
Contents

List of Figures **vii**

List of Tables **xi**

Acknowledgments **xiii**

Contributors **xvii**

Introduction: The Menial Art of Cooking **1**

Enrique Rodríguez-Alegría and Sarah R. Graff

1. Culinary Preferences: Seal-Impressed Vessels from Western Syria as Specialized Cookware **19**
Sarah R. Graff
2. Food Preparation, Social Context, and Ethnicity in a Prehistoric Mesopotamian Colony **47**
Gil J. Stein
3. The *Habitus* of Cooking Practices at Neolithic Çatalhöyük: What Was the Place of the Cook? **65**
Christine A. Hastorf

Contents

4. Cooking Meat and Bones at Neolithic Çatalhöyük, Turkey **87**
Nerissa Russell and Louise Martin
5. From Grinding Corn to Dishing Out Money: A Long-Term History of
Cooking in Xaltocan, Mexico **99**
Enrique Rodríguez-Alegría
6. Cooking for Fame or Fortune: The Effect of European Contact on *Casabe*
Production in the Orinoco **119**
Kay Tarble de Scaramelli and Franz Scaramelli
7. Crafting Harappan Cuisine on the Saurashtran Frontier of the Indus
Civilization **145**
Brad Chase
8. Vale Boi: 10,000 Years of Upper Paleolithic Bone Boiling **173**
Tiina Manne
9. “Hoe Cake and Pickerel”: Cooking Traditions, Community, and Agency at a
Nineteenth-Century Nipmuc Farmstead **201**
Guido Pezzarossi, Ryan Kennedy, and Heather Law
10. Great Transformations: On the Archaeology of Cooking **231**
Kathleen D. Morrison
- Index* **245**

INTRODUCTION

The Menial Art of Cooking

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This book is about cooking. This book is not about food; it is about food preparation and what archaeologists can learn about societies from studying various aspects of their culinary practices, contexts, techniques, and equipment. Aristotle (1995) called cooking a “menial art” in book 1 of *Politics*, describing it as necessary knowledge for slaves in a household but not an honorable duty. Aristotle’s characterization of cooking, albeit in translation, is an activity that is not prestigious and perhaps does not require superior skill. In the title of this book, we are using the term “menial art” ironically. The idea that cooking, especially within the household or by extension within preindustrial societies, was a necessary activity but not an honorable or skillful one has been the prevailing attitude toward cooking in archaeological contexts and a contributing factor toward the lack of studies on cooking or food preparation. This book attempts to change the dominant portrayal of cooking in the past and argues that studying cooking activities can provide a window into other aspects of society, such as relations of power in public and private contexts, politics, economics, religion, social change, cultural practice, and social identity. Since cooking is such an integral part of social life, whether in the context of a feast cooked by chefs

in a palatial kitchen or a simple meal prepared in the field during the workday, it is worth studying.

Food has been an integral part of archaeology for decades, from the ways that archaeologists have characterized the earliest human societies by how they obtain food (hunters and gatherers, foragers, etc.), to explanations that view agricultural production as central to major sociopolitical changes and social complexity, to the growing interest in feasting and politics and research about identity (Twiss 2007a). Archaeologists often assume that cooking is one of the central tasks of households, and perhaps a main reason why households exist as social groups (Hendon 1996). Yet for all the archaeological research that focuses on food, diet, subsistence, agriculture, and so on, there is a dearth of literature on cooking (Isaakidou 2007:5). The different essays in this volume fill a void in the literature by examining techniques and technologies of food preparation, the spaces where food was cooked, the relationship between cooking and changes in suprahousehold economies, the religious and symbolic aspects of cooking, how examining foodways provides insight into social relations of production, distribution, and consumption and the relationship between cooking and social identity, among other issues.

Scholars have sometimes found it useful to consider cooking as one food preparation strategy among many others (e.g., Wandsnider 1997) or as part of a general food preparation phase of “providing and transforming food” (Goody 1982:37). In this volume we define cooking as the food preparation processes that involve heat alteration of foodstuffs, usually by roasting, boiling, frying, smoking, or baking. The cooking process is intermediate between food production or gathering, and eating, and it results in the chemical and physical alteration of food. By food preparation, we refer to any kind of food processing not necessarily involving cooking per se, including butchering, cutting, pickling, salting, fermentation, freezing, storing, serving, grinding, milling, and many other processes that make food edible, storable, amenable to cooking, and culturally acceptable. The distinction can be analytically useful, especially when one considers that cooking might take place in specific settings that, depending on the particular context, may isolate cooks from other daily activities, while food preparation before or after cooking can integrate cooks and others into other arenas of daily life. For example, Rosemary Joyce and John Henderson (2007) have argued that cooks in ancient Honduras prepared cacao drinks in showy vessels and finished preparing the drinks by grinding cacao pods and adding them to the served drink before the guests. In doing so, the cooks claimed credit for their labor by making it visible for the consumers.

Two general points emerge from this collection of essays. First, it is clear that cooking and food preparation were involved in broad social and cultural processes in different archaeological and historical cases. In fact, some studies in

this volume offer information about past societies that could only be obtained by studying cooking. These fresh insights complicate previous cultural, social, and economic models that did not take cooking activities into account. Thus, we argue that cooking should be taken seriously as an aspect of social, cultural, political, and economic life, and the relevance of cooking for different models about the past needs to be investigated thoroughly.

Second, the different papers in this collection make it clear that there is a wide variety of evidence available for the study of food preparation. Evidence is simply not an obstacle for the study of cooking and food preparation, and new techniques, especially those involving chemistry and microscopic studies, will continue enhancing our ability to create detailed, vivid models of the past. Evidence used in the papers in this volume includes excavated and surveyed archaeological data, archival research, ceramic analysis (including petrography of ceramic materials), faunal analysis, botanical analysis, analysis of glass artifacts, stone tool analysis, murals, painted ceramics, ethnographic analogy, and the distribution of artifacts across space, among others. Several papers examine varied lines of evidence in conjunction. All the papers demonstrate that the evidence needs to be interpreted using robust theoretical contexts to avoid projecting our ideas about cooking in contemporary life and imposing them onto the past. Archaeology as a discipline is in a good position to expand our views and knowledge about cooking by deriving insights from material remains over long periods of time, when couched in relevant theoretical contexts.

WHY ARE THERE SO FEW ARCHAEOLOGICAL STUDIES OF COOKING?

Given the abundance of material remains related to food preparation activities—for example, Deagan (2004:611) estimates that 96 percent of all domestic artifacts recovered in En Bas Saline, Haiti, are cookwares—archaeologists are clearly in a good position to focus on cooking and food preparation. Evidence can include faunal and human remains, pottery, various tools made from metal, stone, or ceramic materials, cooking spaces, chemical remains, botanical remains, inscriptions, and texts. Even artifacts not typically associated with cooking, or presumably not made for cooking, such as needles, saws, and serving vessels, are sometimes involved in different food preparation activities (Scott 1997). For the most part, archaeologists have used lines of evidence related to food with other goals in mind: to study diet, nutrition, and health (e.g., Buikstra 1992; Cohen 1989; Danforth 1999; Hamilakis 1999; Isaakidou 2007:5; Larsen 1995); to study agricultural production and related issues of social complexity, politics, demography, the intensification of production, and technology (e.g., Morrison 1994, 1995, 1996; Parsons 1991; Thurston and Fisher 2006); and to study feasting and related

issues of political economy, cultural ecology, and social change (e.g., Bray 2003a, 2003b; Dietler and Hayden 2001; Rodríguez-Alegria 2005, 2010; Wiessner and Schiefenhövel 1996). The work of archaeologists who study different aspects of food has undoubtedly been productive. Then why do studies of cooking remain so peripheral in models of ancient politics, economies, and societies?

The main reason why archaeologists have not devoted much attention to cooking is the fact that we typically associate it with limited relevance beyond the household and daily routine. Although household archaeology examines social organization, activity areas (such as food-processing areas), and specialized craft production, it continues to be considered less productive for examining questions of economy, society, and politics than excavations at large urban centers with major religious and political structures that are controlled by the elite. Early excavations in Egypt and Mesopotamia and the glorious showpieces they uncovered set the standards for great political power and wealth long ago (Kenoyer 2000). Although the idea that elite politics were the most important aspect of power in ancient societies has been called into question over the years (e.g., Graff 2006; Marcus 2004; Morrison 2001; Robin 2001; Sheets 2000), it is hard to escape the bias against the quotidian. Even Ralph Linton (1944:369), in an article about cooking pots in North America, pointed out this problem when he wrote, “It seems to be a general rule that sciences begin their development with the study of the unusual. They have to develop considerable sophistication before they interest themselves in the commonplace.”

Cooking is also associated with women, slaves, servants, and domesticity, and, as a result, with limited significance beyond the household. The association of cooking with women is, for the most part, supported by ethnographic evidence (see Stein, Tarble de Scaramelli and Scaramelli, and Manne, this volume), but the idea that it is a politically or economically irrelevant activity is not (Bray 2003b). In spite of the lack of supporting evidence, it has been difficult to imagine that an activity we regard as having little social value today may have played an important role in social and political life in the past. Archaeologists need to work very hard to avoid imposing the “paradigm of the present” (Gero 1985) onto the past, especially because such self-awareness is extremely difficult when it comes to daily activities (such as cooking) that we take for granted.

Although Aristotle (1995) considered cooking a “menial art,” he did consider it part of the *oikonomia*, or “household management.” Our own word *economy* derives from this Greek word, but our current understanding of economy, as self-regulating markets involving buying and selling, is not the same as “the art of household management” described by Aristotle. The household for Aristotle was a manorial estate, not a small, single-family home, but he argued that these estates should be self-sufficient in providing for every member. Aristotle considered household managing to be “natural” because it provided for life, whereas retail

trade was “unnatural” since it had no inherent boundaries and resulted in limitless accumulation (*ibid.*). Aristotle considered all of society and by extension, the state, to be founded upon the household. Although others argued that the state, especially in terms of economy, has nothing in common with the household (e.g., Rousseau 1994), it was not until the advent of liberalism and its economic counterpart, capitalism, that work in the household came to be considered completely separate from and inferior to the political and economic work conducted by men in the public sphere (e.g., Smith 1976). Liberal theorists rarely mentioned household work except in the context of private property and the law.

Ann Oakley argues that the bias against women’s work in sociology (and, we argue, in archaeology also) began at the same time that modern social sciences were born. Oakley writes about Marx, Weber, Durkheim, Spencer, and Comte: “the so-called ‘founding fathers’ (an appropriate phrase) lived and wrote in an eminently sexist era” (1974:21). Marx and Weber held what Oakley calls “emancipated views” of women, critiquing inequality between the sexes in marriage and arguing in favor of equality (*ibid.*:22). However, Spencer, Comte, and Durkheim naturalized the female/domestic role in their writings, considered women inferior to men, and looked for social change and whatever was important in society in putatively male/public activities (see *ibid.*:21–24).

Feminist scholarship and activism has debated and critiqued the writings of these “founding fathers” and their ideas, whether in the social sciences in general or in archaeology specifically, and it is unnecessary to go over the details here. We only draw attention to two points that will help clarify the contributions of the various papers in this volume. First, work across the social sciences since the 1970s has demonstrated that domestic work and public life are very much intermeshed. Domestic work (and women’s work, more generally) is not really divorced from the public sphere and from wider economic and political processes (e.g., Bray 2003a; Brumfiel 1991; Hendon 1996; Jamieson 2000; LaBianca 1991; McAnany and Murata 2007; Mintz 1985; Oakley 1974; Whitehead 1984). Second, anthropologists and sociologists have demonstrated that housework in general and cooking specifically are important activities because they are work, they have changed historically, and they have complex relations with social class, gender, age, and other socioeconomic factors (e.g., Goody 1982; Gumerman 1997; Mennell 1996; Oakley 1974; Ortiz Cuadra 2006; Weismantel 1988). Clearly, cooking is not just an unimportant or inconsequential activity.

WHY SHOULD ARCHAEOLOGISTS STUDY COOKING?

Archaeologists should study cooking because it is related in complex and varied ways to issues of gender, work, politics, economic life, cultural life, and social differentiation. Studies of gender have been key in drawing archaeologists’ attention

to cooking and in placing women among the actors that shaped political life, the economy, and social change in the past (e.g., Gero and Conkey 1991; Hendon 1996; Joyce 2000; Klein 2001). While these studies were certainly focused on studying women in the past and enhancing archaeology with feminist perspectives, they also demonstrated that the study of cooking is not “just” about studying women. For example, Christine Hastorf (1991) used a combination of ethnohistorical, botanical, and isotopic data to argue that the production of maize beer in the Mantaro Valley of Peru affected gender relations in general. The work of women and women themselves “became the focus of tensions” (ibid.:152), as women increased production of maize beer but saw their social status and participation in political affairs diminish in relationship to that of men through time.

Cooking has, in different societies and time periods, occupied so much time in people’s lives that it is clearly important as work (see Manne, this volume). It can take place in a variety of contexts, whether for the household or as tribute, whether as free or coerced labor, and in egalitarian or hierarchically stratified kitchens. Cooking and food preparation can be a daily task or part of less frequent normative rituals (see Graff, this volume). Goody (1982:37) argues that “the analysis of cooking has to be related to the distribution of power and authority in the economic sphere, that is, to the system of class or stratification and to its political ramifications.”* Time spent preparing food, and the amount of work necessary to prepare a meal, can be managed and negotiated at the level of the household and beyond (e.g., Bauer 1990). Elites and people seeking to enhance their social status and power in past societies have sometimes controlled the work of cooks, managing it as tribute labor and controlling the products of their work for meals, feasts, and ritual (e.g., Bray 2003a; Clark and Blake 1994; Dietler and Herbich 2001; Joyce 2000; Turkon 2004). Classic Maya elites, for example, sometimes portrayed themselves in monumental sculpture and inscriptions as presenting food offerings in ritual scenes, but not cooking. This imagery made public their control over the labor of cooks and their products (Joyce 2000). However, in other examples, rather than elites directly controlling the work of cooks, elite emulation (Mazzoni 2003) or normative cultural practices have been shown to have an effect on the way cooking and food preparation was handled in the past (see Graff, this volume). Archaeological work has also shown that cooking did not always take place in private or secluded settings; in fact, cooking was sometimes integrated spatially into other activities, including agricultural production (e.g., Atalay and Hastorf 2006; Lewis 2007; Robin 2006).

* Goody referred to cooking both as food preparation and eating practices; that is, he did not limit the term only to food preparation. Regardless, his comment is appropriate if one considers food preparation by itself.

Changes in the political economy can affect the kinds of foods that are prepared, time spent in food preparation, and the uses for such food. Thus, political factors can affect daily practice, even in the household. For example, when the Aztec Empire incorporated city-states in the Basin of Mexico into its market system and forced more people to provide tribute and to participate in regional markets, cooking practices changed in some areas. Women and girls, the cooks in Aztec society, changed the kinds of food they cooked from stews to more portable tortillas and dry food in areas where agricultural production and sale of food in markets increased, forcing people to work away from their house. This required more work because they had to grind maize finely by hand and prepare corn tortillas individually rather than simply preparing a large stew in a single pot (Brumfiel 1991, 2001). The imperial politics of the Aztec truly changed the way people cooked in their households, thereby affecting work schedules, cultural practices, and home economics.

Studying the processes involved in food preparation allows us to examine social relations within complex societies as well as within households. If there is differential access to the means of production and resources, it is possible to find economic, political, or ideological differences within that society. For example, food can be prepared outside of the home in a group setting by specialists for daily consumption or special occasions (e.g., Dietler and Hayden 2001). A particular social group might monitor the management of food production and/or its distribution, creating differences between producers and consumers. Skills, gender, ethnicity, class, or generational lines may designate the division of labor in cooking and food preparation. Even the cultural rules of cooking may be different for different social groups, and studying different practices within one city, town, or village could provide insights into these social variations (see Chase and also Graff, this volume). Gumerman (1997) discusses the different ways that these data can be collected and their importance.

In her anthropological study of cooking in a district of Mexico City, Joy Adapon (2008) argues that cooking should be considered a system of action that directly affects and changes the social world. Adapon writes about everyday food preparation and cooking as an art form that has social agency. Following Alfred Gell's argument concerning art as "residues of complex intentionalities" (Gell 1996), Adapon argues that cooks have "culinary agency," not only because their work requires considerable technological skill but also because cooking and ultimately serving food is an act of exchange. In these ways cooking shapes social relations (Adapon 2008).

For these reasons, archaeologists should ask whether food preparation was involved in or affected by political strategies in specific case studies. Cooking can inform issues of social inequality and power in which archaeologists are generally interested. The remains of cooking activities, the identities of cooks, and

the way cooking spaces are distributed across the environment can help identify social inequality. Paula Turkon (2004, 2007), for example, used cooking remains, including ground stone and botanical evidence, to examine social inequality in the Malpaso Valley. Turkon's study is particularly interesting because archaeologists had not been able to document social inequality in the Malpaso Valley with the indicators typically used by archaeologists. By shifting the focus to cooking, Turkon literally has added complexity to the reconstruction of politics in the Malpaso Valley. McAnany and Plank (2001) have also found an unequal distribution of cooking tools and spaces in different archaeological examples and have incorporated food preparation activities into their arguments related to social inequality. Archaeological remains of cooking can also help in the study of cultural change and continuity in relationship to changing political and economic conditions (Cyphers Guillén 1993; Deagan 2004; Hastorf 1990, 1991; Isaakidou 2007; Scaramelli and Tarble de Scaramelli 2005).

Stein (this volume) uses food, butchery practices, and cookwares to identify interaction between locals and colonizers in Mesopotamia of the fourth century BC. Stein shows that local food preparation practices predominate in households at Hacinebi, whether the households had predominantly local or Uruk Mesopotamian (colonial) material culture. He argues that cooking practices in these households demonstrate that colonial households were composed of local women and colonial men and that the establishment of intercultural households was an important process in the Uruk expansion and colonial strategies. Stein's model clearly shows that archaeological studies of cooking can be useful in explaining major political strategies and how these affect cultural change.

Pezzarossi, Kennedy, and Law (this volume) also incorporate food and cooking practices across cultural boundaries in their case study of an eighteenth- and nineteenth-century indigenous (Nipmic) community in Massachusetts. They argue that the origins of food and food-related material culture were not of the greatest importance at this site but rather the meanings that people gave them in daily practices. Based on the concept of *habitus*, also examined by Hastorf (this volume), they interpret how people incorporate cooking tools and ingredients into their daily lives and rhythms, forging and manipulating their identities and the way they think and feel about their historical past and their place in the world. For example, they argue that corn-grinding implements in colonial households most likely signaled nostalgia for the precolonial past. Cooks, in this case, were powerful figures in the household because they participated actively in reinterpreting the material culture and ingredients used in cooking.

Tarble de Scaramelli and Scaramelli (this volume) present another case of cooking in colonial situations. They demonstrate how the study of food preparation practices reveals profound social, political, and economic transformations after European colonization of the Orinoco. In indigenous sites that were

in contact with Spanish colonizers and missions in the Orinoco, and in later Republican sites, they found that manioc (yuca) processing into bread and beer changed through time along with changing political and economic conditions. Household production of manioc bread (*casabe*) increased through time during the colonial period, primarily with indigenous technology. Beer fermentation, however, declined as alcoholic beverages began to be imported into the Orinoco. Tarble de Scaramelli and Scaramelli argue that these changes in manioc processing practices were related to the introduction of a capitalist-style economic system coupled with Christianity, which caused changes in the indigenous family structures, the organization of labor, and eating habits and cooking practices. These socioeconomic changes caused a loss of symbolic meaning of manioc beer, and the increased use of *casabe* as a commodity to be traded for imported spirits. This case demonstrates the complex relationship between household food production, religious beliefs, customs, political changes, and wider regional economies.

Cooking is an important aspect of economic life everywhere because it engages directly with agricultural production and foraging, the production of cooking tools, and food serving in feasts and smaller meals. Archaeologists should incorporate it into their repertoire of factors involved in the economy, whether at the household level or beyond. It is particularly important to realize that the ways in which food preparation is involved in the household, local, or regional economy can be quite complex, given the fact that cooking is production and that it depends on procuring a variety of ingredients (produce, spices, water, oils, etc.), tools (ceramics, baskets, metal pots, wooden tools, rocks, etc.), and fuel (e.g., Biskowski 1994, 2000).

It is also important to consider that cooking and food preparation can highlight the heterogeneity of regional economies. For example, Graff (this volume) argues that in northwestern Syria, ceramic evidence of state-managed redistribution of produce was in fact evidence for an exchange of cooking pots without direct state intervention. This evidence calls into question the economic model that had been proposed previously for this region (Matthews 1996; Mazzoni 1984, 1993, 2002) and highlights a need to examine the seemingly commonplace aspects of archaeological evidence rather than focusing on the emblematic qualities of material culture to understand ancient economies.

Cooking is sometimes related to rendering raw foods edible (see Stahl 1989; Harry and Frink 2009; Wandsnider 1997:2) and always related to turning raw ingredients into culturally acceptable food, especially by enhancing flavors and creating desirable textures. Cooking can aid in the digestive process by increasing the availability of nutrients in food, especially by breaking down complex sugars and lipids, and it can reduce or eliminate pathogens and parasites. Ann Stahl (1989) and LuAnn Wandsnider (1997) provide detailed summaries of find-

ings by nutritionists that are of interest to archaeologists. But in the case of food, health and culture do not always agree, as historical examples can demonstrate. At points, cultural beliefs have encouraged people to overcook different ingredients, most likely eliminating most nutritious qualities they might possess. For example, Mennell (1996:231), writing about English cookbooks, notes that “the section on cooking vegetables reinforces a notorious English failing, advising people to boil carrots for ‘about an hour,’ cauliflower for half-an-hour, and cabbage for up to an hour and a quarter.” While the vegetables were probably sterilized to perfection, they must have been devoid of any flavor and low in nutritional value. Bread and rice in many parts of the world are preferred white, which takes the greatest effort and time to prepare while eliminating the grain parts containing the most minerals and vitamins (e.g., Ortiz Cuadra 2006). In western Alaska and eastern Siberia, Karen Harry and Liam Frink (2009:340) argue that cooking was done in ceramic pots not because of any “need for sustained cooking” but rather to satisfy Arctic peoples’ culinary preferences. Clearly people do not cook food merely for health reasons. On the other hand, food preparation can eliminate poisons and parasites by different means, as is the case with the notoriously poisonous cassava in the Caribbean, the preparation of bitter vetch (Graff, this volume), and most cuts of meat (Ortiz Cuadra 2006; Stahl 1989). The ways in which health and culture affect food preparation are of potential relevance to debates over culture and practical reason and long-standing archaeological debates over evolution, cultural ecology, and power (e.g., Dietler and Hayden 2001). Furthermore, cooking is relevant to studies of agricultural intensification, given that cooking can sometimes increase the nutritional quality of food, thereby making agricultural harvests more productive in terms of nutrition and caloric yield (see Stahl 1989).

The techniques and activities of food preparation can affect health and the human body in other ways. Constant exposure to smoke from hearths can result in respiratory illness (Atalay and Hastorf 2006). Repetitive motion, such as that done during grinding, can result in arthritis, and sitting in particular positions for long periods of time while preparing food can also cause problems with bones and joints. Cooking tools, especially ceramic containers, can promote parasite transmission, and they can harbor bacteria that result in infection (Cohen 1989). Therefore, the relationship between cooking and health is complex, and it is worth studying in detail.

Manne (this volume) integrates several themes discussed so far in this introduction in her study of bone grease rendering in Upper Paleolithic Vale Boi, Portugal. Through her study of the earliest known example of bone grease rendering in Europe, Manne argues that obtaining even small quantities of bone grease was very labor intensive. Based on analogy with many ethnographic examples, Manne argues that women usually practice this activity and, by extension, grease rendering most likely affected women’s work in the Upper Paleolithic. Perhaps

more than any other case study in this volume, Manne considers how cooking was involved in managing humans' relationship to the natural environment. She proposes that grease rendering could have been used to manage seasonal caloric shortages or anthropogenic changes in game availability. Her study underscores how cooking can serve to mediate between the economy, labor, and ecology in particular historical situations.

Cooking is also related to social and cultural divisions of gender, age, class, community, family, and household; it is related to social structures. The relationship between cooking and social structures can change historically in ways that are identifiable archaeologically and that can add complexity to models of the past. Krista Lewis (2007:202–203) has shown that in South Arabia food processing went from taking place primarily in outdoor spaces in the Bronze Age to taking place in secluded or private spaces in the first millennium BC. This shift occurred in the midst of other changes that indicate increased defensive concerns and an emphasis on food storage rather than sharing. The change in cooking practices reflects broader social concerns and gives us an idea of how households coped with social changes. Katheryn Twiss (2007b) has also shown that studying food preparation practices as well as consumption can help identify whether people in the past shared broad community identities or whether they identified more closely with their household. Twiss's and Lewis's observations demonstrate that it is useful to contrast domestic and communal patterns in a historical manner.

Russell and Martin (this volume) argue convincingly that communal solidarity in Neolithic Çatalhöyük was partly a result of bone marrow and grease extraction as well as household meals and communal feasts. They use faunal remains to show that cooks participated in suprahousehold bone grease extraction and that these activities helped create the social ties that made it possible for a large, nucleated community to exist at Çatalhöyük even though it did not have a centralized government.

Hastorf (this volume) also focuses on Çatalhöyük, arguing that food preparation activities, among other factors, provided stability, social cohesion, and longevity to the settlement. Drawing especially from Pierre Bourdieu's theory of practice, Hastorf argues that cooking is "the ultimate habitus practice" and that the material aspects of cooking reflect the habitus of social groups (cf. Atalay and Hastorf 2006). Cooking spaces in Çatalhöyük changed with the seasons, from rooftop cooking in the summer to indoor cooking in the winter. During the cold season, the cook worked in the middle of the house, which literally gave her (or him) a clear view of everything going on inside the house. Hastorf argues that this placement gave the cook a central, powerful place in the household, providing a clear link between cooking and domestic power. Her argument is important because it forces us to set aside the idea that cooking is merely a daily chore and instead places the cook in a position of power.

Cooking is also a context in which archaeologists can study technology and its complex relationship with social identities and power. Ethnographic and historical work is key in demonstrating that cooking is an activity that involves ever-changing technologies. Goody (1982:70) has argued that even in the “simplest” societies, the technology of food production and preparation is complex and that women are the ones who control such technology. Furthermore, the changing availability of different technologies through time can radically alter food preparation, the food that is prepared, or even the significance of particular foods for cultural or religious reasons. For example, Puerto Rican cooking (including recipes and the work of the cook) changed in the last four decades due to a simple change in technology: the increased availability of stoves with more than two burners. This increased the variety of dishes eaten per meal, especially simple dishes that accompanied or sometimes substituted for complex stews, and it affected the work involved in preparing these dishes. Technological changes also affect different ingredients even before they enter the house (e.g., individual packaging, addition or reduction of salt and sugar, artificial flavoring, canning, slicing, freezing, precooking, etc.), thereby affecting the work of cooks, the time involved in food preparation, the quality of the food, and even the symbolic value and meaning of different ingredients and dishes (Ortiz Cuadra 2006). Wandsnider (1997) considers how choice of cooking techniques can be related to the chemical characteristics of different ingredients (among other factors) and how cooking techniques can affect evolution.

In the 1940s, Ralph Linton (1944) used cooking pots and the inferred cooking techniques to address issues of interest at the time: diffusion of technology and its relationship to cultural evolution. Kenneth E. Sassaman (2000) provides a nuanced analysis of how agency affected the use of ceramic and stone pottery in the Stallings culture of the Middle Savannah River in eastern North America, ca. 4500–3000 BP. Sassaman’s analysis shows that soapstone vessels were not the chronological predecessors of ceramic pottery, as evolutionary models would predict. Technological change, in this case, moved toward the incorporation of less efficient pottery though time. Sassaman discusses how men and women participated differentially in the incorporation of ceramic and soapstone pottery, depending on their social goals and strategies. The differential incorporation of ceramic and stone pottery affected cooking practices and social organization through time in ways that would not be accessible to archaeological interpretation if one did not take agency into account and if one did not consider the manufacture and use of different kinds of cooking containers.

Most papers in this volume touch upon technology or techniques in one way or another. Chase (this volume) focuses extensively on technology, examining how meat was acquired, butchered, cooked, distributed, and discarded in Gola Dhoro, India. Chase was able to identify two distinct ways of processing meat at

the site, strongly correlated with separate residential sectors. While it is hard to know whether these differences in food preparation are related to class differences or ethnicity, the results inform current debates on the colonization of the Gujarat by Harappa. In addition, Rodríguez-Alegría (this volume) presents a long-term study of corn grinding in Mesoamerica. By combining archaeological, ethnohistorical, and ethnographic data, he shows that although corn grinding survived for centuries after the Spanish conquest, it is a technology that changed through time, depending on the context of production and the desired results. Scholars have argued that the continuation of corn grinding, a very labor-intensive task, is related to ideologies of female subordination. New data obtained from interviews with the last generation of women to grind corn by hand in Xaltocan suggest that grinding continued into the twentieth century due to more practical problems, including the reliability of transportation to grinding mills, unreliable electric power in the town, and a general preference for the flavor of stone-ground corn. The data emphasize the interplay between household interests and suprahousehold factors that affect technological change.

CONCLUSION

With the increasing interest in feasting and drinking among archaeologists, and the long-standing interest in agricultural production, we believe it is time to increase attention to the social aspects of food from yet another perspective: cooking. We refer to a variety of cooking activities, ranging from butchering, placing food over a fire, drying, or fermenting foodstuffs to grinding grains and spices. Perhaps feasting and other eating practices have received more scholarly attention in recent years than cooking because we typically view cooking as an individual activity of little social value (as did Aristotle, described previously) or something that takes place in private, domestic spaces, largely disconnected from political life and the social world. But several archaeological, ethnographic, and sociological studies in the past decades clearly point to cooking as an activity with important social consequences. Cooking is a social activity because very often women and people of specific social classes and age groups spend a large portion of their lives cooking and engaged in various aspects of food preparation. Food preparation and cooking often take place in outdoor spaces, where people socialize and engage in different activities as they prepare food and cook. Furthermore, cooking is an activity that is stimulated and constrained by a variety of economic, cultural, religious, and practical factors, but it can also be a site of technological creativity and other kinds of change.

Given all of the ways that food preparation is involved in human life, studying it archaeologically is potentially a good source of insights about the past. Archaeological material gives us access to activities and patterns that are not

recorded in writing but that nonetheless affected life in the past in important ways. Furthermore, the insights from archaeology can help inform studies about contemporary society by offering longer-term perspectives on cooking, the use of space, social change, social boundaries, environmental change, and more generally the relationship between food and culture.

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