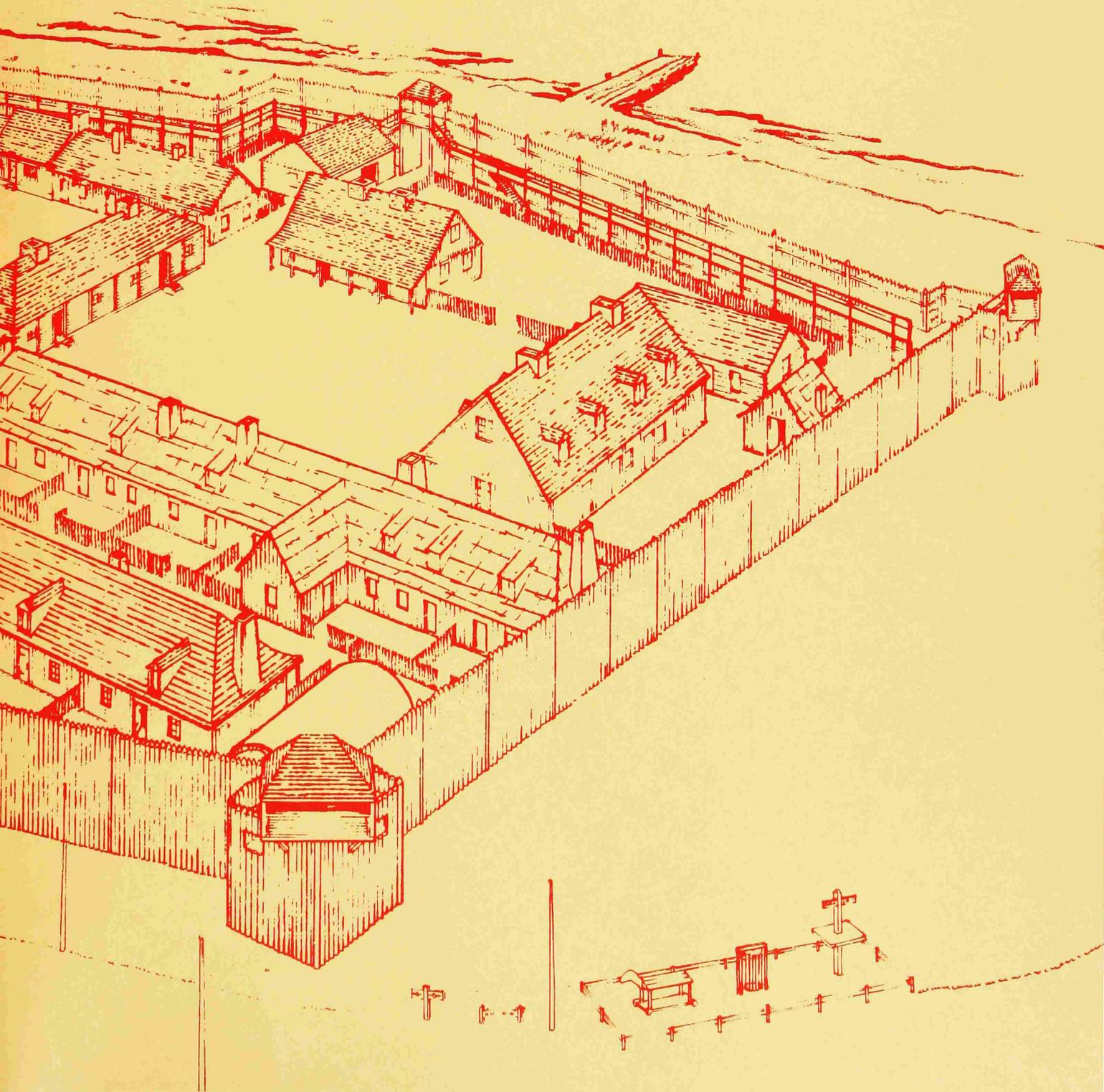


Fort Michilimackinac as it probably looked through the final years of British occupation, 1774–1781. *Courtesy of the Mackinac Island State Park Commission. Drawn by Victor Hogg.*



EIGHTEENTH-CENTURY CERAMICS  
FROM FORT MICHILIMACKINAC

*A Study in Historical Archeology*

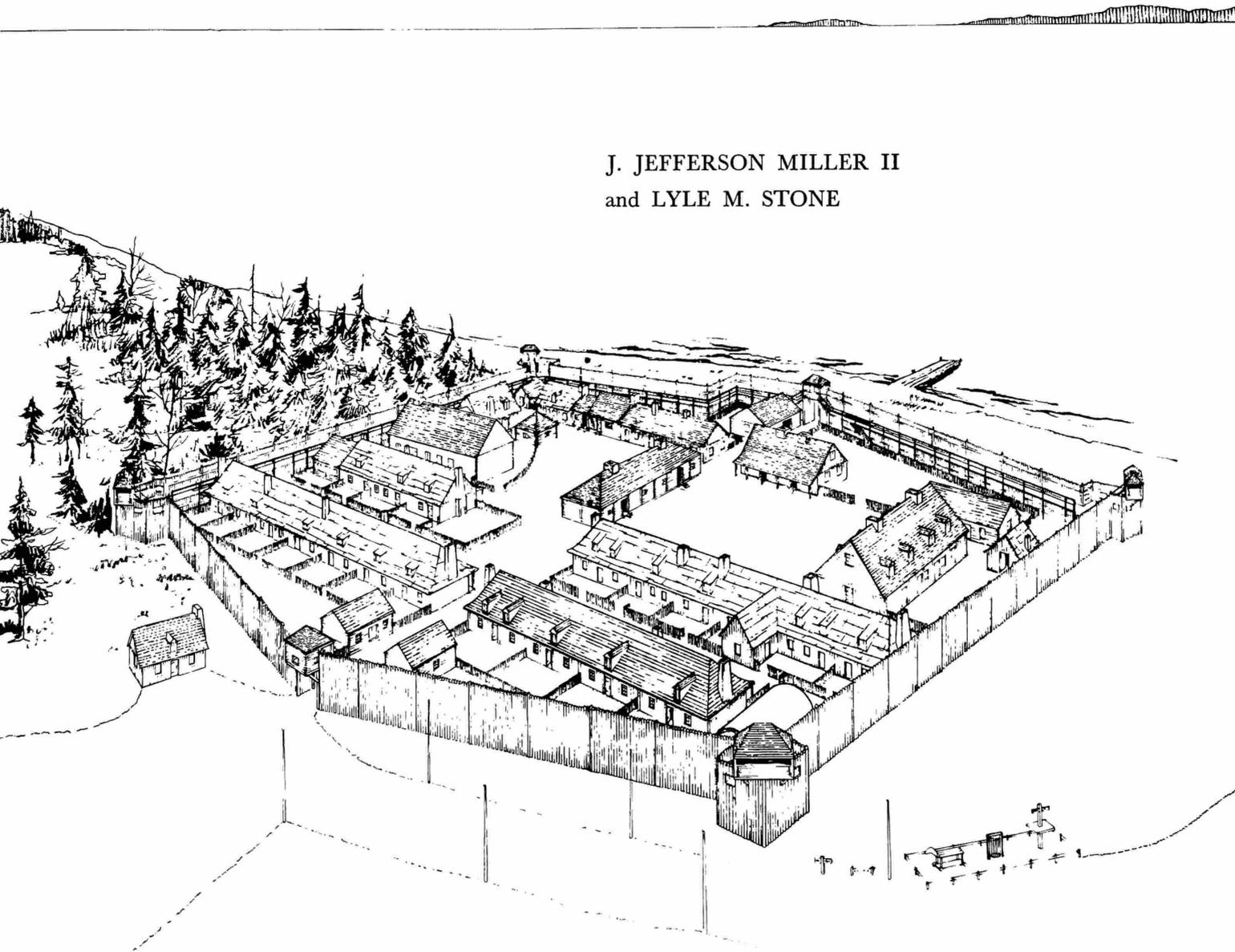
SMITHSONIAN STUDIES IN HISTORY AND TECHNOLOGY

NUMBER 4

# Eighteenth-Century Ceramics From Fort Michilimackinac

A STUDY IN HISTORICAL ARCHEOLOGY

J. JEFFERSON MILLER II  
and LYLE M. STONE



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## Foreword

I am delighted that Mr. Stone and Mr. Miller have completed a study of ceramics from Fort Michilimackinac and am honored by their invitation to contribute a foreword. Along with many others, I have awaited with anticipation a detailed description of the Michilimackinac ceramics.

The report which follows is a welcome addition to the sparse literature on archeological samples of European and Oriental ceramics excavated from sites in the New World. As the authors recognize, their effort is only a step toward the ultimate creation of an inclusive ceramics taxonomy adaptable to the diverse purposes of historical archeology; but it is surely a substantial step that will stand as a major pioneering achievement in the field.

Having discussed problems with both authors while the report was in preparation, I am aware that initially there was a decided element of mutual skepticism between Jeff Miller (a ceramics specialist of the art history school) and Lyle Stone (an anthropologically trained archeologist) regarding approaches to ceramics classification. But after months of collaboration, skepticism gave way to mutual respect: Mr. Stone discovered that art history can treat ceramics typology in a way that is complementary to the methods and purposes of anthropology, while Mr. Miller found that the objective methods of anthropology are not incompatible, after all, with the more subjective approach of the art historian. Together they have demonstrated that archeological data from historic sites can be studied fruitfully by both the anthropologist and the historian. The view that such data should properly be studied exclusively by one or by the other—a view that has been expressed in print recently by adherents to both sides of the argument—has been laid, we trust, to permanent rest by Mr. Stone and Mr. Miller.

EDWARD B. JELKS  
Illinois State University  
August 1968

## Acknowledgments

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# Introduction

J. C. HARRINGTON, of the National Park Service, writing in 1955, on "Archaeology as an Auxiliary Science to American History," pointed out that archeologists working on historical sites "have recovered a great store of data which should be of use in historical studies, but, with rare exception, they have not taken the next step—analysis and synthesis."<sup>1</sup> Although significant advances have been demonstrated in the analysis, interpretation, and synthesis of historical site data since 1955, the shortcomings cited by Harrington still exist to a material extent. This may be due to several persistent characteristics in the field of historical archeology.<sup>2</sup> First, the objectives of this research have changed little. The definition and interpretation of structural detail for reconstruction and restoration purposes is frequently stressed, while a comprehensive evaluation of the artifacts associated with structural features often is neglected.<sup>3</sup> This priority of restoration over

evaluation frequently is due to a lack of funds or research time rather than a failure of historical archeologists to recognize the significance of detailed artifact analysis. As a result, the techniques of historical site artifact analysis have not developed apace with analytic procedures designed to produce structural data. Second, the analytic complexity of historical site artifact assemblages continues to grow as each new site is excavated and reported. Consequently, the historical archeologist and artifact specialist are increasingly confronted with large and complex artifact assemblages manufactured, distributed, and deposited during very short periods of time. The problems of analyzing and describing these complex assemblages are obvious to anyone who has worked in this field. The identification of some eighteenth-century ceramic types, for example, is difficult owing to the lack of adequate descriptive reports. The archeologist often is forced to refer to ceramic publications, catalogs, or collection indices which identify only the best specimens of select ceramic types. Unfortunately, these "museum quality" items are found infrequently in an archeological context.<sup>4</sup> Furthermore, the descriptive criteria

<sup>1</sup> J. C. HARRINGTON, "Archaeology as an Auxiliary Science to American History," *American Anthropologist*, vol. 57, p. 1126.

<sup>2</sup> Historical archeology is concerned with the excavation and interpretation of sites which have been occupied since the time of recorded European history. It is traditional that these sites bear evidence of European occupation or influence. It is assumed that documentary evidence be available which may be called upon to assist in interpreting the archeological findings. The site location need not be restricted to North America, but may be in any other area where Europeans or American colonials had established themselves since the time of recorded European history. Historical archeology has its counterpart in Europe as postmedieval archeology.

<sup>3</sup> Published reports on the sites of Womack (HARRIS and BLAINE, 1965), Rosewell (NOËL HUME, 1962), Clay Bank (NOËL HUME, 1966), Tutter's Neck (NOËL HUME, 1966), Fort Michilimackinac (MAXWELL and BINFORD, 1961), Gilbert (JELKS, 1966), Pearson (DUFFIELD and JELKS, 1961), and Johnny Ward's Ranch (FONTANA and GREENLEAF, 1962) are examples of noteworthy exceptions (for full citations, see bibliography). But for comments on the continuing emphasis on restoration, see IVOR NOËL HUME, "Historical Archaeology in America," *Post-Medieval Archaeology*, vol. 1, p. 105.

<sup>4</sup> For examples of this quandary, see NORMAN FORTHUN BARKA, *Historic Sites Archaeology at Portland Point, New Brunswick, Canada, 1631-1850*, p. 4. See also CURTIS TUNNELL, "A Description of Enameled Earthenware from an Archeological Excavation at Mission San Antonio de Valero (The Alamo)," *State Building Commission Archaeological Program Report no. 2*, p. 19.

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presented in many of the published sources are seldom helpful.

In view of these problems, it is our opinion that reports stressing the analysis, description, and interpretation of historical sites artifacts are badly needed—not only to test conclusions based largely on structural evidence, but also to provide comparative data applicable to the interpretation of contemporaneous historical sites.

This publication is the result of a combined effort by The Museum at Michigan State University and the Smithsonian Institution. The ceramic artifacts described were excavated between 1959 and 1965 from the eighteenth-century site of Fort Michilimackinac (MS<sup>2</sup>), Emmet County, Michigan.<sup>5</sup> Fort Michilimackinac is administered by the Mackinac Island State Park Commission, presently under the direction of Dr. Eugene T. Petersen. Since 1959 the Department of Anthropology and The Museum at Michigan State University have engaged in a continuing program of archeological investigation at Fort Michilimackinac. Their program, undertaken in cooperation with the Mackinac Island State Park Commission, has three basic objectives:

1. To produce a scholarly study of the site. This study, utilizing archeological and documentary materials, is intended to provide detailed information pertinent to a better understanding of the history of Fort Michilimackinac.
2. To provide the Mackinac Island State Park Commission with accurate guidelines for the reconstruction and interpretation of Fort Michilimackinac on its original site.
3. To provide a field laboratory for the training of students in the techniques of archeological research.

<sup>5</sup> MS<sup>2</sup> refers to Mackinac Straits area site number 2. The term Michilimackinac, pronounced Mish la mack ah naw, has been associated with a variety of meanings and has been spelled in many different ways. Walter Havighurst, for example, notes that at least 68 different spellings of the word were recorded between 1681 and 1855. WALTER HAVIGHURST, *Three Flags at the Straights*, pp. X and XI. Spellings such as Mithinimackenucus, Michilimaquinay, Mishinimakinang, Eshelmackinac, and Mochenemockenugong were common during the seventeenth and eighteenth centuries. The Jesuits spelled the word in 13 different ways in *The Jesuit Relations*. . . . The word means variously the "great turtle," "a place of dancing spirits," and "turtle spirits," and has been used to refer to the Mackinac Straits area in general, to the seventeenth-century Fort De Baude at St. Ignace, to the Fort on the south side of the Straits which is the subject of this report, and to the 1781–1895 Fort on Mackinac Island.

An interest in reporting the ceramic artifacts from Fort Michilimackinac began late in the summer of 1965 when J. Jefferson Miller II, associate curator of the Division of Ceramics and Glass, National Museum of History and Technology, Smithsonian Institution, visited the site and viewed a sample of the ceramics recovered during the 1965 field season. Mr. Miller's inspection of this collection prompted him to initiate plans for an analysis of the Fort Michilimackinac ceramics and to suggest a joint publication with Lyle M. Stone, then director of field archeology for the Michigan State University Museum Fort Michilimackinac Project. Subsequently, arrangements were made with Mr. Stone and with the Michigan State University Museum to conduct a study of the Fort Michilimackinac ceramic collection. During the winter of 1965 and throughout 1966 and 1967, Mr. Miller and Mr. Stone conducted the ceramics analysis and related historic research and decided upon a publication format which would include historical, descriptive, and interpretative information. Research on the ceramic artifacts from the Fort has been carried out at the site, at the Michigan State University Museum, and at the Smithsonian Institution. Other comparable artifact collections have been visited and studied, the most important of these being the ones at Colonial Williamsburg, Virginia; Fort Ligonier, Pennsylvania; and the Fortress of Louisbourg, Nova Scotia. Numerous consultations were conducted with archeologists and ceramic specialists in the United States, Canada, and Europe.

The primary objective of this publication is a detailed description of the Fort Michilimackinac ceramics collection (1959–1965), including comments on the manufacture, importation, use, and dating of each ceramic type described. The term "ceramics" as used in this report excludes aboriginal ceramics and kaolin pipes. It is hoped that the descriptions will contribute to the research of the following specialists: (a) the historical archeologist, by providing a documentation of datable ceramic types for comparative purposes; <sup>6</sup> (b) the artifact historian,

<sup>6</sup> One aim of this publication is to provide a useful reference for those conducting investigations of historical sites where ceramics specialists are not readily available for consultation. With this purpose in mind, some general background material has been included and the annotations are deliberately extensive in order to supply an immediate working reference to the type of ceramic under consideration.

by providing data derived from a region and period relatively unknown from the standpoint of ceramic importation and use; and (c) the cultural historian, by providing evidence indicating the level of socioeconomic life maintained at Fort Michilimackinac and presumably at other comparable frontier military posts.

A second objective is to illustrate the interpretative value of historical sites ceramics. By presenting several interpretative problems to which ceramics data may be applied, we hope to facilitate the evaluation of historical sites upon which ceramics are found. The relationships between ceramic change and changing patterns of social life through time in view of different historical and geographical factors must also be studied. For example, ceramic data may reflect diverse functional activities on a site, the presence of various status or socioeconomic groups, and the locus and importance of different trade routes.<sup>7</sup> Information from sites in addition to Fort Michilimackinac has been presented to support many of the interpretations posited.

In consideration of these objectives, this study has been organized as follows. Chapter I: outline of the history of Fort Michilimackinac and the program of archeological research. Chapter II: description of ceramic types from the site. Chapter III: interpretation of historical sites ceramic data.

A basic problem of ceramics classification and description was confronted during the course of research. As the taxonomic system selected is a key element in the structure of this publication, it bears consideration at this time.

The difficulty arises in attempting to present a ceramics classification which is useful and acceptable to both the ceramics historian and the archeologist, who—quite naturally—frequently hold different views with respect to research objectives and the purpose of classification. The ceramic artifacts from Fort Michilimackinac have been analyzed from two points of view, not necessarily incompatible yet distinct in perspective and objective—one archeological and the other that of the ceramics specialist. The ceramics specialist is concerned primarily with presenting a

ceramics catalog for technological, historical, and descriptive purposes. The archeologist may, on the other hand, be concerned primarily with ceramic artifacts as they reflect the social life and culture of the occupants of a historical site. As a result, the purposes and results of classification are different. Both approaches are valid and we wish to emphasize that these differences in orientation exist and that they cannot be (nor should they be) arbitrarily reconciled in a publication of this type. Each orientation has something unique to contribute. The ceramics specialist contributes his detailed knowledge of ceramics history, technology, and identification. The archeologist contributes from the standpoint of taxonomic procedure and interpretative methodology.

Regarding the problem of classification, we have found that the two views do not necessarily differ with respect to the techniques of analysis employed or the definition of ceramic attributes which are relevant for taxonomic purposes. The two approaches differ, however, in the degree of analytic objectivity maintained during the course of research. The traditional archeological approach to analysis relies upon a number of established criteria for the classification and description of ceramics. For example, the traditionally trained archeologist confronted with a collection of eighteenth-century ceramics would consider these artifacts in the light of attributes such as method of manufacture, temper, hardness, color, surface finish, form, and decoration and would search for clusters of diagnostic attributes in an attempt to define historically and culturally valid ceramic types. The types identified would then be evaluated in the light of any additional archeological evidence.<sup>8</sup> This approach is exemplified in a paper published by B. Bruce Powell<sup>9</sup> in which he proposes a rigorous classification of seventeenth-nineteenth-century European ceramics. In so doing, Powell criticizes South, Maxwell and Binford, Caywood, and Cotter for not adhering to three basic rules of taxonomy: (1) there should be a single basis of division between ranks (classes), (2) classes should be mutually exclusive, and (3) classes should be exhaustive. Powell's system of classification represents a thoughtful (and admittedly tentative) attempt to solve this difficult problem, but a number of dis-

<sup>7</sup> In considering the interpretive aspects, we have assumed that a number of factors commonly interact to determine the presence and context of ceramic types on a site. Factors such as transportability, trade logistics, functional necessity, expense, and historic contacts are all related to the nature of ceramics importation and use.

<sup>8</sup> For example, evidence derived from the distribution and association of ceramic types with other artifacts and structures.

<sup>9</sup> B. BRUCE POWELL, "Classification of Ceramics from Historic Sites," special issue of the *Southeastern Archaeological Conference Newsletter*, vol. 9, no. 1, pp. 34-35.

crepancies in his taxonomy illustrate the complications involved. Thus, the existence of an understandable and reasonable difference in approach between archeologists and ceramic historians is eclipsed by complicated variances among historical archeologists confronted with the necessity of creating some sort of workable taxonomy that will facilitate comparisons of results obtained at the ever-increasing number of sites under study.

Essentially, the ceramics historian employs the same process as the archeologist by identifying attributes and attribute clusters, although such classification is carried out in a less mechanical or objective fashion, with the ceramics historian usually relying upon his accumulated knowledge to distinguish ceramic types. The objective means of the archeologist are not always easily applied to the analysis of eighteenth-century ceramics, owing primarily to the complexities of eighteenth-century ceramic production and distribution.<sup>10</sup> Moreover, information contained in the available documentary material or in published works may either override or reinforce the evidence produced by archeologically objective means. Ivor Noël Hume, director of the Department of Archaeology at Colonial Williamsburg, has been a consistent critic of the traditional archeological approach to classification:

The absence of knowledge on the part of the student prompts him to seek it in the only way he knows how—through the methods of anthropology and prehistory. Thus, he wastes time and funds laboriously compiling useless pottery typologies in the quest for dating and nomenclatures that should be sought amid the vast corpus of material already published on the subject. But not being acquainted with these sources, he proceeds on the assumption that in digging an historical site he is plunging into totally uncharted waters.<sup>11</sup>

On the other hand, the methodology of the ceramics historian is weak in certain respects. The comparative lack of a precise, objective method of ceramics identification is reflected in the rather broad ceramics

categories (usually distinguished by country of origin and type of ware) defined by the ceramics historian.

It is our view that, for the present, it is unnecessary to rely totally on either approach to the exclusion of the other. Rather, we have sought a workable format that has, we believe, provided a symbiotic basis for our study. Consequently, in an attempt to achieve some degree of taxonomic consistency and to define procedures and results which are acceptable to the cultural historian, the ceramics historian, and the historical archeologist, we have adopted an intermediate stance to the problem of classification. In so doing, an endeavor has been made to use certain objective means where the nature of the data warrant their use and reliance has been placed upon more subjective means in other cases. As a result, some of the attributes utilized to distinguish ceramic types possibly will seem simplistic or even naive to the ceramics historian. We ask the ceramics historian to bear with this divergence and to recognize that the type of evidence which might seem superfluous for his purposes may be of significance to the historical archeologist. As we have stated, one of our aims is to provide a source which will facilitate the identification, by the working archeologist, of eighteenth-century ceramics. Concomitantly, some of our descriptive means and criteria may appear unorthodox or even meaningless to the archeologist, whereas it is viewed as significant data to cultural and ceramics historians'.

The ceramics classification adopted in this report consists of three levels of taxonomic differentiation—the class, group, and type. No attempt, however, has been made to be consistent in the definition of inter-level differentia. Classes (earthenware, stoneware, and porcelain) are distinguished by differences in paste and certain physical properties resulting from firing. Groups (tin-glazed earthenware, English cream-colored earthenware, coarse earthenware, fine earthenware, English white saltglazed stoneware, other stonewares, Chinese export porcelain, and English porcelain) are distinguished on the basis of physical and/or stylistic properties. Types are distinguished on the basis of style and/or technique of decoration.

Consequently, in our classification of the ceramics from Fort Michilimackinac we have been less systematic than we would have by following the recommendations of Powell. Our classification is exhaustive (with respect to the Fort Michilimackinac ceramics) and attempts to define classes which are mutually exclusive. This system does not, however, adhere to

<sup>10</sup> Some studies in qualitative analysis have been made, but constant changes and experimentation in eighteenth-century manufacturing methods and body formulae tend to limit the usefulness of chemical analysis for attribution purposes. For a basic study of the properties of eighteenth-century European ceramics, see ARTHUR HURST, "Ceramics Construction," *Transactions of the English Ceramic Circle*, vol. 1, no. 4, pp. 28–42.

<sup>11</sup> IVOR NOËL HUME, "Historical Archaeology in America," *Post-Medieval Archaeology*, vol. 1, pp. 104–105.

a single basis of division between ranks. Our basis for division (taxonomic criteria) may vary in distinguishing two taxonomic units on the same level of differentiation. This course has been adopted for several reasons. First, adherence to an inflexible set of diagnostic criteria would produce misleading results with respect to the sample and would serve to confuse our presentation. Second, we feel that the more complicated a historical site ceramics classification becomes, the less easily are we able to fulfill two of the major purposes of classification: providing a format for communication between scholars as an efficient and adaptable means of comparative research, and allowing the investigator to interpret a site and its ceramics in terms of the society which produced them. Third, the availability of documentary evidence, which may identify the country of origin or even the specific manufacturer of a given ceramic type, allows the choice of relevant taxonomic criteria in many cases, whereas a dependence on inflexible criteria and a disregard for historical evidence would produce a classification which does not approximate the historically known situation. On the other hand, historical evidence is not always available as a basis for meaningful distinctions. In such cases (the coarse earthenware group in particular) we have attempted to be more systematic in our definition of taxonomic differentia.

Although we do not profess to have solved this classificatory problem, we hope that we have contributed to the realization that it exists and that historical site artifacts of all kinds patently require a more efficient and meaningful approach to analysis and classification.<sup>12</sup> The ceramics classification presented in this paper includes only the ceramics produced from the site of Fort Michilimackinac. We feel that, at present, this represents the most effective means of describing the ceramic artifacts and allowing

the investigator to interpret the ceramics and the site in terms of the society that produced them. Our system does not purport to represent a final product; and it should not be viewed as such. On this point, we concur with Iain C. Walker, formerly of the Canadian Historic Sites Commission, "An artifact typology is a hypothesis which may or may not prove true and is occasioned by a lack of knowledge on a subject; it is the starting point of a study, not the end result."<sup>13</sup> Our system stands for the present, only to be reevaluated in the light of additional archeological and historical evidence.

An admitted weakness of this study lies in the fact that no comprehensive attempt has been made to correlate the identified ceramic types with additional artifact classes and structural evidence from Fort Michilimackinac. Essentially this is because a detailed analysis of the Fort Michilimackinac archeological data has not been completed at present.<sup>14</sup> In acknowledging the problems encountered in preparing this report, we remain convinced that our work represents a worthwhile contribution to the respective disciplines of historical archeology, cultural history, and ceramics history. In terms of artifact description and interpretation, socioeconomic history, and comparative data, we have presented a large amount of heretofore unpublished information. Hopefully, the ensuing years will see a continuing program of publication on the artifact collections from many North American historical sites. Such a program should result in a more comprehensive understanding of eighteenth-century North America and in a clearer delineation of the complex social and economic patterns of the period.

We assume equal responsibility for the preparation of this report. Each read and consulted upon the revision of the other's contributions. Mr. Miller was primarily responsible for Chapter II and Mr. Stone was primarily responsible for Chapters I and III.

<sup>12</sup> Several published and unpublished works have grappled with this problem. For example, see STANLEY A. SOUTH, "The Ceramic Types at Brunswick Town, North Carolina," *Southeastern Archeological Conference Newsletter*, vol. 9, no. 1, pp. 1-5; EDWARD B. JELKS, "Ceramics From Jamestown," included as Appendix B in *Archeological Excavations at Jamestown* by JOHN L. COTTER, pp. 201-209; BARKA, *Historic Sites Archeology at Portland Point, New Brunswick, Canada, 1631-1850*, p. 493. Classification for data retrieval systems also offers some promise. For this approach (designed for use at Louisbourg), see RENEE H. MARWITT, "Punch Card Design for Ceramic Analysis," *The Conference on Historic Site Archaeology Papers*, 1965-1966, vol. 1, pp. 19-26.

<sup>13</sup> IAIN C. WALKER, "Historic Archaeology—Methods and Principle," *Historical Archaeology* 1967, pp. 23-34.

<sup>14</sup> The task of analyzing the Fort Michilimackinac artifactual and structural remains is presently being undertaken by Lyle M. Stone and will be presented as a part of his Ph.D. dissertation for the Michigan State University Department of Anthropology. This study hopefully will yield results which will facilitate the interpretation of several of the more complex ceramic categories presented in this publication, i.e., coarse earthenwares.

## Chapter I

# History of Fort Michilimackinac and the Present Program of Archeology and Reconstruction

FORT MICHILIMACKINAC is located on the south side of the Mackinac Straits, which separate lower and upper Michigan and join Lakes Michigan and Huron (Figure 1).<sup>1</sup> To the south and west is Lake Michigan and the headwaters of the Mississippi drainage system. To the east and south are Lake Huron and Georgian Bay, links in the westward flow of trade goods and equipment from the lower Great Lakes-Detroit-Lake Huron route or the Ottawa River-Lake Nipissing route (Figure 2). Mackinac Island, on which Fort Michilimackinac was relocated in 1781, lies eight miles to the northeast of the original site. To the north of the straits are the Sault Ste. Marie passage and the entrance to Lake Superior. The straits provided an economically and militarily strategic position for the location of a fort. Fort Michilimackinac served as a focal point for the upper Great Lakes fur trade and was in a position to regulate water travel between Lake Huron and Lake Michigan. The site rests upon windblown beach sand and Algoma stage sand and gravel deposits at an elevation of between 595 and 609 feet above sea level.

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<sup>1</sup> The history of the Mackinac Straits area is somewhat vague, especially during the years preceding British occupation (1760). To date, no in-depth history of this region has been written, although numerous primary documents relating to this problem are available. The history given in this publication is based on primary documents and a number of secondary accounts which have dealt with limited aspects of Mackinac Straits and upper Great Lakes history.

Fort Michilimackinac was established about 1715.<sup>2</sup> Between 1650 and 1715 the upper Great Lakes underwent a rapid settlement by French missionaries, traders, and soldiers. This period of expansion and settlement had been paralleled farther to the east between 1610 and 1650. With the partial exhaustion of fur resources to the east and south of Georgian Bay by 1650 and with the exploration and settlement of the upper Great Lakes, the focus of the fur trade shifted to the west. One of the earliest trading expeditions to the upper Great Lakes was that of two French traders—Pierre Esprit Radisson and Medard Chouart, Sieur de Groseilliers. Radisson made his first trip to the Lake Superior region in 1654 and returned to Quebec in 1656 with many high quality beaver furs. Groseilliers accompanied Radisson on a second trip to the area between 1658 and 1660.<sup>3</sup> These early trading expeditions established valuable contacts for the French and prompted the government of New France to expand its trading interests to the west. French traders were operating near Sault Ste. Marie, at the mouth of Lake Superior, by 1660.<sup>4</sup> The first permanent missionary settlement

<sup>2</sup> The approximate date of 1715 was defined through the research of Moreau S. Maxwell and Lewis R. Binford. See MAXWELL and BINFORD, "Excavation at Fort Michilimackinac, Mackinac City, Michigan: 1959 Season," Michigan State University Museum Cultural Series, 1961, vol. 1, no. 1, pp. 10 and 113.

<sup>3</sup> HAROLD A. INNIS, *The Fur Trade in Canada*, p. 36; CLEVER F. BALD, *Michigan in Four Centuries*, p. 26.

<sup>4</sup> OTTO FOWLE, *Sault Ste. Marie and Its Great Waterway*, p. 89.

in the region was established at Sault Ste. Marie by Fathers Louis Nicolas and Jacques Marquette in 1668.<sup>5</sup> This mission and the French traders centered at Sault Ste. Marie attracted the settlement of the Ottawa who had occupied areas along the southern shore of Lake Superior. By 1669, the mission was referred to in *The Jesuit Relations* . . . as that of the Ottawa<sup>6</sup> although the Chippewa were also important occupants of the Sault at this time.<sup>7</sup> The Sault also served as a trading center for Indians inhabiting the Green Bay area to the west. This contact with Green Bay produced a further extension of the French fur trade and the introduction of trade goods to tribes such as the Potawatomi, Sioux, and Miami.<sup>8</sup>

Shortly after the movement of French traders to the west and into the Lake Superior region, British trading interests were secured to the north. The Hudson's Bay Trading Company was established in 1670 and soon came to represent numerous small trading posts in the James Bay area. The Hudson's Bay enterprise, backed up by cheaper goods and higher fur prices, rapidly became a serious threat to French traders in the south.<sup>9</sup> The French attempted to counter this threat by creating changes in Indian trade patterns and alliances and by establishing new trading posts along the northern shore of Lake Superior.

By 1670 European influence in the upper Great Lakes extended southward to the Mackinac Straits area. A mission, established by Father Jacques Marquette in 1671 on the north side of the straits at St. Ignace, served as a focal point for groups of Ottawa, who had entered the area from the Chaquamegon Bay region of southwestern Lake Superior, for Chippewa from the north, and for Huron from the east. By 1683 the mission at St. Ignace had also begun to serve as a French military post and was garrisoned by 30 soldiers under the command of Daniel de Grosillon, Sieur dul'Hut (Dulhut).<sup>10</sup> Fort de Baude was established adjacent to the mission by Louis de la Porte,

Sieur de Louvigny, in 1689.<sup>11</sup> The maintenance of a fortified post at this strategic location was in response to King William's War (1689–1697) and the intrusion of British traders from Albany, New York, into the Mackinac Straits after 1686. This competitive threat is documented in a letter dated 1686 in which M. de Denonville, governor general of Canada, noted that:

Missilimakinac is theirs. They have taken its latitude; have been to trade there with our Outawas and Huron Indians, who received them cordially on account of the bargains they gave, by selling their merchandise for Beaver which they purchased at a much higher price than we.<sup>12</sup>

Although this encounter was short-lived and took place at a time when the French post was undermanned, it did demonstrate that British traders could penetrate French territory and establish favorable trade contracts with the Indians.

Antoine de Lamonthe Cadillac succeeded as commandant of Fort de Baude in 1695. To control the oversupply of furs accumulated by the increased trading activity in the upper Great Lakes, Louis XIV in 1696 ordered the upper Great Lakes closed to the fur trade. As a result, Cadillac abandoned Fort de Baude in 1698. By 1701 Cadillac having secured permission to establish a fort at Detroit (Fort Pontchartrain)—although this was a direct exception to the stipulations of the 1696 decree—was able to convince many of the Indians remaining in the Straits to join him at Detroit.<sup>13</sup> The Jesuit missionaries, left at St. Ignace with only a small parish, abandoned the mission in 1705 and returned to Quebec.<sup>14</sup> Between 1705 and 1715 the population and fur trade activity of the Mackinac Straits area declined owing to the abandonment of Fort de Baude and the Jesuit

<sup>5</sup> *Ibid.*, p. 98.

<sup>6</sup> R. G. THWAITES, editor, *The Jesuit Relations and Allied Documents: Travels and Explorations of the Jesuit Missionaries in New France, 1610–1791*, vol. 51, p. 61.

<sup>7</sup> W. VERNON KINIETZ, *The Indians of the Western Great Lakes: 1615–1760*, p. 318.

<sup>8</sup> INNIS, pp. 44–45.

<sup>9</sup> The British at Hudson Bay were operating under a reduced transportation overhead and thus were able to supply the same or higher quality trade goods at a lower price.

<sup>10</sup> FOWLE, p. 177.

<sup>11</sup> BALD, p. 43. See also N. M. MILLER SURREY, *Calendar of Manuscripts in Paris Archives and Libraries Relating to the History of the Mississippi Valley to 1803*, vol. 1 (1581–1739), pp. 30–31. This reference contains a statement "of the amounts due certain men for the erection of posts at Detroit and Michilimackinac," recorded 25 July 1689 at Montreal. See also "An Account of the Military Operations in Canada from the month of November, 1691, to the month of October, 1692," in *Documents Relative to the Colonial History of the State of New York*, edited by E. B. O'CALLAGHAN, vol. 9, p. 537.

<sup>12</sup> M. DE DENONVILLE to M. DE SEIGNELAY, dated September 1686, from Missilimackinac, *Documents Relative to the Colonial History of the State of New York*, edited by E. B. O'CALLAGHAN, vol. 9, p. 297.

<sup>13</sup> FOWLE, p. 189.

<sup>14</sup> SURREY, pp. 118–119.

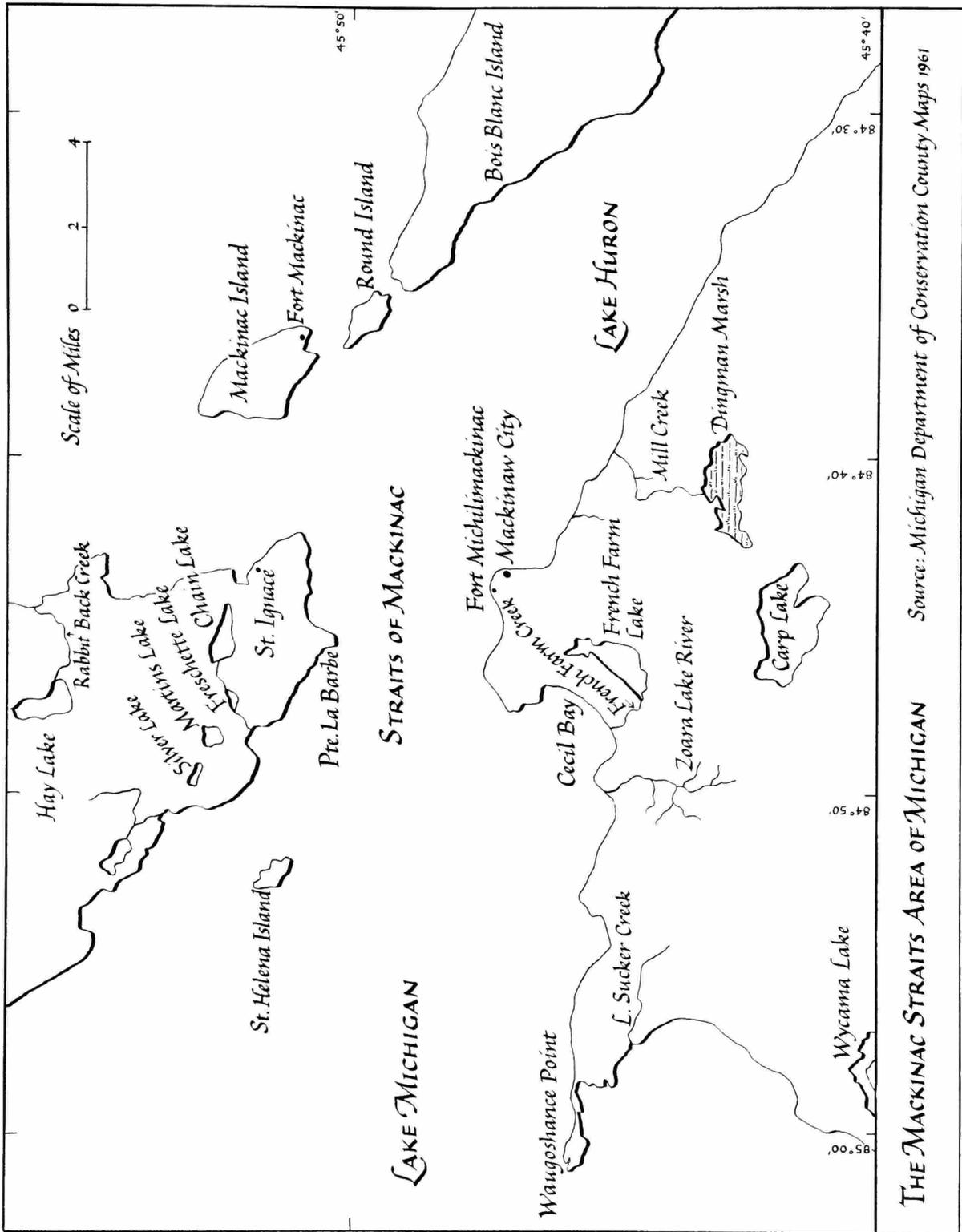


FIGURE 1.—MAP OF MACKINAC STRAITS.

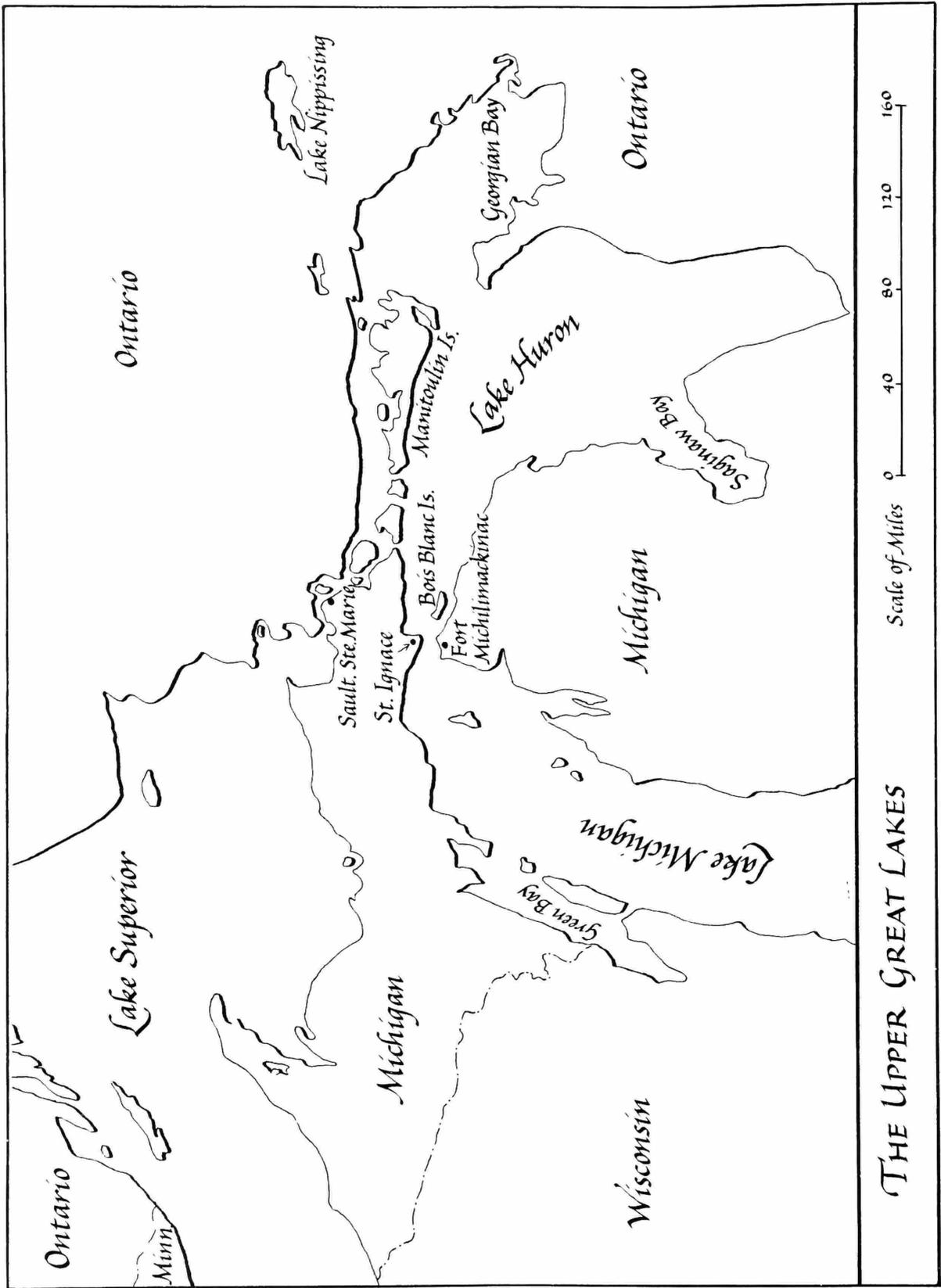


FIGURE 2.—MAP OF THE UPPER GREAT LAKES.

Mission, the decree of 1696, and Queen Anne's War which lasted from 1702 until 1713.<sup>15</sup>

By 1710 the Government of New France recognized the importance of maintaining military control of the Mackinac area and initiated plans to reestablish a post at the Straits.<sup>16</sup> Monsieur de Lignery, a captain of the French army, was dispatched to Michilimackinac in 1712 for the purpose of securing the alliance of the local Indians against the Fox and Iroquois.<sup>17</sup> The Fox had disrupted trade relations with Indian allies of the French by stimulating intertribal conflicts. The Iroquois were trade allies of the British and were viewed as competition to the French trade system. The strategy in reoccupying the Straits sought to curtail the activity of British traders and Iroquois middlemen in the upper Great Lakes and to strengthen Indian alliances which had been weakened by the Fox.

De Lignery apparently spent several years in the Straits before the post was actually constructed. The proposed establishment of this post is again referred to in a letter written by Captain de la Forest in 1714.<sup>18</sup> Moreau S. Maxwell and Lewis R. Binford note that

the original plan for the expedition against the Fox was to send 20 troops under Captain D'Eschailons, Lieutenant Lanour, and Ensign Belestre from Montreal to Michilimackinac to arrive early in August, 1715.— However, the supplies and troops from Montreal did not arrive at the Straits in time for the coordinated

operation, although presumably they did arrive later that year.<sup>19</sup>

Maxwell and Binford suggest that

it appears likely that sometime between 1715 and 1720 De Lignery with several hundred men on his hands waiting for supplies from Montreal put them to work in the time-honored military tradition by building a stockaded fort on the other side of the river, meaning the south shore of the straits.<sup>20</sup>

An anonymous map in the Ayer Collection, Newberry Library, believed to date from 1717, is also referred to by Maxwell and Binford (Figure 3). The map

shows a stockade, square, with square corner bastions, on the south side of the Straits, as well as a fort and mission on the north side of the Straits. The caption, indicating the fort on the south side of the Straits, states that the former fort (at St. Ignace) has been abandoned; that the fort on the south side of the straits has a commandant, a few settlers, and even some French women, and that in 1716 about 600 Coureurs-de-bois were gathered there during trading time.<sup>21</sup>

A later reference gives the year 1717 for the founding of Fort Michilimackinac. This date is mentioned in a letter by John Porteous, an English trader, from Michilimackinac in 1767 in which he states that

Michilimackinac is Situated on [a large cape which form[s] the] Southern [side of the] Straits between the Lakes Huron and Michigan, has Lake Huron on the E. and S.E., and on the S. and W., Lake Michigan, . . . This post was first established upon an Isld on the E. entrance of the Straits, from thence moved to the east point of the northern cape, and afterward moved westwards, about 2 Miles, about the middle of the Straits; and in the year 1717, by request of the Ottawas whose village then stood here, was again moved over where it now stands to protect them from some of the Nations they were then at war with.<sup>22</sup>

Charlevoix's journal clearly illustrates that Fort Michilimackinac was in existence on the south side of the Straits by 1721.<sup>23</sup> The founding date of Fort

<sup>15</sup> Although the mission was abandoned in 1705, there is some evidence to indicate that a new mission or fort was established in 1706. See SURREY, p. 125, and Letter from FATHER MAREST to the MARQUIS DE VAUDREUIL, 14 August 1706, *Michigan Pioneer and Historical Collections*, vol. 33, p. 265. In addition, we know that Father Marest returned to Michilimackinac in 1706 and that the area continued to be frequented by French traders and Indians during this period. See M. DE VAUDREUIL to M. DE PONTCHARTRAIN, Quebec, 28 April 1706, and M. DE PONTCHARTRAIN to M. DE VAUDREUIL, Versailles, 9 June 1706, *Documents Relative to the Colonial History of the State of New York*, edited by E. B. O'CALLAGHAN, vol. 9, pp. 775 and 779;

<sup>16</sup> M. DE VAUDREUIL to M. DE PONTCHARTRAIN, Quebec, 31 October 1710, *Documents Relative to the Colonial History of the State of New York*, edited by E. B. O'CALLAGHAN, vol. 9, p. 849.

<sup>17</sup> *Ibid.*, p. 865.

<sup>18</sup> "Memoirs on Detroit," supposed to have been written by CAPTAIN DE LA FOREST, 1 October 1714, Quebec, *Documents Relative to the Colonial History of the State of New York*, edited by E. B. O'CALLAGHAN vol. 9, pp. 866-867.

<sup>19</sup> MAXWELL and BINFORD, 1961, p. 14, defend this statement by reference to letters from RAMEZAY and BÉGON to French Minister, September and November, 1715, and reproduced in *Collections of the State Historical Society of Wisconsin*, vol. 16, pp. 314 and 327.

<sup>20</sup> MAXWELL and BINFORD, 1961, p. 10.

<sup>21</sup> *Ibid.*, pp. 11-12.

<sup>22</sup> Letter from JOHN PORTEOUS to his father in Scotland, Michilimackinac, summer 1767, "From Niagara to Mackinac in 1767," CLEVER F. BALD, editor, *Historical Bulletin*, No. 2, The Algonquin Club, p. 12.

<sup>23</sup> LE P. DE CHARLEVOIX, *Journal d'un Voyage fait par Ordre du Roi dans L'Amerique Septentrionale: Adressé à Madame la Duchesse de Lesdiguières*, vol. 3, p. 279.

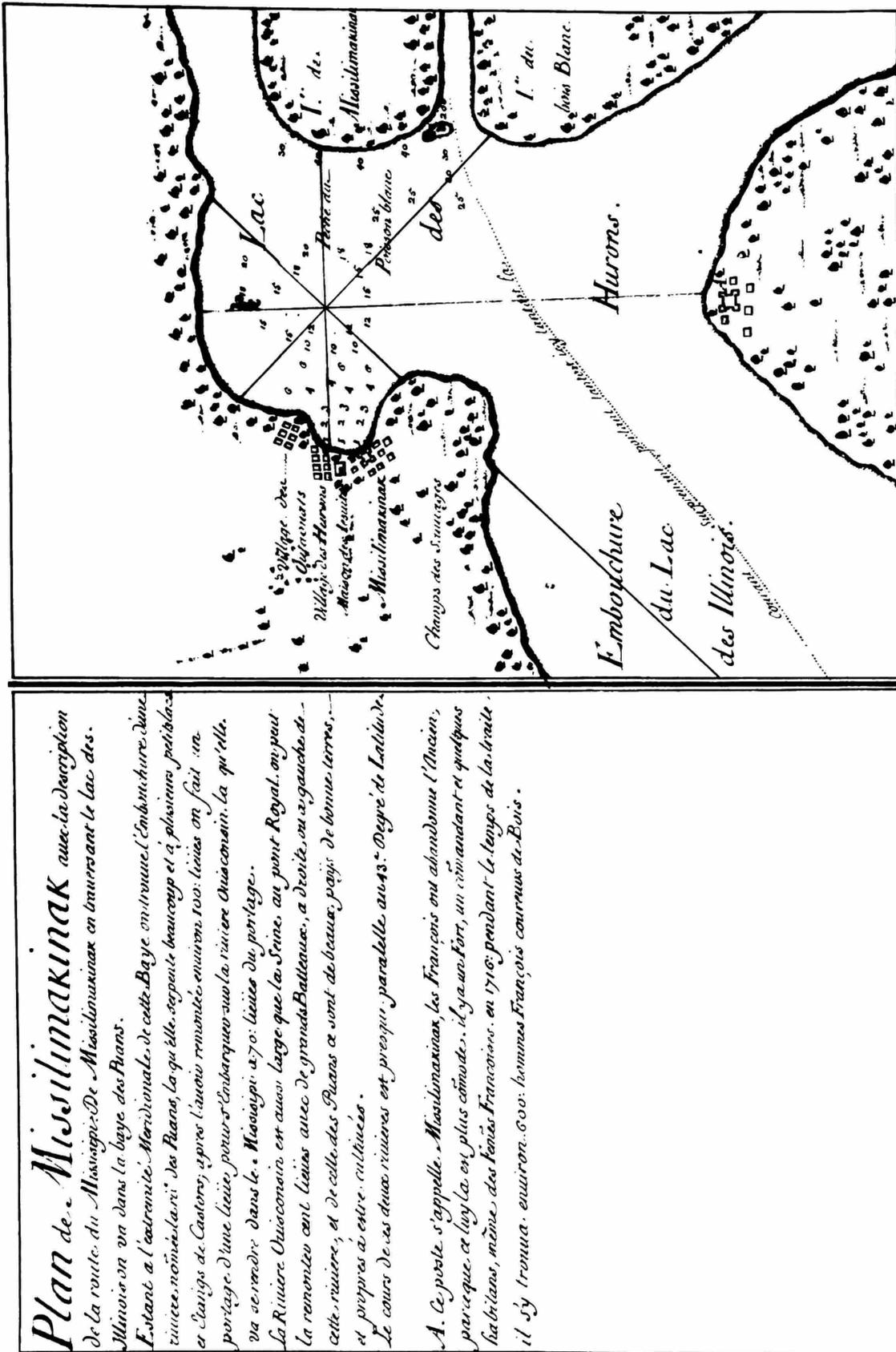


FIGURE 3.—ANONYMOUS MAP OF MACKINAC STRAITS, circa 1717. Courtesy of the Newberry Library, Chicago, Illinois. Edward E. Ayer Collection.

Michilimackinac on the south side of the straits is thus narrowed to between 1714 and 1721, with the most probable date, based on evidence above, falling between 1715 and 1717. Maxwell and Binford, using essentially the same evidence, concluded that the post was established about 1715.<sup>24</sup>

A number of factors contributed to the establishment of this post. With the close of Queen Anne's War in 1713, finances once again were available to support renewed trading interests and military control of the upper Great Lakes.<sup>25</sup> Although anticipated Fox conflicts gave impetus to the construction of the fort, other long-term reasons were extremely relevant to its establishment. A post was necessary at the Straits to discourage competition from the Hudson's Bay Company to the north; to control the activity of the unlicensed French traders, the Coureurs-de-bois; to secure the alliance of the local Indians; and to serve as focal point for anticipated fur-trading expeditions.

The Fox War of 1716 was undertaken under the command of Sieur de Louvigny. Louvigny left Montreal in May 1716 and arrived at Michilimackinac during July or August with at least 300 Frenchmen.<sup>26</sup> There, he combined forces with De Lignery to produce a total troop contingent of nearly 800 French and Indians.<sup>27</sup> This force proceeded to the fortified Fox settlement near Green Bay, Wisconsin, and subdued the Fox within three days. Louvigny immediately departed for Quebec upon his return to the Straits, leaving the command of the Fort to De Lignery with a garrison of no more than 23 soldiers.<sup>28</sup>

In 1720 De Lignery relinquished his command at the post to Monsieur Daneil Lienard de Beaujeau. From 1715 until 1760, Fort Michilimackinac was governed by the following French commandants:

Charles Regnault, Sieur Dubuisson	1729–1730
Jacques Testard, Sieur de Montigny	1730–1733
Pierre Le Gardeur, Sieur de Repentigny	1733–1734

<sup>24</sup> MAXWELL and BINFORD, 1961, p. 113.

<sup>25</sup> Memorial written by CLAUDE MICHEL BÉGON, Intendant of Canada, dated at Quebec, 20 September 1713. *Collections of the State Historical Society of Wisconsin*, vol. 16, pp. 295–297.

<sup>26</sup> Letter of GOVERNOR DE VAUDREUIL to Council of Marine, dated 14 October 1716. *Collections of the State Historical Society of Wisconsin*, vol. 16, p. 342.

<sup>27</sup> *Ibid.*, p. 343.

<sup>28</sup> The conflict of 1716 discussed here was one of several which took place between the French and Fox between 1712 and 1728. See WILLIAM JONES, "Ethnography of the Fox Indians," Margaret Welpley Fisher, editor, *Bureau of American Ethnology*, *Bulletin* 125, pp. 3–5, for a discussion of the Fox Wars of this period.

Pierre Celoron, Sieur de Blainville	1734–1742
Jean Jarret, Sieur de Vercheres	1742–1745
Louis de La Corne	1745–1747
Charles Joseph De Noyelles	1747
Jacques Legardeur, Sieur de St. Pierre	1747
Nicholas De Noyelles, Sieur de Fleurimont	1747–1750
Francois Lefebvre, Sieur Duplessis-Fabert	1750–1753
Louis Lienard, Sieur de Beaujeu-Villemonde	1753–1754
Louis Herbin	1754–1757
Louis Lienard, Sieur de Beaujeu-Villemonde	1758–1760 <sup>29</sup>

During this period the size of the post garrison underwent little change. In 1729 there were no more than 35 soldiers, including officers, at the Fort; in 1747 the troops numbered only 28. In addition to the military personnel and their families, the Fort housed traders, craftsmen such as blacksmiths, missionaries, Coureurs-de-bois, and voyageurs during certain seasons of the year. Local groups of Ojibwa and Ottawa frequented the Fort to trade.

Owing to British competition and fluctuations in the supply and demand of the fur market, the fur trade grew slowly at Fort Michilimackinac between 1720 and 1760.<sup>30</sup> The Fort continued to serve as a supply depot for French traders arriving from the east in the spring or autumn. Once provisioned with food, the traders left for areas to the west and north, returning to Fort Michilimackinac for provisions the following spring and then going to Montreal with their load of furs.<sup>31</sup> The fur trade thus provided a livelihood for the nonmilitary residents of the Fort. The period from 1744 until 1760, during the King George's war and the French and Indian War, was one of economic depression. During these years, the British were able to blockade effectively the St. Lawrence River which was the major supply route for French trade goods to the upper Great Lakes.

By 1760 the fur trade had led to the rapid acculturation of the Indians occupying the upper Great Lakes. The continual shifting of tribal groups (due in part to European and intertribal conflicts and alliances) accompanied by the introduction of European trade goods and ideas had a direct effect on the socio-economic systems of the contacted groups. The European, by 1760, had become an integral and necessary part of the native life. The Indians had become dependent on a continual supply of European trade

<sup>29</sup> *Old Fort Michilimackinac at Mackinaw City, Michigan*, p. 12.

<sup>30</sup> IDA AMANDA JOHNSON, *The Michigan Fur Trade*, p. 581.

<sup>31</sup> INNIS, p. 59.

goods with which to meet their subsistence needs, and in turn, much of Indian society had become oriented toward fulfilling the necessities of European traders; i.e., Indians produced the furs for the trade market, supplied French traders with provisions, and acted as middlemen between the French and outlying Indian groups.<sup>32</sup>

The early French post at Michilimackinac is thought to have consisted of a small square stockade with bastions, a mission, two guardhouses, and a 40-foot-long structure to house military personnel.<sup>33</sup> By 1760 the area within the stockade had been expanded to nearly three times its original size during at least five phases of construction.<sup>34</sup> The first phase (1725–1735) saw the expansion of the original stockade to 200 feet per side, the addition of row houses, a well, and at least three single-unit French inhabitant's houses.<sup>35</sup> During the second expansion (1730–1740), a new row house unit was added, the west wall was expanded, and the north wall was moved 65 feet to the north to accommodate structures added during this phase. During the third phase (1740–1745) another set of row houses was added, the commanding officer's house was constructed, the west stockade was expanded, and the church was rebuilt.<sup>36</sup> The fourth phase of expansion (1751) saw the building of a provisions storehouse and the rebuilding of a guardhouse which had been burned. The final stage of expansion must have taken place prior to 1766, at which time the stockade was expanded to its maximum size of 360 feet north-south by 333 feet east-west, as suggested

<sup>32</sup> See HAROLD HICKERSON, "The Southwestern Chippewa: An Ethnohistorical Study," *American Anthropological Association, Memoir 92*, vol. 64, no. 3, part 2, for a discussion of the effects of the fur trade upon the Chippewa.

<sup>33</sup> In 1720 CAPTAIN DE LIGNERY wrote a letter to COUNT DE TOULOUZE asking for reimbursement for expenses acquired while building "a fort for the garrison, with two guardhouses; and a 40 foot house," *Collections of the State Historical Society of Wisconsin*, vol. 16, pp. 386–387.

<sup>34</sup> The hypothetical expansion phases were defined by LEWIS R. BINFORD in the 1961 *Fort Michilimackinac Preliminary Report* (mimeographed report, Department of Anthropology, Michigan State University) and represent refinements of the original phases proposed by MAXWELL and BINFORD, 1961, pp. 27–38.

<sup>35</sup> LEWIS R. BINFORD notes in his 1961 *Preliminary Report* that the original De Lignery Fort has not been identified.

<sup>36</sup> In the "Mackinac Register of Interments (1743–1806)," we note that Marie Coussante, daughter of Joseph Hins, "Died August 10, 1743; she was the first one buried in the new church built by her father, under the holy water font." *Collections of the State Historical Society of Wisconsin*, vol. 19, p. 150.

by three English military plans of the Fort—the Magra Map of 1766 (Figure 4), the Nordberg Map of 1769 (Figure 5), and the anonymous (Crown Collection) map of circa 1760–1770 (Figure 6).<sup>37</sup>

The French garrison was involved in little military activity from 1715 until 1760, serving primarily to protect traders and maintain friendly relations with the nearby Ojibwa and Ottawa. The Indians occasionally were mustered along with the French garrisons to fight against the British and allied Iroquois to the east.<sup>38</sup> In 1739 commandant Sieur de Celoron and the post garrison accompanied Baron Longueuil with a combined force of 442 Canadians against the Chickasaw in the Yazoo country of Mississippi. This campaign against the Chickasaw was relatively ineffectual owing to Indian desertions, lack of supplies, bad weather, illness, and poor leadership. The expedition terminated after several skirmishes with the Chickasaw which resulted in meaningless negotiations.<sup>39</sup>

During the later part of the French period, there were several shifts of location by Indians allied with the French at Fort Michilimackinac. In 1741 the local Ottawa moved a few miles south to L'Arbre Croche (now Cross Village) on Lake Michigan.<sup>40</sup> The Ojibwa also began moving at about this time to occupy areas near Detroit and Saginaw.<sup>41</sup>

Capitulation of the French forces at Montreal to General Jeffery Amherst in September 1760 ended the French and Indian War, and gave control of the upper Great Lakes to the British. After receiving news of the end of hostilities, the French garrison at Michilimackinac under Captain Louis de Beaujeu

<sup>37</sup> The Nordberg Map was drafted by LIEUTENANT JOHN NORDBERG in 1769. The Magra Map was drafted by LIEUTENANT PERKINS MAGRA in 1766. These English officers were both in the 60th Regiment, commonly referred to as the "Royal American" Regiment. Although these maps are of limited use for exact measurement purposes, they do show the approximate position of many of the buildings which existed between 1760 and 1780 and indicate the position of many of the remaining French period structures. Both maps are in the collections of the William L. Clements Memorial Library, University of Michigan, Ann Arbor, Michigan. The third map is anonymous and is in the Crown Collection of Maps, British Museum.

<sup>38</sup> HAVIGHURST, pp. 51–57.

<sup>39</sup> NORMAN W. CALDWELL, "The Chickasaw Threat to French Control of the Mississippi in the 1740's," *The Chronicles of Oklahoma*, vol. 16, no. 4, pp. 465–492.

<sup>40</sup> KINIETZ, p. 230.

<sup>41</sup> *Ibid.*, p. 319.

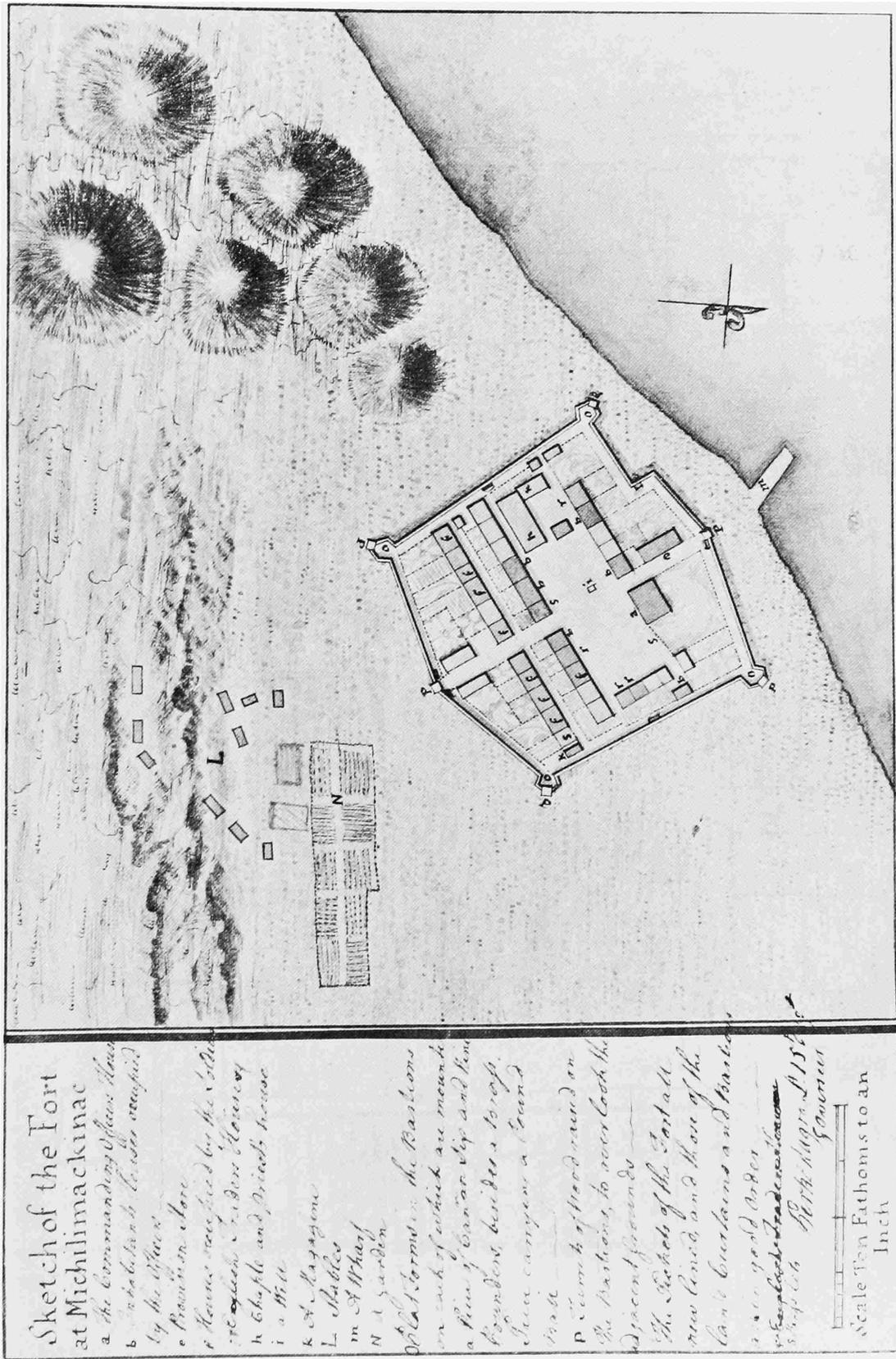


FIGURE 4.—MAP DRAWN BY LIEUTENANT PERKINS MAGRA of the 60th "Royal American" Regiment, 1766. Courtesy of the William L. Clements Memorial Library, University of Michigan.





left to join French settlements in Illinois.<sup>42</sup> Charles de Langlade, second in command, remained at the post and turned it over to British forces under Captain Henry Balfour in September 1761. Balfour immediately departed, leaving the post under the command of Lieutenant Leslye and a garrison of 40 troops from the 60th Regiment.<sup>43</sup>

The articles of capitulation agreed upon in Montreal 8 September 1760 were very favorable to the remaining French inhabitants of Fort Michilimackinac. Religious freedom was guaranteed and the French traders and inhabitants were permitted to retain possession of their property and goods.<sup>44</sup> The latter provision proved to be a matter of concern to the British commandants who were forced to rent troop quarters from the French inhabitants.

Documentary information pertaining to the British occupation of Fort Michilimackinac between 1761 and 1781 is much more complete. As each of eleven succeeding commandants took command, records were made of the structural repairs and additions which had been authorized. The British maintained the Fort more strictly as a military post than as a trading post or "fortified settlement," as had been the case during the French period.<sup>45</sup> During the British period, there was no further expansion of the Fort perimeter, but occupants and traders built cabins outside of the Fort enclosure.

Both the fur-trade activity and the population of Fort Michilimackinac increased during the period of British control. The change from French to British trade policies was in part responsible for this growth. Prior to 1761 the French had administered the fur trade through the sale of monopolies and trade permits. This system was never satisfactory, as the existence of monopolies tended to increase the cost of trade goods.<sup>46</sup> The British government removed all monopolies and previous trade restrictions and thereafter confined the fur trade in the Great Lakes to five licensed posts: Kaministiquia, Michilimackinac, LaBaye, Detroit, and Ouiatanon. A license

system was implemented which permitted anyone to carry on trade from the licensed posts. The Indians were then required to carry their furs to one of the five posts and were not extended credit for trade goods as had been the practice during the French period.<sup>47</sup> Besides the increase in private traders at the Fort, the number of troops increased after 1761 to a garrison of over 100 soldiers in 1781.

Fort Michilimackinac was attacked and captured by a group of local Ojibwa on 2 June 1763 as a part of the Pontiac uprising. Twenty-one of the 35 British soldiers and one British trader were massacred. Nearby Ottawa released the surviving soldiers and traders and took them to Montreal and safety.<sup>48</sup> The post was not reoccupied by British forces until 1764 when Captain William Howard arrived with a contingent of 80 troops. Howard was relieved by Major Robert Rogers and 68 men in 1766. The succeeding commandants were:<sup>49</sup>

Captain-Lieutenant Frederick Speismacher	December 1767–July 1768
Captain Beamsley Glazier	July 1768–May 1770
Captain George Turnbull	May 1770–July 1772
Captain John Vattas	July 1772–June 1774
Major Arent S. DePeyster	June 1774–October 1779
Lieutenant-Governor Patrick Sinclair	October 1779–1781

Numerous buildings were constructed and rebuilt at the Fort after 1766. A new barracks to house at least 30 men was built in 1769. The powder magazine and provisions storehouse were rebuilt by 1773. The civilian community of the Fort grew outside of the stockade enclosure after approximately 1765. John Askin, a resident trader, noted in 1778 that "there is near one hundred houses in the Subarbs."<sup>50</sup> The Revolutionary War had immediate effects upon the post and resulted in the repair of the stockade with wood from dismantled houses, the construction of an internal stockade to enclose the soldiers' barracks, and the leveling of sand dunes to the west of the Fort which might shield attackers.<sup>51</sup> With the arrival of Sinclair in 1779, the decision was made to rebuild the Fort at a more defensible position. During the

<sup>42</sup> HAVIGHURST, p. 58.

<sup>43</sup> MAXWELL and BINFORD, 1961, p. 13.

<sup>44</sup> CAMERON NISH, editor, "The French Regime," *Canadian Historical Documents Series*, vol. 1, pp. 153–155.

<sup>45</sup> LEWIS R. BINFORD, "A Discussion of the Contrasts in the Development of the Settlement at Fort Michilimackinac under British and French Rule," *Southeastern Archaeological Conference Newsletter*, vol. 9, no. 1, pp. 50–52, 1962.

<sup>46</sup> MARJORIE GORDON JACKSON, "The Beginning of British Trade at Michilimackinac," *Minnesota History*, vol. 11, no. 3, pp. 235–236.

<sup>47</sup> *Ibid.*, p. 244.

<sup>48</sup> DAVID A. ARMOUR, editor, *Massacre at Mackinac—1763*, pp. 43, 59, 67.

<sup>49</sup> See MAXWELL and BINFORD, 1961, pp. 14–16.

<sup>50</sup> MILO M. QUAIFFE, editor, *The John Askin Papers, 1747–1795* vol. 1, p. 69.

<sup>51</sup> A. S. DEPEYSTER to CAPTAIN BREHM, Michilimackinac, 20 June 1779. *Michigan Pioneer and Historical Collections*, vol. 9, p. 387.

winter of 1780–1781 and through the following year, the Fort was dismantled and removed to Mackinac Island, eight miles to the northeast.

Contrasts between the French and British occupations of Fort Michilimackinac are many. Differences have been noted between the French and British garrison population size and governmental trading policies. Although many French traders remained at the Fort after 1761, life at Michilimackinac during the British period differed from that of the French period. Under British control, the Fort became an outpost of the eighteenth-century British way of life; status differences were recognized between craftsmen, officer's families, traders, and so on. The accoutrements of day-to-day living were refined with the importation of fine ceramic tablewares, furniture, and household goods. Also, the use of domestic animals such as cattle, swine, and sheep during the British period was greatly increased. The French had relied primarily on wild animals for their subsistence.<sup>52</sup>

After 1781, when the garrison was moved to Mackinac Island, the remains of Fort Michilimackinac deteriorated and eventually were covered over by drifting beach sand. A section of land enclosing the original site of the Fort and a portion of the outlying eighteenth-century village were set aside as a local park by the Village of Mackinaw City in 1857. This enclosed area was transferred to the State of Michigan in 1904, to be administered by the Mackinac Island State Park Commission.

The first limited archeological work at the site was undertaken by the park superintendent, Chris Schneider, in 1932. As a result of this early work, the 1760-period stockade walls were located and reconstructed. Subsequent archeological investigation has confirmed the accuracy of their location. By 1959 the reconstructed stockade had fallen into disrepair and plans were made by the Mackinac Island State Park Commission to begin a program of archeological and historical research aimed at the eventual complete reconstruction of Fort Michilimackinac. An agreement was reached between the Mackinac Island State Park Commission and the Michigan State University Museum to begin an archeological program immediately. Excavations were sponsored by the Commission and were directed and carried out by personnel associated with the Michigan State University

Museum and the University's Department of Anthropology. The excavations in 1959 produced data which allowed the subsequent reconstruction of four structures: the Commanding Officer's House, the King's Storehouse, a British trader's house, and a soldiers' barracks. Excavations between 1960 and 1964 have provided evidence for the reconstruction of the church and a French period row house. The Commission is planning the reconstruction of additional structural units, including a guardhouse and the priest's house. Responsibility for the quality of the archeological project has been carried by the curator of anthropology at the Michigan State University Museum (Dr. Moreau S. Maxwell from 1959 through 1964 and Dr. Charles E. Cleland from 1965 to the present). Field excavations have been directed by Dr. Moreau S. Maxwell, Dr. Lewis R. Binford, Dr. Carl Jantzen, Ronald Vanderwall, Lyle M. Stone, and Dr. James A. Brown. The archeological crew has been composed of anthropology students from Michigan State University since 1966. This student training program has been partially supported by the National Science Foundation Undergraduate Research Participation Program (Grant GY-760). Prior to 1966 the work force was supplied by the Michigan Corrections Department, Pellston Corrections Camp.

The excavation procedures adopted by Dr. Maxwell in 1959 have been used until the present with consistently reliable results.<sup>53</sup> Excavations normally are carried out in units of contiguous 10-foot squares. Vertical excavation units consist of 3-inch-deep arbitrary levels. Horizontal and vertical control has been maintained by reference to the original grid and vertical datum established by Dr. Maxwell in 1959. Stratigraphic excavation is conducted in areas where the eighteenth-century deposits have remained relatively undisturbed. As each 3-inch level or stratum is excavated, written and photographic records are taken of the exposed soil surface. The soil from each excavation unit is then sifted through ¼-inch hardware mesh screen and the artifacts collected and sacked according to provenience unit. All artifacts are washed and cataloged during the course of the field season. Features such as refuse pits, basements, fireplaces, wall foundations, and wall trenches are excavated, recorded, and sifted separately through ⅝-inch hardware mesh screen. Additional records maintained throughout the season include drawings of wall profiles, field

<sup>52</sup> CHARLES E. CLELAND, *A Comparison of French and British Subsistence Systems at Fort Michilimackinac, Emmet County, Michigan*.

<sup>53</sup> MAXWELL and BINFORD, 1961, pp. 19–20.



FIGURE 7.—AIR VIEW OF FORT MICHLIMACKINAC, 1966. Courtesy of the Mackinac Island State Park Commission.

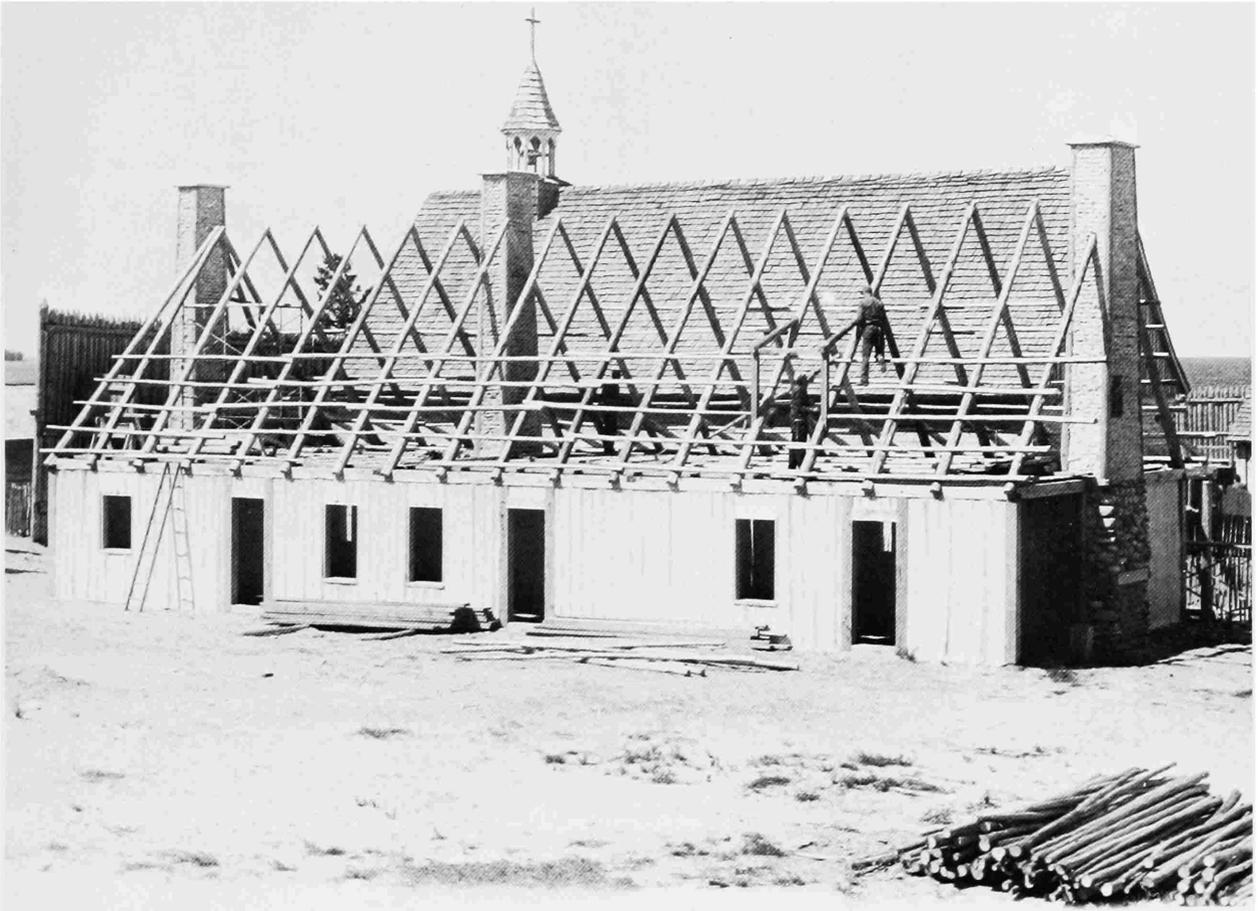


FIGURE 8.—RECONSTRUCTION OF A FRENCH PERIOD ROW HOUSE, 1967. Courtesy of Mackinac Island State Park Commission.

notes, summaries of each 10-foot square, and excavation-feature maps.<sup>54</sup>

A very complex pattern of deposition has been produced by the various construction phases and numerous structural remains at the site. At least four major, distinct soil strata have been recognized and interpreted. One of these zones represents a pre-1715 historic Indian component. Although stratification is common on the site, it is unusual to find an undisturbed unit of soil zones. Numerous structural features representing original buildings, those added during phases of expansion, and structural modifications and additions have served to redeposit the major strata in many cases. Problems of inter-

pretation are compounded further by the fact that many of the French inhabitants continued to live at the Fort during the period of British control. Post-1775 deposits, for example, commonly yield both French and British artifacts. Consequently, the demonstration of what Maxwell has termed an "Isolated Associational Context" is infrequent and has hindered chronological control based on structural-artifactual associations.<sup>55</sup>

Approximately 300,000 artifacts have been recovered and analyzed at The Museum since the first

<sup>54</sup> The Fort Michilimackinac field records are on file at The Museum, Michigan State University.

<sup>55</sup> MOREAU S. MAXWELL, "Methods of Identification and Some Products of Those Methods," pp. 57-60. Maxwell maintains that an Isolated Associational Context is present when "valid associations between individual artifacts and structures or other features" can be made.

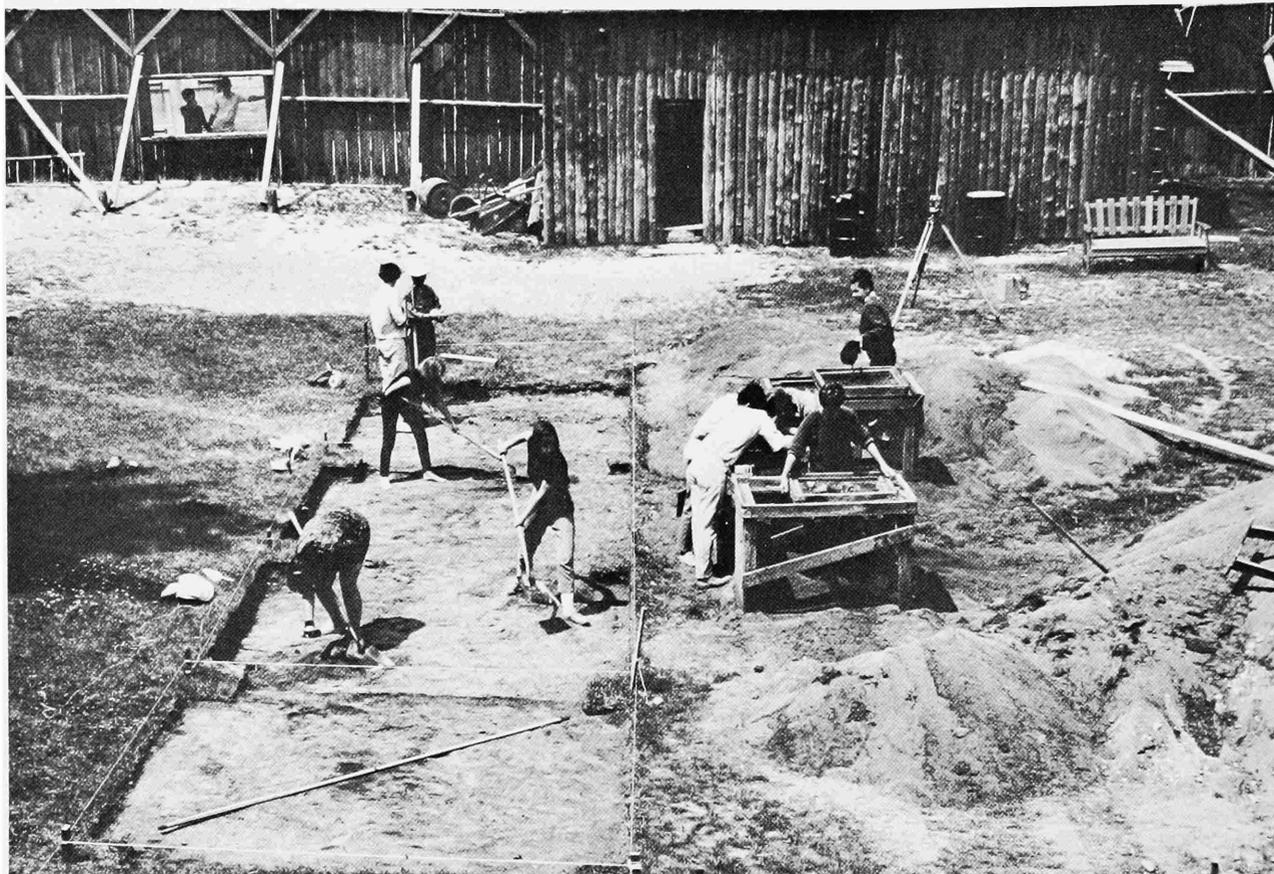


FIGURE 9.—MICHIGAN STATE UNIVERSITY archeology students excavating in the area of the priest's house, 1966. Courtesy Michigan State University Museum.

excavations in 1959. Field records total some 2,300 square sheets and profile drawings; 410 10-foot squares have been excavated to an average depth of 3 feet 9 inches, representing approximately 153,750 cubic feet of earth. Four hundred and twenty features have been excavated and recorded.

The archeological study of Fort Michilimackinac has resulted in the definition of at least 48 eighteenth-century structures and structural components. A majority of the artifacts recovered have been analyzed, classified, and stored in the Anthropology Laboratory of the Michigan State University Museum. A number of these artifacts have been placed on exhibit at Fort Michilimackinac.

This continuing program of historical and archeological research has been documented with a series

of publications. The results of the 1959 season have been reported by Maxwell and Binford.<sup>56</sup> Less extensive reports (listed in the bibliography) stressing specific artifact types or methods of analysis and interpretation have subsequently appeared. Each season's excavation is concluded with the preparation of a preliminary report which is placed on file at The Museum at Michigan State University and with the Mackinac Island State Park Commission. The Commission also has edited and published a series of monographs relating to the historical and cultural significance of the Fort.<sup>57</sup>

<sup>56</sup> MAXWELL and BINFORD, 1961.

<sup>57</sup> DAVID A. ARMOUR, editor, *Massacre at Mackinac—1763 and Treason? At Michilimackinac.*

GEORGE S. MAY, editor, *The Doctor's Secret Journal.*

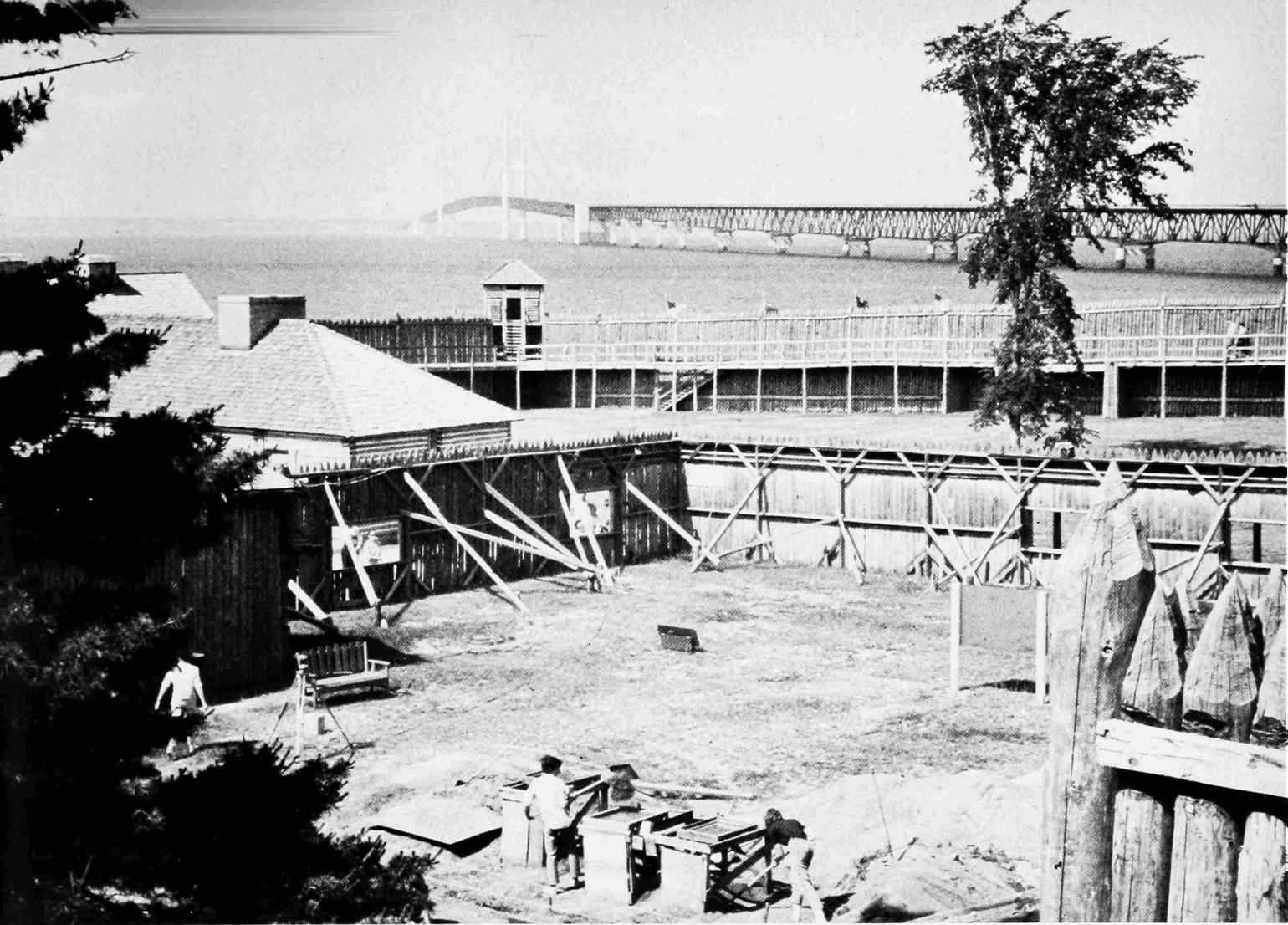


FIGURE 10.—VIEW OF THE FORT MICHILIMACKINAC reconstruction from the southwest bastion. Mackinac Straits and Mackinac Bridge in the background, 1966. Courtesy Michigan State University Museum.

## Chapter II

# Ceramics at Fort Michilimackinac

THE EXCAVATION YEARS 1959–1965 yielded 14,407 ceramic artifacts.

After classification and dating, one salient fact emerged. A remarkably wide variety of ceramics were used at Fort Michilimackinac during its approximately 65 years of active existence. The ceramic artifacts indicate a standard of living, for at least some of the Fort's occupants, well above the austere conditions that supposedly prevailed on the frontier prior to the American Revolution. The ceramic evidence also suggests that the English, after taking possession in 1761, enjoyed far more of the amenities of life than did their French predecessors.<sup>1</sup> This, of course, confirms the established view of the disparity between the French and English adaptations to North America's wilderness environment during the seventeenth and eighteenth centuries.

In considering the material presented in this chapter a few cautionary thoughts are in order. First, a simplistic approach is to be avoided. Though the French capitulated in 1760, French traders and ex-soldiers continued to live in and near the Fort, and French Canadians continued to visit there. Thus, 1760–1761 does not represent a neat line of demarcation for cultural distinctions. Second, the sherd frequencies accompanying this chapter (Appendix A) provide a mathematical approach that has only relativistic significance. It is reasonable to assume that, over the years, acts of abandonment and incidents of breakage roughly evened out insofar as sherd type, size, and number were concerned. The imponderables, however, are many and these frequencies only reflect what was found during excavation. Bearing this caveat in mind, the sherd frequencies remain of considerable value in any

<sup>1</sup> See BINFORD, "A Discussion of the Contrasts in the Development of the Settlement at Fort Michilimackinac Under British and French Rule," *Southeastern Archeological Conference Newsletter*, vol. 9, no. 1, pp. 50–52.

attempt to assay the material culture at Fort Michilimackinac.<sup>2</sup>

In the following pages the various types of ceramics found at Fort Michilimackinac during the excavation years 1959–1965 are discussed and illustrated.<sup>3</sup> The classification of a wide variety of ceramics into meaningful categories inevitably results in some anomalies. The system of classification used in this paper was specifically designed to deal with the materials at hand.<sup>4</sup>

The ceramic artifacts have been divided into three basic classes; earthenware, stoneware, and porcelain. From these three classes eight groups have been defined, each group consisting of ceramics which share certain physical and/or stylistic properties. These eight groups have been further subdivided into types based on decorative style and technique. Classification purely on the basis of physical properties has been avoided (see Introduction, pp. 3–5). Rather, the eight groups represent an attempt to categorize the ceramics within the context of the eighteenth-century culture that produced them. In re-

<sup>2</sup> Problems in artifact count and seriation at Fort Michilimackinac are discussed in MAXWELL and BINFORD, 1961, pp. 86–87.

<sup>3</sup> The context in which ceramic artifacts were found as well as other types of artifacts recovered in conjunction with ceramic sherds are described in the yearly reports filed by the Michigan State University archeologist in charge. For example, see LYLE M. STONE, *Preliminary Report—1965, Archaeological Investigation of Fort Michilimackinac, Mackinaw City, Michigan*, pp. 13 and 15.

<sup>4</sup> Problems of analysis, description, and classification are considered in detail in ANNA O. SHEPARD, *Ceramics for the Archaeologist*. This excellent volume is concerned with prehistoric and classical archeology. Some of the suggested criteria are applicable to historical archeology, others are not. For another study of descriptive and analytic techniques, see BENJAMIN MARCH, *Standards of Pottery Description*. For specific approaches to this problem in historical archeology, see the Introduction, *infra*.

jecting a taxonomy relying on physical criteria alone, we concur with Anna O. Shepard's reasoning that:

In a sense, we [archeologists] have been too objective in our attitude toward pottery; we have treated it as a simple physical thing and, as I have said before, we have well nigh forgotten the role of the potter. Even though we are interested in pottery primarily as one of the expressions of culture, we should be more conscious of the human factor than we generally are, and we will be reminded of it continually as long as we question the meaning of ceramic properties, seek to understand techniques, and study style in its entirety.<sup>5</sup>

It is hoped that the arrangement of ceramic groupings in this study will present facts and conclusions in an orderly manner. Detailed sherd type frequencies are set forth in Appendix A. Pertinent qualitative and quantitative data and some historical information are presented in parts of the text and in the captions to the illustrations. Other comparative material is included in Appendixes B, C, and D. Unresolved problems and areas of uncertainty are discussed in the text in the hope that further scholarship will lead to greater clarification.

## Class A—Earthenware

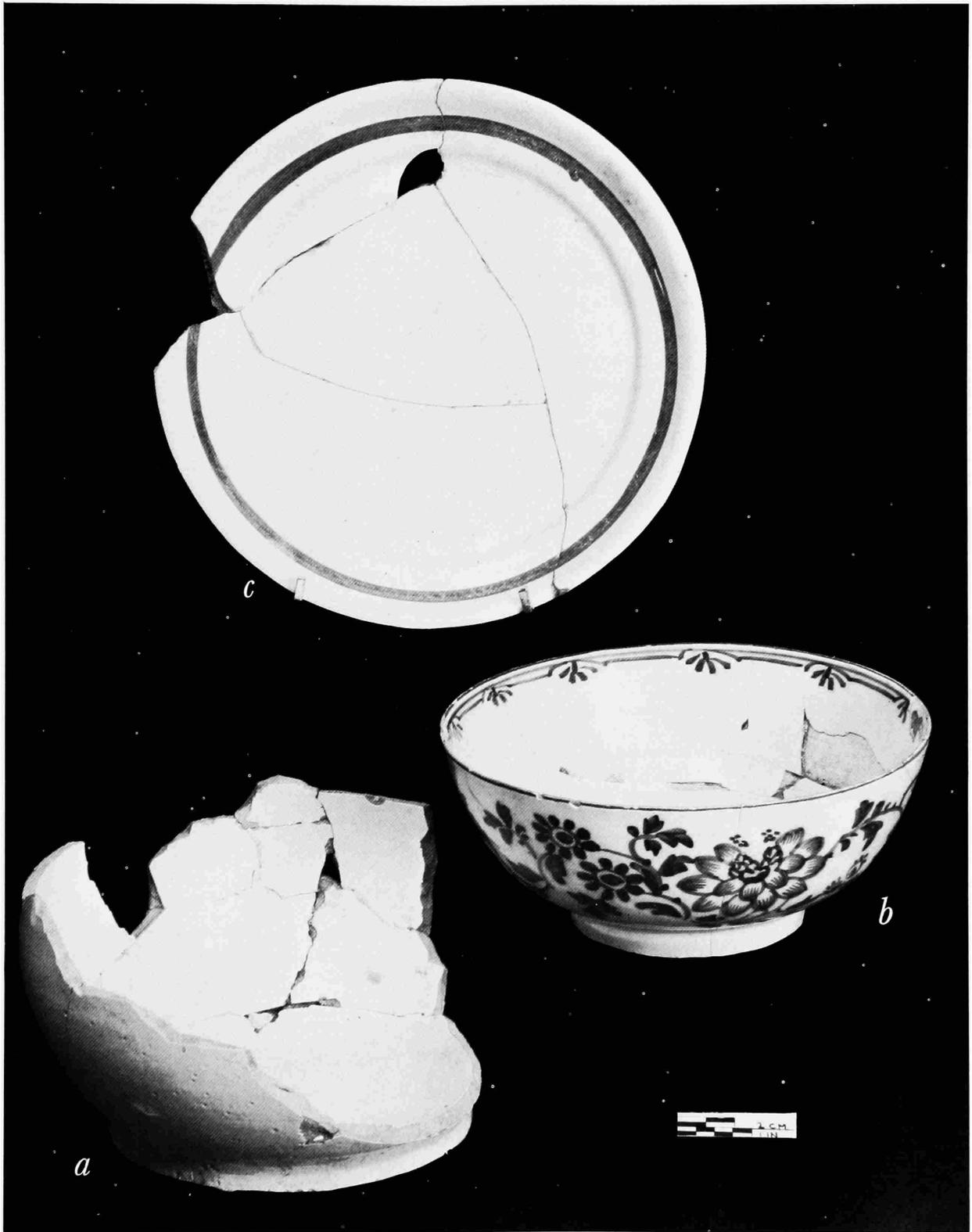
### GROUP I—

#### TIN-GLAZED EARTHENWARE

In the eighteenth century, tin-glazed earthenware was manufactured throughout most of Western Europe. Called majolica in Italy, Spain, and Portugal, faience in France, and delft in Holland and England, these ceramics often differed stylistically but shared basic similarities. All were made of earthenware, and were covered with an opaque, whitish glaze. This so-called "tin-glaze" was essentially a basic lead-glaze to which tin oxide was added, thereby producing a white opaque surface that proved particularly suitable as a ground for painted decoration. During the excavations of 1959–1965 at Fort Michilimackinac, tin-glazed earthenware comprised the largest category of ceramic artifacts recovered: 4,220 sherds were found. The numerical preponderance of this type is attributable, to a certain degree, to the fact that both French and English occupants of the Fort possessed tin-glazed earthenware. Indeed, the evidence indicates that

<sup>5</sup> SHEPARD, p. 322.

FIGURE 11.—BLUE AND WHITE ENGLISH DELFT AND FRENCH FAIENCE. *a*, French faience chamber pot. Light red body covered with a grayish-white glaze. Considerable crazing. Diameter of base, 5 inches. Eighteenth century. *b*, English delft bowl. Buff body covered with a bluish-white glaze; decorated in blue with flowers and vines. Diameter 7 inches. Probably Lambeth, mid-eighteenth century. *c*, French faience plate. Flat base with no foot ring. Thickly potted buff body covered with a bluish-white glaze; decorated with a single, blue band.  $\frac{3}{8}$  inch in section at base, diameter,  $8\frac{1}{4}$  inches. Eighteenth century.



during the French period of occupation, faience was the predominate kind of European ceramic in use at the Fort. On the basis of decorative style and technique, the tin-glazed earthenware found at Fort Michilimackinac has been divided into four types.

#### TYPE A. BLUE and WHITE

*Date:* Eighteenth century.

*Origin:* England and France.<sup>6</sup>

*Description:* Earthenware covered with an opaque, tin-glaze. Plain white or white decorated with blue.<sup>7</sup>

COMMENTS: A total of 3,764 sherds of this type were recovered. As the principal factors in assigning these wares a country of origin are form and decorative style, specific attribution to England or France was frequently uncertain as most of the sherds were small with no, or limited, blue decoration.<sup>8</sup> For this reason, no inclusive attempt was made to subdivide this group. Where definite attribution was possible, it was found that English delft was far more common than French faience.<sup>9</sup> Though it is not practical to include in this publication the complex question of differentiations between typical French and English blue and white tin-glazed earthenware decoration, some gen-

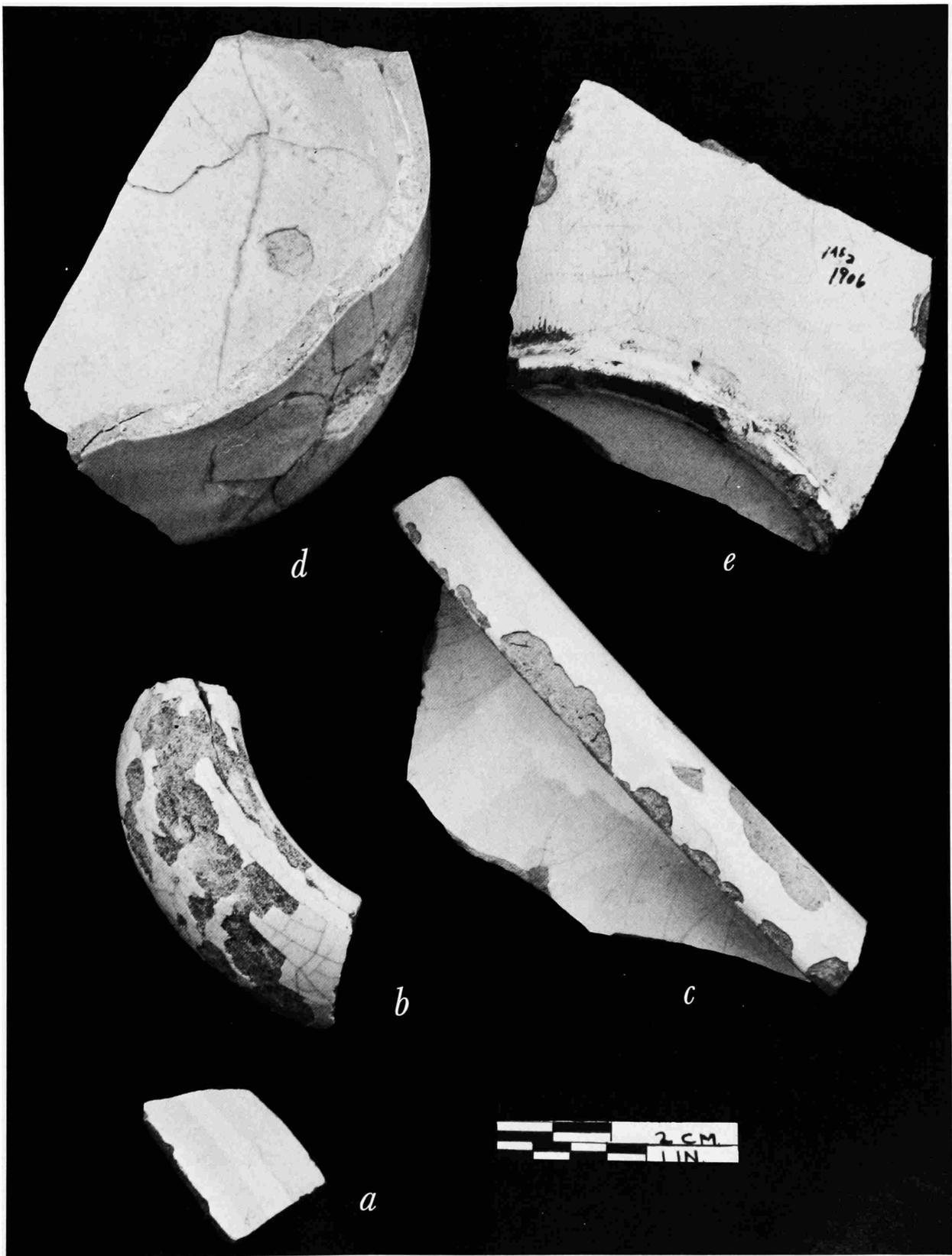
<sup>6</sup> Small sherds of blue and white tin-glazed earthenware with a minimum of decoration frequently defy precise attributions as to place of origin. Thus, the possibility that some of the sherds in this group came from Dutch, German, Spanish, or Portuguese ceramics cannot be completely discounted. No blue and white tin-glazed sherd was found that definitely could be attributed to these countries.

<sup>7</sup> All plain, white sherds are included in this group. A certain percentage of these represent undecorated fragments from Class A, Group I, Type B.

<sup>8</sup> Body materials and glazes of English delft and French faience vary extensively. Multiple ranges of texture, hardness, and color occur from region to region and from factory to factory. French faience tends to craze more frequently but no general rule is applicable. On the basis of a limited sample, the body material of French faience proved slightly harder than that of English delft. All fell between 2 and 4, Moh's scale, with most of the English lying between Moh's scale 2 and 3, while much of the French yielded values of 3 or 3-4. At this time, the most reliable method of attribution lies in comparative studies of the decorative style and form of known pieces of English and French tin-glazed earthenware.

<sup>9</sup> There is some evidence that tin-glazed earthenware was made in the colonies. See FREDERICK H. GARNER, *English Delftware*, p. 37. As no examples of North American origin during the colonial period have been identified, this possible source has been excluded from consideration.

FIGURE 12.—WHITE ENGLISH DELFT AND FRENCH FAIENCE. *a*, French faience sherd, probably from a plate. Light pink body covered with a white glaze. Slight crazing. Eighteenth century. *b*, French faience pitcher handle section. Buff body covered with a white glaze. Considerable crazing. Eighteenth century. *c*, English delft chamber pot rim sherd. Thinly potted, buff body ( $\frac{3}{16}$  inch in section) covered with a grayish-white glaze. Slight crazing. Eighteenth century. *d*, English delft drug jar base section. Cylindrical shape with a flat bottom. Light buff body covered with a grayish-white glaze. Approximate diameter,  $3\frac{3}{4}$  inches. Mid-eighteenth century. *e*, Bowl base section, probably French or English. Buff body covered with a white glaze with a faint greenish tinge. Slight crazing. Eighteenth century.



eral remarks on decorative style may prove helpful. Though the usual motifs (geometric, foliate, landscapes, chinoiseries) are found on the tin-glazed wares of both countries, the style of painting is frequently different. This is especially true in the foliate designs (Figures 13 and 14). The polychrome wares discussed in the following section can often be distinguished in the same manner as well as by the palette. Since illustrated publications on these wares are limited, the best way to achieve some degree of proficiency in identification is to visit museums, dealers, and private collections and to handle as much English delft and French faience as possible.

Useful wares were found exclusively.<sup>10</sup> The more common forms of faience and delft in use at the Fort were plates, platters, punch bowls, pitchers, chamber pots, and pill pots (Figures 11 and 12). Decorative themes on the English blue and white delft included foliate patterns, geometric designs, and chinoiseries (Figure 13). Rim sherds were decorated with a wide variety of conventionalized border designs with no specific motif prevailing. Such diversity suggests a continuing pattern of importation of these wares in small amounts.<sup>11</sup> Indeed, delft wares were a mainstay of the English export trade in ceramics during the first three quarters of the eighteenth century. It is of interest that much of the English delft found at the Fort that can be assigned a probable provenance was manufactured at Liverpool or Bristol (Figures 13 and 15), the two major English seaports serving the American trade.<sup>12</sup> The problem of attributing English delft to specific manufacturing centers is a difficult one. Some archeological work has been done, but many uncertainties remain.<sup>13</sup> The isolated outpost of Fort Michilimackinac seems

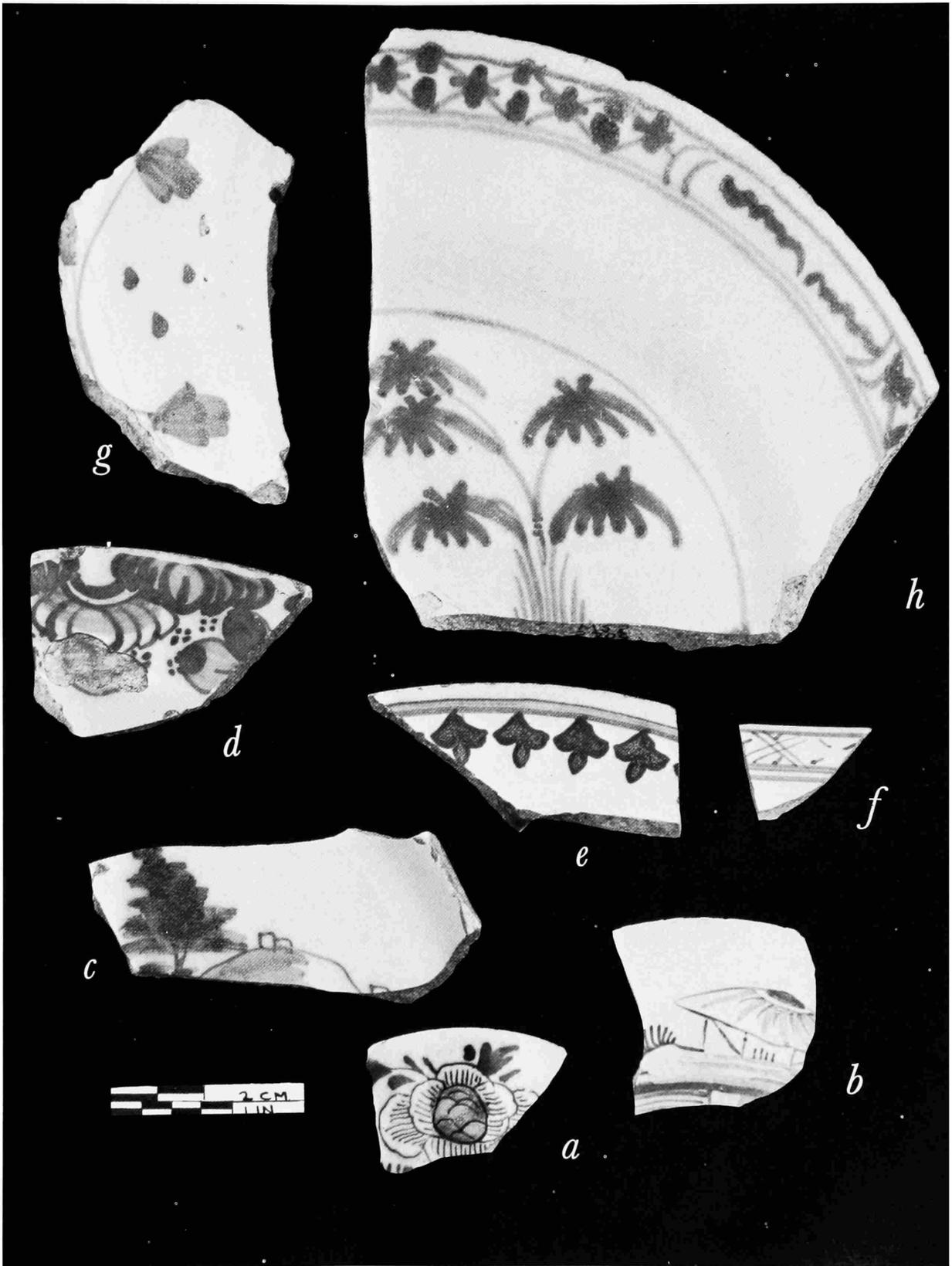
<sup>10</sup> In all of the ceramics uncovered at Fort Michilimackinac to date, no evidence has been found of the presence of purely decorative ceramic artifacts such as figure groups or wall plaques.

<sup>11</sup> The extensive importation of English delft during the colonial period is evidenced by finds at numerous historical sites. For example, see IVOR NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957-1959," pp. 184-186, fig. 12; C. MALCOLM WATKINS, "The Cultural History of Marlborough, Virginia," pp. 136-138.

<sup>12</sup> For an article on Bristol delft pointing out that the delft industry there did not die until after 1780, see: SIR GILBERT MELLOR, "Bristol Delftware," *Transactions of the English Ceramic Circle*, vol. I, no. 2, pp. 22-28.

<sup>13</sup> See FREDERIC H. GARNER, "Lambeth, Bristol or Liverpool?" *Transactions of the English Ceramic Circle*, vol. 2, no. 10, pp. 248-255.

FIGURE 13.—BLUE AND WHITE ENGLISH DELFT; DECORATIVE MOTIFS. *a*, Bowl rim sherd. Thinly potted buff body covered with a bluish-white glaze; decorated with a flower in blue. Probably Liverpool, mid-eighteenth century. *b*, Bowl rim sherd. Thinly potted buff body covered with a grayish-white glaze; decorated with a Chinese landscape scene in blue. Probably Bristol, mid-eighteenth century. *c*, Plate body sherd. Buff body covered with a grayish-white glaze; decorated with a landscape scene in blue. No foot rim; sunken base. Probably Bristol, mid-eighteenth century. *d*, Plate rim sherd. Buff body covered with a bluish-white glaze; decorated with a foliate border in blue. Probably Lambeth, mid-eighteenth century. *e*, Plate rim sherd. Buff body covered with a bluish-white glaze; decorated with a bell flower border in blue. Probably Lambeth, about 1770. *f*, Bowl rim sherd. Buff body covered with a bluish-white glaze; decorated with a geometric border in blue, mid-eighteenth century. *g*, Plate rim sherd. Light buff body covered with a grayish-white glaze; decorated with a bell flower border in blue. Probably Bristol or Lambeth, mid-eighteenth century. *h*, Large plate rim sherd. Buff body covered with a bluish-white glaze; decorated with a geometric border and with palm trees in center, all in blue. No foot rim, sunken base. Probably Liverpool, mid-eighteenth century.



to have received English delft that differed but little from the delft wares imported in large amounts by the colonists of pre-revolutionary Williamsburg, Virginia.<sup>14</sup> In the quality and variety of English delft on hand (as well as other types of English ceramics), Fort Michilimackinac can claim no exceptional position. The English outpost at Fort Ligonier, Pennsylvania (1758–1766), has yielded English ceramics, including blue and white English delft, that closely parallel the finds at Fort Michilimackinac.<sup>15</sup>

The blue and white faience sherds of French manufacture, for the most part, were from utilitarian pieces such as plates, pitchers, and platters (Figure 14). Especially noteworthy are 20 fragments from a globular pitcher recovered during the 1962 excavating season. Many of the blue and white French faience sherds from Fort Michilimackinac are decorated with foliate motifs of the type particularly associated with Rouen and St. Cloud faience of the early eighteenth century.<sup>16</sup>

Materially relevant to the work at Fort Michilimackinac is the archeological project presently being carried out on the site of the eighteenth-century French Fortress of Louisbourg, Cape Breton Island, Nova Scotia.<sup>17</sup> This fortress and naval base, which guarded the entrance to the St. Lawrence River, was operational from about 1720 to 1760. Louisbourg's forty-year period, of course, paralleled the French occupation of Fort Michilimackinac (circa 1715–1761).

<sup>14</sup> See IVOR NOËL HUME, *Here Lies Virginia: An Archaeologist's View of Colonial Life and History*, pp. 290–296, for a discussion of English delft in Colonial Virginia.

<sup>15</sup> Consultation with Jacob L. Grimm, curator, Fort Ligonier, Pennsylvania. The extensive range of ceramic artifacts from Fort Ligonier can be seen in the comprehensive exhibition of archeological finds from the site displayed in several of the reconstructed buildings and in the Fort's museum. It is hoped that a detailed study of the ceramics from Fort Ligonier can be made in the near future. For representative ceramics from Fort Ligonier, see Appendix C, Figure 1. A brief account of the project at Fort Ligonier is contained in CHARLES M. STOTZ, *Fort Ligonier Outpost of the French and Indian War*.

<sup>16</sup> See Y. BRUNHAMMER, *La Faïence Française*, plates 7 and 8; JEANNE GIACOMOTTI, *French Faïence*, figs. 19, 20, 34, and 35; ARTHUR LANE, *French Faïence*, plates 18 and 19.

<sup>17</sup> Archeological investigations have accompanied a restoration project at Louisbourg, begun in 1961. This great French bastion (1720–1760) has yielded much important archeological evidence to date. For representative ceramics from Louisbourg, see Appendix B, and RENEE MARWITT, "A Preliminary Survey of Seven Coarse Earthenwares from the Fortress of Louisbourg," *The Conference on Historic Site Archaeology Papers, 1965–1966*, vol. 1, pp. 53–59.

FIGURE 14.—BLUE AND WHITE FRENCH FAIENCÉ; DECORATIVE MOTIFS. *a.* Body sherd, probably from a bowl. Thickly potted,  $\frac{1}{4}$  inch in section. Salmon body covered with a bluish-white glaze; slight crazing. Decorated with a scrolled band in dark blue. Possibly Rouen or St. Cloud, early eighteenth century. *b.* Body sherd from a small bowl or cup. Light salmon body covered with a glossy white glaze; decorated with raised blue dots over the glaze. Eighteenth century. *c.* Pitcher handle section. Light buff body covered with a white glaze; decorated with a blue foliate pattern. Early eighteenth century. *d.* Bowl body sherd. Buff body covered with a grayish-white glaze; heavily crazed. Decorated with a blue foliate pattern. Eighteenth century. *e.* Bowl body sherd. Buff body covered with a glossy white glaze; decorated with a blue foliate pattern. Possibly Rouen, early eighteenth century. *f.* Platter rim sherd. Buff body covered with a grayish-white glaze; heavily crazed; decorated with a blue foliate and geometric border. Possibly Rouen, early eighteenth century. *g.* Rim sherd from a mug. Buff body covered with a white glaze; slight crazing. Decorated with a blue foliate border. Possibly Rouen, early eighteenth century.



Thus, artifacts from the two sites have mutual significance in any assessment of the culture at military posts in French Canada. In general, the quality of the blue and white faience from Louisbourg is superior to that found at Fort Michilimackinac. Elegant plates bearing the arms of several of Louisbourg's governors (Appendix B, Figure 1), elaborate platters, and flower holders all testify to a more refined standard of living at Louisbourg. This, of course, is to be expected as Louisbourg was one of France's great bastions in the New World, while Michilimackinac, despite its strategic importance, was a remote outpost hundreds of miles west of the nearest center of provincial civilization. A number of the simpler types of blue and white French faience have been found at both sites. The Michilimackinac plate with the blue border line (Figure 11*c*) is the counterpart of many such plates recovered at Louisbourg and the rim sherd from the Michilimackinac platter (Figure 14*f*) is similar to one from Louisbourg (Appendix B, Figure 2*e*).<sup>18</sup>

#### TYPE B. POLYCHROME

*Date:* Eighteenth century.

*Origin:* England and France.

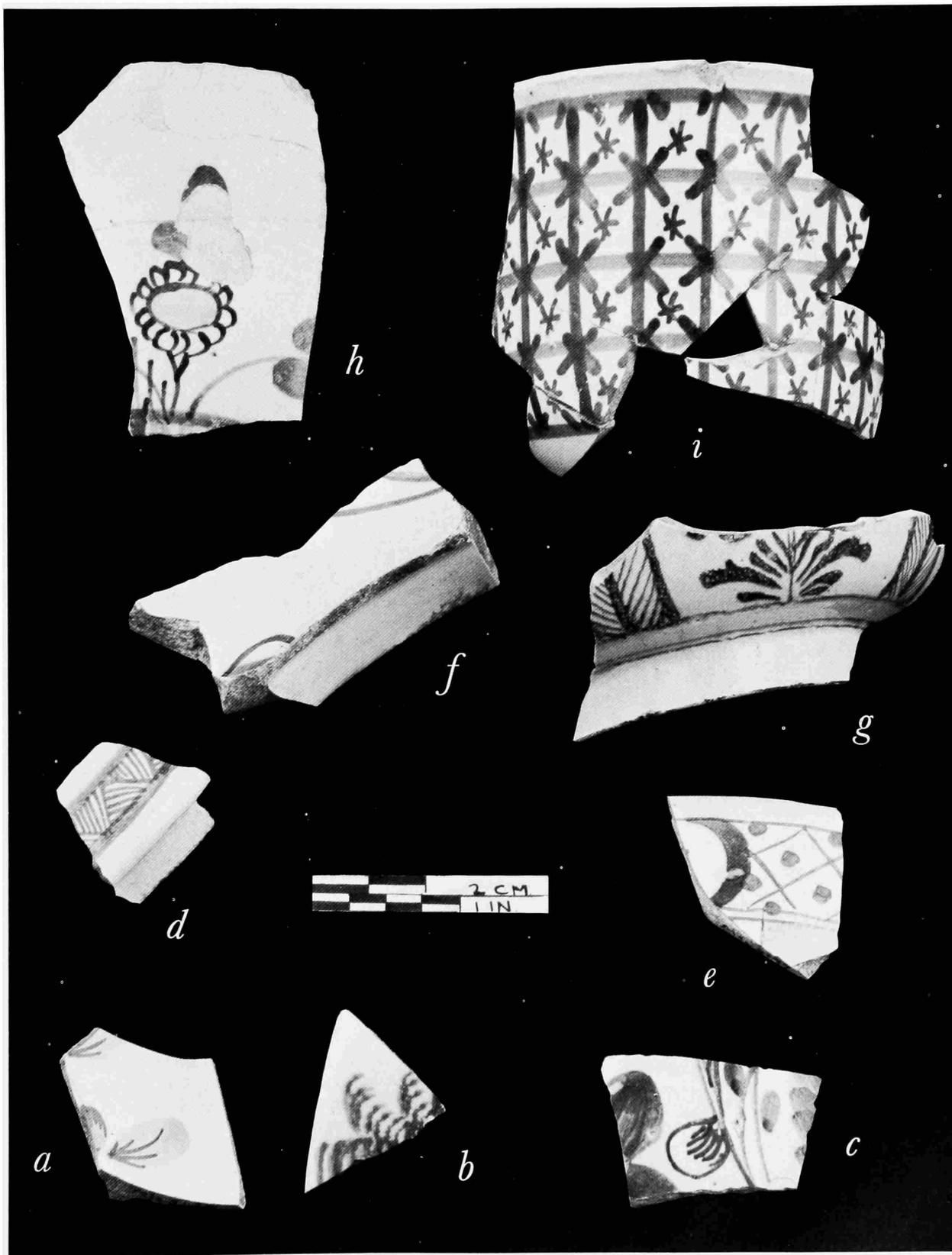
*Description:* Tin-glazed earthenware decorated in one or more colors (plain blue and white (Type A) excepted).

COMMENTS: A total of 176 sherds of this type were recovered.<sup>19</sup> Decorative themes were foliate or geometric and there are no indications of the presence of any elaborate polychrome delft or faience at Fort Michilimackinac. The English polychrome delft dates from around the mid-eighteenth century. As in the case of the plain blue and white, much of the

<sup>18</sup> Sherds from similar French faience plates decorated with a single band of blue near the rim have been recovered at the eighteenth-century Spanish-American site of the Presidio of Los Adais (near present-day Robeline, Louisiana). The Spanish at Los Adais traded with the nearby French, and quantities of French faience have been found on the site. This information was provided by Dr. Edward Jelks, professor of anthropology, Illinois State University.

<sup>19</sup> The small number of sherds of this type clearly indicates that the blue and white delft and faience predominated. The ratio of the blue and white to the polychrome should be adjusted downward, as plain white or white and blue sherds from pieces with polychrome decoration were classified and counted in the blue and white category.

FIGURE 15.—POLYCHROME ENGLISH DELFT. *a*, Sherd from the bottom of a small bowl. Buff body covered with a bluish-white glaze; decorated with blue and green leaves in the "Fazackerly" style. Probably Liverpool, about 1750. *b*, Rim sherd from a small bowl. Buff body covered with a bluish-white glaze; decorated on the exterior with green leaves and, on the interior rim, with a geometric border in blue, green, and dark purple. Probably Liverpool, mid-eighteenth century. *c*, Body sherd from a bowl. Buff body covered with a bluish-white glaze; decorated with a foliate pattern in blue and purple. Probably Bristol, mid-eighteenth century. *d*, Rim sherd (with flange) from a teapot or sugar bowl cover. Buff body covered with a bluish-white glaze; decorated with a geometric border in blue and red. Probably Bristol, mid-eighteenth century. *e*, Punch bowl rim sherd. Buff-colored body covered with a grayish-white glaze; decorated with a geometric border in blue and brown-red, with a yellow flower immediately beneath the border. Probably Bristol, mid-eighteenth century. *f*, Foot ring and base fragment from a punch bowl (possibly from the same bowl as *e*, above). Buff body covered with a grayish-white glaze; decorated with a foliate pattern in brown-red and green. Probably Bristol, mid-eighteenth century. *g*, Foot ring and base fragment from a small bowl. Buff body covered with a grayish-white glaze; decorated with geometric and foliate patterns in purple. Probably Bristol, mid-eighteenth century. *h*, Punch bowl rim sherd. Buff body covered with a grayish-white glaze; decorated with a foliate design in blue, purple, green, and yellow. Interior of rim has a blue border. Probably Bristol, mid-eighteenth century. *i*, Cup, partially restored from eight sherds. Buff body covered with a bluish-white glaze; decorated with a geometric pattern in blue, red, and green. Possibly Lambeth, mid-eighteenth century.



polychrome English delft probably was manufactured in Liverpool and Bristol, the two ports closely involved in trade with North America. Of special interest are fragments from an English delft cup and saucer decorated with an overall lattice pattern in blue, iron red, and green (Figure 15*i*).<sup>20</sup> Also, noteworthy is the presence of Liverpool delft of the Fazackerly type, dating about 1760 (Figure 15*a*).<sup>21</sup> The forms of the English polychrome delft from the Fort were more varied including plates, punch bowls, mugs, and tea services. The French polychrome faience sherds from the Fort are from plates, platters, and small jars (Figure 16).

Analogous polychrome English delft has been found at Fort Ligonier and the Great Crossings of the Youghiogheny River, Pennsylvania (Appendix C).<sup>22</sup> Also, polychrome English delft has been excavated in quantity at the French Fortress of Louisbourg (Appendix B, Figure 2*j*).<sup>23</sup> The presence of English ceramics at Louisbourg resulted from two brief American colonial and British occupations and from intermittent illegal trade between Louisbourg and the colonies.<sup>24</sup> The polychrome French faience from Louisbourg is generally finer than that from Fort Michilimackinac. For example, beautifully painted Mustiers-type dinnerwares recovered at Louisbourg have not been found at Michilimackinac. The less elaborate polychrome faience from Louisbourg, however, is very similar to faience from Michilimackinac. (Compare Figure 16*a* with Appendix B, Figure 2*b*.)

<sup>20</sup> For a mug decorated in this pattern see GARNER, *English Delftware*, fig. 36*a*. A similar cup has been recovered at Louisbourg and is presently on exhibition in the museum on the park grounds.

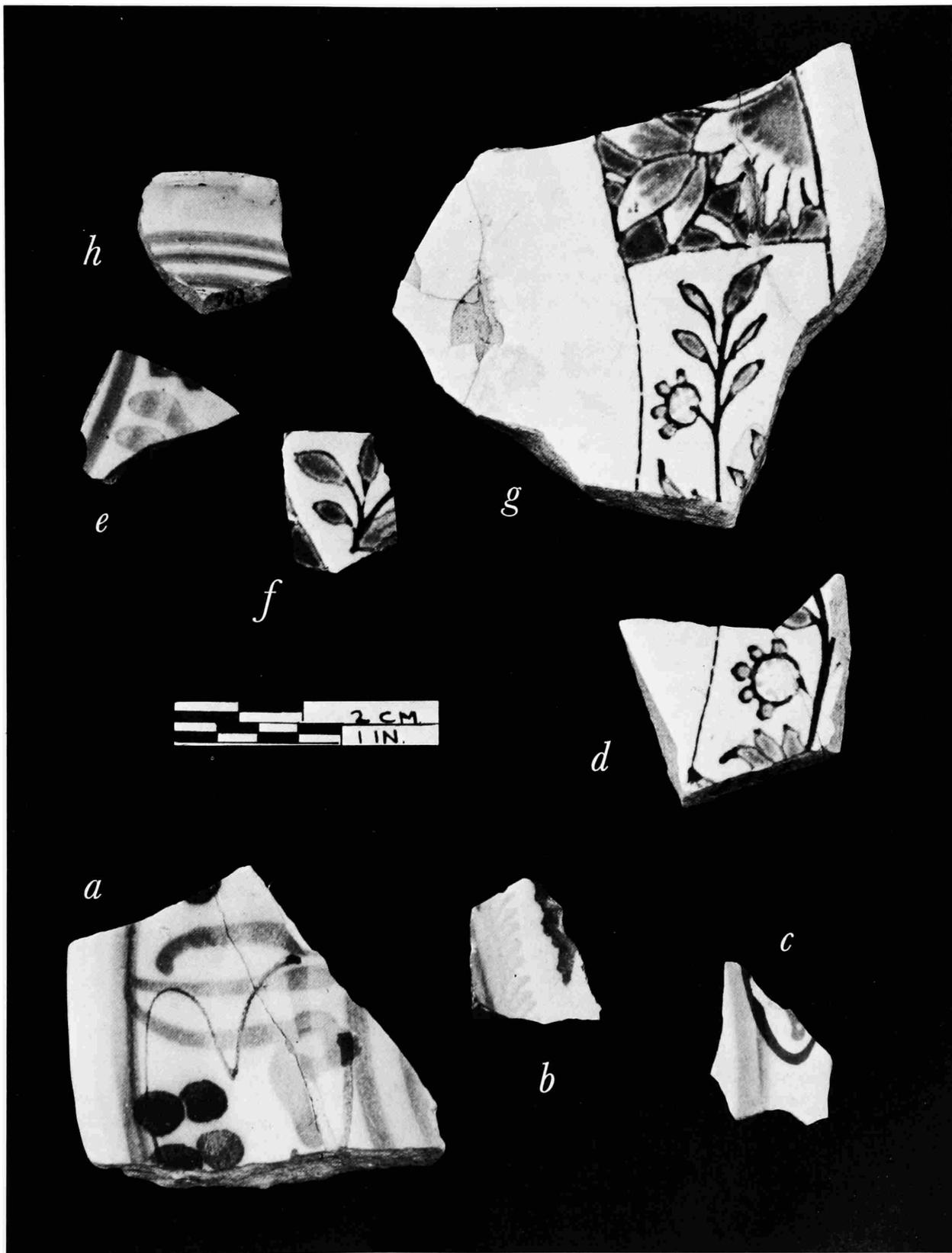
<sup>21</sup> English delft decorated in the colorful style associated with a plate supposedly given to one Thomas Fazackerly of Liverpool is prized today both for its rarity and distinctive floral painting. Such pieces are dated about 1760. See GARNER, *English Delftware*, color plate D and pp. 26 and 33. For similar sherds from excavations at Liverpool pottery sites, see FREDERIC H. GARNER, "Liverpool Delftware," *Transactions of the English Ceramics Circle*, vol. 5, part 2, plate 64.

<sup>22</sup> Artifact collection, Fort Ligonier, Pennsylvania.

<sup>23</sup> Artifact collection, Fortress of Louisbourg.

<sup>24</sup> Mr. John Dunton, conservator, Fortress of Louisbourg, is presently engaged in a series of studies of the ceramic artifacts from Louisbourg. This important work will contribute a great deal of information toward our understanding of the complex distribution of various types of ceramics in North America during the eighteenth century.

FIGURE 16.—POLYCHROME FRENCH FAIENCE. *a*, Rim sherd. White body covered with a tannish-white glaze; decorated with a crude foliate border in blue, brown, orange, and green. Eighteenth century. For a rather similar sherd from Louisbourg, see Appendix B, Figure 2*b*. *b*, Body sherd from a small bowl. Buff body covered with a grayish-white glaze; decorated in blue and yellow. Eighteenth century. *c*, Body sherd from a plate. Buff body covered with a tannish-white glaze; decorated in blue, purple, and brown. Eighteenth century. *d*, Body sherd from a plate. Buff body covered with a glossy, white glaze; decorated with a foliate pattern in black, blue, red, and green. Possibly Rouen, early eighteenth century. *e*, Body sherd from a plate. Thickly potted buff body covered with a tannish-white glaze; decorated in blue and yellow. Eighteenth century. Sherds *a*, *e*, and *c* shown here have similar glazes and painted decoration, but the body compositions and colors differ. *f*, Body sherd from a plate. Buff-colored body covered with a glossy, white glaze; decorated with a foliate pattern in black, blue, and green. Possibly Rouen, early eighteenth century. *g*, Rim sherd from a platter or large dish. Buff-colored body covered with a glossy, white glaze; decorated with a foliate border in black, blue, red, and green. Possibly Rouen, early eighteenth century. Same type as *d* and *f* above. *h*, Rim sherd from a small jar or pitcher. Buff body covered with a dull white glaze; decorated with blue and yellow bands. First half of the eighteenth century.



## TYPE C. BROWN and WHITE

*Date:* Eighteenth century.

*Origin:* France.

*Description:* Earthenware with white, tin-glazed interior and brown, lead-glazed exterior surfaces. The white interior glaze is frequently crazed and occasionally decorated with simple blue foliate or geometric designs.

COMMENTS: This type is, perhaps, the most interesting variety of tin-glazed earthenware found at Fort Michilimackinac. Clearly intended for everyday kitchen and table use, the brown and white wares that produced these sherds raise a number of provocative questions pertinent to American historical archeology. A total of 149 sherds of Type C were recovered at Fort Michilimackinac during the excavating years 1959–1965. Some were found in context with early French features (the northwest corner of the original French stockade) and the remainder were found in random groupings distributed in French and English areas of the Fort. In form, utensils for kitchen use predominate. Fragments from platters, storage jars, and bowls were found (Figures 17 and 18).

The probable origin of this ware has been ascertained by Ivor Noël Hume, director, Department of Archaeology, Colonial Williamsburg, Virginia. Noting the ubiquity of brown and white sherds of this type in American archeological sites of the Revolutionary War period, Mr. Noël Hume proceeded to trace their probable place of manufacture to Rouen.<sup>25</sup> An oval, brown and white dish marked “DELAMETTAIRE ROUEN” is in the collections of the Victoria and Albert Museum, London. Further, several newspaper advertisements offering ceramics and glass in Baltimore and Philadelphia papers of the period 1778–1784 offered “Roan” wares for sale to the public.

The sparsity of this brown and white ware in a colonial prerevolutionary context has led Mr. Noël Hume to propose that

on the basis of this accumulative evidence it seems reasonable to suggest that Rouen faience of the type discussed here was not imported into America until the Revolutionary period, at which time the French seized an opportunity to grasp at a market that they expected to be relinquished by the British.<sup>26</sup>

<sup>25</sup> IVOR NOËL HUME, “Rouen Faience in Eighteenth-Century America,” *Antiques*, December, 1960, vol. 78, no. 6, pp. 559–561.

<sup>26</sup> *Ibid.*, p. 560.

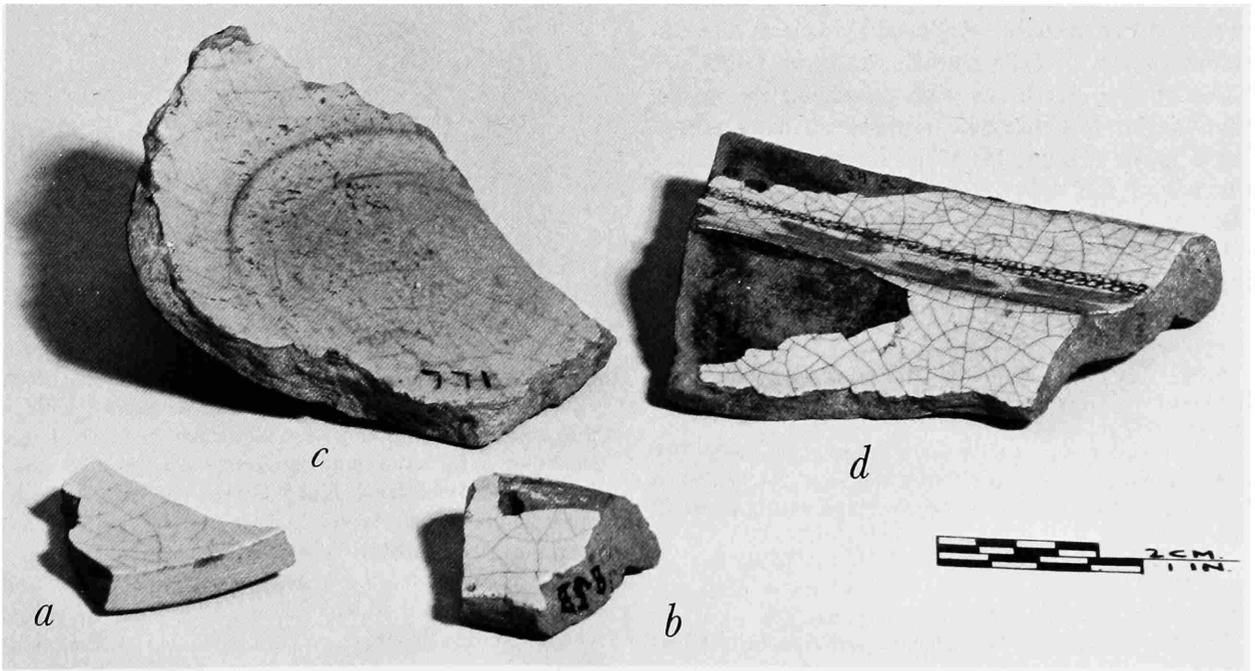
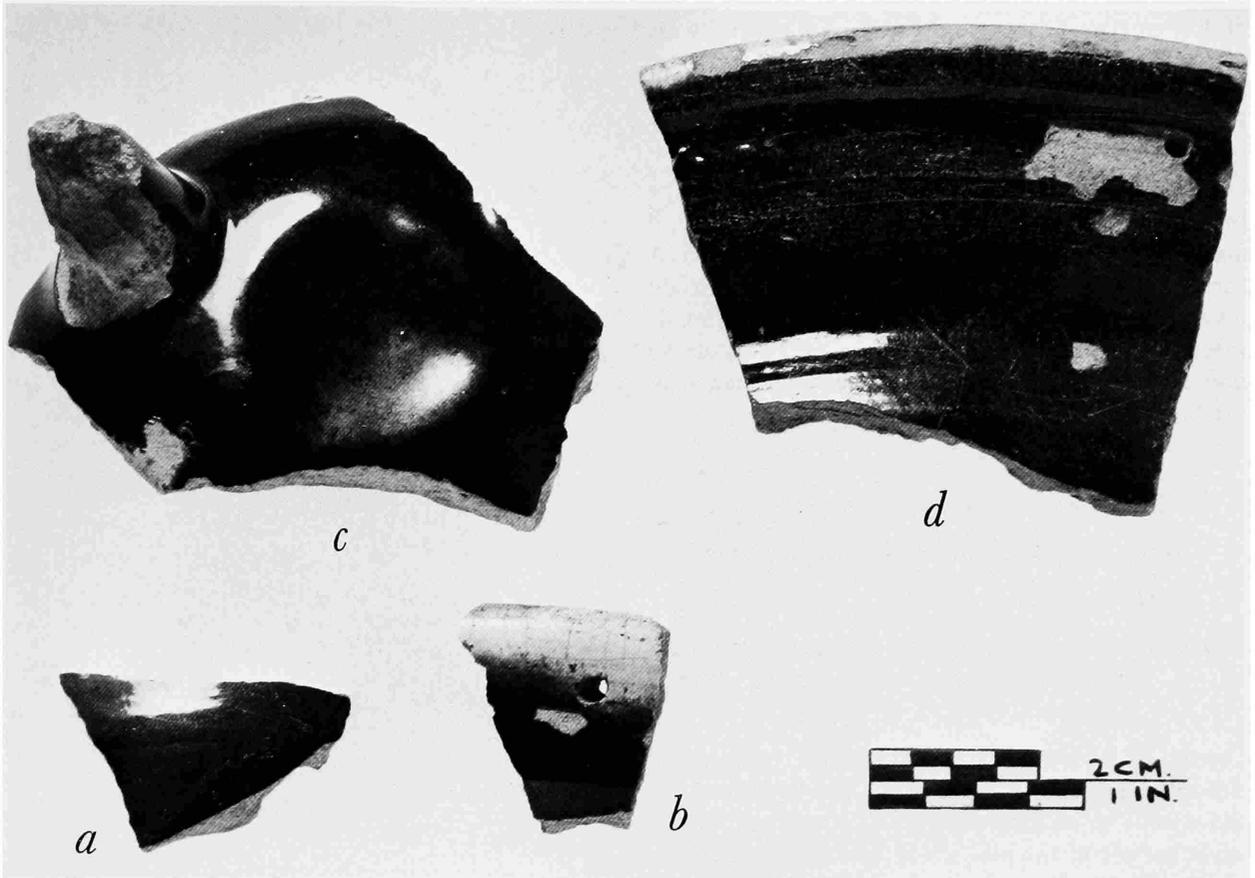
The appearance of Rouen-type faience at Fort Michilimackinac does not necessarily contradict Mr. Noël Hume’s tentative theory, but it does give an additional dimension to the picture. Though some of the Rouen-type sherds were found in association with features of the French period of occupation, many were found within the context of English occupation (1761–1780). This raises several questions. Were these wares owned by the French who stayed on under the English? Were these wares imported by the French and/or by the English after 1760? It seems that a reasonable explanation for the presence of this Rouen-type faience can be based on the fact that the major trade routes serving Fort Michilimackinac went through parts of Quebec and Ontario, which continued to maintain a French culture after 1760. It is also significant that this brown and white faience has been found in considerable quantities during the excavations at the Fortress of Louisbourg (Appendix B, Figure 2*m*).<sup>27</sup> Further, none of this brown and white ware has been found at Fort Ligonier, Pennsylvania (1758–1766), an English outpost isolated from French trade.<sup>28</sup> Thus, the presence

<sup>27</sup> Artifact collections, Fortress of Louisbourg.

<sup>28</sup> Consultation with Jacob Grimm, curator, Fort Ligonier; examination of artifact collection, Fort Ligonier.

FIGURE 17.—FRENCH BROWN AND WHITE ROUEN-TYPE FAIENCÉ (exterior views). *a*, Body sherd from a small bowl. Light red body covered on exterior with a dark brown lead glaze. Eighteenth century. *b*, Rim sherd from a plate or dish. Light red body covered on exterior with a dark brown lead glaze; rim covered with a white tin-glaze. Hole (for repair) drilled just below rim. Eighteenth century. *c*, Base section and one foot from a pipkin or footed pot. Pinkish-buff body covered on exterior with a dark brown lead glaze. Eighteenth century. *d*, Rim sherd from a large plate or dish. Light red body covered on exterior with a dark brown lead glaze. Hole (for repair) drilled just below rim. Eighteenth century. (Also see Figure 27*a*.)

FIGURE 18.—FRENCH BROWN AND WHITE ROUEN-TYPE FAIENCÉ (interior views). *a*, Same as 17*a*. Interior covered with a white tin-glaze; heavily crazed. *b*, Same as 17*b*. Interior covered with a white tin-glaze; heavily crazed. *c*, Same as 17*c*. Interior covered with a white tin-glaze; some crazing. *d*, Same as 17*d*. Interior covered with a white tin-glaze; heavily crazed. Stylized border in black and blue.



of Rouen-type faience at Michilimackinac may be attributed to general trade patterns before and after the French and Indian War that predated any French attempt to obtain part of England's ceramic market in the colonies during the Revolution.

Attention is directed to the small holes drilled in the brown and white faience rim sherds (Figures 17*b*, *d* and 18*b*, *d*). These holes were made for a rivet (probably iron or lead) used to repair the piece. Crude repairs were often necessary in a place such as Michilimackinac where usable ceramics were difficult to obtain.<sup>29</sup> A number of pieces showing evidence of similar repairs have been found at Louisbourg.

#### TYPE D. POWERED BLUE OR PURPLE

*Date:* Second half of the eighteenth century.

*Origin:* England.

*Description:* Tin-glazed earthenware decorated with powdered blue or powdered purple grounds.

COMMENTS: One distinctive decorative category of eighteenth-century English delft was produced by sifting blue or purple (aubergene) pigments over the white surface of the pieces. Geometric reserves, from which this powdered decoration was excluded, were painted with landscapes, chinoiseries, or foliate designs.<sup>30</sup> Mottled or powdered decoration of this general type was probably produced by at least four different centers of delft manufacturing in England.<sup>31</sup> Most of the 131 sherds with powdered decoration found at Fort Michilimackinac were from plates or from small bowls (Figure 19). The proportionately small amount of this type reflects its comparative rarity. Powdered blue and purple English delft also has been found at the English Fort Ligonier and at the French Fortress of Louisbourg.<sup>32</sup> Of special interest at Louis-

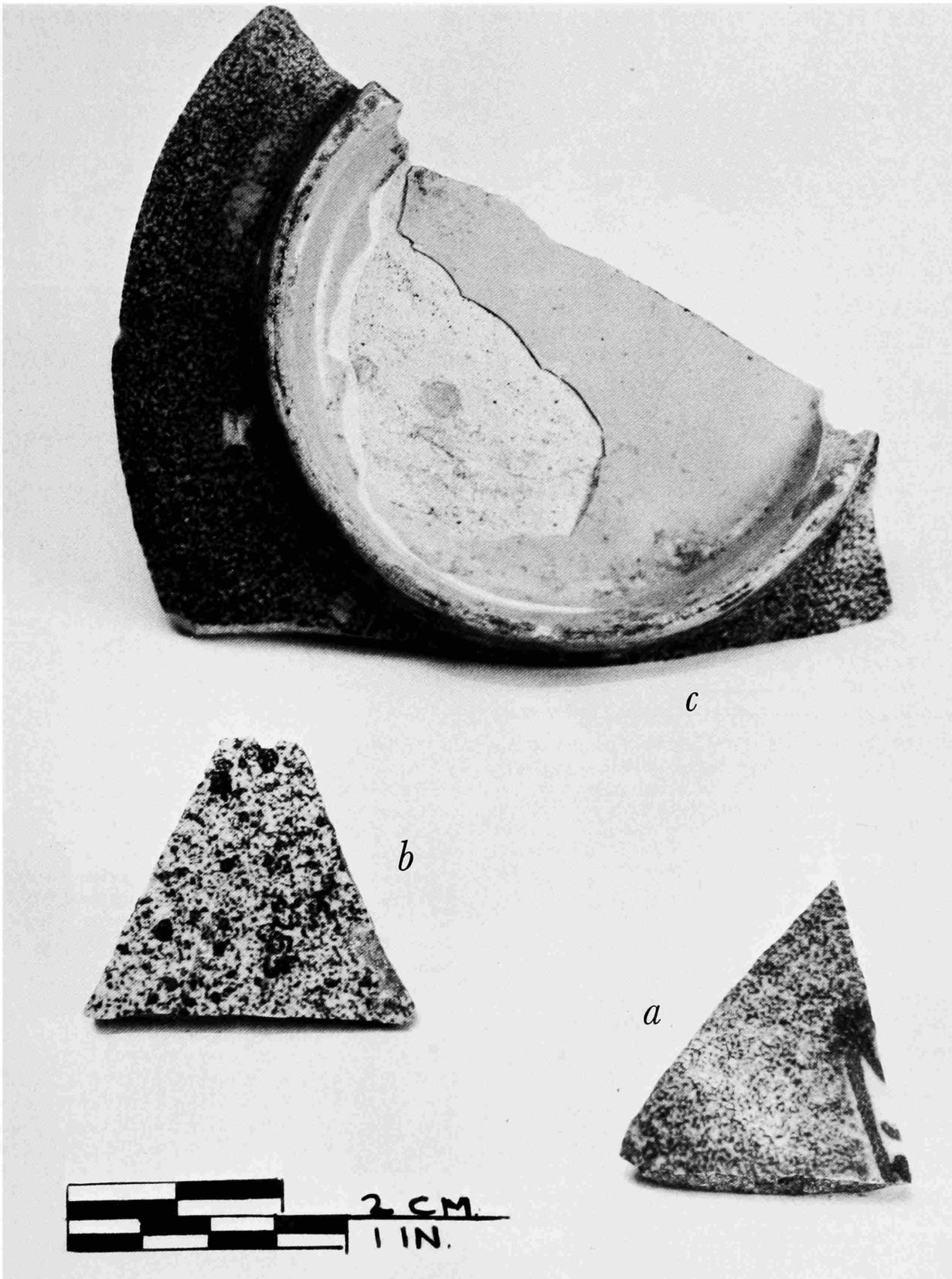
FIGURE 19.—ENGLISH DELFT WITH POWDERED GROUNDS. *a*, Body sherd from a small bowl. Buff body covered with a bluish-white tin-glaze. The exterior is decorated with a powdered, purple ground containing a reserve with a blue decoration, probably of a landscape scene. Probably Bristol or Wincanton, mid-eighteenth century. *b*, Body sherd from a small bowl. Buff body covered with a bluish-white tin-glaze. The exterior is decorated with a powdered blue ground. Probably Bristol, mid-eighteenth century. *c*, Base fragment from a small bowl. Buff body covered with a bluish-white tin-glaze. The exterior is decorated with a powdered purple ground. Probably Bristol, mid-eighteenth century.

<sup>29</sup> See STANLEY A. SOUTH, "Repaired Ceramics from Eighteenth Century Sites," *Brunswick County Historical Society Newsletter*, vol. 8, no. 3.

<sup>30</sup> See GARNER, *English Delftware*, plates 60 and 61, and p. 29. A similar technique was used on the Continent. See FRIEDRICH H. HOFMANN, *Geschichte Der Bayreuther Fayencefabrik*, plates 22 and 23.

<sup>31</sup> For comparable English delft from a Virginia site see IVOR NOËL HUME, "Excavations at Clay Bank in Gloucester County, Virginia, 1962-1963," pp. 15-16, fig. 8(3).

<sup>32</sup> Artifact collections: Fort Ligonier and Fortress of Louisbourg.



bourg is a fine tile, decorated with a purple powdered ground and blue landscape scenes in white reserves. Tiles were often used for fireplace borders. The absence of decorative pieces such as this at Michilimackinac demonstrates a major difference between the material culture of the Fort and that of the more advanced areas along the eastern seaboard ranging from Williamsburg to Louisbourg.

## GROUP II— ENGLISH CREAM-COLORED EARTHENWARE

Major technical and stylistic developments mark the entire course of English ceramic history during the eighteenth century. One significant trend of this period encompassed the efforts of many potters to improve and perfect the processes for manufacturing a cream-colored, lead-glazed earthenware.<sup>33</sup> By 1760 fine white clays were being used to produce a white or buff body which was covered by a liquid lead-glaze which imparted a clear, slightly yellow, sparkling finish to the wares. Ten years later, cream-colored wares had become a major ceramic export, increasingly replacing delft and white saltglazed stoneware as a staple in the trade.<sup>34</sup> Josiah Wedgwood, in 1767, wrote to his partner, Thomas Bentley, that:

I am rejoiced to know you have shipped off the green and gold—May the winds and seas be propitious and the *invaluable* Cargo be wafted in safety to their destined Market, for the emolument of our American Bretheren and friends . . . The demand for this said *cream-colour*, alias *Queens Ware*, alias *Ivory* still increases. It is really amazing how rapidly the use of it has spread almost over the whole globe, and how universally it is liked.<sup>35</sup>

Though cream-colored earthenware was manufactured in many English potteries, two major areas of production centered in Staffordshire and Yorkshire. Perhaps the most important manufacturers of

this ware were the Leeds Pottery in Yorkshire and Josiah Wedgwood's firm in Staffordshire.<sup>36</sup>

A total of 3,549 cream-colored earthenware sherds were recovered during the excavations of 1959–1965. Nearly all were found within an English context.<sup>37</sup> Though some cream-colored earthenware was manufactured prior to 1760, it is reasonable to assume that these wares were not introduced to Fort Michilimackinac until well after the beginning of the period of English occupation. In attempting to ascertain with some degree of precision the years in which cream-colored earthenware first began to be imported in volume, it is of interest to note that comparatively small amounts of this ware have been found at Fort Ligonier, Pennsylvania, which was decommissioned in 1766.<sup>38</sup> Further, practically no cream-colored earthenware has been recovered at the Fortress of Louisbourg which was destroyed by the English and colonials in 1760.<sup>39</sup> The English remained at Louisbourg until about 1768, but little cream-colored earthenware

<sup>36</sup> For a comprehensive study of the Leeds Pottery, see DONALD C. TOWNER, *The Leeds Pottery*.

<sup>37</sup> English cream-colored earthenware was imitated by the French and Germans during the late eighteenth and early nineteenth centuries. It is highly unlikely that any of these wares found their way to Fort Michilimackinac.

<sup>38</sup> Artifact collections, Fort Ligonier.

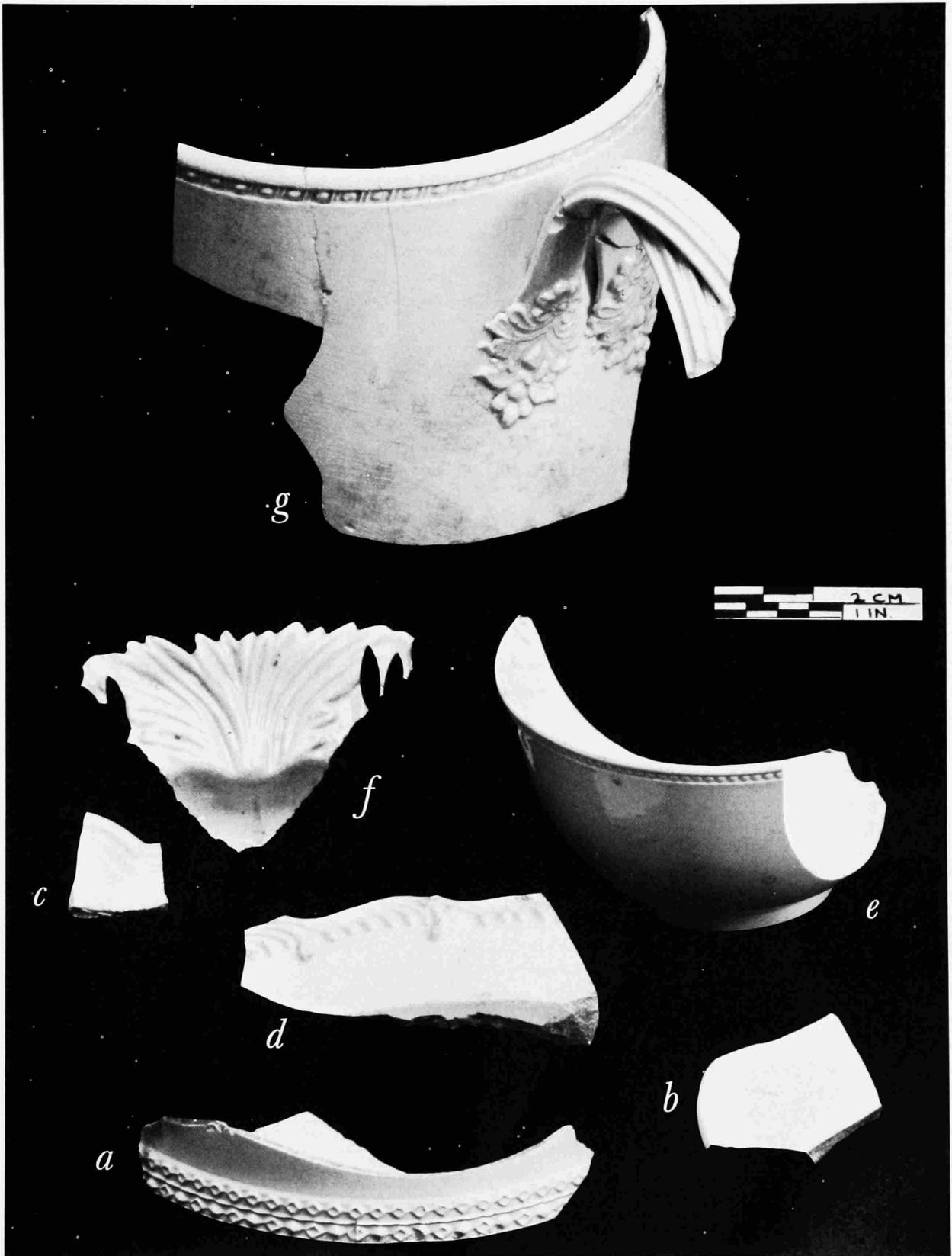
<sup>39</sup> Artifact collections, Fortress of Louisbourg.

FIGURE 20.—ENGLISH CREAM-COLORED EARTHENWARE. *a*, Base fragment from a mug. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a relief diamond pattern. circa 1765–1780. *b*, Plate rim sherd. Cream-colored body covered with a clear, yellowish, lead-glaze. circa 1765–1780. *c*, Plate rim sherd. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a rib and groove “Queen’s pattern” relief border. circa 1765–1780. *d*, Plate rim sherd. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with the “feather” relief border. circa 1765–1780. *e*, Small bowl. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a beaded border in relief. Probably Leeds, circa 1765–1780. *f*, Rim sherd from a small plate or stand. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a pierced border and a foliate pattern in relief, circa 1765–1780. *g*, Upper portion of a mug. Cream-colored body covered with a clear, yellowish lead-glaze; decorated in relief with an alternating bead and gadroon border. Possibly Leeds, circa 1765–1780.

<sup>33</sup> For a history of eighteenth-century cream-colored wares, see DONALD C. TOWNER, *English Cream-Coloured Earthenware*.

<sup>34</sup> For a discussion of cream-colored ware's rise in popularity in Williamsburg and the attendant declines of delft and of saltglazed wares, see NOËL HUME, *Here Lies Virginia: An Archeologist's View of Colonial Life and History*, pp. 295–299.

<sup>35</sup> Excerpt from a September 1767 letter from JOSIAH WEDGWOOD to THOMAS BENTLEY; Ann Finer and George Savage, editors, *The Selected Letters of Josiah Wedgwood*, p. 58.



seems to have been present. As the ceramic finds from Fort Michilimackinac (during its English period) and Fort Ligonier and the Fortress of Louisbourg are roughly similar in most other categories, the dearth of cream-colored earthenware at Fort Ligonier and Louisbourg suggests that the majority of Michilimackinac's cream-colored wares were imported after about 1770.

Again, no fragments of figures or other purely decorative pieces were found, indicating a strictly utilitarian function for these wares. The implications, based on the evidence at hand, are twofold. First, the volume and variety of cream-colored wares in use after about 1770 indicates a material culture (at least for some of the Fort's inhabitants) well above subsistence levels. Second, the wide variety of designs and types encountered suggests a pattern of repeated importation in comparatively small lots. In these two respects the findings with regard to the tin-glazed wares discussed in Group I and the cream-colored wares are consistent and mutually reinforcing.

The breakdown of the cream-colored wares into the types listed below is arbitrary, but it is hoped that this arrangement adequately distinguishes the varieties of cream-colored wares encountered.

#### TYPE A. PLAIN

*Date:* Circa 1765–1780.

*Origin:* England.

*Description:* Cream-colored earthenware covered with a clear, yellowish, lead-glaze; no relief or painted decoration.

**COMMENTS:** A total of 2,874 plain, cream-colored earthenware sherds were found during the excavation years 1959–1965. Though some cream-colored ware was produced without any relief or painted decoration (Figure 20*b*), most had some decoration, usually molded in relief. Such relief decoration was generally sparse and most frequently utilized as border or rim motifs. For this reason, the majority of the sherds in this group are body sherds from relief-decorated, cream-colored wares. Forms encountered (with or without relief decoration) included standard-size dinner plates, soup plates, platters (Figure 21), and tea services or part tea services. To this list of forms provided by archeological evidence can be added large pitchers as “2 Large Queen Wair Jugs”

were scheduled in the 1778 inventory of the trader, John Askin.<sup>40</sup>

The abundance of cream-colored earthenware at Fort Michilimackinac indicates a substantial use of these wares by the British Army. The archeological findings confirm this. During the 1959 excavations, 387 creamware sherds were found in association with features (completed after 1770) relating to the British military occupation.<sup>41</sup> The recovery of cream-colored wares in this context raises the question of whether it was usual for officers to include ceramic dinner and tea services in their personal luggage?<sup>42</sup> The evidence at Fort Michilimackinac suggests an affirmative answer to this question. The fact that some of the Fort's civilian population owned and used dinner and tea services raises the difficult problem of ascertaining to what degree these artifacts represent the material culture of each group. Certainly, the more affluent civilians observed traditional English amenities. In 1778 John Askin, the

<sup>40</sup> John Askin's Inventory of 31 December 1778, p. 10. ms. Ontario Archives, Toronto. “Queen's Ware,” a term introduced by Josiah Wedgwood (see Wedgwood's letter quoted on page 42, *infra*), quickly became practically synonymous with the general term “creamware.”

<sup>41</sup> MAXWELL and BINFORD, 1961, pp. 93–94.

<sup>42</sup> Surprisingly little research has been done on the social (as opposed to military) history of the English army in colonial America. Inquiries to a number of military historians as to pertinent information, published or otherwise, resulted in negative replies.

FIGURE 21.—ENGLISH CREAM-COLORED EARTHENWARE. *a*, Plate, 9¾ inches in diameter. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with “feather pattern” relief border. circa 1765–1780. *b*, Plate, 9½ inches in diameter. Buff body covered with a clear, yellowish, lead-glaze; decorated with a rib and groove relief border. No foot ring. circa 1765–1780. *c*, Platter, 19 inches in length, 14¼ inches in width. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a rib and groove relief design (“Queen's pattern”). circa 1765–1780.



trader, commenting on short supplies at the Fort, wrote to a friend in Detroit that:

Mrs. Askin still has some tea and loaf sugar and at once a day for herself will be able to hold out, the rest of us have chocolate for Breakfast and Barley substituted in the noon or Coffee for the afternoon. Spirits and spruce we have and can't much do without for the present.<sup>43</sup>

#### TYPE B. RELIEF BORDERS

*Date:* Circa 1765–1780.

*Origin:* England

*Description:* Cream-colored earthenware covered with a clear, yellowish, lead-glaze and decorated with various molded relief borders.

COMMENTS: Much eighteenth-century cream-colored, useful ware had as its sole decoration a narrow relief border. A total of 561 sherds with relief borders were found at Fort Michilimackinac during the excavating years 1959–1965. Six border patterns were represented (Figure 20a, c–g). A numerical breakdown of these patterns is given in Appendix A, Table 2.

The plain, beaded border (Figure 20e) was probably used by many different manufacturers including the Leeds Pottery.<sup>44</sup> Some of the polychrome decorated cream-colored earthenware sherds from the Fort also contained this relief pattern. The second kind of relief pattern (Figures 20c, 21 b and c), used primarily on dinner services, consists of single or parallel grooves and ribs. Josiah Wedgwood, with his penchant for vivid nomenclature, probably first designated the single rib and groove as the “Royal” pattern and the double rib and groove as the “Queen’s” pattern.<sup>45</sup> After supplying services of cream-colored earthenware to Queen Charlotte, Wedgwood called his cream-colored wares “Queen’s Ware.” The name soon became a general one for cream-colored earthenware regardless of the manufacture. John Askin, the wealthy trader at Fort Michilimackinac, used the term “queens wair” as did the Detroit merchants, Alexander and

William Macomb, who sold ceramics to Askin.<sup>46</sup> Leeds used a number of the same pattern names as Wedgwood, and it is probable that other manufacturers also conformed. Wedgwood, the Leeds Pottery, and other English potteries also produced cream-colored wares with a “feather” relief border.<sup>47</sup> A total of 248 rim sherds from the Fort were found to be decorated with variations of the feather edge (Figures 20d and 21a).

Four other relief border patterns were found in considerably smaller quantities. Dominant among these were a geometric, diamond pattern (Figure 20a) which occurred in three variations and an alternating bead and line border (Figure 20g). More elaborate pieces of cream-colored earthenware often had pierced borders, and a few sherds of this type were recovered (Figure 20f).

<sup>46</sup> John Askin’s Inventory, pp. 10 and 15; Macomb Account Book, 1776–1778 Ms. (Burton Historical Collection, Detroit Public Library), p. 50.

<sup>47</sup> Josiah Wedgwood’s first pattern book (1770) showed two types of feather borders. The pattern designated “feather edge shape No. 1” (which was widely copied) predominated at Fort Michilimackinac. Both feather designs are illustrated in JOHN M. GRAHAM II and HENSLEIGH C. WEDGWOOD, *Wedgwood*, p. 58, plate 67.

FIGURE 22.—ENGLISH POLYCHROME AND TRANSFER-PRINTED CREAM-COLORED EARTHENWARE. a, Saucer rim sherd. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated over the glaze with foliate designs in black and iron-red. Possibly Leeds, circa 1765–1780. b, Cup or tea bowl rim sherd. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a beaded border in relief and with a black transfer print over the glaze. The print shows part of a bird. Probably printed in Liverpool, circa 1765–1780. c, Cup or tea bowl rim sherd. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a beaded border in relief and, over the glaze, with black flowers against an iron-red background. Possibly Leeds, circa 1765–1780. d, Saucer, approximately 4½ inches in diameter. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated in the center with a bead and line relief border and over the glaze with flowers in red, black, blue, purple, and green. Circa 1765–1780.

<sup>43</sup> Letter from JOHN ASKIN to SAMPSON FLEMING, 20 April 1778. *The John Askin Papers*, Milo M. Quaife, editor, vol. 1, p. 79.

<sup>44</sup> See TOWNER, *The Leeds Pottery*, figs. 30a and 30b.

<sup>45</sup> See WOLF MANKOWITZ, *Wedgwood*, p. 56. TOWNER, *The Leeds Pottery*, facsimile reproduction of Leeds pattern book, p. 1, nos. 2 and 3; plate 1, no. 2; and plate 2, no. 2.



## TYPE C. POLYCHROME

*Date:* Circa 1765–1780.

*Origin:* England.

*Description:* Cream-colored earthenware covered with a clear, yellowish, lead-glaze; decorated over the glaze with polychrome enamel colors.

COMMENTS: English eighteenth-century cream-colored wares decorated in hand painted colors over the glaze were less common than the plain wares. This comparative rarity is reflected in the findings at Fort Michilimackinac where only 65 sherds of this type were recovered during the years 1959–1965.<sup>48</sup> All were from parts of tea services. These sherds, for the most part, are painted with foliate designs primarily in red, black, blue, and green (Figure 22a, c, d). The work is unpretentious, and at this time there is no evidence that more elaborately decorated cream-colored wares were present at the Fort.

## TYPE D. HANDLES, FINIALS, SPOUTS

*Date:* Circa 1765–1780.

*Origin:* England.

*Description:* Handles, finials, and spouts from elements of tea and coffee services. All cream-colored earthenware covered with a clear, yellowish, lead-glaze.

COMMENTS: Sculptural (molded) elements such as finials or fragments of twisted handles do not properly comprise a separate stylistic type, and the sherds described here also belong to one of the other categories of cream-colored ware in this section. Such sherds, however, are sometimes particularly useful in pinpointing the place of manufacture and for this reason are treated separately. A total of 31 sherds of this type were found. All of them were from small pieces such as mugs, tea or coffee cups, teapots, and sugar bowls (Figure 23). Especially noteworthy are a handsome mug with twisted, reeded handles secured by flowered terminals (Figure 23e) and the molded base of a teapot spout (Figure 23a). Both of

FIGURE 23.—ENGLISH CREAM-COLORED EARTHENWARE; MOLDED DETAILS. *a*, Base section of a teapot spout. Cream-colored body covered with a clear, yellowish, lead-glaze; decorated with a molded acanthus leaf pattern. Probably Leeds, circa 1765–1780. *b*, Sherd from the top of a caster. Cream-colored earthenware covered with a clear, yellowish, lead-glaze. Circa 1765–1780. *c*, Body sherd and part of a finial from a sugar bowl or teapot cover. Cream-colored earthenware covered with a clear, yellowish, lead-glaze; applied finial of foliate design. Circa 1765–1780. *d*, Small cup. Cream-colored earthenware covered with a clear, yellowish, lead-glaze. Circa 1765–1780. *e*, Upper section of a mug. Cream-colored earthenware covered with a clear, yellowish, lead-glaze; decorated with a bead and line border in relief and with applied, foliate handle terminals. Probably Leeds, about 1765–1780.

<sup>48</sup> This ratio of polychrome to plain sherds is only of relative value. The true ratio of polychrome pieces to plain ones was probably slightly lower, as undecorated areas of polychrome wares yield plain body and rim sherds.



these pieces can be attributed with some certainty to the Leeds Pottery.<sup>49</sup>

The archeological evidence tends to indicate that the cream-colored earthenware at the Fort was generally confined to tea and coffee services and to dinner services. Certainly, some "polite" society existed side by side with the rougher elements during the English occupation. Writing to a friend in Montreal in 1778, the English trader, John Askin, complained of the dull winters at the Fort and compared Michigan's social life with that of London.

Your friends in this quarter have thought themselves very happy to have a dance once a week. I entertain their Company with tea & humble Grogg during the last winter, whilst you at London could have all your wants and wishes supplied, as well as your wanton wishes.<sup>50</sup>

#### TYPE E. TRANSFER PRINTED

*Date:* Circa 1765–1780.

*Origin:* England.

*Description:* Cream-colored earthenware decorated with a black transfer print over the glaze.

COMMENTS: Transfer printing, as a process for decorating ceramics and enamels, was initiated in several parts of England during the mid-eighteenth century. The precise origin of the art is still unclear. One pioneer in the development of this speedy means of decoration was John Sadler of Liverpool.<sup>51</sup> By the mid-1760s Sadler, in partnership with Guy Green, was printing large amounts of creamware for potteries in Liverpool as well as for Josiah Wedgwood.<sup>52</sup>

It was not until the final quarter of the eighteenth century that transfer printing achieved a major posi-

tion as a cheap means of decoration. Thus, it is not surprising that comparatively few transfer-printed cream-colored earthenware sherds have been found at Fort Michilimackinac. A total of 18 sherds were discovered to have some printed decoration, all in black overglaze (Figure 22*b*). As in the case of the polychrome cream-colored wares, the printed sherds came from elements of a tea service.

### GROUP III— COARSE EARTHENWARE

Perhaps any attempt to classify the diverse ceramics found at Fort Michilimackinac will result, at some point, in a more or less arbitrary demarkation between wares that seemingly have much in common. Such is the case with the earthenware artifacts. Tin-glazed earthenware and cream-colored earthenware have been discussed in the preceding pages (Groups I and II). The remaining earthenware is divided, we believe with some logic, into two categories, the first being coarse earthenware. For the purposes of this study, coarse earthenware is defined as low fired, crude pottery with a minimum of decoration, glazed or unglazed, produced for house and kitchen use. This coarse earthenware comprises the most humble class of household wares. Other finer, more decorative earthenwares manufactured for the tea and dinner table are included in Group IV as fine earthenware.

Simply conceived and produced earthenwares and stonewares were probably the only ceramics available to most of the Fort's occupants.<sup>53</sup> Coarse earthenware probably also was used in the kitchens of the more affluent traders of the English period, as well as in the officers' messes. The most common forms of these kitchen ceramics found were dishes, large plates, and bowls. The exigencies of life at Fort Michilimackinac resulted in the active practice of a number of crafts. Though there is good evidence of brickmaking, to date no pottery kiln site or other evidence of pottery making at the Fort has been discovered.<sup>54</sup> The tentative conclusion must be that the coarse earthenwares, as well as the finer ceramics, were all imported.

<sup>49</sup> Compare the handle and handle terminals in Figure 23*e* to TOWNER, *The Leeds Pottery*, plate 15. Note that the identical bead and line border is also found on both pieces. Also, compare the tea spout base (Figure 23*a*) with Towner, *English Cream-Coloured Earthenware*, p. 74, fig. II, nos. 4 and 5, and note Towner's comments, p. 66.

<sup>50</sup> Letter from JOHN ASKIN to CHARLES PATTERSON, 17 June, 1778. *The John Askin Papers*, Milo M. Quaife, editor, vol. 1, p. 135.

<sup>51</sup> For an explanation of the transfer printing process, see ELLOUISE BAKER LARSEN, *American Historical Views on Staffordshire China*, pp. 285 and 286.

<sup>52</sup> See MANKOWITZ, *Wedgwood*, rev. ed., p. 52. Also see JOSEPH MAYER, "On Liverpool Pottery," *Transactions of the Historic Society of Lancashire and Cheshire*, vol. VII, pp. 184–189.

<sup>53</sup> Indian and colono-indian ceramics are excluded from this study. For a brief survey of Indian artifacts from the Fort, including ceramics, see MOREAU S. MAXWELL, "Indian Artifacts at Fort Michilimackinac, Mackinaw City, Michigan," *Michigan Archaeologist*, June 1964, vol. 10, no. 2, pp. 23–30.

<sup>54</sup> See DAVID A. ARMOUR, "Made in Mackinac, Crafts at Fort Michilimackinac," *Mackinac History*, Leaflet no. 8.

The identification of these coarse earthenwares presents a number of thorny problems, many of which cannot be resolved at this time. There are few, if any, documented pieces of eighteenth-century Canadian pottery. Little is known about coarse eighteenth-century French earthenware. These gaps in our knowledge do not cause problems unique to Fort Michilimackinac. Archeologists working on the extensive excavations at the Fortress of Louisbourg have been confronted with similar difficulties. Renee H. Marwitt, in a report on seven types of coarse earthenware from Louisbourg, has noted that:

While a great deal is known about English, German, and Chinese ceramics of the period, little work of an archeological nature has been done with French ceramics, the common earthenware in particular, and it is these wares that make up the bulk of the ceramic assemblage. Thus, it became imperative that these wares be systematically recorded and grouped into meaningful types.<sup>55</sup>

In the descriptions accompanying the figures which illustrate sherds considered in this section (Figures 24–28), specific body and glaze color designations are given in accordance with the *Munsell Soil Color Charts*.<sup>56</sup> The Munsell values have been given in order to relate this study to preliminary work describing the coarse earthenwares from the Fortress of Louisbourg.<sup>57</sup> Though the Munsell system has undeniable merit in archeological typology involving, for example, Southwest Indian studies, this system's value in eighteenth-century historical archeology is, to an extent, debatable. The complexity of manufacturing processes, trade patterns, and the mobility of eighteenth-century potters defies any neat typology. For example, a Canadian potter who might have made wares that found their way to Louisbourg or Michilimackinac probably would have worked with a variety of clays, colors, and glaze materials. Further, different kilns, firing temperatures, and conditions of reduction all affect body and glaze colors. Thus, seemingly unrelated wares may well have close associations. Having noted the above reserva-

tions, it is nevertheless clear that reference to the Munsell chart does enable individual sherds or pieces to be more accurately described.

#### TYPE A. UNGLAZED REDWARE

*Date:* Eighteenth century.

*Origin:* Probably North America.

*Description:* Thick red earthenware, unglazed or slip-covered on interior surfaces only.

**COMMENTS:** A total of 50 sherds of low fired, red, unglazed earthenwares were uncovered at Fort Michilimackinac during the years 1959–1965. These were not colono-indian ceramics and could have originated nearly anywhere. Soft (Moh's scale 2–3) and permeable, such ceramics would not be suitable for use as shipping containers. Most of the sherds of this type show no evidence of surface covering, though a few are covered with a brown slip on the interior surfaces only.

The 50 sherds came from wheel-thrown dishes and bowls that were comparatively thick in section, averaging about  $\frac{3}{8}$  inch. No other forms were discerned. It is possible that some of these ceramics served as containers for dry materials such as corn. Most of the sherds were completely without decoration, but a few were embellished with single or double incised lines (Figure 24d). Body color varies slightly; most have a slight orange cast and lie in the range of Munsell 2.5 YR 6/8–2.5 YR 5/6.

#### TYPE B. BROWN GLAZED REDWARE

*Date:* Eighteenth century.

*Origin:* England, France, or North America.

*Description:* Variants of red earthenware covered on one or both sides with a brown lead-glaze.

**COMMENTS:** A total of 267 sherds of this type were recovered. There was a considerable variety in the quality and color of both glaze and body, indicating that brown glazed useful wares came to Fort Michilimackinac from a number of different sources. As is frequently true of the simple, coarse pottery of the eighteenth century, in most instances no precise place of origin can be assigned with any certainty. Some of these sherds are possibly French, or possibly French Canadian, while others of this type give evidence of

<sup>55</sup> MARWITT, "A Preliminary Survey of Seven Coarse Earthenwares from the Fortress of Louisbourg," p. 53. On page 54, Mrs. Marwitt comments, regarding these coarse earthenwares, that "The cultural associations and chronological range is unknown at the present time."

<sup>56</sup> *Munsell Soil Color Charts* (Baltimore: Munsell Color Company, Inc., 1965).

<sup>57</sup> See MARWITT, "A preliminary Survey of Seven Coarse Earthenwares from the Fortress of Louisbourg," p. 54.

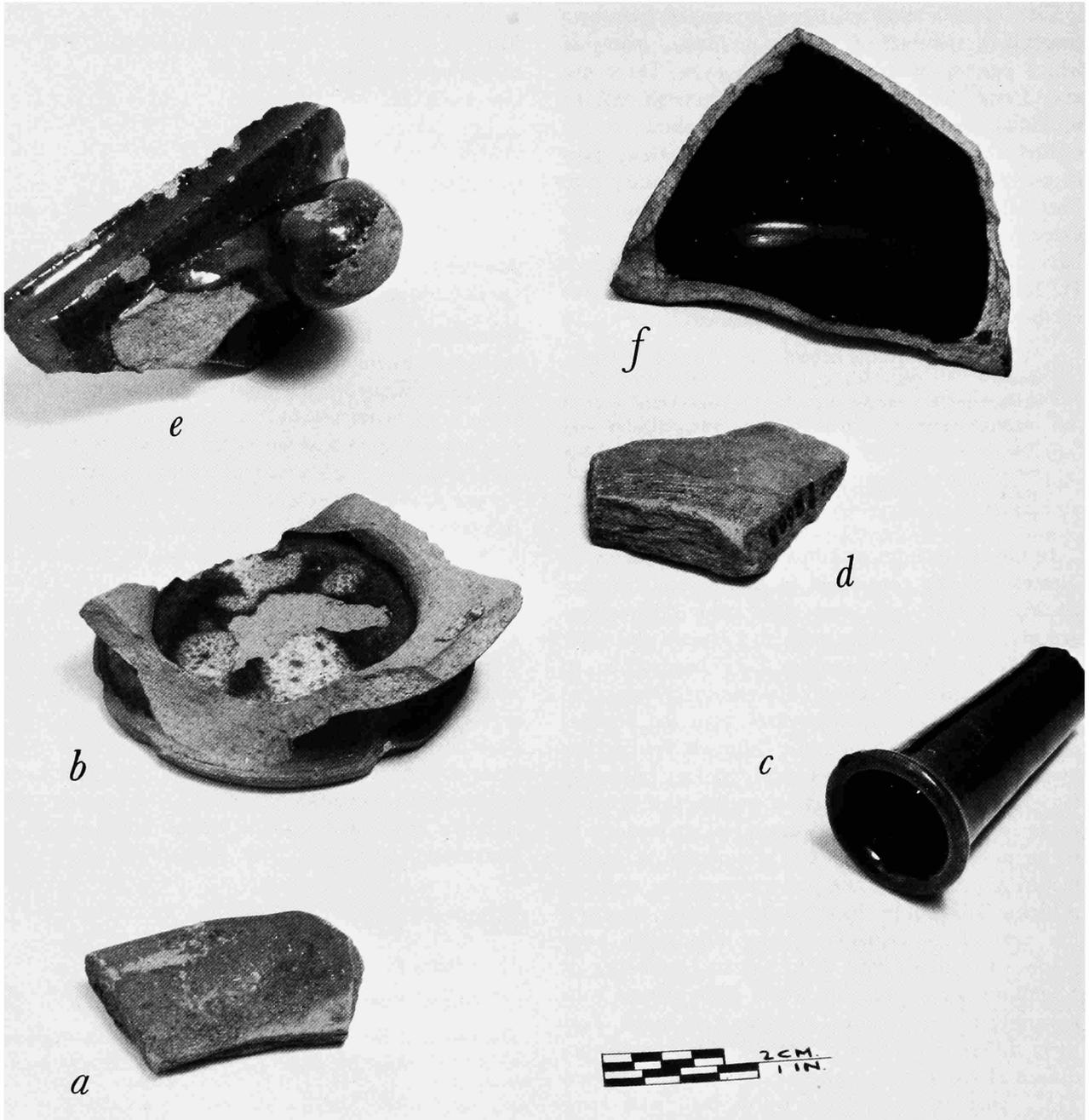


FIGURE 24.—COARSE RED EARTHENWARE. *a*, Rim sherd from a plate or dish. Orange-red, coarse-grained body covered with a brown slip. Possibly North American, eighteenth century. Body, Munsell 2.5 YR 6/8; slip, Munsell 10 YR 5/3. *b*, Base from a small footed jar or bowl. Bottom is flat and unglazed. Orange-red, coarse-grained body covered with a dark brown lead-glaze. Possibly French, eighteenth century. Body, Munsell 2.5 YR 6/8; glaze, Munsell 5 YR 2/2. See Figure 25*b*. *c*, Pipkin handle. Pinkish-tan body covered with a brown lead-glaze. English, second half of the eighteenth century. Body, Munsell 7.5 YR 6/6; glaze, Munsell 5 YR 3/3. *d*, Body sherd from a bowl or jar. Light red body; unglazed exterior and grayish brown slip covered interior. Exterior decoration of parallel incised lines. Possibly North American, eighteenth century. Body, Munsell 2.5 YR 6/8; slip, Munsell 10 YR 5/2. *e*, Handle and rim section from a covered dish. Orange-red, coarse-grained body covered with an orange-brown lead-glaze. The applied handle is awkwardly pinched. Possibly French, eighteenth century. Body, Munsell 5 YR 6/8; glaze, Munsell 2.5 4/8. See Figure 25*c*. *f*, Base section from a cylindrical mug. Brownish-red body covered with a very dark brown glaze. The bottom is flat and unglazed. Probably North American or English, eighteenth century. Body, Munsell 2.5 5/4; glaze, Munsell 5 YR 2/1. See Figure 25*a*.

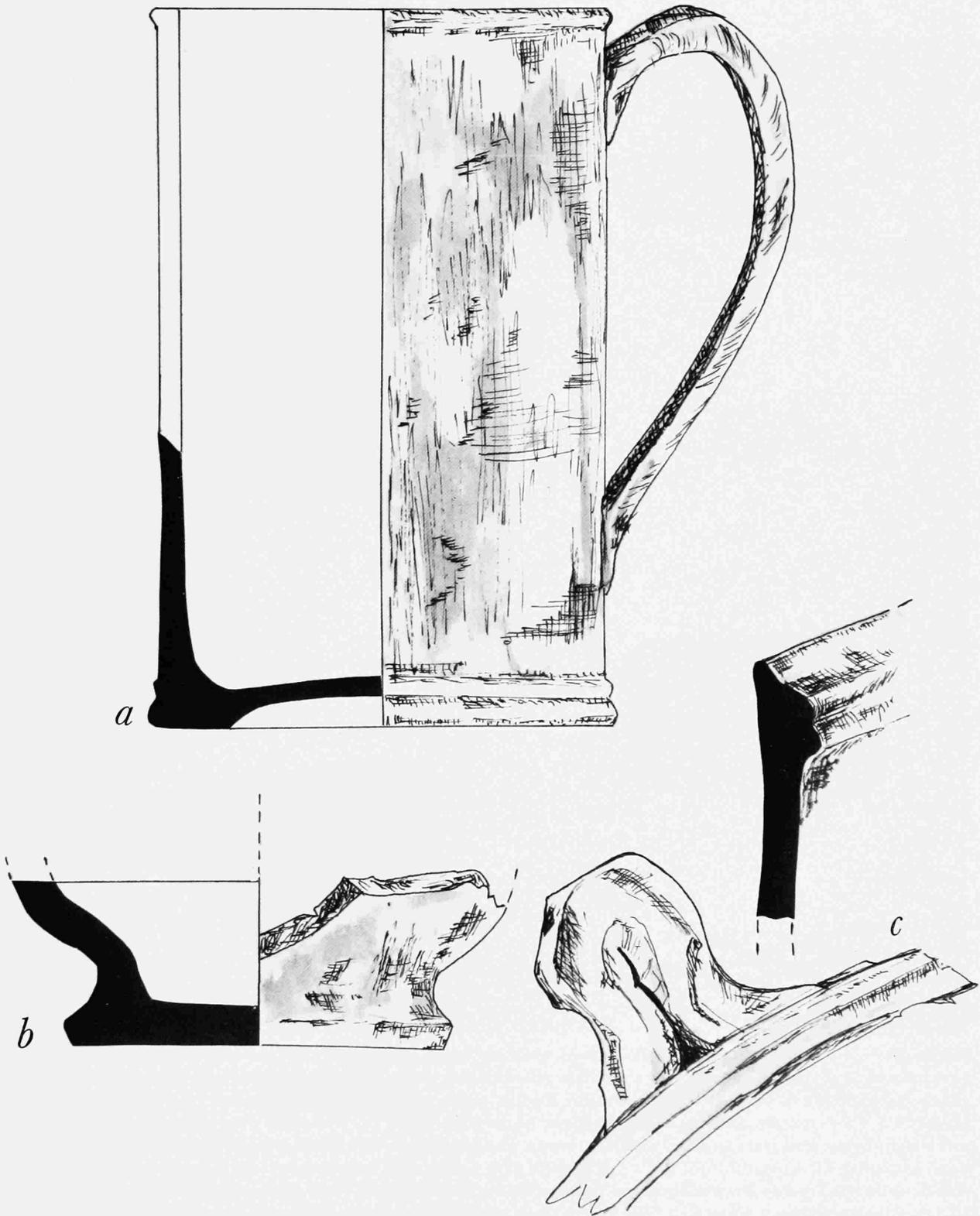


FIGURE 25.—COARSE RED EARTHENWARE; RECONSTRUCTED DRAWINGS (full scale). *a*, Section and suggested reconstruction of base fragment from mug, Figure 24*f*. *b*, Section and suggested reconstruction of base fragment from a small footed jar or bowl, Figure 24*b*. *c*, Rim section and profile from above of handle and rim sherd from a covered dish, Figure 24*e*.

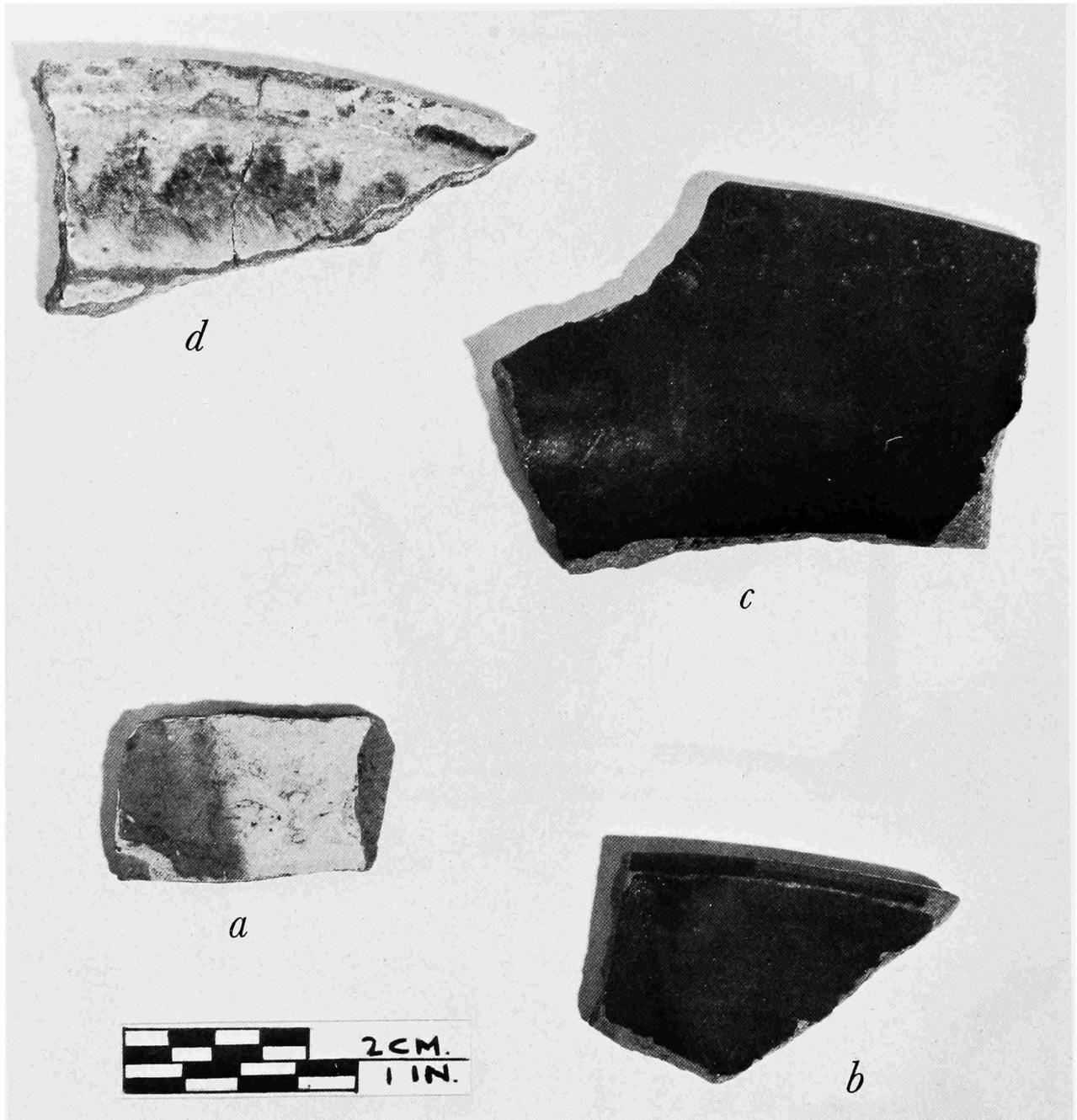


FIGURE 26.—COARSE EARTHENWARE. *a*, Body sherd, probably from a small bowl. Light red body covered on exterior with a cream-colored slip and on interior with a very thin yellowish-pink slip or wash. The exterior is covered with a clear, lead-glaze splashed in places with tan coloring. Possibly English, eighteenth century. Body, Munsell 2.5 YR 6/6; exterior slip, Munsell 2.5 Y 8/2; exterior splash coloration in glaze, Munsell 2.5 Y 6/4. *b*, Rim sherd from a plate. Red body covered with a light brown lead-glaze splashed with dark brown. Possibly French, eighteenth century. Body, Munsell 2.4 YR 4/4; glaze, Munsell 5 YR 4/6 and 2.5 YR 2/2. *c*, Rim sherd from a plate. Red body covered with a brown lead-glaze splashed with dark brown. Possibly French, eighteenth century. Body, Munsell 2.5 YR 4/4; glaze, Munsell 10 R 3/4 and 2.5 YR 2/2. *d*, Rim sherd from a plate. Red body covered with a cream-colored slip; decorated on interior with a border of a wavy purple line and a green rim line, under a thin lead-glaze. Probably French, eighteenth century. Body, Munsell 2.5 YR 6/6.

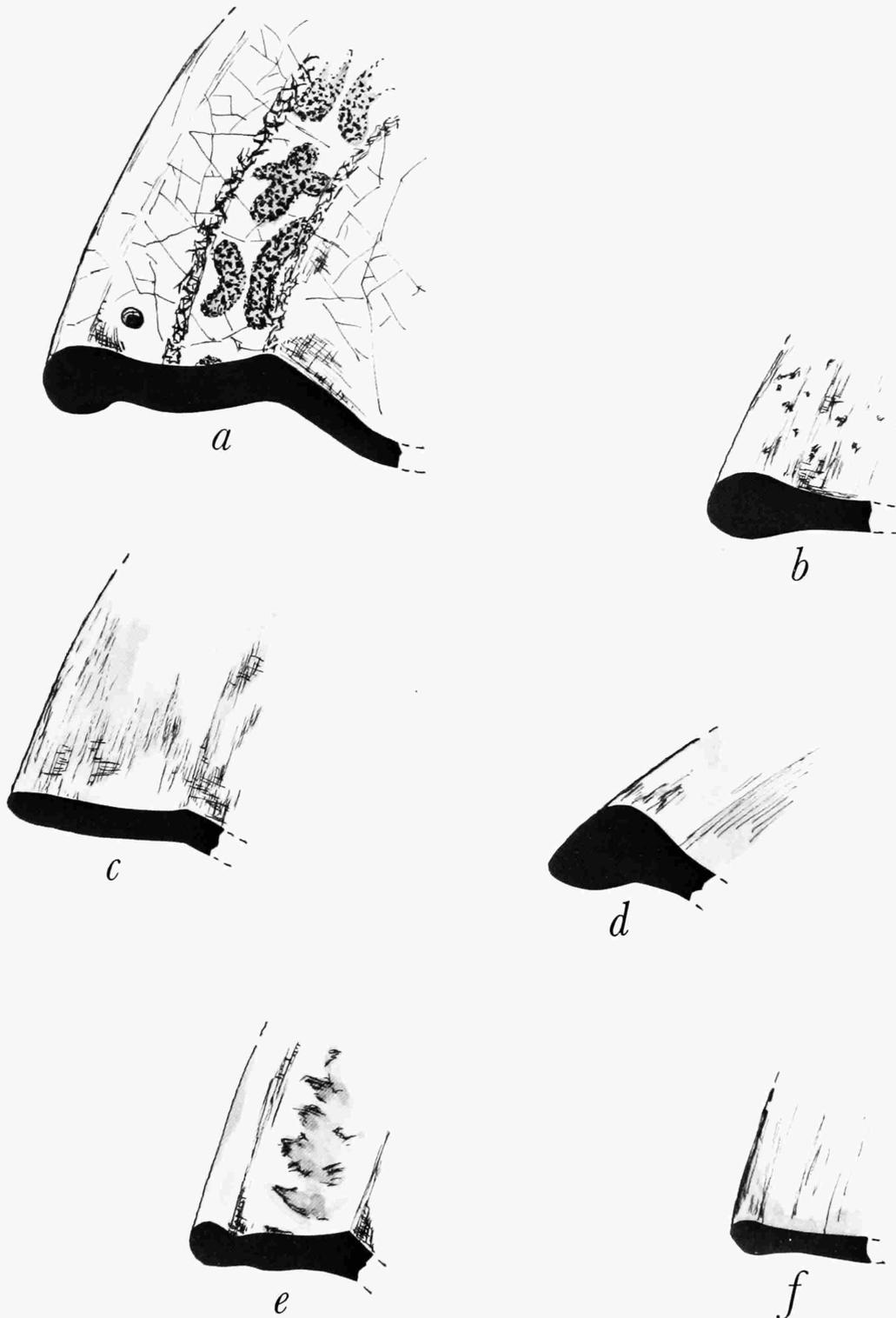


FIGURE 27.—EARTHENWARE; section drawings of rim sherds (full scale). *a*, Section and inner border of French “Rouen” type ware, Figures 17*d* and 18*d*. *b*, Rim section from plate, Figure 24*a*. *c*, Rim section from plate, Figure 26*c*. *d*, Rim section from a large dish, Figure 32*e*. *e*, Rim section from a plate, Figure 26*d*. *f*, Rim section from a plate, Figure 26*b*.

English manufacture or of having been made in North America by potters working in the English tradition.

A number of different forms were encountered and nearly all were consistent with kitchen or hearthside use. Sherds from small jars, pipkins, large covered jars, deep dishes, plates, and dishes were discovered (Figure 24). A few sherds from mugs also were found. The body materials range from medium grained to coarse and, in color, from brownish-red to orange-red. The glazes also varied from light tan to dark, black-brown.

One distinctive type of brown glazed ware included in this group has a granular, red clay body covered with a lead-glaze ranging in color from yellow-brown to red-brown, splashed with areas of deep brown (Figure 26*b* and *c*). Of this type, only sherds from dinner plates have been found at Michilimackinac to date. Similar wares have been excavated at Williamsburg where they are tentatively assigned a Pennsylvania or New England origin, though the possibility of French or English manufacture is not excluded.<sup>58</sup> A number of New England pieces decorated in this manner and dating from the early nineteenth century can be found in American collections. This same general type of ware has been recovered in a great variety of forms at Louisbourg (Appendix B, Figure 2*k*).<sup>59</sup> The Louisbourg finds include a number of rather complete pieces that are in forms associated with French manufacture, and for this reason are assigned a French provenance. It is hoped that further scholarship will develop more information relevant to the origin and distribution of this particular kind of brown glazed, red earthenware.

#### TYPE C. GREEN AND PURPLE DECORATED REDWARE

*Date:* Eighteenth century.

*Origin:* Probably France.

*Description:* Red earthenware covered with a white slip and decorated with green and purple colored lead-glaze.

**COMMENTS:** Only two sherds of this type were recovered, both in 1959. As the decoration of these sherds differed so from the other coarse earthenware from the Fort, it has been necessary to classify them separately. Comprising adjacent rim fragments from

<sup>58</sup> Conversation with IVOR NOËL HUME, director, Department of Archaeology, Colonial Williamsburg.

<sup>59</sup> MARWITT, "A Preliminary Survey of Seven Coarse Earthenwares from the Fortress of Louisbourg," Ware 4, Fig. 3*c*.

a plate (Figure 26*d*), the sherds are covered with a thin white slip. The interior border is decorated with a rim line of green and a wavy border design in purple. This find is significant as it represents yet another variety of ceramics of probable French origin and as similarly decorated wares have been excavated at Louisbourg (Appendix B, Figure 2*a*).<sup>60</sup>

#### TYPE D. GREEN GLAZED EARTHENWARE

*Date:* Eighteenth century.

*Origin:* Probably France or England. Possibly North America.

*Description:* Variants of low fired earthenware covered with a green lead-glaze.

**COMMENTS:** A total of 170 sherds of low fired earthenware glazed on one or both sides with a green lead-glaze were recovered at the Fort during the excavation years 1959–1965. The material ranges in body color from brown-red through buff to tan-gray. The potting is often crude and most of the sherds appear to have come from chamber pots, jars, and bowls. Thirteen sherds excavated in 1959 were found to come from a single bowl which has been partially restored (Figures 28*c* and 29). The sherds from this bowl, as well as others of the same type, were found within a French context predating 1740.<sup>61</sup> A French or French-Canadian provenance is reasonably confirmed by the shape of the vessel, and, at the present time, it can only be said that the bowl is of a French type, as it is possible that it was manufactured in Canada by a potter working in the French tradition. A similar, but larger bowl has been reconstructed from sherds excavated at Louisbourg (Appendix B, Figure 3).<sup>62</sup>

Some sherds with a buff-gray body and light-to-medium green lead-glaze on both sides (Figure 32*b*) are similar to sherds from chamber pots recovered at Louisbourg (Appendix B, Figure 2*l*) and Colonial Williamsburg. These green glazed sherds are presently given an English attribution by the Williamsburg archeologists.<sup>63</sup> As English and North American coarse earthenwares are found in Louisbourg along with French ceramics, the exact provenance of these ubiquitous green glazed wares is still unclear.

<sup>60</sup> *Ibid.*, p. 56, Ware 3, fig. 51.

<sup>61</sup> MAXWELL AND BINFORD, 1961, pp. 94–95.

<sup>62</sup> Artifact collections, Fortress of Louisbourg.

<sup>63</sup> Conversation with IVOR NOËL HUME, director, Department of Archaeology, Colonial Williamsburg.

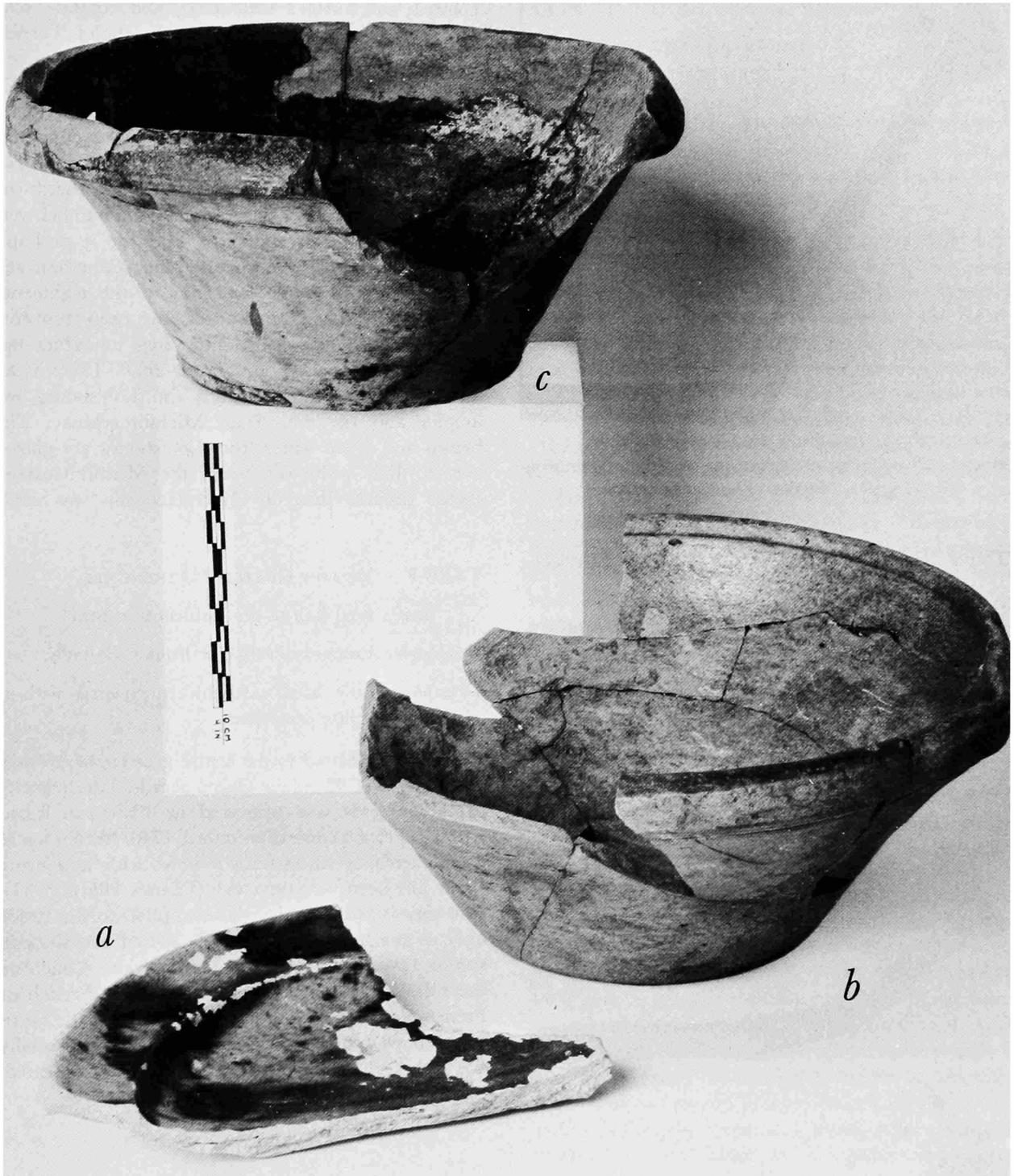


FIGURE 28.—COARSE EARTHENWARE. *a*, Section of a plate with a flat base, no foot ring. Wheel thrown pink body with inclusions of small pebbles; covered with a green lead-glaze with brown splashes. Probably French or French Canadian, first half of the eighteenth century. Body, Munsell 7.5 YR 8/4; green glaze, Munsell 7.5 6/7. (See Figure 30.) *b*, Bowl with a flat base, pronounced rim, and an abbreviated pouring lip. Light red body covered on interior with a mustard yellow lead-glaze. Probably French or French Canadian, first half of the eighteenth century, Body, Munsell 5 YR 6/6; glaze, Munsell 2.5 Y 6/6. (See Figure 31.) *c*, Bowl with a flat base and pronounced rim. Light red body covered on rim and interior with a dark green lead-glaze. Probably French or French Canadian, first half of the eighteenth century. Body, Munsell 5 YR 6/4.5; glaze, Munsell 5 Y 3.52. (See Figure 29.)

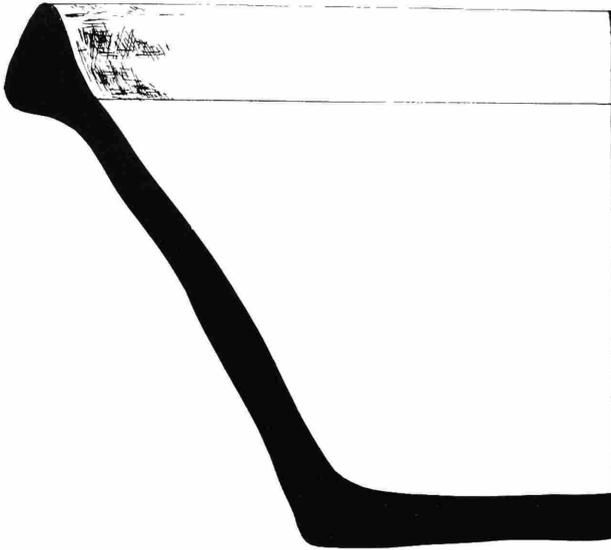


FIGURE 29.—COARSE EARTHENWARE BOWL; section drawing ( $\frac{2}{3}$  scale). Section of bowl, Figure 28c.

TYPE E. BROWN and GREEN GLAZED EARTHENWARE

*Date:* First half of the eighteenth century.

*Origin:* Probably France or French Canada.

*Description:* Low fired earthenware covered with a mixed brown and green lead-glaze.

COMMENTS: Twelve sherds of this distinctive earthenware were recovered in the years 1959–1965. The largest piece is about one-fifth of a plate (Figures 28a and 30). The body material is light salmon



FIGURE 30.—COARSE EARTHENWARE PLATE; section drawings ( $\frac{2}{3}$  scale). Sections of plate, Figure 28a.

colored, soft (Moh's scale 2–3), and contains scattered impurities in the form of small pebbles. Turning marks show the plate was thrown on a wheel. There is no foot ring. A light green lead-glaze, dappled with brown (probably manganese) is applied to the interior of the plate, but the exterior is unglazed except in areas where glaze from the interior has run over the rim and down the back. These sherds are not English in form or decoration, and a number were found in a French context.<sup>64</sup> Thus, it is probable that this pottery is French or French-Canadian and that it dates from the first half of the eighteenth century. As rather similar wares have been recovered at Louisbourg, this attribution does not seem unreasonable (Appendix B, Figure 2h).<sup>65</sup> There is an interesting difference between the Louisbourg examples and the ones from Michilimackinac. The brown and green wares from Louisbourg are glazed over a thin, white slip while the Michilimackinac sherds disclose that no underglaze slip was used.

TYPE F. YELLOW GLAZED EARTHENWARE.

*Date:* First half of the eighteenth century.

*Origin:* Probably France or French Canada.

*Description:* Low fired earthenware covered with a yellow lead-glaze.

COMMENTS: Related to the coarse green glazed wares are a group of 32 yellow glazed sherds. The majority of these sherds was recovered in 1959 and found within a French context predating 1740.<sup>66</sup> From ten of these sherds, a wheel-thrown bowl with a pouring spout has been reconstructed (Figures 28b and 31). The clay is red and the glaze, applied to the inside only, is mustard yellow. Crudely potted and thick in section (averaging  $\frac{1}{2}$  inch at the base and  $\frac{1}{4}$  inch on the sides), this pouring bowl is probably French or French-Canadian. Though the clays differ, the forms of this bowl and the green glazed bowl are essentially the same. Both have flat bottoms and truncated, conical shapes with pronounced upper rims.

<sup>64</sup> MAXWELL AND BINFORD, 1961, pp. 94–95.

<sup>65</sup> MARWITT, "A Preliminary Survey of Seven Coarse Earthenwares From the Fortress of Louisbourg," p. 55, Ware 1A.

<sup>66</sup> MAXWELL AND BINFORD, 1961, pp. 94–95.

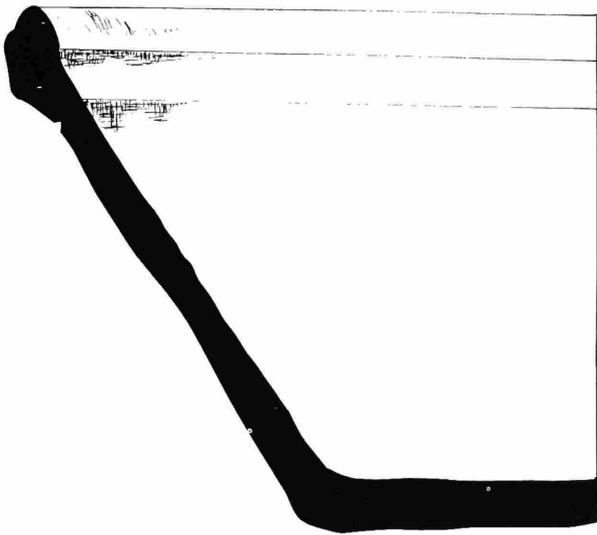


FIGURE 31.—COARSE EARTHENWARE BOWL; section drawing ( $\frac{2}{3}$  scale). Section of bowl, Figure 28*b*.

As our knowledge of seventeenth- and eighteenth-century Canadian pottery is virtually nonexistent at this time, no meaningful conclusions can be made concerning these finds. A French provenance is indicated, but French Canada remains as a possible place of origin. Though more sophisticated wares of the period under consideration have been studied in depth, the common, low fired pottery has received minimal attention. As a practical matter, we may never acquire more information for so little of this common pottery has survived and its documentation is so scanty. In determining place of origin, microscopic examination and quantitative analysis (including new and more sophisticated techniques such as neutron irradiation) may prove helpful in certain limited ways.<sup>67</sup> Common clay deposits, however, of essentially similar composition can be found on both sides of the Atlantic. The main avenue to increased information about these common earthenwares lies in archeological studies on the sites of seventeenth- and eighteenth-century potteries.

<sup>67</sup> See H. W. M. HODGES, "The Examination of Ceramic Materials in Thin Section Slides," *The Scientist and Archaeology*, Edward Pyddoke, editor, pp. 101-110.

#### TYPE G. CARMEL GLAZED EARTHENWARES

*Date:* Eighteenth century.

*Origin:* Probably England or France.

*Description:* Granular, low fired, red earthenware covered on the exterior surfaces with a cream-colored slip and a lead-glaze containing tan (caramel) splashes.

COMMENTS: A total of 25 sherds of this type were recovered during the years 1959-1965. All were small, and frequently it was not possible to ascertain the exact form of the pieces from which the sherds came. As the sherds were wheel thrown, thinly potted, and were glazed only on the exterior, it seems probable that they came from small containers or jars with covers or narrow necks. Throwing rings and the discernible curvatures of some sherds tend to confirm this. The caramel glaze color was applied vertically (Figure 26*a*). Relatively similar sherds have been recovered at Bishop's Waltham, Hampshire, England.<sup>68</sup> Exact counterparts to the Michilimackinac caramel glazed wares have not, however, to date been discovered by the authors in either museum or archeological collections.

#### TYPE H. SLIP-DECORATED EARTHENWARE

*Date:* Eighteenth-century.

*Origin:* England.

*Description:* Buff-colored earthenware covered with a yellow slip and decorated with brown slip lines or dots. Overall, a clear lead-glaze.

COMMENTS: The technique of slip decorating was utilized by many eighteenth-century English potters. Earthenware pieces were covered with either brown or yellow slip (a watery clay) and then decorated with lines or dots of contrasting slip. A liquid lead-glaze was then applied and the pieces fired. One method of applying slip lines of contrasting color is termed "combing" and pieces decorated in this manner are often referred to as "combed wares." Sixty-seven English slip decorated sherds were recovered at Fort Michilimackinac. In all instances the decoration consisted of brown slip upon a cream or yellow

<sup>68</sup> Communication with KENNETH J. BARTON, curator, Portsmouth City Museum, Portsmouth, Hampshire.

slip ground (Figure 33). Drinking cups, dishes, and possibly jugs and bowls were the forms represented.

Of special interest is a large fragment from a yellow drinking cup decorated with combed lines of brown slip (Figure 33*e*) recovered in 1964. Slip decorated English earthenware has been found at many eighteenth-century English colonial sites as well as at Louisbourg (Appendix B, Figure 2*c*).<sup>69</sup>

<sup>69</sup> For eighteenth-century English combed and dotted slipwares from colonial sites, see NÖEL HUME, "Excavations at Rosewell in Gloucester County, Virginia 1957-1959," pp. 188-189, no. 2, fig. 14; JOHN L. COTTER, *Archaeological Excavations at Jamestown* (Washington: National Park Service, 1958), p. 185, plate 83; NÖEL HUME, "Here Lies Virginia: An Archaeologist's View of Colonial Life and History," fig. 119; C. MALCOLM WATKINS, "The Cultural History of Marlborough, Virginia," p. 128, fig. 64. Also, see artifact collections: Fort Ligonier, and the Fortress of Louisbourg.

FIGURE 32.—MISCELLANEOUS COARSE EARTHENWARE. *a*, Body sherd, possibly from a chamber pot. Light pink body covered with a cream-colored and orange slip or wash and with a clear lead-glaze splashed with light green. Probably French, eighteenth century. Body, Munsell 5 YR 7/4; cream slip, Munsell 5 Y 8/3. *b*, Body sherd, possibly from a chamber pot. Gray body covered with a light green lead-glaze. Possibly English, eighteenth century. Body, Munsell 10 YR 6/2; glaze, Munsell 5 Y 4.5/4. *c*, Body sherd, probably from a large bowl or jar; 1/2-inch thick in section. Light red body covered, on exterior only, with a dark green lead-glaze. Probably French or French Canadian, first half of the eighteenth century. Body, Munsell 5 YR 6/4.5; glaze, Munsell 5 Y 3.5/2. *d*, Body sherd from a bowl. Light red body covered on interior with a mustard yellow lead-glaze. Probably French, first half of the eighteenth century. Body Munsell 5 YR 6/6; glaze, Munsell 2.5 Y 6/6. *e*, Rim sherd from a large dish. Light red body covered with a light green lead-glaze. Probably French, first half of eighteenth century. Body, Munsell 5 YR 7/4; glaze, (Nickerson Color Fan) Munsell 7.5 GY 8/7. *f*, Handle from a drinking vessel or small pitcher. Cream-colored body covered with a green lead-glaze. Probably French, eighteenth century. Body, Munsell 5 Y 7.5/1; glaze, (Nickerson Color Fan) Munsell 5 GY 5/6.





FIGURE 33.—ENGLISH SLIP-DECORATED EARTHENWARE. *a*, Rim sherd from a cup. Buff body decorated with a yellow slip and (on exterior surface) brown slip dots; covered overall with a clear lead-glaze. Eighteenth century. *b*, Body sherd from a cup or small bowl. Buff body decorated with a yellow slip and combed, brown slip lines; covered overall with a clear lead-glaze. Eighteenth century. *c*, Rim sherd from a cup. Buff body decorated with a yellow slip and brown slip dots; covered overall with a clear lead-glaze. Eighteenth century. *d*, Body sherd from a dish,  $\frac{1}{4}$  inch in section. Buff body decorated with a cream-colored slip and combed, brown slip lines; covered overall with a clear lead-glaze. Eighteenth century. *e*, Section of a cup. Buff body decorated with a yellow slip and combed, brown slip lines; covered overall with a clear lead-glaze. Eighteenth century. *f*, Body sherd, probably from a dish. Red body decorated on interior only with a cream-colored slip and combed, brown slip lines; covered with a clear lead-glaze. Eighteenth century.

## GROUP IV— FINE EARTHENWARE

The utilitarian, coarse earthenwares considered in the previous section were practically necessities in the life at Fort Michilimackinac. The social organization, both civilian and military, required some basic kitchen equipment. Metal, bone, wood, and ceramic utensils filled these essential needs. But, as has been pointed out, during the period of English occupation, life was far from primitive for some of the Fort's inhabitants. The ceramic evidence in support of this assertion is considerable. The fine English earthenwares that have been recovered at the Fort to date comprise one part of this evidence.

In making the admittedly arbitrary distinction between coarse and fine earthenware, it can be stated that fine earthenware of the eighteenth century was, in general, more delicate, more finely grained, and more sophisticated in decoration. In most instances its use was designated for the tea and dinner table rather than the kitchen. Nearly all of the sherds of fine earthenware from Fort Michilimackinac came from part or whole tea services.<sup>70</sup> Though comparatively few sherds of fine earthenware were recovered, the significance of these finds should not be underestimated. The types discussed in this section serve to enlarge the spectrum of ceramics known to be present at the Fort. This information, in turn, adds to the overall picture of a more complex material culture; one, indeed, that contains elements closely analogous to the material culture enjoyed in the more affluent parts of the colonies.

Some of the fine earthenwares discussed in this section could as well have been listed in "Group II, English Cream-Colored Earthenware." After consideration, it was decided that the special glazes applied to these wares justified separate treatment.

### TYPE A. WHIELDON TYPE (Brown and Green Splashed Glaze)

*Date:* About 1755–1775.

*Origin:* England.

*Description:* Cream-colored earthenware with a yellowish, clear lead-glaze on interior surfaces and splashed brown and green lead-glazes on the exterior surfaces.

COMMENTS: Sixteen sherds of finely potted (about  $\frac{1}{16}$  inch in section) cream-colored earthenware from parts of a tea service were recovered. All were decorated on the exterior in soft brown and green colors. Neatly but irregularly applied (splashed) brown and green lead-glaze of this type is associated with Thomas Whieldon (1719–1795), one of eighteenth-century England's pioneering potters and a mentor of Josiah Wedgwood. As Whieldon's wares were unmarked and as other English potters quickly adopted his techniques, it is preferable to use the term Whieldon type in descriptions of most ceramics traditionally ascribed to Thomas Whieldon.

Examination of a sherd from a teapot of this type (Figure 34c) discloses that the piece was made from typical English cream-colored earthenware. In addition to the fine, light green and brown glaze, the teapot was decorated with closely spaced (about  $\frac{1}{16}$  inch) incised, concentric lines.<sup>71</sup>

### TYPE B. WHIELDON TYPE (Tortoise-shell Glaze)

*Date:* About 1755–1775.

*Origin:* England.

*Description:* Cream-colored earthenware covered with a mottled brown, cream, gray, and green lead-glaze.

COMMENTS: Perhaps most closely associated with Thomas Whieldon are the wares decorated with a

<sup>70</sup> For an informative monograph on eighteenth-century tea drinking in England and the Colonies, see RODRIS ROTH, "Tea Drinking in 18th Century America: Its Etiquette and Equipment," Washington: United States National Museum *Bulletin* 225, pp. 61–91.

<sup>71</sup> This type of glaze is rarer than the "tortoise-shell," see Type B. For a small bowl glazed in this manner which is also decorated with incised, concentric lines, see CYRIL EARLE, *The Earle Collection of Staffordshire Pottery*, fig. 260. To differentiate from the "tortoise-shell," the "*Earle catalog*" designates this type of glaze as "variegated" or "clouded."

mottled, so-called "tortoise-shell" lead-glaze.<sup>72</sup> Again, caution dictates the use of "Whieldon type" when describing these ceramics. Whieldon's wares were unmarked and Wedgwood, as well as other potters, used tortoise-shell glazes.<sup>73</sup> Sixty-eight sherds of cream-colored earthenware decorated with a tortoise-shell glaze were recovered at Fort Michilimackinac. Most were from parts of at least three separate tea services or part tea services, though sherds from plates were also found. Of the three tea services, one had a brown and light green mottled glaze (Figure 34*d*); another was decorated with a mottled brown and blue-green glaze (Figure 34*b*), and the third was plain mottled brown (Figure 34*e*). Typical Whieldon applied foliate relief designs were found on a number of the sherds (Figure 34*a, d*).

Whieldon type tortoise-shell glazed wares have been recovered from many eighteenth-century sites including Fort Ligonier (Appendix C, Figure 1*b*), Colonial Williamsburg, and the Fortress of Louisbourg.<sup>74</sup>

TYPE C. WHIELDON-WEDGWOOD TYPE (Fruit and Vegetable Motifs)

*Date:* Circa 1755–1775.

*Origin:* England.

*Description:* Cream-colored earthenware molded in pineapple, cauliflower, and cabbage relief patterns and decorated with green, yellow, and white lead-glazes.

COMMENTS: During their brief partnership (1754–1759), Thomas Whieldon and Josiah Wedgwood I worked to develop new decorative motifs and glazes in order to expand the market for their earthenwares. Wedgwood was especially interested in perfecting a green glaze. The extensive experimentation of this period resulted in improved green and yellow lead-glazes that particularly enhanced pieces molded in the

forms of vegetables and fruit. The body of these wares was usually cream-colored or buff, essentially the same as the body material of the cream-colored earthenware described in Group II of Class A.

So-called pineapple wares were produced during the 1760s by Whieldon, Wedgwood, and probably a number of other English potters.<sup>75</sup> Only three sherds of this pineapple ware were found at the Fort, all from a teapot (Figure 35*a*). Sherds from a similar pineapple ware teapot have been found at Fort Ligonier.<sup>76</sup>

Closely related to the pineapple wares were the pieces molded in imitation of cauliflowers and cabbages (Figures 35 *d, e, g, h, and j*). Of special interest is a fragment from a cabbage-molded teapot cover with a rabbit finial (Figure 35*h*).<sup>77</sup> A total of 19 sherds from cauliflower and cabbage decorated wares were found and all of these were from parts of tea services. Again, the significance of these finds lies in the increased range of ceramics proved to be represented in the material culture at Fort Michilimackinac.

<sup>75</sup> A yellow and green pineapple teapot attributed as possibly from the Whieldon-Wedgwood partnership is illustrated in MANKOWITZ, plate III.

<sup>76</sup> Artifact collection, Fort Ligonier.

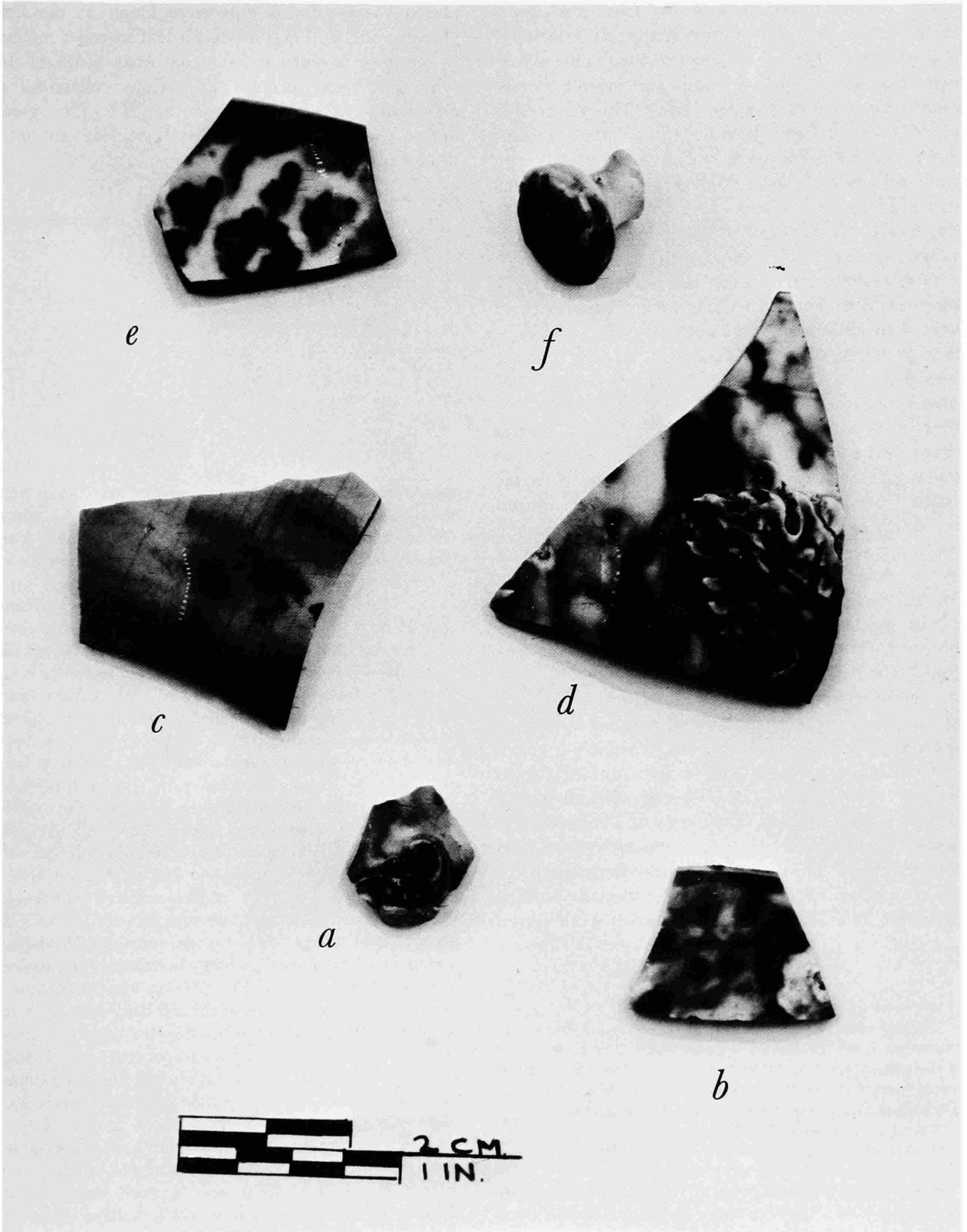
<sup>77</sup> A cabbage leaf teapot with a similar rabbit finial is illustrated in FRANK TILLEY, *Teapots and Tea*, plate VIII, no. 31.

FIGURE 34.—ENGLISH, WHIELDON TYPE FINE EARTHENWARE. *a*, Body sherd, probably from a teapot. Cream-colored body covered with a mottled brown lead-glaze and decorated with a relief foliate design. So-called tortoise-shell glaze. Whieldon type, circa 1755–1775. *b*, Rim sherd from a saucer. Thinly potted cream-colored body covered with a mottled brown and green lead-glaze. Whieldon type, circa 1755–1775. *c*, Body sherd, probably from a teapot. Cream-colored body covered on interior with a clear lead-glaze and on exterior with a brown and green lead-glaze. Exterior is also decorated with fine, incised lines. Whieldon type, circa 1755–1775. *d*, Body sherd from a cover, probably from a sugar bowl or teapot. Cream-colored body covered on both sides with a brown, mottled lead-glaze containing small splashes of light green. The leaf is applied and was part of the base decoration for the finial. So-called tortoise-shell glaze. Whieldon type, circa 1755–1775. *e*, Rim sherd from a saucer. Thinly potted cream-colored body covered with a mottled brown lead-glaze. So-called tortoise-shell glaze. Whieldon type, circa 1755–1775. *f*, Finial, probably from a teapot. Cream-colored body covered with a mottled brown and green lead-glaze. Finial molded in shape of a flower. Whieldon type, circa 1755–1775.

<sup>72</sup> For colored illustrations of Whieldon type, tortoise-shell glazed pieces, see CYRIL EARLE, *The Earle Collection of Staffordshire Pottery*, plate VI; and GEORGE SAVAGE, *English Pottery and Porcelain*, fig. 51. The popularity of the tortoise-shell wares in England roughly coincided with the English occupation of Fort Michilimackinac. By the early 1780s, the vogue for the tortoise-shell glazes had practically died out. See G. BERNARD HUGHES, "Animals with a Whieldon Glaze," p. 947.

<sup>73</sup> A marked Wedgwood tea caddy decorated with a tortoise-shell glaze is illustrated in MANKOWITZ, plate III.

<sup>74</sup> Artifact collections: Fort Ligonier, Colonial Williamsburg, and Fortress of Louisbourg.



One thematic variation of the fruit and vegetable lead-glazed earthenwares frequently associated with Josiah Wedgwood I is decorated with alternating vertical green and yellow bands and overall, evenly spaced black or dark green dots.<sup>78</sup> This decorative scheme was probably intended to imitate a melon. Three sherds from a teapot and a saucer of this type were recovered (Figure 35*b*). Fragments of similar dotted green and yellow wares have been found at the Great Crossing of the Youghiogheny, Pennsylvania (Appendix C, Figure 2*b*).<sup>79</sup>

It is probable that entire tea services were fairly uncommon at Fort Michilimackinac. Rather, those who lived well enough to enjoy tea, coffee, or chocolate probably often possessed sets of cups (or tea bowls) and saucers that were used with other non-matching pieces. The archeological evidence of this practice is confirmed by some documentary sources that reveal teapots, milk jugs, and sugar bowls sold as separate items. For example, in May of 1776 the trader John Askin purchased from the Detroit merchants, Alexander and William Macomb, several ceramic pieces including a teapot for twelve shillings.<sup>80</sup> When Askin made an inventory of his effects at Michilimackinac in 1778, he listed no tea services. He did list numerous cups, saucers, milk jugs, and sugars, however. Two separate entries scheduled "6 Tea Potts" and "3 Tea Potts."<sup>81</sup>

Closely related to the green glazed wares discussed in the preceding paragraphs, and perhaps rarer than the vegetable and fruit imitations, is a finely grained, buff-colored earthenware decorated with foliate relief patterns and a green glaze covered with an overall design of dotted circles in dark green. The distinctive decorative motifs that set these wares apart have been sometimes attributed to William Greatbatch, a skilled Staffordshire potter who occasionally worked for both Whieldon and Wedgwood.<sup>82</sup> Four green

glazed sherds of this type were found at the Fort (Figures 35*c*, and *i*). One has a leaf in relief molded in the same manner as found on intact pieces of this type that have survived in various collections of eighteenth-century English ceramics.<sup>83</sup> The green dotted sherds from Fort Michilimackinac are from dinner plates or platters.

<sup>83</sup> Two platters of this type are in the Smithsonian's collections, catalog no. 62.756A, B.

FIGURE 35.—ENGLISH FINE EARTHENWARE DECORATED WITH FRUIT AND VEGETABLE MOTIFS. *a*, Rim sherd from a teapot. Cream-colored body molded in form of a pineapple. Interior covered with a clear lead-glaze, exterior covered with a bright yellow lead-glaze. Whieldon-Wedgwood type, circa 1755–1775. *b*, Rim sherd from a saucer. Cream-colored body covered with a green lead-glaze, decorated with regular lines of dark green or black dots. Wedgwood type, circa 1755–1775. *c*, Body sherd from a plate or small platter. Cream-colored body covered with a green lead-glaze; decorated with a molded foliate pattern and an overall design of dotted circles; circa 1755–1775. *d*, Body sherd from a teapot. Cream-colored body molded in form of a cabbage. Interior covered with a clear lead-glaze, exterior covered with a bright green lead-glaze; circa 1755–1775. *e*, Body sherd from a teapot. Cream-colored body molded in imitation of a cauliflower. Interior covered with a clear lead-glaze, exterior covered with a green and whitish lead-glaze; circa 1755–1775. *f*, Base section from a saucer. Cream-colored body covered on exterior with a clear lead-glaze and on interior with a green and yellow lead-glaze and regular lines of dots, probably in imitation of a melon; Wedgwood type, circa 1755–1775. *g*, Rim sherd from a plate or small platter. Cream-colored body molded in the form of a cabbage leaf and covered with a green lead-glaze; circa 1755–1775. *h*, Section of a teapot cover with a rabbit finial. Cream-colored body molded in imitation of a cabbage leaf and covered with a green, yellow, and brown lead-glaze; circa 1755–1775. *i*, Body sherd from a plate or small platter. Cream-colored body with a green lead-glaze; decorated with an overall design of dotted circles; circa 1755–1775. *j*, Rim sherd from a small bowl. Cream-colored body molded in imitation of a cauliflower, covered with a clear, green and white lead-glaze; circa 1755–1775.

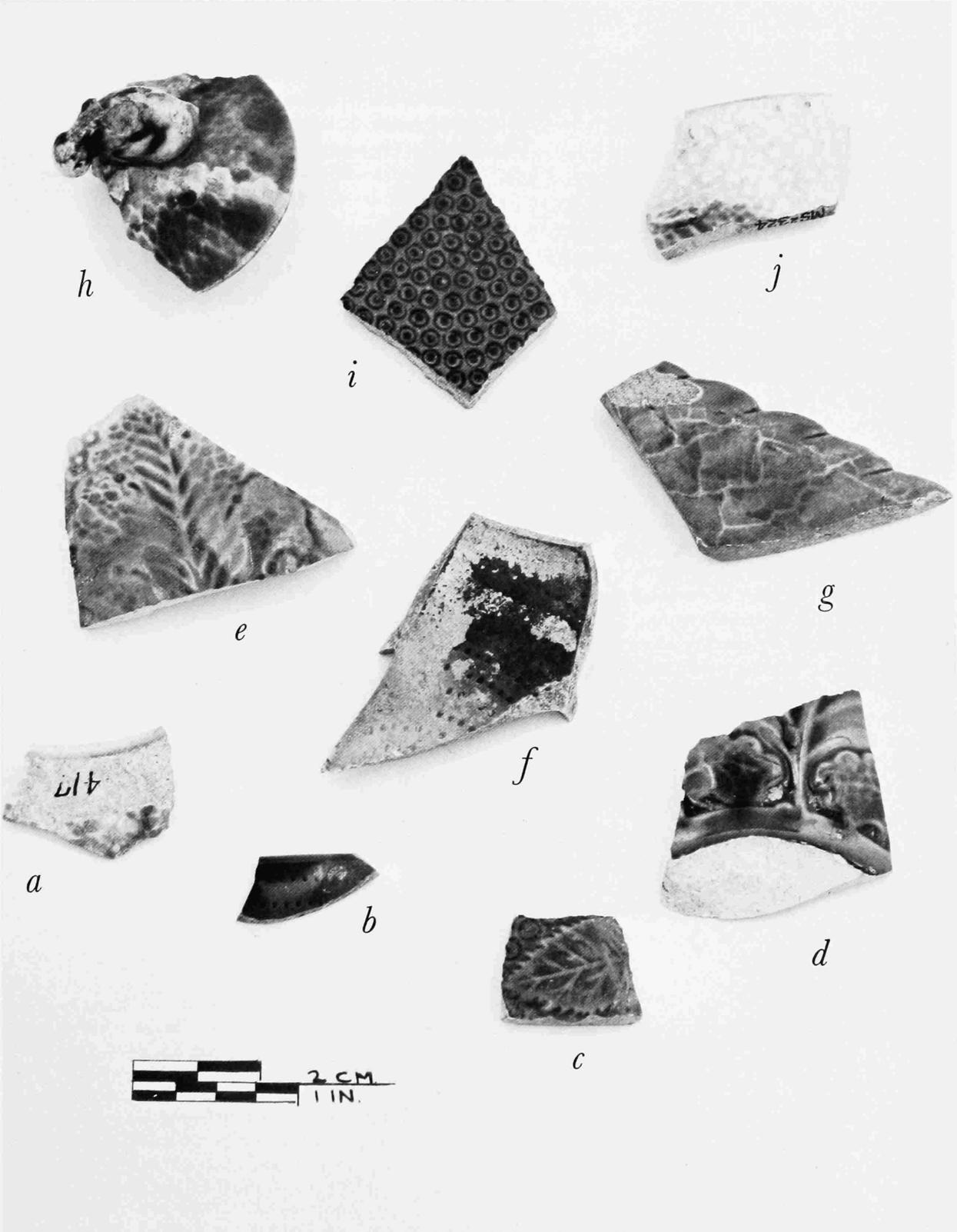
<sup>78</sup> Wedgwood's green and yellow glazes are discussed in MANKOWITZ, pp. 25–39, and a green and yellow glazed piece of the melon type is illustrated in color in Plate II. Excellent color illustrations of the cauliflower are in ROSS TAGGERT, *The Burnap Collection of English Pottery*, facing p. 144.

<sup>79</sup> Artifact collections, Fort Ligonier.

<sup>80</sup> Macomb Account Book, 1776–1778, p. 50.

<sup>81</sup> John Askin's Inventory of 1778, pp. 12, and 14.

<sup>82</sup> See DONALD TOWNER, "William Greatbatch and the Early Wedgwood Wares," *Transactions of the English Ceramic Circle*, vol. 5, part 4, plate 177a.



## Class B—Stoneware

### GROUP I—

#### ENGLISH WHITE SALTGLAZED STONEWARE

Stoneware occupies a roughly defined place midway between earthenware and porcelain. Stoneware is a hard, high fired ceramic that, during the process of manufacture, has attained some degree of vitrification rendering it generally impermeable to liquids. Manufacturing methods and materials used varied greatly in the eighteenth century, resulting in a wide range of ceramics that can be described as stoneware. Porcelain, which is also vitrified, is excluded from the category of stoneware by virtue of its special ingredients, translucency, and usual slightly higher firing temperatures.

A major segment of mid-eighteenth-century English production consisted of fine white stoneware covered with a clear saltglaze. Wares of this type are frequently categorized under the general term "saltglaze." Though varying in body composition from fragile to more substantial, English white saltglazed stoneware logically comprises a generic group.<sup>84</sup> A distinctive glaze was achieved by placing common salt in the kiln. The ensuing reaction produced a glassy, slightly rough surface that could be over-painted or left plain. Fine, white saltglazed stoneware flourished in England for a comparatively short period—roughly 1730–1770. Its decline can be attributed in part to the spectacular rise in popularity of the cream-colored wares in the years following 1760.<sup>85</sup>

Most of the more common types of English saltglaze of the period circa 1740–1770 were found at the Fort. A total of 2,465 saltglazed sherds were counted; the majority of which represented fragments from dinner services. As in the case of the

delft and cream-colored wares, utilitarian considerations predominated. Comparable saltglazed stoneware, representative of the types discussed in this section, were found at Fort Ligonier, Pennsylvania, and at the Fortress of Louisbourg, Nova Scotia (Appendix B, Figure 1*d*, and Appendix C, Figure 1*d*).<sup>86</sup> The varieties (in form and decoration) of the saltglazed white stonewares from Louisbourg exceed those from Michilimackinac. The presence of substantial quantities of fine English saltglaze at Louisbourg reinforces the suggestion that, in addition to the wares brought in during the two English invasions, established trade connections between the French fortress and the colonies existed prior to (and during?) the French and Indian War.<sup>87</sup>

Practically no eighteenth-century English white saltglaze is marked and rarely can a piece be ascribed to a specific maker. Much of it was manufactured in Staffordshire.

#### TYPE A. PLAIN WHITE

*Date:* About 1740–1770.

*Origin:* England.

*Description:* White stoneware covered with a clear saltglaze.

**COMMENTS:** A total of 1,687 sherds of this type were found. Most of these plain sherds represent interior fragments from pieces decorated with relief borders

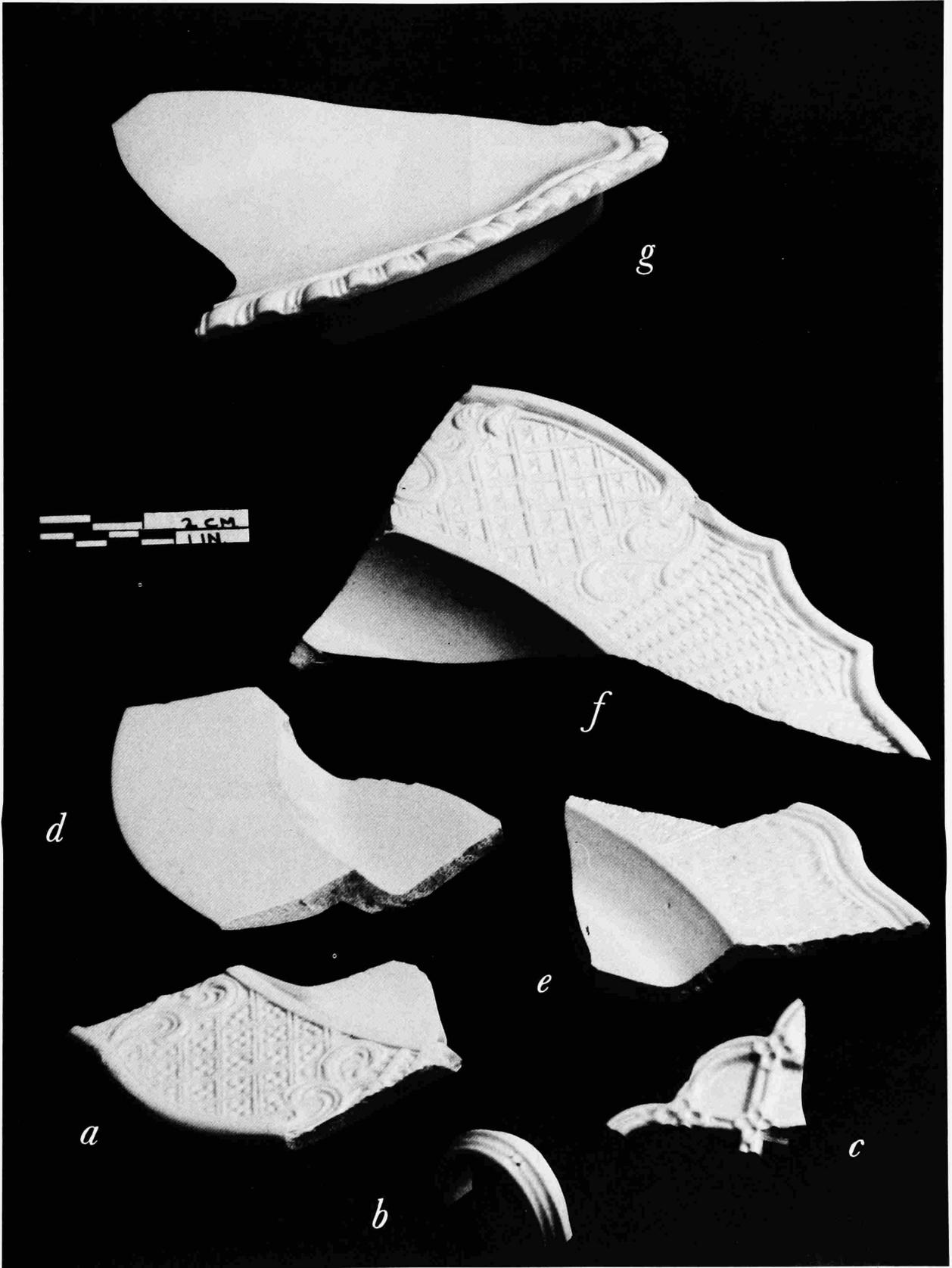
<sup>86</sup> Artifact collections: Fort Ligonier, and the Fortress of Louisbourg.

<sup>87</sup> Conversation with Mr. John Dunton, chief conservator, Fortress of Louisbourg.

<sup>84</sup> Heavy, dark-bodied, utilitarian stonewares are discussed in Class B, Group II. Most of these stonewares were also saltglazed. For an excellent discussion of various types of English saltglazed stoneware, see W. B. HONEY, "English Saltglazed Stoneware," *Transactions of the English Ceramic Circle*, vol. 1, no. 1, pp. 12–22.

<sup>85</sup> By 1770, saltglaze "was hardly being made at all for the wider market." W. B. HONEY, *English Pottery and Porcelain*, p. 84. Some was being produced for export as late as the 1780s, however. A scratch blue mug in the Smithsonian Institution (Lloyd E. Hawes Collection, catalog 65.88) is decorated in relief with the Great Seal of the United States.

FIGURE 36.—ENGLISH WHITE SALTGLAZED STONEWARE. *a*, Plate rim sherd. White body covered with a clear saltglaze; molded scroll and diaper border. Circa 1750–1770. *b*, Handle section from a small cup. White body covered with a clear saltglaze. Circa 1750–1770. *c*, Plate rim sherd. White body covered with a clear saltglaze; molded trellis border. Circa 1750–1770. *d*, Plate rim sherd. White body covered with a clear saltglaze. Circa 1750–1770. *e*, Plate rim sherd. White body covered with a clear saltglaze; molded pattern of lozenges and wavy lines. Circa 1750–1770. *f*, Rim sherd from a platter or large dish. White body covered with a clear saltglaze; molded diaper and basket weave pattern with scrolls. Circa 1750–1770. *g*, Rim section from a tureen cover. White body covered with a clear saltglaze. Molded gadroon border. Circa 1750–1770.



(TYPE B). There were, however, some undecorated saltglazed wares at the Fort including dinner plates (Figure 36*d*). White saltglazed tea services or part services were used at Fort Michilimackinac (Figure 36*b*), but tea services of Chinese porcelain or cream-colored earthenware were predominant. Most of the white saltglazed stoneware sherds represented pieces from dinner plates or other parts of dinner services. This experience is also reflected in the finds from other colonial excavations.

#### TYPE B. RELIEF DECORATED

*Date:* About 1740–1770.

*Origin:* England.

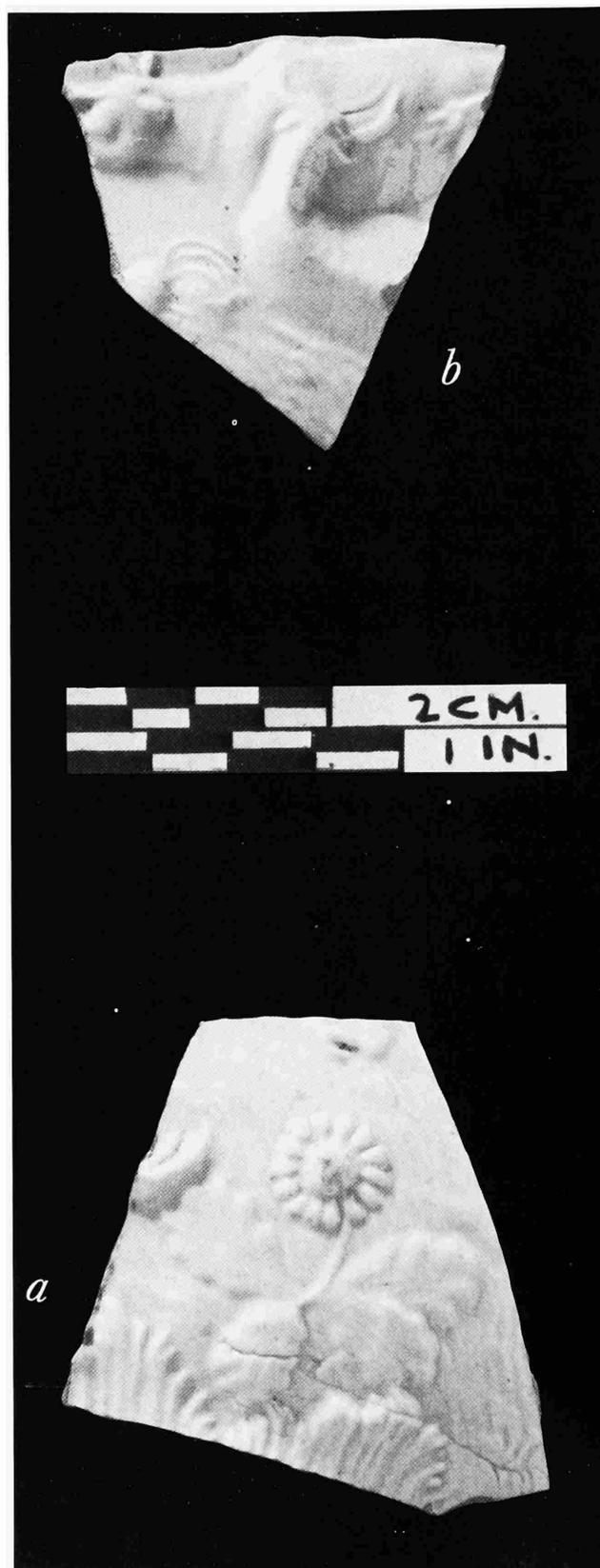
*Description:* White stoneware covered with a clear saltglaze and decorated with molded relief patterns.

COMMENTS: A total of 519 relief-decorated, white saltglazed sherds were found. Nearly all were rim sherds from parts of dinner services. Though plates predominated, larger serving pieces also were represented. Sherds from platters, round serving dishes, and tureen covers (Figure 36) were found with borders matching the plates. It is reasonable to conclude that some occupants of the Fort brought with them, or imported, extensive services. Again, the evidence suggests a material culture surprising for the place and time.

The molded relief patterns were the common ones used on English white saltglaze in about 1760.<sup>88</sup> The repertoire of the English manufacturers was a restricted one, and most of the usual relief designs for these wares are represented by rim sherds from the Fort (Figure 36). Taken in conjunction with the other ceramic artifacts from Fort Michilimackinac (espe-

<sup>88</sup> Evidently the same molds were also used to make English lead-glazed earthenware table wares manufactured at about the same time as the saltglazed stoneware. See CYRIL EARLE, *The Earle Collection of Staffordshire Pottery* (catalog), nos. 249, 251, and 252; *English Pottery and Porcelain*, catalog of 1948 Exhibition of the English Ceramic Circle, plate 14, no. 62.

FIGURE 37.—BODY SHERDS, recovered at Fort Michilimackinac, from an English white saltglazed stoneware teapot with molded decoration similar to the one shown in Figure 38.



cially the cream-colored ware and the Chinese export porcelain), these saltglaze sherds offer sound evidence of the extensive use of good table services during the period of English occupation. The variety of relief patterns represented (conventionalized diaper, basketwork, gadroon, and trellis designs) again suggests a repeated pattern of importation in small lots.<sup>89</sup>

<sup>89</sup> For similar saltglaze sherds from other colonial sites, see NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957-1959," p. 206, fig. 27, nos. 13 and 14; NOËL HUME, *Here Lies Virginia: An Archaeologist's View of Colonial Life and History*, p. 296; BARKA, vol. II, plate 137; BESSIE M. HENRY, "English Ceramics in the British Virgin Islands," *Antiques*, vol. 71, no. 6, p. 548, fig. 3; STANLEY SOUTH, "Russellborough, the Royal Governor's Mansion at Brunswick Town," *The Conference on Historic Site Archaeology Papers, 1965-1966*, vol. I p. 117; C. MALCOLM WATKINS, "The Cultural History of Marlborough, Virginia," p. 133, fig. 67; artifact collections: Fort Ligonier, and the Fortress of Louisbourg.

If the common, relief-decorated sherds discussed above indicate the norm for ceramics of this type at the Fort, several sherds provide evidence of the presence of a far rarer piece of English saltglaze in northern Michigan. These fragments (Figure 37) are from a fine, relief-decorated teapot with a design depicting a pastoral scene. Few similar pieces have survived intact (Figure 38), and it is probable that comparatively few were made.<sup>90</sup> In the mid-eighteenth

<sup>90</sup> See BERNARD RACKHAM, *The Glaisher Collection of Pottery and Porcelain* (catalog), vol. II, plate 36B. Rackham dates this teapot from 1760 and notes that this design has been attributed to William Greatbach. An earthenware teapot covered with a green lead glaze over this same relief design is illustrated in FRANK TILLEY, *Teapots and Tea*, plate VIII, no. 29. Also see TOWNER, "William Greatbach and the Early Wedgwood Wares," *Transactions of the English Ceramic Circle*, vol. 5, part 4, plates 175, 179.



FIGURE 38.—ENGLISH WHITE SALTGLAZED STONWARE TEAPOT decorated with a pastoral scene. Five inches high. Collection of Mrs. Elizabeth Chellis.

century, teapots such as this were often not made as parts of tea services, but rather were manufactured and sold as separate items.<sup>91</sup> An analogous discovery of a sherd from an exceptional, relief-molded saltglazed teapot was made by Ivor Noel Hume during his archeological investigations at Rosewell, Gloucester County, Virginia.<sup>92</sup>

Of interest are several entries in John Askin's inventory of 31 December, 1778. In scheduling his effects, Askin listed "18 White Plates," "5 Large White Cups and Saucers," and "1 Small White Bowl."<sup>93</sup> As Askin distinguished his cream-colored earthenware as "Queens Wair," it seems probable that the trader's "White" ceramics were white English saltglazed stoneware. Askin could have been referring to delft, but the delft dinner wares at the Fort were, from the evidence, blue and white or polychrome. Only the delft pill pots and chamber pots seem to have been entirely white.

#### TYPE C. SCRATCH BLUE

*Date:* Circa 1740–1770.

*Origin:* England.

*Description:* Grayish-white stoneware with incised decoration; the incised lines colored blue, and the piece covered overall with a clear saltglaze.

**COMMENTS:** A distinct type of English saltglazed stoneware is termed, for convenience, "scratch blue." The decorative technique employed was a simple one. Stylized geometric or foliate designs were scratched (incised) on the formed pieces prior to firing. Cobalt was applied to the incised lines and then the pieces were fired and saltglazed. Thus, the blue from the cobalt emphasized the incised decoration. Unfortunately, the cobalt blue tended to diffuse and impart a grayish tone to the entire piece. In comparison to the plain white and white relief-molded saltglaze, relatively little scratch blue was made.

A total of 190 sherds of scratch blue saltglaze were recovered at Fort Michilimackinac during the excavation years 1959–1965. As far as can be ascertained,

all were fragments from tea services (Figure 39a).<sup>94</sup> Delicate, indeed dainty, such services again suggest a milieu during the English period of occupation far different from the stereotyped concept of rough frontier living. Though less prevalent than the white relief wares, scratch blue has been found in many comparable historic sites.<sup>95</sup> Scratch blue sherds from the Fortress of Louisbourg and Fort Ligonier are illustrated in Appendix B, Figure 2d, and Appendix C, Figure 1h and Figure 2e.

#### TYPE D. POLYCHROME

*Date:* Circa 1740–1770.

*Origin:* England.

*Description:* White stoneware covered with a clear saltglaze and decorated in enamel colors over the glaze.

**COMMENTS:** Sixty-nine sherds of polychrome saltglaze were recovered. This low figure reflects the situation in eighteenth-century England where comparatively small amounts of white, saltglazed stoneware were decorated with overglaze colors.<sup>96</sup> In all cases where form could be determined, these polychrome sherds from the Fort were found to come from tea services or part tea services. Outstanding in this group are a partially restored milk jug and cup (Figure 39b and c). Overpainted in enamel colors, with iron red and blue predominating, these pieces

<sup>94</sup> A scratch blue mug (dated 1752) with a chevron border similar to the teabowl from the Fort (Figure 39a) is illustrated in BERNARD RACKHAM, *Early Staffordshire Pottery*, plate 55. This mug is part of the Schreiber collection in the Victoria and Albert Museum. See BERNARD RACKHAM, *The Schreiber Collection* (catalog), vol. II, no. 82. This chevron border has been found on scratch blue wasters from Thomas Whieldon's pottery at Fenton Low (circa 1740–1759). See A. T. MORLEY HEWITT, "Early Whieldon of the Fenton Low Works," *Transactions of the English Ceramic Circle*, vol. 3, part 3, plate 61b.

<sup>95</sup> For scratch blue from other historic sites see BARKA, vol. II, fig. 138; WATKINS, p. 133, fig. 67. Artifact collections of Colonial Williamsburg, Fort Ligonier, and of the Fortress of Louisbourg.

<sup>96</sup> At Rosewell, where English white saltglaze wares were "... plentiful and generally of good quality including tankards, teapots, cups, saucers, bowls, and plates. Only one small fragment was found to be ornamented with applied enamels." NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957–1959," p. 169. A few sherds of enameled saltglaze were found at Portland Point, New Brunswick. See BARKA, vol. II, fig. 138.

<sup>91</sup> See TOWNER, *English Cream-Coloured Earthenware*, p. 17.

<sup>92</sup> NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957–1959," pp. 169–170, fig. 8.

<sup>93</sup> John Askin's Inventory of 1778, pp. 12 and 14.

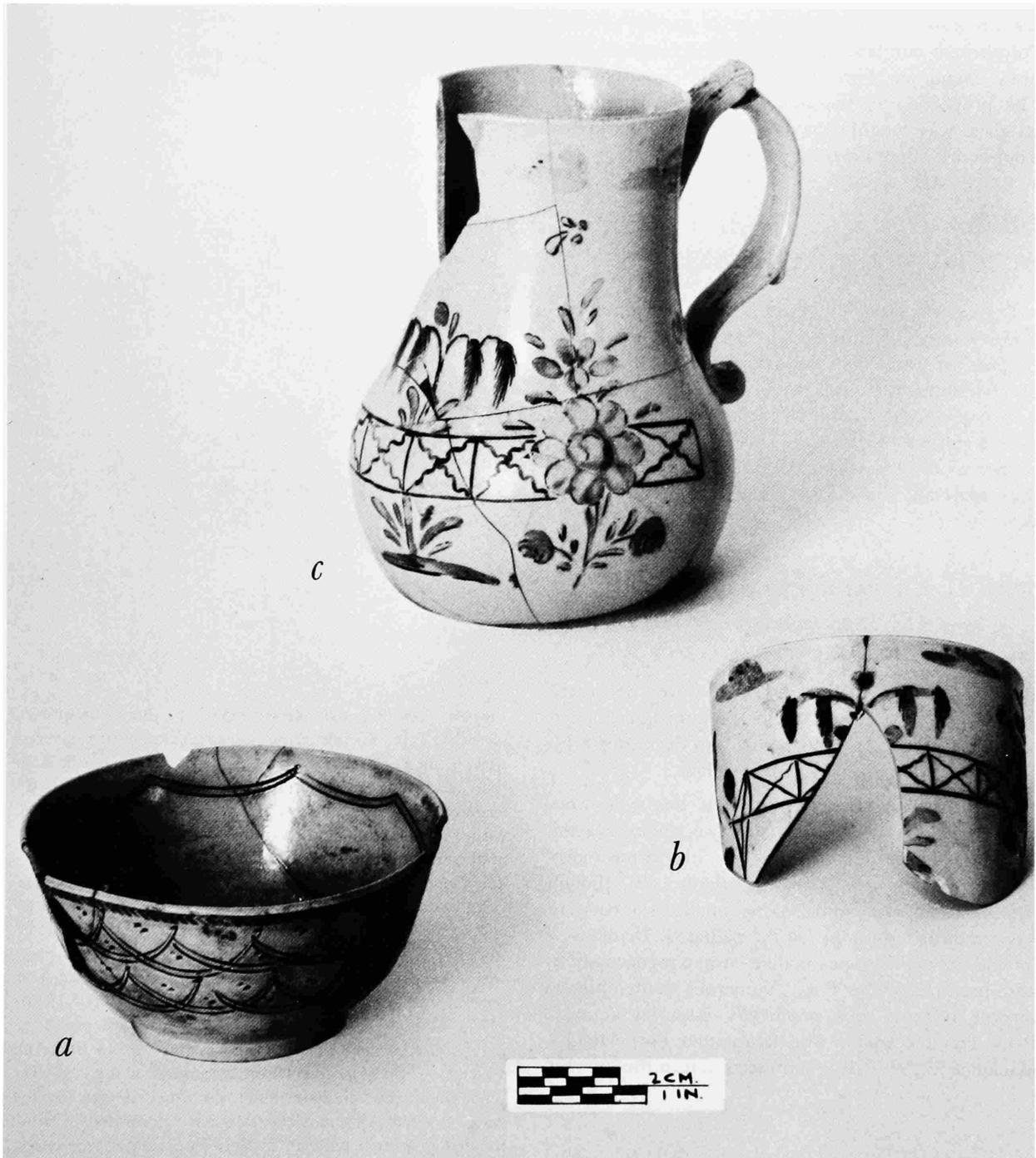


FIGURE 39.—ENGLISH WHITE SALTGLAZED STONEWARE; POLYCHROME AND SCRATCH BLUE DECORATION. *a*, Tea bowl. White body covered with a clear saltglaze; decorated with incised swag and chevron patterns colored with blue under the glaze. Circa 1760. *b*, Rim and side section of a cup from the same service as *c* below. *c*, Milk jug, approximately, 5½ inches high. White body covered with a clear saltglaze; decorated in enamel colors over the glaze with a garden scene in black, red, and blue. Circa 1750–1770.

are decorated with a Chinese-style garden scene.<sup>97</sup> Polychrome saltglaze sherds in limited numbers have been found at Fort Ligonier and Louisbourg.<sup>98</sup> The proportion to the more common, plain white saltglaze was roughly the same at Michilimackinac, Louisbourg, and Fort Ligonier.

## GROUP II— STONEWARE, MISCELLANEOUS

Considered here are a miscellany of eighteenth-century stonewares found at Fort Michilimackinac. Because of its special characteristics and numerical preponderance, English white saltglazed stoneware has been treated separately in the preceding section. The materials discussed in this section continue to suggest a complex pattern of ceramic use and importation, especially during the period of English occupation.

### TYPE A. RHENISH STONEWARE

*Date:* Eighteenth century.

*Origin:* Germany.

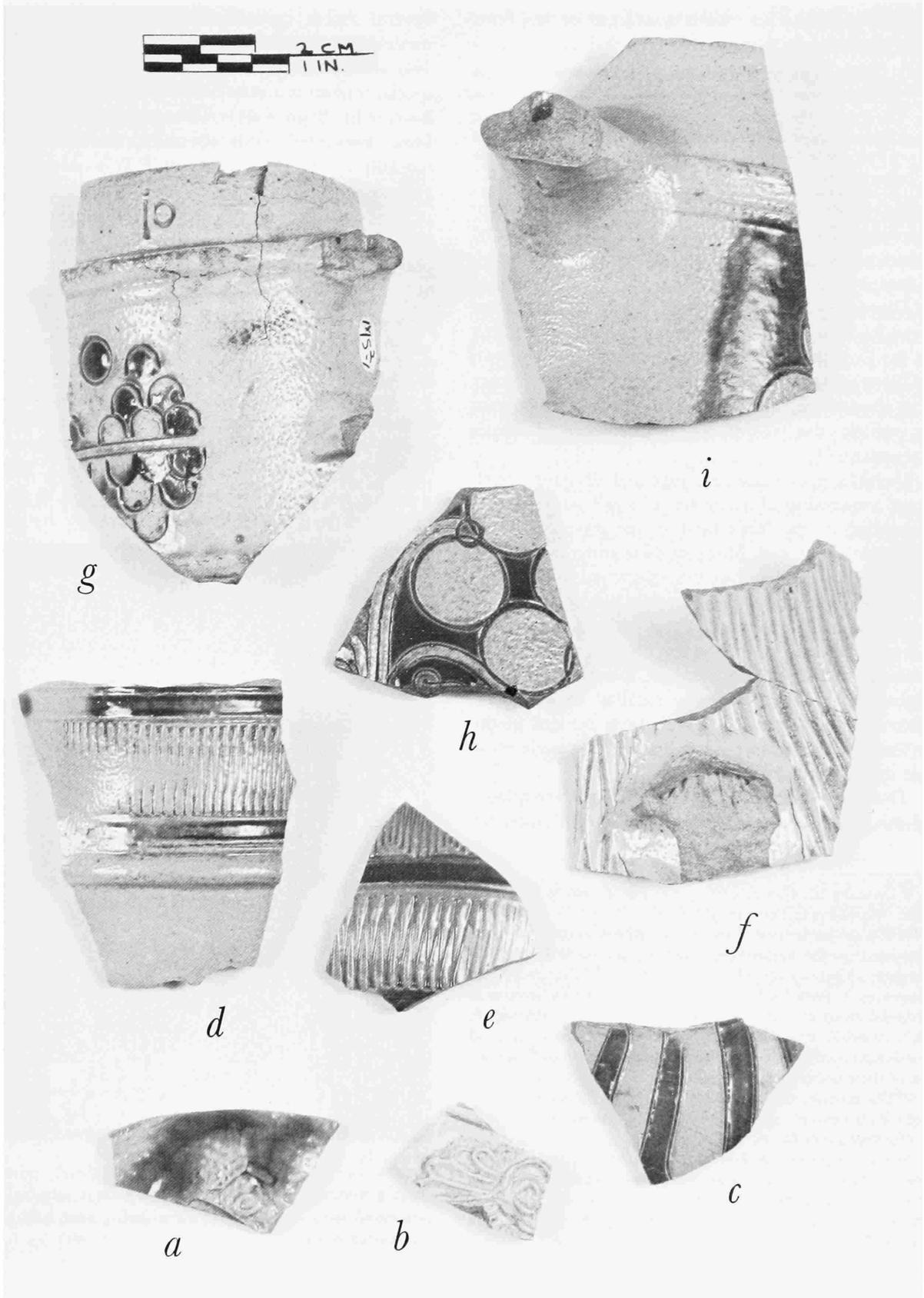
*Description:* Saltglazed, gray stoneware decorated with incised, molded, stamped, or applied designs. Some pieces also decorated with cobalt blue under the glaze.

**COMMENTS:** Seventy-three sherds of this type were found at Fort Michilimackinac during the excavation years 1959–1965. The only discernible forms represented were mugs or tankards (Figure 40), though the possibility that some of the smaller sherds were from chamber pots cannot be excluded. Drinking—for Indians and Europeans alike—was a preoccupation and pastime at the Fort. Numerous contemporary records refer to this practically essential activity. Peter Pond, a trader who frequented Fort Michilimackinac in the 1770s, reminisced that in the summer

FIGURE 40.—RHENISH STONEWARE. *a.* Body fragment, probably from a tankard or jug. Gray stoneware covered with a clear saltglaze; decorated with foliate patterns in relief and with cobalt blue. Circa 1725–1775. *b.* Body fragment, probably from a jug. Gray stoneware covered with a clear saltglaze; decorated with incised lines and applied flowers. Circa 1725–1775. *c.* Body fragment, probably from a tankard or jug. Gray stoneware covered with a clear saltglaze; decorated with incised lines and bands of cobalt blue. Westerwald type, circa 1725–1775. *d.* Body fragment from a tankard or jug. Gray stoneware covered with a clear saltglaze; decorated with an incised geometric pattern and horizontal bands of cobalt blue. Circa 1725–1775. *e.* Body fragment, probably from a tankard or a jug. Similar decorations as *d* above, but from a different artifact. *f.* Body fragment from a tankard or jug, showing place where one handle terminal was attached. Gray stoneware covered with a clear saltglaze; decorated with a molded, geometric pattern. Possibly Hoehr, late seventeenth or early eighteenth centuries. *g.* Rim section of a tankard. Gray stoneware covered with a clear saltglaze; decorated with an incised foliate pattern and cobalt blue. “io” incised on rim. Westerwald type, circa 1725–1775. *h.* Body fragment from a tankard or jug. Gray stoneware covered with a clear saltglaze; decorated with a stylized, incised foliate pattern and cobalt blue. Westerwald type, circa 1725–1775.

<sup>97</sup> The painting of the chinoiserie fence on these pieces is distinctive. For a similar treatment on English white saltglaze, see *English Pottery and Porcelain*, catalog of 1948 exhibition of the English Ceramic Circle, no. 94, plate 20. Also, *The Earle Collection* (catalog), no. 109, p. 47.

<sup>98</sup> Artifact collections: Fort Ligonier, and the Fortress of Louisbourg.



season, when the fur traders converged on the Fort, some attended to business—

While Others were amusing themselves in Good Company at Billiards, Drinking fresh Punch Wine & Every thing thay Please to Call for While the More Vulgar Ware fiting Each other. Feasting was Much attended to—Dancing at Nite with Respectable Parsons.<sup>99</sup>

Mugs made from tough German stoneware were particularly suitable for tavern use. Indeed, German stoneware mugs were common throughout the English colonies in the mid-eighteenth century.<sup>100</sup> The majority of German stoneware sherds at Fort Michilimackinac were found within areas containing materials relating to the English period of occupation. As large amounts of German stoneware were exported to both France and England in the eighteenth century, the context in which the sherds were discovered becomes important.<sup>101</sup>

Durable, gray stoneware jugs and drinking vessels were a speciality of a number of small potteries that flourished in the Rhineland in the seventeenth and eighteenth centuries. Many of these stoneware manufacturers were located in the Westerwald. The technique of combining various types of plastic decoration with some cobalt coloring (Blauwerk) was well established by the advent of the seventeenth century. The increase of the export trade in these wares in the eighteenth century evidently resulted in a general deterioration of quality that is quite evident in the stylized geometric and foliate designs on a majority of the sherds from the Fort.<sup>102</sup>

There were a few exceptions to the mediocre quality of the Rhenish stoneware at Fort Michilimackinac.

<sup>99</sup> CHARLES M. GATES, editor, *Five Fur Traders of the Northwest*: "Narrative of Peter Pond," p. 47.

<sup>100</sup> Many sherds from German stoneware mugs have been recovered in the archeological excavations at Williamsburg, Virginia. Three mugs of this type from Williamsburg are illustrated in IVOR NOËL HUME, "Rhenish Gray Stonewares in Colonial America," *Antiques*, vol. XCII, no. 3, p. 352, fig. 6. This excellent article discusses in some detail the origin and development of these wares, the German export trade, and the use of these wares in the colonies.

<sup>101</sup> For remarks on the export of German stoneware in the eighteenth century, see EMIL HANNOVER, *Pottery and Porcelain, A Handbook for Collectors*, vol. 1, p. 221.

<sup>102</sup> For similar sherds from three colonial Virginia sites, see NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957-1959," pp. 186-187, figs. 13 and 26; NOËL HUME, "Excavations at Tutter's Neck," p. 68, no. 23 and fig. 18(23); WATKINS, p. 133, fig. 66.

Several sherds contain no traces of blue and are meticulously decorated with applied flowers (Figure 40*b*) or molded geometric designs (Figure 40*f*).<sup>103</sup> Of special interest is a small rim sherd impressed with a fleur-de-lis (Figure 41). This decorative motif has been associated with German stoneware made specially for the French market.<sup>104</sup> It is not unreasonable to conclude that some German stoneware came to the Fort during the period of French control. Similar eighteenth-century Rhenish stoneware has been found at the French Fortress of Louisbourg, and at the English outpost of Fort Ligonier.<sup>105</sup>

<sup>103</sup> A seventeenth-century jug from Hoehr decorated with the same molded, geometric patterns as the sherd in figure 40*f* is illustrated in HANNOVER, vol. I, p. 221, fig. 235.

<sup>104</sup> Writing of the export of German stonewares of the Westerwald type, Hannover notes that as a decorative device, ". . . the lilies of France, . . . witness to the connection we have suggested so far as France is concerned." HANNOVER, vol. I, p. 221.

<sup>105</sup> Artifact collections: Fortress of Louisbourg, and Fort Ligonier.

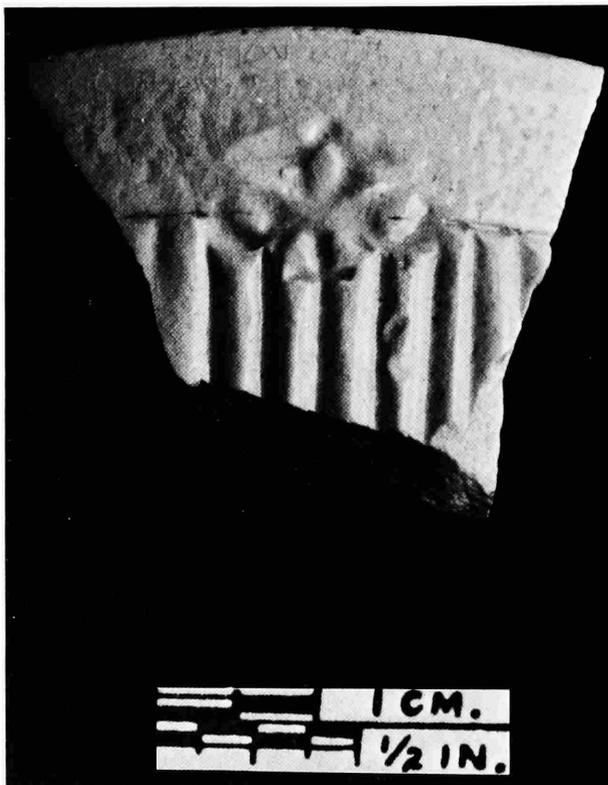


FIGURE 41.—RHENISH STONWARE. Rim sherd (enlarged) from a stoneware mug covered with a clear saltglaze and decorated with an impressed fleur-de-lis. First half of the eighteenth century.

## TYPE B. BROWN STONEWARE

*Date:* Eighteenth century.

*Origin:* Probably England.

*Description:* Heavy stoneware decorated in brown colors and saltglazed.

COMMENTS: This type includes a broad class of utilitarian stoneware that was in general use in Europe and North America during the eighteenth century. Heavy, strong, and particularly suitable for the storage of liquids, the ubiquitousness of this stoneware is attested to by its presence in most colonial sites.<sup>106</sup> High fired and varying in degree of vitrification and in granular quality, the bodies of these pieces range in color from dark buff to dark gray. Some sherds have distinctly pinkish interiors.<sup>107</sup> Exterior coloration is essentially monochromatic, ranging from dark brown to cream and grayish-brown tones. Usually the darker browns, sometimes mottled (so-called "Tiger Ware"), appear at the top of the pieces while the lower parts are decorated in lighter tones. All are saltglazed. The determination of the place of manufacture of this type of stoneware is sometimes difficult and uncertain. Much of it was produced in Germany. Similar wares were also made in England and in the colonies.<sup>108</sup> The opinions of several authorities who have had extensive experience in this specialized field lead to the tentative conclusion that the sherds from Fort

Michilimackinac are probably of English origin.<sup>109</sup> An important industry specializing in the manufacture of brown saltglazed stoneware of this type was centered in the London area, especially at Fulham and Lambeth.<sup>110</sup>

During the years 1959–1965, 205 sherds of this brown stoneware were recovered at the Fort. In all cases where the form of the original object could be ascertained, it was determined that the fragments were from storage vessels. The small number of sherds found might be misleading in any attempt to infer that stoneware of this type was rare at the Fort. Saltglazed stoneware storage vessels were so strong and durable that breakage probably was negligible.

A few sherds of a related stoneware are included in this group (Figure 42*a* and *b*). Readily distinguishable by the fine, deep brown glaze with a faintly metallic sheen, these sherds are smooth to the touch, rather finely grained, and comparatively light in weight. Such stoneware usually is attributed to Nottingham and dated in the period circa 1690–1765.<sup>111</sup> This Nottingham type represents a finer stoneware which was often used for drinking cups, jugs, and bottles. Most of the sherds from Fort Michilimackinac are fragments from narrow-necked bottles. Nottingham type sherds have also been recovered at many colonial sites and at Louisbourg.

## TYPE C. RED STONEWARE

*Date:* Mid-eighteenth century.

*Origin:* England.

*Description:* Unglazed, finely grained red-brown stoneware.

COMMENTS: A distinctive English stoneware seems to have been developed in the late seventeenth century by the brothers John and David Elers, Dutch potters, who immigrated to England and began manufacturing various kinds of stoneware at

<sup>106</sup> See NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957–1959," p. 208, nos. 1 and 4, fig. 28, nos. 1 and 4, and pp. 210, 211, nos. 1 and 2, fig. 29, nos. 1 and 2; NOËL HUME, "Excavations at Tutter's Neck," pp. 67–68, nos. 18–22, fig. 18, nos. 18–22; BARKA, vol. 1, p. 371 (found in association with seventeenth-century French occupation). Also, artifact collections: Fort Ligonier, and the Fortress of Louisbourg.

<sup>107</sup> Though the sherds from Fort Michilimackinac are probably all English, this characteristic resulting from firing conditions also has been noted by Noël Hume on some pieces tentatively attributed to Yorktown, Virginia. See NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957–1959," p. 208, no. 2.

<sup>108</sup> For a discussion of the close relationship between the English and German stonewares of this type, see W. B. HONEY, *English Pottery and Porcelain*, pp. 53–59. An important early reference to the German export trade in these wares and to English manufacturing of a similar stoneware is contained in ROBERT PLOT, *The Natural History of Oxford-shire* (London: 1677), p. 250. Colonial Virginia stoneware of this type is documented in an excellent, recent monograph, C. MALCOLM WATKINS and IVOR NOËL HUME, "The 'Poor Potter' of Yorktown," pp. 75–111.

<sup>109</sup> A number of sherds were examined by Ivor Noël Hume, director, Department of Archeology, Colonial Williamsburg, and Robert Charleston, keeper of ceramics, Victoria and Albert Museum, London, England.

<sup>110</sup> See JOHN DRINKWATER, "Some Notes on English Salt-Glaze Brown Stoneware," *Transactions of the English Ceramic Circle*, vol. 2, no. 6, pp. 31–32. Mr. Drinkwater suggests this stoneware should be called "Thames-side."

<sup>111</sup> See W. B. HONEY, *European Ceramic Art*, vol. I, p. 454; RACKHAM, *The Glaisher Collection of Pottery and Porcelain* (catalog), vol. II, plates 79 and 80. Similar stoneware probably was also made in Staffordshire.

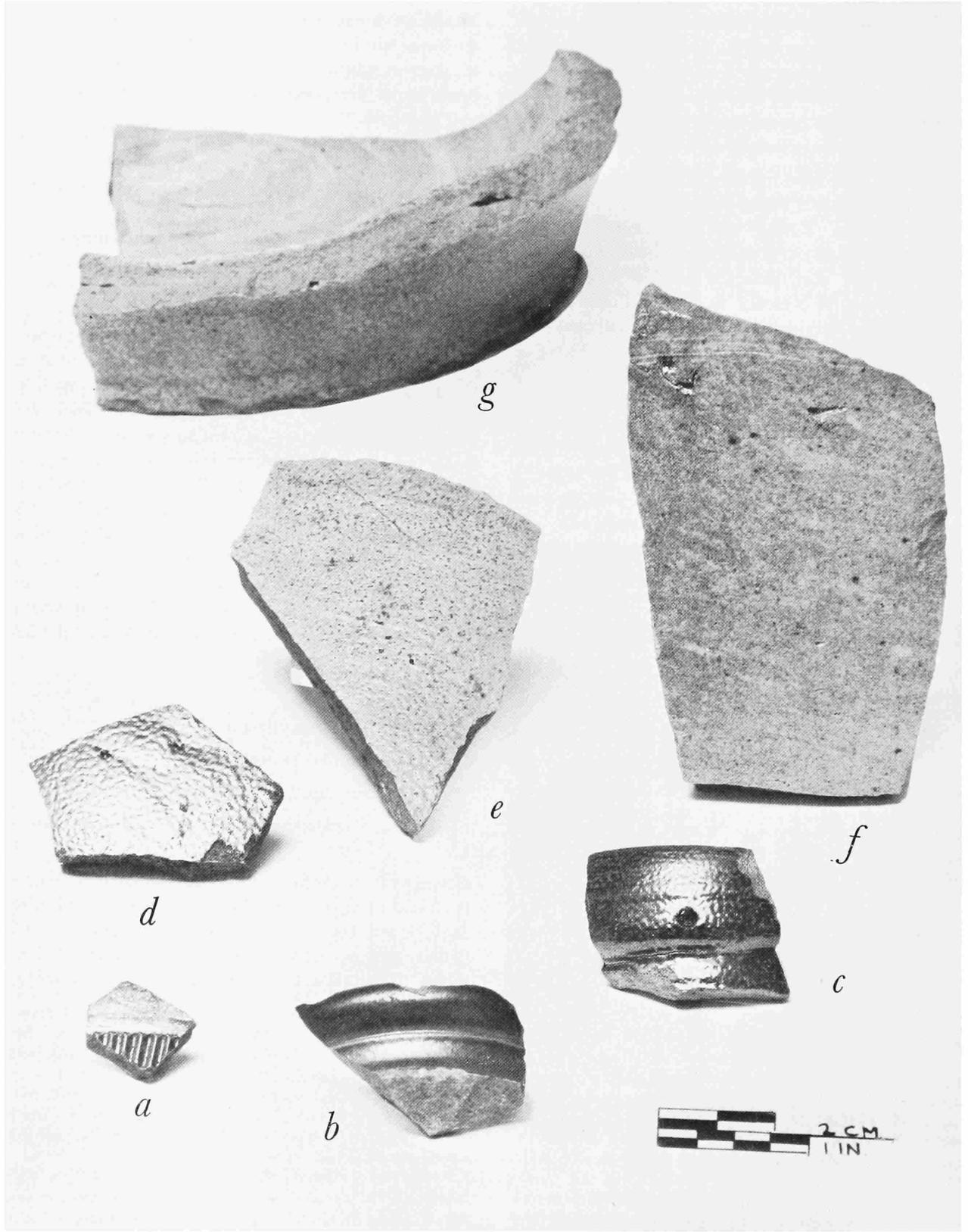




FIGURE 43.—ENGLISH RED STONEWARE TEAPOT. Unglazed, decorated in relief with chinoiseries, circa 1760. Excavated at Fort Michilimackinac in 1959.

FIGURE 42.—ENGLISH BROWN STONEWARE. *a*, Body sherd, probably from a jug. Gray stoneware body of extremely light weight covered with a brown slip and a clear saltglaze; decorated with a molded rib pattern. Nottingham type, circa 1725–1765. *b*, Rim sherd from a bottle-shaped storage vessel. Gray stoneware body of light weight covered with a brown slip and a clear saltglaze. Nottingham type, circa 1725–1765. *c*, Rim sherd from a bottle-shaped storage vessel. Gray body covered with a mottled brown slip and a clear saltglaze. This type is associated with the London area stoneware manufacturing centers of Fulham and Lambeth, circa 1725–1775. *d*, Body sherd from a storage vessel. Gray body covered with a mottled brown slip and a clear saltglaze. Interior surface unglazed. Fulham and Lambeth type, circa 1725–1775. *e*, Body sherd from the side of a large storage vessel,  $\frac{1}{2}$  inch thick in section. Gray body with an unglazed pinkish interior. Exterior covered with a gray slip and a clear saltglaze. Circa 1725–1775. *f*, Body sherd from the side of a large storage vessel,  $\frac{3}{8}$  inch thick in section. Buff-gray body with an unglazed interior. Exterior covered with a light tan slip and a clear saltglaze. Circa 1725–1775. *g*, Base section from a large storage vessel,  $\frac{7}{8}$  inch thick in section at widest part. Gray body with an unglazed, pink interior. Exterior covered with a gray and tan slip and a clear saltglaze. Circa 1725–1775.



FIGURE 44.—STAMPED MARK ON BOTTOM OF THE ENGLISH RED STONEWARE TEAPOT shown in Figure 43 (enlarged).

Fulham and later in Staffordshire. Fine-grained and unglazed, this redware often was given simple applied relief decorations. Stoneware of this type achieved at least limited acceptance, and its manufacture continued in Staffordshire throughout the eighteenth century and into the early nineteenth century. Elers' pieces are extremely rare, and the makers of the later redwares are for the most part unidentified.<sup>112</sup>

<sup>112</sup> It is incorrect to refer to mid-eighteenth century, English red stoneware as "Elers ware."

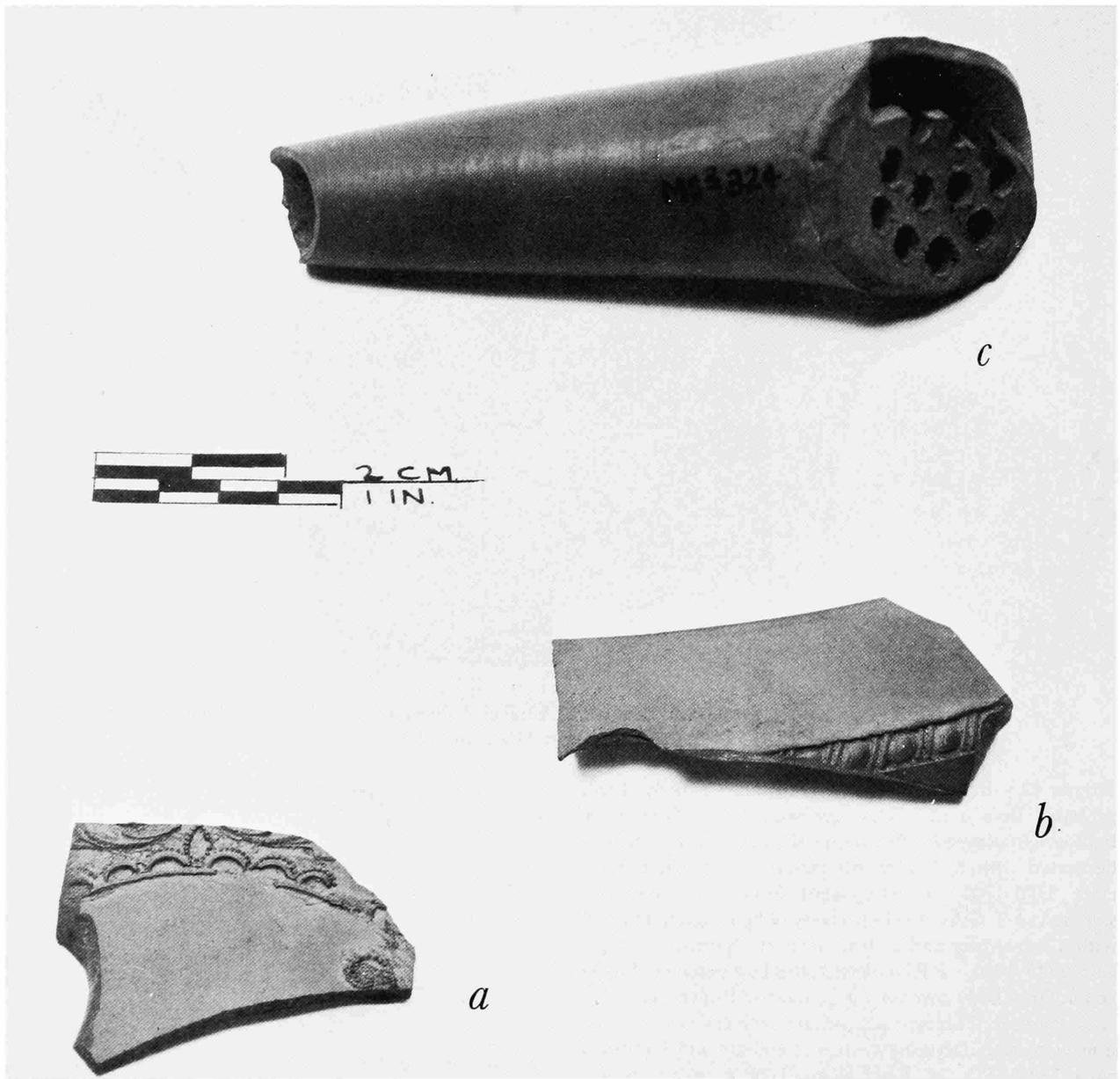


FIGURE 45.—ENGLISH RED STONEWARE. *a*, Body sherd from a teapot. Body of fine-grained red stoneware; unglazed. Relief decoration, evidently part of a cartouche. Circa 1760. *b*, Shoulder section from a teapot. Body of fine-grained red stoneware; unglazed. Molded border decoration of beads separated by double lines. Circa 1760. *c*, Teapot spout. Body of fine-grained red stoneware; unglazed, circa 1760.

Fourteen sherds of English, red stoneware were recovered in the years 1959–1965. Included in this material is a fine teapot, circa 1760–1770 (Figure 43), that must be considered one of the major ceramic finds at the Fort. Cylindrical in shape, the pot has a gadroon border at base and shoulder, a twisted handle, and straight spout. The relief decoration consists of elaborate and delicate chinoiseries framed

in rococo demicartouches. The phoenix-like bird at the upper left of one side and, indeed, the entire composition is markedly similar to the decoration on a red stoneware coffeepot in the Glaisher Collection in the Fitzwilliam Museum, Cambridge, England.<sup>113</sup> The applied chinoiserie is identical to that

<sup>113</sup> RACKHAM, *The Glaisher Collection of Pottery and Porcelain* (catalog), vol. I, no. 463; vol. II, plate 34A.

on a red stoneware teapot in the Hanley Museum. The relief decoration was stamped on the piece, probably from brass molds that were commonly used for this purpose. The base of the teapot from the Fort is impressed with a pseudo-Chinese seal mark (Figure 44). This same mark has been found on an English red stoneware teapot that also contains an inscription (possibly the potter's) "Joseph Edge 1760."<sup>114</sup> Other details of the handle and relief borders indicate the possibility that this piece was manufactured at Leeds.<sup>115</sup>

The significance of this find lies in the added dimension given to our knowledge of ceramics used at Fort Michilimackinac. In a larger sense, this comprises further evidence of the pervasion of some of the more refined aspects of English culture on the distant frontiers of North America. Comparatively small amounts of English mid-eighteenth century red stoneware have been recovered at Louisbourg.<sup>116</sup> (Figure 45.) Analogous to the experience at Michilimackinac, the outstanding find of this type to date at Louisbourg has been an exceptional red stoneware teapot molded in imitation of joined bamboo stalks.

## Class C—Porcelain

### GROUP I—

#### CHINESE EXPORT PORCELAIN

The preceding sections of this chapter have dealt with earthenware and stoneware. This section and the following one will consider porcelain. Porcelain, as a ceramic material, is high fired, vitrified, and more or less translucent.<sup>117</sup> It was first made in China, probably during the T'ang Dynasty (A.D. 618–907). The vast majority of oriental porcelains are so-called true or hard paste porcelains, essentially made of but two materials—kaolin, a fine clay basically composed of

feldspar, and petuntse, a fusible feldspathic rock—fired at about 1400° centigrade. The resulting porcelain, when glazed, varied in color from nearly pure white to shadings of gray-white, blue-white, and green-white. Chinese hard paste porcelain is very hard (about 9 Moh's scale) and when broken reveals a conchoidal fracture. Potting quality ranged, during the 18th century, from superb, thin "eggshell" to clumsy, thick, warped pieces. Some Chinese porcelain (due to defective firing) has a bubbly glaze frequently termed "orange peel." The foot rings of many pieces are unglazed, slightly rough, and often show a distinct orange color.

During the eighteenth century, the China trade supplied increasing amounts of porcelain to Western Europe. Prior to the American Revolution, Chinese porcelain came to the colonies and Canada via Europe. There was no established trade between North America and the Orient.<sup>118</sup> Chinese porcelain was imported quite early in the colonial period. Blue and white sherds of Chinese porcelain have been recovered in excavations at seventeenth-century Jamestown, Virginia.<sup>119</sup> By the mid-eighteenth century, Chinese porcelain comprised an important segment of the China trade and was generally of good quality, yet reasonably priced. Though the secret of manufacturing both hard paste porcelain and soft paste porcelain spread through Europe from about 1700–1775, the Chinese porcelains remained competitive.<sup>120</sup>

A total of 3,082 sherds of Chinese export porcelain were recovered at Fort Michilimackinac during the excavation years 1959–1965. The majority of these sherds were found in an English context, though at least some Chinese porcelain was at the Fort during the French period, possibly as early as 1740.<sup>121</sup> Sherds from tea services or part tea services constitute approximately 90 percent of the Chinese porcelain found. Several large punch bowls and a few dinner plates represent the other forms encountered.

<sup>114</sup> The identical mark and a redware teapot with the same relief decoration, but with a plain handle, have been reproduced in an article on English red stoneware. See ROBIN PRICE, "Some Groups of English Redware of the Mid-Eighteenth Century," *Transactions of the English Ceramic Circle*, vol. 4, part 5, plates 1 and 2.

<sup>115</sup> Imitation Chinese seal marks were used on red stoneware made at Leeds. For a rather similar Leeds mark, see TOWNER, *The Leeds Pottery*, p. 145, fig. 6(31) and text, p. 146.

<sup>116</sup> Artifact collections, Fortress of Louisbourg.

<sup>117</sup> For an excellent definition of porcelain in general terms, see HONEY, *European Ceramic Art*, vol. I, pp. 495–497.

<sup>118</sup> The China trade in porcelain is discussed in J. A. LLOYD HYDE, *Oriental Lowestoft*, pp. 4–27; and JOHN GOLDSMITH PHILLIPS, *China Trade Porcelain*, pp. 34–41. Types of Chinese porcelain made for specific European markets are illustrated in MICHEL BEURDELEY, *Porcelain of the East India Companies*. The China trade of the early republic is treated specifically in JEAN M. MUDGE, *Chinese Export Porcelain for the American Trade*.

<sup>119</sup> COTTER, p. 195, plate 83.

<sup>120</sup> For a documented study of English imports of Chinese porcelain in the eighteenth century, see: AUBREY J. TOPIN, "The China Trade and Some London Chinamen," *Transactions of the English Ceramic Circle*, vol. 1, no. 3, pp. 37–56.

<sup>121</sup> MAXWELL and BINFORD, 1961, p. 94.

## TYPE A. BLUE and WHITE

*Date:* Eighteenth century.

*Origin:* China.

*Description:* White, hard paste porcelain decorated in underglaze blue.

COMMENTS: The 2,784 blue and white Chinese porcelain sherds recovered are from pieces of generally good quality. The potting is thin and the painting in underglaze blue is delicate and precise. Decorative motifs include landscape scenes, geometric and foliate patterns, and representations of people, birds, deer, and dragons (Figures 46, 47, and 48). Border designs were conventional, and at least 15 different rim patterns were found (Figure 47). The less fine, stereotyped blue and white export wares of the late eighteenth and early nineteenth centuries of the so-called "Canton" and "Nanking" types were (as expected) unrepresented at the Fort.

The preponderance of blue and white over polychrome Chinese export porcelain at Michilimackinac reflects the experience at other eighteenth-century colonial sites.<sup>122</sup> The extensive range of blue and white decorative patterns found at the Fort adds to the evidence of continuous importation of small lots of ceramics for the private use of traders and army personnel.

We have some documentary confirmation of the presence of Chinese porcelain at the Fort. The trader John Askin at the time of his 1778 inventory owned "1 small China Tea Canister," "Sett of New China," "1 Sett of New China," "1 Box with 2 Setts of China," and "1 large China Bowl."<sup>123</sup> Though the Askin inventory lists a number of ceramic items, only a few of them are identified as "China." In the eighteenth century, Chinese porcelain was often called "India China." Askin's use of the term "China," when considered in connection with the forms he listed, rather strongly suggests that his "China" was in fact Chinese export porcelain. This same distinction was observed by Alexander and William Macomb, the Detroit merchants who sold general merchandise to John Askin. In 1776, the Macombs forwarded a variety

<sup>122</sup> See NOËL HUME, "Excavations at Rosewell in Gloucester County, Virginia, 1957-1959," pp. 179-194, figs. 11 and 12; WATKINS, figs. 76, 77. Also see BARKA, vol. I, p. 388; and artifact collections at Colonial Williamsburg, Fort Ligonier, and the Fortress of Louisbourg.

<sup>123</sup> John Askin's Inventory, pp. 10, 13. A base fragment from a "large China bowl," possibly John Askin's, is illustrated in Figure 50a.

FIGURE 46.—CHINESE EXPORT PORCELAIN. All examples are white, hard paste porcelain decorated in underglaze blue, circa 1725-1775. *a*, Body sherd, probably from the base section of a punch bowl; foliate decoration. *b*, Base section with foot ring (on reverse side) from a small bowl; decorated with a Chinese garden scene with figures. *c*, Rim sherd from a bowl; foliate decoration. *d*, Body sherd, probably from the center of a saucer; decorated with a Chinese figure and willow trees. *e*, Base section from a tea bowl decorated on interior with a bird and flowers. Exterior covered with an overall brown glaze (Type C). *f*, Shoulder and upper rim sherd from a teapot; decorated with a Chinese figure and a willow tree. Probably from the same service as *d* above. *g*, Rim sherd from a saucer; decorated with a dragon.

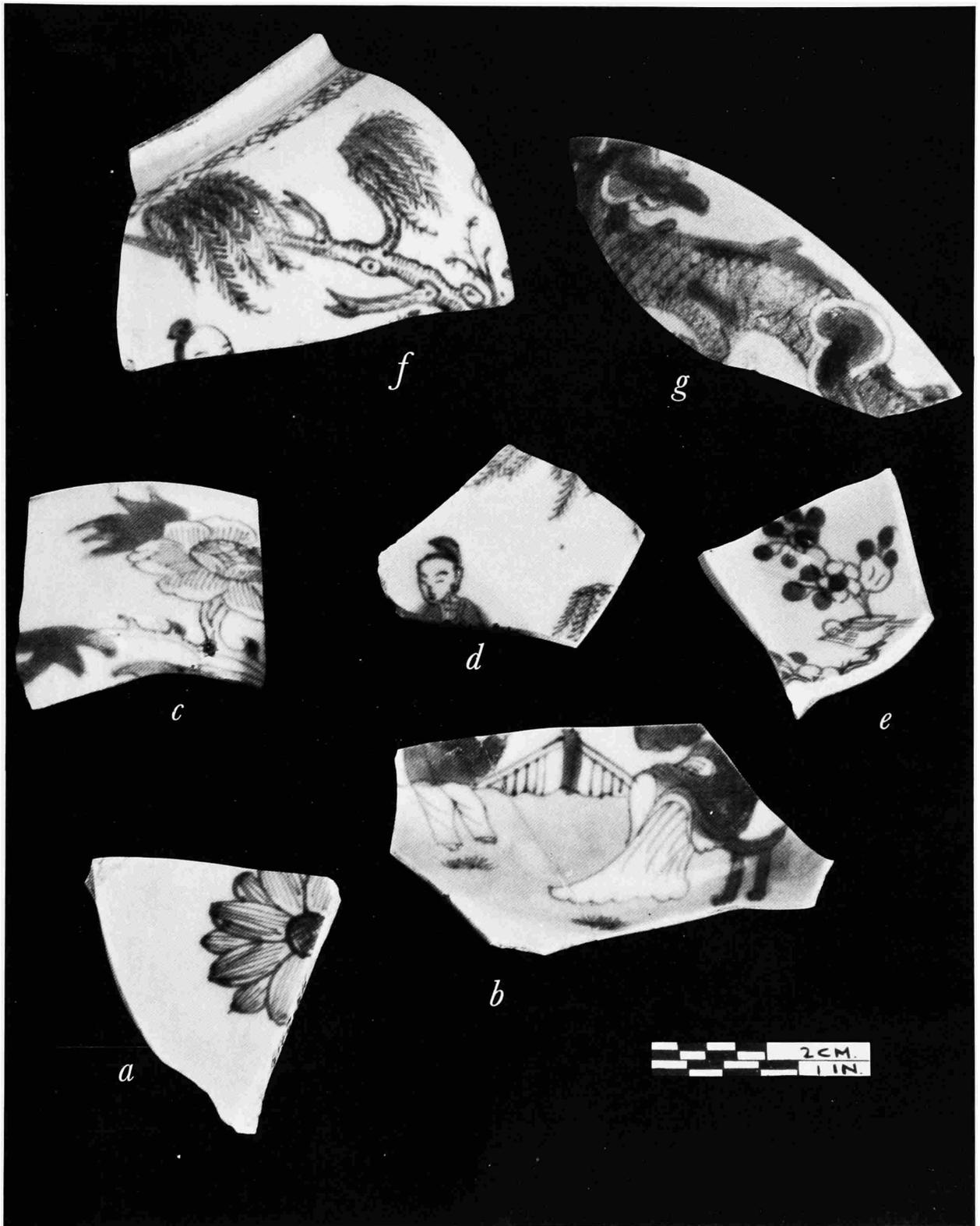




FIGURE 47.—CHINESE EXPORT PORCELAIN. All examples are white, hard paste porcelain decorated in underglaze blue. Chinese, circa 1725–1775. The rim sherds shown here are from saucers and tea bowls. They are illustrated to indicate the variety of stylized foliate and geometric border designs on the Chinese porcelain tea wares from Fort Michilimackinac.



FIGURE 48.—CHINESE EXPORT PORCELAIN. All examples are white, hard paste porcelain, circa 1725–1775. *a* and *b*, Tea bowl and saucer decorated with Chinese landscape scenes in underglaze blue. *c*, Saucer decorated with a Chinese landscape of a boat and figures in underglaze blue.

of ceramics to Askin and recorded each transaction in their account book. In three instances they specifically noted the sale of "1 Sett China Cups & Saucers," "3 China Muggs," and "1 Sett China Cups & Saucers."<sup>124</sup> Again, it seems probable that the Macomb's "China" was in fact Chinese export porcelain.

The only marked Chinese porcelain sherd found to date at Fort Michilimackinac is a segment from the bottom of a blue and white tea bowl. This mark, in underglaze blue, upon examination, proved to be a pseudo seal mark consisting of meaningless Chinese characters.<sup>125</sup> Blue and white Chinese export porcelains of the eighteenth century were occasionally marked in this manner, though most Chinese export porcelain was unmarked.

#### TYPE B. POLYCHROME

*Date:* Eighteenth century.

*Origin:* China.

*Description:* White to grayish-white, hard paste porcelain decorated with enamel colors over the glaze.

COMMENTS: While blue and white pieces were the bread and butter of the eighteenth-century trade in Chinese porcelains, a great amount of polychrome wares were also imported into Europe. As the overglaze decoration required special artists and additional firings, the polychrome porcelain cost more to produce. At mid-eighteenth century London auctions, blue and white dinner services from Canton sold at consistently low prices, while the less common polychrome Chinese porcelains were more expensive.<sup>126</sup> The comparative rarity of the polychrome porcelains is reflected by the finds at Fort Michilimackinac, where only 256 sherds of polychrome-decorated Chinese porcelain were recovered in the excavation years 1959–1965. The predomination of the blue and white type at the Fort duplicates the experience to date in other colonial sites.<sup>127</sup>

All the polychrome sherds recovered were from parts

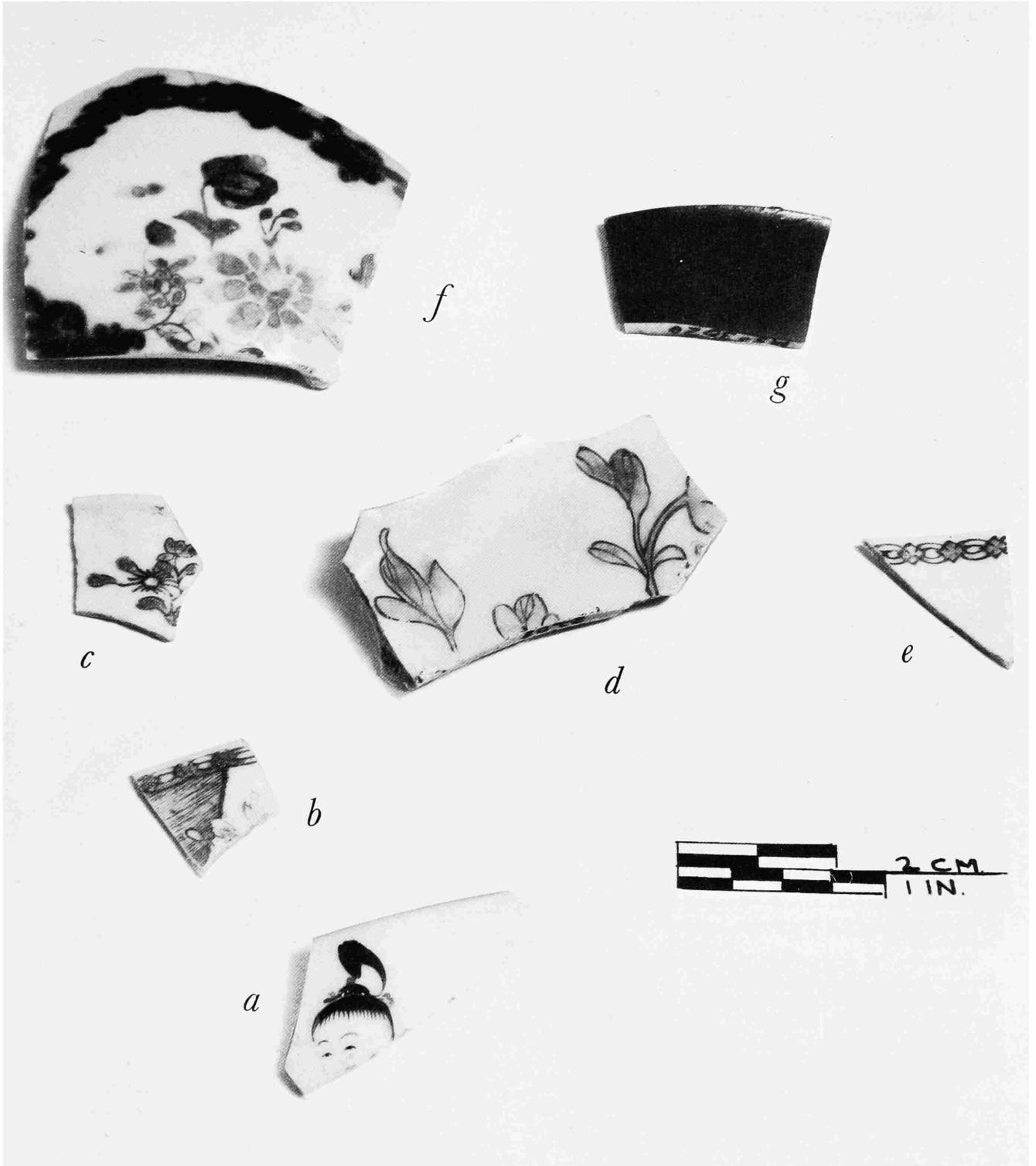
<sup>124</sup> Macomb Account Book, 1776–1778, pp. 49, 51.

<sup>125</sup> This mark was examined and interpreted by Dr. John A. Pope, director, Freer Gallery of Art, Washington, D.C.

<sup>126</sup> GERALD REITLINGER, *The Economics of Taste*, vol. II, pp. 202, 320. Also see PHILLIPS, *China Trade Porcelain*, pp. 38–41.

<sup>127</sup> See NOËL HUME, *Here Lies Virginia: An Archaeologist's View of Colonial Life and History*, p. 304; artifact collections: Colonial Williamsburg, Fort Ligonier, and the Fortress of Louisbourg.

FIGURE 49.—CHINESE EXPORT PORCELAIN. All examples are white, hard paste porcelain decorated with overglaze enamel colors. Chinese, circa 1725–1775. *a*, Rim sherd from a bowl. Thinly potted; decorated with the face of a Chinese figure in black, red, and gold. *b*, Rim sherd from a tea bowl. Very thinly potted; decorated with flowers, drapery, and a chain border in brown, green, red, and gold. *c*, Rim sherd from a tea bowl. Thinly potted; decorated with a foliate design in red, green, and yellow. *d*, Body sherd from the center of a saucer dish (foot ring is on reverse). Decorated with green leaves outlined in black. *e*, Rim sherd from a tea bowl. Very thinly potted, decorated with an interior diamond and chain border in red and gold. *f*, Rim sherd from a bowl; decorated with polychrome flowers within a vine-formed cartouche painted in blue and gold. *g*, Rim sherd from a tea bowl. The exterior is decorated with a glossy, brown ground (so-called "dead-leaf").



of tea services or punch bowls. There were at least four polychrome Chinese export porcelain whole or part tea services at Fort Michilimackinac. The borders on these services were simple geometric patterns painted in red or in red and gold (Figures 49 and 50). Landscapes, foliate designs, and Chinese figures supplied the decorative motifs for these services. The quality of the painted decoration was good but not exceptional for wares of this type.<sup>128</sup> Tea bowls, rather than tea cups (with handles) prevailed. Two part services are specially worthy of comment. The rim sherd illustrated in Figure 49*b* is from a tea bowl of great delicacy. The porcelain is of excellent quality and the potting is very thin—so-called “egg shell porcelain.” The pieces in this dainty set were decorated with polychrome flowers and a partial background of finely penciled, brown-red lines. The border design represents a chain in red and gold.<sup>129</sup> One tea bowl (Figure 50*b*) is painted with humorously conceived Chinese figures, delineated in the manner of European chinoiseries.<sup>130</sup>

A fragment of a small section of the base and foot rim of a punch bowl (Figure 50*a*) is of extreme interest. The foot rim of this bowl measures  $\frac{3}{16}$  of an inch in cross section at its edge, widening to  $\frac{1}{2}$  inch at the point where it joins the bottom of the bowl. The bottom of the bowl is  $\frac{3}{8}$  of an inch thick in cross section at its widest point. Using the  $2\frac{1}{4}$  inch arc of the foot ring of this sherd, it is possible to compute the outside diameter of the foot ring as approximately 6 inches. The measurement of a number of Chinese export porcelain punch bowls indicates that the diameter of these bowls is roughly twice the outside diameter of the foot rings. Thus, the bowl at Michilimackinac had a diameter of about 12 inches. The bowl itself is of grayish-white porcelain, decorated with geometric diaper patterns in black and red which surround cartouches that probably contained landscape scenes.<sup>131</sup>

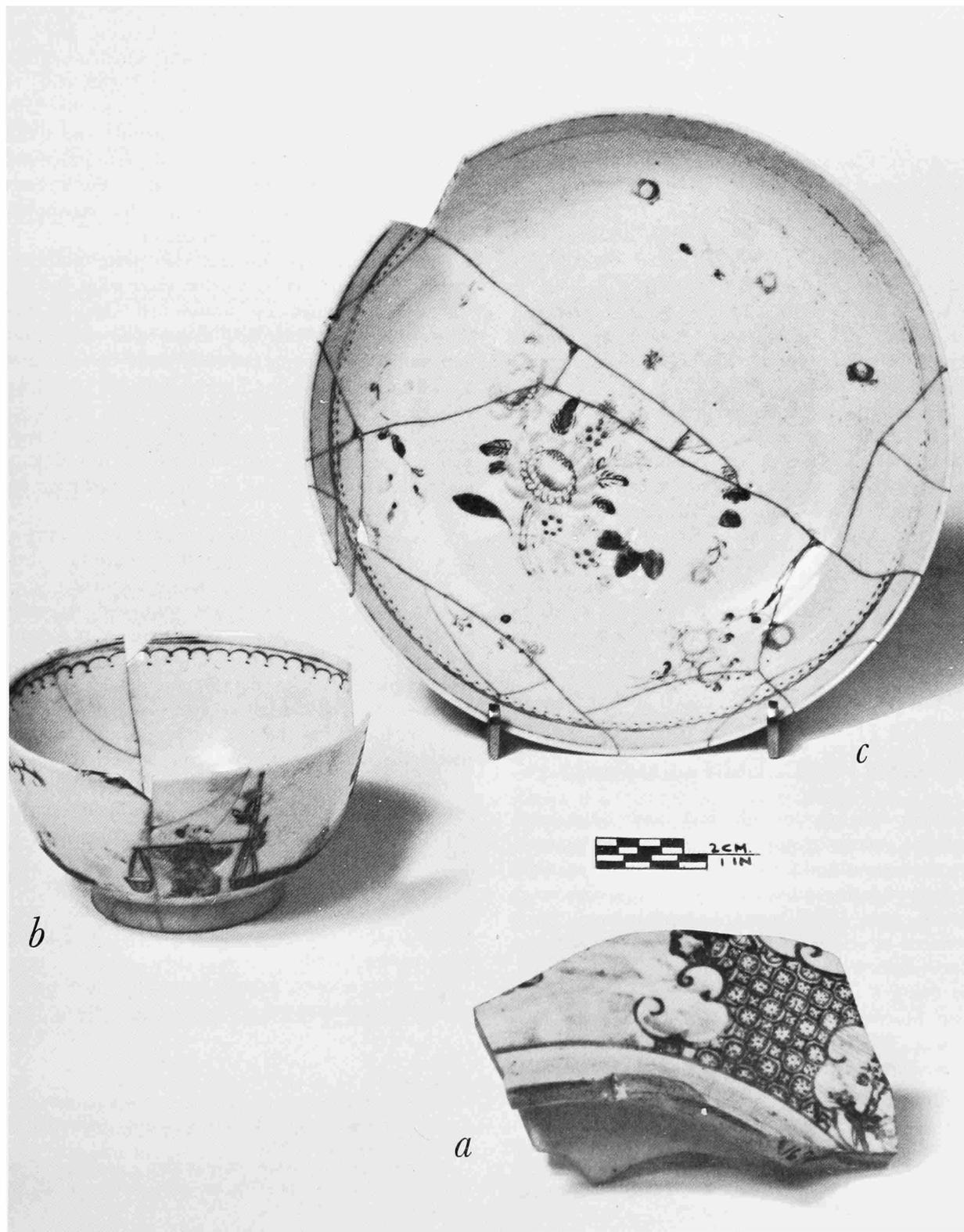
<sup>128</sup> The quality of body glaze and decoration in eighteenth century Chinese export porcelain varied considerably.

<sup>129</sup> For a similar rim design on Chinese export porcelain made for the English market, see PHILLIPS, plate 25.

<sup>130</sup> This tea bowl is also illustrated as part of the cover design. EUGENE T. PETERSON, *Gentlemen on the Frontier*.

<sup>131</sup> Diaper patterns of this type are often found on the famille rose porcelains of the K'ang Hsi (1662–1722), and Yung Cheng (1723–1735) periods. See G. C. WILLIAMSON, *The Book of Famille Rose*, plates XX and XXI. The quality of the porcelain, however, and the less precise decoration on the Michilimackinac sherd suggests a dating in the Ch'ien Lung period (1736–1795). This particular diaper pattern has been termed “Octogon and Square.” See EDWIN A. BARBER, *The Ceramic Collector's Glossary*, p. 53.

FIGURE 50.—CHINESE EXPORT PORCELAIN. All examples are white, hard paste porcelain decorated with overglaze enamel colors, circa 1725–1775. *a*, Base fragment from a large punch bowl,  $\frac{1}{2}$  inch in section at thickest part. Decorated with polychrome landscapes in reserves divided by a geometric diaper pattern painted in black and red. *b*, Tea bowl. Decorated with polychrome landscape scenes and Chinese figures. The inner border design is in red. *c*, Saucer dish. Decorated with polychrome flowers. The border design is in red.



## TYPE C. BROWN GLAZE

*Date:* Eighteenth century.

*Origin:* China.

*Description:* Hard paste porcelain with blue and white interior decoration and with an overall brown glazed exterior.

COMMENTS: One variety of Chinese export porcelain was decorated on the exterior with an overall brown glaze. This brown glaze is sometimes identified as 'dead leaf.'<sup>132</sup> The interior of this type was decorated in the usual manner of blue and white export porcelain with conventional flowers, birds, or landscapes. Forty-two sherds of brown glazed Chinese porcelain were found at the Fort, all from tea bowls and saucers (Figure 49g). This type also has been found in limited quantities at Louisbourg.<sup>133</sup>

In attempting to assess the probabilities of ownership of Chinese porcelain tea sets, it has been noted that several references in John Askin's inventory and the Macomb account book specify teapots or tea sets as "China." If the wealthier traders owned Chinese porcelain, there is also archeological evidence that some of the British military possessed tea services or part services of Chinese manufacture. The excavations of 1959 revealed Chinese export porcelain sherds on the site of the fireplace and storage closet floor of the soldiers' barracks in use during the 1770s.<sup>134</sup>

## GROUP II— ENGLISH PORCELAIN

During the seventeenth and early eighteenth centuries, increasing imports of Chinese and Japanese porcelain stimulated Europeans to numerous attempts at manufacturing porcelain. By the mid-eighteenth century true (hard paste) porcelain was being produced by several German factories. A second type of porcelain, termed artificial or soft paste porcelain, was being made in France and England. This soft paste porcelain differed from the hard paste in formula. The basic ingredients varied from country to country and from factory to factory. In essence, the hard paste, made primarily of kaolin and petuntse,

<sup>132</sup> See W. B. HONEY, *Guide to the Later Chinese Porcelains*, (catalog of the Victoria and Albert Museum), p. 19, plate 116.

<sup>133</sup> Artifact collections, Fortress of Louisbourg.

<sup>134</sup> MAXWELL and BINFORD, 1961, p. 94.

was expensive to produce and required a great deal of technical know-how, especially in the area of kiln construction. Most European hard paste porcelain factories operated under royal patronage and few made money. The soft paste variety, which contained additional ingredients such as ground glass (frit) or bone ash, proved (in many instances) commercially feasible. Soft paste porcelain is vitrified and translucent, but not as hard as the hard paste porcelain. Further, when examined under a glass, the fracture of soft paste shows as granular, rather than conchoidal as in the case of hard paste porcelain.

Eighteenth-century English soft paste porcelain varies considerably in body color, glaze color, weight, and color obtained by transmitted light.<sup>135</sup> The simple, blue and white English porcelain considered here can be, with some practice, easily distinguished from the blue and white Chinese hard paste porcelain. In addition to the considerations outlined above, the English porcelain's glaze frequently is marred with minute imperfections and with sparse, tiny dots of underglaze blue that have become detached from the decorated areas.

Only 61 sherds of English porcelain were found at Fort Michilimackinac during the excavation years 1959–1965. This small count is not surprising when factors of price and supply are considered. As noted in the last section, good quality Chinese porcelains flooded Europe during the eighteenth century. The cost in China was so low that the considerable shipping expenses involved did not prevent Chinese porcelains from competing in the marketplace with European porcelains. Fine porcelains from major European factories such as Meissen, Sèvres, and Chelsea were very expensive.<sup>136</sup> Though the decoration on the better European services was often superior, the Chinese porcelain body was generally as good as the porcelain produced on the Continent (hard or soft paste) and was, in many cases, markedly finer than the soft paste porcelains manufactured in England prior to about 1800.

For these reasons, English porcelain (and indeed all European porcelain) did not occupy a major place

<sup>135</sup> For short résumés of characteristics of eighteenth-century English porcelains, see J. L. DIXON, *English Porcelain of the Eighteenth Century*, pp. 46–67.

<sup>136</sup> For sale prices of dinner services from a number of European factories during the 1770s, see REITLINGER, vol. II, pp. 548–558.

in the material culture of the colonial period. On the other hand, these negative factors lend special interest to the limited amount of English porcelain found at Fort Michilimackinac. Within this context it is of considerable significance that all of the English porcelain sherds found at the Fort to date are blue and white. Generally, the English porcelain decorated in underglaze blue was the cheapest, as it required less labor for decoration and fewer firings.

#### TYPE A. LIVERPOOL

*Date:* About 1770.

*Origin:* Liverpool, England.

*Description:* White, soft paste porcelain decorated in underglaze blue.

COMMENTS: Liverpool was a major center of England's ceramic industry during the eighteenth century. Cream-colored earthenware, delft, and porcelain were all manufactured there by a number of small factories. Porcelain was first made in Liverpool on a commercial basis in about 1755, and before 1800 about ten different potteries had engaged to some extent in the manufacture of porcelain. Attribution to specific Liverpool factories is sometimes conjectural, but new scholarship is enabling Liverpool porcelain to be assigned to a known maker with some degree of assurance. Much Liverpool porcelain shares certain characteristics and for this reason can be given the generic name "Liverpool."

Forty-one sherds from Liverpool porcelain teacups and saucers have been recovered at Fort Michilimackinac (Fig. 51*a* and *f*). These sherds were all from the same tea service or part service of white porcelain decorated in relief with vertical ribs and foliate patterns. The exterior borders of these pieces were painted with a rather distinctive floral design in a dark, underglaze blue, and the interior borders were painted with a simple, geometric pattern in the same dark blue. This particular decoration is a well-known one that is represented in several important collections of Liverpool porcelain.<sup>137</sup> Pieces in this

pattern have been attributed to the Liverpool pottery of Richard Chaffers, but Chaffers died in 1765 and a pitcher in this same pattern is dated 1773.<sup>138</sup>

In considering the presence of Liverpool porcelain at Michilimackinac, the matter of geography cannot be ignored. Liverpool and Worcester porcelain comprise a rather large percentage of the English porcelain found in colonial sites. Worcester was close to Bristol which shared most of the American trade with Liverpool. The proximity of pottery and seaport probably explains the relatively substantial representation of Worcester and Liverpool porcelain in colonial sites. This pattern of blue and white porcelain in small amounts, and frequently of Worcester and Liverpool origin, can be discerned at Colonial Williamsburg, Fort Ligonier, and Louisbourg.<sup>139</sup>

#### TYPE B. WORCESTER PORCELAIN

*Date:* About 1765–1775.

*Origin:* Worcester, England.

*Description:* White, soft paste porcelain decorated in underglaze blue.

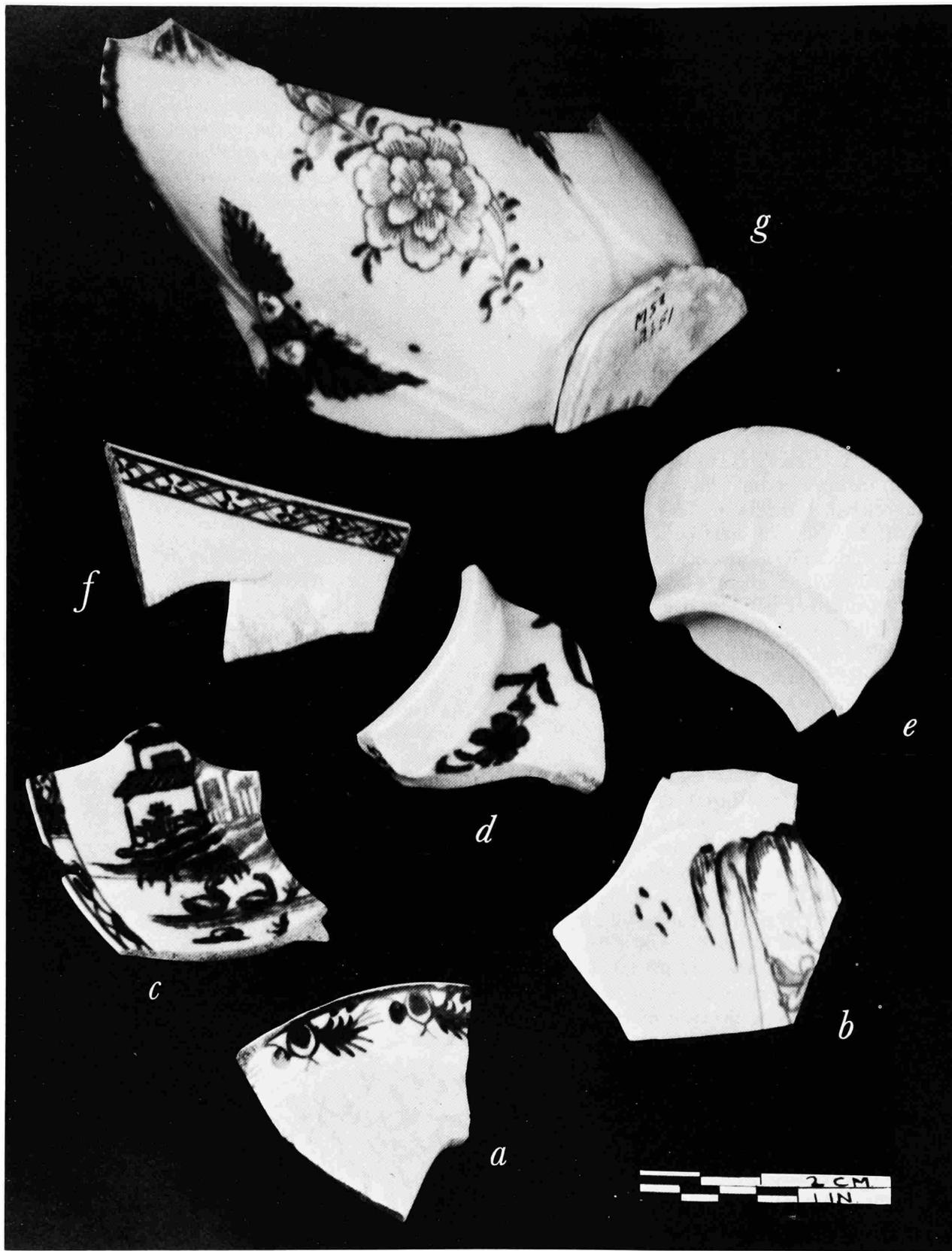
COMMENTS: Eleven sherds of blue and white Worcester porcelain were recovered. The small number of sherds of this type belies its importance as the fragments came from three separate pieces from three different tea services or part tea services. The shoulder and neck of a gently lobed teapot decorated with flowers in underglaze blue (Figure 51*d*) and a foot ring and base from a slop bowl (Figure 51*e*) represent the first of these Worcester designs. A body fragment of a teapot with flowers and scrolls in relief framing a chinoiserie design of a man fishing (Figure 51*b*) is from a second and entirely different Worcester pattern. The third Worcester design has no molded relief decoration. The saucer rim (Figure 51*c*) is painted with a chinoiserie landscape and bordered with an alternating design of flowers and geometric cross-hatching.<sup>140</sup>

<sup>138</sup> The Chaffers' attribution is in STANLEY W. FISHER, *English Blue and White Porcelain of the 18th Century*, pp. 148–149, plate 44B. The pitcher dated 1773 is illustrated in *The Connoisseur*, vol. LXXIX, p. 89.

<sup>139</sup> Artifact collections: Colonial Williamsburg, Fort Ligonier, and the Fortress of Louisbourg. Interestingly, to date only one piece of eighteenth-century French porcelain (a knife handle, probably St. Cloud) has been recovered at Louisbourg.

<sup>140</sup> This border is ascribed to Lowestoft by FISHER, pp. 178–179. An examination of this sherd disclosed a number of Worcester characteristics that justify its attribution to Worcester rather than Lowestoft.

<sup>137</sup> See KNOWLES BONEY, *Liverpool Porcelain*, p. 173, plate 12H; BERNARD RACKHAM and W. B. HONEY, "Liverpool Porcelain," *Transactions of the English Porcelain Circle*, no. II, plate VIII 1.



Worcester was one of the great English porcelain factories. The sherds from the Fort date from the first period of the factory's existence (1751–1783)—the so-called “Dr. Wall period.” Worcester did a large business in the cheaper blue and white tablewares which, to at least some extent, were exported to the colonies.<sup>141</sup> The pattern of material culture at Fort Michilimackinac was, in fact, similar to that in the seaboard colonies insofar as porcelain was concerned. In both areas Chinese porcelain predominated, while the English porcelain was mostly of the simple blue and white variety.

TYPE C. BLUE and WHITE (Miscellaneous)

*Date:* 1760–1780.

*Origin:* England.

*Description:* White, soft paste porcelain decorated in underglaze blue.

COMMENTS: Nine sherds of blue and white English porcelain from Fort Michilimackinac cannot be precisely identified as to place of manufacture. The most significant of these finds is a large fragment from a sauceboat (Figure 51g). The sauceboat has a flat base and molded decoration of broad leaves and clusters of pears. A stylized flower is painted below the pouring lip. The presence of this sherd from a sauceboat suggests that at least one English porcelain dinner service (or part service) was at the Fort, thereby enlarging the area of known usage for English porcelain at Michilimackinac. This important sherd is probably Liverpool, but possibly could be the product of several other factories which manufactured blue and white porcelain in England during the second half of the eighteenth century.<sup>142</sup>

FIGURE 51.—ENGLISH PORCELAIN. All examples are white, soft-paste porcelain, circa 1760–1780. *a*, Rim sherd from a cup or tea bowl (exterior view). White body covered with a gayish-white glaze. Decorated with a molded relief pattern of ribs and vines and with a foliate border in underglaze blue. Liverpool, circa 1770. *b*, Body sherd from a teapot. White body covered with a bluish-white glaze. Decorated with a molded relief pattern of scrolls and with a Chinese fisherman in underglaze blue. Worcester, circa 1765–1775. *c*, Rim sherd from a saucer. White body covered with a bluish-white glaze; decorated with a Chinese landscape scene in underglaze blue. Worcester, circa 1765–1775. *d*, Shoulder and neck fragment from a teapot. White body covered with a bluish-white glaze; decorated with flowers in underglaze blue. Worcester, circa 1765–1775. *e*, Base section, probably from a slop bowl. White body covered with a bluish-white glaze; decorated with a molded lobe pattern. Worcester, circa 1765–1775. *f*, Rim sherd from a tea bowl or cup (interior view). From same service as *a* above. *g*, Front and base section of a sauce boat. White body covered with a bluish-white glaze. Decorated with a molded relief pattern of broad leaves and pears and with flowers in underglaze blue. Probably Liverpool, about 1770.

<sup>141</sup> For Worcester from an eighteenth-century Virginia site, see NOËL HUME, “Excavations at Rosewell in Gloucester County, Virginia, 1957–1959,” pp. 181 and 183, fig. 11, no. 21. English porcelain from eighteenth-century Virginia sites is predominately blue and white. See NOËL HUME, *Here Lies Virginia: An Archaeologist's View of Colonial Life and History*, p. 304. Also see, SOUTH, “Russellborough, the Royal Governor's Mansion at Brunswick Town,” p. 117 for a description of a marked blue and white Worcester teacup recovered at Brunswick, North Carolina, from a feature dating 1766–1776.

<sup>142</sup> Similar, but not identical, sauceboats are in the collections of the Chicago Art Institute and the Henry Ford Museum. The Chicago piece is presently identified as possibly Lowestoft and the Detroit piece is presently attributed to Plymouth.

## Conclusion

Our examination of the ceramic artifacts recovered from 1959–1965 at Fort Michilimackinac has, we believe, produced useful information relevant to several areas of American studies.

*First:* On a taxonomic basis, the ceramics from the Fort have been classified and counted in order to present a reasonably clear description of this particular class of artifacts. When this information eventually is integrated with the work on other types of artifacts from the Fort, a more comprehensive understanding of this complex site will be possible.

*Second:* Our study has produced solid evidence that, during the Fort's English period, at least a few of the occupants (both traders and the military) were using ceramics that varied but little from those used in the more established areas of the colonies. Thus, for some, the social life as reflected by the material culture at Fort Michilimackinac was on a considerably higher level than the heretofore stereotyped view of existence at a wilderness outpost. Other types of artifacts from the Fort as well as the surviving documentary evidence confirm this interpretation.

*Third:* Particular finds described in this paper have contributed to a more complete understanding of the trade and distribution of Chinese and European

ceramics in eighteenth-century North America. Many problems remain unsolved, but new evidence has been accumulated. A case in point is the discovery at the Fort of the brown and white French (Rouen-type) ware (Class A, Group I, Type C).

*Fourth:* Negative results, though at times discouraging, serve to point out areas in particular need of further scholarship. This study has demonstrated to the authors that considerable uncertainty exists in the identification of coarse earthenwares of the eighteenth century. The field of eighteenth-century Canadian pottery has been virtually untouched.

*Fifth:* Historical archeology is a comparatively new discipline. It is hoped that this in-depth study will serve as an indication of possible ways to approach some of the problems represented by a major eighteenth-century historical site. Perhaps, as historical archeology achieves a more applicable methodology, this attempt will appear, in retrospect, to be a clumsy one. Regardless, a great deal of pertinent information has been compiled here. And this data, when combined with the work of other historical archeologists and cultural historians, should serve to add to an understanding of the material culture of colonial North America.

## Chapter III

# Interpretation of Historical Site Ceramics

THE PRECEDING DESCRIPTION of ceramic artifacts from Fort Michilimackinac has illustrated several interpretative problems to which ceramics data are applicable. Datable ceramic artifacts may be used by the archeologist to define the temporal dimension and chronology of the site under investigation. The association of datable ceramic artifacts with structures and structural components may assist in the dating of these units and the identification of structural phases and changing construction techniques through time. The definition and context of different ceramic functional categories (i.e., general utility earthenware as distinct from fine porcelain tea services) may suggest the occupancy of different structures or structural components by persons performing certain tasks or engaging in different social activities. We also have seen that the presence and

context of ceramics on a site may serve as a measure of certain historical activities which affected its development; for example, European trade logistics, economics, and fur-trade policies.

The purpose of this chapter is to elaborate some of these problem applications with data from Fort Michilimackinac and other historical sites. The discussion is divided into two sections, each of which is devoted to a class of interpretative problem to which ceramics data may be applied. The first such class is temporal and chronological and the second is socio-economic. Here and in the preceding chapter we have attempted to demonstrate, to a limited extent, these interpretative applications. Of perhaps more importance, they are presented for consideration in future research.

## Temporal and Chronological Interpretations

The terms temporal and chronological are often used interchangeably to express the same class of phenomenon. For the purposes of this discussion we distinguish the two as follows. Temporal denotes time *in general*. We may speak of the temporal dimension of a site as the segment of time during which it was occupied. Chronological refers to a *time scale*, or to the ordering of specific events, sequences, or phases of events within a temporal dimension. A site such as Fort Michilimackinac is defined by a temporal dimension of approximately 66 years (circa 1715 to 1781) consisting of chronologically ordered events (i.e., phases of construction or the French-British occupation sequence.)

The methods and implications of placing a historical site in its temporal dimension with the use of datable ceramic artifacts are well known and

straightforward. The accuracy and importance of temporal interpretations based on ceramic evidence may vary with the complexity of the site, the presence of other datable historic artifacts, and the availability of documentary evidence pertaining to the site. For example, if a site can be closely dated by historical means, the dating derived from ceramics analysis assumes less importance, but does serve as a means of corroborating the validity of historical sources. Unfortunately, in many instances we see the elaborate technical description of ceramic artifacts but an inadequate concern with dating the ceramics other than for the purpose of assigning the site a temporal dimension. Even worse, the ceramics often are overlooked or described in such general terms as to be meaningless.

Examples of temporal interpretations based on ceramic evidence occur frequently in the literature. Patricia Gall, in reporting the Fort Pic Site, Ontario, used ceramic evidence to support conclusions drawn largely from structural, historical, and other artifactual evidence.<sup>1</sup> No attempt was made to distinguish the ceramic artifacts in terms of the known chronology of the site (1789–1798, 1799–1821, 1821–1865, and post 1865). H. G. Omwake and T. D. Stewart in reporting the Townsend Site near Lewes, Delaware, concluded on the basis of ceramic, kaolin pipe, and brick artifacts that the nonaboriginal component of the site dates to the latter half of the seventeenth century.<sup>2</sup> Charles H. Fairbanks in describing the European ceramics from New Echota, Georgia, was able to confirm the very tight historical dating of this site (1825–1838) with ceramic evidence.<sup>3</sup> An excellent, detailed description of ceramic artifacts from the Anderson's Mill Site, Texas, has been reported by E. Paul Durrenberger, although a chronological evaluation of the site (circa 1850–1914) was not attempted on the basis of ceramic evidence.<sup>4</sup>

The chronological interpretation of historical site ceramics is less frequently encountered in the literature. Several notable reports have appeared, however, which exemplify the type of useful information which can be derived from a detailed chronological analysis of ceramic artifacts. The Custer Road Dump Site, Mackinac Island, Michigan, reported by David S. Brose, presents the results of an extensive historical evaluation of the ceramics as a means of interpreting the chronology of the site.<sup>5</sup> Stanley A. South's interpretations of structure chronology from the site of Brunswick Town, North Carolina, on the basis of the comparative frequency of dated ceramic types, provides an excellent example of chronological

analysis.<sup>6</sup> Likewise, Bert Salwen, in interpreting the chronology of the Fort Shantok Site, Connecticut, in part on the basis of ceramic evidence, was able to adequately identify the sequent periods of site occupation from 1000 B.C. to A.D. 1750.<sup>7</sup>

There are, of course, logical reasons in some cases why chronological interpretations based on ceramic evidence have not been attempted. Often, ceramic dating is not precise enough to reflect chronological events in a short-term occupation site. It would be difficult, for example, to segment a temporal dimension of say 10 or 15 years on the basis of different ceramic types. This does not mean, however, that the dating of ceramics from such a short-term occupation site should be overlooked altogether. Ceramics which are derived from poor or questionable contexts or structural associations are of little use in interpreting contextual chronology. Such factors as culture lag or the discrepancy between manufacture and importation date often may invalidate the use of ceramic artifacts as chronological indicators, if other artifacts are present which can be more readily dated.

Conversely, assuming good contextual and chronological control of ceramic artifacts, there are several interpretative problems which may be evaluated from the standpoint of ceramics. These are discussed below under the headings of stratigraphic, structural, and artifact assemblages.

### *Stratigraphic Context*

The stratigraphic context of dated ceramic types may allow the investigator to assign a time sequence to individual stratum and to series of related strata. The association of these strata with certain occupational features, structures, or structural episodes would then facilitate the chronological interpretation of these units or periods. One of the major soil strata at Fort Michilimackinac, a brown, highly organic refuse deposit, contains white saltglazed stoneware, English cream-colored earthenware, stoneware, tinglazed earthenware, and Chinese export porcelain in quantity. The presence of cream-colored earthenware, however, places a lower limit on the date which may be assigned this stratum (post about 1765). The horizontal limits of this stratum conform to the bounds

<sup>1</sup> PATRICIA L. GALL, "The Excavation of Fort Pic, Ontario," *Ontario Archaeology*, publication no. 10.

<sup>2</sup> H. GEIGER OMWAKE and T. D. STEWART, editors, "The Townsend Site Near Lewes, Delaware." *The Archeologist*, vol. 15, no. 1.

<sup>3</sup> CHARLES H. FAIRBANKS "European Ceramics from the Cherokee Capitol of New Echota," pp. 10–16. Papers presented at the First and Second Conferences on Historic Site Archaeology, a special issue of the *Southeastern Archaeological Conference Newsletter*, edited by Stanley A. South.

<sup>4</sup> E. PAUL DURRENBERGER, "Anderson's Mill (41TV130): A Historic Site in Travis County, Texas," *Bulletin of the Texas Archeological Society*, vol. 36, pp. 1–69.

<sup>5</sup> DAVID S. BROSE, "The Custer Road Dump Site: An Exercise in Victorian Archaeology," *The Michigan Archaeologist*, vol. 13, no. 2.

<sup>6</sup> STANLEY A. SOUTH, "The Ceramic Types at Brunswick Town, North Carolina," pp. 1–5.

<sup>7</sup> BERT SALWEN, "European Trade Goods and the Chronology of the Fort Shantok Site," *Bulletin of the Archeological Society of Connecticut*, no. 34, pp. 5–39.

of structures known to have existed after 1769. The vertical position of the stratum suggests that it was deposited very late during the period of site occupation, perhaps 1775–1780. In this case we have dated a stratum on the basis of both ceramic composition and spatial distribution. The association of this stratum with post-1769 structures is supported on the basis of concurrent ceramics dates assigned independently. Other less easily interpretable strata at the site have been assigned provisional dates on the basis of ceramics evidence alone.

### *Structural Elements*

Often the dates and length of occupation of buildings can be determined by ceramic analyses. For example, a structure at Fort Michilimackinac yielding ceramic associations consisting of large quantities of English white saltglazed stoneware and a small quantity of English cream-colored earthenware would be placed chronologically between 1761 and about 1770. Features such as fireplaces, basements, and refuse pits could then be associated with the unit on the basis of similarities in the relative proportions of the same ceramic types, or by means of direct comparison of dates. Phases of stockade expansion at Fort Michilimackinac can be roughly dated on the basis of distributional evidence of ceramics. Since the Fort grew in size with each stockade expansion, we would expect earlier dated ceramic types to exhibit the most restricted range of spatial distribution. Ceramics dating after 1765 would be distributed laterally to the maximum size of the Fort enclosure. Thus, the length of time between any two expansion phases could be

defined as the time difference between the ceramics characteristic of two “expansion assemblages.”

### *Artifact Assemblages*

Ceramic dating at Fort Michilimackinac has permitted the chronological arrangement of poorly dated artifact types and assemblages on the basis of ceramic associations. Ceramics are often a means of determining the chronology of artifact types which cannot be directly dated by comparative or historical means. To carry this point to the next logical implication, it may also prove feasible to chronologically seriate artifact assemblages by comparing the frequencies of datable ceramic types which the assemblages share in common. Datable ceramic types from Fort Michilimackinac have provided a means of evaluating the significance of kaolin pipe stem bore diameter date determination. For example, a sample of 60 kaolin pipe stem fragments from the refuse deposit described above has yielded a date of 1754, using Binford’s regression equation. On the basis of ceramic and structural evidence, however, we have determined that this stratum was deposited after 1769. We conclude that the pipe stem sample date does not adequately reflect the time of deposition, but does give an indication of the chronological range of artifacts which one might expect to find in this stratum (i.e., about 1740–1775). The stratum apparently represents an accumulation of trash over a 25- to 35-year period which was deposited rapidly sometime between 1775 and 1781. Pipe stem dates, therefore, must be evaluated relative to other datable artifacts, in this case ceramics, if the date defined is to be understood.

## Socioeconomic Interpretations

Under the general heading of socioeconomic interpretations, the following four subjects are discussed: trade and transportation, sociocultural change, status and social level, and functional interpretations. Distinctions are based on the nature of the socioeconomic interpretations which may be derived from the analysis of historical site ceramic data. Under trade and transportation are included such topics as supply and distribution sources, trade routes and networks, and the economics and media of ceramics transportation. Sociocultural change includes the subjects of acculturation and changing

material values. Status and social level include both synchronic and diachronic dimensions of the differential use of ceramic types. Functional interpretations include the study of ceramic forms as they reflect different social or economic activities.

### *Trade and Transportation*

That several types of trade and transportation phenomena are reflected in the ceramics from Fort Michilimackinac has been demonstrated in the preceding chapter. For example, in discussing the

ceramic type described as brown and white tinglazed earthenware (Rouen type, Class A, Group I, Type C, pp. 38–40), we concluded that the presence of this French ceramic type at the Fort indicated that some established French trade routes were continued via Canada during the period of British occupation, or, after 1761. As the Rouen type is of French origin, we reasoned that its most logical North American source was French rather than British. Since some of this type was found in a context post-dating 1761, it most likely passed from France to England and then to Fort Michilimackinac via Montreal, in accordance with British navigation acts which permitted the importation of European manufactured goods into the colonies only by way of England. This is further supported by noting the absence of this type at Fort Ligonier, Pennsylvania, an English outpost dating between 1758 and 1766. It appears that the French trade network which had existed prior to 1761 was maintained, at least to some extent, after that date and served to supply French goods to the occupants of Fort Michilimackinac.

Similar types of conclusions have been drawn from the artifactual remains at other historical sites in North America. It may often be possible to identify the source and route or direction from which any given type of artifact was introduced to a site, in the absence of documentary evidence. Viewed in this light, ceramics or other artifacts may be a valuable means of determining the type of external influences to which a site or an area was exposed. For example, Gregory Perino, in describing French clasp knives from Kaskaskia, Illinois, notes that they were introduced from the north, rather than through New Orleans.<sup>8</sup> This conclusion is based on the knife makers' marks, which are identical to those reported from Fort Michilimackinac. In other cases where documentary evidence is available but defines alternate or conflicting sources, artifactual evidence may be used to identify the most logical source.

The distribution of eighteenth-century ceramics on North American sites is a good indicator of the complex and extensive trade networks which existed between and within different countries at that time. The extent of the Chinese export porcelain trade system is partially reflected in the presence of this type of ceram-

ics on many North American historic sites.<sup>9</sup> Manufacture and export patterns of a worldwide scope are reflected in the presence at Fort Michilimackinac of ceramics from China, France, England, Germany, probably French Canada, and possibly the colonies. As we have seen, particularly in the case of English porcelain sherds from the site, it is sometimes possible to identify the most probable manufacturer of a given ceramic type. Such information in turn may relate to broader conclusions of some importance. For example, the fact that much of the English porcelain found at the Fort originated in the west of England near the major ports of Bristol and Liverpool stands as supportive and additional evidence of the nature of England's complex trade with its North American colonies. Further, the precise scope of this trade has been more clearly defined. The evidence of place of manufacture may in turn provide source material as a basis for more extensive qualitative-comparative research on the part of the ceramics analyst. Evidence derived from the above kinds of study—some of which is often not recorded in documentary sources—can make a valuable contribution to the student of ceramic history and technology.

Several recent authors have considered historical sites ceramics from the standpoint of economics and transportation media. Interpretations in these areas are based on the supposition that the quality and variety of ceramics found on a site are a measure of the logistics required to efficiently and economically transport a variety of ceramic types, and of the relative economic level of the population receiving the ceramics.

In reporting the ceramics from the Johnny Ward's Ranch site in south-central Arizona, Bernard L. Fontana and J. Cameron Greenleaf noted the relative value and durability of "Ironstone China."

Considering its remarkable qualities it is not surprising that ironstone was also used by the United States Army and carried throughout the West as military posts were established. Nor is it surprising that 299 of the 369 Ward's Ranch sherds were ironstone. Here was a ware that met the requirements of the western frontier: it was cheap, it could withstand the rigor of overland hauling by wagon or train; it was reasonably handsome and "respectable."<sup>10</sup>

<sup>9</sup> See for example KAMER AGA-OGLU, "Late Ming and Early Ch'ing Porcelain Fragments from Archaeological Sites in Florida," *The Florida Anthropologist*, vol. 8, no. 4, pp. 99–110. Also see Appendix D of this publication.

<sup>10</sup> BERNARD L. FONTANA and J. CAMERON GREENLEAF, "Johnny Ward's Ranch: A Study in Historic Archaeology," *The Kiva*, vol. 28, no. 1, p. 92.

<sup>8</sup> GREGORY PERINO, "The Kaskaskia Indian Village Site, 1700–1832," *The Conference on Historical Site Archaeology Papers 1965–1966*, vol. 1, pp. 127–131.

David S. Brose, in reporting the nineteenth-century Custer Road Dump Site ceramics, considers the types described to reflect the impact of improved intra-regional communications in the upper Great Lakes area during the last quarter of the nineteenth century

. the civilian ceramics at Mackinac are drawn from greater and greater distances and directions through the last quarter of the 19th century. This correlates well with the increased variety of types present at each succeeding level of the site. In general most of these ceramics are drawn from areas in the Great Lakes-Ohio River Drainage or the Atlantic Coast. I would consider this period when railroad transportation achieved a position equal in importance with waterborne transportation (Langer 1948; Bald 1961) as marking the end of more regional historic archaeological complexes. The rather similar assemblages of the late nineteenth century sites, as seen in variations of decorated earthenwares, indicate that early water transportation alone was less effective in the distribution of newer styles, and in creating homogeneity, than the railroad-water transportation combination.<sup>11</sup>

Similar factors are reflected in the ceramics data from Fort Michilimackinac. A review of the ceramics described indicates that there were two distinct categories of ceramics in use at the post: forms which served everyday utilitarian purposes and forms of higher quality and greater expense which were used in more sophisticated social contexts. This distinction is interpreted both in cultural and chronological terms. The French period occupants of the Fort were using few ceramic types which characterized a high level of social life. First, these ceramics were probably too expensive to have been afforded by the majority of French period occupants—a population of traders, trappers, and soldiers existing more or less on a subsistence level. Second, the fragile nature of these expensive ceramics did not permit their extensive importation by means of a canoe-portage system of transportation. It is during the British period that we find the introduction and extensive utilization of such fine ceramic types. The British introduced a more efficient means of transportation and communication, thus making it possible to import fragile goods, such as ceramics, in larger quantities. Moreover, during the British period, there was a greater market for fine quality and expensive ceramic items. Status differences at the post were more rigidly defined and the population was composed of more individuals maintaining a relatively high level of social life (e.g., the families of

military officers, successful craftsmen, and traders). The demand for fine quality ceramic items was thus met by an increasingly efficient transportation system. It is evident from the archeological remains that many of the British period occupants were maintaining a higher level of social life than that of the French period occupants. Indeed, this higher level of social life at the Fort (always qualified by the fact of geographical isolation) seems to have been similar in many respects to that of the upper middle classes in the seaboard colonies and in England.

Ceramic artifacts are thus viewed as particularly sensitive indicators of differences in transportation media and economics. This type of evidence, although independently available to a very limited extent through historical research in the case of Fort Michilimackinac, is of obvious interest to students of cultural and ceramic history. Moreover, it allows the archeologist to explain the presence and distribution of other types of artifacts in similar terms.

### *Sociocultural Change*

Several recent authors have pointed out some of the potential implications of interpreting evidence of culture change from the material remains of both aboriginal and Euro-American historical site occupations. Since phenomena of this sort often are reflected in the presence and context of dated ceramic types, a brief examination of the implications involved in this type of study is in order.

The majority of research in this area is based on the assumption that a change in the material possessions of a society is accompanied by changes in the culture of that society. Thus, the historic artifacts recovered from an aboriginal site give some indication of the type of change-producing influence to which the society was exposed. If one can then determine the quantity and quality of material goods introduced to a population over a period of time, a measure of the type, rate, and extent of culture change which the population underwent may be derived. Unfortunately, this line of reasoning has produced few significant findings. Many authors express the opinion that their artifacts tell us to what extent a society was acculturated, without explaining the implications of their findings. The theoretical potential of acculturation study through historic artifact research has been often pointed out, but few attempts have been made to

<sup>11</sup> BROSE, pp. 81–82.

conduct the research.<sup>12</sup> Several other authors (L. Ross Morrell, and Warren L. Wittry, for example) have attempted to study the process of acculturation from the standpoint of historic artifactual remains.<sup>13</sup> The potential value of acculturation studies through the means of historic artifact research has perhaps best been expressed by Bernard L. Fontana.

If one is interested in understanding the impact of European culture upon American Indian villages, he can choose a contact or postcontact site in which to dig. If one is interested in knowing what happened to Indians who developed a symbiotic relationship with non-Indians (as on a folk-urban continuum), he can pick a frontier site for excavation. If the objective is to study the impact of European material culture on villages of a specific tribe and compare this with subsequent Europeans themselves, then the archaeologist should look for both protohistoric and contact sites and dig both.

Other questions involving rates, kinds, and amounts of culture change, levels of sociocultural integration, and many more—all in terms of their relation to material culture—may best be examined in historic sites if they are to be examined archaeologically at all. This is because we have artifactual data and data from documentary sources, often both historic and ethnographic.<sup>14</sup>

We concur with this view and add only that ceramics are particularly useful to this type of research, in view of their demonstrated analytic value. This is obviously one area of potential interpretative importance which has not been sufficiently exploited in the past, and which holds great promise for future historical archeologists.

The subject of changing material values also is considered to be an aspect of sociocultural change. This type of interpretation has been most precisely demonstrated by David S. Brose in the Custer Road Dump Site report. Brose, in considering the large variety of ceramic and glass types identified in a

twenty-year-period trash dump (1876–1896), was able to “approximate the popularity of these artifact types (particularly ceramics, pressed glass and crockery) recovered throughout the area within a few years.”<sup>15</sup> This statement and its demonstration by Brose is of considerable theoretical importance. We should be able to apply this reasoning to ceramic artifacts recovered from seventeenth- and eighteenth-century historic sites as well. It may be that this factor of changing popularity may have equal importance over aspects such as transportation media and economics in explaining the presence of ceramics on many sites.

### *Status and Social Level*

In discussing the economic implications of historical site ceramics above, we pointed out that ceramics are sensitive and reliable indicators of status differences. In the case of Fort Michilimackinac, the French and British adapted to living at the post in very different ways, both socially and economically. These different adaptations are readily reflected in the ceramic remains assigned to the two occupations. This interpretative approach is usually equally applicable to the ceramics from other historical sites. In many cases we should be able to establish the relative socioeconomic level of a population and define any major status differences which existed at a site by means of the distributional analyses of ceramics.

### *Functional Interpretations*

The functional interpretation of ceramics assumes that different types and forms of ceramic artifacts served different social or economic purposes, or that they were common to different contexts of utilization. It should then be possible to identify the nature and locus of specific activities and tasks by studying the distribution of various ceramic forms.

At Fort Michilimackinac, for example, we should be able to distinguish structures occupied by soldiers and those occupied by wealthy traders by studying the distribution and clustering of specific ceramics in different structural contexts. Certain ceramic forms are “task specific” in being a part of the artifact assemblage that is common to a certain task, such as

<sup>12</sup> See for example, RODERICK SPRAGUE, “Post-1800 Historical Indian Sites,” *Historical Archaeology*, 1967, p. 70, and GEORGE IRVING QUIMBY, “Indian Culture and European Trade Goods,” pp. 11, 12.

<sup>13</sup> L. ROSS MORRELL, “The Woods Island Site in Southeastern Acculturation 1625–1800,” *Notes in Anthropology* (Florida State University, 1965), vol. 11; and WARREN L. WITTRY, “The Bell Site, Wn9, An Early Historic Fox Village,” *The Wisconsin Archaeologist*, n. s., vol. 44, no. 1.

<sup>14</sup> BERNARD L. FONTANA, “On the Meaning of Historic Sites Archaeology,” *American Antiquity*, vol. 31, no. 1, pp. 61–65.

<sup>15</sup> BROSE, p. 72.

storage, blacksmithing, food serving, and cooking. By carefully considering the distribution of these "task specific" forms, it may be possible to determine the different locations in which the tasks were carried out.

Although this type of analysis has not been attempted on the Fort Michilimackinac ceramic remains we consider its potential interpretative value to be of importance in future studies.

## Conclusion

Ceramics are viewed in this chapter as particularly reliable and sensitive indicators which may assist in resolving interpretative problems confronting the historical archeologist. As such, an attempt has been made to demonstrate the value of ceramics as interpretative resources which apply to both practical and theoretical problems. Although several of the interpretations suggested may seem simplistic and rather

obvious, we feel that this type of study can contribute significantly to the understanding of any historical site upon which ceramics are found. A large body of evidence exists in ceramic artifacts which has received little attention in the literature of historical archeology. A broadened interest by historical archeologists in the potential applications of ceramics analysis will, we believe, materially advance work in the field.

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## Appendix A

### Sherd Frequencies

TABLE 1.—*Sherd frequency of Class A, Group I, tin-glazed earthenware, found at Fort Michilimackinac*

<i>Excavation Year</i>	<i>Sherds</i>			
	TYPE A BLUE AND WHITE	TYPE B POLY- CHROME	TYPE C BROWN AND WHITE	TYPE D POWDERED BLUE AND POWDERED PURPLE
1959.....	836	28	44	13
1960.....	440	20	36	7
1961.....	450	23	23	4
1962.....	251	7	5	1
1963.....	618	45	18	22
1964.....	310	21	9	18
1965.....	757	31	14	21
Undated...	102	1	0	45
Total..	3,764	176	149	131

TABLE 2.—*Sherd frequency of Class A, Group II, cream-colored earthenware, found at Fort Michilimackinac*

<i>Excavation Year</i>	<i>Sherds</i>								
	TYPE A PLAIN	TYPE B RELIEF BORDERS					TYPE C POLYCHROME	TYPE D HANDLES, FINIALS, SPOUTS, ETC.	TYPE E TRANSFER PRINTED
		1. Beaded Edge	2. Groove and Rib	3. Feather	4. Diamond	5. Bead and Line			
1959.....	404	31	4	15	0	2	16	4	0
1960.....	411	21	7	10	0	4	1	4	0
1961.....	411	11	3	47	0	4	2	0	0
1962.....	202	29	0	8	1	7	3	3	0
1963.....	410	39	3	54	3	8	9	6	0
1964.....	321	8	11	26	2	2	13	2	0
1965.....	675	73	9	68	15	0	13	10	18
Undated.....	40	15	1	20	0	0	8	2	0
Total.....	2,874	227	38	248	21	27	65	31	18

TABLE 3.—*Sherd frequency of Class A, Group III, coarse earthenware, found at Fort Michilimackinac*

Excavation Year	Sherds							
	TYPE A UNGLAZED REDWARE	TYPE B BROWN GLAZED REDWARE	TYPE C GREEN AND PURPLE DECORATED REDWARE	TYPE D GREEN GLAZED EARTHEN- WARE	TYPE E BROWN AND GREEN GLAZED EARTHEN- WARE	TYPE F YELLOW GLAZED EARTHEN- WARE	TYPE G CAMEL GLAZED EARTHEN- WARE	TYPE H SLIP-DECO- RATED EARTHEN- WARE
1959.....	5	39	2	42	5	21	5	16
1960.....	0	10	0	26	2	0	1	7
1961.....	1	54	0	14	0	4	1	2
1962.....	0	19	0	22	0	0	0	5
1963.....	8	58	0	60	0	3	4	19
1964.....	13	50	0	6	0	1	2	15
1965.....	0	37	0	0	5	0	12	3
Undated.....	23	0	0	0	0	3	0	0
Total....	50	267	2	170	12	32	25	67

TABLE 4.—*Sherd frequency of Class A, Group IV, fine earthenware, found at Fort Michilimackinac*

Excavation Year	Sherds		
	TYPE A WHIELDON TYPE (BROWN, GREEN, AND YELLOW GLAZE)	TYPE B WHIELDON TYPE (TORTOISE- SHELL GLAZE)	TYPE C WHIELDON- WEDGWOOD TYPE (FRUIT AND VEGETABLE MOTIFS)
1959.....	1	37	23
1960.....	7	8	0
1961.....	1	1	0
1962.....	0	1	0
1963.....	7	6	0
1964.....	0	9	0
1965.....	0	6	3
Undated....	0	0	3
Total..	16	68	29

TABLE 5.—*Sherd frequency of Class B, Group I, English saltglazed earthenware, found at Fort Michilimackinac*

Excavation Year	Sherds			
	TYPE A PLAIN	TYPE B RELIEF DECO- RATED	TYPE C SCRATCH BLUE	TYPE D POLY- CHROME
1959.....	329	124	35	22
1960.....	146	30	20	11
1961.....	244	62	22	10
1962.....	68	13	7	0
1963.....	430	100	34	4
1964.....	189	104	30	4
1965.....	271	86	39	18
Undated.....	10	0	3	0
Total....	1,687	519	190	69

TABLE 6.—*Sherd frequency of Class B, Group II, stoneware, found at Fort Michilimackinac*

<i>Excavation Year</i>	<i>Sherds</i>		
	TYPE A RHENISH	TYPE B BROWN	TYPE C RED
1959.....	13	76	2
1960.....	6	50	2
1961.....	12	25	<sup>a</sup> 8
1962.....	1	39	0
1963.....	29	15	0
1964.....	4	0	0
1965.....	8	0	2
Undated.....	0	0	0
Total.....	73	205	14

<sup>a</sup> Teapot.

TABLE 7.—*Sherd frequency of Class C, Group I, Chinese export porcelain, found at Fort Michilimackinac*

<i>Excavation Year</i>	<i>Sherds</i>		
	TYPE A BLUE AND WHITE	TYPE B POLYCHROME	TYPE C BROWN GLAZED
1959.....	649	20	1
1960.....	227	12	0
1961.....	241	38	2
1962.....	76	2	1
1963.....	653	37	12
1964.....	457	32	14
1965.....	471	111	12
Undated.....	10	4	0
Total.....	2,784	256	42

TABLE 8.—*Sherd frequency of Class C, Group II, English porcelain, found at Fort Michilimackinac*

<i>Excavation Year</i>	<i>Sherds</i>		
	TYPE A LIVERPOOL	TYPE B WORCESTER	TYPE C BLUE AND WHITE (Miscellaneous)
1959.....	3	5	2
1960.....	0	0	0
1961.....	31	2	3
1962.....	1	0	0
1963.....	1	1	2
1964.....	3	3	0
1965.....	2	0	2
Undated.....	0	0	0
Total.....	41	11	9



*Appendix B*

Related Material from the Fortress of Louisbourg,  
Cape Breton Island, Nova Scotia



FIGURE 1.—FRENCH BLUE AND WHITE FAIENCE PLATE decorated with the arms of one of the governors of Louisbourg only (approximately  $9\frac{3}{8}$  inches in diameter). Photograph, courtesy Fortress of Louisbourg National Historic Park.

FIGURE 2.—REPRESENTATIVE SHERDS FROM THE EXCAVATIONS AT THE FORTRESS OF LOUISBOURG. *a*, French earthenware plate rim sherd. Red body covered with a white slip decorated on the interior only with a border of a wavy purple line between two green bands; overall clear lead-glaze on interior only. Eighteenth century (Marwitt, Ware 3). *b*, French faience base section and part foot ring from a small bowl. Buff body covered with a tannish-white tin-glaze, decorated with blue and yellow. Eighteenth century. *c*, English earthenware body sherd from a bowl or jug. Light red earthenware body covered on the exterior with a yellow slip and decorated with tooled-in lines of brown slip; covered overall with a clear lead-glaze. Probably Staffordshire, mid-eighteenth century. *d*, English white stoneware base section from a small bowl. White body covered with a clear saltglaze; decorated with incised lines filled with cobalt blue (so-called scratch blue). Probably Staffordshire, circa 1740–1760. *e*, French faience rim sherd from a large plate or platter. Light buff body covered with a grayish-white tin-glaze; heavily crazed and decorated with a blue foliate and geometric border. Possibly Rouen, early eighteenth century. *f*, Chinese export porcelain body sherd from a plate. White, hard paste porcelain body covered with a bluish-white glaze and decorated, over the glaze, with foliate and geometric designs in blue, red, and gold. Eighteenth century. *g*, French earthenware body sherd from a dish or plate. Light pink body decorated with a brown slip foliate pattern and covered overall with a light green lead-glaze. Eighteenth century (Marwitt, Ware 1B). *h*, French or French-Canadian earthenware rim sherd from a deep plate or dish. Thickly potted light salmon body containing small pebbles and covered with a thin white slip. Over the slip is a mottled dark brown and light green glaze. Eighteenth century (Marwitt, Ware 1C). *i*, French earthenware rim sherd from a large plate or a platter. Light red body decorated with trailed lines of cream-colored slip and covered overall (interior only) with a brown lead-glaze. Eighteenth century (Marwitt, Ware 7). *j*, English delft base section from a punch bowl. Buff body covered by a bluish-white tin-glaze; decorated with a polychrome foliate design. Probably Liverpool, mid-eighteenth century. *k*, French or French-Canadian earthenware rim sherd from a plate. Red earthenware covered with a brown lead-glaze decorated with splashes of deep brown. Eighteenth century (Marwitt, Ware 4). *l*, English or French earthenware rim sherd from a chamberpot. Buff body covered with a green lead-glaze. Mid-eighteenth century. *m*, French earthenware base section from a small jar. Red body covered on exterior with a dark brown lead-glaze and on interior with a white tin-glaze. Probably Rouen, mid-eighteenth century.

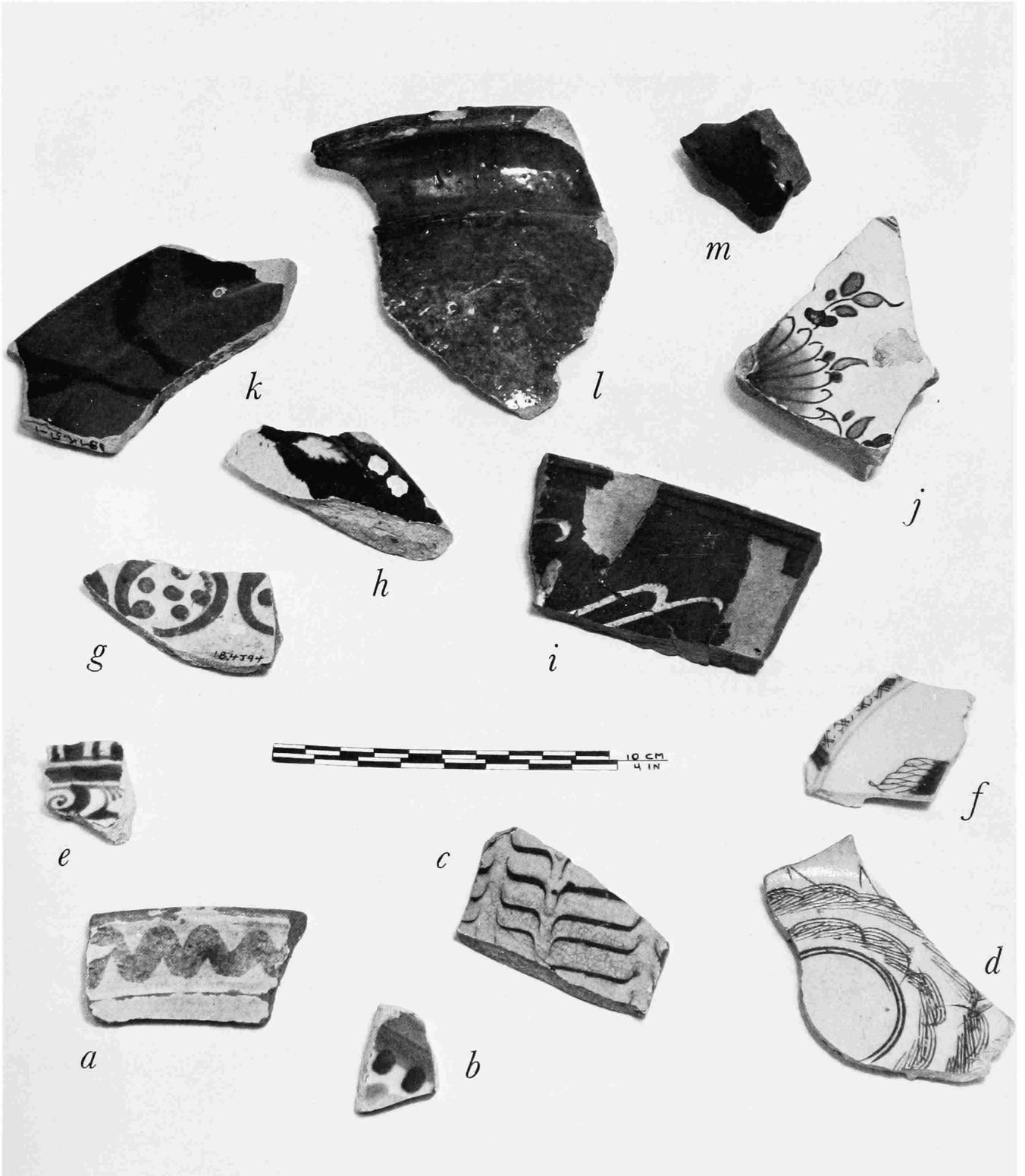




FIGURE 3.—EARTHENWARE BOWL WITH A PRONOUNCED RIM. Decorated on interior and on rim with a green lead-glaze. French or possibly French-Canadian, eighteenth century. Compare with text, Figure 28c. Photograph, courtesy Fortress of Louisbourg National Historic Park.

*Appendix C*

Related Material from Two Mid-Eighteenth-Century Pennsylvania  
Sites Occupied by the English Army

FIGURE 1.—REPRESENTATIVE SHERDS FROM FORT LIGONIER, PENNSYLVANIA (1758–1766). *a*, English earthenware rim sherd from a small bowl. Cream-colored body molded in the shape of a pineapple. Clear lead-glazed interior and yellow lead-glazed exterior. Whieldon-Wedgwood type, about 1760. *b*, English earthenware body sherd from a tea bowl. Cream-colored body covered on interior with a clear lead-glaze and on exterior with a mottled brown lead-glaze (so-called tortoise-shell glaze). Whieldon type, mid-eighteenth century. *c*, English delft body sherd, probably from a small bowl. Buff body covered with a white tin-glaze, decorated with a foliate pattern in black and green. Probably Liverpool, mid-eighteenth century. *d*, English white saltglazed stoneware body sherd from a plate. White body with molded foliate and geometric decoration, covered with a clear saltglaze. About 1740–1760. *e*, English porcelain base section from a saucer. White, soft paste porcelain body decorated with a landscape scene in underglaze blue. Worcester, about 1765. *f*, English white saltglazed stoneware rim sherd from a tea bowl. Thinly potted white body covered with a white saltglaze and decorated, over the glaze, with polychrome flowers. About 1740–1760. *g*, North American earthenware rim sherd from a cup. Red body decorated with brown and cream slip and covered overall with a clear lead-glaze. Probably Pennsylvania, mid-eighteenth century. *h*, English white saltglazed stoneware base section from a small bowl. White body decorated with incised lines picked out in cobalt blue, and covered overall with a clear saltglaze (so-called “scratch blue”). About 1740–1760. *i*, English delft body sherd from a bowl. Buff body covered with a white tin-glaze, decorated with flowers in blue. Probably Liverpool, mid-eighteenth century. *j*, Chinese export porcelain rim sherd from a tea bowl. White, hard paste porcelain body decorated, over the glaze, with a red and blue foliate pattern. Mid-eighteenth century.

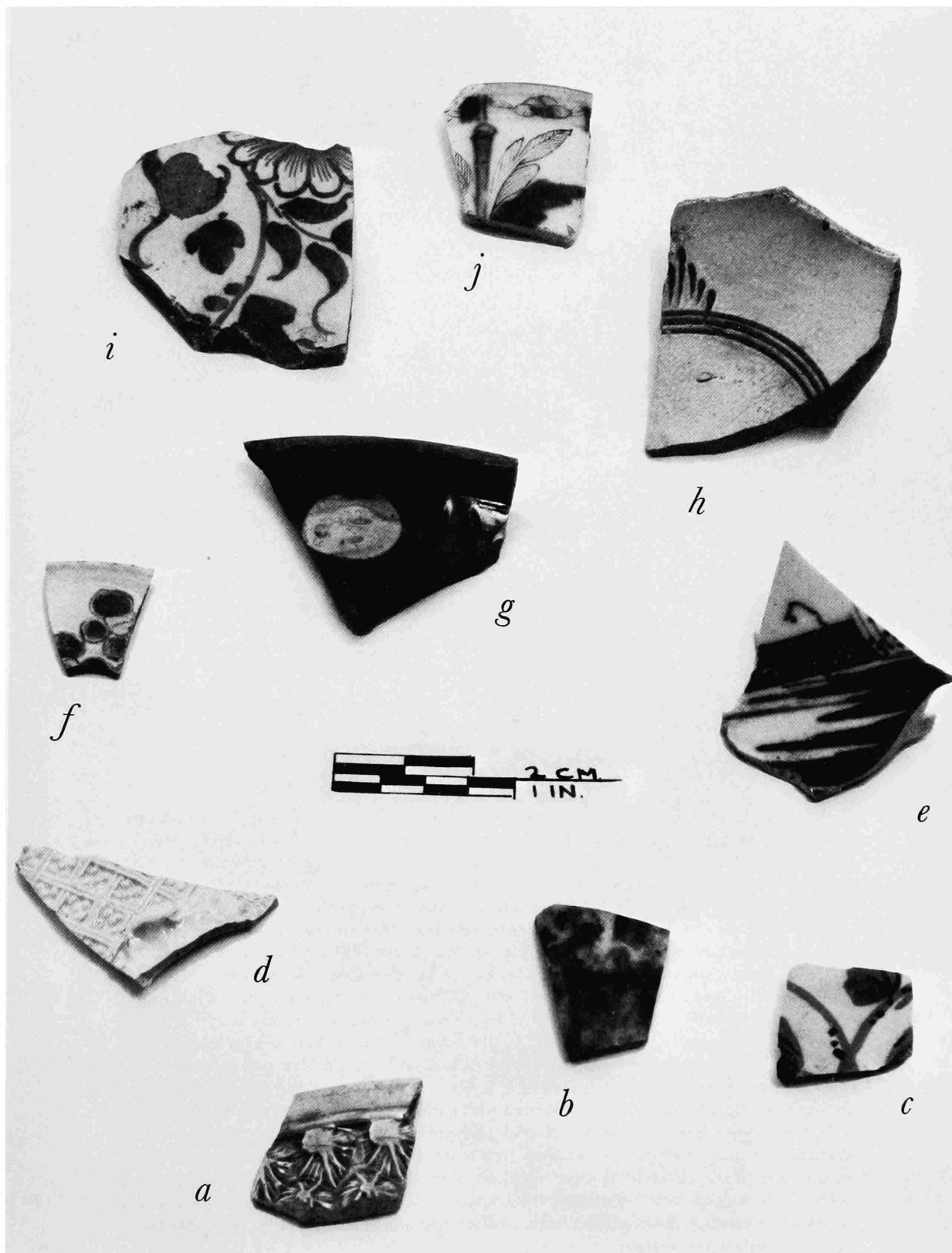
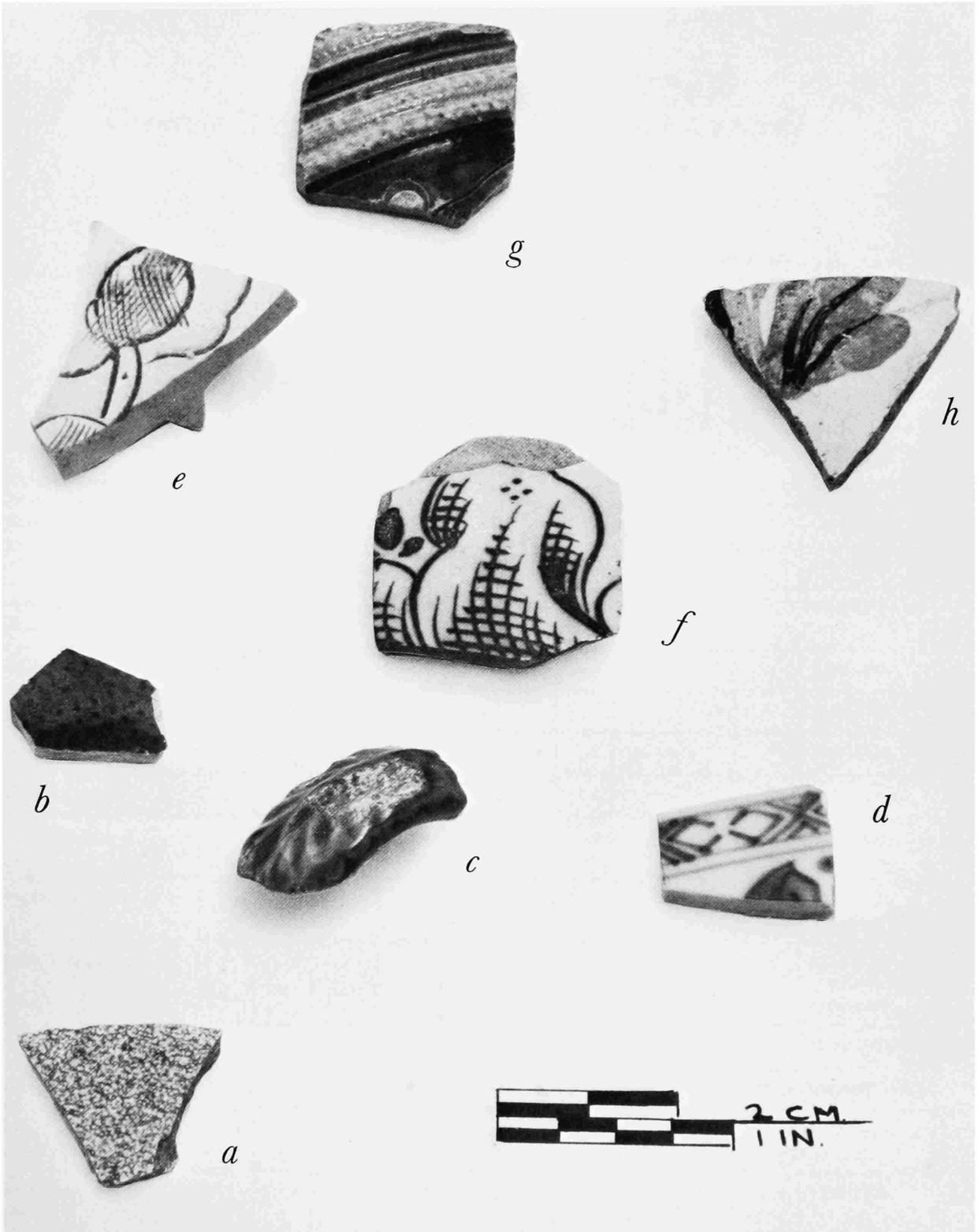


FIGURE 2.—REPRESENTATIVE SHERDS FROM THE GREAT CROSSING OF THE YOUGHIOGHENY RIVER, PENNSYLVANIA (MID-EIGHTEENTH CENTURY). *a*, English delft body sherd, probably from a small bowl. Buff earthenware body covered on interior with a grayish-white tin-glaze and on exterior with a white tin-glaze decorated with powdered purple. Probably Bristol, mid-eighteenth century. *b*, English earthenware body sherd, probably from a cup. Cream-colored body covered on interior with a clear lead-glaze and on exterior with a green lead-glaze decorated with regularly spaced dark green dots. About 1760. *c*, English handle section, probably from a teapot. Cream-colored body with relief-molded cabbage leaf pattern and covered with a green lead-glaze. About 1760. *d*, Chinese export porcelain rim sherd from a cup or tea bowl. White, hard paste porcelain body decorated with a geometric border in underglaze blue. Mid-eighteenth century. *e*, English white stoneware base section from a small bowl. White body decorated with incised lines picked out in cobalt blue, and covered overall with a clear saltglaze (so-called “scratch blue”). About 1740–1760. *f*, English delft body sherd from a bowl. Buff earthenware body covered with a bluish-white tin-glaze and decorated with a foliate design in blue. Possibly Bristol, mid-eighteenth century. *g*, German stoneware body sherd from a mug or tankard. Gray body with molded bands and incised foliate designs and cobalt blue bands all under a clear saltglaze. Rhenish, probably Westerwald, eighteenth century. *h*, English delft body sherd from a bowl. Buff earthenware body covered with a bluish white tin-glaze and decorated with a foliate design in black and green. Probably Liverpool, mid-eighteenth century.



## *Appendix D*

### Ceramic Types from Other Eighteenth-Century North American Historical Sites

*A checklist of some ceramic types from eighteenth-century North American historical sites*

Site	French faience	English delft	English cream-colored earthenware	English white saltglaze stoneware	Rhenish stoneware	Chinese export porcelain	English porcelain	English, brown saltglaze stoneware	French porcelain	English slip-decorated earthenware	Date
Louisbourg, Nova Scotia	v	v	v	v	v	v	v	v	v	v	Circa 1720–1768.
Santa Rosa, Pensacola, Florida	v				v	v					1722–1752.
Rosewell, Virginia		v		v	v	v	v			v	1763–1772.
Russellborough, North Carolina			v	v		v	v				1758–1776.
Portland Point, New Brunswick	v	v	v	v	v	v		v		v	1631–1850.
Pemaquid, Maine		v		v	v						1630–1775.
Ligonier, Pennsylvania		v	v	v	v	v	v	v		v	1758–1766.
Williamsburg, Virginia		v	v	v	v	v	v	v		v	18th century
Jamestown, Virginia		v	v	v	v	v	v	v		v	17th–18th century.
Tutter's Neck, Virginia		v			v	v		v			1701–1710; 1730–1740.
Clay Bank, Virginia		v						v			Late 17th century–18th century.
Michilimackinac, Michigan	v	v	v	v	v	v	v	v		v	Circa 1715–1781
Great Crossings, Pennsylvania		v	v	v	v	v					Circa 1750–1800.
Presidio San Agustin de Ahumada, Texas	v			v		v					1756–1771.
Brunswick Town, North Carolina		v	v	v		v	v			v	1726–1776.

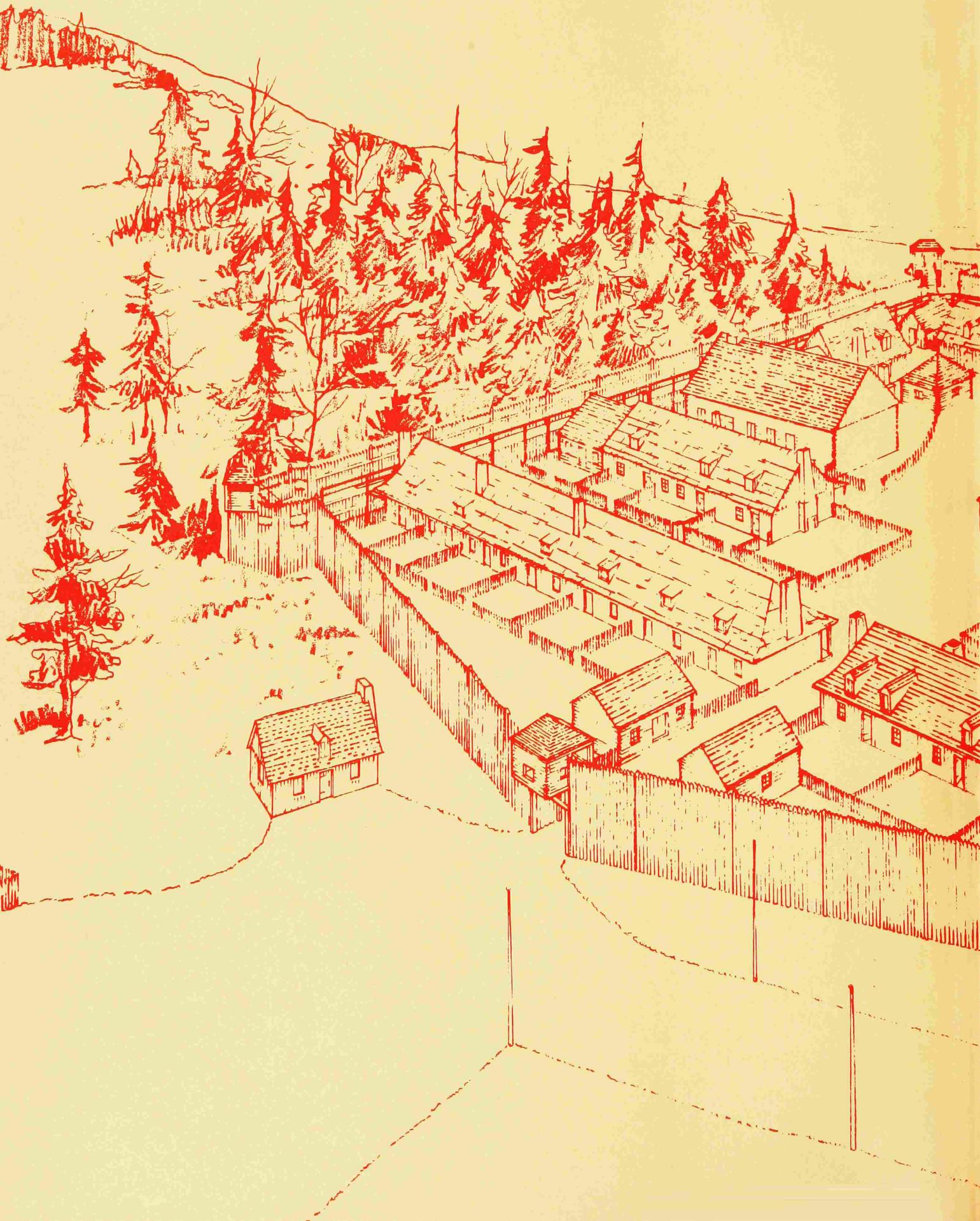
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Fort Michilimackinac as it probably looked through the final years of British occupation, 1774-1781. *Courtesy of the Mackinac Island State Park Commission. Drawn by Victor Hogg.*

