## Alcohol: Anthropological/ Archaeological Perspectives

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### **Key Words**

material culture, colonialism, feasts, gender, identity

#### **Abstract**

Alcohol is a special form of embodied material culture and the most widely used psychoactive agent in the world. It has been a fundamentally important social, economic, political, and religious artifact for millennia. This review assesses trends in the anthropological engagement with alcohol during the past two decades since the Annual Review last covered this subject. It highlights the growing archaeological contributions to the field, as well as recent developments by sociocultural anthropologists and social historians. Increasing historicization has been a useful corrective to the earlier functionalist emphasis on the socially integrative role of drinking. Recent studies tend to employ a more strategic/agentive analytical framework and treat drinking through the lens of practice, politics, and gender. Moreover, alcohol has come to be seen as an important component of the political economy and a commodity centrally implicated in strategies of colonialism and postcolonial struggles over state power and household relations of authority.

### INTRODUCTION

It has been nearly two decades since the ARA published an overview of the anthropology of alcohol (Heath 1987a). The current review seeks to complement this excellent earlier study by selectively assessing some major trends in the field during the intervening period. This includes highlighting archaeological contributions to the study of the history of alcohol, something that has been largely absent from works on alcohol by sociocultural anthropologists. Space limitations preclude any attempt at comprehensive coverage, and several important themes, such as medical anthropology's engagement with alcohol studies, are left to other venues and more capable hands (e.g., Bennett & Cook 1996, Marshall et al. 2001).

As Heath (1987a) pointed out in his review, the study of alcohol was experiencing a transformation in perspective at the time he was writing (see also Heath 1976, 1987b, 1995, 2000). The dominant approach, grounded almost exclusively in the disciplines of biology/medicine, public health, and social psychology, had focused on alcohol consumption primarily as an individual pathology or a social problem. This view began essentially with the emergence of the temperance movement in the early nineteenth century, the corresponding creation of alcohol as a collective category and dangerous substance, and the discursive construction of drinking as a problem and then alcoholism as a disease (Blocker 1989, Harrison 1971, Heather & Robertson 1989, McDonald 1994c). However, by the 1980s the orthodoxy of this alcoholism-and-addiction literature was being challenged by a growing anthropological engagement with the subject, which had begun in the 1960s, that focused instead on normal drinking and on alcohol as an integrated social artifact and culturally valued good. Moreover, for the first time, anthropologists were undertaking ethnographic research specifically designed to focus on alcohol rather than simply reporting on it as a secondary by-product of studies designed to meet other goals.

Since that time, anthropological studies of alcohol have proliferated, and several new developments in theoretical orientation have both guided and grown out of this work. To be sure, alcohol has remained a minority research field within anthropology, and anthropologists have never achieved more than a minority voice in the broader field of alcohol studies, nor have they shared much in the abundant research funding supporting this field (see Hunt & Barker 2001). However, they have made important contributions in highlighting the cultural understanding of drinking practices and patterns and in exposing the ethnocentric assumptions underlying much other work. In this sense, both anthropologists and social historians have played similarly subversive roles in alcohol studies by challenging entrenched orthodoxies of more powerful disciplines from the margins (Barrows & Room 1991b, Bennett & Cook 1996).

Much of the earlier alcohol research in sociocultural anthropology evinced a somewhat defensive tone in response to two trends. The first was a foundational subtext of ethnocentric moralizing and individualism in the dominant alcohol-as-pathology literature, and the second was an earlier widespread colonial discourse about the predilection for inebriation and disorder among colonized peoples. Hence, early anthropological analyses often were drawn by the logic of (at least implicit) polemic into a functionalist orientation that focused predominantly on the socially integrative role of drinking. This is evident even in works as late as Douglas (1987a). More recent studies, however, have tended to give equal emphasis to conflict and contradiction and to treat drinking in a more agentive/ strategic framework through the lens of practice, politics, and gender. Moreover, the criticism that anthropologists had ignored the dysfunctional aspects of drinking (e.g., Room 1984) has been countered by studies that seek to define and understand culturally and historically specific forms of abnormal problem drinking within particular normal drinking patterns (Bennett & Cook 1996, Colson & Scudder 1988, Eber 2000, Heath 2000, Huby 1994, Marshall 1991, Spicer 1997). Furthermore, since Singer's (1986) critique of the field for neglecting the broader political economy in which drinking is embedded, alcohol increasingly has come to be recognized as an important component of the political economy and as a commodity centrally implicated in strategies of colonialism and postcolonial economic and political struggles over state power and in household relations of authority (e.g., Bryceson 2002a, Crush & Ambler 1992, Dietler 1990, Jankowiak & Bradburd 2003). Social historians and some anthropologists have also contributed to a crucial historicization of drinking that has been important in overcoming some of the problems inherent in functionalist interpretations (e.g., Akyeampong 1996, Barrows & Room 1991a, Colson & Scudder 1988, Willis 2002). Finally, another significant new development is the extension of research on alcohol into the deep past through the emergence of a sustained archaeological engagement with drinking (e.g., Dietler 1990, Milano 1994, Vencl 1994) and a recent flourishing of work by archaeologists on feasting (e.g., Bray 2003a, Dietler & Hayden 2001, Wright 2004).

This review examines several of these trends, with a special effort made to highlight the archaeological exploration of alcohol. The intention is to suggest that alcohol research represents a fruitful conjuncture of interests and actually has the potential to serve as a mutually heuristic bridge across the subdisciplines of anthropology.

### ALCOHOL AS EMBODIED MATERIAL CULTURE

One issue that demands immediate attention is the nature of the category that defines the subject of this review. What, precisely, is meant by alcohol, and what are the implications of using this term? In the first place, it should be clear that the term does not describe a single, self-evident object. Rather, alcohol is a culturally specific, and quite re-

cent, analytical category that lumps together an astonishing variety of disparate substances on the sole basis of the common presence of a chemical named ethanol (C<sub>2</sub>H<sub>5</sub>OH) that produces psychoactive effects. However, the chemical composition and properties of ethanol were identified only in the twentieth century, and, as noted above, the concept of alcohol as a collective term linking such things as beer, wine, and whiskey is a discursive product of the nineteenth-century temperance movement (Blocker 1989, Harrison 1971, Roberts 1984). This is not necessarily a universally shared folk category, especially among peoples who had/have not been exposed to the recent Euro-American demonization and medicalization of drinking that arose in the context of an emerging urbanindustrial social order and the demands of capitalist work discipline. Even in societies that use the category, culturally specific patterns of inclusion and exclusion can, for example, create fatal problems for epidemiological survey studies when researchers are unaware of such variations. Strunin (2001), for instance, found that young Haitians did not consider two favorite rum-based beverages (kremas and likay) to be alcoholic drinks.

Ethanol can be produced from an impressively wide range of sugary or starchy foods by a variety of techniques (Bruman 2000, Huetz de Lemps 2001, Jennings et al. 2005). Moreover, some varieties of alcoholic drinks have substantial nutritional value, and they may form a significant component of the diet of many peoples (Platt 1955, 1964; Steinkraus 1995). In fact, it is perhaps more appropriate to think of alcohol as a special class of food with psychoactive properties resulting from the application of alternative culinary techniques: The same grain can become porridge, bread, beer, or whiskey, depending simply on the techniques applied to it. It is clear that many peoples think of their traditional forms of alcohol in this way. Despite the British conception of alcohol as a kind of antifood that marks a discrete sphere of consumption (Douglas 1975), one shared by ancient Greeks

(Murray 1990), many peoples consider it an especially valued form of food.

Furthermore, similar to other foods, alcohol is a form of what may be called embodied material culture (Dietler 2001). That is, it is a special kind of material culture created specifically to be destroyed, but destroyed through the transformative process of ingestion into the human body. Hence, it has an unusually close relationship to the person and to both the inculcation and the symbolization of concepts of identity and difference in the construction of the self. Moreover, because of their psychotropic properties, alcoholic beverages often have a heightened valuation in ritual contexts, and they frequently even serve as a crucial indexical sign of ritual. As one Tanzanian informant succinctly summed it up, "If there's no beer, it's not a ritual" (Willis 2002, p. 61). Consequently, the consumption of alcohol is usually enveloped by a set of cultural rules and beliefs that is even more emotionally charged than with other foods and drinks (Douglas 1987b; Heath 1987a, 1987b, 2000; Wilson 2005b). Furthermore, because sustaining the process of alcohol consumption requires continual replenishing production through both agricultural and culinary labor, this domain of material culture reveals especially intimate dialectical linkages between the domestic and political economy. These features also assure that the consumption of embodied material culture constitutes a prime arena for the negotiation, projection, and contestation of power, or what may be called commensal politics (Dietler 1996).

In brief, alcoholic drinks are not simply reducible to a uniform chemical substance with physiological effects. They constitute a form of material culture subject to almost unlimited possibilities for variation in terms of ingredients, techniques of preparation, patterns of association and exclusion, modes of serving and consumption, aesthetic and moral evaluations, expected behavior when drinking, styles of inebriation, and so forth. They form a versatile and highly charged symbolic medium and social tool that are operative in the play-

ing out of ritual and politics, and in the construction of social and economic relations, in crucial ways. Hence, alcohol, as a special class of embodied material culture, is a particularly salient example of what Mauss referred to as a "total social fact," and it constitutes an especially revealing focus of analysis for anthropologists and historians.

### THE (PRE)HISTORY OF ALCOHOL

Alcohol is currently the most widely used human psychoactive agent around the world, and this is a social fact with a deep history. At the time of European colonial expansion, only parts of the Pacific and North America seem to have been without indigenous versions of alcoholic drinks, and European forms were quickly adopted in those regions as well. Furthermore, although religious prohibitions against alcohol consumption currently are widespread in the Islamic Middle East, this was certainly not the case in antiquity. Some of the oldest archaeological evidence for beer and wine comes from precisely this region (McGovern et al. 1995, Michel et al. 1993), and the word alcohol is even of Arabic origin (al'kohol, originally meaning a powdered essence).

The investigation of the early history of alcohol by archaeologists and ancient historians has developed greatly in recent years. That is not to say that earlier scholars ignored alcohol in antiquity (e.g., see Braidwood et al. 1953). But what distinguishes recent work is a more systematic, concerted effort both to develop the theoretical understanding of drinking as a social practice (e.g., Dietler 1990, 2001; Murray 1995; Poux 2004) and to improve techniques for detecting alcohol production and consumption in the archaeological record (e.g., Biers & McGovern 1990, Michel et al. 1993). Part of this effort has also involved the ethnoarchaeological investigation of alcohol, in which researchers undertake ethnographic studies that pay systematic attention to the material dimension of alcohol in its social context as a way of aiding archaeological interpretation (Arthur 2003; Bowser 2003; Dietler & Herbich 2001, 2006).

Archaeologists have several potential lines of evidence to explore the production and consumption of alcohol in the past, and the best results come from triangulating multiple strands of data. These strands include the excavated material-culture traces of consumption, production, and trading practices (e.g., brewing, drinking, serving, and transport vessels; feasting ritual sites and domestic kitchens; breweries and wineries; and shipwrecks laden with wine amphorae), iconographic and textual representations of drinking, models and test implications derived from experimental and ethnographic research, and the chemical traces of alcoholic beverages preserved in ancient vessels.

Archaeometric techniques for analyzing chemical residues from ancient vessels have seen remarkable progress over the past couple of decades, and these techniques have been instrumental in the recent detection of alcohol in Neolithic China, demonstrating the production of a fermented beverage of rice, honey, and fruit as early as the seventh millennium B.C.E. This beverage was the precursor of the cereal-based alcohol of the second millennium B.C.E. that has been preserved inside sealed bronze vessels of the Shang and Western Zhou dynasties (McGovern et al. 2004). The earliest chemical traces of alcohol found elsewhere date to the early sixth millennium B.C.E. and come from the Middle East and Transcaucasia. The oldest residues of grape wine come from Georgia, and residues of both wine and barley beer have been found in Iranian ceramics dating a few centuries later (McGovern 2003, Michel et al. 1993), although the origin of these beverages is probably even older. It has even been suggested that the desire for beer may have been responsible for the original domestication of cereals in the eighth millennium B.C.E. (Braidwood et al. 1953, Katz & Voigt 1986). In any case, archaeological evidence of wine and beer drinking is widespread in Mesopotamia, Assyria, and Anatolia by the third millennium B.C.E., and this demonstrates both that wine was an object of trade from an early date and that it was generally a costly good consumed only by elite strata of these societies, whereas the lower classes drank beer (Joffe 1998, McGovern et al. 1995, Milano 1994, Pollock 2003).

Wine had also spread to beer-drinking Egypt by the third millennium B.C.E., despite the absence of native wild grapes in Egypt. The evidence for alcohol in ancient Egypt is particularly rich: It includes tomb paintings and models illustrating the complete winemaking and beer-making processes. The evidence also shows that wine was, again, present as an important elite drink and that it had important religious roles (James 1995, Lesko 1995, Poo 1995). Wine jars demonstrate that a complex labeling system was already in operation in ancient Egypt by the New Kingdom. Writing on the shoulders of jars and stamps on clay seals indicated the year of the vintage, the region, the vineyard, the vintner, and even the quality of the wine (Lesko 1995). Barley and wheat beer, however, remained the popular drink of the masses, and there is evidence for its production on a large scale, such as the brewery excavated at Hierakonpolis (Geller 1993).

In Europe, credible evidence for alcoholic beverages, especially drinking vessels in funerary contexts, dates back to at least the Neolithic, although it is probable that forms of alcohol such as fermented honey (mead) may have existed even earlier (Dietler 1990. 1996; Sherratt 1991; Vencl 1994). Both grain beers and mead are attested during the Iron Age (first millennium B.C.E.) through historical texts, chemical residues, and the traces of a possible brewery in Germany (Arnold 1999, Dietler 1990, 1999, Stika 1996). Wine was also introduced to Early Bronze Age Greece in the third millennium B.C.E. and served as an elite beverage in Minoan and Mycenaean contexts (Hamilakis 1999; Wright 1995, 2004). It subsequently spread to Italy with Greek colonization during the eighth and seventh centuries B.C.E. Unlike its role in other

societies, wine eventually replaced beer and other drinks altogether among Greeks (except Spartans), Etruscans, and Romans of all social classes (Murray 1990, Murray & Tecusan 1995, Tchernia 1986, Tchernia & Brun 1999). Meanwhile, Phoenician colonists carried the practice of making wine from the Levant to Carthage and their colonies in southern Spain during the eighth century B.C.E. (Greene 1995). By 700 B.C.E., native Iberian societies in Spain (where beer was the indigenous drink) began to make their own wine and to trade it in amphorae modeled after the Phoenician type (Guérin & Gómez Bellard 1999). France was the last region in the Mediterranean to begin consuming wine. The introduction of wine to this region was the result of an Etruscan wine trade that began in the late seventh century B.C.E. and the founding of the Greek colony of Massalia (modern Marseille) in approximately 600 B.C.E., which produced the first wine in France (Bertucchi 1992, Dietler 1990). By the second to first centuries B.C.E., the Mediterranean wine trade had expanded dramatically, such that an estimated 55-65 million amphorae of Roman wine were imported into France over a period of a century (Poux 2004, Tchernia 1986). By the second century c.e., France, now a Roman province, had become a major wine-producing region that was even exporting wine back to Rome (Amouretti & Brun 1993, Brun 2003).

The origins of alcohol distillation are still somewhat obscure. Greeks in Alexandria had already developed the distillation of plant essences for medicinal purposes by the fourth century c.e. The technique was further developed by Arab chemists for the extraction of essential oils for perfumes, and it probably was passed back to Europe during the medieval period, perhaps through Spain. The distillation of alcohol from wine seems to have emerged in the medical schools of Salerno and/or Montpellier during the twelfth century (although see Allchin 1979). Distilled alcohol remained primarily for medicinal uses until the sixteenth and seventeenth cen-

turies, although some recreational consumption seems to have begun as early as the fifteenth century, especially in Germany. During the sixteenth century, production began to shift from apothecaries and monasteries to merchants and commercial distillers. By the seventeenth century, consumption was widespread and production increased dramatically, especially once cheaper sugar- and grain-based alcohols began to be produced in northern Europe (Braudel 1979, pp. 241–49; Forbes 1970; Matthee 1995).

Little archaeological research has been conducted on ancient alcohol in Africa outside of Dynastic Egypt, although Edwards (1996) has identified credible evidence for the ritual importance of sorghum beer in Kushite society from the late first millennium B.C.E. However, sub-Saharan Africa does have an immense range of indigenous alcoholic beverages made from various cereals, bananas, palm sap, honey, and other ingredients that were an important part of African cultures everywhere at the time of European and Arabic contact (Huetz de Lemps 2001). These are probably of considerable antiquity in most areas, a fact attested by an eleventh-century reference by the geographer Al-Bakri to alcoholic drinks as part of a royal funerary ritual in Ghana (Pan 1975, pp. 20–21). As in most other places, the technique of distilling alcohol is a by-product of European colonialism and dates only to the late nineteenth century in most parts of Africa. However, indigenous materials were quickly adapted to make distillation devices and produce local varieties of distilled spirits in many areas (Dietler & Herbich 2006, Huetz de Lemps 2001, Tanzarn 2002, Willis 2002).

In India, textual evidence demonstrates that barley and rice beers extend back to at least the Vedic period (second millennium B.C.E.), and alcoholic beverages made from a variety of grasses, fruits, and other substances are also attested in ancient texts (Prakash 1961). On the basis of Sanskrit texts and possible small pottery stills, Allchin (1979) has even claimed that the process

of alcohol distillation may have been invented in India and Pakistan at approximately 500 B.C.E., although the evidence for this is ambiguous.

The New World also has a range of traditional alcoholic drinks made from very different ingredients: principally maize and agave, but many other kinds of roots, fruits, and stalks as well (Bruman 2000). In the Americas, less research has been conducted on identifying the earliest traces of these drinks. However, it is clear that maize-based chicha was an important element of feasting and state politics in the Inca empire and in several earlier expansionary polities of South America from at least the third century B.C.E. (Bray 2003b, Cook & Glowacki 2003, Goldstein 2003, Lau 2002, Moore 1989, Morris 1979). Moreover, chica may have been a significant implement of feasting and status differentiation as early as the ninth century B.C.E. (Clark & Blake 1994). It has even been argued that the desire for alcohol made from sweet stalks (rather than grain) may have been responsible for the original domestication and spread of maize as early as the sixth millennium B.C.E. (Smalley & Blake 2003). In Central America, the Maya also drank maize beer, as well as a fermented drink called balché made from honey and bark that was additionally spiked with hallucinogens (Coe 1994, pp. 134, 166; LeCount 2001). Fermented agave formed the base for the alcohol of choice (pulque) of the Aztec state (Smith et al. 2003). This drink presumably had a greater antiquity as well, although clear evidence is lacking. Distilled alcohol and the production of wine from grapes in the New World are products of the Spanish conquest (Bruman 2000, Rice 1996).

Recent archaeological and historical research of this kind has succeeded in enriching our understanding of the deep antiquity and near ubiquity of alcohol on a worldwide scale, as well as illuminating the social, political, and economic roles of alcohol in ancient societies. These latter insights are discussed below with related contributions from sociocultural anthropologists and social historians.

### ALCOHOL, IDENTITY, AND GENDER

The integrative role of alcohol in maintaining social cohesion and drinking as a constructive social act are themes stressed by most anthropologists who have studied alcohol since the 1960s, and these need little further comment here (see Douglas 1987b; Heath 1987a, 1987b, 2000). Another longstanding theme has been the way in which drinking serves to mark social categories, boundaries, and identity. However, what distinguishes more recent work is that drinking patterns are not viewed simply as reflections of social organization, manifestations of deep cognitive structure (in the structuralist mode), nor as simple expressions of cultural identity, but rather as practices through which personal and group identity are actively constructed, embodied, performed, and transformed. In other words, drinking is seen as a significant force in the construction of the social world, both in the sense of creating an ideal imagined world of social relationships and in the pragmatic sense of strategically crafting one's place within that imagined world, or challenging it. This theme has, in fact, tended to dominate a number of recent edited volumes on drinking by both anthropologists and historians (e.g., de Garine & de Garine 2001, Douglas 1987a, Gefou-Madianou 1992, McDonald 1994b, Scholliers 2001, Wilson 2005a).

This kind of identity construction and marking through drinking occurs along a variety of social category and boundary distinctions, including age, gender, class, family or lineage, occupation, ethnicity, and religion (e.g., Martin 2001, Mars 1987, McDonald 1994a). Regional, national, and cosmopolitan identities also frequently involve drinking practices (e.g., Guy 2001, Hall 2005, Wilson 2005b). The relationship between alcohol and identity can also shift over time, as, for example, in contexts of increasing commoditization in which traditional associations with age/seniority and community may be overridden by new associations with class distinctions

(Suggs 1996). In all these cases, drinking serves simultaneously to construct both a sense of communal identity for those drinking together or sharing tastes and a sense of difference and boundaries from others.

It is not only types of alcohol that serve as indexical signs of identity. Drinking is a learned technique du corps, in the sense of Mauss (1936), and all aspects are relevant in embodying and discerning identity and difference. Hence, in addition to such qualitative distinctions (i.e., aesthetic dispositions people develop about preferred kinds of alcohol, drinking paraphernalia, and styles of drinking and the cultural capital derived from embodied knowledge about proper consumption practices), various other symbolic diacritica converge in complex permutations in the construction of identity through drinking practices. These include the following: (a) spatial distinctions (i.e., segregation into separate drinking places or other structured differential positioning of groups or individuals while drinking together), (b) temporal distinctions (such as the order of serving or consumption, or the timing of drinking events), (c) quantitative distinctions (in the relative amounts of drink consumed or served), and (d) behavioral distinctions (i.e., differences in expected bodily comportment during and after drinking, including such things as permissible signs of intoxication or expected modes of drunken comportment and serving or being served). Such distinctions are not only part of an embodied Bourdieuean habitus, but they can be consciously manipulated on a microscale to make statements about relative status or sentiments of inclusion and exclusion at various levels. Feasts and other kinds of drinking rituals can be an especially powerful theater for such politically charged symbolic assertions and contestations (Dietler & Hayden 2001).

Gender is perhaps the most widespread dimension of identity in which alcohol plays an obvious role (Gefou-Madianou 1992, McDonald 1994b). Masculinity is frequently defined around the capacity to drink within associations of male drinkers, from the ancient Greek symposion to the Irish pub (Driessen 1992, Murray 1990, Peace 1992, Suggs 1996). In many societies, women may be expected to drink less than men (or to abstain completely), to behave differently from men when drinking or intoxicated, to prefer different kinds of alcohol than men, or to drink in different places than men (Dietler & Herbich 2006, Eber 2000, Hendry 1994, Huby 1994, Macdonald 1994, Suggs 1996). Male and female practices may also vary by class within the same society (González Turmo 2001). These features are not static but change in response to a variety of factors, including the use of drinking as a form of resistance to male authority (Papagaroufali 1992) and the commoditization of alcohol (Suggs 1996).

Another gendered dimension of drinking is that, at least in contexts of nonindustrial production, women have often been the primary suppliers of alcohol predominantly consumed by men. Some researchers have viewed this as exploitation, although female brewing labor (and male dependence on it) may also be overtly recognized and valued, and women may derive considerable categorical and individual status from their central role in the furnishing of hospitality or in maintaining commensal relations with the gods (March 1998). Furthermore, with the commoditization of alcohol, women have frequently benefited from their role as brewers by developing a new source of economic power and independence (see below).

Alcohol has also played a frequent role in the distinction of class boundaries and the embodiment of class identities through both the development of tastes for different types of alcohol and styles of drinking, and sometimes the imposition of sumptuary laws restricting access to symbolically charged drinks or drinking paraphernalia. In contemporary Africa, for example, factory-brewed bottled beer and traditional ferments commonly distinguish the consumption patterns of urban workers and provincial salaried professionals on the one hand, and rural agriculturalists

on the other, whereas imported distilled liquor is consumed exclusively by urban elites (e.g., Colson & Scudder 1988, Diduk 1993, Partanen 1991). These specific distinctions represent a postcolonial shift in African patterns, but this is not a new phenomenon. As noted above, the distinction between wine and beer was a common class marker in ancient Mesopotamia and Egypt, and diacritical styles of drinking also characterized, for example, some European Iron Age societies (Arnold 1999; Dietler 1990, 1999). In other contexts, distinctions between wine and beer, for instance, may be associated more with regional identity than class (e.g., Hall 2005), although class may be marked by other aspects of drinking practices.

### ALCOHOL AND POLITICS

Alcohol has long been a prime political tool. Its importance in this domain is related to its widespread association with hospitality and ritual, and to its status as a socially valued good and form of embodied material culture that acts as a social marker. There are numerous paths by which alcohol is deployed in the micropolitics and macrostrategies of the manipulation of power and the construction of authority (see Dietler 1990, 2001; Willis 2002). However, especially in the context of rituals of public consumption (feasts), alcohol has been equally crucial to the operation of politics at all scales: from societies without formal political roles or institutions, to societies with centralized chiefly authority, to imperial states (Bray 2003a, Dietler & Hayden 2001).

In contexts where the exercise of power is not vested in formal political institutions or roles, the manipulation of drinking frequently serves as a significant avenue to the creation of prestige and social capital that are fundamental to the conditions of possibility for leadership in influencing group decisions and actions. The production of this kind of power may occur in the context of the subtle small-scale engineering of social indebtedness through the manipulation of hospital-

ity (e.g., in small beer drinks in the home), the lavish hosting of community ceremonies, or the overtly agonistic mounting of competitive feasts (e.g., Dietler & Herbich 2006, Rehfisch 1987). Hosting drinking feasts may also be essential for climbing the social hierarchy by acquiring formal titles or ritual positions, where these exist (e.g., Arthur 2003, de Garine 1996).

In societies with formal centralized leadership roles, the generous public provision of alcohol on a regular basis frequently is seen as a duty of the person who performs that role, as it symbolically institutionalizes a patron-client relationship. Failure to lavishly dispense alcohol will result in loss of authority, and political challenges may be orchestrated through the mounting of rival drinking feasts. This public largesse can impose considerable demands on such leaders for agricultural surplus and brewing labor (Jennings 2005), and it is one of the main reasons often cited for a connection between political power and polygyny in Africa (see Dietler 2001). Such leaders also frequently have a right to tribute in alcohol and to corvée labor from subjects that serves to ease the burden of such obligatory hospitality. However, corvée labor also requires the provision of beer in compensation for participation (see below). Researchers have observed this kind of political role for alcohol in cases ranging from petty chiefs and royalty in Africa (e.g., Akyeampong 1996, Crush 1992, Willis 2002) to the Inca imperial state. So important was alcohol to the operation of the Inca state that it maintained vast storehouses and compounds of female brewers specifically to produce chicha for large consumption events (Moore 1989, Morris 1979).

## ALCOHOL, POLITICAL ECONOMY, AND COLONIALISM

Alcohol has also been an object of major economic importance and a significant component of the political economy in a wide variety of contexts. It has been a particularly prominent factor in colonial situations, both ancient and modern (Dietler 1990, Jankowiak & Bradburd 2003, Pan 1975). To understand the roles of alcohol in this domain, it is necessary to first briefly consider the properties of alcohol as an economic good.

Most traditional forms of alcohol are made for immediate consumption: They will spoil within a few days of fermentation. This is true for most forms of grain beer before the addition of hops as a preservative (a European invention of the ninth century) and for most other fruit-, sap-, or starchbased alcohols before the invention of distillation (Bruman 2000, Huetz de Lemps 2001, Jennings et al. 2005). The major ancient exception is wine, which could be preserved in amphorae for years. Modern exceptions include distilled spirits and hopped beers. Consequently, most traditional indigenous forms of alcohol could not be traded over great distances or stockpiled: Production and consumption were usually spatially and temporally proximate. These drinks necessitated control of a large labor force for hosting a significant consumption event, and they were of limited value as trade goods. Moreover, these drinks were usually made from products that were a common part of the household agrarian base, and production was often a domestic activity. Wine (as with distilled liquor), on the other hand, could be accumulated for years and traded over vast distances. It had a stronger potential to become a circulating commodity—that is, a good produced for exchange rather than immediate consumption in a social event (see Dietler 1990). The brief window of consumption for most traditional alcoholic beverages is one reason that ancient breweries have been relatively rare archaeological finds, and those that have been identified, for example, in Egypt and South America (Geller 1993, Moore 1989), are facilities for state-sponsored feasting at an adjacent location rather than for trade. Wineries, on the other hand, as specialized commodity-production facilities separated from consumption sites, have been far more commonly detected (Amouretti &

Brun 1993, Brun 2003, Rice 1996). As Willis (2002, p. 237) further observed in regard to distilled alcohol, "when compared with informal-sector ferments, spirits have encouraged more complex economic linkages and a tendency to more overtly commercialized labor relations within production." But, as he also observed, distillation in contexts such as the African countryside has remained a smallscale affair, often as a complement to brewing. It solves the problem of localized oversupply for sellers, as, rather than spoiling, excess alcohol can be kept for sale at another time (Willis 2002, p. 237). The elevated psychoactive effects owing to a much higher alcohol content have also been an obvious source of attraction.

Traditional forms of alcohol have tended to constitute a major component of the domestic economy, with a significant proportion of agricultural resources devoted to brewing. Where quantitative measures have been attempted in smallholder and peasant households, it is clear that 15%-30% (and often considerably more) of the household grain supply is commonly dedicated to the production of alcohol (de Garine 1996, Dietler 2001, Jennings 2005, Platt 1964, Saul 1981). Moreover, this production also frequently requires large quantities of fuel. For example, Saul (1981) noted that, during one week in Manga (a Mossi town of 7000 inhabitants), five beer feasts held in one ward required 1400 kg of wood for brewing and cooking for one of these feasts alone, in addition to 1900 kg of red sorghum required for beer. Other figures from different parts of Africa indicate that 10%-50% of fuelwood consumption is a common figure for brewing (McCall 2002).

Alcohol production of this type is usually a labor-intensive process and one performed predominantly by women. However, alcohol also performs a crucial role in maintaining interhousehold flows of labor through its use in work feasts (see Dietler & Herbich 2001). The work feast is the most-common practice by which large collective-labor projects have been mobilized before the advent of capitalist wage labor: It is an event in which a group of

people is called together to work on a project for a day (or more) and, in return, is treated to drink and/or food, after which the host owns the proceeds of the day's labor. This mechanism has both a voluntary form, in which the workers/guests are drawn by the host's reputation for lavish hospitality, and a more obligatory form, called corvée, in which labor tribute is seen as a duty. However, both forms operate through the idiom of generous hospitality providing the context for collective labor. Such practices have been instrumental in mobilizing everything from agricultural labor, house and wall construction, cash cropping, and trade expeditions in acephalous societies to large-scale building and mining projects in imperial states (e.g., Colson & Scudder 1988; Crush 1992; Dietler & Herbich 2001, 2006; Garine 2001; Jennings 2005; McAllister 2001; Milano 1994; Morris 1979; Moore 1989).

Given the common political and economic importance of alcohol, it is not surprising that it should have come to play a major role in the operation of the political economy and in the articulation of colonial encounters in various parts of the ancient and modern worlds (Crush & Ambler 1992, Dietler 1990, Jankowiak & Bradburd 2003). In fact, the roles of alcohol in colonial situations have been extremely complex and even contradictory, ranging (sometimes simultaneously) from an intended implement of seduction and control to an imagined vector of disorder, a source of colonial and postcolonial state revenue, and a major component of a subversive alternative economy (i.e., bootleg production, smuggling, etc.). What is crucial in each context is to understand the nature of cross-cultural demand (or indifference) for specific types of alcohol and the shifting unintended consequences of consumption of an alien beverage. The meaning, use, and value of particular forms of alcohol usually change as the drinks traverse cultural and social frontiers (Bryceson 2002b, Dietler 1990).

In the ancient world, wine was a form of alcohol implicated in various colonial encounters around the Mediterranean. For example, it was a trade commodity that served as the primary element articulating relations between the indigenous peoples of Gaul and alien Etruscans, Greeks, and Romans over several centuries (Dietler 1990, Poux 2004). This relationship eventually reached such proportions that ships carrying up to 10,000 amphorae of wine maintained a trade that pumped up to 16 million liters of Roman wine per year into Gaul over nearly a century (Tchernia 1986). Careful analysis of the regionally distinctive nature of consumption of imported wine and the often-unintended social and cultural consequences has been extremely helpful in understanding the historical transformation of the colonial encounter as a whole (Dietler 1990, 1996; Poux 2004).

The analysis of *chicha* production and consumption in the Andes has been equally helpful in revealing the operation of the Inca imperial state, which depended on the massive production of *chicha* to organize state labor projects and consolidate power through statesponsored commensal rituals. It was largely the brewing and weaving labor of a select group of women (aclla) appropriated from around the empire that underwrote this system of state control (Bray 2003b, Jennings 2005, Moore 1989, Morris 1979). Chicha was equally important in several earlier Andean polities, although often in somewhat different ways (e.g., Lau 2002). For example, a comparative analysis of the Tiwanaku core area and peripheral regions suggests a prominent role for feasting in what Goldstein (2003) suggests may have been a soft form of Tiwanaku state expansion in which agency resided with multiple competing corporate groups operating independently of any state design.

Alcohol has been an equally important element in the expansion of modern European colonialism in both the Old and New Worlds and in the operation of postcolonial states in the age of globalization (e.g., see Angrosino 2003, Eber 2000, Mancall 2003, Scaramelli & De Scaramelli 2005). However, Africa offers perhaps the richest set of analyses of this phenomenon by anthropologists and

social historians (e.g., Akyeampong 1996; Ambler 1991, 2003; Bryceson 2002a; Colson & Scudder 1988; Crush & Ambler 1992; Diduk 1993; Holtzman 2001; Pan 1975; Partanen 1991; Willis 2002). In West Africa, distilled spirits (brandy, rum, and gin) played a major role in the Atlantic slave trade from its beginning, serving as a commodity, a currency, and a lubricant for establishing exchange relationships (Ambler 2003, Diduk 1993, Pan 1975). Cities such as Liverpool even built special distilleries specifically to service the African market. Liquor became a key trade item in the triangle that linked Europe, Africa, and the Americas: It was traded for African slaves who worked the American sugar plantations that provided the raw material for rum that was used to obtain more slaves. By the 1770s, North American rum exports to Africa alone are estimated at an annual average of over 1.1 million liters (Smith 2001). Moreover, the growing slave-sugar economy of the seventeenth century also made cheap rum readily available to the working classes of England and Holland for the first time (Matthee 1995).

With the imposition of European colonial control over Africa in the nineteenth century (and earlier in South Africa), alcohol became a subject of ambivalence, conflicting discourses, and shifting policies and alliances—but was always of major concern. On the one hand, the colonial state in most regions began to rely on taxes on alcohol for both a substantial part of its operating revenues (Akyeampong 1996, Crush & Ambler 1992, Diduk 1993, Heap 2002, Pan 1975) and for the mobilization and pacification of a native labor force (Crush & Ambler 1992, Diduk 1993, Holtzman 2001, Suggs & Lewis 2003). For example, French West Africa derived approximately 70% of its revenues from alcohol duties in the early twentieth century (Pan 1975, p. 16). On the other hand, anxiety about the effects of alcohol in producing an unruly subject population and disrupting work discipline also became pervasive. Moreover, the prevalence of a strong temperance ideology among Protestant missionaries led to both political agitation for state limitations on alcohol and direct attempts to influence African drinking practices and beliefs through religious conversion. These conflicting forces resulted in alcohol becoming a constant subject of colonial legislation and (usually unsuccessful) attempts to control native consumption and production of alcohol while promoting the sale of revenueproducing imported varieties or state monopolies. Not surprisingly, alcohol also became a central object of contestation between the colonial state and both African leaders and local brewers. This struggle has continued in postcolonial African states (Akyeampong 1996, Ambler 1991, Colson & Scudder 1988, Crush & Ambler 1992, Diduk 1993, Gewald 2002, Partanen 1991, Willis 2002).

A major consequence of the colonial engagement with Africa, and other regions, has been shifts toward the commercialization of alcohol and toward new contexts of consumption, which have often altered the cultural meaning of drinking. In Europe, domestic production of alcohol was gradually replaced between the fourteenth and nineteenth centuries by specialist alewives selling out of homes and eventually by commercial establishments that became a primary locus for public consumption—alehouses, taverns, or public houses (Clark 1983, Kümin & Tlusty 2002). Similar processes are seen in nineteenth and twentieth century Africa, particularly in urban contexts where new forms of public culture emerged in which public drinking was a major element. These transformations toward commercialization have often provided women, as the primary traditional brewers (at least for grain beers), with a new source of economic power and independence, although one with limitations (Akyeampong 1996, Colson & Scudder 1988, Dietler & Herbich 2006, Green 1999, Haggblade 1992, Holtzman 2001, Roberts 2000, Saul 1981, Suggs 1996). In many cases, income from commoditized brewing and distilling has become decisive for the survival of poorer households, especially female-headed ones (Green 1999). The dependence on alcohol production has also frequently propelled women into resistance against the state (Bradford 1992, Gewald 2002, Haggblade 1992).

Commoditization also produced new contexts of consumption (beer halls, shebeens, etc.) that the state has often seen as potential centers of subversive politics and has tried, usually without success, to control. Shifting alcohol from ritual to market contexts also sometimes has set off conflict between generations and genders (as senior men have felt their power challenged by liberalized access to a potent political symbol and tool) and, for example, between traditionalists and Christian converts (e.g., Quintero 2002). This shift sometimes has produced curious alliances of interest as well, as in the case of senior women and young male drinkers uniting in opposition to official alcohol restrictions in Windhoek (Gewald 2002), or in the case of colonial officials enacting restrictive liquor laws in Ghana, despite the loss of considerable revenues, to support the desire of local chiefs for selective access to alcohol and to shore up the social control of these senior men on whom the state depended (Akyeampong 1996). Commoditization has also frequently altered the cultural meaning of drinking toward the celebration of individual prowess and away from community cooperation, although the continuities and transformative play on traditional symbols are complex (Bryceson 2002b, Suggs 1996). Despite the intricacies of local histories of the intersection of alcohol, colonialism, and globalization, as Colson & Scudder (1988, p. 96) noted in Zambia, a frequent long-term result of commercialization has been the recruitment of new categories of drinkers (e.g., young men and women), an increase in the overall quantities of alcohol available, and an increase in the proportion of the population involved in heavy drinking.

#### ALCOHOL AND RELIGION

Because inebriation induces altered states of consciousness, alcohol has frequently played a prominent role in rituals of both a religious and secular nature. Indeed, it is often treated as an indexical sign of a ritual event. But the relationship of alcohol to religion is complex. On the one hand, it is, and has been, an integral part of many religious practices around the world and throughout history, from the ritual consumption of wine in the Catholic mass to ancestor and spirit propitiation with beer in Africa (Carlson 1990, Colson & Scudder 1988, Green 1999, Luning 2002). On the other hand, its consumption is proscribed by some religions (e.g., Islam and several Protestant Christian sects) to such an extent that abstention can become one of the most important defining symbols of piety and group membership.

The association between alcohol and religion is one with a deep antiquity. Information on this relationship is especially abundant in the case of ancient Greece, which has left us a rich and diverse textual and iconographic archive on the subject of wine. Wine was not only the crucial element of the Greek social ritual of the symposion, but it was directly associated with the divine power of Dionysus, and ritual libations were an essential part of religious practice (Brun et al. 2005, Lissarrague 1990, Murray 1990, Murray & Tecusan 1995). Wine was also a fundamental aspect of ancient Egyptian religion: It had many theological associations, and wine offerings were made in divine cults and funerary rituals (Poo 1995). Archaeologists have also been able to reconstruct the pervasive use of alcohol in funerals and other religious rituals of ancient societies that did not leave texts, such as Iron Age European societies (Arnold 1999; Dietler 1990, 1999; Forenbaher & Kaiser 2001; Poux 2004). ancient Kushite society (Edwards 1996), and various Andean polities (Lau 2002). Religion is not only intimately entwined with alcohol consumption, but often with its production as well. Perhaps the most salient case is the preservation of wine production on monastic estates in Europe after the decline of the Roman Empire and the longstanding tradition of monasteries as centers of beer production and

experimentation with techniques of herbal additives to alcoholic drinks (Vess 2004).

As noted above, some Protestant Christian sects depict alcohol as an evil and dangerous substance that defiles the drinker and forbid its consumption. Aside from its prominent role in the temperance movements of Europe and the United States (Blocker 1989, Harrison 1971, Roberts 1984), this belief has been transported by missionaries to many colonial encounters and postcolonial situations. In those contexts, alcohol has often acquired the additional stigma of being associated with traditional ritual practices and the power of what missionaries view as pagan superstition and prior networks of communal identity. Hence, for example, Christian fundamentalists in Malawi have mandated that alcohol must be avoided to attain salvation both because of its evil nature and because of its assoctiation with the traditional extended family relations and obligations that thwart the attainment of worldly success in the Western individualist model (van Dijk 2002). Spier (1995) offers the telling example of Andean women opposing the conversion of their husbands to Protestantism precisely because abstinence from drinking would sever household connections to mutual aid networks. Such examples are widespread in Africa, Latin America, and other places where missionaries have been active (e.g., Eber 2000, Heath 2000, Willis 2002). This has frequently resulted in

alcohol serving as a highly charged focus of symbolic contestation in identity struggles between not only traditionalists and Christian converts, but also between Protestant and Catholic converts (Luning 2002).

### **CONCLUSION**

Alcohol, as an especially prized form of embodied material culture and the most widely used type of psychoactive agent in the world, has been a fundamentally important social, economic, and political artifact for millennia. Hence, alcohol should be a subject of crucial interest to the social sciences, both for what it can tell us about social life and culture and for our ability to understand its potential dangers and benefits. Although still marginal to the dominant perspectives in alcohol studies, sociocultural anthropologists, archaeologists, and social historians have made a variety of important contributions and are expanding research in several directions. A few major themes among those contributions over the past couple of decades have been reviewed here in a highly selective fashion. Although far from comprehensive in its coverage, it is hoped that this discussion serves both to highlight the potential of an anthropological engagement with alcohol and to suggest the interconnections and the mutually heuristic benefits of this subject as a bridge between the subdisciplines.

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### LITERATURE CITED

Akyeampong E. 1996. Drink, Power, and Cultural Change: A Social History of Alcohol in Ghana, c. 1800 to Recent Times. Oxford: James Currey

- Allchin FR. 1979. India: the ancient home of distillation? Man 14:55-63
- Ambler C. 1991. Drunks, brewers, and chiefs: alcohol regulation in colonial Kenya 1900–1939. See Barrows & Room 1991a, pp. 165–83
- Ambler C. 2003. Alcohol and the slave trade in West Africa, 1400–1850. See Jankowiak & Bradburd 2003, pp. 73–87
- Amouretti MC, Brun JP, eds. 1993. La production du vin et de l'huile en Méditerranée. Paris: Boccard
- Angrosino MV. 2003. Rum and ganja: indenture, drug foods, labor motivation, and the evolution of the modern sugar industry in Trinidad. See Jankowiak & Bradburd 2003, pp. 101–15
- Arnold B. 1999. "Drinking the feast": alcohol and the legitimation of power in Celtic Europe. *Camb. Archaeol.* 7, 9:71–93
- Arthur JW. 2003. Brewing beer: status, wealth and ceramic use alteration among the Gamo of south-western Ethiopia. World Archaeol. 34(3):516–28
- Barrows S, Room R, eds. 1991a. *Drinking Behavior and Belief in Modern History*. Berkeley: Univ. Calif. Press
- Barrows S, Room R. 1991b. Introduction. See Barrows & Room 1991a, pp. 1-25
- Bennett LA, Cook PW. 1996. Alcohol and drug studies. In Medical Anthropology: Contemporary Theory and Method, ed. CF Sargent, TM Johnson, pp. 235–51. Westport, CT: Praeger. Rev. ed.
- Bertucchi G. 1992. Les amphores et le vin de Marseille, VIe s. avant J.-C. IIe s. après J.-C. Paris: CNRS
- Biers WR, McGovern PE, eds. 1990. Organic Contents of Ancient Vessels: Materials Analysis and Archaeological Investigation. Philadelphia: MASCA Res. Pap. Sci. Archaeometry
- Blocker J. 1989. American Temperance Movements: Cycles of Reform. Boston: Twayne
- Bowser B. 2003. *The perceptive potter: beer bowls and political action in the Ecuadorian Amazon*. Presented at Annu. Meet. Soc. Am. Archaeol., 68th, Milwaukee
- Bradford H. 1992. "We women will show them": beer protests in the Natal countryside, 1929. See Crush & Ambler 1992, pp. 208–34
- Braidwood R, Sauer JD, Helbaek H, Mangelsdorf PC, Cutler C, et al. 1953. Symposium: Did man once live by beer alone? *Am. Anthropol.* 55:515–26
- Braudel F. 1979. Civilization and Capitalism, 15th–18th Century. Volume 1: The Structures of Everyday Life. Trans. S Reynolds. New York: Harper & Row
- Bray T, ed. 2003a. *The Archaeology and Politics of Food and Feasting in Early States and Empires*. New York: Kluwer
- Bray T. 2003b. To dine splendidly: imperial pottery, commensal politics, and the Inca state. See Bray 2003a, pp. 93–142
- Bruman JH. 2000. Alcohol in Ancient Mexico. Salt Lake City: Univ. Utah Press
- Brun JP. 2003. Le vin et l'huile dans la Méditerrannée antique. Paris: Errance
- Brun JP, Poux M, Tchernia A, eds. 2005. Le vin: nectar des dieux, génie des hommes. Gollion, Switzerland: InFolio
- Bryceson DF, ed. 2002a. *Alcohol in Africa: Mixing Business, Pleasure, and Politics*. Portsmouth, NH: Heinemann
- Bryceson DF. 2002b. Changing modalities of alcohol usage. See Bryceson 2002a, pp. 23-52
- Carlson RG. 1990. Banana beer, reciprocity, and ancestor propitiation among the Haya of Bukova, Tanzania. *Ethnology* 29:297–311
- Clark J, Blake M. 1994. The power of prestige: competitive generosity and the emergence of rank societies in lowland Mesoamerica. In *Factional Competition and Political Development in*

- the New World, ed. EM Brumfiel, JW Fox, pp. 17–30. Cambridge, UK: Cambridge Univ. Press
- Clark P. 1983. The English Alehouse: A Social History, 1200–1830. New York: Longman
- Coe SD. 1994. America's First Cuisines. Austin: Univ. Texas Press
- Colson E, Scudder T. 1988. For Prayer and Profit: The Ritual, Economic, and Social Importance of Beer in Gwembe District, Zambia, 1950–1982. Stanford, CA: Stanford Univ. Press
- Cook AG, Glowacki M. 2003. Pots, politics, and power: Huari ceramic assemblages and imperial administration. See Bray 2003a, pp. 173–202
- Crush J. 1992. The construction of compound authority: drinking at Havelock, 1938–1944. See Crush & Ambler 1992, pp. 367–94
- Crush J, Ambler C, eds. 1992. *Liquor and Labor in Southern Africa*. Athens: Ohio Univ. Press de Garine I. 1996. Food and the status quest in five African cultures. In *Food and the Status Quest:*An Interdisciplinary Perspective, ed. P Wiessner, W Schiefenhövel, pp. 193–218. Oxford: Berghahn
- de Garine I, de Garine V, eds. 2001. *Drinking: Anthropological Approaches*. New York: Berghahn Diduk S. 1993. European alcohol, history, and the state in Cameroon. *Afr. Stud. Rev.* 36(10):1–42
- Dietler M. 1990. Driven by drink: the role of drinking in the political economy and the case of Early Iron Age France. J. Anthropol. Archaeol. 9:352–406
- Dietler M. 1996. Feasts and commensal politics in the political economy: food, power, and status in prehistoric Europe. In *Food and the Status Quest: An Interdisciplinary Perspective*, ed. P Wiessner, W Schiefenhövel, pp. 87–125. Oxford: Berghahn
- Dietler M. 1999. Rituals of commensality and the politics of state formation in the "princely" societies of Early Iron Age Europe. In *Les princes de la protohistoire et l'émergence de l'état*, ed. P Ruby, pp. 135–52. Naples: Cahiers du Centre Jean Bérard, Inst. Français de Naples
- Dietler M. 2001. Theorizing the feast: rituals of consumption, commensal politics, and power in African contexts. See Dietler & Hayden 2001, pp. 65–114
- Dietler M, Hayden B, eds. 2001. Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power. Washington, DC: Smithsonian
- Dietler M, Herbich I. 2001. Feasts and labor mobilization: dissecting a fundamental economic practice. See Dietler & Hayden 2001, pp. 240–64
- Dietler M, Herbich I. 2006. Liquid material culture: following the flow of beer among the Luo of Kenya. In *Grundlegungen. Beiträge zur Europäischen und Afrikanischen Archäologie für Manfred K.H. Eggert*, ed. HP Wotzka, pp. 395–408. Tübingen, Germ.: Francke Verlag Douglas M. 1975. Deciphering a meal. *Daedalus* 101:61–82
- Douglas M, ed. 1987a. Constructive Drinking: Perspectives on Drink from Anthropology. Cambridge, UK: Cambridge Univ. Press
- Douglas M. 1987b. A distinctive anthropological perspective. See Douglas 1987a, pp. 3–15
- Driessen H. 1992. Drinking on masculinity: alcohol and gender in Andalusia. See Gefou-Madianou 1992, pp. 71–79
- Eber CE. 2000. Women and Alcohol in a Highland Maya Town: Water of Hope, Water of Sorrow. Austin: Univ. Texas Press. Rev. ed.
- Edwards DN. 1996. Sorghum, beer, and Kushite society. Norwegian Archaeol. Rev. 29:65-77
- Forbes RJ. 1970. Short History of the Art of Distillation. Leiden, The Netherlands: E.J. Brill
- Forenbaher S, Kaiser T. 2001. Nakovano Cave: an Illyrian ritual site. Antiquity 75:677-78
- Garine E. 2001. An ethnographic account of the many roles of millet beer in the culture of the Duupa agriculturalists, (Poli Mountains) northern Cameroon. See de Garine & de Garine 2001, pp. 191–204

- Gefou-Madianou D, ed. 1992. Alcohol, Gender and Culture. London: Routledge
- Geller J. 1993. Bread and beer in fourth-millennium Egypt. Food Foodways 5(3):255-67
- Gewald JB. 2002. Diluting drinks and deepening discontent: colonial liquor controls and public resistance in Windhoek, Namibia. See Bryceson 2002a, pp. 117–38
- Goldstein P. 2003. From stew-eaters to maize-drinkers: the chicha economy and the Tiwanaku expansion. See Bray 2003a, pp. 143–72
- González Turmo I. 2001. Drinking: an almost silent language. See de Garine & de Garine 2001, pp. 130-43
- Green M. 1999. Trading on inequality: gender and the drinks trade in southern Tanzania. Africa 69:404–25
- Greene JA. 1995. The beginnings of grape cultivation and wine production in Phoenician/Punic North Africa. See McGovern et al. 1995, pp. 311–21
- Guérin P, Gómez Bellard C. 1999. La production du vin dans l'Espagne préromaine. In *Els productes alimentaris d'origen vegetal al'etat del Ferro de l'Europa Occidental: de la producció al consum*, ed. R Buxó, E Pons, pp. 379–88. Girona, Spain: Museu d'Arqueologia de Catalunya
- Guy KM. 2001. Wine, champagne and the making of French identity in the Belle Epoque. See Scholliers 2001, pp. 163–77
- Haggblade S. 1992. The shebeen queen and the evolution of Botswana's sorghum beer industry. See Crush & Ambler 1992, pp. 395–412
- Hall TM. 2005. Pivo at the heart of Europe: beer-drinking and Czech identity. See Wilson 2005a, pp. 65–86
- Hamilakis Y. 1999. Food technologies, technologies of the body: the social context of wine and oil production and consumption in Bronze Age Crete. *World Archaeol.* 31(1):38–54
- Harrison B. 1971. Drink and the Victorians: The Temperance Question in England, 1815–72. London: Faber & Faber
- Heap S. 2002. Living on the proceeds of a grog shop: liquor revenue in Nigeria. See Bryceson 2002a, pp. 139–59
- Heath DB. 1976. Anthropological perspectives on alcohol: an historical review. In *Cross-Cultural Approaches to the Study of Alcohol: An Interdisciplinary Perspective*, ed. M Everett, J Waddell, D Heath, pp. 41–101. The Haugue: Mouton
- Heath DB. 1987a. Anthropology and alcohol studies: current issues. Annu. Rev. Anthropol. 16:99–120
- Heath DB. 1987b. A decade of development in the anthropological study of alcohol use: 1970–1980. See Douglas 1987a, pp. 16–69
- Heath DB, ed. 1995. International Handbook on Alcohol and Culture. Westport, CT: Greenwood Press
- Heath DB. 2000. Drinking Occasions: Comparative Perspectives on Alcohol and Culture. Philadelphia: Brunner/Mazel
- Heather N, Robertson I. 1989. Problem Drinking. Oxford: Oxford Univ. Press. 2nd ed.
- Hendry J. 1994. Drinking and gender in Japan. See McDonald 1994a, pp. 175-90
- Holtzman J. 2001. The food of the elders, the "ration" of women: brewing, gender, and domestic processes among the Samburu of northern Kenya. *Am. Anthropol.* 103:1041–58
- Huby G. 1994. Drinking and the management of problem drinking among the Bari, southern Sudan. See McDonald 1994b, pp. 235–47
- Huetz de Lemps A. 2001. *Boissons et civilsations en Afrique*. Bordeaux, France: Presses Univ. de Bordeaux
- Hunt GP, Barker JC. 2001. Socio-cultural anthropology and alcohol and drug research: towards a unified theory. *Soc. Sci. Med.* 53:165–88

- James TGH. 1995. The earliest history of wine and its importance in ancient Egypt. See McGovern et al. 1995, pp. 197–213
- Jankowiak W, Bradburd D, eds. 2003. *Drugs, Labor, and Colonial Expansion*. Tucson: Univ. Ariz. Press
- Jennings J. 2005. La chichera y el patrón: chicha and the energetics of feasting in the prehistoric Andes. In *Archaeological Papers of the American Anthropological Association*, vol. 14, pp. 241–59. Washington, DC: Am. Anthropol. Assoc.
- Jennings J, Antrobus KL, Atencio SJ, Glavich E, Johnson R, et al. 2005. "Drinking beer in a blissful mood": alcohol production, operational chains, and feasting in the ancient world. *Curr. Anthropol.* 46(2):275–304
- Joffe AH. 1998. Alcohol and social complexity in ancient western Asia. Curr. Anthropol. 39(3):297–322
- Katz SH, Voigt MM. 1986. Bread and beer: the early use of cereals in the human diet. *Expedition* 28(2):23–34
- Kümin B, Tlusty BA, eds. 2002. *The World of the Tavern: Public Houses in Early Modern Europe*. Burlington, VT: Ashgate
- Lau G. 2002. Feasting and ancestor veneration at Chinchawas, North Highlands of Ancash, Peru. Lat. Am. Antig. 13:387–402
- LeCount LJ. 2001. Like water for chocolate: feasting and political ritual among the Late Classic Maya at Xunantunich, Belize. *Am. Anthropol.* 103:935–53
- Lesko LH. 1995. Egyptian wine production during the New Kingdom. See McGovern et al. 1995, pp. 215–30
- Lissarrague F. 1990. The Aesthetics of the Greek Banquet: Images of Wine and Ritual. Princeton, NJ: Princeton Univ. Press
- Luning S. 2002. To drink or not to drink: beer brewing, rituals, and religious conversion in Maane, Burkina Faso. See Bryceson 2002a, pp. 231–48
- Macdonald S. 1994. Whisky, women and the Scottish drink problem. A view from the Highlands. See McDonald 1994b, pp. 125–44
- Mancall PC. 2003. Alcohol and the fur trade in New France and English America, 1600–1800. See Jankowiak & Bradburd 2003, pp. 89–99
- March KS. 1998. Hospitality, women, and the efficacy of beer. In *Food and Gender: Identity and Power*, ed. CM Counihan, SL Kaplan, pp. 45–80. Amsterdam: Harwood Acad.
- Marshall M. 1991. "Problem deflation" and the ethnographic record: interpretation and introspection in anthropological studies of alcohol. *J. Subst. Abuse* 2:353–67
- Marshall M, Ames GM, Bennett LA. 2001. Anthropological perspectives on alcohol and drugs at the turn of the new millennium. Soc. Sci. Med. 53:153–64
- Martin AL. 2001. Old people, alcohol and identity in Europe, 1300–1700. See Scholliers 2001, pp. 119–37
- Mars G. 1987. Longshore drinking, economic security and union politics in Newfoundland. See Douglas 1987a, pp. 91–101
- Matthee R. 1995. Exotic substances: the introduction and global spread of tobacco, coffee, cocoa, tea, and distilled liquor, sixteenth to eighteenth centuries. In *Drugs and Narcotics in History*, ed. R Porter, M Teich, pp. 24–51. Cambridge, UK: Cambridge Univ. Press
- Mauss M. 1936. Les techniques du corps. J. Physiol. (Paris) 32:271–93
- McAllister P. 2001. *Building the Homestead: Agriculture, Labour and Beer in South Africa's Transkei*. Leiden, The Netherlands: Ashgate
- McCall MK. 2002. Brewers, woodfuel, and donors: an awkward silence as the fires blaze. See Bryceson 2002a, pp. 93–114

- McDonald M. 1994a. Drinking and social identity in the west of France. See McDonald 1994b, pp. 99–124
- McDonald M, ed. 1994b. Gender, Drink and Drugs. Oxford: Berg
- McDonald M. 1994c. Introduction: a social-anthropological view of gender, drink and drugs. See McDonald 1994b, pp. 1–30
- McGovern PE. 2003. Ancient Wine: The Search for the Origins of Viticulture. Princeton, NJ: Princeton Univ. Press
- McGovern PE, Fleming SJ, Katz SH, eds. 1995. The Origins and Ancient History of Wine. Amsterdam: Gordon & Breach
- McGovern PE, Zhang JH, Tang JG, Zhang ZQ, Hall GR, et al. 2004. Fermented beverages of pre- and proto-historic China. *Proc. Natl. Acad. Sci. USA* 101(51):17593–98
- Michel RH, McGovern PE, Badler VR. 1993. The first wine and beer: chemical detection of ancient fermented beverages. *Anal. Chem.* 65:408–13
- Milano L, ed. 1994. Drinking in Ancient Societies: History and Culture of Drinks in the Ancient Near East. Papers of a Symposium Held in Rome, May 17–19, 1990. Padova, Italy: Sargon
- Moore JD. 1989. Pre-Hispanic beer in coastal Peru: technology and social context of prehistoric production. *Am. Anthropol.* 91:682–95
- Morris C. 1979. Maize beer in the economics, politics and religion of the Inca empire. In *Fermented Foods in Nutrition*, ed. C Gastineau, W Darby, T Turner, pp. 21–34. New York: Academic
- Murray O, ed. 1990. Sympotica: A Symposium on the Symposion. Oxford: Clarendon
- Murray O. 1995. Histories of pleasure. See Murray & Tecusan 1995, pp. 3–17
- Murray O, Tecusan M, eds. 1995. In Vino Veritas. London: British School at Rome
- Pan L. 1975. Alcohol in Colonial Africa. Helsinki: Finn. Found. Alcohol Stud.
- Papagaroufali E. 1992. Uses of alcohol among women: games of resistance, power, and pleasure. See Gefou-Madianou 1992, pp. 48–70
- Partanen J. 1991. Sociability and Intoxication: Alcohol and Drinking in Kenya, Africa, and the Modern World. Helsinki: Finnish Foundation for Alcohol Studies
- Peace A. 1992. No fishing without drinking: the construction of social identity in rural Ireland. See Gefou-Madianou 1992, pp. 167–80
- Platt B. 1955. Some traditional alcoholic beverages and their importance in indigenous African communities. *Proc. Nutr. Soc.* 14:115–24
- Platt B. 1964. Biological ennoblement: improvement of the nutritive value of foods and dietary regimens by biological agencies. *Food Technol.* 18:662–70
- Pollock S. 2003. Feasts, funerals, and fast food in early Mesopotamian states. See Bray 2003a, pp. 17–38
- Poo MC. 1995. Wine and Wine Offering in the Religion of Ancient Egypt. London: Kegan Paul
- Poux M. 2004. L'Age du vin: rites de boisson, festins et libations en Gaule indépendente. Montagnac, France: Editions Monique Mergoil
- Prakash OM. 1961. Food and Drinks in Ancient India (From Earliest Times to 1200 A.D.). Delhi: Munshi Ram Manohar Lal
- Quintero G. 2002. Nostalgia and degeneration: the moral economy of drinking in Navajo society. *Med. Anthropol. Q.* 16:3–21
- Rehfisch F. 1987. Competitive beer drinking among the Mambila. In Constructive Drinking: Perspectives on Drink from Anthropology, ed. M Douglas, pp. 135–45. Cambridge: Cambridge Univ. Press
- Rice PM. 1996. The archaeology of wine: the wine and brandy haciendas of Moquegua, Peru. *J. Field Archaeol.* 23:187–204

- Roberts BD. 2000. Always cheaply pleasant: beer as a commodity in rural Kenyan society. In Commodities and Globalization: Anthropological Perspectives, ed. A Haugerud, PM Stone, PD Little, pp. 179–96. Boulder, CO: Rowman & Littlefield
- Roberts J. 1984. Drinking, Temperance and the Working Class in Nineteenth-Century Germany. Boston: Allen & Unwin
- Room R. 1984. Alcohol and ethnography: a case of problem deflation? Curr. Anthropol. 25:169-91
- Saul M. 1981. Beer, sorghum, and women: production for the market in rural Upper Volta. Africa 51:746-64
- Scaramelli F, De Scaramelli KT. 2005. The roles of material culture in the colonization of the Orinoco, Venezuela. 7. Soc. Archaeol. 5:135-68
- Scholliers P, ed. 2001. Food, Drink and Identity: Cooking, Eating, and Drinking in Europe Since the Middle Ages. Oxford: Berg
- Sherratt A. 1991. Sacred and profane substances: the ritual use of narcotics in later prehistoric Europe. In Sacred and Profane: Proceedings of a Conference on Archaeology, Ritual and Religion, ed. P Garwood, D Jennings, R Skeates, J Toms, pp. 50-64. Oxford: Oxford Univ. Comm. Archaeol.
- Singer M. 1986. Toward a political-economy of alcoholism: the missing link in the anthropology of drinking. Soc. Sci. Med. 23(2):113-30
- Smalley J, Blake M. 2003. Sweet beginnings—stalk sugar and the domestication of maize. Curr: Anthropol. 44(5):675-703
- Smith FH. 2001. Alcohol, slavery, and African cultural continuity in the British Caribbean. See de Garine & de Garine 2001, pp. 212–24
- Smith ME, Wharton JB, Olson JM. 2003. Aztec feasts, rituals, and markets: political uses of ceramic vessels in a commercial economy. See Bray 2003a, pp. 235-68
- Spicer P. 1997. Toward a (dys)functional anthropology of drinking: ambivalence and the American Indian experience with alcohol. Med. Anthropol. Q. 11:306–23
- Spier F. 1995. San Nicolas de Zurite: Religion and Daily Life of a Peruvian Andean Village in a Changing World. Amsterdam: VU Univ. Press
- Steinkraus KH, ed. 1995. Handbook of Indigenous Fermented Foods. New York: Marcel Dekker
- Stika HP. 1996. Traces of a possible Celtic brewery in Eberdingen-Hochdorf, Kreis Ludwigsburg, southwest Germany. Veg. Hist. Archaeobotany 5:81–88
- Strunin L. 2001. Assessing alcohol consumption: development from qualitative research methods. Soc. Sci. Med. 53(2):215-26
- Suggs DN. 1996. Mosadi Tshwene: the construction of gender and the consumption of alcohol in Botswana. Am. Ethnol. 23:597-610
- Suggs DN, Lewis SA. 2003. Alcohol as a direct and indirect labor enhancer in the mixed economy of the Batswana, 1800-1900. See Jankowiak & Bradburd 2003, pp. 135-49
- Tanzarn NB. 2002. Liquid gold of a lost kingdom: the rise of waragi production in Kibaale District, Uganda. See Bryceson 2002a, pp. 75–91
- Tchernia A. 1986. Le vin de l'Italie romaine: essai d'histoire économique d'après les amphores. Paris: Boccard
- Tchernia A, Brun JP. 1999. Le vin romain antique. Grenoble, France: Glénat
- van Dijk R. 2002. Modernity's limits: pentacostalism and the moral rejection of alcohol in Malawi. See Bryceson 2002a, pp. 249–64
- Vencl S. 1994. The archaeology of thirst. J. Eur. Archaeol. 2(2):299-326
- Vess D. 2004. Monastic moonshine: alcohol in the Middle Ages. In Religion and Alcohol: Sobering Thoughts, ed. CK Robertson, pp. 147-75. New York: Peter Lang

- Willis J. 2002. Potent Brews: A Social History of Alcohol in East Africa, 1850–1999. Nairobi: Brit. Inst. East. Afr.
- Wilson TM, ed. 2005a. Drinking Cultures: Alcohol and Identity. New York: Berg
- Wilson TM. 2005b. Drinking cultures: sites and practices in the production and expression of identity. See Wilson 2005a, pp. 1–24
- Wright JC. 1995. Empty cups and empty jugs: the social role of wine in Minoan and Mycenaean societies. See McGovern et al. 1995, pp. 287–309
- Wright JC, ed. 2004. The Mycenaean Feast. Athens: Am. School Class. Stud.



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