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

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"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 usealteration 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 ethnographic 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.

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MIDWEST ARCHAEOLOGICAL PERSPECTIVES

Cover images: Vessels from the Cloudman Pottery Assemblage. Courtesy of the Department of Anthropology, Michigan State University. Cover design: Bruce Gore | Gore Studio, Inc.

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Ancient Pottery, Cuisine, and Society at the Northern Great Lakes

Susan M. Kooiman. 2021. <u>University of Notre Dame Press &</u> <u>Midwest Archaeological Conference, Inc.</u>, Notre Dame, Indiana. xiv + 223 pp. \$100.00 (cloth), ISBN 9780268201456. \$45.00 (paperback), ISBN 978-0-268-20146-3. \$35.99 (e-book), ISBN 9780268201449 or 9780268201470

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

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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 in 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 multifaceted 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.