion

This variety appears to have been most heavily distributed between 1700 and 1781 (Brown 1975a:fig.3). There is some evidence that a change occurred in this variety through time, the clear specimens appearing earlier in the range and the frosted ones later. The variety was in existence at least by 1706, by virtue of its discovery at Portland.

Variety WIIB3 (Plate 118, No.20)

Definition

These are often called "melon" beads. They are large, clear,

and transparent. Eight longitudinal spiral ridges give them a corrugated effect (Harris and Harris 1965:312). The variety corresponds to Kidd and Kidd's (1970) type WIIE1.

Dimensions

Length	0.7 cm
Diameter*	0.9 cm
Perforation Diameter	0.4 cm

Sample - 1

Provenience

Portland (1) - Y502AF.1

Description

This specimen has a length of 0.9 cm, a diameter of 1.1 cm and a perforation diameter of 0.3 cm.

Distribution

Variety WIIB3 is represented by one specimen in the "Tunica

* Diameter is measured to the crest of the ridges.

Treasure" from the Trudeau Site. It has also been found at Womack, as represented by Harris and Harris (1965:308-313) type 43.

Discussion

This bead variety is very rare, and little can be said of it. It was at least being distributed by 1706, and its date range for "heaviest" trade has been calculated at 1700 to 1730 (Brown 1975a:fig.3).

Class WIII

Beads of this class have a variety of shapes. They are polychrome, having either surface decoration or inlays of contrasting colors.

Type WIIIA

These beads are large, round, spheroidal, with surface designs of a different color from the background. Wire-wound marks and air bubbles are not readily apparent, making it difficult to determine method of manufacture. Beads of this type were probably made in Amsterdam (Sleen 1967:53).

Variety WIIIA4 (Plate 118, No. 21)

Definition

This is a large, round, opaque, black (actually dark burgundy with a black appearance) bead, having white wavy lines upon its surface. It somewhat resembles Good's type 75 bead, except that she classified the above as a drawn bead of complex construction and described its color as opaque black (Good 1972:115). It is similar to Kidd and Kidd's (1970) type II, except they classified the latter beads as drawn, rather than wire-wound.

Dimensions

Length	1.1 cm
Diameter	1.3 cm
Perforation Diameter	0.3 cm

Sample - 1

Provenience

Portland (1) - Y506C3

Description

This specimen has a length of 0.9 cm, a diameter of 1.2 cm, and a perforation diameter of 0.4 cm. The white glass inlays are not set deeply into the glass.

Distribution

In addition to Trudeau and Portland, WIIIA4 beads have been found at Womack, where it seems to correspond to Harris and Harris' (1965:308-313) type 39; and Tallapoosa (Burke 1936: 56). According to Fairbanks (1955:18), black spherical inlaid beads also occur at Ocmulgee Old Fields and at various Coosa and Chattahoochee Valley sites of the early 18th century.

Discussion

Sleen (1967:111) described "quite a few black beads often ornamented with two interweaving wavy lines" as being made in Amsterdam. This variety is not overly abundant on historic sites, but where it does occur, the contexts are generally early 18th century. The bracketed dates for the heaviest distribution of variety WIIIA4 are 1700 to 1730. Its discovery at Portland indicates that it was being traded at least by 1706 (Brown 1975a: fig.3).

Variety WIIIA6

Definition

This is a very large opaque dark burgundy wire-wound bead variety. Yellow wavy anastomosing lines occur around the bead circumference.

Dimensions

Length	0.6 cm - 0.9 cm
Diameter	0.9 cm - 1.1 cm
Perforation Diameter	0.2 cm - 0.3 cm

Sample - 1

Provenience

Lockguard (1) - W353A

Distribution

Beads of this variety have been found at Tallapoosa (Burke 1936:56); Bayou Goula (Quimby 1957:134); Fatherland (Quimby 1966:195); Fort St. Joseph (Ibid); Chota (Gleeson 1970: 93-96); and Trudeau (Brain et al. n.d. b).

Discussion

Variety WIIIA6 beads are believed to have been made in Amsterdam (Karklins 1975:81). Brain assigns a date range of 1699 to 1799, with a median date of 1733 (Brain et al. n.d. b).

Clothing Ornaments - Bells

Sample - 2

Provenience

Lockguard (2) - W356A; W363A

Description

These bells, both of the Flushloop variety, are badly crushed. Measurements cannot be taken.

Clothing Ornaments - Springs (Plate 90c)

Sample - 2

Provenience

St. Pierre (1) - Y558-31D
Lockguard (1) - W355A

Description

The St. Pierre specimen (Plate 90c) has 12 coils of 0.25 cm thick iron wire. Its spring diameter is 1.5 cm and its length is 4.4 cm. The Lockguard spring has 11 coils of 0.15 cm thick iron wire. Its diameter and length are 0.8 cm and 2.2 cm, respectively.

Distribution

Similar iron springs, about one inch in diameter (2.54 cm), were found with burials in Mound C at the Fatherland Site (Ford 1936:61). Brass springs occur at the Bayou Goula Site (Quimby 1957:139).

Personal Group

Bracelets

Sample - 1

Provenience

Portland (1) - Y500A

Description

This band of sheet brass/copper is broken on one end and comes to a gently rounded point on the other. It is 2.4 cm wide (Brown 1975a:plate 6, No.12).

Coins (Plate 120)

Sample - 5

Provenience

St. Pierre (5) - Y558-31H; W13A; W41A; W63A; W79A

Description

These copper coins are all identical. One face has the profile of a man wearing a wig and the words "LUDOVIGUS MAGNUM

REX" ("LOUIS GREAT KING"). The reverse face has a lion and a griffin standing on either side of a pole, above which a bird hovers carrying a carcass between its claws. The best reading for the words around the edge are "LABOR ALITIS ACFE_T" ("GIVEN WINGED YEARS").*

Crucifix Corporus

Sample - 1

Provenience

Portland (1) - Y502A

Description

This is a very fine solid brass Christ figurine (Brown 1975a:plate 6, No.11). It is 6.9 cm tall and 6.6 cm wide from hand to hand. The nails penetrate both hands and feet. The one on the right hand protrudes 0.2 cm to 0.3 cm from the front of the figure. They protrude from the back of the extremities by less than 0.1 cm.

* Translations provided by William Wright.

Distribution

Very similar crucifix corpora have been found at the Marquette Mission Site (Stone 1972:fig.14A-B), and a somewhat cruder specimen was discovered at Fort Michilimackinac (Petersen 1964:52).

Discussion

Stone felt the two crucifix corpora found at the Marquette Mission date to the late 17th/early 18th centuries (Stone 1972:16-17). The occupation of the mission from 1670 to 1705, fits very nicely with the hypothesized dates of 1698 to 1706 for Portland.

Fire-Steels (Plate 90d-e)

Sample - 2

Provenience

St. Pierre (2) - Y646A; W77A

Description

Both specimens are iron and have a rectangular to oval shape. W77A (Plate 90e) is 3.5 cm in width.

Keys (Plate 94a-c)

Sample - 4

Provenience

St. Pierre (4) - Y558-9A; Y558-31D; TLJ1; W20A

Description

All of these keys are broken. Only the shanks and bows survive, the key blades being absent on all. The shafts are solid and correspond to Stone's (1974:227) Series B keys. Two of the specimens have oval bows. The width of the bows are 2.6 cm (Plate 94a) and 1.5 cm (Plate 94b). The other two keys have flared handles, one (Plate 94c) of which is 3.5 cm wide and stepped, somewhat reminiscent of a spoon handle from St. Pierre (see p. 875). Flared key bows are absent at Fort Michilimackinac

(Ibid:225-229) and so I am not totally convinced the two specimens from St. Pierre are indeed keys.

Mirrors

Sample - 1

Provenience

St. Pierre (1) - Y573A

Description

This fragment of clear glass has a greenish hue to it. It is flat and bifacially beveled by grinding. It probably served as mirror glass.

Miscellaneous Ornaments (Plate 121)

Sample - 2

Provenience

Portland (1) - Y506Cl-1
St. Pierre (1) - T8B

Description

Portland

(Y506Cl-1) - This portion of an antler is 6.0 cm long. One end has been slightly tapered by shaving. It has not been drilled and its function is unknown.

St. Pierre

Plate 121 (T8B) - When first found, I thought this broken object was merely a drilled plastic toy. The drilling seemed unusual, however, because it was performed from two ends and did not join evenly. A closer examination revealed this material to be a very hard light black stone. The object has been ground and polished to such an extent that it is difficult for the untrained eye to determine the type of stone. The object has a plano-convex cross-section, almost flat. The edges have been carved into a saw-tooth design, the convex surface being slightly beveled. The drill hole diameter is 0.2 cm. This object presumably was some sort

of ornament. It is probably of aboriginal make.

Rings

Sample - 2

Provenience

Portland (1) - 1 lost
Lockguard (1) - W377B

Description

The notation of a ring at Portland is based merely upon recollection. It is not mentioned in the field notes, nor did it ever appear in the lab. I clearly remember seeing it though and have a visual impression that it was of very simple form, much like the specimen from Lockguard. The latter is some form of copper alloy and has a very small ring diameter of 1.5 cm. The ring has two small adjoining protruberances. The larger of the two has a series of pentagonal shapes on its surface. Seen from above, the knobs appear to be the head and body of an insect.

Slateboards (Plate 114d-e)

Sample - 3

Provenience

St. Pierre (3) - W29A; W44A; W47A

Description

All of these pieces of slate are believed to be fragments of slateboards. One (Plate 114d) has been worked into a 90° angle, presumably to fit the corner of a frame. Another (Plate 114e) is beveled, presumably for a similar purpose. Scratches occur on both sides of all of these fragments. Most are random, but on some, numbers are clearly apparent. One (Plate 114e) has a vertical list of figures. The numbers are faint, but they appear to be "90, 15, 20, 24, 30".

Tobacco Pipe Group

White Clay Tobacco Pipes

Sample - 112

Provenience

Portland (4) - Y506B(4)
 St. Pierre (107) - Y550D; Y550E; Y550J1(2); Y556A; Y558-3;
 Y558-9(Y578); Y558-9A; Y558-13; Y558-20; Y558-31A;
 Y558-31B; Y558-31C; Y558-31D(3); Y558-31F(2)
 Y558-31H; Y558-76(2); Y567A; Y569A; Y571B;
 Y576A(4); Y577A(3); Y579A; T4D(2); T9D; T12F;
 Y601A(3); Y603A(4); Y641A; Y642A; Y642B; Y643B;
 Y646A(3); Y646B(7); Y647A; Y647B; W2A; W3A; W6A;
 W7A; W8A(2); W10A; W13A(2); W17A1; W22A; W24A(2);
 W25A; W26A(3); W27A(2); W27B; W28A(2); W28B;
 W34A; W40A; W41A(3); W43A(2); W44A; W49A; W52A;
 W53A; W56A; W61A(2); W69A; W72A; W77A(2); W80A(2);
 W86A; W117B; W119A; W436; unlabeled(1)

Lonely Frenchman (1) - W308B

Comments - Y550E; Y550J1; Y558-9(Y578); Y558-31C; Y558-31D;
 Y569C; Y571B; Y576A(2); Y577A; T4D; T9D; T12F;
 Y601A; Y603A(2); Y643B; Y646A; Y647B; W6A; W25A;
 W27A; W34A; W56A; W61A; W77A; and W80A are pipe
 bowl fragments
 Y550D; Y558-31B; Y558-31F; Y567A; Y579A; Y646B(2);
 W13A; W17A1; W24A(2); W26A; W41A(2); W86A; W119A;
 pipe stems have dot-and-saw-tooth design

Description

Portland

All of the pipes from Portland are stems. The fragments are probably from the same pipe, as they all have the same bore diameter ($5/64$ ths inch) and are from the same feature. Three of these specimens have been ground on their ends, perhaps having been purposely broken into small fragments for use as beads. Their length ranges from 1.8 cm to 2.6 cm. The unground pipe stem is 3.7 cm in length.

St. Pierre

A total of 80 pipe stems and 20 pipe bowls were recovered at St. Pierre. All of the latter have glossy surfaces and some deserve detailed description:

- (Y558-31C) - This is a bulbous-shaped bowl with a broken heel. Two diamonds are stamped on its small circular heel base, but the part of the design farthest away from the smoker cannot be deciphered.
- (Y569A) - Too little remains of the bowl of this specimen and so its shape cannot be determined. Stamped on its small heel base are the initials "RB". Above the letters is a tripe-pointed crown (Brown 1975a: plate 11, No. 1).
- (Y576A) - This bowl, slightly bulbous in shape, is oriented at an angle between 110° and 115° . The heel base has a stamped impression of a man dressed in either a long coat or pantaloons. His feet are spread apart and his left arm is bent, the hand placed on his side. The right hand holds the barrel of a firearm, its stock lying next to the right foot. The figure's head points away from the smoker. This pipe may be an example of the "pipes du chasseur" so often seen in trade lists (Marie Gérin-Lejoie - personal communication) (Brown 1975a: plate 11, No.2).

- (Y576A) - This bowl is not as the bulbous as the last, but is slightly more obtuse. It is oriented at an angle of about 120° . The rim is milled. Its small heel is broken in half, but enough remains of the design to suggest a scale balance is being depicted. At the end of a horizontal bar, supported in the middle, are two sets of three lines forming steep triangles. Presumably each set once held a plate (Ibid:plate 11, No. 3).
- (Y577A) - This bowl is joined to a stem found in the same square. It has the exact same shape as the last bowl, including the milled design around the rim. The small heel has the initials "GB" stamped in its base and, similar to Y569A, a triple-pointed crown is stamped above the letters (Ibid:plate 11, No.4).
- (T12F) - This bowl lacks a heel, but it does have a floral design stamped just above the base of the bowl. The design consists of two sets of two lines running perpendicular, between which are circular depressions like petals.
- (Y603A) - A stamped heel occurs on this bowl, but it is so fragmentary it cannot be read.
- (W6a) - This is a bulbous-shaped bowl. A cannon is stamped on the base of its small heel.

Bore diameters of 14 bowls and 79 stems were measured.

The results are as follows:

4/64 th inch	24
5/64 th inch	64
6/64 th inch	2

Applying the Binford linear regression formula (1962 b: 19-21), a date of 1755.85 is secured, a time considerably later than the occupation of St. Pierre. The lengths of pipe stems collected in 1975 and 1976 (N-69) averaged 2.77 cm, with a standard deviation of 1.06 cm. Sixteen specimens from the total pipe stem collection have a circumferential dot-and-saw-tooth design. This decoration consists of two sets of 10 or 12 circumferential indentations. On at least four of the stems (Y558-31B; Y558-31F; W24A; W86A) the design occurs on the end towards the bowl. Three (Y550D; Y567A; Y579A) have the decoration closer to the mouth end. Two of the stems (Y558-31B; W117B) have one end shaved to fit the mouth more comfortably. One stem (Y646B) has circumferential grooves on each end and was intentionally broken at these points. Two others (W43A; W44A) have a circumferential groove on or near one end. Another specimen (W8A) has a circumferential groove in the middle of the stem section.

Lonely Frenchman

This one pipe stem has a bore diameter of 4/64 th inch and a stem length of 2.7 cm.

Discussion

A considerable number of English pipe manufacturers had initials identical to those seen on the St. Pierre pipe bowls, and some of these men were laboring at the time Fort St. Pierre was occupied. A Robert Burrill was producing pipes by at least 1676 (Bailey 1936:48), 14 other British pipe makers bore the initials "RB" between 1706 and 1766 (Walker 1971:65), and an Englishman named George Brown was making pipes bearing his initials by 1706. Although the names correspond well with the St. Pierre specimens, the various English forms and decorations of the period do not fit at all (Alexander 1966; Oswald 1975). The milled rim, a characteristic feature of the St. Pierre pipes were not made on English pipes after the last quarter of the 17th century. Initials were stamped on the flat base of the heels in the first half of the 17th century, but by the end of the century were being placed on either side of the bowl in cartouches (Noël Hume 1969a:304-305).

Dutch pipes of the early 18th century, however, conform well with the assemblage from St. Pierre (Oswald 1975:116-118, fig.22). These Dutch pipes are distinguished from contemporary British specimens by having smaller bowls, milled rims which do not run parallel to the stem, and stems with a glossy surface (Walker 1971:90). Dutch pipes are described as having:

...somewhat egg-shaped bowls very often with vertical paring on the sides, thin walls, narrow stems, and generally highly burnished buff surfaces. Makers marks are stamped on the backs of the bowls, on the bases of small heels, or on either side of spurs, nearly always in diminutive letters or miniscule shields of arms. Equally small pictorial marks were impressed on the bases of the small heels,

among them a fish, a windmill, a milkmaid carrying two buckets, and a figure whom the Dutch describe as the "lady of easy virtue" (Noël Hume 1969a:307).

The city of Gouda, Holland, was the principal center for the export trade of these clay pipes (Humphrey 1969:18-20), and France, which apparently had no major pipe industry, was one of the chief recipients of the Gouda pipes. The pipes found in the lower layers (French context) of the excavations at Fortress Louisbourg are almost exclusively of Dutch origin (S. Walker 1968:109). Similarly, Stone noted that Dutch pipes are most commonly associated with the French occupation at Fort Michilimackinac (Stone 1974:151). Milled rims and stamped designs on heel bases are typical features at the latter site (Ibid:fig.78H). Some of the stamped impressions are deer, powder horns, and teapots (Petersen 1963:3; Stone 1974:149). Eighteenth century Dutch pipes found in England have stamped figures of swine and of a lamb under a tree. Numbers surmounted by triple-pointed crowns are also common (Oswald 1975:fig.22, Nos.15-17).

A human figure stamped on the base of pipe heels is also a typical Dutch feature. The Milkmaid form mentioned above is perhaps the best known. Walker illustrated two Dutch bowls at Fortress Louisbourg with human figures arranged in exactly the same position as the St. Pierre specimen (Y576A), left hands on hips and feet separated, the only difference being that the individuals are blowing trumpets instead of holding muskets. These pipes are dated between 1720 and 1732 (Walker 1971:fig.41).

a period overlapping nicely with the occupation of Fort St. Pierre. Pipes with small stamped heels have also been found at the French-related Fatherland Site (Neitzel 1965:50, pl.13j) and Port Dauphin (Noel Read Stowe-personal communication), as well as on many other sites in Florida and the Gulf States (Noël Hume 1969a:307).

The dot-and-saw-tooth pipe stem design is also commonly found on French-related sites. It has been observed at Fort Michilimackinac (Stone 1974:fig.78j-m), Fortress Louisbourg (Walker 1971:fig.29,40b-e), the Spanish site of Santa Rosa in Pensacola, dating between 1722 and 1751 (Omwake 1965), and at Trudeau (LMS Collections). This design is quite typical on Gouda pipes, the name "GOUDA" often being stamped at each end of the design. Such specimens at Fort Michilimackinac are believed to date between 1715 and 1735 (Stone 1974:150). Walker indicated that stems with this decoration were produced by the Dutch throughout the 17th century, the ones from Louisbourg dating between 1716 and 1750 (Walker 1971:70).

The date of 1755.88 from the bore hole analysis of the St. Pierre pipes is not overly disconcerting. In the first place, a pipe stem sample less than 900 is not adequate to provide accurate site dates (A. Noël Hume 1963). Furthermore, when Harrington initially presented his pipe stem chronology article, the source of Binford's linear regression formula, Harrington warned that his conclusions are based entirely upon pipes of English make. Dutch pipes in the sample would result in inaccurate dates (Harrington 1954:12). Harrington

intentionally excluded Dutch pipes from his graphs because these pipes frequently have shorter stems and narrower bore diameters than the English ones from the same period (Walker 1965:61). The use of Binford's formula on a Dutch pipe assemblage should result in a considerably later date. The dating of the St. Pierre sample is off by about 30 years.

Activities Group

Construction Tools - Axes

Sample - 2

Provenience

Portland (1) - Y506C3-1
St. Pierre (1) - Y577A

Description

Portland

One axe was found in our excavations at Portland.
Another axe, reportedly from one of the pits, was offered

for study.* Many more have supposedly been discovered in the vicinity. Both of these axes were made by the "laminated method." Neither have stamped impressions. These axes do not have steel edges, a common feature on the axes of Canada. Steel-edged blades are rare in colonial Louisiana sites, primarily because this area generally received poorer material than New France in the late 17th century (Marie Gérin-Lajoie - personal communication).

The excavated axe (Brown 1975a:plate 4, No.2) is 13.8 cm long and has a blade width of 7.7 cm. The back width of the attachment hole is 5.3 cm and it is 4.0 cm wide at the juncture of the blade. It is 0.5 cm to 0.7 cm thick. The hole itself has a straight back and straight sides, the latter rapidly coming to a point as they approach the blade. The long axis of the hole is 5.0 cm and its width is 2.5 cm. Traces of wood are still visible in the socket, evidence that it was burned with the handle. The axe in the Wright Collection (Ibid:plate 4, No.1) appears larger than the above, because its attachment hole is considerably smaller. It is actually only 13.5 cm long, however, and its blade width is 8.5 cm. The attachment hole is 4.2 cm wide at the back and 3.0 cm wide where the blade and attachment hole meet. The latter is oval, its length 4.0 cm, its width 2.8

* William Wright of the Mississippi Department of Archives and History excavated this axe at Portland several years prior to our work.

cm, and its thickness 0.5 cm.

St. Pierre

The single axe from this site, when first discovered, was thought to be a wedge (Brown 1975b:plate 5, No.1). It was soon realized that this is an axe made in the manner described by Quimby - a strap of iron being twisted into a loop and forged over a wedge-shaped center piece (Quimby 1966:71). This specimen is the center piece. It is 11.7 cm long, 8.7 cm wide at the blade edge, 3.1 cm wide at the opposite edge and 1.5 cm thick at the latter.

Distribution

Axes are very common artifacts on early 18th century sites. Wittry found four at the Bell Site, two of which are of the same shape as the Wright axe (Wittry 1963:34, fig.24A,D). Axes with similar forms have also been recovered at Fatherland (Neitzel 1965:50, pl.14X) and at the Rosebrough Lake Site (Miroir et al.1973:fig.7b-c). A wedge-shaped axe center piece from the latter site is identical to that from St. Pierre (Ibid: fig.7d), and such axes are also typical of the Guebert Site (Good 1972:166, fig.38d). Three axes were found at Gilbert. One complete specimen, made by the "laminated method", is almost identical to the axe recovered in our excavations at Portland. The Gilbert specimen is somewhat unusual, however, in that the

iron strip is composed of two distinct layers of metal (Jelks et al. 1966:25-26, fig. 23a). Axes have also been found at Fort Michilimackinac (Stone 1974:297-298), Fort Toulouse (Heldman 1973:150, fig. 10, 64c) and in the "Tunica Treasure" from Trudeau (Brain et al. n.d. b).

Construction Tools - Chisels (Plate 122a)

Sample - 1

Provenience

St. Pierre (1) - Y641B

Description

This long wrought iron bar has a square cross-section. It is tapered at one end to fit a wooden handle. A square-shaped iron protrusion occurs 5.9 cm from this tapered end to prevent the handle from slipping toward the working end, hence breaking. The iron bar is slightly thicker toward the working end, the latter having been beveled to a sharp point. The distance from the protrusion to the working end is 17.6 cm. The protrusion rises 0.9 cm from all sides of the bar and the

square cross-section of the latter varies from 1.2 cm at the handle to 1.4 cm just above the bevel.

Construction Tools - Files (Plate 122b and 123)

Sample - 1

Provenience

St. Pierre (1) - T8G

Description

This file is 17.4 cm long, has a triangular cross-section, and is tapered on both ends. The rasps, which occur on at least two surfaces, have been cut in two directions resulting in a diamond-shaped cross-hatched pattern.

Construction Tools - Wedges (Plate 124)

Sample - 2

Provenience

St. Pierre (2) - T8H; W71B1

Description

One (Plate 124b) wrought iron bar is 12.0 cm long, slightly beveled on its broken tip, and has a rectangular cross-section, 2.0 cm by 2.2 cm. It is believed to be a wedge. The other object (Plate 124a), definitely a wedge, is 8.7 cm long. A large oblong head, 4.3 cm long and 3.2 cm wide, joins flat with one face of the blade, but juts out from the other face turning in about 2.0 cm below the head. The two faces of the blade taper to a thick dull point.

Toys - Jews Harps (Plate 90b)

Sample - 1

Provenience

St. Pierre (1) - Y641A

Description

This iron jews harp has a diamond-shaped cross-section and

a flattened triangular head. The vibrator is missing. Its maximum length and width are 5.1 cm and 3.5 cm respectively. The shanks appear to taper slightly and the form appears to correspond with Stone's SB, T2, Vb jews harps (1974:141-143, fig.76,0).

Discussion

Series B, Type 2 jews harps have been found mostly in French contexts at Fort Michilimackinac (Ibid:144).

Fishing Gear - Fishhooks

Sample - 4

Provenience

St. Pierre (4) - Y600A; W18A; W27B; W41A

Description

All but one of these fishhooks are made of iron. The exception (W27B) is brass and may not, in actuality, even be

a fishhook. It has a lot of corroded iron at its shank end. The other specimens all have flattened shank ends and lack barbs. They correspond to Stone's T1, Vb (1974:244-245, fig. 151R). Individual lengths of the iron specimens are 2.6 cm (Y600A); 3.1 cm (W18A); and 2.9 cm (W41A).

Storage Items - Barrel Hoops

Sample - 7

Provenience

St. Pierre (7) - Y558-31A; T9C; W26B; W28A(2); W28B; W65A
Comments - T9C consists of 2 hoop sections fastened by an iron rivet.

Description

The width of these barrel hoop sections ranges between 2.8 cm and 3.5 cm with an average of 3.23 cm. Such hoops encircled barrels and were connected by a single rivet (Stone 1974:203). A number of these specimens are concentrated around the Lead Shot Drop area.

Storage Items - Rivets (Plate 125a-f)

Sample - 30

Provenience

St. Pierre (30) - Y558-20; T5A; T5B; T10C; Y642A; Y660A(2);
Y661A(5); Y662A; Y663A(5); Y672A(6); W29A;
W66A1; W67A; W96A; W111A; unlabeled(1)
Comments - T5A; T10C; Y642A; Y661A; Y672A are rivet
preforms

Description

Five specimens are merely wrought iron bars used to make rivets. Some of these bars have been flattened and flared on one end, but for some reason were not cut into short sections.

Discussion

These objects are primarily associated with the area believed to be a blacksmith shop (Locale 2). It is evident that rivets were being made in the location and it is possible that their function was to join barrel hoops to barrels. One hoop section (T9C) is connected by an iron rivet.

Miscellaneous Hardware - Bolts (Plate 125g-h)

Sample - 3

Provenience

St. Pierre (3) - Y661A; Y662A; Y663A

Description

Plate 125g (Y662A) - This bolt is 6.3 cm long and 1.6 cm in diameter. Its head is 2.7 cm square and 0.8 cm thick.

Plate 125h (Y663A) - This bolt is 6.0 cm long and 1.3 cm in diameter. Its head is 1.6 cm square and 0.7 cm thick.

(Y661A) - This broken bolt has a head 1.8 cm square and 0.7 cm thick. Its diameter is 1.1 cm.

Discussion

Bolts are primarily found with rivets in the area of the blacksmithing operations (locale 2).

Miscellaneous Hardware - Nuts (Plate 125i-k)

Sample - 7

Provenience

St. Pierre (7) - Y661A; W4A; W5A; W25A; W41A; W70A; W96A

Description

With the exception of W96A (Plate 125i), all of the nuts are square. Two (W5A; W25A) still have a portion of a broken bolt within their holes. Four nuts (Y661A; W4A; W70A; W96A) are broken at their holes. All of the holes are too corroded to measure accurately, but the square heads range between 1.7 cm and 2.5 cm long and between 0.7 cm and 1.1 cm thick. The average dimensions are 2.13 cm square and 0.98 cm thick. The irregular nut measures 2.7 cm by at least 3.2 cm with a thickness of 1.1 cm.

Discussion

Unlike bolts and rivets, nuts do not appear to be primarily associated with Locale 2, the area of blacksmithing activity. They are evenly scattered throughout the excavations.

Miscellaneous Hardware - Chain Links

Sample - 4

Provenience

St. Pierre (4) - T15D; W2A; W10A; W67A

Description

Two individual links (W10A; W67A) are broken. One (T15D) has eight links and another (W2A) has two. All are highly corroded and probably date to the occupation of the fort. The links of T15D are all twisted and are 3.2 cm in length. The two links of W2A are also twisted, but are larger (5.0 cm). The individual links are each 5.1 cm in length.

Miscellaneous Brass/Copper Artifacts (Plate 126 and 127)

Sample - 23

Provenience

Portland (2) - Y500A; Y506C
St. Pierre (21) - Y558-14; Y558-31B(7); Y558-31H(2);
Y558-76; Y565A; T8H(2); W15A; W27B; W28A; W37A1;
W54A1; W77B1; W117B

Description

With the exception of those artifacts discussed below, all of the above are fragments of sheet brass or copper (Plate 127).

St. Pierre

(Y558-14) - This object is shaped like a pen cap. It was manufactured by rolling a triangular-shaped piece of brass into a cone. The cone has five evenly-spaced holes arranged in a diamond pattern. A strip of sheet brass 4.1 cm long is attached to the cone by three small iron rivets. Its end is rolled into a loop. Contained within the cone is a substance having a high ferrous content. The sheet brass used to make this cone may have originally been from a strainer, but the function of the finished product has not been determined (Brown 1975a:plate 13, No. 1).

Plate 126a (Y558-31H) - This broken cast brass hook is approximately 9.8 cm long. Its rectangular

cross-section is 1.4 cm wide and 0.3 cm thick. The hook is tapered and beveled. The opposite end is notched, giving the metal a thickness of 0.2 cm at this point. A drill hole occurs 0.6 cm from the end of the slot, the rod having broken at this weak point. Deep file marks occur over the entire object. Its use is unknown.

(Y565A) - This tubular brass object is about 3.5 cm long. It has been crushed and torn, making its function difficult to ascertain. It was designed out of a large brass tube which was flattened and bent into the shape of a "U". It was subsequently torn (Brown 1975a:plate 13, No.2).

Plate 126b (W15A) - This unusual bullet-shaped object has a deep slot on one end. Its cross-section is plano-convex and two hook-shaped protrusions are brazed to its flat side. The hooks face each other and are separated just enough to serve as a clasp. The object is 4.1 cm long and has a maximum width of 2.1 cm. The slot is 0.6 cm wide and 1.5 cm deep. The hooks raise 0.9 cm from the back of the object. Its actual use is unknown, but it may have served in some sort of buckling capacity.

(W28A) - This broken brass band has a thin biconvex cross-section. One end is rounded and the other

is broken at a screw hole. The object is 1.3 cm wide. Its use is not known.

Plate 126c (W54A1) - This centrally perforated broken disc has a maximum diameter of 4.5 cm and a hole diameter of 0.7 cm. The very thin sheet brass metal has been twisted. The actual use of this brass disc at St. Pierre is unknown, but similar discs were found at the Guebert Site (Good 1972: fig.22n), in urn burials at the Taskigi Site (Sheldon 1974:156), and at the Woods Island Site. The latter dates between 1650 and 1704. The perforated brass discs found at Woods Island are most often associated with the skull region of burials. They are believed to be hair ornaments or ear decorations (Morrell 1965:20,45,47,61). These metal ornaments are very similar to protohistoric and prehistoric circular shell gorgets (Good 1972:87).

Miscellaneous Iron Artifacts

Blade Fragments

Sample - 25

Provenience

Portland (1) - Y502A
St. Pierre (24) - Y558-4; Y558-9(Y578); Y558-9A; Y558-31F(5);
Y561A; Y5670; Y571B; Y575A; Y576A; Y577A; Y592A;
Y640A; Y643A(2); Y922; W21A; W23B; W45B; W51a2(2)

Description

These small pieces of flat iron are probably parts to blades. The actual tool, whether knife, saw, or whatever, cannot be determined.

Hooks (Plate 95g)

Sample - 2

Provenience

St. Pierre (2) - W43A; W44A

Description

(W43A) - This hook has a simple catch lock, a form presently still quite common. The object, 5.9 cm long and 2.5 cm wide, may actually be recent,

but the high degree of corrosion makes it very suspect.

Plate 95g (W44A) - This is a large heavy open hook. Its shank is circular and the base and top of the tapered hook are flat. Its length and width are 6.5 cm and 4.0 cm respectively.

Iron Rings

Sample - 7

Provenience

St. Pierre (5) - Y646B; W28B W68A; W105A1; unlabeled (1)
Lockguard (2) - W366A(2)

Description

St. Pierre

Three of the specimens (W68A; W105A1; unlabeled) may post-date the French occupation of Fort St. Pierre. The other two are highly corroded, have diameters ranging between 1.5 cm and 1.6 cm, and are made of thick strap bands 0.6 cm to 1.1 cm wide.

Lockguard

These two rings were meant to be connected. One is broken, but the ends of the other ring overlap for a distance of 0.7 cm. Their diameters are 1.0 cm.

Wedge-shaped Objects (Plate 95e-f)

Sample - 2

Provenience

St. Pierre (2) - T11B; Y647B

Description

Plate 95e (T11B) - This is a small thick sheet iron blade. It is thick at the small end, tapering to a pointed edge at the other. It is 5.4 cm long and 2.8 cm wide.

Plate 95f (Y647B) - This small sheet iron block is thick throughout. It is 5.1 cm long and 2.8 cm wide.

Miscellaneous

Sample - 11

Provenience

Portland (3) - Y500A(2); Y505A2
St. Pierre (8) - Y550H1; Y558-1; Y558-31A(2); Y576A;
Y577A; W5A; W119A

Description

Portland

Two of the objects (Y500A; Y505A2) are simply flat pieces of iron. The other (Y500A) is a small iron band, 1.4 cm wide and 0.15 cm thick, which is rolled into a loose coil. Its length is approximately 4.2 cm.

St. Pierre

(Y550H1) - This is a heavy solid iron cylinder, 2.3 cm in diameter, 1.6 cm long, and 0.3 cm to 0.45 cm thick. A reddish vitrified substance occurs on its surface. It may have been a fragment of a musket barrel (Brown 1975a:plate 13, No.6).

(Y553-1) - This rectangular iron block is 2.6 cm long, 4.5 cm wide, and 1.2 cm thick. The metal extends beyond the entire length of the block along one

edge and is slightly hooked, as if to suspend it from something. Its use is unknown (Ibid: plate 13, No.3).

Plate 128a (Y558-31A) - This slightly bowed iron bar has a length of 17.0 cm and a width of 1.6 cm. The ends are twisted into tight loops towards the concave surface. The loops measure between 0.8 cm and 1.2 cm in diameter. An iron rivet occurs in the middle of the iron strap. Its use is unknown.

Plate 129 (Y558-31A) - This is a large, thick, "U"-shaped object. The iron plate was originally diamond-shaped, having been bent to form an irregular opening approximately 5.0 cm in diameter. The metal has a length of 19.0 cm, a maximum width of 6.6 cm, and is 1.3 cm thick throughout, except on the ends where it increases to 2.4 cm. It may be a fragment of a caisson.

(Y576A) - This ringed-pin object is 3.1 cm long and has a hole diameter of 0.6 cm. Huntington (1960:fig. 5) illustrated a similar object which is a cock screw for a 1763 French Charleville musket but, as no evidence of threads occurs on the St. Pierre specimen, it cannot be classified as such (Brown 1975a:plate 13, No. 8).

(Y577A) - This is a fragment of a thick iron tube. It is

not a musket barrel, as its diameter (which could not be properly measured due to corrosion) is too large.

Plate 128b (W5A) - This object is shaped like a crowbar and may have served this function. It is an iron bar with a long tapered tang and a notched hook on the opposite end. The length of the tang up to the notch is 10.5 cm. The hook portion is 4.6 cm long and is flattened and flared out to a width of 2.6 cm. The hook is bent at a slight angle to the tang's plane.

Plate 95d (W119A) - This is a flattened "W"-shaped piece of thick iron wire. It is pointed on both ends and has a straight-line length of 6.3 cm.

Miscellaneous Lead Artifacts

Sample - 2

Provenience

St. Pierre (2) - W76A; W85A

Description

These are two oblong nodules of lead. W76A is 2.5 cm long, has a square cross-section, and weighs 18.5 gm. W85A is 2.4 cm long, has an octagonal cross-section and weighs 17.9 gm. Their function is unknown.

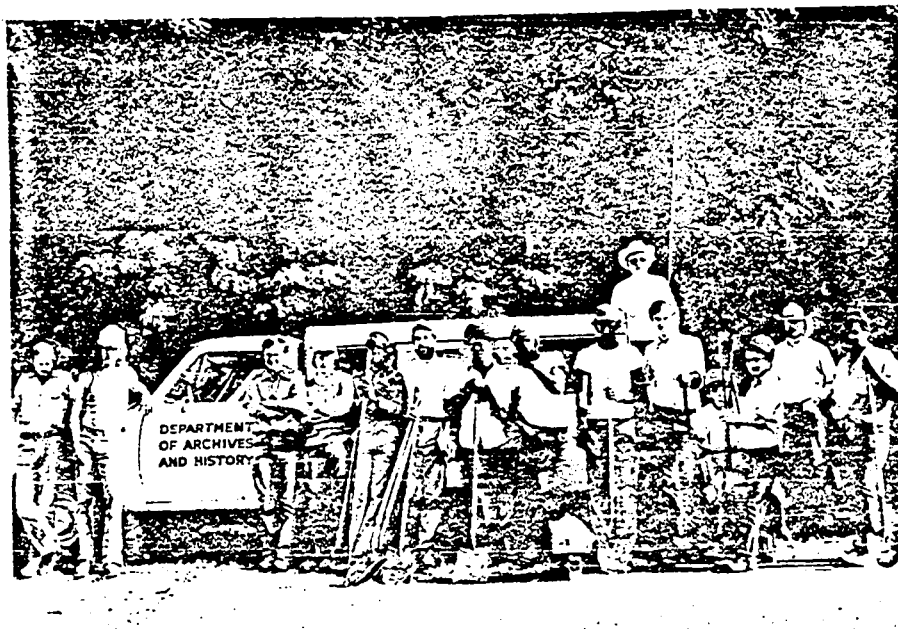


Plate 1

1976 Field Crew in the Yazoo Bluffs Region

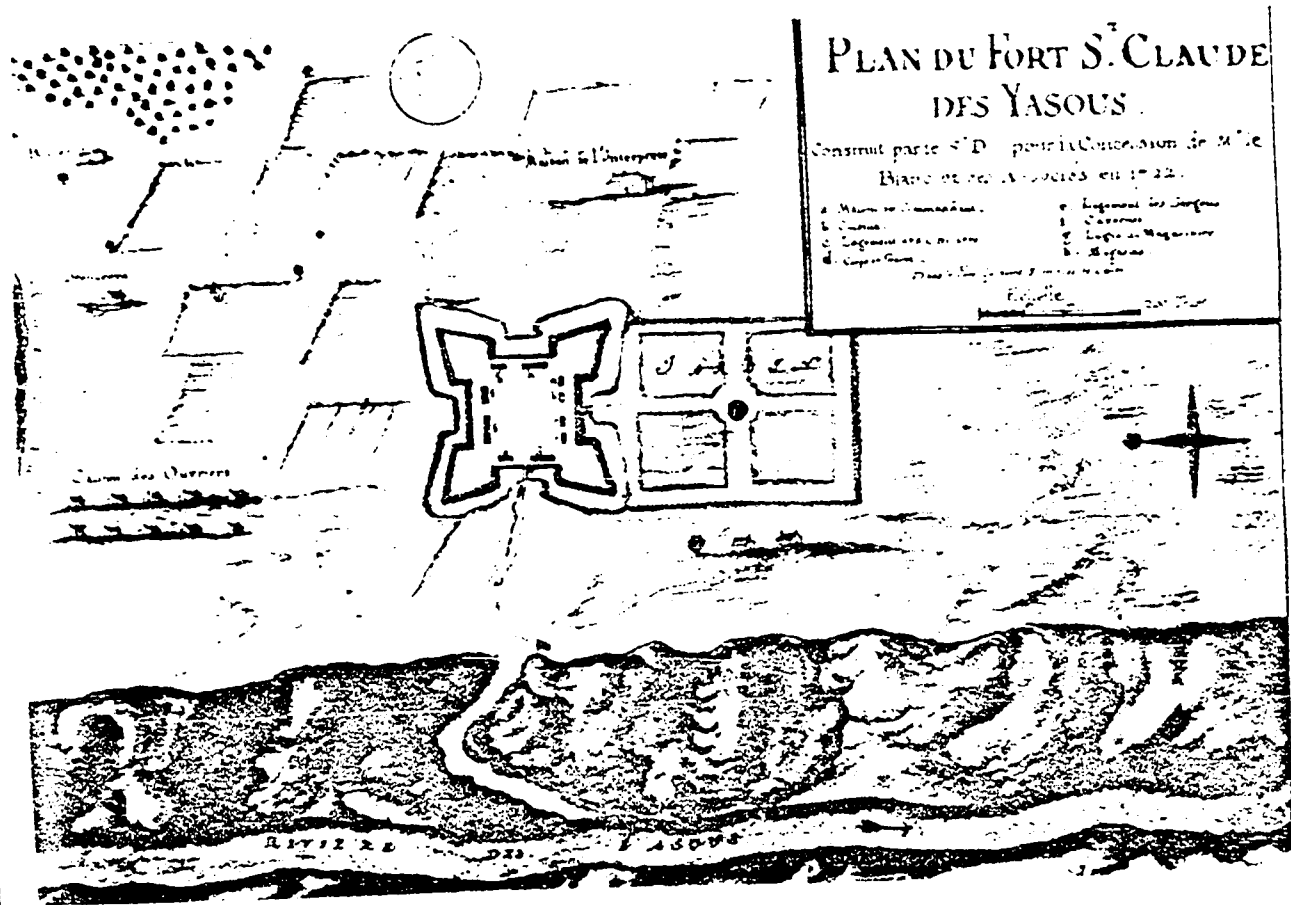
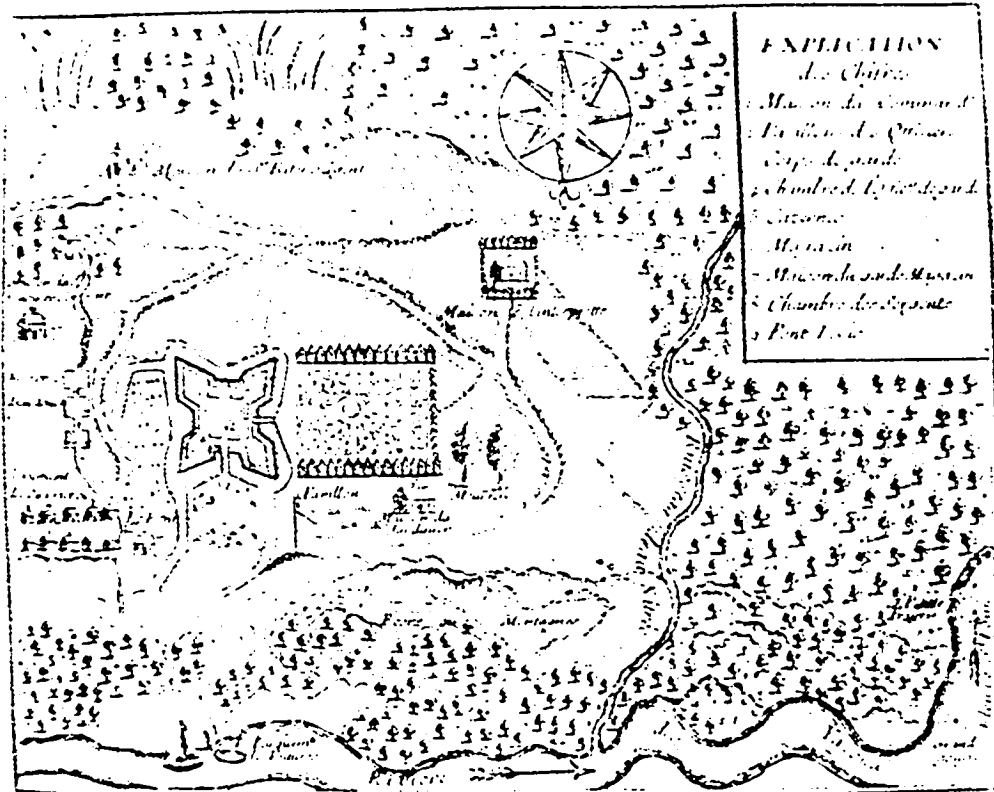


Plate 3

Fort St. Claude (Pierre) (Anon.)



Plan de la Citadelle de M. Le Bien, et voisines aux Yezous

Plate 4

Fort St. Pierre (Dumont dit Montigny in Swanton 1911:pl.7b)

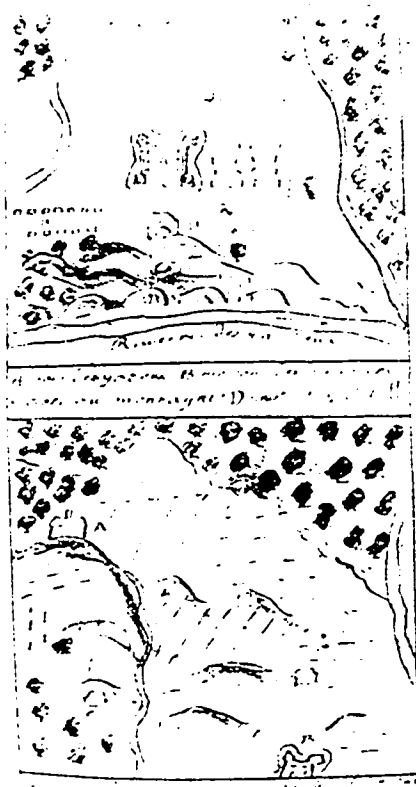


Plate 5

Fort des Yazous (Dumont dit Montigny 1931)

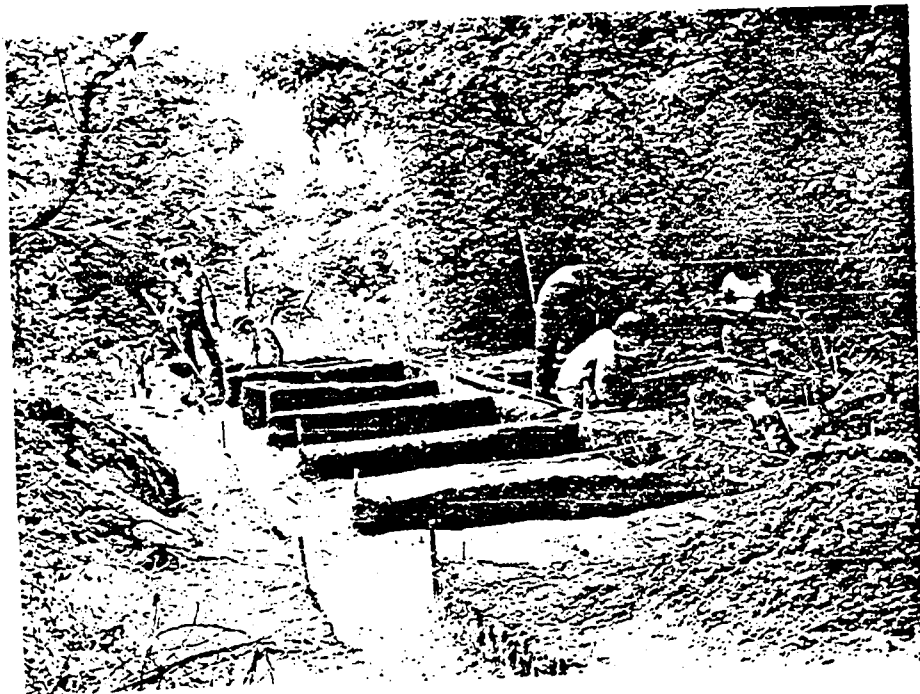


Plate 6

St. Pierre (23-M-5) - Excavation of Locale 1

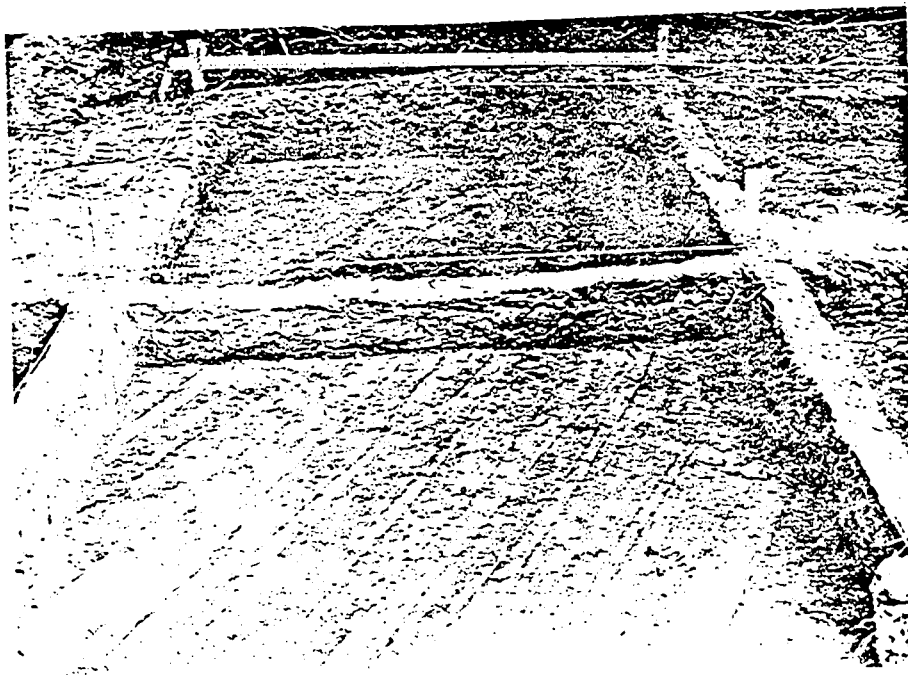


Plate 7

St. Pierre (23-M-5) - Burned Plank Stains in Locale 1

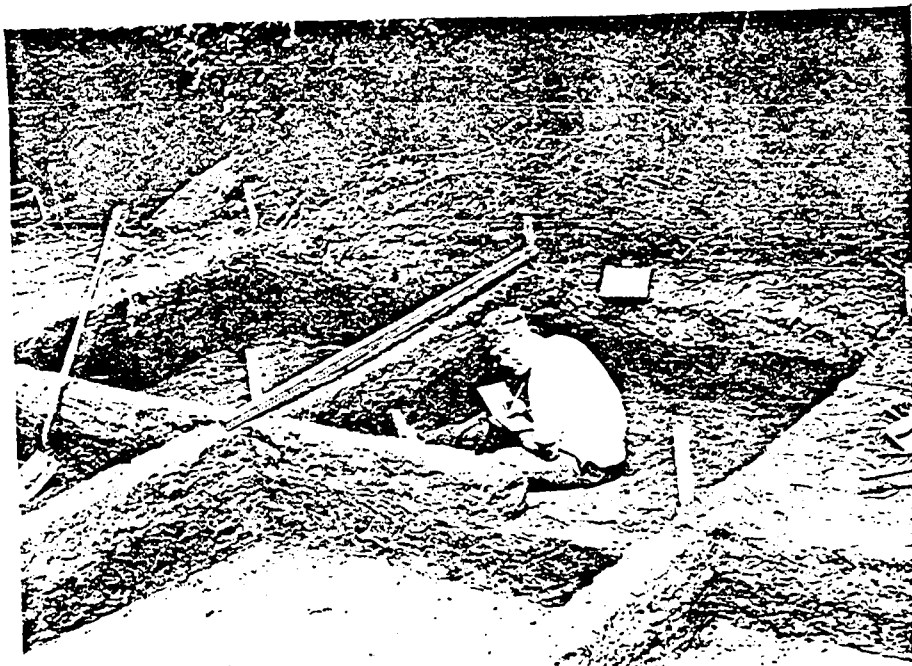


Plate 8

St. Pierre (23-M-5) - Two Natural Layers in Locale 1

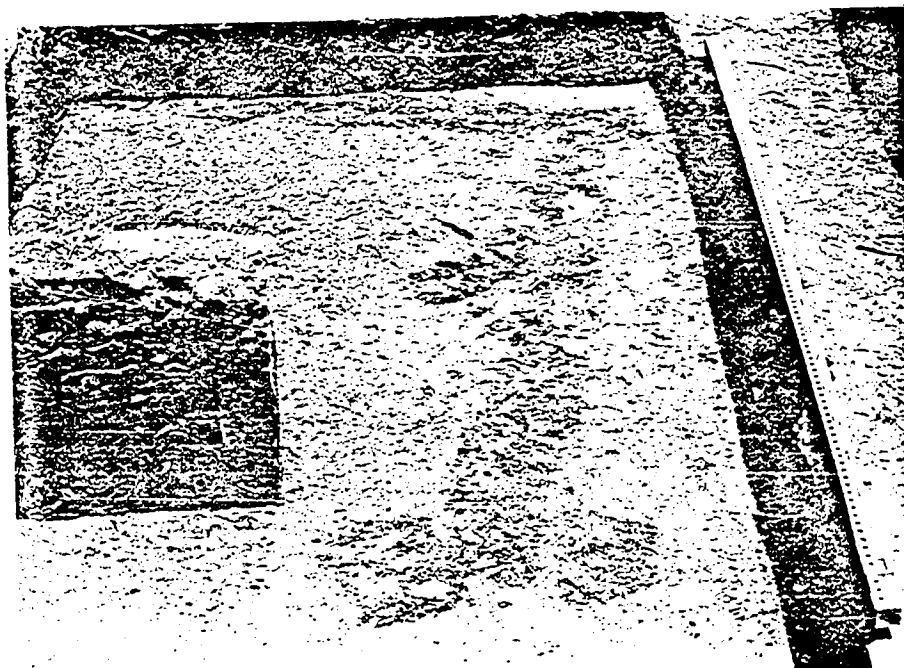


Plate 9

St. Pierre (23-M-5) - Wall Trenches in Locale 1



Plate 10

St. Pierre (23-M-5) - Mississippi Plain, var.
Yazoo Jar in Section D of the Moat. Provenience -
Y558-31D.

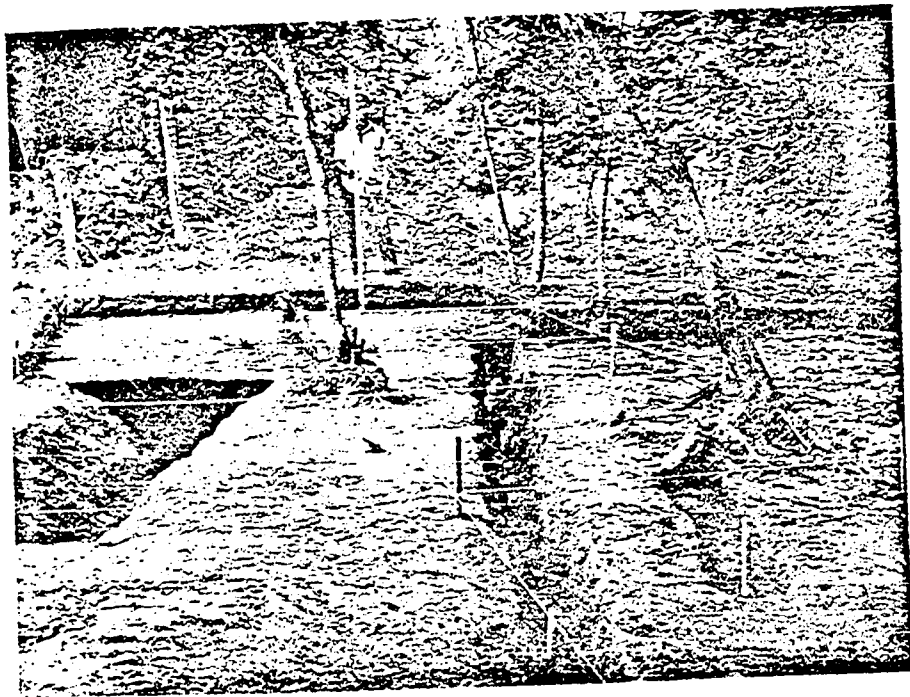


Plate 11

St. Pierre (23-M-5) - Moat and Southern Curtain

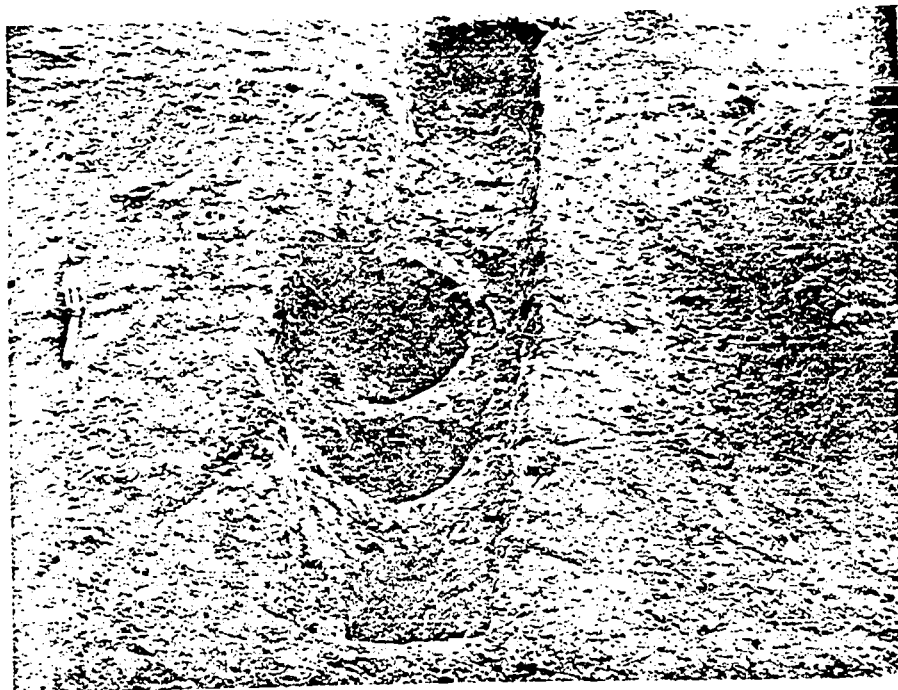


Plate 12

St. Pierre (23-M-5) - Short Wall Trench Dividing
Rooms in Structure B.



Plate 13

St. Pierre (23-M-5) - Structure C

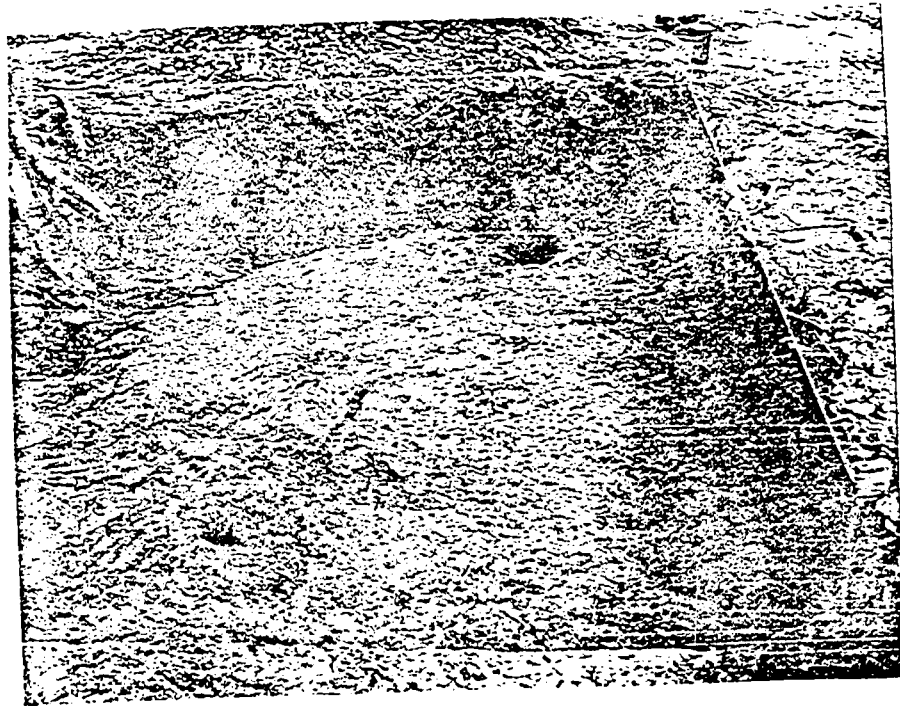


Plate 14

St. Pierre (23-M-5) - Lead Shot Drop Area: Flat
Circular Area Surrounded by Shallow Ditches.

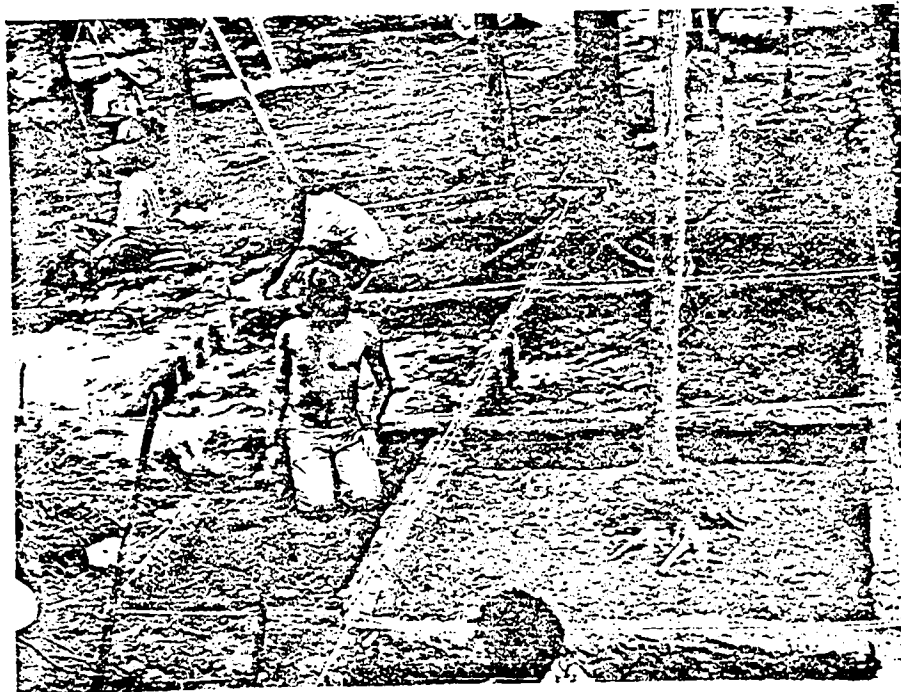


Plate 15

St. Pierre (23-M-5) - Excavations in the Burned Area along the Western Part of the Site.

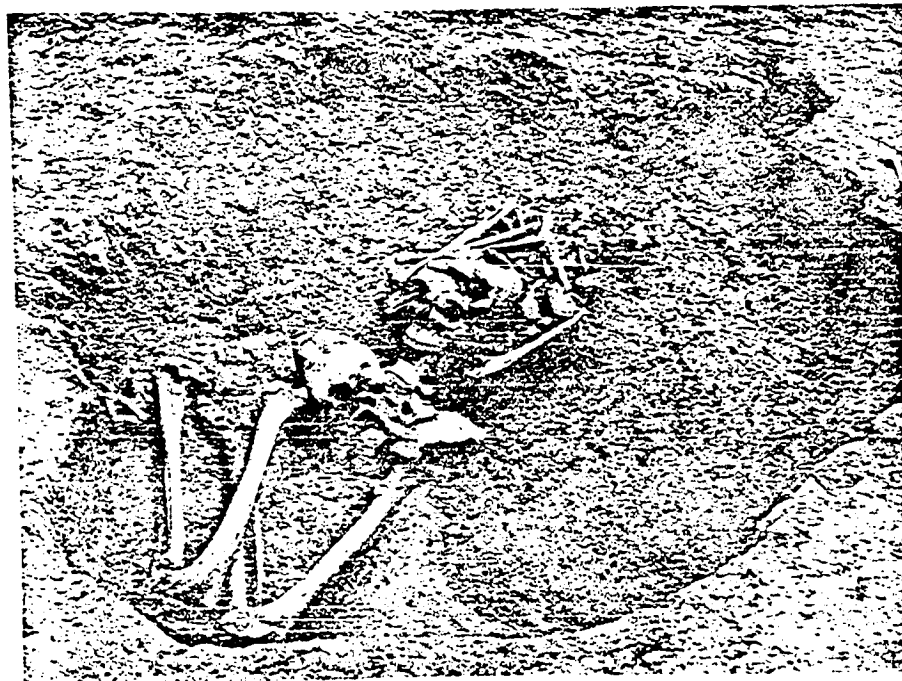


Plate 16

Wright's Bluff (22-M-15) - Disturbed Historic Burial

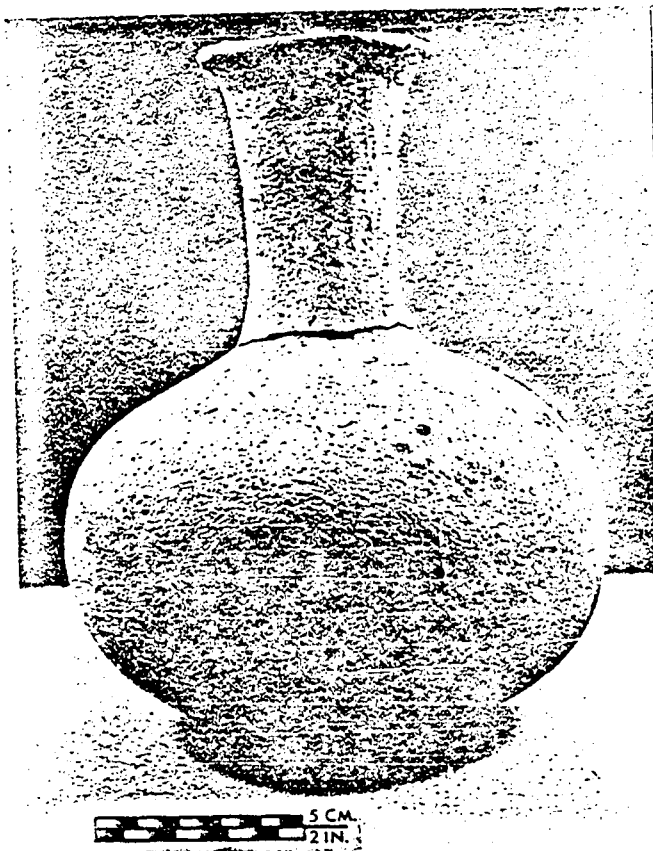


Plate 17

Wright's Bluff (22-M-15) Burial Collection -
Mississippi Plain, var. Yazoo Bottle.

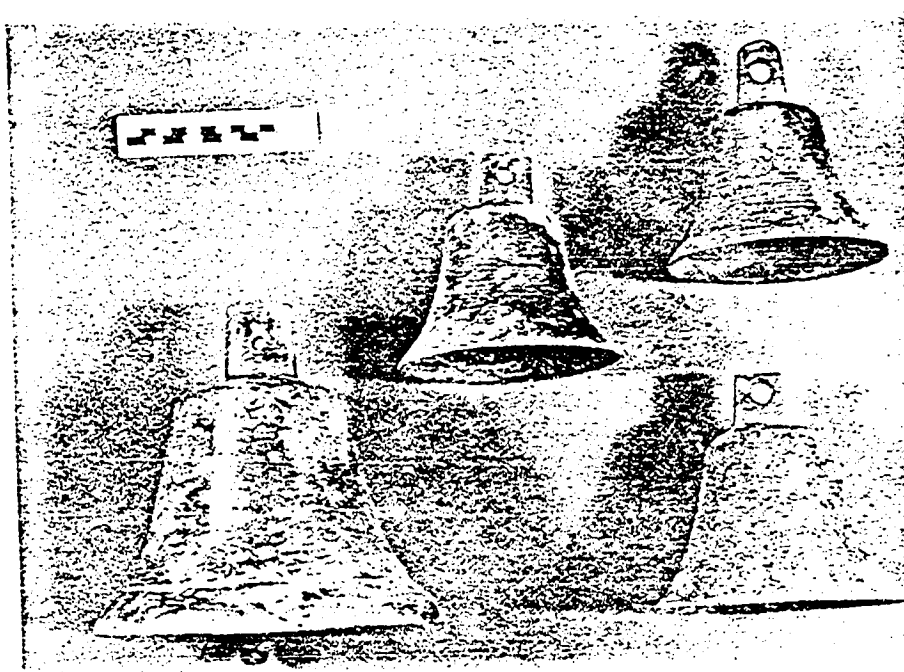


Plate 18

Wright's Bluff (22-M-15) Burial Collection - Bells.



a

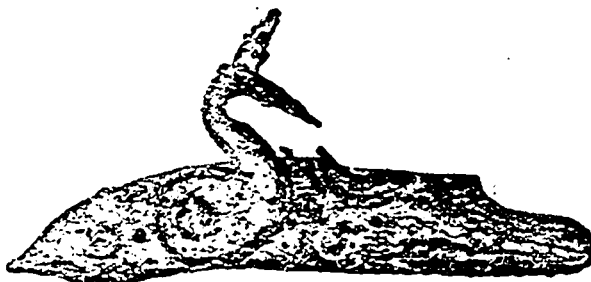


b



Plate 19

Wright's Bluff (22-M-15) Burial Collection -
Lock. a, Obverse Face. b, Reverse Face.



a

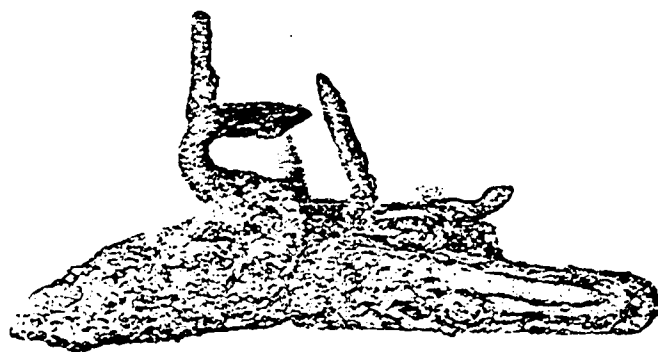


b

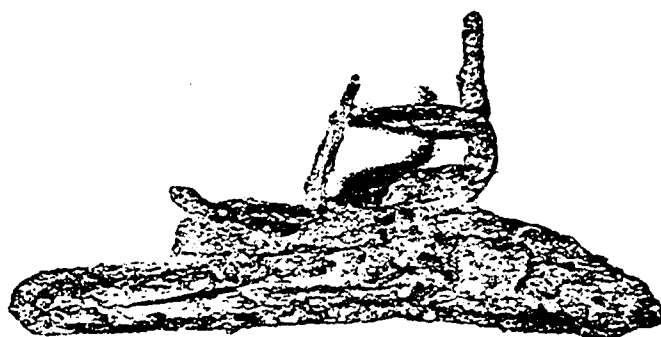


Plate 20

Wright's Bluff (22-M-15) Burial Collection -
Lock. a, Obverse Face. b, Reverse Face.



a

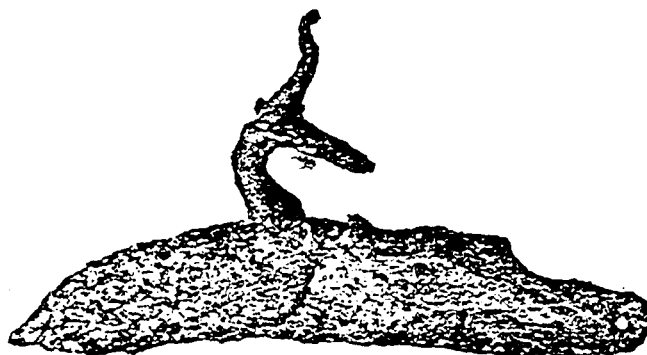


b

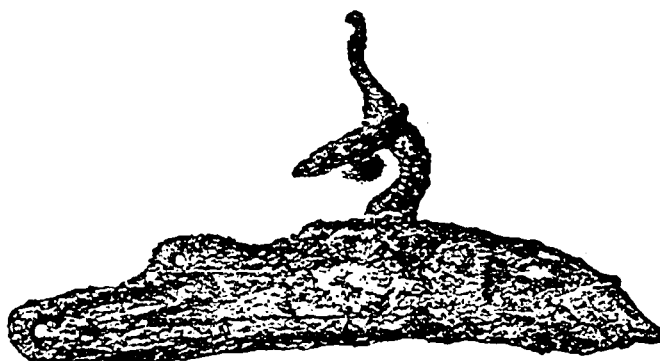


Plate 21

Wright's Bluff (22-M-15) Burial Collection -
Lock. a, Obverse Face. b, Reverse Face.



a



b



Plate 22

Wright's Bluff (22-M-15) Burial Collection -
Lock. a, Obverse Face. b, Reverse Face.

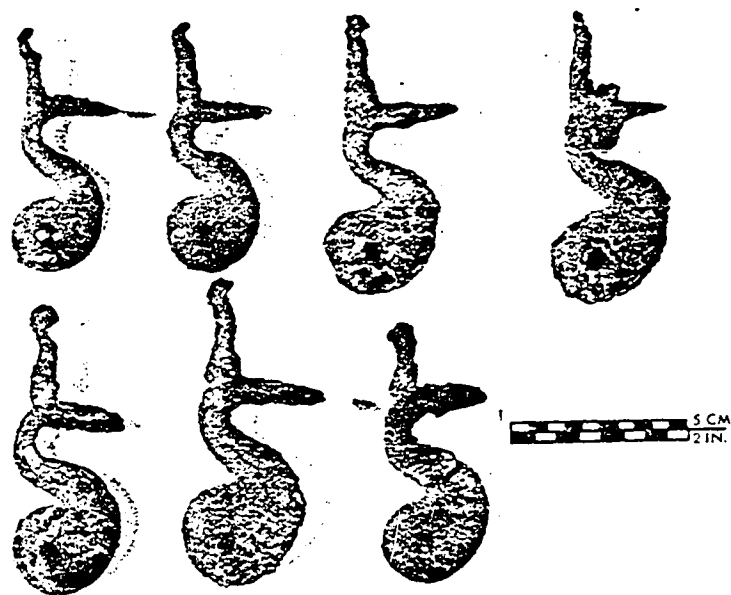


Plate 23

Wright's Bluff (22-M-15) Burial Collection -
Musket Cocks.

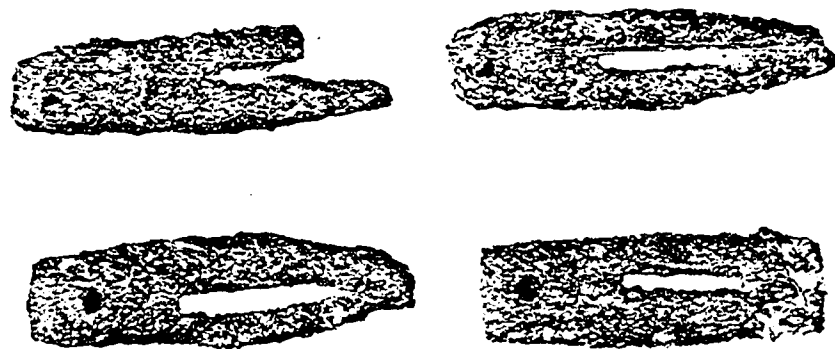


Plate 24

Wright's Bluff (22-M-15) Burial Collection -
Triggerplates.

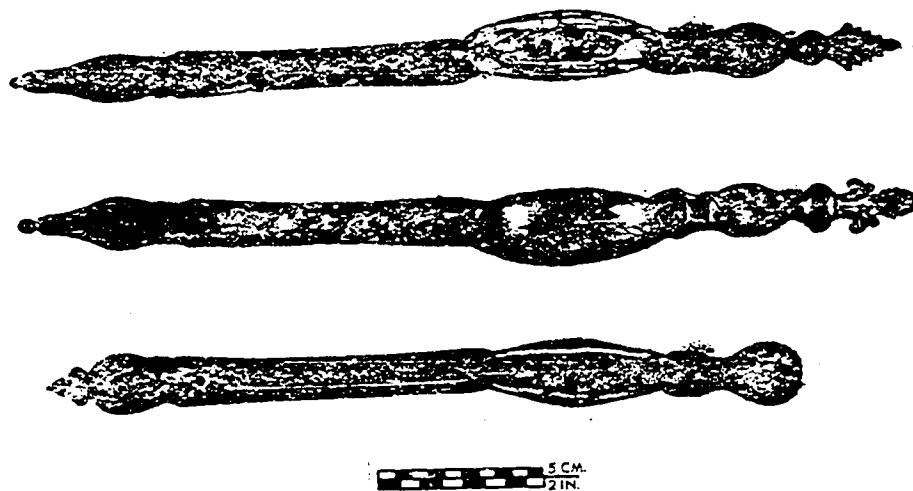


Plate 25

Wright's Bluff (22-M-15) Burial Collection -
Triggerguards.

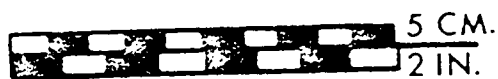


Plate 26

Wright's Bluff (22-M-15) Burial Collection -
Triggerguard Finials. Close-up of Triggerguards
in Plate 25.



Plate 27

Wright's Bluff (22-M-15) Burial Collection -
Rampipes.



Plate 28

Wright's Bluff (22-M-15) Burial Collection -
Sideplates.

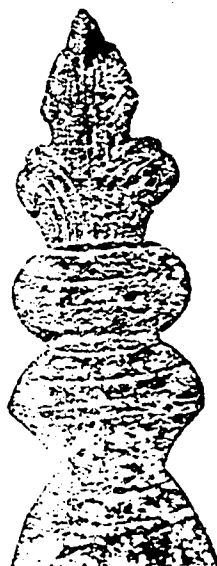


Plate 29

Wright's Bluff (22-M-15) Burial Collection -
Buttplate Finial.



Plate 30

Wright's Bluff (22-M-15) Burial Collection -
Thumbplate.

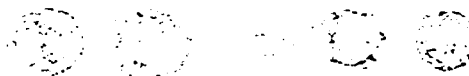


Plate 31

Wright's Bluff (22-M-15) Burial Collection -
Screwdriver, Blade Gunflints, Lead Balls, and
Beads.



Plate 32

View from Anglo (22-M-16) Looking toward St.
Pierre (23-M-5).

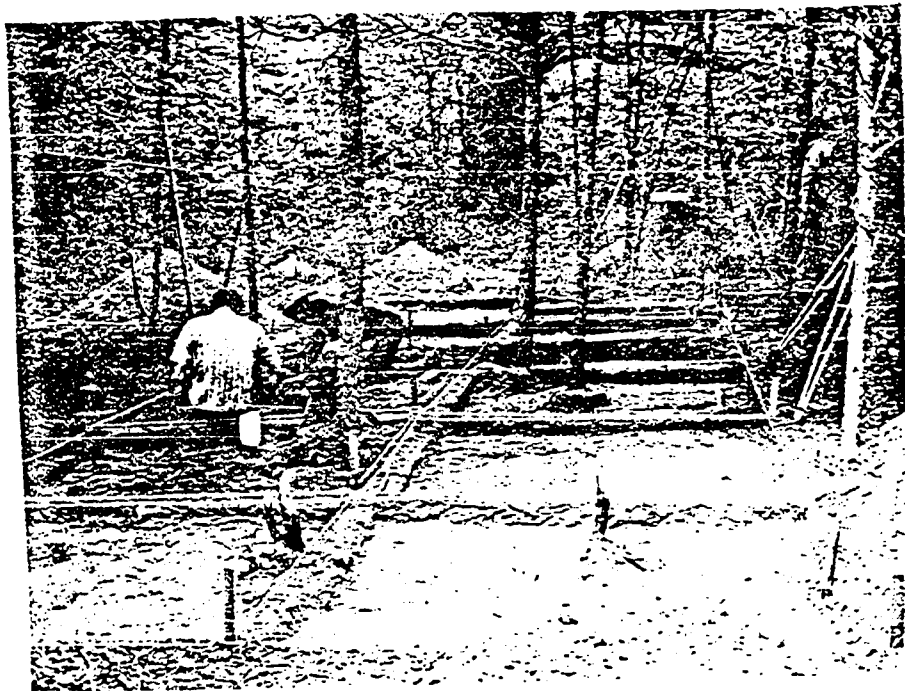


Plate 33

Lockguard (22-M-17) - Excavations.

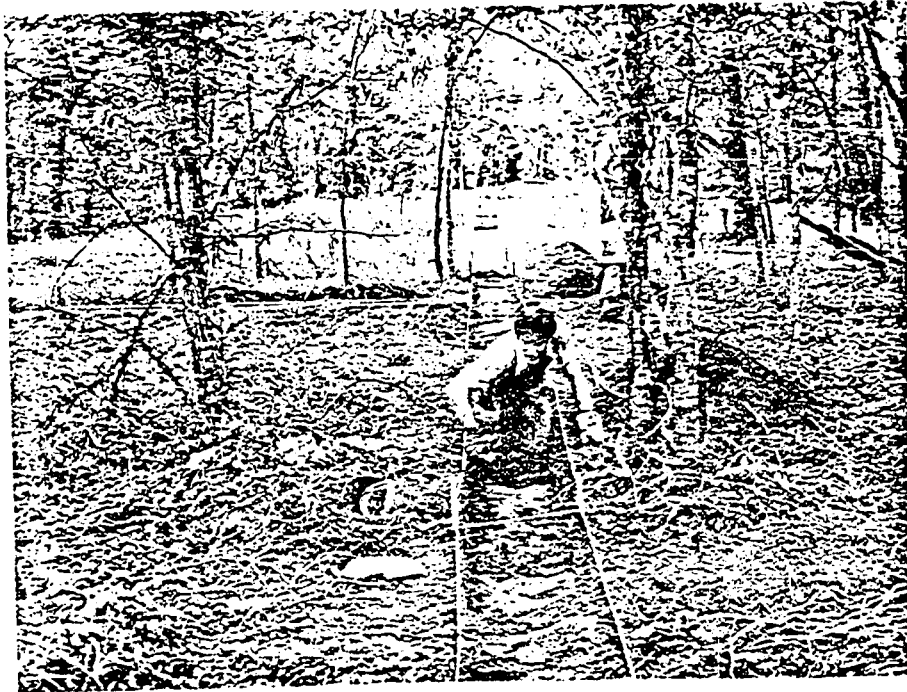


Plate 34

Lonely Frenchman (23-M-11) - Excavations.

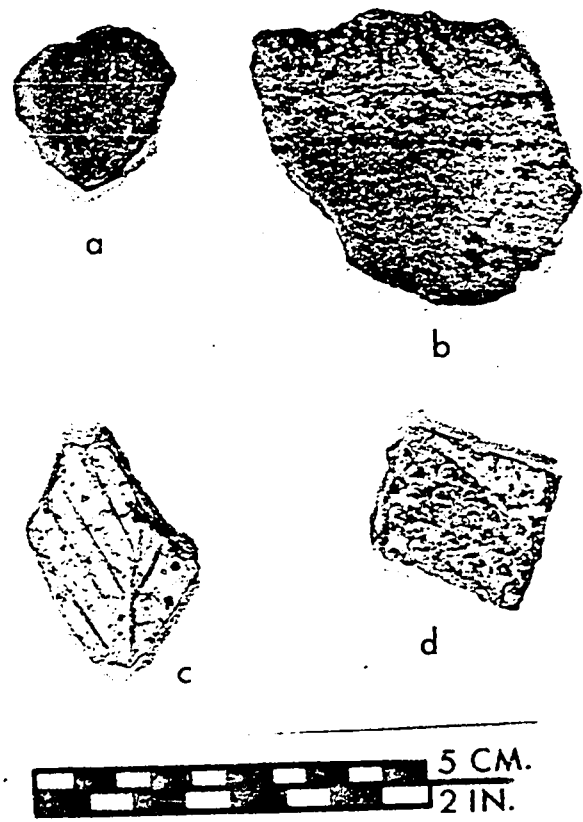


Plate 35

Aboriginal Pottery. Avoyelles Punctated. a-b, var. Dupree. c-d, var. Unspecified. Provenience - St. Pierre. a, Y592A. b, W76B. c, Y601A. d, T6B.

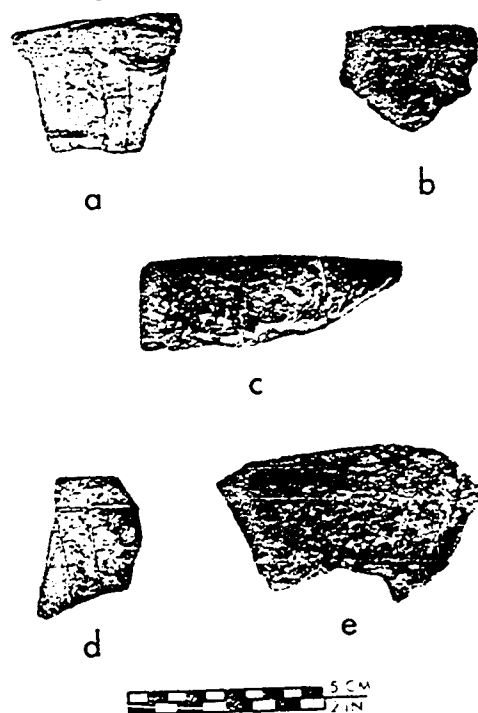


Plate 36

Aboriginal Pottery. Barton Incised. a, var.
Charlevoix. b-e, var. Davion. Provenience -
Portland. c, Y506B. d, Y501B. c, Y506C. Wright's
 Bluff. a, W325A. St. Pierre. b, Y642B.

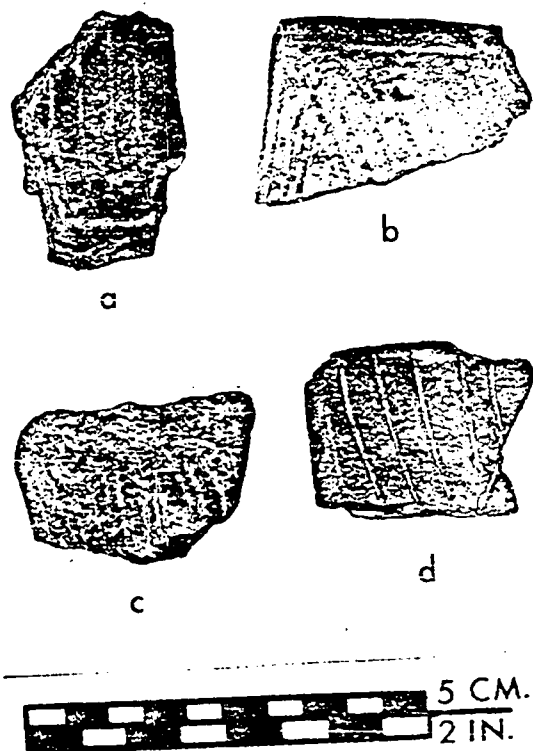


Plate 37

Aboriginal Pottery. Barton Incised. a-d, var.
Midnight. Provenience - Portland. a, Y506C2.
St. Pierre. b, W117A. c, Y550D. d, W117A.

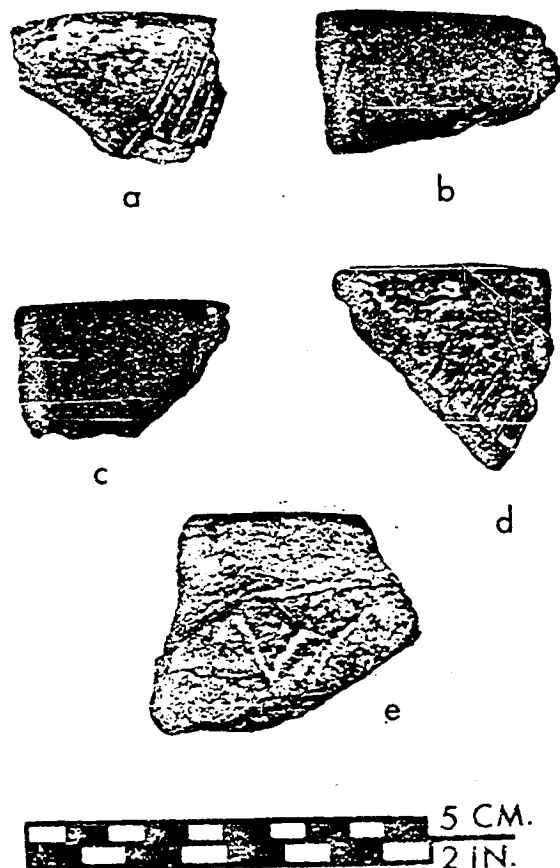


Plate 38

Aboriginal Pottery. Barton Incised. a-e, var.
Portland. Provenience - Portland. a, Y506A. d,
Y506A. St. Pierre. b, Y559A. c, Y567A. e, W87A1.

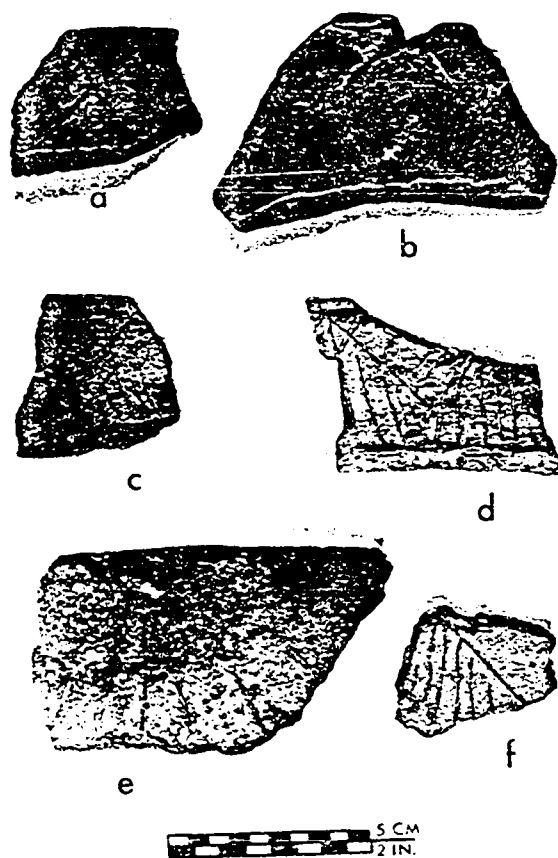


Plate 39

Aboriginal Pottery. Barton Incised. a-f, var.
Portland. Provenience - Portland. b, Y503A/Y506C3.
 c, Y502A. d, Y506C. e, Y500A. f, Y506C.

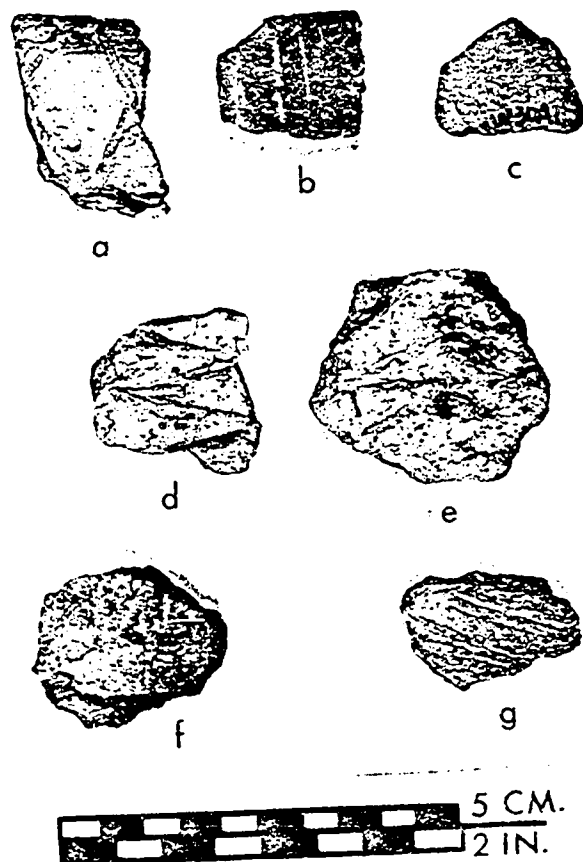


Plate 40

Aboriginal Pottery. Beldeau Incised. a, var.
 Bell Bayou. Carter Engraved. b, var. Carter.
 c, var. Mud Lake. Chevalier Stamped. d-e, var.
 Chevalier. Chickachae Combed. f, var. Unspecified.
 Churupa Punctated. g, var. Thornton. Provenience -
 St. Pierre. a, W86A. b, W102A1. c, W30A1. d, W94A.
 f, Y558-27. g, W1A. Lonely Frenchman. e, W304B.

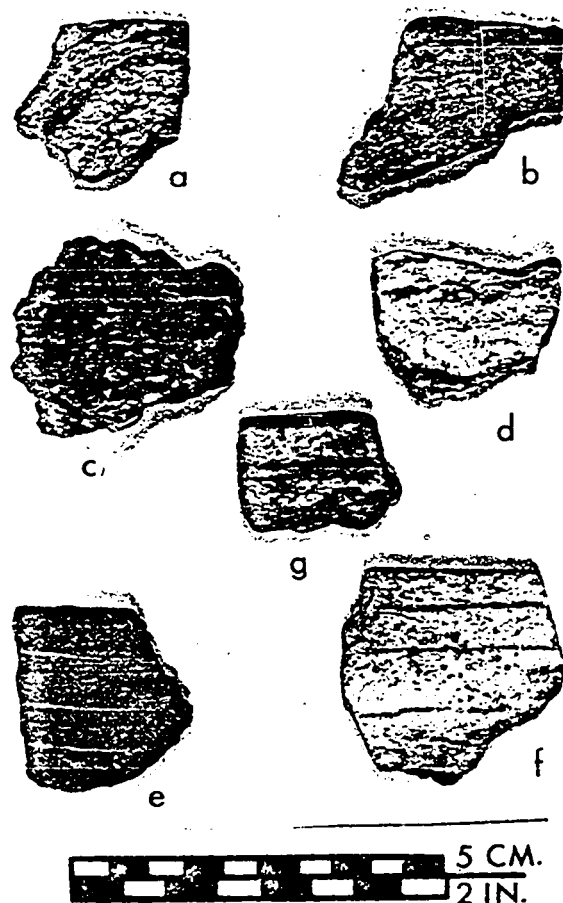


Plate 41

Aboriginal Pottery. Coleman Incised. a, var.
 Bass. Winterville Incised. b, var. Unspecified.
 Coles Creek Incised. c-d, var. Coles Creek.
 e-f, var. Blakely. g, var. Campbellsville.
 Provenience - Portland. c, Y504B. St. Pierre. a,
 Y592A. b, Y565A. d, W117A. e, Y569A. f, Y663A.
 g, Y660A.

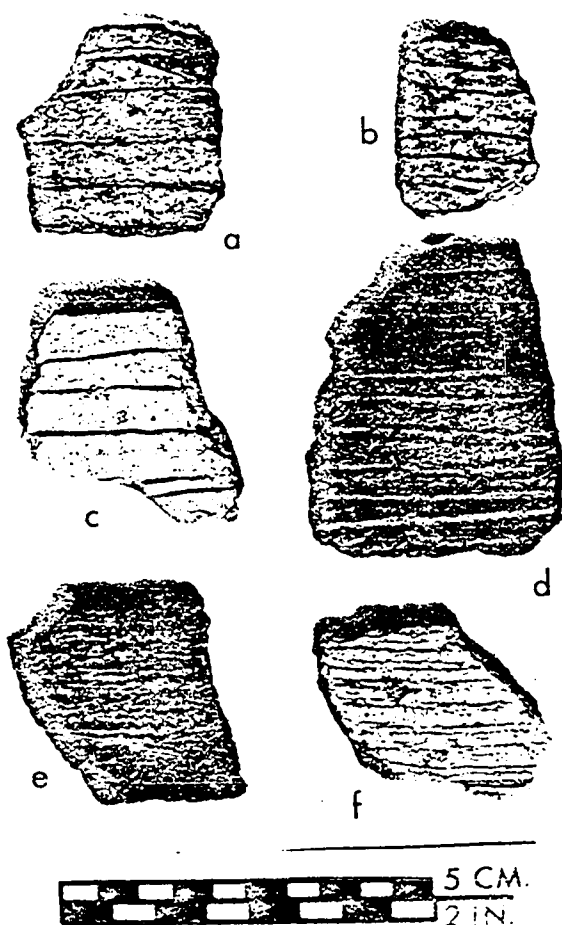


Plate 42

Aboriginal Pottery. Coles Creek Incised. a-c,
 var. Hardy. d-f, var. Mott. Provenience -
 Portland. d, Y506B. St. Pierre. a, Y576A. b,
 W51A. c, Y561A. e, W63A. f, Y578A.



Plate 43

Aboriginal Pottery. Coles Creek Incised. a-b,
 var. Stoner. c, var. Wade. d-e, var. Unspecified.
 Provenience - St. Pierre. a, Y558-31H. b, W27B.
 c, W80B. d, W15A. e, W94A.

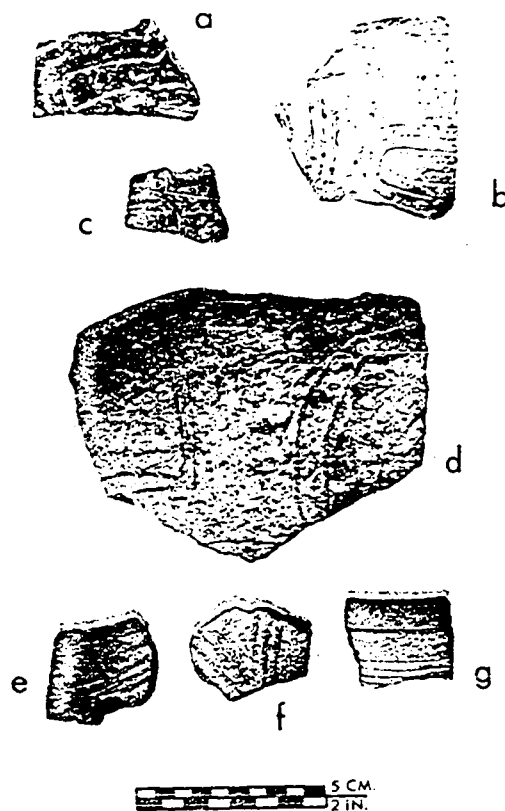


Plate 44

Aboriginal Pottery. Cracker Road Incised. a-g,
 var. Cracker Road. Provenience - Portland. b,
 Y502F.1. c, Y505A1. d, Y502F.1. Wright's Bluff.
 e, W330A. St. Pierre. a, Y640A. f, Y646A. g,
 Y604A.

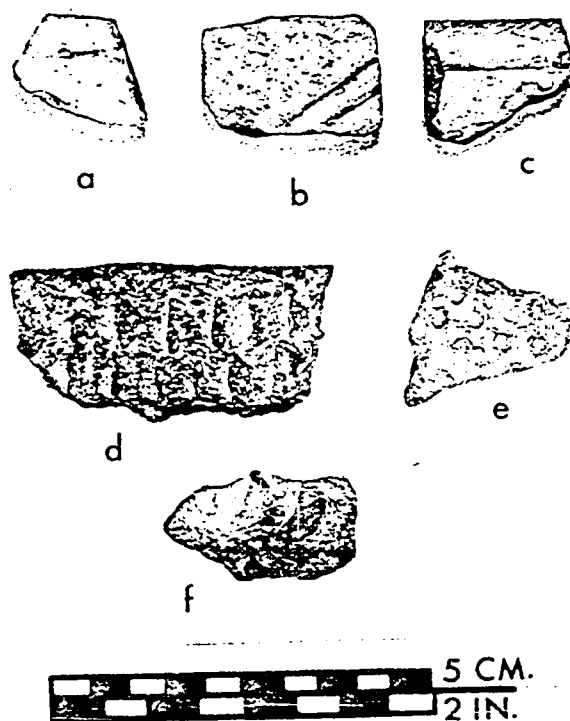


Plate 45

Aboriginal Pottery. Cracker Road Incised. a-c,
 var. Souel. Evansville Punctated. d-f, var.
Evansville. Provenience - St. Pierre. a, Y550E.
 b, W20A. c, Y576A. d, Y566A. e, W40A. f, W47A.

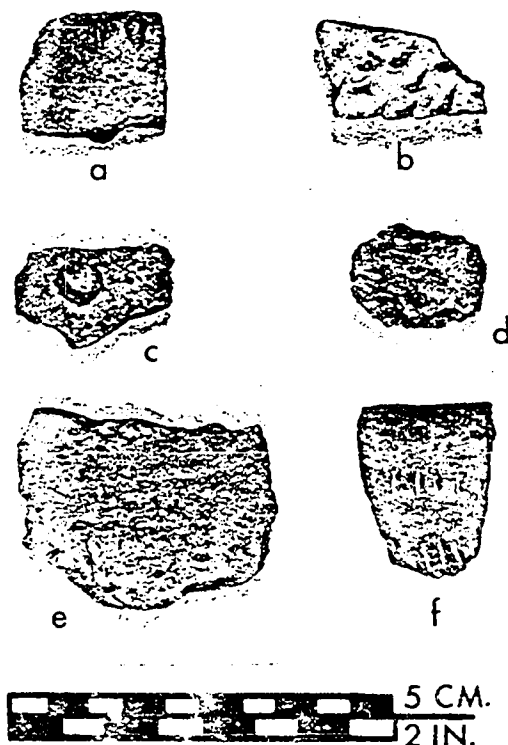


Plate 46

Aboriginal Pottery. Evansville Punctated. a-b,
 var. Braxton. c-d, var. Rhinehart. e-f, var.
Unspecified. Provenience - Lockguard. c, W360A1.
 St. Pierre. a, W80A. b, W102A1. d, W96A. e,
 W54A1. f, W85A.

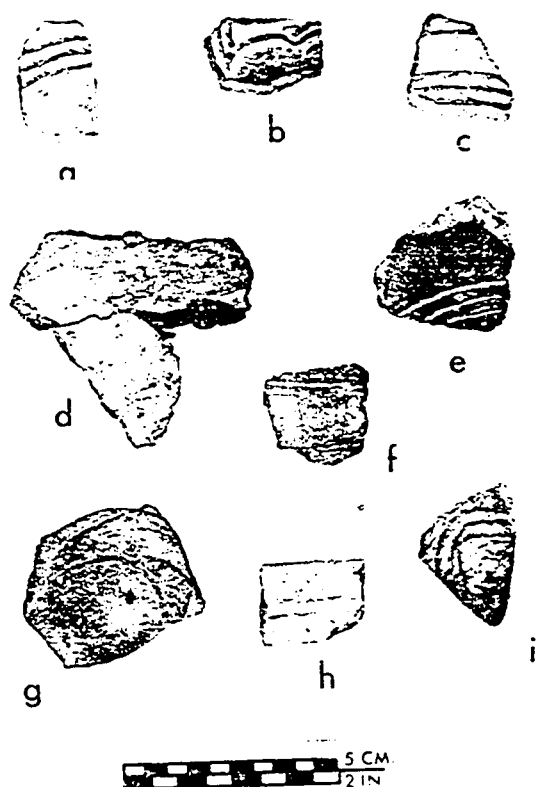


Plate 47

Aboriginal Pottery. Fatherland Incised. a-i,
 var. Fatherland. Provenience - Portland. a,
 Y500A. b, Y506A. c, Y505C2. St. Pierre. d, T11B.
 e, W97A. f, Y642A. g, W41A. h, Y579A. i, Y601A.

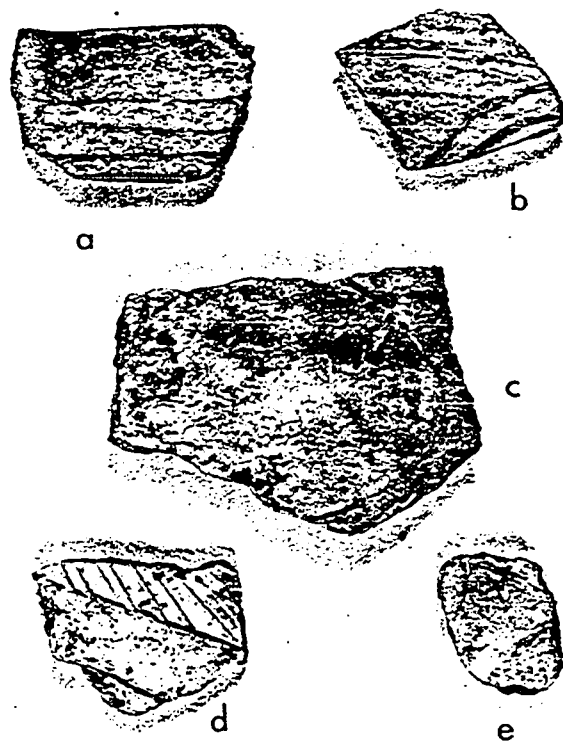


Plate 48

Aboriginal Pottery. Fatherland Incised. a, var. Snyders Bluff. b-c, var. Unspecified. French Fork Incised. d-e, var. McNutt. Provenience - Portland. b, Y506B. St. Pierre. a, Y550E. c, W13A. d, W86A. e, W64A1.

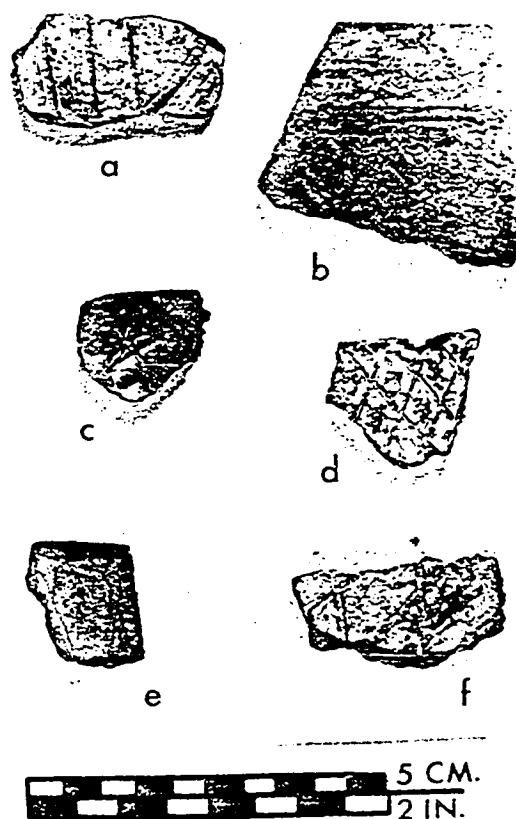


Plate 49

Aboriginal Pottery. Grace Brushed. a, var. Grace. b, var. Warren. Harrison Bayou Incised. c-f, var. Harrison Bayou. Provenience - Portland. a, Y506B. b, Y506C1. St. Pierre. c, W41A. d, W19A1. e, Y566A. f, W11A.

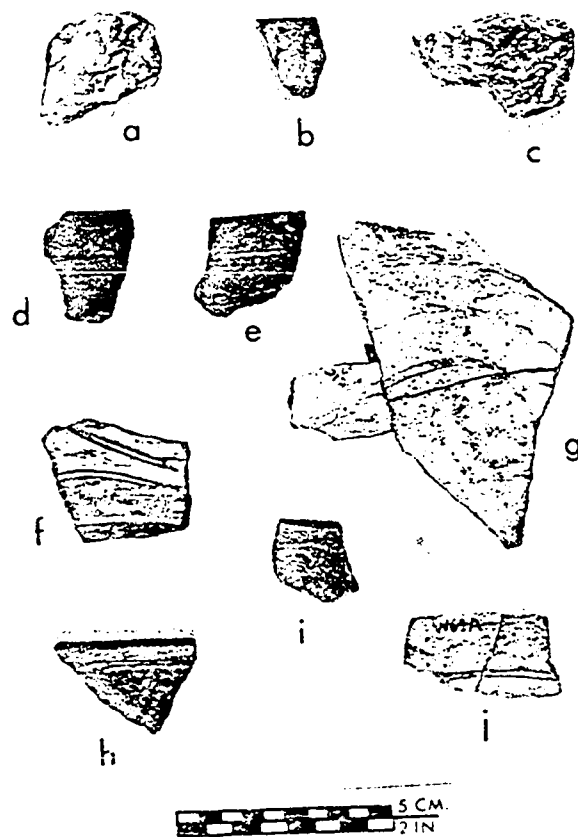


Plate 50

Aboriginal Pottery. Hollyknowe Ridge Pinched.
 a-c, var. Patmos. Leland Incised. d-e, var.
Leland. f-j, var. Blanchard. Provenience -
 Portland. g, Y506C/Y506C1. h, Y500A. i, Y501B.
 St. Pierre. a, W108A. b, Y571B. d, Y558-76. e,
 Y600A. f, Y558-3. j, W60A1/W64A. Lonely
 Frenchman. c, W301F.

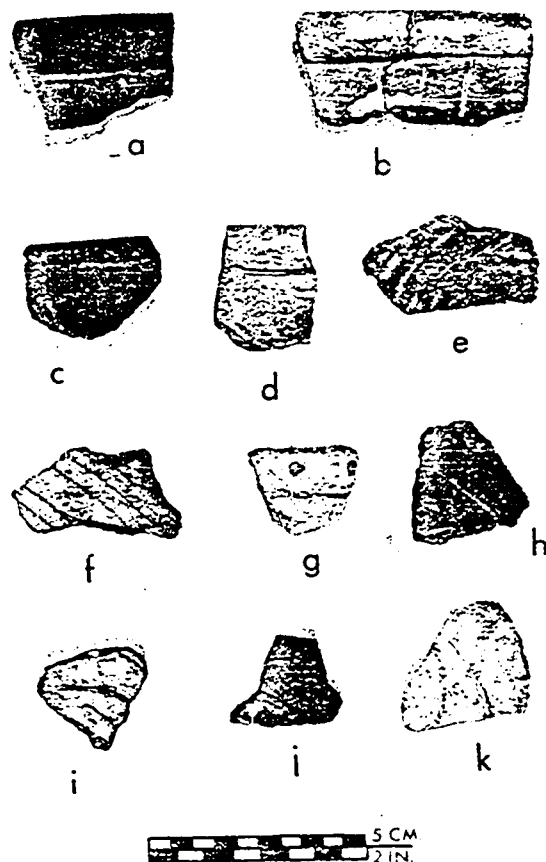


Plate 51

Aboriginal Pottery. Leland Incised. a-d, var. Bovina. e, var. Foster. f-k, var. Russell.
 Provenience - Portland. a, Y502A. b, Y500AF.1/
 Y501B. c, Y501A. d, Y502AF.1. k, Y501B. St.
 Pierre. e, W86A. f, W76A. g, Y558-9 (Y550F1).
 h, Y558-20. i, W35A. j, Y577A.

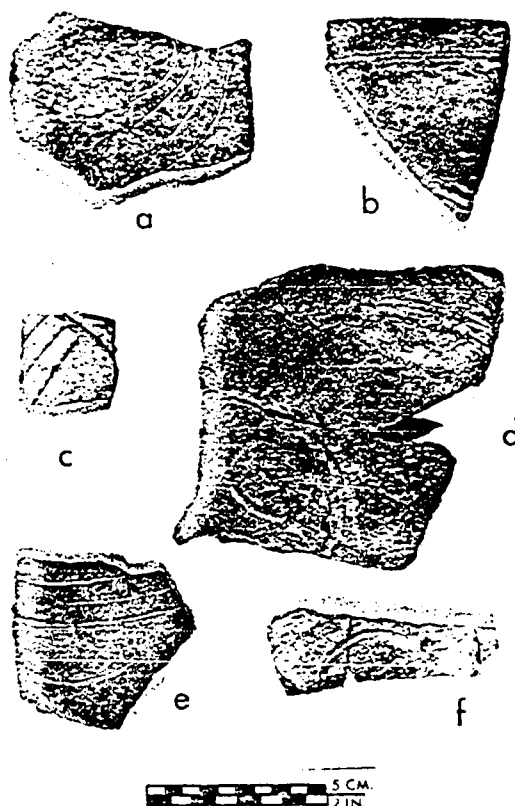


Plate 52

Aboriginal Pottery. Leland Incised. a-f, var. Williams. Provenience - Portland. b, Y506C2. c, Y506C2. d, Y506C2/Y506C3. St. Pierre. a, Y558-4. e, Y577A. f, Y578A/Y579A.

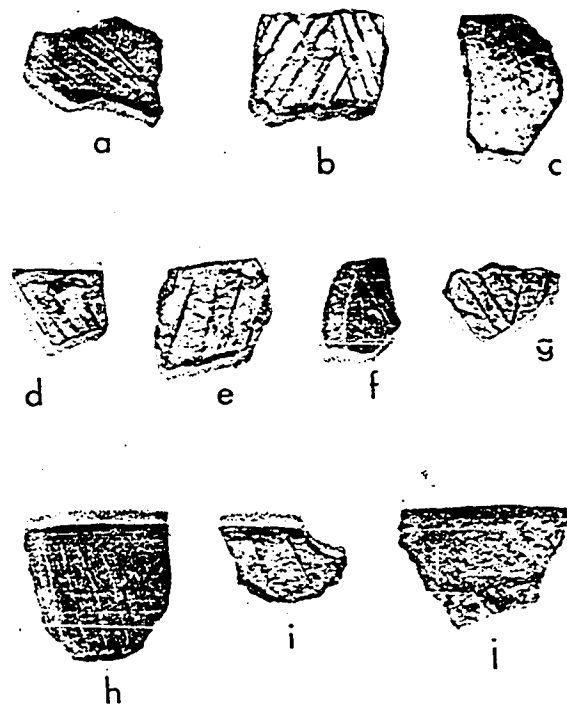


Plate 53

Aboriginal Pottery. Mazique Incised. a-d, var. Kings Point. e-j, var. Manchac. Provenience - St. Pierre. a, W115A. b, Y558-9(Y550F1). c, Y910. d, Y561A. e, W43A. f, W23A. g, Y647B. h, Y647B. i, T9D. j, Y558-9A.

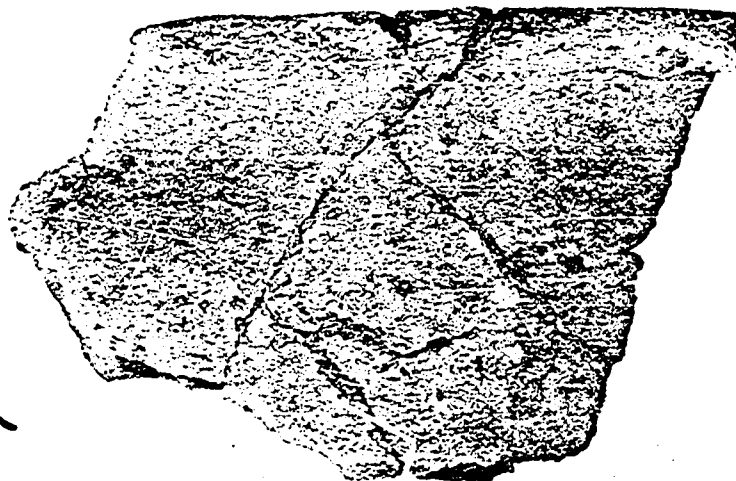


Plate 54

Aboriginal Pottery. Mississippi Plain, var.
Yazoo. Provenience - St. Pierre. Y558-3A.

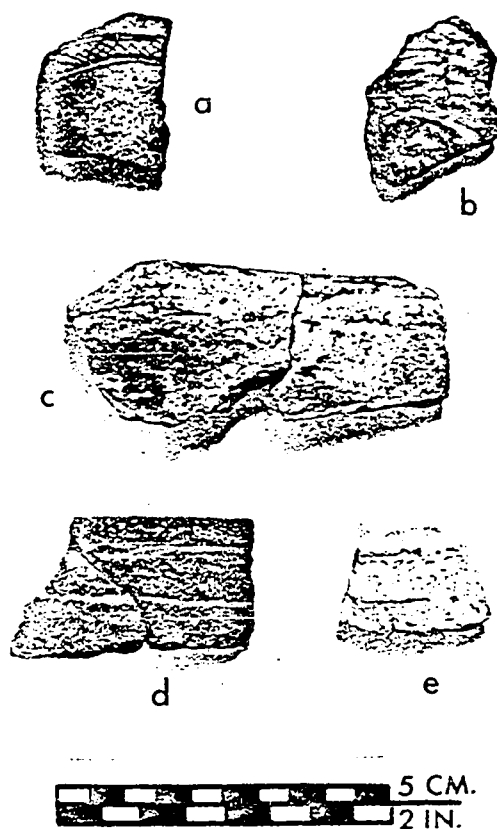


Plate 55

Aboriginal Pottery. Maddox Engraved. a, var. Silver City. Marksville Stamped. b, var. Troyville. Mound Place Incised. c-e, var. Mound Place. Provenience - St. Pierre. a, Y646A. b, Y575A. c, W92A/W94A. d, W115A. e, Y558-9(Y578).

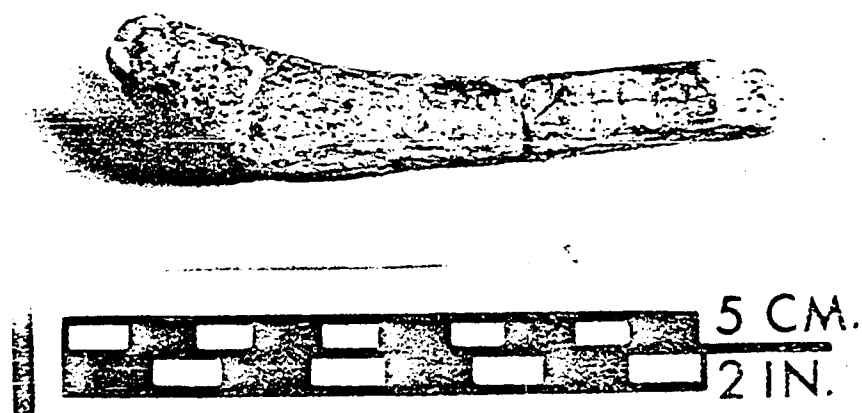


Plate 56

Aboriginal Pottery. Mound Place Incised, var.
Mound Place. Close-up of Plate 55c.

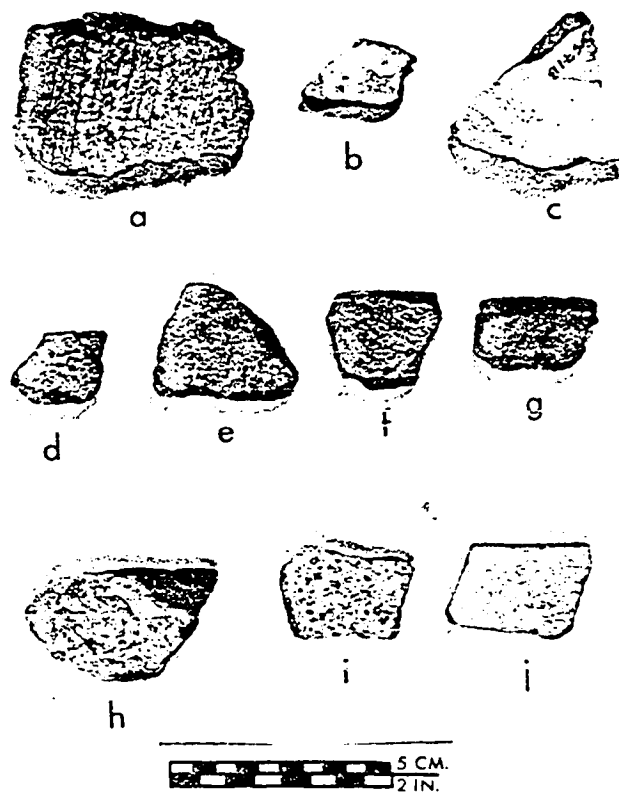


Plate 57

Aboriginal Pottery. Mulberry Creek Cord Marked.
 a, var. Edwards. Modena Red and White. b-c, var. Poisson. Old Town Red. d-g, var. Ballground.
 h-i, var. St. Pierre. Provenience - Portland.
 g, Y505A1. St. Pierre. a, Y646B. b, Y579A. c,
 Y571B. d, W43A. e, Y642A. f, Y642A. h, Y579A.
 i, Y558-9A. j, Y575A.



Plate 58

Aboriginal Pottery. Owens Punctated. a, var. Menard. b, var. Poor Joe. c, var. Unspecified. Provenience - Wright's Bluff. a, W335D4. St. Pierre. b, Y558-13. c, Y575A.

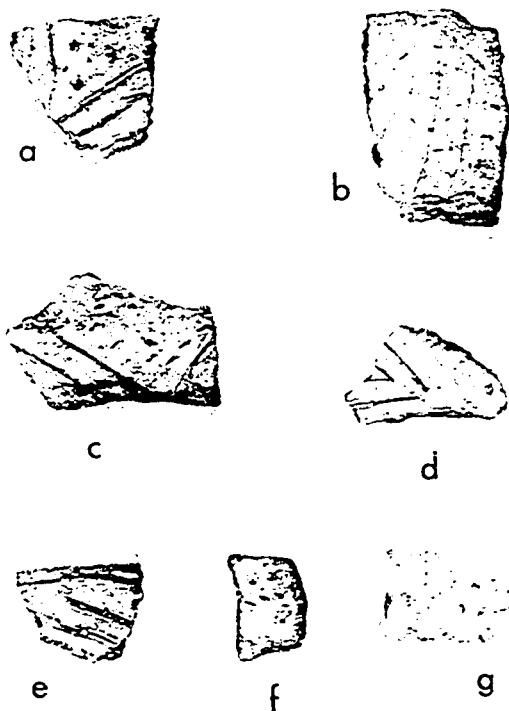


Plate 59

Aboriginal Pottery. Owens Punctated. a-e, var.
Widow Creek. Parkin Punctated. f-g, var.
Hollandale. Provenience - Portland. a, Y506C3.
d, Y505D1. e, Y500A. St. Pierre. b, Y577A. c,
Y571B. Lonely Frenchman. g, Y924A.

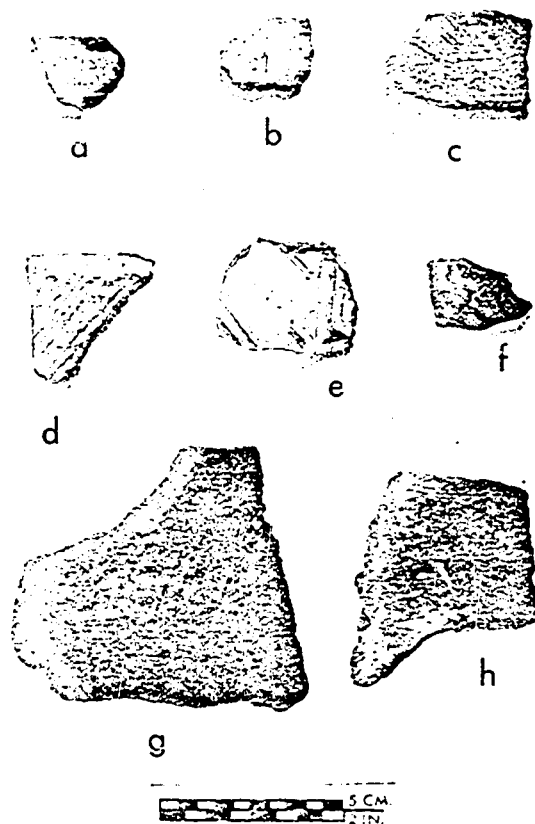


Plate 60

Aboriginal Pottery. Plaquemine Brushed. a-e,
var. Plaquemine. Pouncey Ridge Pinched. f,
var. Patosi. Wallace Incised. g-h, var. Wallace.
 Provenience - Portland. a, Y506C3. c, Y500A.
 St. Pierre. b, Y558-31F. e, Y558-31D. f, Y550A2.
 g, Y558-10. h, Y662A. Lonely Frenchman. d, W301G.

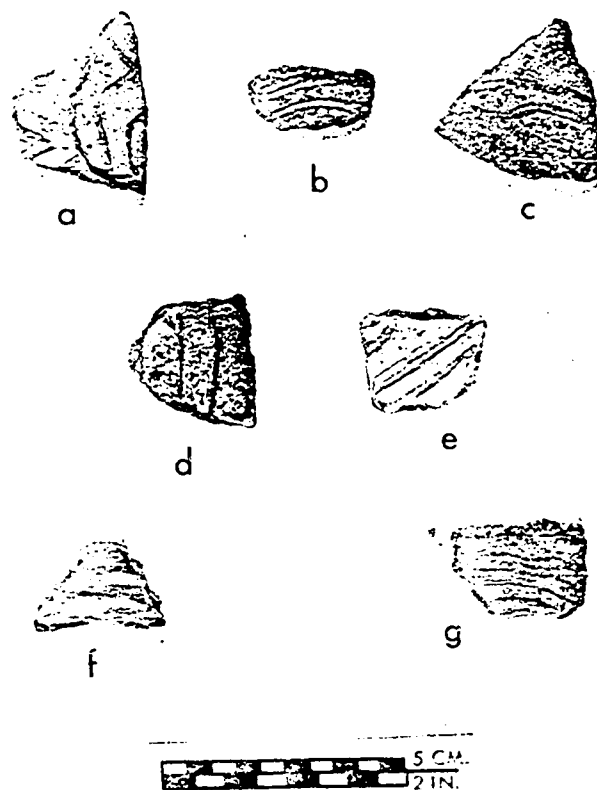


Plate 61

Aboriginal Pottery. Winterville Incised. a-d,
 var. Winterville. e-g, var. Belzoni. Provenience -
 Portland. a, Y505A2. b, Y502AF.1. f, Y506A. St.
 Pierre. b, Y578A. c, T12E. e, W107A. g, Y558-9A.

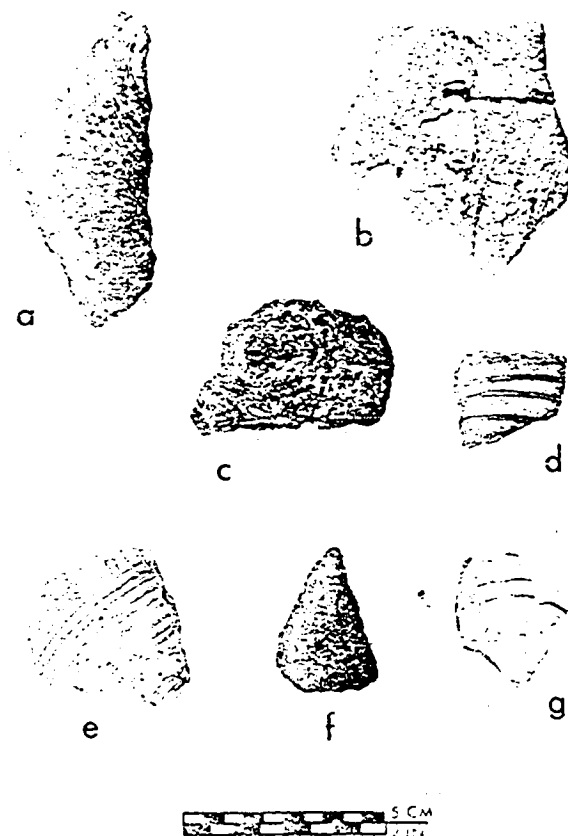
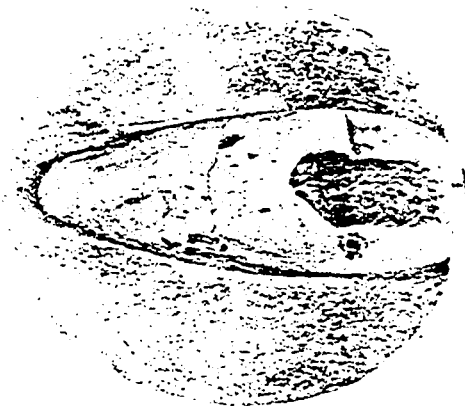


Plate 62

Aboriginal Pottery. Winterville Incised. a-g,
 var. Tunica. Provenience - Portland. a, Y506B.
 c, Y506C2. f, Y506C. g, Y506C2. St. Pierre. d,
 Y558-31B. e, Y558-31D. Lonely Frenchman. b,
 W301F.



a



b



plate 63

Aboriginal Pipe. a, Side View. b, Bottom View.
Provenience - Portland. Y502AF.1.

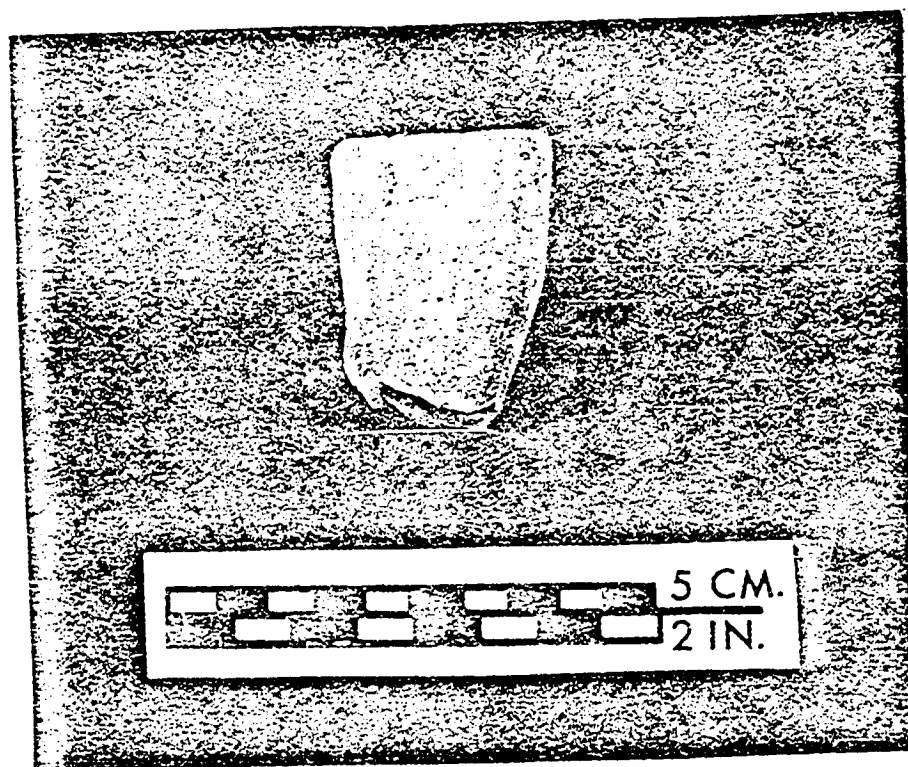


Plate 64

Aboriginal Pipe. Provenience - St. Pierre.
Y558-31A.

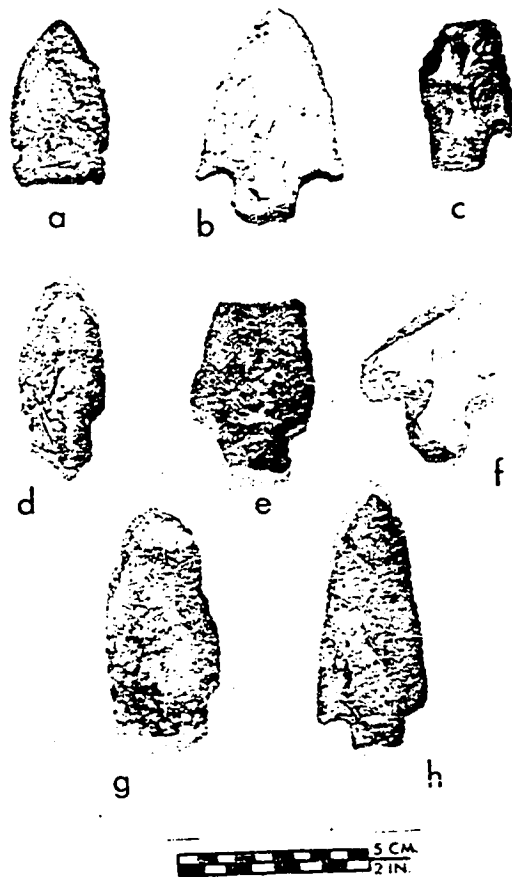


Plate 65

Projectile Points. a, Knight Island. b-e, Unclassified. f, Broad Gary Stemmed. g-h, Provisional Type 1. Provenience - Wright's Bluff. h, W335A. Lockguard. g, W365A. St. Pierre. a, W95A. b, W76A. c, W6A. d, T3F. e, W13A. f, W27A.

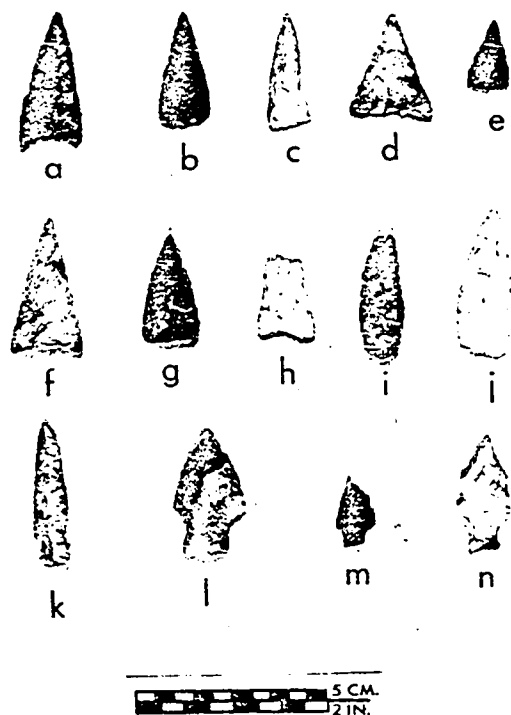


Plate 66

Projectile Points. a-h, Madison. i, Nodena. j, Gunterville. k, Unclassified. Collins. l and n, var. Claiborne. m, Glass Point. Provenience - Portland. a, Y505C2. b, Y502AF.1. c, Y506B. e, Y506B. Wrights Bluff. g, W336A. Lockguard. h, W368A. St. Pierre. f, W80A. i, Y558-31D. j, W21A. k, T15F. l, W21A. m, W11A. n, T1H1.

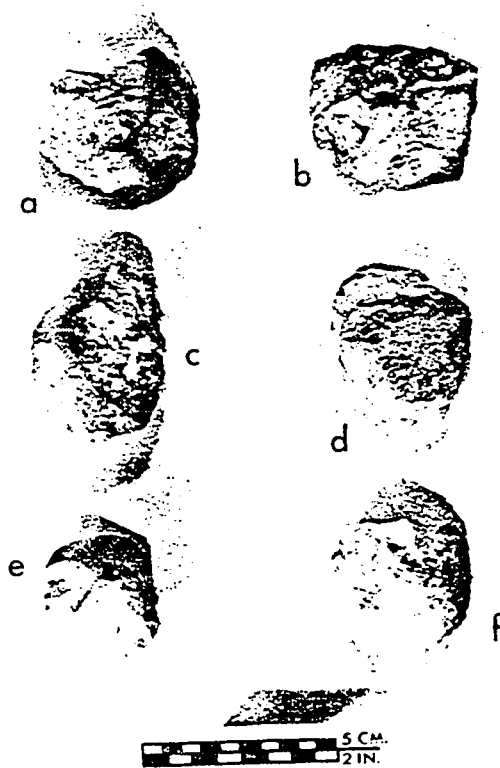


Plate 67

Discoidal Scrapers. Provenience - Anglo. f,
W428. St. Pierre. a, Y550J1. b, T12F. c, W48A.
d, W59A1. e, W119A.



Plate 68

Discoidal Scraper. Close-up on Working Edge of
Plate 67d.

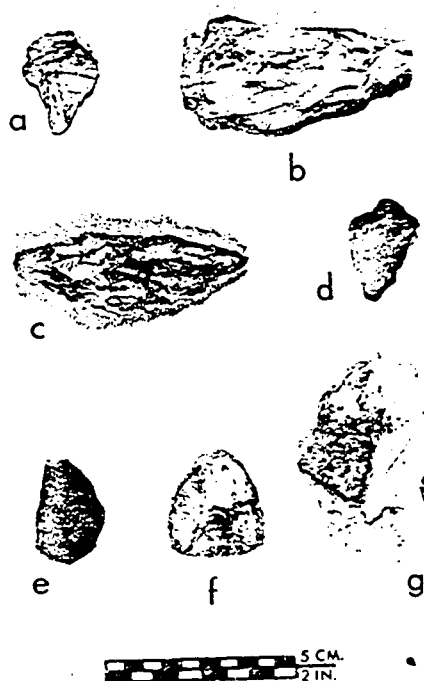


Plate 69

Miscellaneous Lithics. a, Side Scraper. b-c, Hafted Side Scrapers. d-e, Double Side Scrapers. f-g, Hafted End Scrapers. Provenience - Lockguard. f, W375A. St. Pierre. a, T15D. b, W27A. c, W40A. d, W1A. e, W71A1. g, W79A.



Plate 70

Hafted End Scraper. Close-up on Working Edge of
Plate 69d.

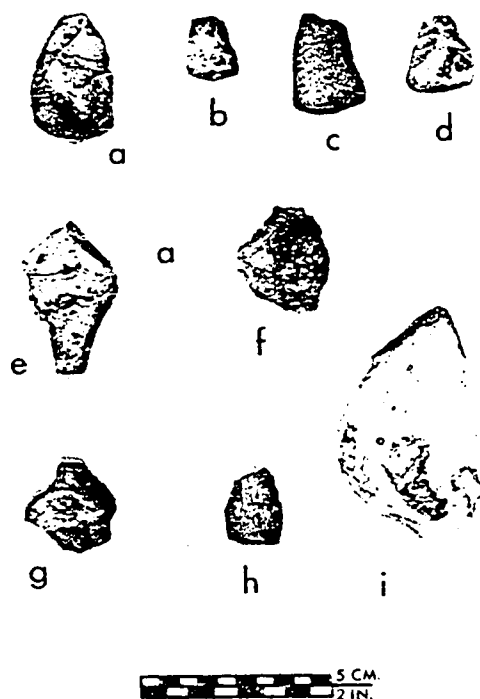


Plate 71

Miscellaneous Lithics. a-d, Hafted End Scrapers. e-g, Side-End Scrapers. h-i, Hafted Side-End Scrapers. Provenience - Portland. a, Y506A. b, Y506B. c, Y506B. d, Y506C3. h, Y506C3. Wright's Blugg. g, W335B. Lockguard. i, W369A. St. Pierre. e, Y571C. f, W42A.

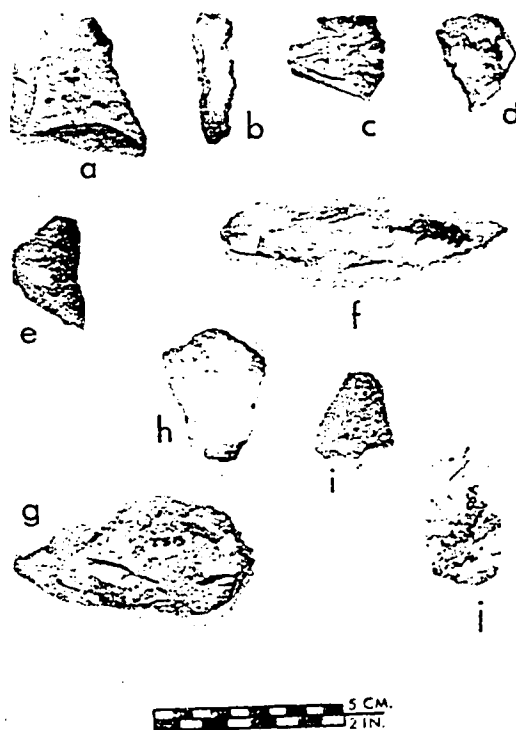


Plate 72

Miscellaneous Lithics. a-b, Double Side-End Scrapers. c, End Scraper-Borer. d-e, Double Side Scraper-Borers. f, Hafted Double Side Scraper-Borer. g, Hafted Side Scraper-Knife-Borer. h, Side Scraper-Spokeshave. i, Double Side Scraper-Spokeshave. j, Hafted Side Scraper-Knife-Spokeshave. Provenience - Wright's Bluff. e, W335A. Anglo. h, W406. Lockguard. j, W355A. St. Pierre. a, T3B. b, Y661A. c, W53A. d, W55A. f, W43A. g, T5B. i, W62A1.

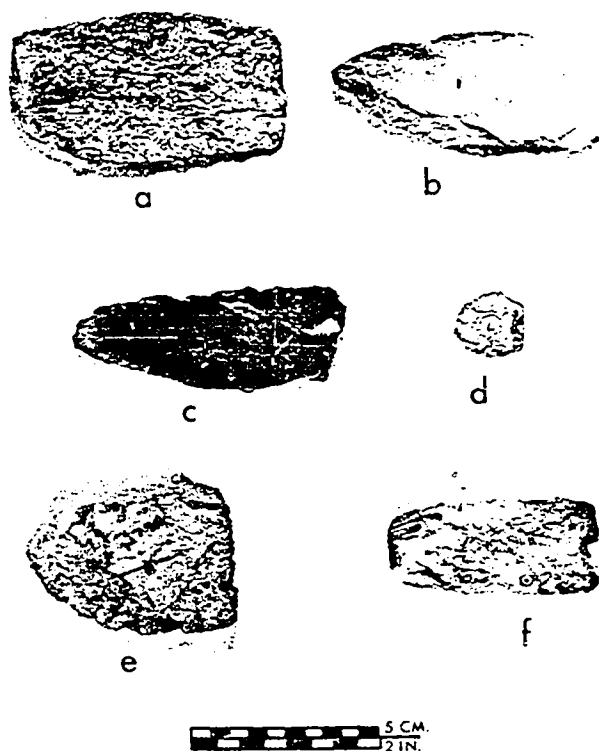


Plate 73

Miscellaneous Lithics. a, Knife. b-f, Hafted Knives. Provenience - Portland. d, Y506B. St. Pierre. a, Y908. b, Y662A. c, Y571A1. e, W79A. f, W27A.

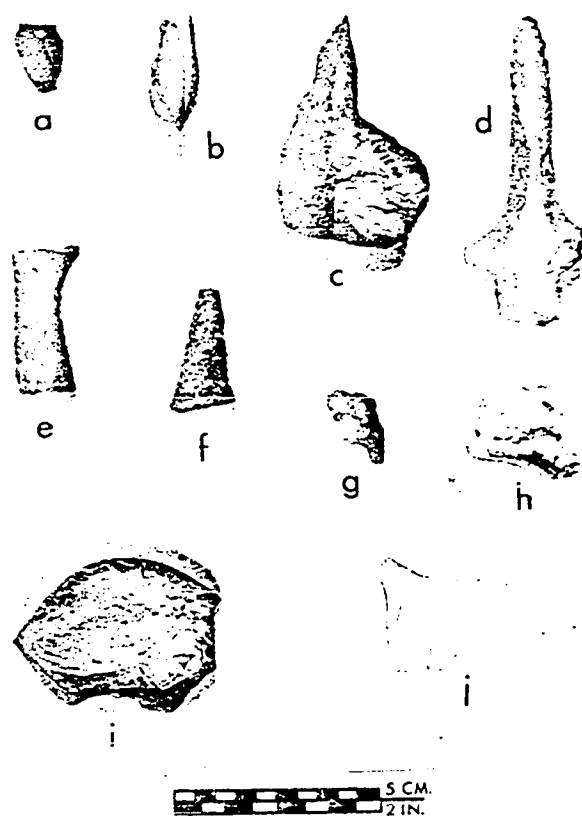


Plate 74

Miscellaneous Lithics. a-b, Burins. c-f, Drills. g-i, Spokeshaves. j, Engraver. Provenience - Portland. f, Y506C2. Wright's Bluff. i, W335A. Anglo. j, W410. St. Pierre. a, Y601A. b, W74B. c, W31A. d, T12H. e, Y579A. g, W54A1. h, W32A.

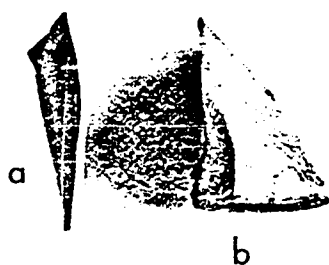


Plate 75

Burins. Close-up on Working Edge of Plate 74a-b.



Plate 76

Miscellaneous Lithics. a-b, Adzes. c, Hoe. d-e,
 Celts. f, Chopper. Provenience - Anglo. b,
 W409. St. Pierre. a, T15A. c, W39A. d, W54A1.
 e, W17A1. f, Y568A.

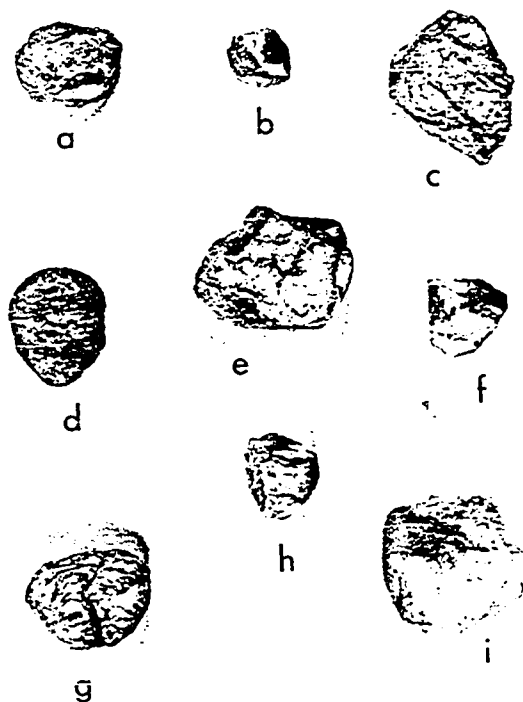


Plate 77

Hammerstones. a-i, Category 1. Provenience -
Portland. e, Y501B. St. Pierre. a, W72A. b,
Y663A. c, W97A. d, Y647B. f, Y561A. g, Y577A.
h, Y565A. i, W98A.

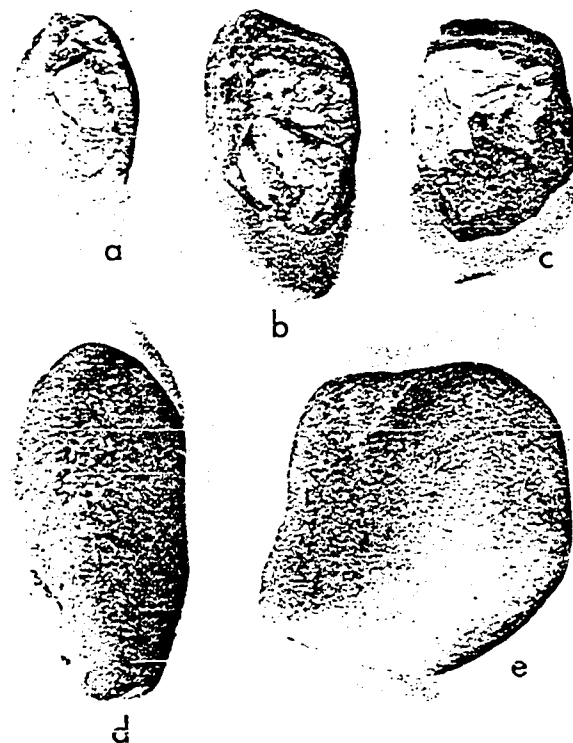


Plate 78

Hammerstones. a-c, Category 2. d-e, Category 3. Provenience - Wright's Bluff. e, W325A. St. Pierre. a, W42A. b, W8A. c, T11B. d, W107A.

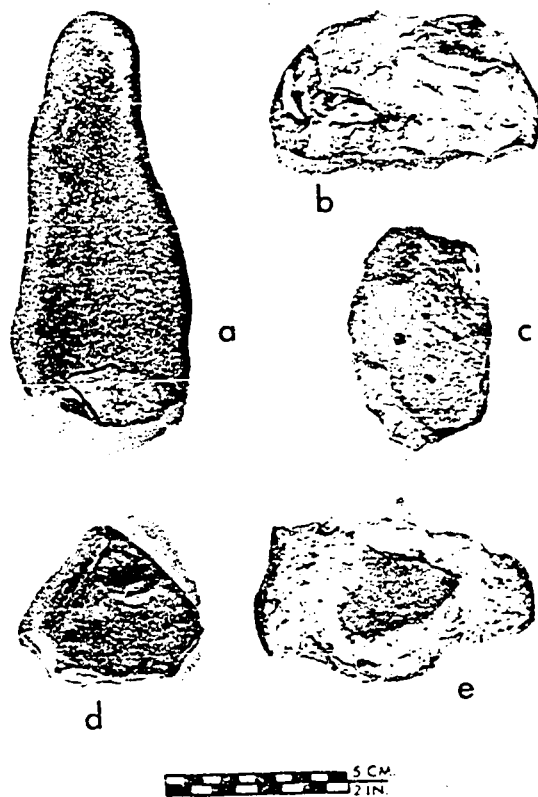


Plate 79

Crude Bifaces. Provenience - St. Pierre. a,
Y662A. b, W48A. c, Y558-31A. d, Y644A. e, Y578A.

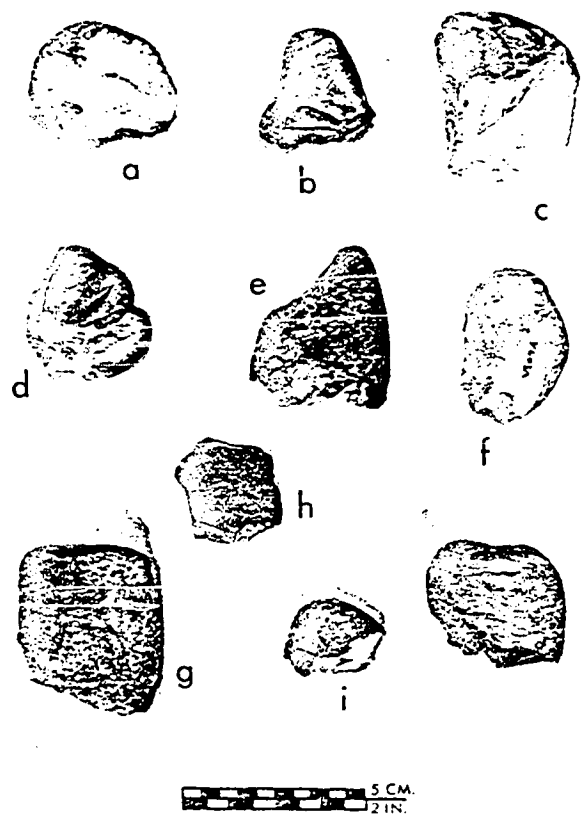


Plate 80

Crude Bifaces. Provenience - Lockguard. j, W359A. St. Pierre. a, W52B. b, W70A. c, W98A. d, W35A. e, Y643B. f, Y603A. g, W60A1. h, Y911. i, Y602A.

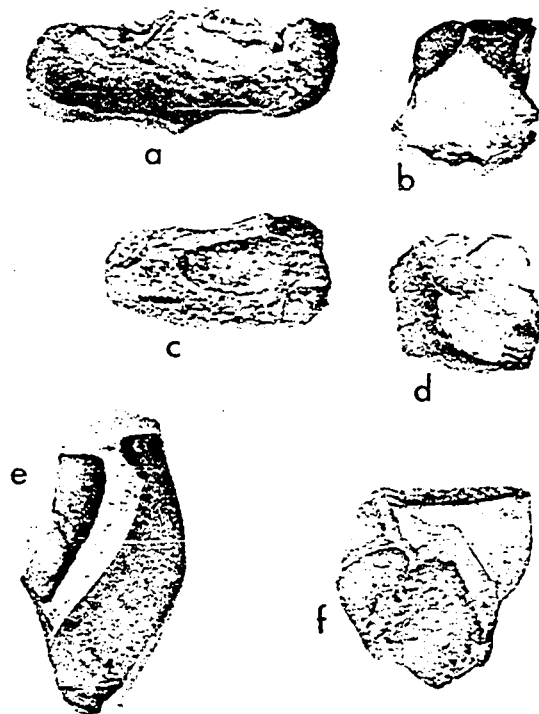


Plate 81

Cores. Provenience - Lockguard. e, W363B. St.
Pierre. a, T8H. b, Y558-7. c, Y672A. d, Y578A.
f, W106A.



Plate 82

Glass Projectile Point. Close-up of Plate
66m (length is 1.7 cm).

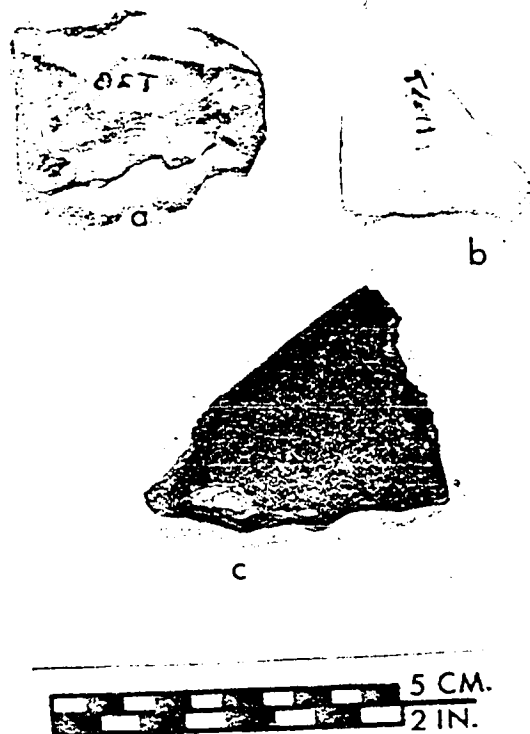


Plate 83

Glass Tools. a, Spokeshave. b-c, Scrapers.
Provenience. St. Pierre. a, T2B. b, T6A. c,
W5A.

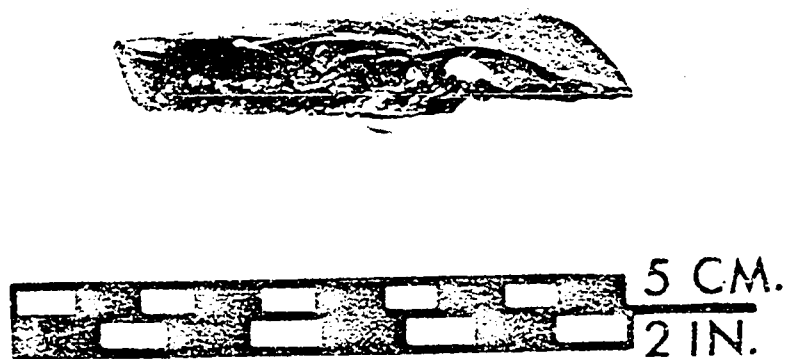


Plate 84

Glass Scraper. Close-up on Working Edge of
Plate 83c.

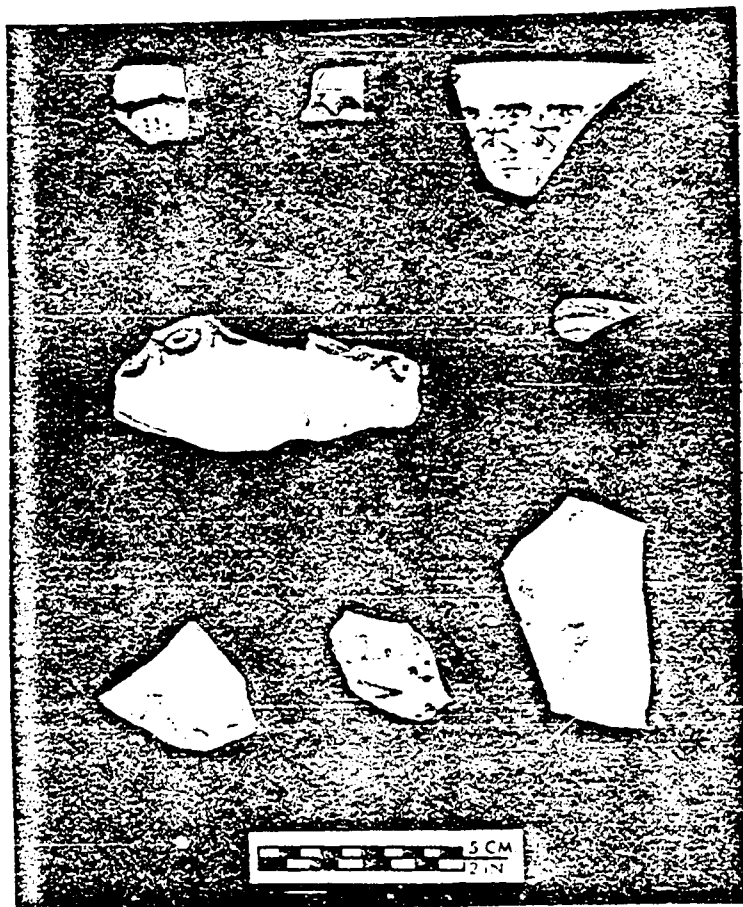


Plate 85

Tin-Enamelled Earthenware (Faience). Class A.
 a-f, Type 2. g-h, Type 1. Provenience - St.
 Pierre. a, W79A. b, Y640A. c, W7A. d, W1A. e,
 W80A. f, Y600A. g, T4D. h, Y558-31E.

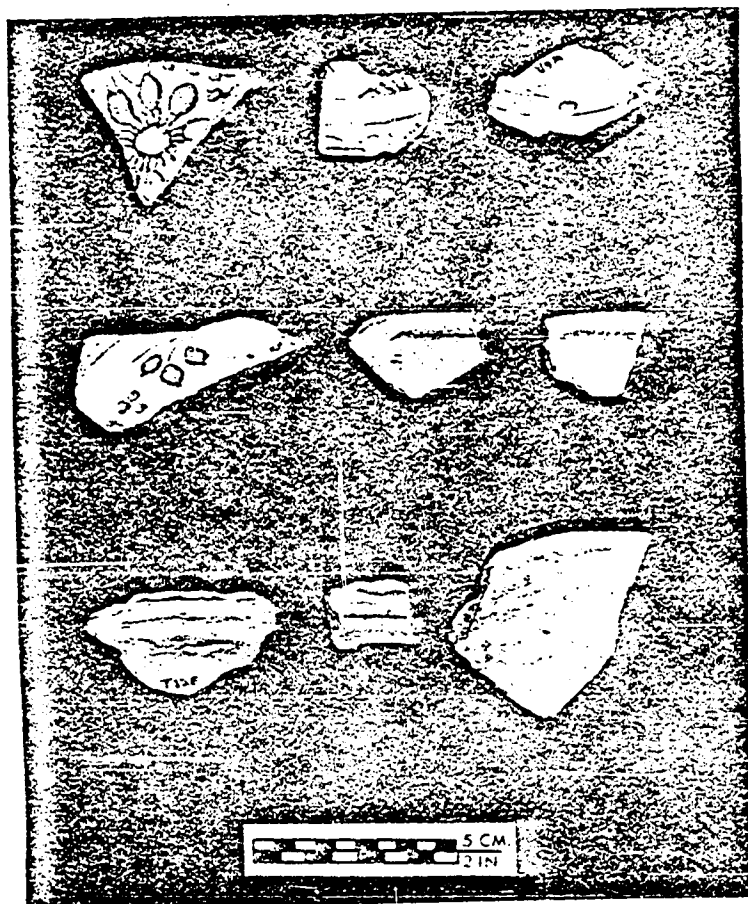


Plate 86

Tin-Enameled Earthenware (Faience). Class B.
 a-d, Type 1. Lead-Glazed Earthenware. Class A.
 e-i, Type 2. Provenience - St. Pierre. a, W18A.
 b, Y912. c, W6A. d, W66A1. e, W117A. f, T12E.
 g, T12F. h, W61A. i, W86A.

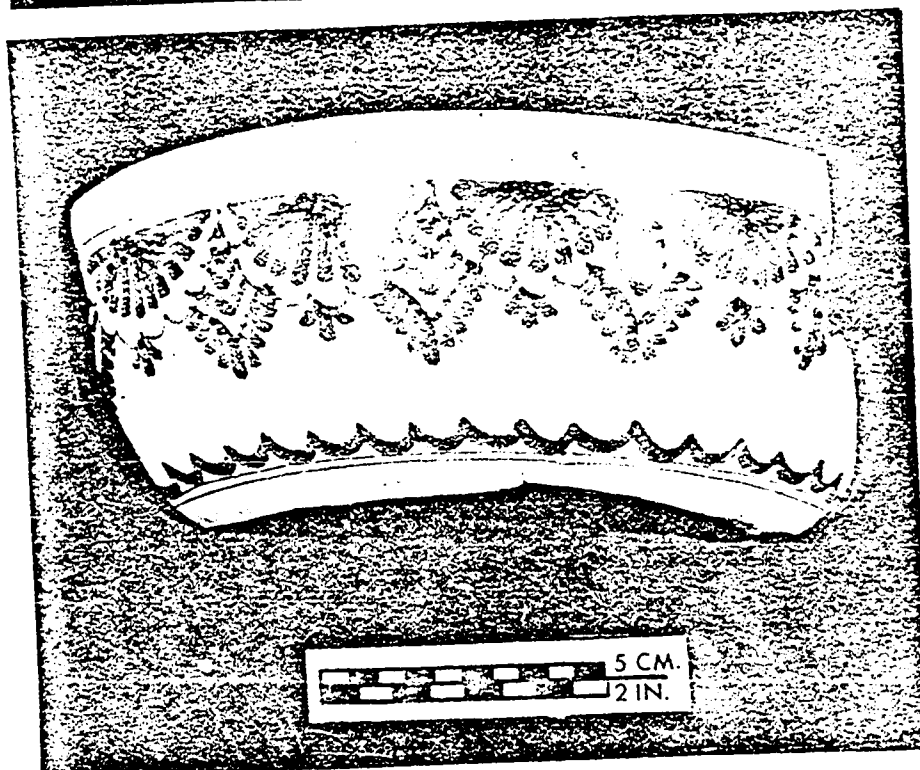
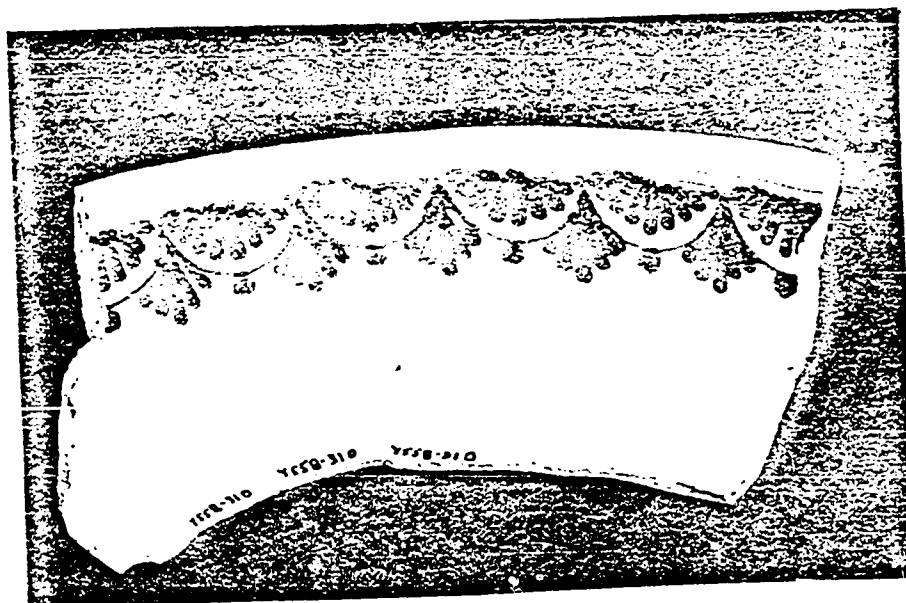


Plate 87

Tin-Enamelled Earthenware (Faience) Bowl. Class A, Type 2. a, Interior. b, Exterior. Provenience - St. Pierre. Y558-31D.

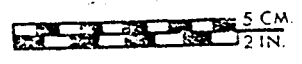
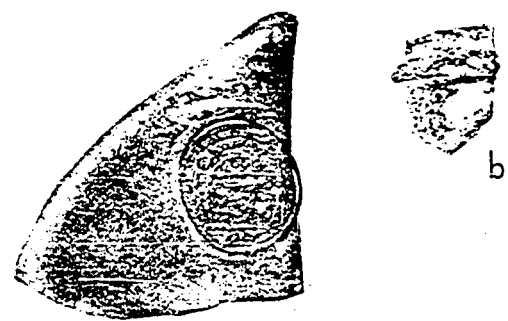


Plate 88

Wine Bottles. Provenience - Lockguard. b, W370A. St. Pierre. a, Y558-31C. c, W1A/W6A/W18A/W66A1.

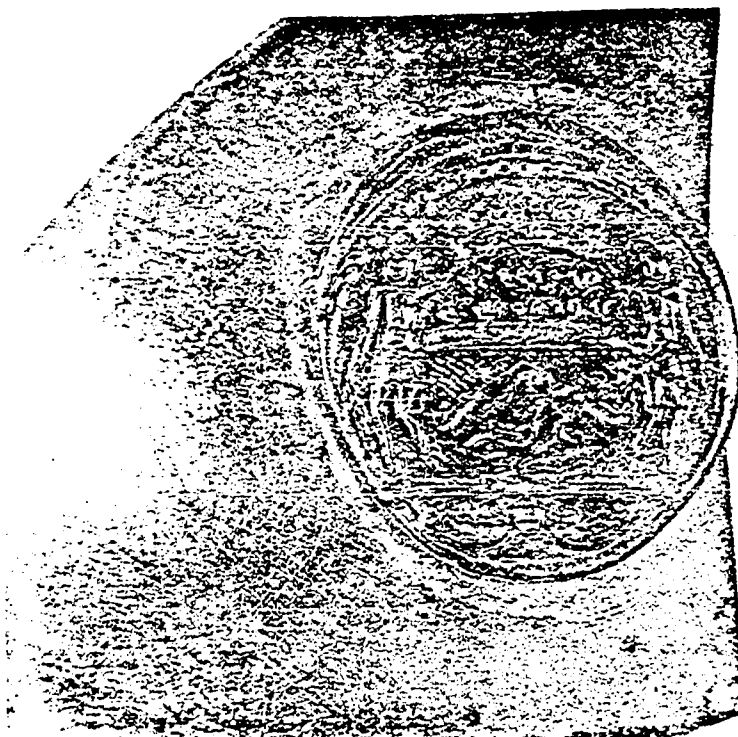


Plate 89

Wine Bottle Seal. Close-up of Plate 88a.

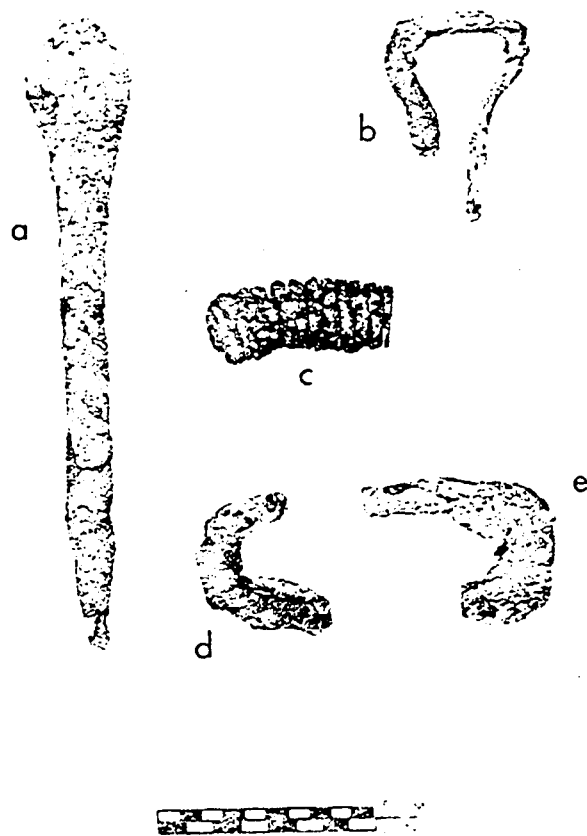


Plate 90

Miscellaneous Iron Objects. a, Spoon. b, Jew's Harp. c, Spring. d-e, Fire-Steels. Provenience - St. Pierre. a, Y641A. b, Y641A. c, Y558-31D. d, Y646A. e, W77A.

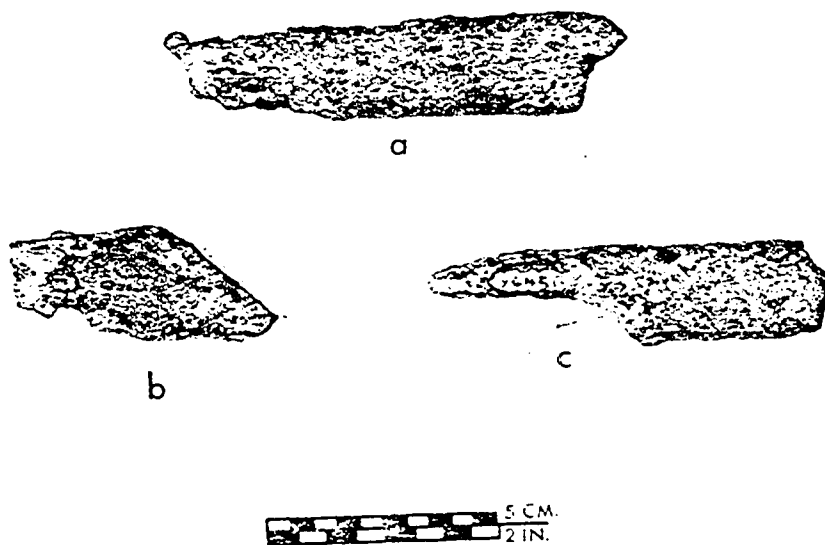


Plate 91

Knives. a-b, "Hawk-billed" Shape Clasp Knives.
c, Case Knife. Provenience - St. Pierre. a,
Y558-9A. b, T8G. c, Y645A.

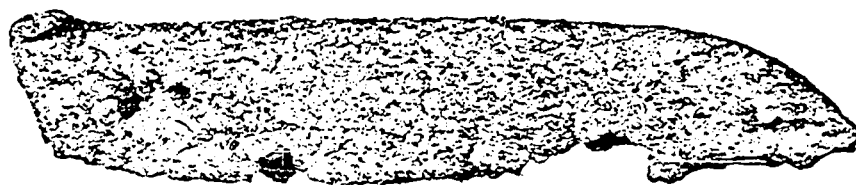


Plate 92

Knife. "Hawk-billed" Shape Clasp Knife.
Provenience - Wright's Bluff.

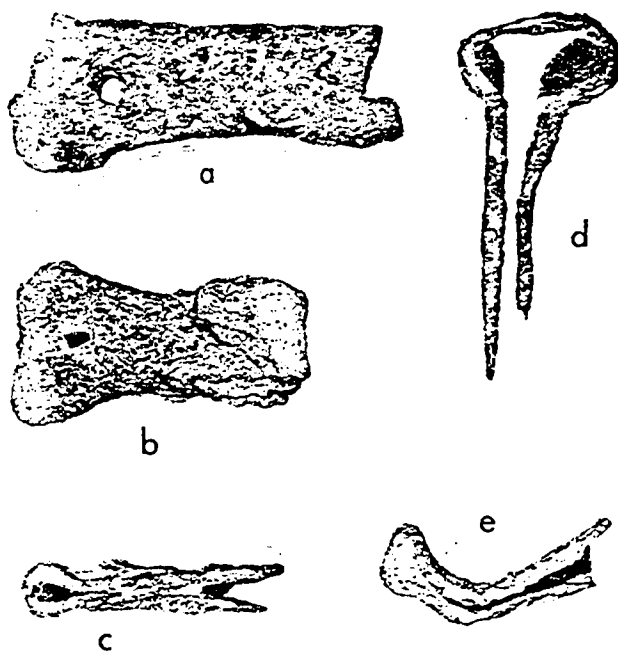


Plate 93

Hinges. Provenience - St. Pierre. a, W43A.
b, W80B. c, Y662A. d, Y558-31A. e, T7A.

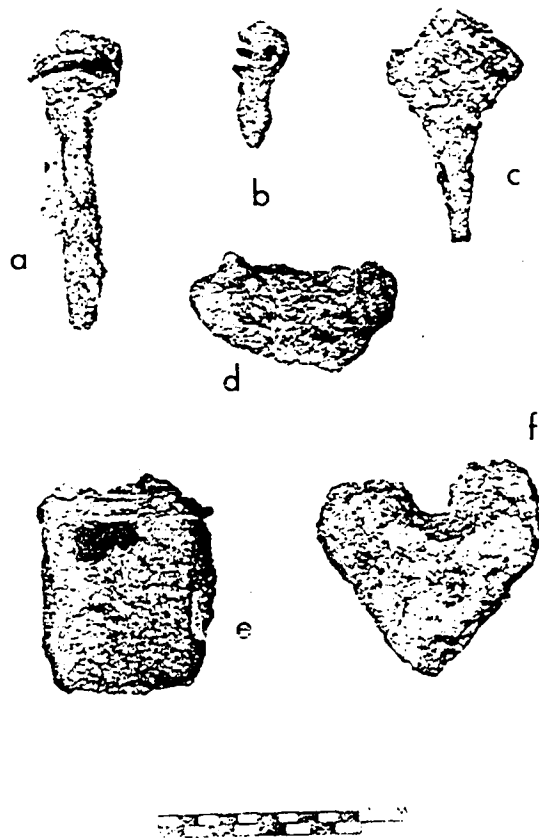


Plate 94

Miscellaneous Iron Objects. a-c, Keys. d, Hasp Lock. e-f, Locks. Provenience. St. Pierre. a, Y558-9A. b, W20A. c, Y558-31D. d, W71B1. e, W18A. f, Y950.

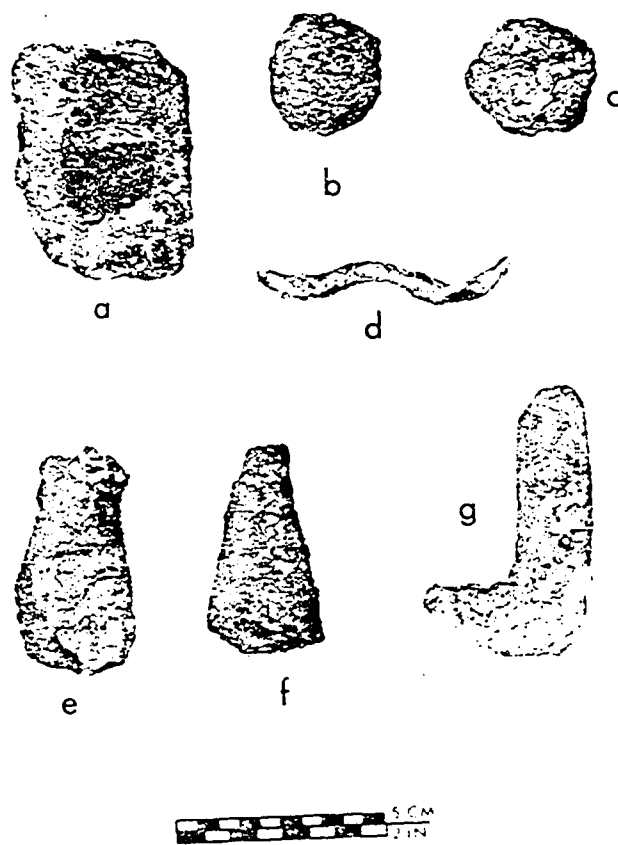


Plate 95

Miscellaneous Iron Objects. a, Hasp Keeper
 Element. b-c, Cannister Shot. d-g, Unclassified
 Objects. Provenience - St. Pierre. a, Y558-31D.
 b, W72A. c, W76B. d, W119A. e, T11B. f, Y647B.
 g, W44A.



Plate 96

Miscellaneous Iron Objects. a-d, Handles. e-f, Iron Rings. g, Hook. Provenience - St. Pierre. a, W29A. b, Y603A. c, W117A. d, Y558-9A. e, W28B. f, Y646B. g, W43A.

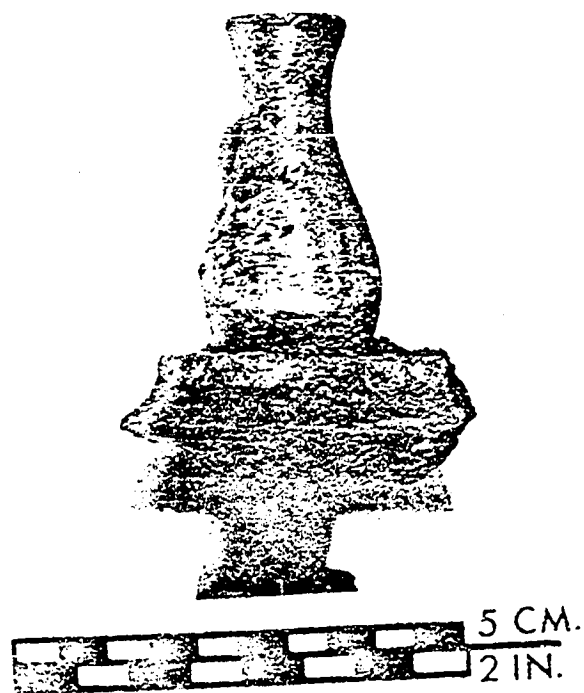


Plate 97

Powder Flask. Provenience.- St. Pierre. Y641A.

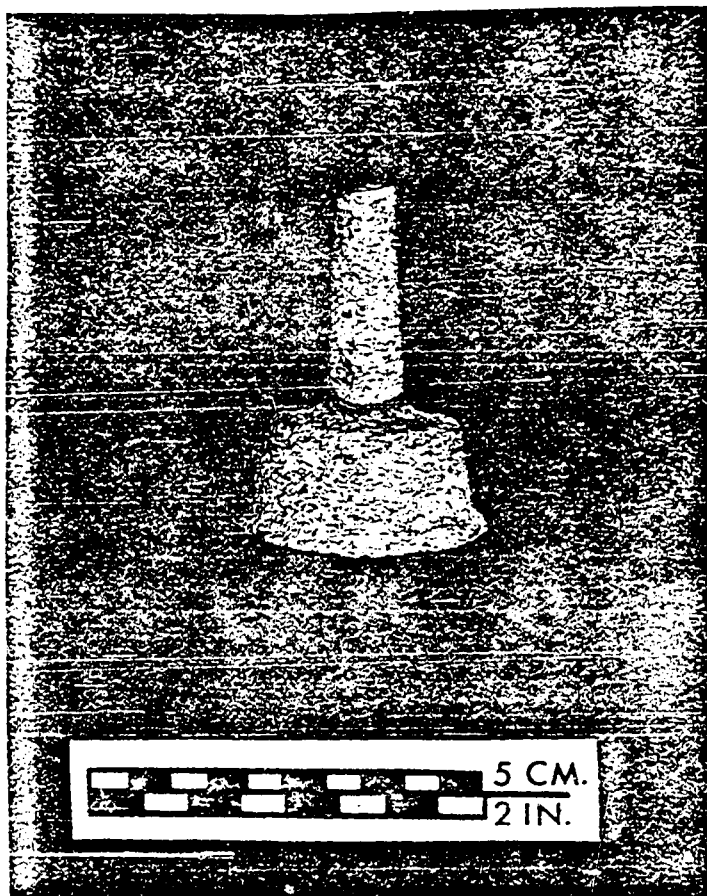


Plate 98

Spout. Provenience - St. Pierre. Y646A.

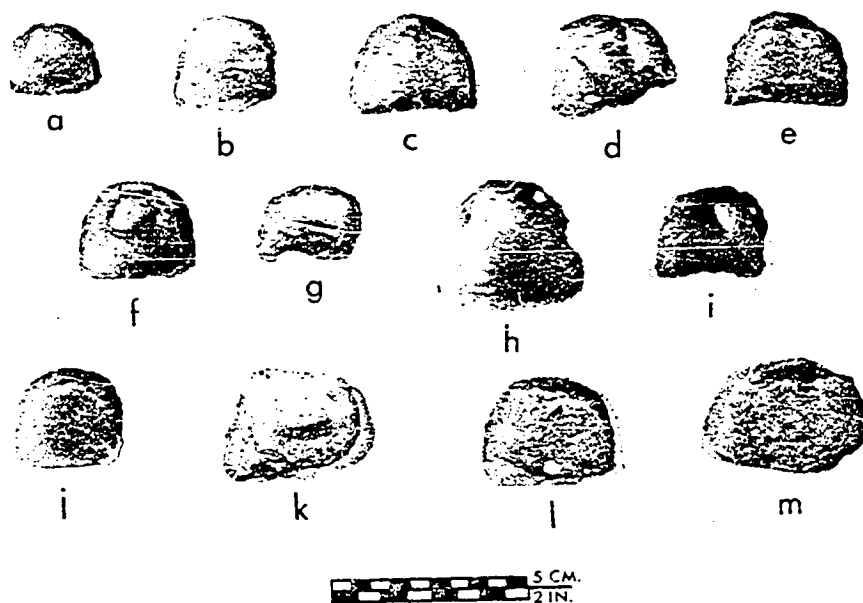


Plate 99

Gunflints. Type 1, Spall Gunflints. Provenience -
 St. Pierre. a, Y558-9A. b, Y558-31A. c, Y558-31A.
 d, Y640A. e, Y646B. f, W4A. g, W6A. h, W26B. i,
 W18A. j, W29A. k, W79A. l, W79A. m, W80A.

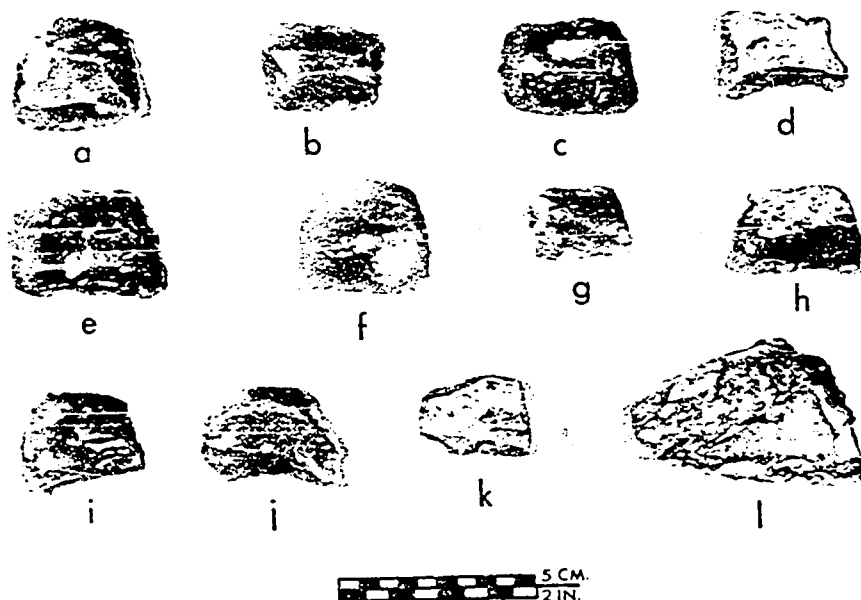


Plate 100

Gunflints. Type 2, Blade Gunflints. a-e, var. A. f-h, var. B. i-k, var. C. l, Flint Nodule. Provenience - St. Pierre. a, W7A. b, T12G. c, Y558-31B. d, W40A. e, W63A. f, T9B. g, W120A. h, W79A. i, Y558-31B. j, W64A. k, W74A. l, Y600A.

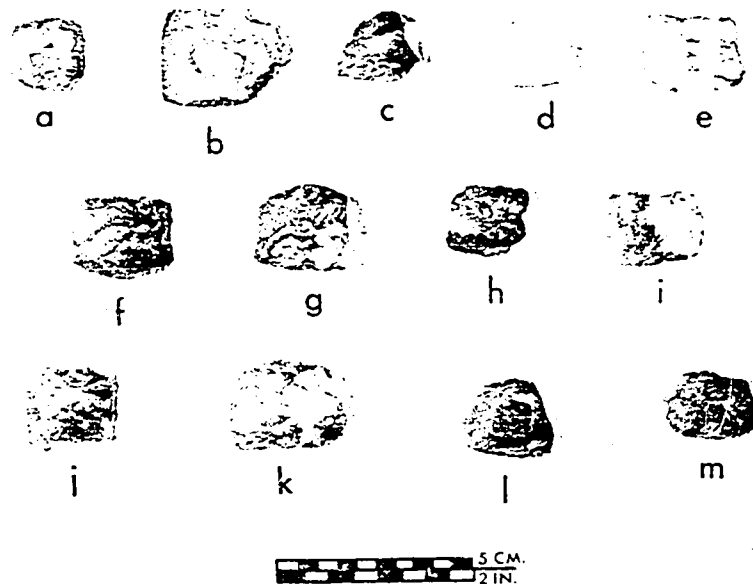
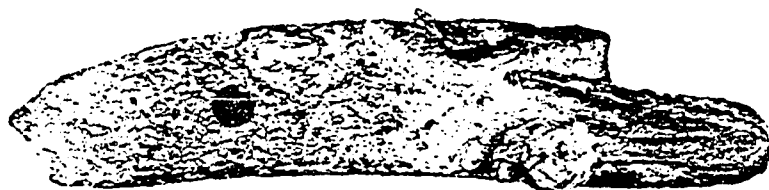
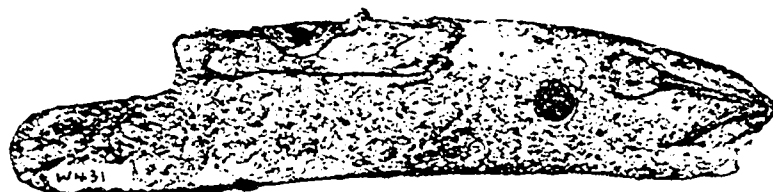


Plate 101

Gunflints. Type 3, Aboriginal Gunflints.
 Provenience - Wright's Bluff. j, W329A. k,
 W330A. Lockguard. l, W355A. m, W373A. St.
 Pierre. a, T9B1. b, Y603A. c, Y640A. d, Y647B.
 e, W5A. f, W24A. g, W45A. h, W64A1. i, W80A.



a



b



Plate 102

Lock Plate. a, Obverse Face. b, Reverse Face.
Provenience - Lockguard. W431.

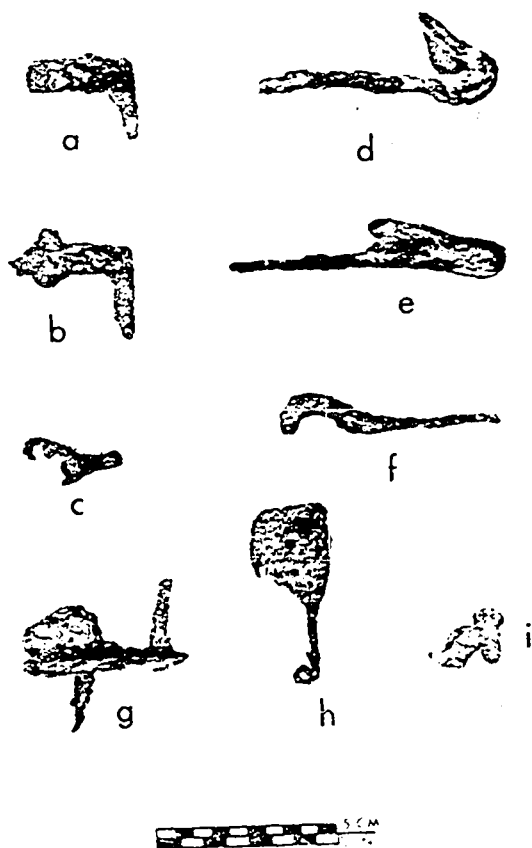


Plate 103

Gun Parts. a-b, Sears. c, Sear Spring. d-f, Mainsprings. g-h, Triggers. i, Tumbler Bridge. Provenience - Wright's Bluff. c, W329A. g, W334-1B. h, W334-1. St. Pierre. a, W117A. b, W72A. d, W89A1. e, W23A. f, W35A. i, W48A.

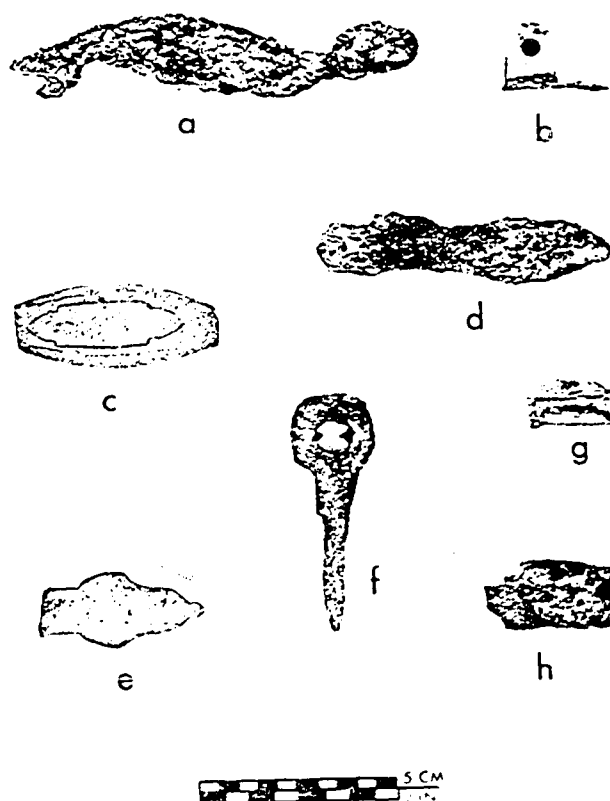


Plate 104

Gun Parts. a, Sideplate. b-d, Triggerguards. e, Buttplate. f, Touchhole Pick. g-h, Rampipes. Provenience - Wright's Bluff. g, W330A. h, W334-1B. Lockguard. c, W431. St. Pierre. a, W28B. b, W77A. d, W86A. e, W43A. f, W27A.

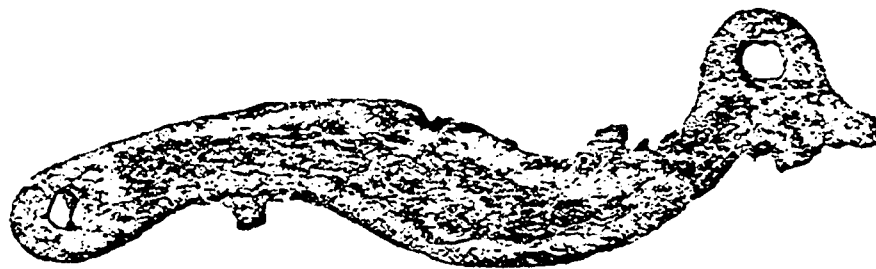


Plate 105

Sideplate. Provenience - Wright's Bluff.

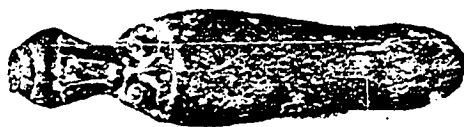


Plate 106

Triggerguard. Provenience - St. Pierre. Y600A.



Plate 107

Breech Plug. Provenience - St. Pierre. T12H.

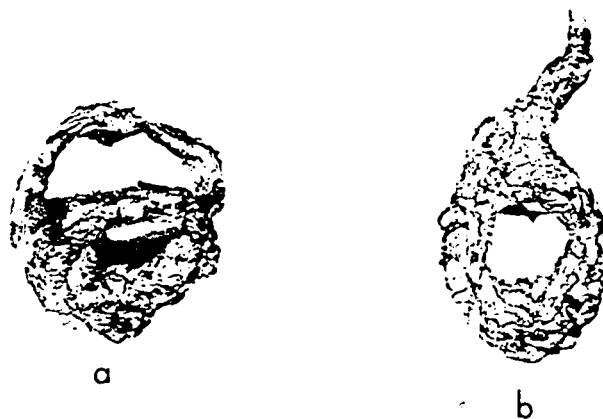


Plate 108

Barrel Bands and Swivels. Provenience - St.
Pierre. a, Y558-76. b, Y558-76.

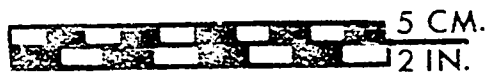
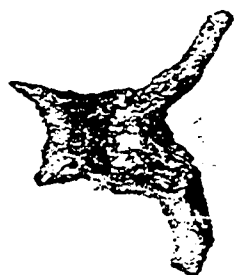


Plate 109

Barrel Band and Swivel. Provenience - St.
Pierre. Y600A.



Plate 110

Screwdriver. Provenience - Wright's Bluff.
W330A.

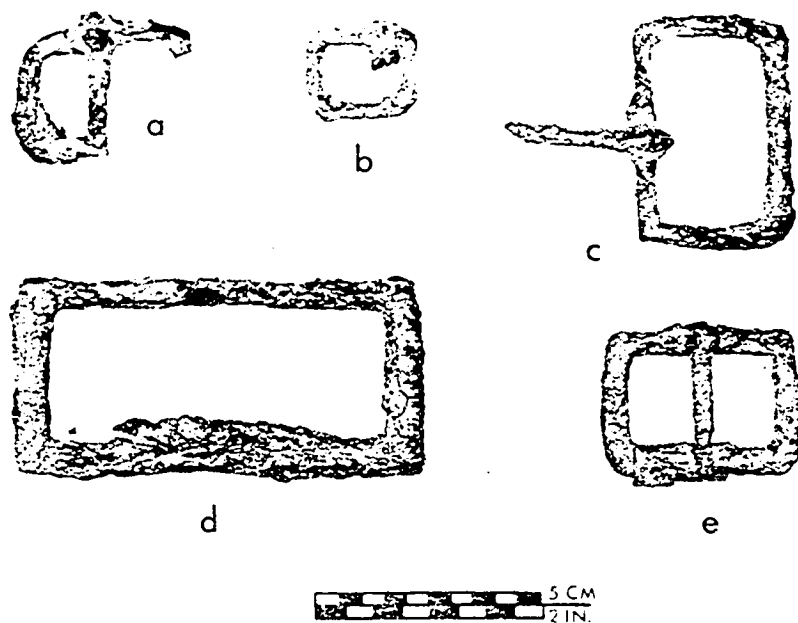


Plate 111

Buckles. Provenience - St. Pierre. a, T1H. b, T7C. c, T9E. d, Y646A. e, W104A.

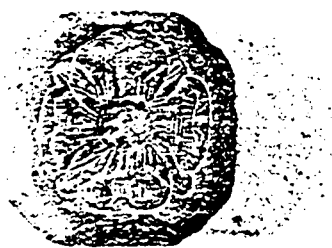


Plate 112

Cufflink. Provenience - St. Pierre. Y558-31B.
(1.4 cm square).

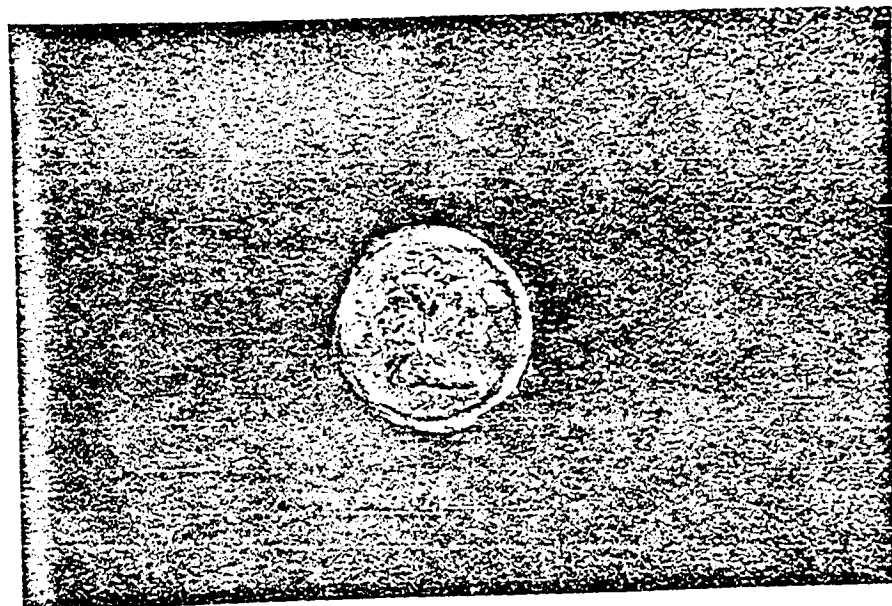


Plate 113

Cufflink. Provenience - St. Pierre. (1.4 cm square).

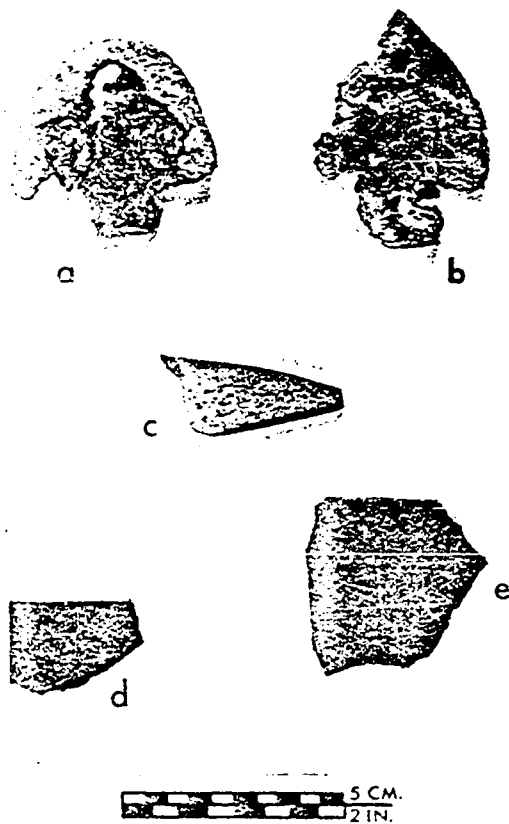


Plate 114

Miscellaneous Objects. a-b, Shoe Heels. c, Whetstone. d-e, Slateboard Fragments. Provenience - St. Pierre. a, Y558-20. b, T5B. c, W77A. d, W29A. e, W47A.

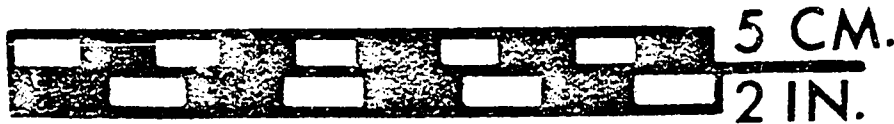


Plate 115

Pin. Provenience - St. Pierre. Y558-31A.

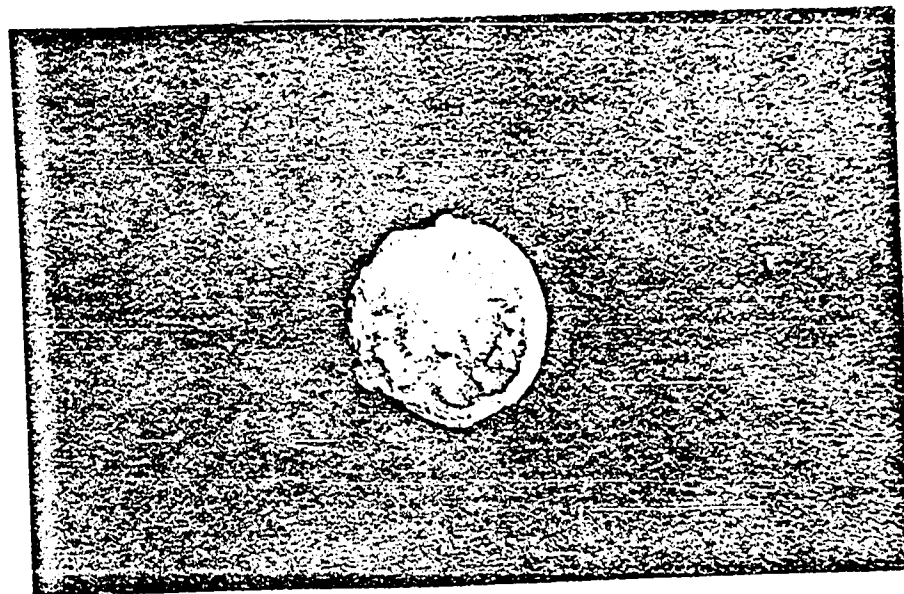
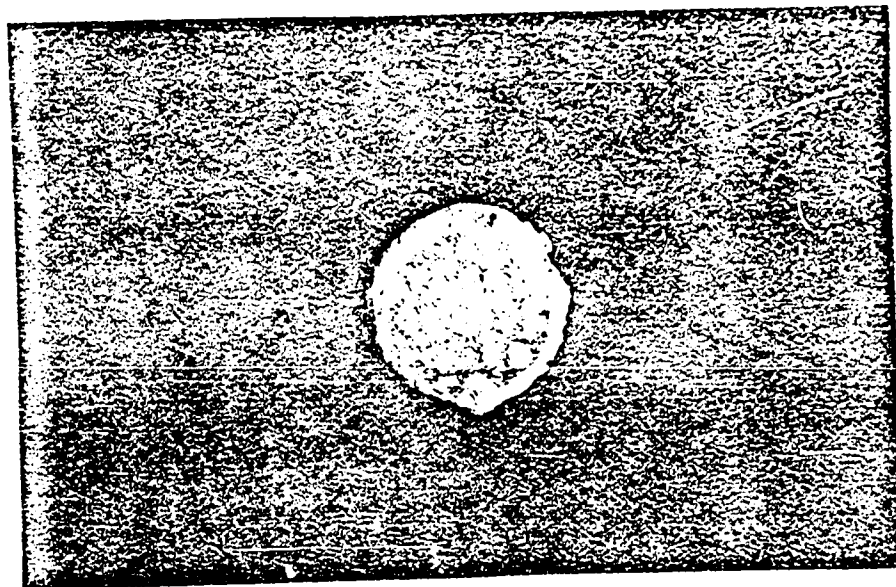


Plate 116

Bale Seal. Provenience - St. Pierre. W28B.

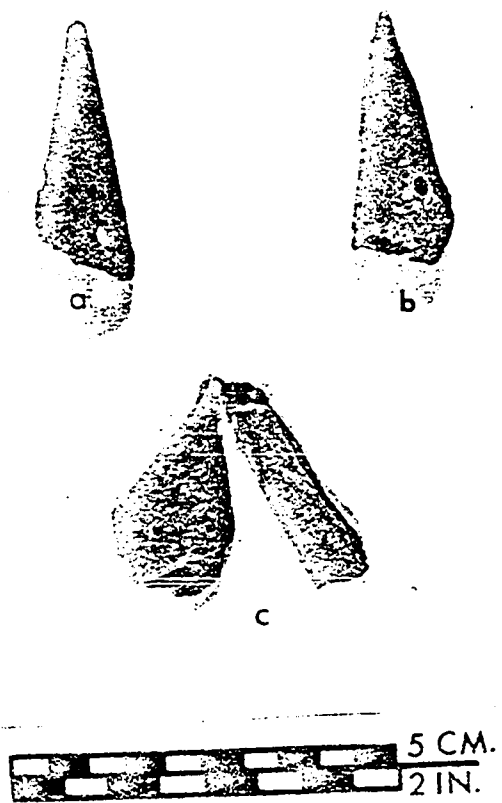


Plate 117

Tinklers. Provenience - St. Pierre. a, Y558-31D.
b, Y558-31D. c, Y558-31D.

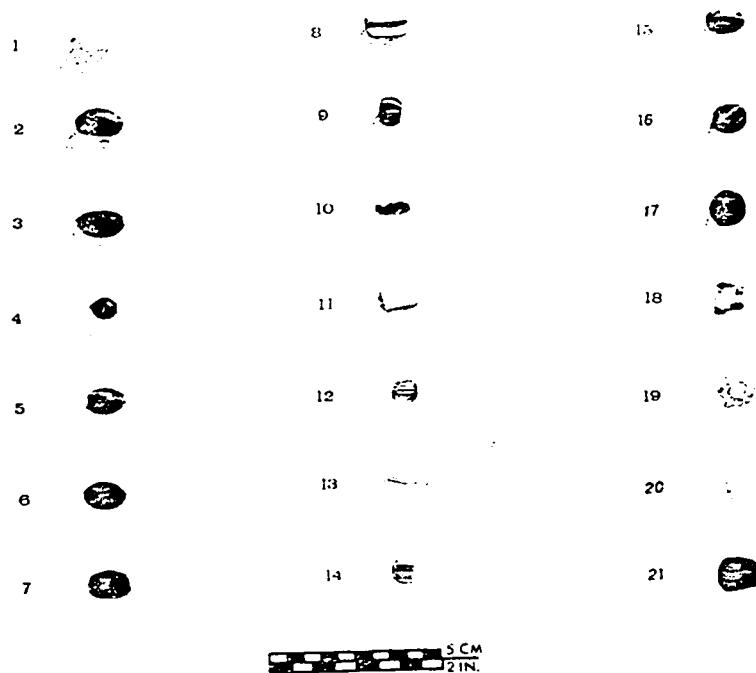


Plate 118

Glass Beads. 1 and 11, var. DIIA1. 2, var. DIIA4.
 3, var. DIIA6. 4, var. DIIA7. 5, var. DIIA8. 6,
 var. DIIA13. 7, var. DIIA15. 8, var. DIIB2. 9,
 var. DIIB15. 10, var. DIIB16. 12, var. DIVB1. 13,
 var. DIVB3. 14, var. DIVB9. 15, var. DIVB10. 16,
 var. DIVB11. 17, var. WIIA3. 18, var. WIIA11.
 19, var. WIIB2. 20, var. WIIB3. 21, var. WIIA4.

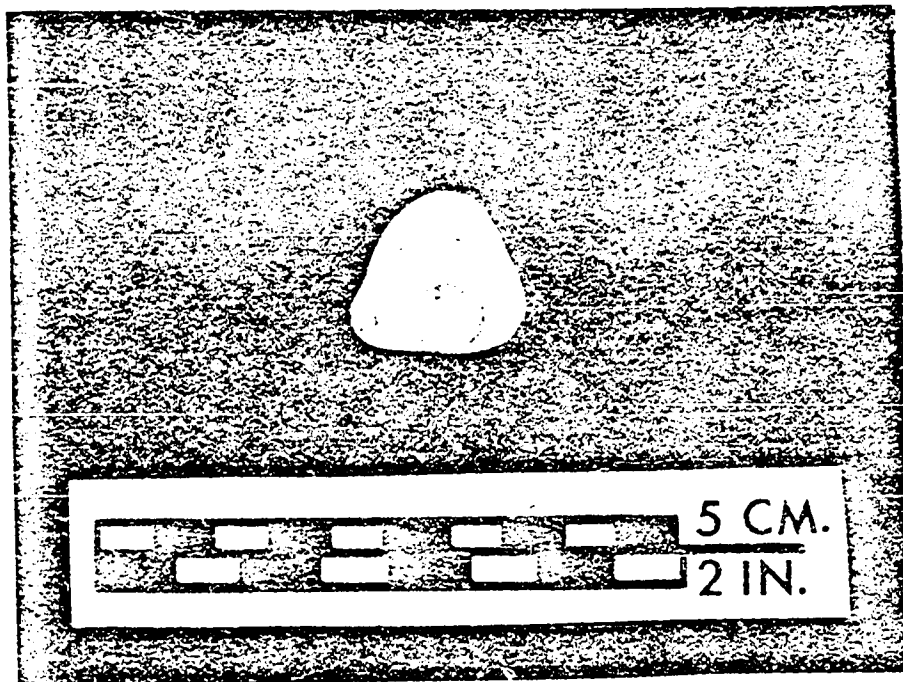


Plate 119

Clay Bead. Provenience - St. Pierre. W17A.



Plate 120

Coin. Provenience - St. Pierre. W63A. (diameter
is 2.4 cm).

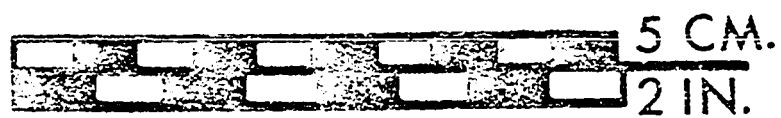


Plate 121

Miscellaneous Ornament. Provenience - St.
Pierre. T8B.

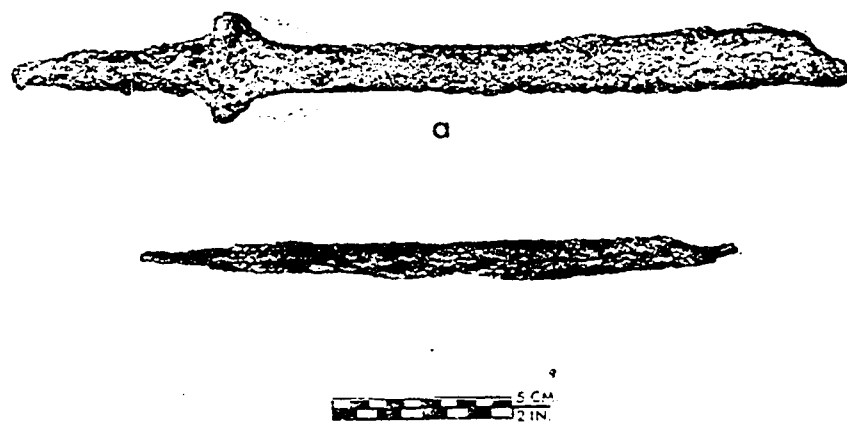


Plate 122

Construction Tools. a, Chisel. b, File.
Provenience - St. Pierre. a, Y641B. b, T8G.

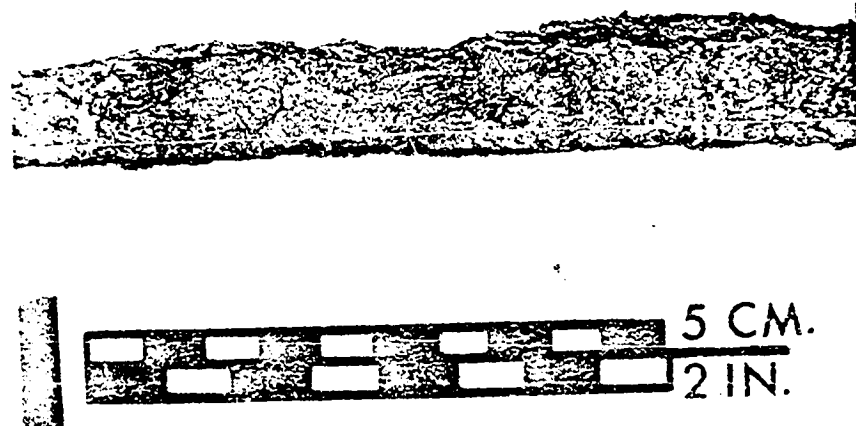
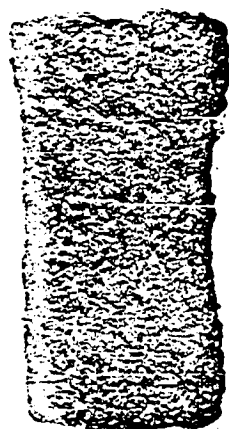


Plate 123

File. Close-up of Plate 122b.



a

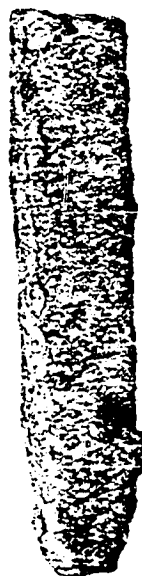


Plate 124

Wedges. Provenience - St. Pierre. a, W71 B1.
b, T8H.

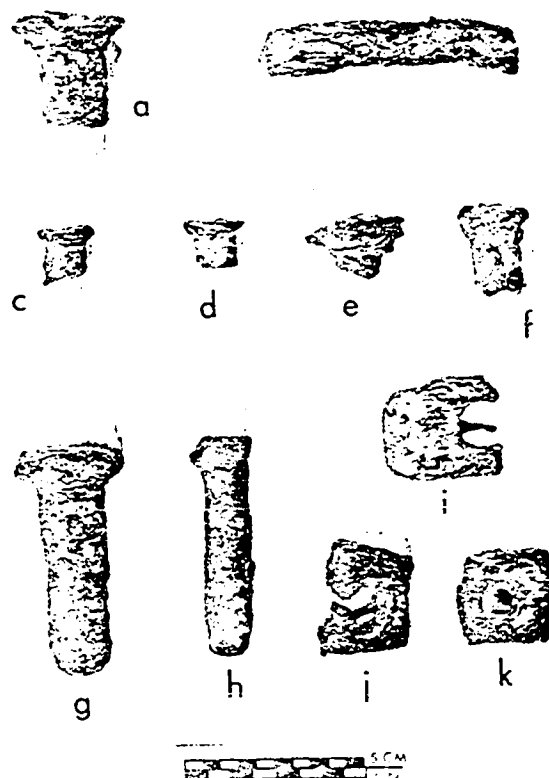


Plate 125

Miscellaneous Hardware. a-f, Rivets. g-h, Bolts. i-k, Nuts. Provenience - St. Pierre. a, Y661A. b, Y661A. c, Y663A. d, Y663A. e, W29A. f, Y558-20.

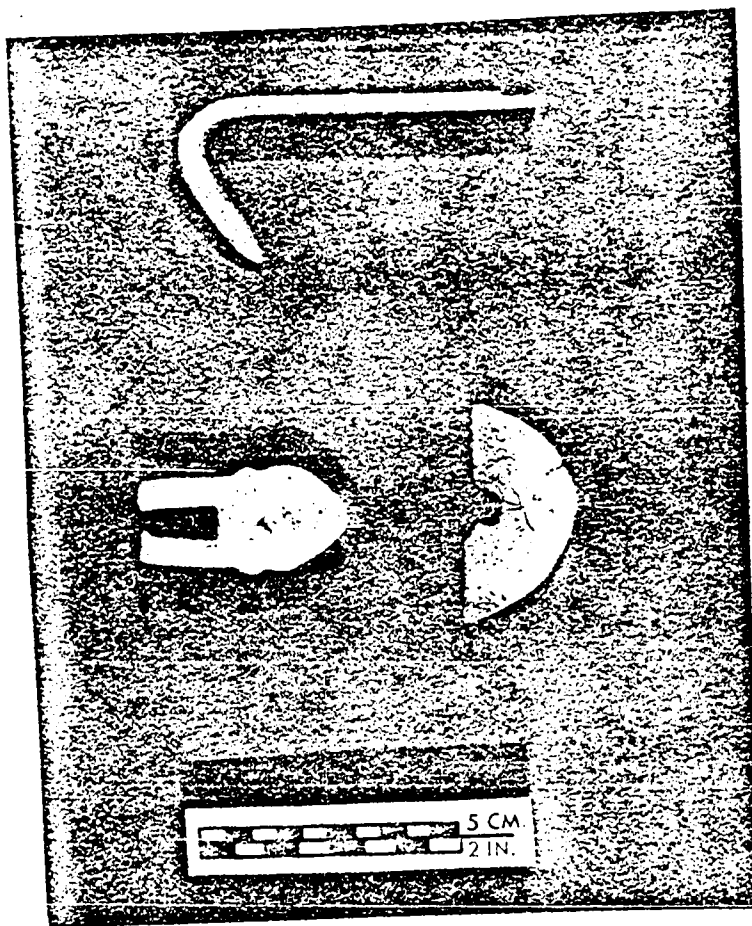


Plate 126

Miscellaneous Brass/Copper Objects. Provenience -
St. Pierre. a, Y558-31H. b, W15A. c, W54A1.

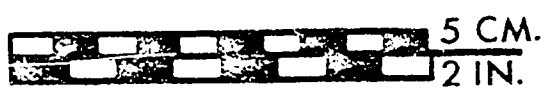
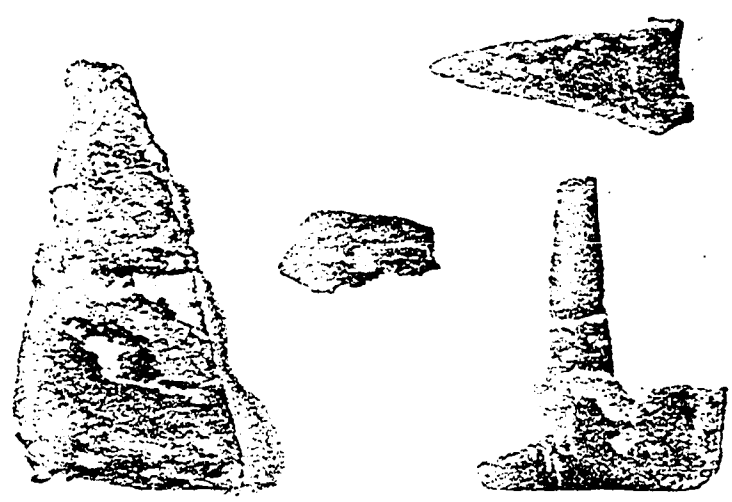


Plate 127

Miscellaneous Brass/Copper Objects. Provenience -
St. Pierre. Y558-31B.

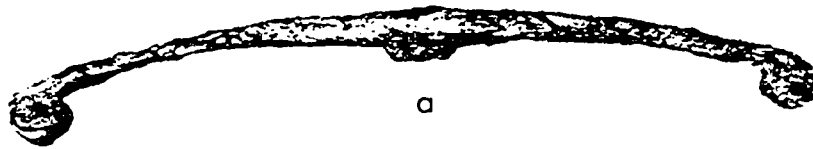


Plate 128

Miscellaneous Iron Objects. Provenience - St.
Pierre. a, Y558-31A. b, W5A.

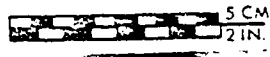


Plate 129

Miscellaneous Iron Object. Provenience - St.
Pierre. Y558-31A.

Bibliography

- Abbit, Mary W.
1973 The eighteenth-century shoe buckle. In Five artifact studies, edited by Ivor Noel Hume, pp.25-53. Colonial Williamsburg Occasional Papers in Archaeology 1.
- Alexander, L.T.
1966 English clay tobacco pipes. Quarterly Bulletin of the Archaeological Society of Virginia 21(3):58-66.
- Anonymous
Fort St. Claude. Archives Hydrographiques de la Marine, Paris.
- Ascher, Robert
1968 Time's arrow and the archaeology of a contemporary. In Settlement archaeology, edited by K.C. Chang, pp.43-52. National Press Books, Palo Alto.
- Atkinson, D.R.
1962 Makers' marks on clay tobacco pipes found in London (Part I). Archaeological Newsletter 7(8):182-188. London.
- 1965 Makers' marks on clay tobacco pipes found in London (Part II). Archaeological Newsletter 7(11):249-256. London.
- Baerreis, David A.
1961 The ethnohistoric approach and archaeology. In Symposium on the concept of ethnohistory, pp.49-77. Ethnohistory 8(1).
- Bailey, F.G.
1960 Tribe, caste, and nation. Manchester University Press, Manchester.
- Bailey, Worth
1936 Check list: British trade pipe marks. Arrow Points 21(5-6).
- Baird, Donald
1973 His Highness Prince Rupert's way of making shot; 1665. The Canadian Journal of Arm's Collecting 11(3): 83-85.
- Bakeless, John
1961 The eyes of discovery, America as seen by the first explorers. Dover Publications, Inc., New York.

- Barber, Daniel M.
1966 Kaolin pipe stems, an analysis of their value to local archaeology. Museum Service, pp.88-93. Rochester (May-June).
- Barker, George C.
1958 Some functions of Catholic processions in Pueblo and Yaqui culture change. American Anthropologist 60:449-455.
- Barnett, Homer G.
1942 Invention and culture change. American Anthropologist 44:14-30.
1953 Innovation: The basis of culture change. McGraw-Hill, New York.
- Barth, Fredrik (Editor)
1963 The role of the entrepreneur in social change in northern Norway. Scandinavian University Books, Bergen.
1966 Models of social organization. Royal Anthropological Institute of Great Britain and Ireland Occasional Paper 23.
1967a Economic spheres in Darfur. In Themes in economic anthropology, edited by R. Firth. Tavistock Publications, London.
1967b On the study of social change. American Anthropologist 69:661-669.
- Basso, Keith H.
1970 To give up on words: Silence in western Apache culture. Southwestern Journal of Anthropology 26: 213-230.
- Bauxar, J. Joseph
1959 The historic period. Illinois Archaeology Bulletin 1:40-58.
- Beals, Ralph L.
1932 Aboriginal survivals in Mayo culture. American Anthropologist 34:28-39.
- Beauchamp, Sl. de
1746 Journal of de Beauchamp's journey to the Choctaws. In Mereness 1916:257-297.
- Bee, Robert L.
1974 Patterns and processes, an introduction to anthropological strategies for the study of sociocultural change. The Free Press, New York and London.

- Bell, Robert E.
1958 Guide to the identification of certain American Indian projectile points. Oklahoma Anthropological Society, Special Bulletin 1.
- Bell, Robert E. and Tyler Bastian
1967 Preliminary report upon excavations at the Longest site, Oklahoma, a pilot study of Wichita Indian archaeology and ethnohistory. Report to the National Science Foundation.
- Bellah, Robert
1964 Religious evolution. American Sociological Review 29:358-374.
- Bénard de la Harpe
1831 Journal historique de l'établissement des Français à la Louisiane. New Orleans.
- Binford, Lewis R.
1962a Archaeology as anthropology. American Antiquity 28: 217-225.
- 1962b A new method of calculating dates from kaolin pipestem samples. Southeastern Archaeological Conference, Newsletter 9(1):19-21.
- 1965 Archaeological systematics and the study of culture process. American Antiquity 31:203-210.
- 1968 Archeological Perspectives. In New perspectives in archeology, edited by S.R. Binford and L.R. Binford, pp.5-32. Aldine Press, Chicago and New York.
- 1972 Some comments on historical versus processual archaeology. In An archaeological perspective, edited by L.R. Binford, pp.114-121.
- Binford, S.R. and L.R. Binford (Editors)
1968 New perspectives in archeology. Aldine Press, Chicago and New York.
- Blanchette, Jean-François
1974 Gunflints from Chicoutimi Indian site (Québec). Unpublished A.M. thesis. Department of Anthropology, Brown University.
- 1975 Gunflints from Chicoutimi Indian site (Québec). Historical Archaeology 9:41-54.
- 1976a Gunflint debitage from Meusnes (Loir-et-Cher, France), the results from a test pit excavated in 1973. Paper presented at the 4th French Regime Symposium, Mobile.

- 1976b The Port Dauphin gunflints. Unpublished ms.
- Blumer, Herberg
1966 Sociological implications of the thought of George Herbert Mead. The American Journal of Sociology 71:535-544.
- Boas, Franz
1896 The limitations of the comparative method. In Boas 1940:270-280.
1897 Northern elements in the mythology of the Navaho. American Anthropologist 10:371-376.
1910 Psychological problems in anthropology. American Journal of Psychology 21:371-384.
1911 The mind of primitive man. Macmillan Co., New York.
1920 The methods of ethnology. In Boas 1940:281-289.
1930 Some problems of methodology in the social sciences. In Boas 1940:260-269.
1936 History and science in anthropology: A reply. In Boas 1940:305-311.
1940 Race, language and culture. Macmillan Co., New York.
- Bordaz, Jacques
1970 Tools of the old and new stone age. The Natural History Press, New York.
- Bordes, François
1968 The old stone age. McGraw-Hill, New York.
- Bourne, Edward G. (Editor)
1904 Narratives of the career of Hernando de Soto. 2 vols. David Nutt, London.
- Boyd, M.F., H.G. Smith, and J.W. Griffin
1951 Here they once stood: The tragic end of the Apalachee missions. University of Florida Press, Gainesville.
- Brain, Jeffrey P.
1969 Winterville: A case study of prehistoric culture contact in the Lower Mississippi Valley. Unpublished Ph.D. dissertation. Department of Anthropology, Yale University.
1970 The Tunica treasure. Lower Mississippi Survey, Bulletin 2. Peabody Museum, Harvard University.

- 1971 The Lower Mississippi Valley in North American prehistory. National Park Service, Southeast region and the Arkansas Archeological Survey.
- 1973 Trudeau: An 18th century Tunica village. Lower Mississippi Survey, Bulletin 3. Peabody Museum, Harvard University.
- 1975a The archaeology of the Tunica: Trial on the Yazoo. Preliminary report of investigations conducted by the Lower Mississippi Survey. In Research Reports. National Geographic Society, Washington.
- 1975b Artifacts of the Adelantado. The Conference on Historic Site Archaeology Papers 8:129-138.
- 1976 Ceramics of the eighteenth century Tunica. Paper presented in the Symposium on new developments in Lower Mississippi Valley ceramic chronology at the Southeastern Archaeological Conference, Tuscaloosa.
- 1977 On the Tunica trail. Louisiana Archaeological Survey and Antiquities Commission, Anthropological Study 1. Baton Rouge.
- n.d.a Tunica. In North American Indian handbook, edited by Raymond D. Fogelson. Smithsonian Institution, Washington.
- n.d.b Late prehistoric settlement patterning in the Yazoo Basin and Natchez bluffs regions of the Lower Mississippi Valley. In Mississippian settlement patterns, edited by Bruce D. Smith. Academic Press, New York (in press).
- Brain, Jeffrey P., Alan Toth, and Antonio Rodríguez-Buckingham
1974 Ethnohistoric archaeology and the De Soto entrada into the Lower Mississippi Valley. The Conference on Historic Site Archaeology Papers 7:232-289.
- Brain, Jeffrey P., Ian W. Brown, and Vincas P. Steponaitis
n.d.a Archaeology of the Natchez bluffs. Papers of the Peabody Museum of Archaeology and Ethnology. Peabody Museum, Harvard University (forthcoming volume).
- n.d.b Tunica treasure. Papers of the Peabody Museum of Archaeology and Ethnology. Peabody Museum, Harvard University (in press).
- Brasser, T.J.C.
1971 The coastal Algonkians: People of the first frontiers. In North American Indians in historical perspective, edited by E.B. Leacock and N.O. Lurie, pp.64-91. Random House, New York.

- Briggs, Jean
1971 Strategies of perception: The management of ethnic identity. In Paine 1971c:55-73.
- Broom, Leonard and E. Shevsky
1952 Mexicans in the United States: A problem in social differentiation. Sociology and Social Research 36(3):150-158.
- Brose, David S.
1975 Functional analysis of stone tools: A cautionary note on the role of animal fats. American Antiquity 40:76-94.
- Brown, Calvin
1926 Archeology of Mississippi. Mississippi Geological Survey, University Mississippi.
- Brown, Ian W.
1972 The location of the historic Natchez villages. Unpublished ms. Lower Mississippi Survey Files, Peabody Museum, Harvard University.
- 1973 Settlement patterns in the bluff area of the Lower Mississippi Valley. Unpublished Honors thesis. Department of Anthropology, Harvard College.
- 1974 An ethnography of the Tunica Indians. Unpublished ms. Lower Mississippi Survey Files, Peabody Museum, Harvard University.
- 1975a Archaeological investigations at the historic Portland and St. Pierre sites in the Lower Yazoo Basin, Mississippi. Unpublished A.M. thesis. Department of Anthropology, Brown University.
- 1975b Excavations at Fort St. Pierre. The Conference on Historic Site Archaeology Papers 9:60-85.
- 1975c St. Pierre (23-M-5) and the Lonely Frenchman (23-M-11) sites, 1975 excavations: A preliminary report. Unpublished ms. Mississippi Department of Archives and History, Jackson
- 1975d End scraper wear analysis. Unpublished ms.
- 1976a Buttons and pipes from the early 18th century French Fort St. Pierre. Unpublished ms. Lower Mississippi Survey Files, Peabody Museum, Harvard University.

- 1976b Fort St. Pierre and associated French and Indian sites in the Yazoo bluffs region, Mississippi: A report on the 1976 investigations. Unpublished ms. Mississippi Department of Archives and History, Jackson.
- 1976c Fort St. Pierre, a mini-Pompeii. Paper presented at the 9th Annual Meeting of the Society for Historical Archaeology, Philadelphia.
- 1976d Glass beads from the early 18th century Portland site. Unpublished ms.
- 1976e The Portland site (22-M-12), an early 18th century historic Indian site in Warren County, Mississippi. Mississippi Archaeology XI(1):2-11.
- 1977a Historic trade bells. The Conference on Historic Site Archaeology Papers 10:69-82.
- 1977b Artifact patterning and activity areas: The evidence from Fort St. Pierre, Mississippi. Paper presented at the 18th Annual Conference on Historic Site Archaeology, Lafayette.
- 1978a An archaeological survey of the Tchula-Greenwood bluffs region, Mississippi: Final report. Unpublished ms. Cottonlandia Museum, Greenwood.
- 1978b A reexamination of the houses at the Bayou Goula site, Iberville Parish, Louisiana. Louisiana Archaeology 3 (in press).
- 1978c An archaeological survey of Mississippi period sites in Coahoma County, Mississippi: Final report. Unpublished ms. Cottonlandia Museum, Greenwood.
- n.d.a Burr's Hill trade bells. In The Burr's Hill Collection, edited by Susan Ferguson. Brown University Press, Providence (in preparation).
- n.d.b Trade bells in the Tunica treasure. In Brain et al. n.d.b.

Bruner, Edward M.

- 1953 Assimilation among Fort Berthold Indians. The American Indian 6:21-29.
- 1956a Cultural transmission and cultural change. Southwestern Journal of Anthropology 12:191-199.
- 1956b Primary group experience and the processes of acculturation. American Anthropologist 58:605-623.

- Burke, R.P.
1936 Check list: Glass trade beads. Arrow Points 21 (5-6).
- Burridge, Kenelm
1969 New heaven, new earth. Schocken Books, Inc., New York.
- 1975 New heaven, new earth: Millenarianism in Polynesia. In Cultural and social anthropology, introductory readings in ethnology, edited by Peter B. Hammond, pp.292-305. Macmillan Co., Inc., New York. Collier Macmillan Publishers, London.
- Buyer, Suzanne de
1964 Faïence de Franche-comté XVIII siècle, Paligny au Baillage d'Avol. In Cahiers de la Ceramique de verse 4:104.
- Caldwell, Joseph R.
1964 Interaction spheres in prehistory. In Hopewellian studies, edited by J.R. Caldwell and R.L. Hall, pp. 135-143. Illinois State Museum Scientific Papers 12.
- Calver, William L. and R.P. Bolton
1950 History written with pick and shovel. The New York Historical Society, New York.
- Cambron, James W.
1955 The Wheeler point. Oklahoma Anthropological Society, Newsletter IV(4):7-8.
- 1957 Some early projectile point types from the Tennessee Valley. Journal of Alabama Archaeology III (2):17-19.
- Cambron, James W. and David C. Hulse
1975 Handbook of Alabama archaeology, point types (Part I). The Archaeological Research Association of Alabama, Inc.
- Cambron, James W. and Spencer A. Waters
1961 Flint Creek rock shelter (Part II). Journal of Alabama Archaeology VII(1):1-42.
- Carneiro, R.L. (Editor)
1967 Herbert Spencer: The evolution of society. University of Chicago Press, Chicago.
- Charlevoix, François Xavier de
1923 Journal of a voyage to North America, vol.II. Edited by Louise Phelps Kellogg. The Caxton Club, Chicago.

- Chartrand, René
1973 The troops of French Louisiana, 1699-1769. Military Collector and Historian, Journal of the Company of Military Historians XXV(2).
- Chicken, George
1725 Colonel Chicken's journal to the Cherokees. In Mereness 1916:93-172.
- Claiborne, J.F.H.
1880 Mississippi as a province, territory and state, with biographical notes of eminent citizens. Jackson.
- Clark, Andrew Hill
1968 Acadia: The geography of early Nova Scotia to 1760. University of Wisconsin Press, Madison.
- Clarke, David L.
1968 Analytical archaeology. Methuen & Co. Ltd., London.
- Cleland, Charles E.
1971 Metallic artifacts. In Cleland et al. 1971:19-34.
- Cleland, Charles E. et al.
1971 The Lasanen site, an historic burial locality in Mackinac County, Michigan. Michigan State University, Anthropological Series, Publications of the Museum 1(1).
- Collins, Henry B., Jr.
1940 Outline of Eskimo prehistory. In Essays in historical anthropology of North America, pp.533-592. Smithsonian Miscellaneous Collections 100.
- Conkling, Robert
1974 Legitimacy and conversion in social change: The case of French missionaries and the Northeastern Algonkian. Ethnohistory 21:1-24.
- Cotter, John L.
1951 Stratigraphic and area tests at the Emerald and Anna mound sites. American Antiquity 17:18-32.

1952 The Gordon site in southern Mississippi. American Antiquity 18:110-126.
- Cox, Isaac J. (Editor)
1905 The journeys of René Robert Cavelier Sieur de La Salle, Vol.I. A.S. Barnes & Company, New York.
- Coxe, Daniel
1940 Description of Louisiana by Daniel Coxe, edited by P. Radin. Sutro Branch California State Library Occasional Papers, Reprint Series 11. California State Library, San Francisco.

Crabtree, Donald E.

1967 Notes on experiments in flint knapping: 3, the flint-knapper's raw materials. Tebiwa, The Journal of the Idaho State University Museum 10(1):8-25.

1972 An introduction to flintworking. The Idaho State University Museum Occasional Papers 28.

Crane, Verner W.

1929 The southern frontier 1670-1732. The University of Michigan Press, Ann Arbor.

Deetz, James J.F.

1965 The dynamics of stylistic change in Arikara ceramics. Illinois Studies in Anthropology 4.

1968 The inference of residence and descent rules from archeological data. In Binford and Binford 1968: 41-48.

1972 Archaeology as a social science. In Leone 1972a: 108-117.

1973 Ceramics from Plymouth, 1620-1835: The archaeological evidence. In Ceramics in America, edited by Ian M.G. Quimby, pp.15-40. University Press of Virginia, Charlottesville.

1977 In small things forgotten. The Natural History Press, Garden City, New York.

Deetz, James J.F. and Edwin S. Dethlefsen

1965 The doppler effect and arcaeology: A consideration of the spatial aspects of seriation. Southwestern Journal of Anthropology 21:196-200.

1967 Death's head, cherub, urn and willow. Natural History 76(3):29-37.

DeJarnette, David L. and Asael T. Hansen

1960 The archaeology of the Childersburg site, Alabama. Florida State University, Notes in Anthropology 4.

DeJarnette, David L., Edward Kurjack, and James W. Cambron

1962 Stanfield-Worley bluff shelter excavations. Journal of Alabama Archaeology VIII(1-2).

Delanglez, Jean

1935 The French Jesuits in Lower Louisiana (1700-1763). Loyola University Press, New Orleans.

1937 A Louisiana poet-historian: Dumont dit Montigny. Mid-America 19(1):31-49.

- 1948a The first establishment of the faith in New France. Mid-America 19:187-214 (n.s.).
- 1948b Life and voyages of Louis Jolliet. Chicago.
- Dickason, Clive
1976 Some Amerindian visitors to late renaissance France. Paper presented at the French Regime Symposium, Prairie du Rocher.
- Diron d'Artaguiette
1722-1723 Journal of Diron d'Artaguiette. In Mereness 1916:15-92.
- Dixon, Roland B.
1928 The building of culture. Scribner's, New York.
- Douglas, Mary
1972 Symbolic orders in the use of domestic space. In Man, Settlement, and Urbanism, edited by P.J. Ucko, Ruth Tringham, and G.W. Dimbleby, pp.513-521. Gerald Duckworth and Company, Ltd., London.
- Dozier, Edward P.
1954 Comments on Spanish-Indian acculturation in the Southwest. American Anthropologist 56:680-684.
- 1958 Spanish-Catholic influences on Rio Grande Pueblo religion. American Anthropologist 60:441-448.
- Duclos, Sieur
1713 Memoir on Louisiana, letter of Duclos to Ponchartrain, October 9, Mobile. In Rowland and Sanders 1929:79-143.
- Duffield, Lathel F. and Edward B. Jelks
1961 The Pearson site, a historic Indian site at Iron Bridge Reservoir, Rains County, Texas. The University of Texas, Department of Anthropology, Archaeological Series 4.
- Du Ru, Father Paul
1700 Journal de voyage en Louisiane. In Delanglez 1935.
- Eccles, W.J.
1969 The Canadian frontier, 1534-1760. Holt, Rinehart and Winston, Inc., New York.
- Eggan, Fred
1961 Some anthropological approaches to the understanding of ethnological cultures. Ethnohistory 8:1-11.

- Ehrmann, W.W.
1940 The Timucua Indians of sixteenth century Florida.
Florida Historical Quarterly XVIII:163-191.
- Ellis, Florence H.
1954 Comments on Spanish-Indian acculturation in the Southwest. American Anthropologist 56:678-679.
- Engels, Friedrich
1972 Origin of the family, private property, and the state. International Publishers, New York.
- Erasmus, C.J.
1961 Man takes control. Bobbs-Merill Co., Indianapolis.
- Erickson, Clifford S.
1966 Catlinite. Central States Archaeological Journal 13 (4):132-136.
- Fairbanks, Charles H.
1955 The Abercrombie mound, Russell County, Alabama.
Early Georgia 2(1):13-19.
- Firth, Raymond
1936 We, the Tikopia. Allen and Unwin, London.
1959 Social change in Tikopia. Allen and Unwin, London.
- Fitch, Tobias
1725 Captain Fitch's journal to the Creeks. In Mereness
1916:173-212.
- Flannery, Kent V.
1971 Archaeological systems theory and early Mesoamerica.
In Man's imprint from the past, edited by James
J.F. Deetz, pp.344-364. Little, Brown and Company,
Inc., Boston.
1972 Culture history v. cultural process: A debate in
American archaeology. In Leone 1972a:102-107.
1973 Archeology with a capital 'S'. In Research and theory
in current archeology, edited by Charles L. Redman,
pp.47-53. John Wiley & Sons, New York.
- Ford, James A.
1935a Ceramic decoration sequence at an old Indian village
site near Sicily Island, Louisiana. Department of
Conservation, Louisiana Geological Survey,
Anthropological Study 1.
1935b Outline of Louisiana and Mississippi pottery horizons.
Louisiana Conservation Review 4(6):33-38.

- 1936 Analysis of Indian village site collections from Louisiana and Mississippi. Department of Conservation, Louisiana Geological Survey, Anthropological Study 2.
- 1951 Greenhouse: A Troyville - Coles Creek period site in Avoyelles Parish, Louisiana. American Museum of Natural History, Anthropological Papers 44(1).
- 1952 Measurements of some prehistoric design developments in the Southeastern states. American Museum of Natural History, Anthropological Papers 44(3).
- 1961 Menard site: The Quapaw village of Osotouy on the Arkansas River. American Museum of Natural History, Anthropological Papers 48(2).
- 1963 Hopewell culture burial mounds near Helena, Arkansas. American Museum of Natural History, Anthropological Papers 50(1).
- Ford, James A. and James B. Griffin
1937 (A proposal for a) conference on pottery nomenclature for the Southeastern United States. Mimeographed ms. for circulation to members of the Southeastern Archaeological Conference, Ann Arbor.
- 1938 Report of the conference on Southeastern pottery typology. Proceedings of the First Southeastern Archaeological Conference. Mimeographed ms., Ann Arbor.
- Ford, James A., Philip Phillips, and William G. Haag
1955 The Jaketown site in West-Central Mississippi. American Museum of Natural History, Anthropological Papers 45(1).
- Ford, James A. and George I. Quimby
1945 The Tchefoncte culture, an early occupation of the Lower Mississippi Valley. Society for American Archaeology, Memoir 2.
- Ford, James A. and Clarence H. Webb
1956 Poverty Point, a late Archaic site in Louisiana. American Museum of Natural History, Anthropological Papers 46(1).
- Ford, James A. and Gordon R. Willey
1940 Crooks site, a Marksville period burial mound in La Salle Parish, Louisiana. Department of Conservation, Louisiana Geological Survey, Anthropological Study 3.
- Fortes, Meyer
1936 Culture contact as a dynamic process. Africa 9: 24-55.

- Fowler, Melvin L.
1969 The Cahokia site. In Explorations into Cahokia archaeology, edited by M.L. Fowler, pp.1-30. Illinois Archaeological Survey, Bulletin 7.
- Frank, Joe
1975 In defense of Hutchin's Natchez Indian. Mississippi Archaeology X(4):7-12.
- Freeman, M.
1971 Tolerance and rejection of patron roles in an Eskimo settlement. In Paine 1971c:34-54.
- French, Benjamin F. (Editor)
1846-1853 Historical collections of Louisiana. 5 vols. New York.
- 1869 Historical collections of Louisiana and Florida. J. Sabin & Sons, New York.
- Fried, Morton
1967 The evolution of political society. Random House, New York.
- Frison, George C.
1968 A functional analysis of certain chipped stone tools. American Antiquity 33:149-155.
- Fritz, John M.
1972 Archaeological systems for indirect observation of the past. In Leone 1972a:135-157.
- Fritz, John M. and Fred T. Plog
1970 The nature of archaeological explanation. American Antiquity 35:405-412.
- Garvan, Anthony N.B.
1951 Architecture and town planning in colonial Connecticut. Yale University Press, New Haven.
- Gay, Marjorie
1974 Excavations in Dallas County, Alabama. Alabama Archaeological Society Stones & Bones, Newsletter (September).
- Gayarré, Charles
1846 Histoire de la Louisiane, Vol.I. Magne & Weisse, New Orleans.
- Geertz, Clifford
1957 Ritual and social change: A Javanese example. American Anthropologist 59:32-54.

- 1963 Agricultural involution. University of California Press, Berkeley and Los Angeles.
- Giacomatti, Jeane
1963 French science. Universe Book, Inc., New York.
- Gibson, Jon L.
1974 Poverty Point, the first North American chiefdom. Archaeology 27(2):96-105.
- Gifford, James C.
1960 The type-variety method of ceramic classification as an indicator of cultural phenomena. American Antiquity 25:341-347.
- Gillin, John
1945 Parallel cultures and the inhibitions to acculturation in a Guatemalan community. Social Forces 24:1-14.
- Gilmore, Kathleen K.
1969 The San Xavier missions: A study in historic site identification. Texas State Building Commission Archaeological Program, Report 16.
- Giraud, Marcel
1966 Histoire de la Louisiane françoise, Vol.III, l'époque de John Law, 1717-1720. Presses Universitaires de France, Paris.
- 1974 A History of French Louisiana, Vol.I, the reign of Louis XIV, 1698-1715. Louisiana State University Press, Baton Rouge.
- Glassie, Henry
1975 Folk housing in Middle Virginia. The University of Tennessee Press, Knoxville.
- Gleeson, Paul (Editor)
1970 Archaeological investigations in the Tellico Reservoir interim report 1970. Report of Investigations 8. Department of Anthropology, University of Tennessee, Knoxville.
- Gluckman, M.
1949 The sociological theories of Malinowski. Rhodes-Livingston Papers 16. Oxford University Press, London.
- Goggin, John M.
n.d. An introduction to Spanish trade beads and pendants - 16th and 17th centuries. Unpublished ms. Lower Mississippi Survey Files, Peabody Museum, Harvard University.

- Goodenough, Ward H.
1963 Cooperation in change. Russell Sage Foundation,
New York.
- Goldschmidt, W.R.
1959 Man's way. Holt, Rinehart and Winston, New York.
- Good, Mary E.
1972 Guebert site: An 18th century historic Kaskaskia
Indian village. The Central States Archaeological
Societies Inc., Memoir II.
- Gravier, Father Jacques
1700 Journal of the voyage of Father Gravier. In Shea
1861:115-163.
- 1701 Relation or journal of the voyage of Father Gravier,
of the Society of Jesus, in 1700, from the country
of the Illinois to the mouth of the Mississippi
River. In Thwaites 1896-1901, 65:100-179.
- 1708 Letter of Father Gravier, upon the affairs of
Louisiana. In Thwaites 1896-1901, 66:124-143.
- Gregory, Hiram A.
1962 Louisiana Studies 1(2). Northwestern State College.
- Gregory, Hiram A. and Clarence H. Webb
1965 European trade beads from sites in the Natchitoches
Parish, Louisiana. The Florida Anthropologist 17,
No.3, Pt.2, pp.15-44.
- Griffin, James B.
1958 The chronological position of the Hopewellian
culture in the Eastern United States. Museum of
Anthropology, University of Michigan, Anthropological
Papers 12.
- 1966 Mesoamerica and the Eastern United States in
prehistoric times. In Handbook of Middle American
Indians, Vol.4, Archaeological frontiers and
external connections, edited by Robert Wauchope,
pp.111-131. University of Texas Press, Austin.
- Griffin, John W. and Hale G. Smith
1948 The Goodnow mound, Highland County, Florida.
Contributions to the Archaeology of Florida 1.
- Grimm, Jacob L.
1970 Archaeological investigations of Fort Ligonier,
1960-1965. Annals of Carnegie Museum 42.

- Haas, Mary R.
1943 The solar deity of the Tunica. Papers of the Michigan Academy of Science, Arts, and Letters 28 (4):531-535.
- 1950 Tunica texts. University of California at Berkeley, Publications in Linguistics 6(1).
- Hallowell, A.I.
1954 The self and its behavioral environment. Exploration 2:106-165.
- 1957 The backwash of the frontier: The impact of the Indian on American culture. In The frontier in perspective, edited by W.D. Wyman and C.B. Kroeber, pp.229-258. University of Wisconsin Press, Madison.
- Hally, David J.
1972 The Plaquemine and Mississippian occupations of the Upper Tensas Basin, Louisiana. Unpublished Ph.D. dissertation. Department of Anthropology, Harvard University.
- Hamilton, Henry W.
1967 Tobacco pipes of the Missouri Indians. Missouri Archaeological Society, Memoir 5.
- Hamilton, Henry W., Jean T. Hamilton, and Eleanor F. Chapman
1974 Spiro mound copper. Missouri Archaeological Society, Memoir 11.
- Hamilton, Peter J.
1898 Colonial Mobile. Boston and New York.
- Hamilton, T.M.
1960a Additional comments on gunflints. In Hamilton 1960b: 73-79.
- 1960b Indian trade gun. Missouri Archaeologist 22. (Editor).
- 1965 Recent developments in the use of gunflints for dating and identification. In Diving into the past, edited by Helmquist and Wheeler, pp.52-57. Minnesota Historical Society, St. Paul.
- 1968 Early Indian trade guns:1625-1775. Contributions of the Museum of the Great Plains 3.
- 1971 The gunflints of Sept-Iles and Mingan. The Conference on Historic Site Archaeology Papers 4:61-74.

- 1976 Firearms on the frontier: Guns at Fort Michilimackinac 1715-1781. Reports on Mackinac History and Archaeology 5.
- Hamilton, T.M. and Bruce W. Fry
1975 A survey of Louisbourg gunflints. Canadian Historic Sites, Occasional Papers in Archaeology and History 12:101-128.
- Hanson, Lee H., Jr.
1969 Kaolin pipe stems - boring in on a fallacy. The Conference on Historic Site Archaeology Papers 4:2-15.
- Harrington, J.C.
1954 Dating stem fragments of seventeenth and eighteenth century clay tobacco pipes. Quarterly Bulletin of the Archaeological Society of Virginia 9(1).
- Harris, Donald A.
1971 A French colonial well: Its construction, excavation and contents. The Conference on Historic Sites Archaeology Papers 5:51-89.
- Harris, Marvin
1968 The rise of anthropological theory. Thomas Y. Crowell Co., New York.
- Harris, R.K. and I.M. Harris
1965 A preliminary archaeological and documentary study of the Womack site, Lamar County, Texas. Bulletin of the Texas Archaeological Society 36.
- Hatch, Elvin
1973 Theories of man and culture. Columbia University Press, New York.
- Hays, H.R.
1968 From ape to angel. Capricorn Books, New York.
- Hayward, J.F.
1963 The art of the gunmaker, Vol.II. St. Martins Press.
- Heider, Karl G.
1970 The Dugum Dani, a Papuan culture in the highlands of west New Guinea. Viking Fund Publications in Anthropology 49.
- 1971 Archaeological assumptions and ethnographical facts. In Man's imprint from the past, edited by James J.F. Deetz, pp.384-396. Little, Brown and Company, Boston.

- Heizer, Robert F. and John E. Mills
1952 The four ages of Tsurai. Berkeley and Los Angeles.
- Heldman, Donald P.
1973 Archaeological investigations of Fort Toulouse: 1972-73. Research project Alabama Historical Commission and the National Park Service.
- Hennepin, Father Louis
n.d. Account of the discovery of the river Mississippi and the adjacent country. In Cox 1905:66-87.
- Herskovits, Melville J.
1966 Cultural dynamics. Alfred A. Knopf, New York.
- Hester, Thomas R., Delbert Gilbow, and Alan D. Albee
1973 A functional analysis of "Clear Fork" artifacts from the Rio Grande plain, Texas. American Antiquity 38:90-96.
- Heye, George C., F.W. Hodge, and George H. Pepper
1918 The Nacooche mound in Georgia. Contributions from the Museum of the American Indian, Heye Foundation 4(3).
- Holmes, Jack D.L.
1969 Dauphin Island in the Franco-Spanish war, 1719-1722. In McDermott 1969:103-125.
- Holmes, William H.
1903 Aboriginal pottery of the eastern United States. Bureau of American Ethnology, Annual Report 20.
- Honigsmann, John J.
1952 Intercultural relations at Great Whale River. American Anthropologist 54:510-522.
- Howell, Walter G.
1973 The French period, 1699-1763. In A history of Mississippi, Vol.I, edited by R.A. McLemore, pp. 24-68. University and College Press of Mississippi, Hattiesburg.
- Hubert, Sieur
1717 Letter of Sieur Hubert at Dauphine Island to the council, October 26. In Rowland and Sanders 1929: 236-252.
- Hudson, Charles M.
1970 The Catawba nation. University of Georgia Press, Athens.
- Humphrey, R.V.
1969 Clay pipes from old Sacramento. Historical Archaeology 3:23-25.

- Hunt, G.T.
1960 The wars of the Iroquois: A study in intertribal trade relations. University of Wisconsin Press, Madison.
- Huntington, R.T.
1960 Identification of unmarked gunlocks. In Hamilton 1960b.
- Jelks, Edward B. et al.
1966 The Gilbert site: A Norteño focus site in northwestern Texas. Bulletin of the Texas Archaeological Society 37.
- Jenkins, Ned J. and Jerry J. Nielsen
1974 Archaeological salvage investigations at the West Jefferson Steam Plant site, Jefferson County, Alabama. Unpublished ms. Mound State Monument.
- Jennings, Jesse D.
1941 Chickasaw and earlier Indian cultures of northeast Mississippi. Journal of Mississippi History 3(3).
- Jolliffe, Susan
1973 Chinese porcelain from the shipwreck "Machault". National Historic Parks and Sites Research Bulletin 14.
- Jones, B. Calvin
1972 Colonel James Moore and the destruction of the Apalachee missions in 1704. Bureau of Historic Sites and Properties Bulletin 2.
- Karklins, Karlis
1975 Seventeenth century Dutch beads. Historical Archaeology VIII:64-82.
- Keesing, Felix M.
1939 The Menomini Indians of Wisconsin: A study of three centuries of cultural contact and change. Memoirs of the American Philosophical Society 10.
- Kerrick, J.E. and D.L. Clarke
1967 Notes on the possible misuse and errors of cumulative percentage frequency graphs for the comparison of prehistoric artefact assemblages. Proceedings of the Prehistoric Society 33:55-69.
- Kidd, Kenneth E. and Martha A. Kidd
1970 A classification system for glass beads for the use of field archaeologists. Canadian Historic Sites Occasional Papers in Archaeology and History 1.

- Kinsey, W. Fred III
1960 Additional notes on the Albert Ibaugh site.
Pennsylvania Archaeologist 30(3-4):81-105.
- Klinger, Robert L. and Richard Wilder
1967 Sketch book 76, the American soldier 1775-1781.
Cooper-Trent, Arlington.
- Kraus, Bertram S.
1944 Acculturation, a new approach to the Iroquoian
problem. American Antiquity 9:302-318.
- Kroeber, Alfred L.
1901 Explanation of causes and origin. In Kroeber 1952:
12-19.
1923 Anthropology. Harcourt Brace Jovanovich, New York.
1938 Historical context, reconstruction, and interpretation
In Kroeber 1952:79-84.
1939 Cultural intensity and climax. In Kroeber 1952:
337-343.
1940 Stimulus diffusion. In Kroeber 1952:344-357.
1943 Structure, function, and pattern in biology and
anthropology. In Kroeber 1952:85-94.
1948 Anthropology. Harcourt Brace, New York.
1952 Nature of culture. The University of Chicago Press,
Chicago.
- Kuhn, Thomas S.
1970 The structure of scientific revolutions. International
Encyclopedia of Unified Science 2(2). The University
of Chicago Press, Chicago.
- Kunkel, J.H.
1970 Society and economic growth. Oxford University Press,
New York.
- La Chaise, M. de
1723a Letter of M. de La Chaise to the directors of the
Company of the Indies, September 6 and 10, New
Orleans. In Rowland and Sanders 1929:294-357.
1723b Letter of M. de La Chaise to the directors of the
Company of the Indies, October 18, New Orleans. In
Rowland and Sanders 1929:358-391.

- Laguna, Frederica de
 1960 The story of a Tlingit community: A problem in the relationship between archaeological, ethnological and historical methods. Bureau of American Ethnology, Bulletin 172.
- Lamothe de Cadillac, Antoine Laumet de
 1713 Letter of Lamothe Cadillac to Ponchartrain. In Rowland and Sanders 1929:162-204.
 1716 Minutes of the council on Cadillac's letter of July 1. In Rowland and Sanders 1929:219-221.
- Lancaster, Chet S.
 1974 Brideservice, residence, and authority among the Goba (N. Shona) of the Zambezi Valley. Africa 44: 46-64.
 1975 Later iron hoes from southern Zambia. Current Anthropology 16(2):283.
- Lane, Arthur
 1948 French faience. Faber and Faber, London.
- Lankford, George E. III
 1977 A new look at De Soto's route through Alabama. Journal of Alabama Archaeology XXIII(1):10-36.
- La Salle, Nicolas de
 1704 Census of Louisiana. In Rowland and Sanders 1929: 18-20.
- La Salle, René Robert Cavelier Sieur de
 1682 Account of the taking possession of Louisiana. In Cox 1905:159-170.
 1684 Memoirs presented by La Salle to the Marquis de Seignelay in 1684. In Cox 1905:171-204.
- La Source, Rev. Dominic Thaumur de
 1698 Letter of Sieur Thaumur de La Source. In Shea 1861: 79-86.
- La Tour, Sieur de
 1717 Letter of Sieur de La Tour, lieutenant in command at the Alabamas. In Rowland and Sanders 1929:250.
- Leacock, Eleanor
 1954 The Montagnais "hunting territory" and the fur trade. American Anthropological Association, Memoir 78.

- Le Baron Marc de Villiers
1931 L'établissement de la Province de la Louisiane.
Journal de la Société des Américanistes de Paris.
- Le Bouteux, Jean Baptiste Michel
1720 Veue du camp de la concession de monseigneur Law.
Ayer collection, Newberry Library.
- Le Clerq, Father Chretien
n.d.a Narrative of the first attempt by M. Cavelier de
La Salle to explore the Mississippi, drawn up from
the manuscripts of Father Zenobius Membré, a Recollect
In Cox 1905:87-106.
- n.d.b Account of La Salle's attempt to reach the
Mississippi by sea, and of the establishment of a
French colony in St. Louis Bay. In Cox 1905:205-
222.
- Le Conte, M.
1924 Les Allemands à la Louisiane au XVIIIe siècle.
Journal de la Société des Américanistes de Paris
XVI.
- Le Moyne de Bienville, Jean-Baptiste
1706 Abstract of letters from Bienville to Ponchartrain.
In Rowland and Sanders 1929:20-29.
- 1718 Letter to the regent, June 10. In Delanglez 1935.
- Le Moyne d'Iberville, M.P.
1699 Narrative of the expedition of M. d'Iberville to
Louisiana. In French 1869:19-162.
- Le Moyne de Morgues, Jacques
1875 Narratives of Le Moyne. Boston.
- Leone, Mark P.
1972a (Editor) Contemporary archaeology. Southern Illinois
University Press, Carbondale and Edwardsville.
- 1972b Issues in anthropological archaeology. In Leone
1972a:14-27.
- Le Page du Pratz, Antoine Simon
1774 The history of Louisiana or of the western parts
of Virginia and Carolina (reprinted 1972 by Claitor's
Publishing Division, Baton Rouge).
- Le Petit, Father
1730 Letter from Father Le Petit, missionary, to Father
d'Avaugour, procurator of the missions in North
America. In Thwaites 1896-1901,68:120-223.

- Levin, Michael E.
1973 On explanation in archaeology: A rebuttal to Fritz and Plog. American Antiquity 38:387-395.
- Lévi-Strauss, Claude
1967a The sorcerer and his magic. In Structural anthropology chapter 9. Doubleday & Company Inc., New York.
1967b History and anthropology. In Structural Anthropology, chapter 1. Doubleday & Company Inc., New York.
- Lewis, T.M.N. and Madeline Kneberg
1970 Hiwassee Island: An archaeological account of four Tennessee Indian peoples. The University of Tennessee Press, Knoxville.
- Linton, Ralph
1936 The study of man: An introduction. D. Appleton-Century Co. Inc., New York and London.
1940 Acculturation in seven American Indian tribes. D. Appleton-Century Co. Inc., New York and London.
1943 Nativistic movements. American Anthropologist 45:230-240.
- Long, George A.
1973a Progress report on faience research. National Historic Parks and Site Branch Research Bulletin 12.
1973b Tin-glazed earthenware from the "Machault". National Historic Parks and Site Branch Research Bulletin 13.
- Lough, John
1960 An introduction to 18th century France. Loganns, England.
- Lusser, M. de
1730 Journal of the journey that I made in the Choctaw nation by order of M. Perier, beginning on January 12th, 1730, and lasting until March 23rd of the same year. In Rowland and Sanders 1927:81-117.
- McClelland, D. and D. Winter
1969 Motivating economic achievement. The Free Press, New York.
- McClurkan, Burney
1972 Fort Desha, the location of the Arkansas Post, ca. 1735-1750. The Conference on Historic Site Archaeology Papers 6:32-39.
- McDermott, John F.
1965 (Editor) The French in the Mississippi Valley. University of Illinois Press, Urbana.

- 1969 (Editor) Frenchmen and French ways in the Mississ-
ippi Valley. University of Illinois Press, Urbana.
- McCuire, Joseph D.
1899 Pipes and smoking customs of the American aborigines,
based on material in the United States National
Museum, Washington. Report of the United States
National Museum for 1897, pp.351-645.
- McLennan, J.S.
1918 Louisbourg from its foundation to its fall, 1713-
1758. Fortress Press, Sydney, Nova Scotia.
- Malinowski, Bronislaw
1929 Practical anthropology. Africa 2:23-38.
- 1944 A scientific theory of culture. University of North
Carolina Press, Chapel Hill.
- 1961 Argonauts of the western Pacific. E.P. Dutton &
Co., Inc., New York.
- 1965 An ethnographic theory of language and some
practical corollaries. In Coral gardens and their
magic, Vol.II, the language of magic and gardening,
pp.4-74. Indiana University Press, Bloomington.
- Mandelbaum, D.G.
1941 Culture change among the Nilgiri tribes. American
Anthropologist 43:19-26.
- Martin, Paul S.
1972 The revolution in archaeology. In Leone 1972a:5-13.
- Marwitt, Renée H.
1967 A preliminary survey of seven coarse earthenwares
from the Fortress of Louisbourg. The Conference
on Historic Site Archaeology Papers 1:53-56.
- Marx, Karl
1965 Pre-capitalist economic formations. International
Publishers, New York.
- 1970 Introduction to a critique of political economy.
Edited by C.J. Arthur. International Publishers,
New York.
- Mason, Ronald J.
1976 Ethnicity and archaeology in the Upper Great Lakes.
In Cultural change and continuity, edited by
Charles Cleland, pp.349-361. Academic Press, Inc.,
New York.

- Maude, H.E.
1968 Of islands and men: Studies in Pacific history.
Oxford University Press, New York.
- Maxwell, Moreau S. and Lewis H. Binford
1961 Excavations at Fort Michilimackinac, Mackinac City, Michigan, 1959 season. Publications of the Museum, Michigan State University, Cultural Series 1.
- Mead, Margaret
1932 The changing culture of an Indian tribe. Columbia University Press, New York.

1956 New lives for old. Mentor Books, New York.
- Membré, Father Zenobius
n.d.a Narrative of the adventures of La Salle's party at Fort Crevecoeur, in Illinois, from February, 1680, to June, 1681. In Cox 1905:106-131.

n.d.b Narrative of La Salle's voyage down the Mississippi. In Cox 1905:131-159.
- Mercer, Henry C.
1923 Ancient carpenters' tools. Bucks County Historical Society, Doyleston, Pennsylvania.
- Mereness, Newton D.
1916 Travels in the American colonies. Macmillan Co., New York.
- Miller, J. Jefferson and Lyle M. Stone
1970 Eighteenth-century ceramics from Fort Michilimackinac: A study in historical archeology. Smithsonian Studies in History and Technology 4.
- Mills, C. Wright
1940 Situated actions and vocabularies of motive. American Sociological Review 5(6):904-913.
- Miroir, M.P. et al.
1973 Bénard de la Harpe and the Massonite Post. Bulletin of the Texas Archeological Society 44:113-167.
- Montigny, François Jolliet de
1699a Letter written August 25. In Swanton 1911:22.

1699b Letter of M. de Montigny. In Shea 1861:75-79.
- Mooney, James
1892-1893 The Ghost Dance religion. Bureau of American Ethnology, Annual Report 14(2).

- Moore, Clarence B.
 1908 Certain mounds of Arkansas and of Mississippi. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia 13:480-600.
- 1909 Antiquities of the Cuachita Valley. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia 14:1-170.
- 1910 Antiquities of the St. Francis, White, and Black Rivers, Arkansas. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia 14:255-364.
- 1911 Some aboriginal sites on Mississippi River. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia 14:367-478.
- 1912 Some aboriginal sites on Red River. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia 14:481-644.
- 1913 Some aboriginal sites in Louisiana and in Arkansas. Reprint from the Journal of the Academy of Natural Sciences of Philadelphia 16:1-98.
- Moore, W.E.
 1963 Social change. Prentice-Hall, Englewood Cliffs, New Jersey.
- Morgan, Lewis H.
 1877 Ancient society. Holt, Rinehart and Winston, New York.
- Morrell, L. Ross
 1965 The Woods Island site in Southeastern acculturation: 1625-1800. Florida State University, Notes in Anthropology 11.
- Murray, Robert A.
 1964 Glass trade beads at Fort Laramie. Wyoming Archaeologist 8(3):13-19.
- Mulvihill, M.J.Sr. (Editor)
 1931 Vicksburg and Warren County, Mississippi, Tunica Indians, Quebec missionaries, Civil War veterans. Warren County, Mississippi.
- Nance, J.D.
 1971 Functional interpretations from microscopic analysis. American Antiquity 36:361-366.

- Neitzel, Robert S.
1965 Archeology of the Fatherland site: The Grand Village of the Natchez. American Museum of Natural History, Anthropological Papers 51(1).
- Nelson, Lee H.
1963 Nail chronology as an aid to dating old buildings. History News 19(2).
- Felson, N.C.
1914 Pueblo ruins of the Galisteo Basin, New Mexico. American Museum of Natural History, Anthropological Papers 15(1).
- Newell, H. Perry and Alex D. Krieger
1949 The George C. Davis site, Cherokee County, Texas. Society of American Archaeology, Memoir 5.
- Noel Hume, Audrey
1963 Clay tobacco pipe dating in the light of recent excavations. Quarterly Bulletin of the Archaeological Society of Virginia 18:22-25.
- Noel Hume, Ivor
1960 Rouen faience in eighteenth century America. Antiques 78:559-561.
- 1969a A guide to artifacts of colonial America. Alfred A. Knopf, New York.
- 1969b Pearlware: Forgotten milestone in English ceramic history. Antiques 95:390-397.
- 1969c Pottery and porcelain in colonial Williamsburg archaeological collections. Colonial Williamsburg Archaeological Series 2.
- Norton, Thomas E.
1974 The fur trade in colonial New York, 1686-1776. The University of Wisconsin Press, Madison.
- Ogburn, W.F.
1957 Cultural lag as theory. Sociology and Social Research 41:167-174.
- Omwake, H.G.
1956 Date-bore diameter correlation in English white kaolin pipe stems, yes or no? Quarterly Bulletin of the Archaeological Society of Virginia 11(1).
- 1965 White kaolin pipe bowl and stem fragments. In Smith 1965:41-51.

Orchard, William C.

- 1929 Beads and beadwork of the American Indians. Contributions from the Museum of American Indian, Heye Foundation 11.

Osler, E.B.

- 1967 La Salle. Toronto.

Oswald, Adrian

- 1951 English clay tobacco pipes. The Archaeological Newsletter 3(10):153-159. London.

- 1955 Tobacco pipes of Broseley Shropshire. The Archaeological Newsletter 5(10-11), Parts 1-2. London.

- 1960 The archaeology and economic history of English clay tobacco pipes. Journal of the British Archaeological Association 23 (3rd series).

- 1975 Clay pipes for the archaeologist. British Archaeological Reports 14.

Paine, R.

- 1971a Introduction. In Paine 1971c:3-7.

- 1971b A theory of patronage and brokerage. In Paine 1971c:8-21.

- 1971c (Editor) Patrons and brokers in the east Arctic. University of Toronto Press, Toronto.

Pargellis, Stanley

- 1957 The problem of American Indian history. Ethnohistory 4(2):113-124.

Parkman, Francis

- 1894 The old régime in Canada. France and England in North America, Vol.4. Little, Brown and Company, Boston.

Pénicaut, M. André

- 1698-1722 Annals of Louisiana, from the establishment of the first colony under M. d'Iberville to the departure of the author to France, in 1722. In French 1869:33-162.

Périer, M.

- 1730 Letter of Périer to Maurepas, March 18, New Orleans. In Rowland and Sanders 1927:61-71.

Périer, M. and M. de La Chaise

1729a Letter of Périer and de La Chaise to the directors of the Company of the Indies, January 30, New Orleans. In Rowland and Sanders 1929:610-624.

1729b Letter of Périer and de La Chaise to the directors of the Company of the Indies, April 22, New Orleans. In Rowland and Sanders 1929:642-644.

Perino, Gregory

1967 The Kaskaskia Indian village site, 1700-1832. The Conference on Historic Site Archaeology Papers 1: 127-132.

Petersen, E.T.

1963 Some 18th century clay pipes found at Mackinac. Michigan Archaeologist 9(1):1-6.

1964 Gentlemen on the frontier. Mackinac Island State Park Commission, Mackinac Island.

Peterson, Charles E.

1965 The houses of French St. Louis. In McDermott 1965: 17-40.

Peterson, Harold L.

1968 The book of the continental soldier. The Stackpole Company, Harrisburg.

Phelps, Dawson A.

1966 Colonial Natchez: A French colony. Unpublished ms. Lower Mississippi Survey Files, Peabody Museum, Harvard University.

Phillips, Philip

1940 Middle American influences on the archaeology of the Southeastern United States. In The Maya and their Neighbors, edited by A.M. Tozzer, pp.349-367. D. Appleton-Century Co., New York and London.

1958 Application of the Wheat-Gifford-Wasley taxonomy to Eastern ceramics. American Antiquity 24:117-125.

1970 Archaeological survey in the Lower Yazoo Basin, Mississippi, 1949-1955. Papers of the Peabody Museum of Archaeology and Ethnology 60.

Phillips, Philip, James A. Ford, and James B. Griffin

1951 Archaeological survey in the Lower Mississippi Alluvial Valley, 1940-1947. Papers of the Peabody Museum of Archaeology and Ethnology 25.

- Poisson, Father du
 1726 Letter from Father du Poisson, missionary to the Akensas, to Father Patouillet. In Thwaites 1896-1901, 67:248-263.
- 1727 Letter from Father du Poisson, missionary to the Akensas, to Father ***. In Thwaites 1896-1901, 67:276-325.
- Polanyi, Karl
 1947 Our obsolete market mentality. Commentary 3:109-117.
- Porter, James W.
 1969 The Mitchell site and prehistoric exchange systems at Cahokia: AD 1000+ 300. In Explorations into Cahokia archaeology, edited by M.L. Fowler, pp. 137-164. Illinois Archaeological Survey, Bulletin 7.
- Priestley, Herbert I. (Editor)
 1928 The Luna papers, documents relating to the expedition of Don Tristán de Luna y Arellano for the conquest of La Florida in 1559-1561. 2 vols. Deland.
- Quimby, George I.
 1942 The Natchezan culture type. American Antiquity 7:255-275.
- 1951 The Medora site, West Baton Rouge Parish, Louisiana. Field Museum of Natural History, Anthropological Series 24:81-135.
- 1957 The Bayou Goula site, Iberville Parish, Louisiana. Fieldiana: Anthropology 47(2).
- 1966 Indian culture and European trade goods. The University of Wisconsin Press, Madison.
- Quimby, George I. and Alexander Spoehr
 1951 Acculturation and material culture. Fieldiana: Anthropology 36:107-147.
- Radcliffe-Brown, A.R.
 1935 On the concept of function in social sciences. American Anthropologist 37:394-402.
- 1952 Structure and function in primitive society. The Free Press, New York.
- Raphael, Father
 1725 Letter of Father Raphael to the Abbé Raguet, May 15, New Orleans. In Rowland and Sanders 1929:470-492.
- 1726a Letter of Reverend Father Raphael, a Capuchin, Vicar General of Louisiana, to the Abbé Raguet. In Rowland and Sanders 1929:515-521.

- 1726b Letter of Father Raphael to the Abbé Raguet. In Rowland and Sanders 1929:521-532.
- Ray, Arthur J.
1978 History and archaeology of the northern fur trade. American Antiquity 43:26-34.
- Redfield, Robert
1941 The folk culture of Yucatan. University of Chicago Press, Chicago.
- Redfield, Robert, Ralph Linton, and M.J. Herskovits
1936 Memorandum for the study of acculturation. American Anthropologist 38:149-152.
- Regis du Roullet
1729 Letter from Regis du Roullet to Maurepas, November 11, New Orleans. In Rowland and Sanders 1927:21-54.
- Richardson, J. and A.L. Kroeber
1940 Three centuries of women's dress fashions: A quantitative analysis. Anthropological Records 5 (2):111-154.
- Ridley, Frank
1954 The Frank Bay site, Lake Nipissing, Ontario. American Antiquity 20:40-50.
- Ritchie, William A.
1932 The Algonkin sequence in New York. American Anthropologist 34:406-414.
- Rouse, Irving
1951 A survey of Indian River archeology. Yale University Publications in Anthropology 44.
- Rowland, Dunbar and Albert G. Sanders (Editors and Translators)
1927 Mississippi Provincial Archives, 1729-1740, French Dominion, Vol.I. Mississippi Department of Archives and History, Jackson.
- 1929 Mississippi Provincial Archives, 1701-1729, French Dominion, Vol.II. Mississippi Department of Archives and History, Jackson.
- 1932 Mississippi Provincial Archives, 1704-1743, French Dominion, Vol.III. Mississippi Department of Archives and History, Jackson.
- Rucker, Marc D.
1976 Archaeological investigations at Pocahontas mound A. Archaeological Excavation Report 3. Mississippi State Highway Department, Jackson.

- Russell, Carl P.
1957 Guns on the early frontiers. Bonanza Books, New York.
- Sahlins, Marshall D.
1960 Evolution: Specific and general. In Sahlins and Service 1960:chapter 2.
- 1964 Culture and environment: The study of cultural ecology. In Horizons of anthropology, edited by Sol Tax, pp.132-147. Aldine Publishing Co., Chicago.
- 1965 On the sociology of primitive exchange. In The relevance of models for social anthropology, edited by M. Banton, pp.139-236. Association for Social Anthropologists, Monograph 1.
- Sahlins, Marshall D. and Elman R. Service
1960 Evolution and culture. University of Michigan Press, Ann Arbor.
- Salter, Andrew H.
1977 Catlinite calumets: Late prehistoric and historic interactions in Eastern North America. Unpublished Honors thesis. Department of Anthropology, Harvard College.
- Sapir, Edward
1916 Time perspective in aboriginal American culture: A study in method. In Selected writings of Edward Sapir, edited by D.G. Mandelbaum, pp.389-462. University of California Press, Berkeley and Los Angeles (1949).
- 1921 Language. Harcourt and Brace, New York.
- Schmitt, Karl, Jr.
1965 Patawomeke: An historic Algonkian site. Quarterly Bulletin of the Archaeological Society of Virginia 20(1):1-36.
- Scholes, France V.
1942 Troublous times in New Mexico, 1659-1670. Historical Society of New Mexico, Publications in History II.
- Schuetz, Mardith K.
1969 The history and archaeology of the mission San Juan Capistrano. Texas State Building Commission Archaeological Program, Report 11.
- Schutz, Alfred
1962 On multiple realities. In Collected papers I: The problem of social reality, edited by M. Natanson. Martinus Nijhoff, The Hague.

- Schuyler, Robert L.
1972 Historical and historic sites archaeology. In Leone 1972a:118-124.
- Scully, Edward G.
1951 Some Central Mississippi Valley projectile point types. Mimeographed ms. Ann Arbor.
- Sears, William H.
1954 A late Archaic horizon on the Atlantic coastal plain. Southern Indian Studies 6:28-36.
- Semenov, S.A.
1976 Prehistoric technology. Translated by M.W. Thomson. Harper & Row Publishers, Inc., New York.
- Service, Elman R.
1960a The law of cultural dominance. In Sahlins and Service 1960:chapter 4.
1960b The law of evolutionary potential. In Sahlins and Service 1960:chapter 5.
1962 Primitive social organization. Random House, New York.
1971 Cultural evolutionism. Holt, Rinehart and Winston, New York.
- Shafer, Harry J.
1970 Notes on uniface retouch technology. American Antiquity 35:480-487.
- Sharp, Lauriston
1952 Steel axes for stone-age Australians. Human Organization 2:17-22.
1975 Technological innovation and culture change: An Australian case. In Cultural and social anthropology, introductory readings in ethnology, edited by P.B. Hammond, pp.42-51. Macmillan Publishing Co., Inc., New York.
- Shea, John G.
1861 Early voyages up and down the Mississippi. Joel Munsel, Albany.
- Sheldon, Craig T.
1974 The Mississippian-historic transition in central Alabama. Ph.D. dissertation, University of Oregon, University Microfilms, Ann Arbor.
- Singer, Milton
1968 The concept of culture. International Encyclopedia of the Social Sciences 3:527-543.

- Sleen, W.G.N. Van der
1967 A handbook of beads. Publication of the Journées International du Verre, Liege, Belgium.
- Smith, Brent W.
1976 The late Archaic-Poverty Point steatite trade network in the Lower Mississippi Valley: A preliminary report. Louisiana Archaeological Society, Newsletter 3(4):6-10.
- Smith, G. Hubert
1972 Like-a-Fishhook village and Fort Berthold Garrison Reservoir North Dakota. National Park Service, Anthropological Papers 2.
- Smith, Hale G.
1956 The European and the Indian. Florida Anthropological Society Publications 4.
1965 (Editor) Archaeological excavations at Santa Rosa Pensacola. Florida State University, Notes in Anthropology 10.
- Smith, Marian W.
1954 Shamanism in the Shaker religion of Northwest America. Man 54:119-122.
- Solon, L.M.
1903 A history and description of the old French faience. Cassell & Co., New York.
- South, Stanley
1962 The ceramic types at Brunswick Town, North Carolina. Southeastern Archaeological Conference, Newsletter 9(1).
1968 Archaeological evidence of pottery repairing. The Conference on Historic Site Archaeology Papers 2: 62ff.
1972 Evolution and horizon as revealed in ceramic analysis in historical archeology. The Conference on Historic Site Archaeology Papers 6:71-116.
1977 Method and theory in historical archeology. Academic Press, New York.
- Spencer, Herbert
1876-1896 Principles of sociology. 3 vols. D. Appleton & Co., New York.
- Speth, John D.
1972 Mechanical basis of percussion flaking. American Antiquity 37:34-60.

- 1975 Miscellaneous studies in hard-hammer percussion flaking: The effects of oblique impact. American Antiquity 40:203-207.
- Spicer, Edward H.
- 1954 Spanish-Indian acculturation in the Southwest. American Anthropologist 56:663-678.
- 1958 Social structure and the acculturation process. American Anthropologist 60:433-441.
- 1961 Perspectives in American Indian culture change. University of Chicago Press, Chicago.
- Spier, Leslie
- 1921 The Sun Dance of the Plains Indians: Its development and diffusion. American Museum of Natural History, Anthropological Papers 16(7).
- Spoehr, Alexander
- 1947 Changing kinship systems. Field Museum of Natural History, Anthropological Series 33:159-235.
- SSRC Summer Seminar on Acculturation
- 1954 Acculturation: An explanatory formulation. American Anthropologist 56:973-1002.
- Stephens, B.W.
- 1958 Comments on some aboriginal tobacco pipes. The Central States Archaeological Journal 5(2):64-68.
- Steponaitis, Vincas P.
- 1974 The late prehistory of the Natchez region: Excavations at the Emerald and Foster sites, Adams County, Mississippi. Unpublished Honors thesis. Department of Anthropology, Harvard College.
- 1976 Plaquemine ceramic chronology in the Natchez region. Paper presented in the Symposium on new developments in Lower Mississippi Valley ceramic chronology at the Southeastern Archaeological Conference, Tuscaloosa.
- Steward, Julian H.
- 1936 The economic and social basis of primitive bands. In Essays in honor of A.L. Kroeber, edited by R. Lowie, pp.331-350. University of California Press, Berkeley.
- 1937 Ecological aspects of Southwestern society. Anthropos XXXII:87-104.
- 1938 Basin - Plateau, sociopolitical groups. Bureau of American Ethnology, Bulletin 120.
- 1942 The direct historical approach to archaeology.

American Antiquity 7:337-343.

1946-1950 Handbook of South American Indians. Bureau of American Ethnology, Bulletin 1-6.

1955 Theory of culture change. University of Illinois Press, Urbana.

Stocking, George W., Jr.

1971 Race, culture, and evolution, essays in the history of anthropology. The Free Press, New York. Collier-Macmillan Ltd., London.

Stone, Lyle M.

1971 Rosary and glass beads. In Cleland et al. 1971: 74-85.

1972 Archaeological investigations of the Marquette Mission site, St. Ignace, Michigan, 1971: A preliminary report. Reports in Mackinac History and Archaeology 1.

1974 Fort Michilimackinac, 1715-1781: An archaeological perspective on the Revolutionary frontier. Michigan State University, Anthropological Series, Publications of the Museum 2.

Stotz, Charles M.

1974 The reconstruction of Fort Ligonier, the anatomy of a frontier fort. Association for Preservation Technology, Bulletin VI(4).

Strong, William D.

1935 An introduction to Nebraska archeology. Smithsonian Miscellaneous Collections 93(10).

1940 From history to prehistory in the northern Great Plains. In Essays in historical anthropology of North America, pp.353-394. Smithsonian Miscellaneous Collections 100.

Struever, Stuart and Gail L. Houart

1972 An analysis of the Hopewell interaction sphere. Museum of Anthropology, University of Michigan, Anthropological Papers 46.

Surrey, N.M. Miller

1916 The commerce of Louisiana during the French regime 1699-1763. Columbia University Studies in History, Economics and Public Law 71(1).

Swanton, John R.

1911 Indian tribes of the Lower Mississippi Valley and adjacent coast of the Gulf of Mexico. Bureau of American Ethnology, Bulletin 43.

- 1928 Social organization and social usages of the Indians of the Creek confederacy. Bureau of American Ethnology, Annual Report 42:23-472.
- 1931 Source material for the social and ceremonial life of the Choctaw Indians. Bureau of American Ethnology, Bulletin 103.
- 1942 Source material on the history and ethnology of the Caddo Indians. Bureau of American Ethnology, Bulletin 132.
- 1946 The Indians of the Southeastern United States. Bureau of American Ethnology, Bulletin 137.
- Swanton, John R. and J.O. Dorsey
1912 A dictionary of the Biloxi and Ofo languages accompanied with thirty-one Biloxi texts and numerous Biloxi phrases. Bureau of American Ethnology, Bulletin 47.
- Szwed, J.
1966 Private cultures and public imagery: Interpersonal relations in a Newfoundland peasant society. Institute of Social and Economic Research, Memorial University of Newfoundland.
- Thomas, Daniel H.
1960 Fort Toulouse in tradition and fact. The Alabama Review XIII(4).
- Thomas, David H.
1971 On the use of cumulative curves and numerical taxonomy. American Antiquity 36:206-209.
- 1976 Figuring anthropology, first principles of probability and statistics. Holt, Rinehart and Winston, New York.
- Thompson, Brittain (Editor)
1974 Alabama Archaeological Society, Stones and Bones Newsletter (September).
- Thurnwald, R.C.
1932 The psychology of acculturation. American Anthropologist 34:557-569.
- Thwaites, Reuben Gold (Editor)
1896-1901 The Jesuit relations and allied documents: Travels and explorations of the Jesuit missionaries in New France, 1610-1791. 73 vols. The Burrows Brothers Co., Cleveland.

- Tonti, Henry de
1693 Memoir sent in 1693, on the discovery of the Mississippi and the neighboring nations by M. D. La Salle, from the year 1678 to the time of his death, and by the Sieur de Tonti to the year 1691, Parts I-II. In Cox 1905:1-65.
- Toth, Alan
1966 Hopewellian influences in the Southeastern United States. Unpublished Honors thesis. Department of Anthropology, Harvard College.
- Trigger, Bruce
1968 The French presence in Huronia: The structure of Franco-Huron relations in the first half of the seventeenth century. Canadian Historical Review XLIX:107-141.
- 1970 Archaeology and ecology. In World Archaeology 2(1).
- Tsirk, Are
1974 Mechanical basis of percussion flaking: Some comments. American Antiquity 39:128-130.
- Tuggle, H. David, A.H. Townsend, and T.J. Riley
1972 Laws, systems, and research designs: A discussion of explanation in archaeology. American Antiquity 37:3-12.
- Tunnell, Curtis D. and J. Richard Ambler
1967 Archaeological excavations at Presidio San Agustin de Ahumada. Texas State Building Commission Archaeological Program, Report 6.
- Tylor, Edwar B.
1874 Primitive culture. 2 vols. Holt, Rinehart and Winston, New York.
- Voget, Fred W.
1956 The American Indian in transition: Reformation and accomodation. American Anthropologist 58:249-263.
- Vogt, Ivon Z.
1950 On the concepts of structure and process in cultural anthropology. American Anthropologist 62:18-33.
- Walker, Iain C.
1965 Some thoughts on the Harrington and Binford systems for statistically dating clay pipes. Quarterly Bulletin of the Archaeological Society of Virginia 20(2):60-64.
- 1971 An archaeological study of clay pipes from the King's Bastion, Fortress of Louisbourg. Canadian Historic Sites Occasional Papers in Archaeology and History 2:55-122.

- Walker, Sansoucy
1968 Field report on an excavation at Louisbourg, Nova Scotia, Canada. Quarterly Bulletin of the Archaeological Society of Virginia 22(3):91-116.
- Wallace, Anthony F.C.
1956 Revitalization movements. American Anthropologist 58:264-281.

1961 Culture and personality. Random House, New York.
- Wallis, Wilson D.
1918 Messiahs - Christian and pagan. The Gorham Press, Boston.

1943 Messiahs - their role in civilization. Washington.
- Waring, Antonio J., Jr.
1940-1945 The southern cult and Muskogean ceremonial. In Williams 1968:30-69.
- Waring, Antonio J., Jr. and Preston Holder
1945 A prehistoric ceremonial complex in the Southeastern United States. In Williams 1968:9-29.
- Warren, S.H.
1914 The experimental investigation of flint fracture and its application to problems of human implements. Journal of the Royal Anthropological Institute 44:512-551.
- Washburn, Wilcomb E.
1961 Ethnohistory: History "in the round". In Symposium on the concept of ethnohistory, pp.31-48. Ethnohistory 8(1).
- Watson, Patty Jo, Steven A. Le Blanc, and Charles L. Redman
1971 Explanation in archeology. Columbia University Press, New York and London.
- Watt, Frank H. and W.P. Meroney
1937 Glass Indian trade beads in central Texas. Central Texas Archeologist 3:52-58.
- Wax, R.H. and R.K. Thomas
1961 American Indians and White people. Phylon 22:305-317.
- Wedel, Mildred Mott
1971 J.-B. Bénard, Sieur de la Harpe: Visitor to the Wichitas in 1719. Great Plains Journal 10(2):37-70.

- 1974 Le Sueur and the Dakota Sioux. In Aspects of Upper Great Lakes anthropology, edited by E. Johnson, pp.157-171. Minnesota Historical Society, St. Paul.
- 1976 Ethnohistory: Its payoffs and pitfalls for Iowa archeologists. Journal of the Iowa Archeological Society 23:1-44.
- Wedel, Waldo R.
1936 An introduction to Pawnee archeology. Bureau of American Ethnology, Bulletin 112.
- 1940 Culture sequence in the Central Great Plains. In Essays in historical anthropology of North America, pp.291-352. Smithsonian Miscellaneous Collections 100.
- Wedel, Waldo R. and Mildred M. Wedel
1976 Wichita archeology and ethnohistory. In Kansas and the West, Bicentennial essays in honor of Nyle H. Miller, edited by F.R. Blackburn et al., pp.8-20. Kansas State Historical Society.
- West, George A.
1905 The aboriginal pipes of Wisconsin. Wisconsin Archaeologist 4(3-5):46-171.
- 1934 Tobacco, pipes and smoking customs of the American Indians. 2 vols. Bulletin of the Public Museum of the City of Milwaukee 17:1-994.
- White, John R.
1975 Historic contact sites as laboratories for the study of culture change. The Conference on Historic Site Archaeology Papers 9:153-163.
- White, Leslie
1949 The science of culture. Farrar, Straus and Company, New York
- 1959 The evolution of culture. McGraw-Hill Co., Inc., New York.
- White, Lynn Jr.
1967 The historical roots of our ecological crisis. Science 155.
- White, Stephen W.
1975 On the origin of gunspalls. Historical Archaeology 9:65-73.
- Wike, Joyce
1958 Problems in fur trade analysis: The Northwest Coast. American Anthropologist 60:1086-1101.

- Willey, Gordon R. and Philip Phillips
1958 Method and theory in American archaeology. University of Chicago Press, Chicago.
- Williams, F.E.
1923 The Vailala madness and the destruction of native ceremonies in the Gulf Division. Port Moresby: Territory of Papua, Anthropology Report 4.
- 1934 The Vailala madness in retrospect. In Essays presented to C.G. Seligman, pp.369-379. London.
- Williams, Stephen (Editor)
1968 The Waring papers, the collected works of Antonio J. Waring, Jr. Papers of the Peabody Museum of Archaeology and Ethnology 58.
- Williams, Stephen and Jeffrey P. Brain
n.d. Excavations at Lake George, Yazoo County, Mississippi. Papers of the Peabody Museum of Archaeology and Ethnology (forthcoming volume).
- Wilmsen, Edwin N.
1968 Functional analysis of flake stone artifacts. American Antiquity 33:156-161.
- Wilson, G. and M.H. Wilson
1945 The analysis of social change. Cambridge University Press, Cambridge.
- Wilson, Samuel, Jr.
1965 Colonial fortification and military architecture in the Mississippi Valley. In McDermott 1965:103-122.
- Winters, Howard D.
1968 Value systems and trade cycles of the late Archaic in the Midwest. In Binford and Binford 1968:175-221.
- Wissler, Clark (Editor)
1909 The Indians of Greater New York and the Lower Hudson. American Museum of Natural History, Anthropological Papers 3.
- 1923 Man and culture. Thomas Y. Crowell Co., New York.
- Witthoft, John
1966 A history of gunflints. Pennsylvania Archaeologist XXXVI(1-2):12-49.
- 1967 Glazed polish on flint tools. American Antiquity 32:383-388.

- Wittry, Warren L.
1963 The Bell site, Wn9, an early historic Fox village.
The Wisconsin Archaeologist 44(1).
- Wolf, Eric R.
1964 The study of evolution. In Horizons of anthropology,
edited by Sol Tax, pp.108-119. Aldine Publishing
Co., Chicago.
- 1965 Aspects of group relations in a complex society:
Mexico. In Contemporary cultures and societies of
Latin America, edited by D.B. Heath and R.N. Adams,
pp.85-101. Random House, New York.
- Woodward, Arthur
1965 Indian trade goods. Oregon Archaeological Society,
No.2.
- Woolworth, Alan R. and W. Raymond Wood
1960 The archeology of a small trading post (Kipp's Post
32MN1) in the Garrison Reservoir. Bureau of
American Ethnology, Bulletin 176. River Basin
Surveys, Paper 20.
- Worsley, P.M.
1957 Millenarium movements in Melanesia. Journal of the
Rhodes-Livingston Institute 21:18-31.
- Wrong, Dennis H.
1961 The oversocialized conception of man. American
Sociological Review 26(2):183-193.
- Zay, E.
1892 Histoire monétaire des colonies françaises d'après
les documents officiels. Paris.
- Zelenietz, Martin and David Kravitz
1974 Absorption, trade and warfare: Beachcombers on
Ponape, 1830-1854. Ethnohistory 21(3):223-249.
- Zoltvany, Yves F. (Editor)
1969 The French tradition in America. University of
South Carolina Press, Columbia.