ANCIENT POTTERY, CUISINE, AND SOCIETY AT THE NORTHERN GREAT LAKES

Susan M. Kooiman
CONTENTS

List of Figures
List of Tables
Acknowledgments

ONE Introduction

TWO Environmental and Cultural History of the Northern Great Lakes

THREE Cuisine and Pottery Technology in the Northern Great Lakes

FOUR Pottery and Cuisine: Theoretical and Methodological Perspectives

FIVE Pottery Taxonomy, Chronology, and Occupational History of the Cloudman Site

SIX Pottery Function

SEVEN Diet and Cuisine at the Cloudman Site

EIGHT Ethnographic and Ethnohistorical Accounts of Diet and Cooking
Culinary and Technological Tradition and Change at the Cloudman Site

Appendix A. Cloudman Pottery Data

Appendix B. Cloudman Pottery Vessels Sampled for Microbotanical, Stable Isotope, and Lipid Residue Analyses

Appendix C. Selected Vessels from the Cloudman Pottery Assemblage

References

Index
FIGURES

Figure 1.1. Location of the Cloudman site (20CH6) and select Woodland sites in the Great Lakes. Courtesy of Adriana Martinez.

Figure 2.1. Map of the Great Lakes with the Northern Great Lakes region indicated. Courtesy of Adriana Martinez.

Figure 2.2. Distribution of cultural groups ca. 1630. Courtesy of Erin Beachey.

Figure 3.1. Drummond Island and the Cloudman site (20CH6). Courtesy of Adriana Martinez.

Figure 6.1. Rim diameter frequencies of the Cloudman pottery assemblage.

Figure 6.2. Interior carbonization patterns for the Cloudman site (20CH6) pottery assemblage. Courtesy of Erin Beachey.

Figure 6.3. Interior carbonization Pattern 1 (boiling).

Figure 6.4. Interior carbonization Pattern 2 (stewing).

Figure 6.5. Interior carbonization Pattern 3 (boiling + stewing).

Figure 6.6. Proportions of interior carbonization patterns by component (percentages of total analyzed vessels displayed).

Figure 7.1. Plot of δ15N/δ13C values of Cloudman pottery residues.

Figure 7.2. Frequencies of lipid residue food categories by component (percentages of total sampled vessels displayed).
Figure 7.3. Microbotanical frequencies of maize, wild rice, and squash by component (percentages of total sampled vessels displayed).

Figure C1. Vessel 5, Laurel Pseudo-scallop Shell.

Figure C2. Vessel 20, Laurel Dentate Stamped (oblique).

Figure C3. Vessel 109, Laurel Banked Linear Stamped.

Figure C4. Vessel 6, Laurel Dentate Rocker Stamped.

Figure C5. Vessel 131, North Bay Linear Stamped.

Figure C6. Vessel 35, Late Laurel (cf. Laurel Incised or Mackinac Banded).

Figure C7. Vessel 33, untyped (incipient Blackduck?).

Figure C8. Vessel 80, Mackinac Punctate.

Figure C9. Vessel 191, Mackinac Punctate.

Figure C10. Vessel 50, Mackinac Banded.

Figure C11. Vessel 120, Mackinac Banded.

Figure C12. Vessel 76, Mackinac Undecorated.

Figure C13. Vessel 55, Mackinac ware.

Figure C14. Vessel 81, Blackduck Banded.

Figure C15. Vessel 88, Blackduck Banded.

Figure C16. Vessel 199, cf. Bowerman Plain v. Cordmarked.

Figure C17. Vessel 200, untyped (ELW/MLW Transition).

Figure C18. Vessel 42, Bois Blanc ware.

Figure C19. Vessel 24, “Proto-Juntunen” ware (plain).

Figure C20. Vessel 102, Juntunen Drag-and-Jab.

Figure C21. Vessel 204, Juntunen Linear Punctate.

Figure C22. Vessel 25, Juntunen ware.

Figure C23. Vessel 43, Traverse Decorated v. Punctate.
Figure C24.  Vessel 150, Traverse Plain v. Scalloped.
Figure C25.  Vessel 162, Iroquoian-style (cf. Lawson Incised).
Figure C26.  Vessel 64, Iroquoian-style (cf. Ripley Plain).
Figure C27.  Vessel 74, Iroquoian-style (cf. Huron Incised).
Figure C28.  Vessel 156, Iroquoian-style (cf. Huron Incised).
Figure C29.  Vessel 166, Iroquoian-style (cf. Huron Incised).
Figure C30.  Vessel 39, Laurel ware (Middle Woodland).
Figure C31.  Vessel 201, untyped (Middle Woodland).
Figure C32.  Vessel 52, Mackinac Undecorated (Early Late Woodland).
Figure C33.  Vessel 53, Mackinac Punctate (Early Late Woodland).
Figure C34.  Vessel 83, Mackinac ware (Early Late Woodland).
Figure C35.  Vessel 202, Mackinac ware (Early Late Woodland).
Figure C36.  Vessel 63, untyped (Early Late Woodland).
Figure C37.  Vessel 75, Traverse Plain v. Scalloped (Late Late Woodland).
Figure C38.  Vessel 54, untyped (cf. O’Neil site cup; Late Woodland).
Figure C39.  Vessel 167, Iroquoian-style (Late Precontact).
Figure C40.  Vessel 182, Iroquoian-style, cf. Huron Incised (Late Precontact).
TABLES

Table 5.1. Cloudman Pottery Vessels by Site Component
Table 5.2. Middle Woodland Vessels by Type
Table 5.3. Miscellaneous Woodland and Unknown Vessels
Table 5.4. Early Late Woodland Vessels by Type
Table 5.5. Late Late Woodland Vessels by Type
Table 5.6. Late Precontact Vessels
Table 5.7. Miniature Vessels by Type
Table 5.8. AMS Dates from Carbonized Pottery Residue Samples
Table 6.1. Mean Temper Size of Pottery Vessels by Component
Table 6.2. Temper Size Relationships, Welch’s Unpaired T-Test (significant outcomes boldfaced)
Table 6.3. Mean Rim Diameter of Pottery Vessels by Component
Table 6.4. Rim Diameter Relationships, Welch’s Unpaired T-Test (significant outcomes boldfaced)
Table 6.5. Vessel Wall Thickness by Component
Table 6.6. Body Thickness Relationships, Welch’s Unpaired T-Test
Table 6.7. Technical Properties of Pottery Vessels by Type/Ware
Table 6.8. Comparison of Mean Temper Size and Mean Body Thickness of Pottery Vessels by Component
Table 6.9. Frequency of Use-Alteration Traces by Component
**Table 6.10.** Interior Carbonization Pattern Frequency by Component

**Table 6.11.** Primary Interior Carbonization Pattern Frequency by Component

**Table 6.12.** Interior Carbonization Pattern Relationships, Kruskal-Wallis

**Table 6.13.** Interior Carbonization Pattern Frequency by Type/Ware

**Table 7.1.** Vessel Clusters by Microbotanical Species Content (Jaccard’s Coefficient)
"The issue of subsistence practices and how they change through time has dominated the literature of the Northern Great Lakes region for generations. Kooiman’s book sheds new light on these age-old questions. By focusing on pottery function and use-alteration analysis she provides a great deal of clarification on ancient cuisine as it changed through time." — James Skibo, author of Understanding Pottery Function

Ancient cuisine is one of the hot topics in today’s archaeology. This book explores changing settlement and subsistence in the Northern Great Lakes from the perspective of food-processing technology and cooking. Susan Kooiman examines precontact Indigenous pottery from the Cloudman site on Drummond Island on the far eastern end of Michigan’s Upper Peninsula to investigate both how pottery technology, pottery use, diet, and cooking habits change over time and how these changes relate to hypothesized transitions in subsistence, settlement, and social patterns among Indigenous pottery-making groups in this area.

Kooiman demonstrates that ceramic technology and cooking techniques evolved to facilitate new subsistence and processing needs. Her interpretations of past cuisine and culinary identities are further supported and enhanced through comparisons with ethnoarchaeological and ethnohistoric accounts of local Indigenous cooking and diet. The complementary nature of these diverse methods demonstrates a complex interplay of technology, environment, and social relationships, and underscores the potential applications of such an analytic suite to long-standing questions in the Northern Great Lakes and other archaeological contexts worldwide. This clearly written book will interest students and scholars of archaeology and anthropology, as well as armchair archaeologists who want to learn more about Indigenous/Native American studies, food studies and cuisine, pottery, cooking, and food history.

Susan M. Kooiman is assistant professor of anthropology at Southern Illinois University Edwardsville.

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Cover images: Vessels from the Cloudman Pottery Assemblage. Courtesy of the Department of Anthropology, Michigan State University.
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Ancient Pottery, Cuisine, and Society at the Northern Great Lakes


Reviewed by Sean B. Dunham, USDA Forest Service, Chippewa National Forest, Cass Lake, MN

Susan M. Kooiman’s Ancient Pottery, Cuisine, and Society at the Northern Great Lakes applies an innovative approach in the analysis of the ceramic assemblage from the Cloudman site, a multi-component Woodland era occupation, ca. AD 100 to AD 1600, in the Upper Peninsula of Michigan. This book is the second volume in the archaeological monograph series, Midwest Archaeological Perspectives (MAP), which is a joint venture by the University of Notre Dame Press and the Midwest Archaeological Conference (MAC), Inc. Kooiman was the recipient of the 2019 MAC dissertation award and Ancient Pottery was derived from her dissertation. Ancient Pottery is an engaging and well-written foray into Woodland and Late Precontact ceramics as well as culinary and subsistence practices.

There are several noteworthy elements of this volume, not the least of which is that the data presented was derived from a curated collection. The Cloudman site ceramic assemblage includes a minimum of 202 individual ceramic vessels that had previously been placed into regional typological and chronological categories. Kooiman reassessed and updated the typological classifications and finetuned the chronology with AMS radiocarbon dating (Chapter 5). This process created a framework including four occupational periods for the site that serve as the focus of subsequent analyses. The occupational sequence is described as: Middle Woodland (ca. AD 100–200); early Late Woodland (ca. AD 900–1000); late Late Woodland (ca. AD 1200–1300); and Late Precontact (ca. AD 1300–1500).

Ceramic typology and chronometric dating are the basis of many analyses in the Upper Great Lakes region and elsewhere. Kooiman’s research takes this approach further using this baseline to examine, “...changing settlement, subsistence, and social patterns from the perspective of food processing technology, food and resource selection, and cooking methods... (p. 2).” Through an integrated, multiproxy approach, outlined in Chapter 4, Kooiman adds functional pottery analysis, stable isotope analysis, microbotanical analysis, and lipid residue analysis to further explore the Cloudman ceramic assemblage. This is where the fun starts!

The functional properties of ceramic vessels are approached in Chapter 6 based on their technical properties, such as vessel size and temper size, and examined diachronically and synchronically per the typological and occupational sequence. The second element of the functional analysis examined use-alteration patterns on the vessels including carbonization and sooting resulting from their use. The technical properties revealed that vessels were...
smaller and had larger temper in the Middle Woodland. The pots were larger in subsequent periods and had smaller temper after the Early Late Woodland period. The use-alteration patterns showed significant differences before and after the Early Late Woodland. Interior carbonization patterns indicated that stewing was the primary cooking method in the Middle Woodland and boiling became more common during subsequent periods. Further, some vessels showed evidence for both boiling and stewing in the Late Late Woodland and Late Precontact periods. This data provides new ways to think about how pottery was used during the Woodland period in the UP.

Chapter 7 looks at stable isotopes, lipids, and microbotanical data derived from the ceramics and applies them to the occupational framework as well as the functional analysis. These lines of evidence combine to illustrate significant diachronic patterns at the site. Kooiman’s review of isotopes, microbotanicals, and lipids shows that nuts and aquatic resources were well represented throughout the Woodland sequence at the Cloudman site and neither showed indications of major fluctuations of use. Microbotanical and isotope analyses results were somewhat conflicting regarding maize with microbotanical data indicating its presence throughout the sequence and isotopic evidence indicating it was not an important resource at the site. Interestingly, the microbotanical signature of maize is highest in the Middle Woodland appearing in 42% of the sampled vessels and drops through the remainder of the sequence to 22% by the Late Precontact period. The opposite trend occurs for wild rice. Wild rice phytoliths are present in each of the periods and significantly increased to over 60% of the sampled vessels in the Late Late Woodland and Late Precontact periods. These data provide a more complete view into the subsistence choices being made by Woodland people at the Cloudman site.

The overarching paradigm in the Upper Great Lakes region revolves around the intensification of the deep-water fall fishery during the Late Woodland period. More recently, scholars have suggested that the use of starchy plants, notably acorns, maize, and wild rice, also intensified over the course of the Late Woodland. Kooiman’s multi-faceted approach provides some clarity on this topic in relation to the Cloudman site. The stewing versus boiling dichotomy is critical since boiling is required for processing starchy resources like wild rice, acorns, and maize. Likewise, the process to cook wild rice includes boiling, then reducing the liquid as the rice cooks which could account for the vessels with mixed boiling and stewing use-alteration patterns observed in the later occupational sequence. Kooiman’s book provides a game changing approach to how we explore subsistence strategies in the region.

Kooiman’s *Ancient Pottery* is an overwhelming success. Not only does it demonstrate the importance of revisiting curated assemblages, but it also applies a novel multiproxy approach combining traditional methods with newer techniques to enhance our understanding of Woodland subsistence and cultural dynamics in the Upper Great Lakes. To my knowledge, this is the most comprehensive use of such a suite of approaches in the region and I look forward to seeing more studies like this one. I highly recommend Kooiman’s *Ancient Pottery* to anyone engaged in Woodland and Late Precontact studies in the Midwest as well as anyone researching ceramic assemblages and foodways in any part of the world.