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Alcohol as Embodied Material Culture

Anthropological Reflections on the Deep Entanglement of **Humans** and Alcohol

Michael Dietler

Introduction

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This chapter approaches the long, entangled relationship between humans and alcohol from the disciplinary perspective of anthropology and archaeology. Specifically, it raises a series of propositions about alcohol as a distinctive form of material culture that are based on comparative analysis of a broad range of ethnographic, historical, and archaeological studies. The intention is to extend discussion beyond the biological or physiological effects of alcohol on the human body towards seeing it as an important symbolic medium and social tool that is subject to an enormous amount of cultural elaboration. The chapter also emphasizes that alcohol production, distribution, and consumption constitute a significant part of the modern world economy, and that this feature has a deep and complex history. Before getting to that discussion, however, it is necessary to say a few words about the relationship between anthropological perspectives on alcohol and those of other disciplines.

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On a popular level, attitudes about alcohol exhibit a striking degree of ambivalence. On one hand, alcohol is by far the most widely and abundantly consumed psychoactive agent in the world. Current estimates place the number of active consumers at over 2.4 billion people worldwide (or roughly a third of the Earth's population), with an average per capita consumption of over 6 litres of pure alcohol per year for people over 15 years old. And in many European and American countries the figures are even higher, ranging from 50% to over 85% of the adult population being current drinkers, with a per capita rate of over 12 litres of pure alcohol in Europe (Heath, 1995; WHO, 2004, 2011, 2014; GBD 2016 Alcohol Collaborators, 2018). Clearly, drinking alcohol is a widely accepted and very popular activity. Moreover, as archaeologists have demonstrated, the practice of drinking has a deep antiquity on multiple continents (Dietler, 1990; Vencl, 1994; McGovern et al., 1995; Dietler, 2006). Yet, alcohol has also sometimes acquired a bad reputation as a dangerous substance and caused several mass panics. Some governments and religions have even tried to ban it altogether. Indeed, regions with a predominantly Muslim population account for a large percentage of the abstainers in global statistics, as do evangelical Christians in the United States.

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A similar disparity in attitudes is reflected in academic research on alcohol. On the negative side, the message that has been relentlessly purveyed by most of the literature from medicine, biology, psychology, and public health over most of the past century is that alcohol consumption should be viewed fundamentally as an individual pathology or a social problem (Heather & Robertson, 1997). This position has taken two forms. One is a primary





focus on addiction models for the heterogeneous set of problems that have come to be labelled 'alcoholism' (or 'alcohol use disorder'). This category of problems, although undeniably serious, actually affects only a small minority of drinkers, but it has attracted the lion's share of funding and research attention and it lies at the core of the development of what is called 'alcohol studies'. A second focus has been an approach that treats alcohol itself as a dangerous substance: attempting to measure the detrimental health, social, and economic effects of alcohol on the general population, often with policy recommendations that evoke an ethos reminiscent of Prohibitionist moralism (Harrison, 1971; Blocker, 1989). A prime recent example is a widely publicized, and rather problematic, epidemiological study that appeared in *The Lancet* in 2018, to great fanfare in the popular press. It offered the stark conclusion that 'The level of alcohol consumption that minimises health loss is zero' (GBD 2016 Alcohol Collaborators, 2018). Of course, the same could be said for driving, crossing the street, or playing football, but the study also included several fairly draconian policy recommendations urging governments to act forcefully to curtail general alcohol consumption.

In marked contrast, anthropologists and social historians have tended to start from the conspicuous fact of the global ubiquity and antiquity of alcohol and, consequently, to focus on the social functions and cultural logic of drinking that could explain such a vast, sustained pattern of consumption and demand. Correspondingly, they have targeted for research what is called 'normal drinking'— what most people do most of the time—and explored the reasons that alcohol is so widely valued as a mainstream, integrated cultural artefact (Douglas, 1987; Heath, 1987, 2000; Wilson, 2005; Dietler, 2006). To be sure, since the 1990s, anthropologists have also taken up the issue of problem drinking, especially after much of their early research on alcohol under the functionalist paradigm was justly criticized for focusing exclusively on the socially integrative role of drinking and ignoring dysfunctional aspects (Room, 1984; Marshall, 1991). However, anthropologists have insisted that 'problem drinking' is not a universal pathology with a single description or cause, but a culturally and historically specific concept that can only be understood as an aberration from the patterns that constitute normal drinking in any given society (Colson & Scudder, 1988; Huby, 1994; Heath, 1995; Mitchell, 2004). They have also insisted on asking the crucial question 'A problem for whom?', given that the accepted definition of problem drinking in Western societies has often originated in middle-class anxieties about working class or immigrant drinking practices, the demands of capitalist factory work discipline, or colonialist fears about the drinking practices of unruly subjects. Moreover, problem drinking has frequently been assumed to be the cause of other troubles among those groups rather than a response to social inequality, racism, and oppression. Hence, the politics of drinking have become a crucial anthropological issue.

It should also be acknowledged that medical and biological research on alcohol has not been entirely negative. In the last few decades, some researchers have also begun to explore the potential health *benefits* of alcohol, as well as its dangers. This has consisted mostly of epidemiological studies that have suggested a positive role for moderate alcohol consumption in alleviating the risks of cardiovascular disease, dementia, diabetes, cancer, and several other maladies—a benefit that reverses when consumption exceeds moderate levels (San José et al., 1999; Corrao et al., 2000; Theobald et al., 2000; Dasgupta, 2011). As one might expect, these studies have been hyperbolized to the maximum by the alcohol industry. However, they have often yielded ambiguous, or even contradictory, results; and, at present, there is still some dispute about the precise benefit versus risk balance associated

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with alcohol. But these health studies, positive or negative, generally exclude evaluation of the positive *social* functions of alcohol in their cost/benefit modelling—that is, precisely the kinds of considerations that Dunbar (this volume, Chapter 11) seeks to reintroduce into such calculations (see also Peters & Stringham, 2006).

While on the subject of recent studies about potential health benefits, I would like to urge caution in invoking these studies in thinking about evolutionary implications—especially the kinds of simplistic speculations one sometimes encounters in sociobiology, where current cultural practices are explained directly as the manifestation of some hypothesized prehistoric behaviour, universalized human nature, or biological imperative. In the first place, the health benefits proposed by these studies are generally solutions to thoroughly modern urban diseases—such as cardiovascular problems resulting from our meat, fat, and sugar saturated diets that bear no resemblance to the overwhelmingly carbohydrate-based diets of antiquity. Moreover, the kind of drinking that is proposed to offer these benefits—moderate daily consumption of small amounts of alcohol—is the opposite pattern from that which characterized most of history and prehistory. For reasons that will become clear later, periodic festive binge drinking was likely the dominant pattern before the nineteenth century, and continues to be in much of the non-industrialized world (and on college campuses, for that matter) (see also McShane, this volume, Chapter 12).

Alcohol, Culture, and Society

With the context set by these introductory comments, let me now turn back to the core of my intervention here, which is structured around a series of seven propositions.

Alcohol Consumption Has a Deep History

The first proposition is simply an underscoring of the volume's theme, that humans have been making alcohol for a very long time and consuming it for even longer. And this has been a feature of human societies around the world. At the time of European colonial expansion over the globe beginning in the late fifteenth century, nearly every region of the world already had its own indigenous forms of alcoholic beverages. The only exceptions were Oceania and parts of North America, which quickly adapted the use of alcohol to their local social practices (Marshall, 1979: 2). The earliest physical traces of alcohol production found so far date back nearly 9000 years in China and over 7000 years in the Near East and Transcaucasia (Michel et al., 1993; McGovern et al., 2004; see also McGovern, this volume, Chapter 6; see also Guerra-Doce, this volume, Chapter 5). But it is highly probable that alcohol production actually goes much further back than that, and in many other places. The chapter by Dietrich and Dietrich (this volume, Chapter 7) is of great interest in this vein because it offers new evidence to suggest that drinking was already a part of hunter-gatherer feasts among societies in Anatolia as early as the tenth to ninth millennium BC.

The question of how far before the tenth millennium humans actually began to *produce* alcohol, as opposed to simply consuming ripe fruits with naturally occurring fermented sugars, is a difficult one to answer. As the research reported by Dudley (this volume, Chapter 2) and Carrigan (this volume, Chapter 3) indicate, the biological evolutionary

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mutation that enabled the ancestors of humans and other close primates to metabolize ethanol more quickly apparently dates back at least 10 or 12 million years, and it opens a series of interesting questions—for instance, about when humans began to select fermented fruits for their mild psychoactive effects rather than simply consuming a food source that other species could not eat during times of shortage. But this is well beyond my range of competence. What is clear is that over the past 10 000 years, at least, people have creatively developed a wide variety of practices to make and consume large amounts of alcohol—it has become a highly elaborated form of material culture with a complex social history.

Alcohol is a Category Conflating Many Things

A second proposition is that alcohol is actually not a single, self-evident substance, but rather a collective analytical category that we use to describe an astonishingly wide range of disparate beverages on the sole basis that they contain ethanol (C_2H_5OH), a psychoactive substance produced by the fermentation of sugars. This may seem an obvious point, but it is worth emphasizing because 'alcohol' is not a universally shared folk category, and it certainly was not in the past. The chemical composition and properties of ethanol were identified only in the nineteenth century (de Saussure, 1807), and the concept of 'alcohol' as a collective term linking such things as beer, wine, cider, and whisky is a discursive product of the nineteenth-century Temperance movement (Harrison, 1971; Roberts, 1984; Blocker, 1989). Before these developments, people learned that the application of certain alternative culinary techniques could transform ordinary foods into substances that had pleasant transformative effects on consciousness, but there is no reason to assume that they thought of different fermented products as a common category or recognized that they contained a common active ingredient. Some people still don't.

The flip side of this fact is that ethanol can be produced from an astonishing variety of substances—basically anything that has sugar or starch—by an enormous variety of techniques. And people throughout history have been extremely creative in developing local ways of making alcoholic beverages from raw sugars (such as honey and cane sugar), fruits (such as grapes, bananas, dates, apples, plums, oranges, and so forth), grains (including barley, rice, millet, sorghum, maize, wheat, oats, and many others), saps (of cacti, palm trees, and other plants), tubers (such as potatoes, beets, and cassava), milk, and many other things (Bruman, 2000; Huetz de Lemps, 2001; Jennings et al., 2005; Dietler & Herbich, 2006). What is more, many varieties of traditional alcoholic drinks have substantial nutritional value and they have formed a significant component of the diet of many peoples (Platt, 1955, 1964; Steinkraus, 1995). Indeed, studies have shown that beer sometimes constitutes as much as a third or more of the total caloric intake for some peoples in Africa and elsewhere (Platt, 1964; de Garine, 1996; Dietler, 2001; Jennings, 2005; Flavin, 2018). In fact, it is perhaps more appropriate to think of alcohol, as many people do, as a special class of food with psychoactive properties resulting from the application of alternative culinary techniques; after all, the same grain can become porridge, bread, beer, or whisky, depending simply on how it is processed.

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Alcohol is 'Embodied Material Culture'

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A third proposition is that alcohol constitutes a form of material culture with some distinctive properties. In the first place, it is liquid material culture, an ephemeral substance that has always needed containers for its production, transport, and consumption. This is fortunate for archaeologists, because these containers are usually far more durable than their contents, and they, along with scattered iconographic representations, constitute our primary source of evidence about drinking in the ancient past. But even more important for understanding the cultural and social significance of alcohol is that it is a special form of what I have called 'embodied material culture' (Dietler, 2001). That is, like other foods, alcoholic beverages are a kind of material culture made to be destroyed through ingestion into the human body—they become part of our very being. But unlike other foods, they also magically transform consciousness as they enter the body. This means that both alcohol and other foods have an unusually close relationship to the inculcation and the symbolization of concepts of identity and difference in the construction of the self ('you are what you eat'). 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. Consequently, the consumption of alcohol is usually enveloped by a set of cultural rules and beliefs that are even more emotionally charged than with other foods and drinks.

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Because embodied material culture is designed to be destroyed, this also means that sustaining the process of consumption requires continually replenishing the supply of food and drink, which requires continual production through both agricultural and culinary labour. Consequently, this domain of material culture is one in which the intimate linkages between the domestic and political economy are especially evident.

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In brief, alcoholic drinks are not simply reducible to a uniform chemical substance with physiological effects. They constitute a class 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 behaviour when drinking, styles of inebriation, and so forth. They form a versatile and highly charged symbolic medium and social tool that is operative in the playing out of ritual and politics, and in the construction of social and economic relations. In fact, drinking alcohol is a particularly salient example of what Marcel Mauss referred to as a 'total social fact': an activity that has implications throughout society, in the legal, economic, religious, aesthetic, and political spheres (Mauss, 1966: 76–7).

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Alcohol, Community, and Social Identities and Boundaries

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These features lead to a fourth comparative observation: people create and sustain social relationships and communities by sharing alcohol, and they use the possibilities for elaboration I just mentioned to mark and perform social identities, categories, and statuses, as well as the boundaries of social groups. Earlier anthropological studies before the 1990s tended to emphasize especially the integrative role of alcohol in maintaining social cohesion and the fact that drinking is a constructive social act (Mandelbaum, 1965; Netting, 1979; Douglas, 1987). However, what distinguishes more recent work on these issues is that





drinking patterns are not viewed simply as *reflections* of social organization or as simple *expressions* of cultural identity, but rather as practices through which personal and group identities are actively constructed, embodied, performed, and transformed. In other words, drinking is seen as a significant *active* 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 (Dietler, 1990, 2001; Willis, 2002; Wilson, 2005; Dietler, 2006).

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This kind of identity construction and marking through drinking occurs along a variety of social category and boundary distinctions, including gender, age, class, family or lineage, ethnicity, and religion. Regional, national, and cosmopolitan identities also commonly involve distinctive drinking practices (Colson & Scudder, 1988; Gefou-Madianou, 1992; McDonald, 1994; Bryceson, 2002; Wilson, 2005). The relationship between alcohol and identity can also be fluid, shifting over time in response to changing circumstances. This has happened, for example, in many contexts of increasing commodification where traditional associations with age/seniority and community were overridden by new associations with class distinctions.

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Gender is perhaps the most widespread dimension of identity in which alcohol plays an obvious role (Gefou-Madianou, 1992; McDonald, 1994; Eber, 2000; Holtzman, 2001). Masculinity is frequently defined around the capacity to drink and it frequently happens within exclusive associations of male drinkers, from the ancient Greek *symposion* to the English working-class pub and the African beer hall and *shebeen*. In many societies, women are expected to drink less than men (or to abstain completely), or to prefer different kinds of alcohol than men (e.g. American stereotypes about manly versus girly drinks), or to behave differently from men when drinking or intoxicated, or to drink in different places than men. Male and female practices may also vary by class within the same society. These features are not static, but change in response to a variety of factors, including sometimes the use of drinking as a form of resistance to male authority.

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As noted, alcohol has also played a frequent role in the distinction of class boundaries and the embodiment of class identities through both the development of contrasting 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. A distinction between wine and beer was a common class marker in ancient Mesopotamia and Egypt (McGovern et al., 1995), as it is in contemporary England and the United States. In other contexts, distinctions between wine and beer may be associated more with regional or ethnic identity than class (as was the case in ancient Greece, where only barbarians drank beer). But even when everyone is drinking the same type of alcohol, class may be simultaneously marked by other aspects of drinking practices (such as drinking vessels, styles of drinking and drunkenness, the setting of drinking events, and so forth).

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Alcohol can also be used to mark the status of events as well as people. For example, in some contexts wine may be consumed only at special festive events while beer constitutes the daily drink. This happened, for instance, in southern Germany as the 'beer border' (that is, the boundary between predominantly beer-drinking regions and predominantly wine-drinking regions) shifted south during the fifteenth century (Unger, 2004: 108). Today, Champagne often fills this special event-defining role in European and American contexts.

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It is not only types of alcohol that serve as indexical signs of identity or status. Drinking is a learned 'technique du corps', in the sense of Marcel Mauss (1935), and all aspects are



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relevant in embodying and discerning identity and difference. Hence, in addition to *qualitative* distinctions (that is, aesthetic dispositions people develop about preferred kinds of alcohol and drinking paraphernalia), various other symbolic diacritica converge in complex permutations in the construction of identity through drinking practices. These include: *spatial* distinctions (that is, segregation into separate drinking places or other structured differential positioning of groups or individuals while drinking together); *temporal* distinctions (such as the order of serving or consumption, or the timing of drinking events); *quantitative* distinctions (in the relative amounts of drink consumed or served); and *behavioural* distinctions (that is, differences in expected bodily comportment during and after drinking, including such things as permissible signs of intoxication or expected modes of drunken comportment, serving or being served, and so forth).

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In raising this issue of cultural styles of inebriation, I would emphasize that, although ethanol produces common physiological stimuli in human beings, the ways people perceive, interpret, and react to those stimuli are culturally learned, embodied behaviours. That is, different cultures have different ways of performing intoxication (MacAndrew & Edgerton, 2003; Mitchell, 2004; Wilson, 2005). Moreover, there are often different styles of drunken comportment between genders, classes, age groups, and other categories of people within the same society—and different ways of behaving that are appropriate to different contexts (e.g. a wedding versus a football game or a cocktail party). These styles can also change over time in response to complex semiotic shifts and sociological processes. Obviously, there are limits to this cultural patterning: if one drinks to a blood alcohol level above 0.4%, one is likely to end up in a coma or dead, no matter what culture one belongs to. But in the more moderate quantities that most people consume, culture plays a major role in determining how people behave; for example, whether they become loud and aggressive; or quiet and stoic; or break into singing and dancing. In fact, the absence of a direct physiological explanation of drunken behaviour is demonstrated by placebo experiments showing that people do not even have to actually consume alcohol in order to exhibit the expected signs of intoxication—they merely have to believe they are consuming alcohol (Fillmore & Vogel-Sprott, 1995). Further evidence is provided by the fact that in the United States, the reported mean number of drinks required to feel drunk decreased significantly in each successive survey conducted between 1979 and 2000 (Kerr et al., 2006).

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Alcohol, Ritual, and Religion

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A fifth proposition is that, because of its ability to transform human consciousness, alcohol has had a very important role in rituals of various kinds. Rite of passage ceremonies, such as births, initiations, weddings, and funerals are very frequently marked by drinking, as are many other kinds of rituals. Indeed, one Tanzanian informant could have been speaking for Africa in general in stating: 'If there's no beer, it's not a ritual' (Willis, 2002: 61).

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The major modern world religions have also frequently incorporated alcohol into the core of their ceremonies (as with the Catholic mass or the Jewish Shabbat). Indeed, Christian monks were for centuries among the leading brewers and vintners, and they were largely responsible for keeping wine production alive after the collapse of the Roman Empire (Seward, 1979; Vess, 2004). On the other hand, some religions have reacted strongly against alcohol with prohibitions that constitute decisive symbolic boundaries of membership and tests of

adherence (as in the cases of Islam and several of the American evangelical Christian sects). In contexts of conversion and missionization, this often creates deep tensions and disruptive ramifications in societies where drinking has a variety of crucial traditional social roles beyond the religious sphere (Spier, 1995; Eber, 2000; Luning, 2002; Willis, 2002). The important point is that religions may either embrace or ban alcohol, but it is never ignored—it is always a powerful substance.

Alcohol is a Political Tool Used in 'Commensal Politics'

A sixth proposition is that alcohol has long been a prime political tool. There are numerous paths by which alcohol is deployed in the micropolitics and macrostrategies of the manipulation of power and the construction of authority. However, especially in the context of rituals of public consumption (or what are called *feasts*), it has been equally crucial to the operation of what has been defined as 'commensal politics' at multiple scales: from societies without formal political roles or institutions, to societies with centralized chiefly authority, to imperial states (see Dietler, 1996, 2001; Dietler & Hayden, 2001).

Lacking the space here to illustrate this dimension in detail, let me simply offer the summary statement that, in small-scale societies 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 for establishing leadership in influencing group decisions and actions. This may occur in the context of the subtle small-scale engineering of social indebtedness through the manipulation of hospitality (e.g. in small beer drinks in the home), to the lavish hosting of community ceremonies, to the overtly agonistic mounting of competitive feasts (Dietler, 2001).

In societies with formal centralized leadership roles, the generous public provision of alcohol on a regular basis frequently comes to be seen as a duty of the person who performs that role, as it symbolically institutionalizes a patron–client relationship. Failure to do so will result in loss of authority, and political challenges may be orchestrated through the mounting of rival drinking feasts. This can impose considerable demands on such leaders for agricultural surplus and brewing labour, and it is one of the reasons often cited for a connection between political power and polygyny in Africa (Dietler, 1990; Dietler & Herbich, 2001). This kind of political role for alcohol has been observed in cases ranging from petty chiefs and royalty in Africa to the Inca empire, where alcohol was so important to the operation of the state, that it maintained vast storehouses and compounds of female brewers specifically to produce *chicha* (maize beer) for large consumption events (Morris, 1979; Moore, 1989; Lau, 2002; Bray, 2003; Cook & Glowacki, 2003; Goldstein, 2003; Jennings & Bowser, 2009).

As noted earlier, alcohol can also serve the political function of marking class differences, especially in the context of 'diacritical feasts' (Dietler, 2001), in which distinctive kinds of alcohol, serving vessels, and so forth are used to differentiate separate hierarchical consumption communities within a society.

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Alcohol, the Economy, and Colonial Encounters

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A final proposition is that the enormous demand for alcohol, stemming from its social and political importance, has ensured that it has frequently had a major role in the operation of the economy. Today, the world market for branded alcohol is calculated to be in the range of 150–190 billion dollars per year. But that is estimated to account for only about 38% of the alcohol actually consumed, as a large proportion of the alcohol in rural Africa, Latin America, Asia, and Eastern Europe is locally made (Haworth & Simpson, 2004; ICAP, 2006; Jernigan, 2009). This economic significance is not simply a modern phenomenon: alcohol has long been a major factor in the economy, and in colonial encounters in various parts of the ancient and modern worlds. In order to understand this feature, it is necessary to first briefly consider the properties of alcohol as an economic good.

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Most traditional forms of alcohol are made for immediate consumption: they will spoil within a few days of fermentation. This is true for nearly all forms of grain beer before the addition of hops as a preservative, which was a European invention of the ninth-to-twelfth centuries (Behre, 1999; Unger, 2004). It is also true for most other fruit, sap, or starch-based alcohols before the even more recent invention of distillation (Bruman, 2000; Huetz de Lemps, 2001; Jennings et al., 2005; Dietler & Herbich, 2006). The one major ancient exception to the pattern of rapid spoilage is wine, which could be preserved in amphorae for years.

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This means that, with the exception of wine, most premodern indigenous forms of alcohol could not be traded over great distances or stockpiled: production and consumption were both spatially and temporally very close to each other. These drinks necessitated control of a large labour force for hosting more than a small consumption event, and they were of limited value as trade goods. Wine, on the other hand, could be accumulated for years and traded over vast distances as a circulating commodity—that is, a good produced for exchange rather than for immediate consumption in a social event. The same is true for distilled alcohol since the use of distillation for the production of beverage alcohol began in Europe in the fifteenth century and spread to the rest of the world in subsequent centuries as a result of European colonial expansion.

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The roles of alcohol in colonial situations have been extremely complex and even contradictory, ranging from an intended implement of seduction and control, to an imagined vector of disorder, to a source of colonial and postcolonial state revenue, to a major component of a subversive alternative economy (bootleg production, smuggling, and so on). What is crucial in each context is to understand the nature of cross-cultural demand 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.

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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 Southern Gaul and alien Etruscan, Greek, and Roman merchants over a period of five centuries, beginning in the late seventh century BC (Dietler, 2005, 2010). As the trade expanded in a significant way to non-Mediterranean Gaul in the second century BC, this reached such proportions that ships carrying up to 10 000 amphorae of wine maintained a trade that pumped up to 16 million litres of Roman wine per year into Gaul over nearly a century (Tchernia, 1986; Poux, 2004; Tchernia, 2016). In both of these situations, there were culturally distinctive



consumption patterns for imported wine and drinking vessels in different regions, and profound entangling consequences of a social, political, and economic nature.

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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. In West Africa, for example, 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 (Pan, 1975; Diduk, 1993; Ambler, 2003). 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 litres (Smith, 2001, 214; 2008). 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).

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With the imposition of European colonial sovereignty over Africa in the nineteenth century, alcohol became a subject of ambivalence, conflicting discourses, and shifting policies and alliances—but always of major concern. On the one hand, colonial states in most regions began to rely upon taxes on alcohol for both a substantial part of their operating revenues and for the mobilization and pacification of a native labour force. On the other hand, anxiety about the effects of alcohol in producing an unruly subject population and disrupting work discipline also became pervasive (Pan, 1975; Crush & Ambler, 1992; Diduk, 1993; Akyeampong, 1996; Holtzman, 2001; Heap, 2002; Suggs & Lewis, 2003). 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. The result of these opposing forces was that alcohol became a constant subject of conflict, colonial legislation, and attempts to control its native consumption and production while promoting the sale of revenue-producing imported varieties or state monopolies; and these struggles continued in postcolonial African states (Colson & Scudder, 1988; Ambler, 1991; Partanen, 1991; Akyeampong, 1996; Willis, 2002).

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Conclusion

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Obviously, much more remains to be said about the complex social history of the human affair with alcohol, but these few selected comparative observations are intended to convey both the important social roles of drinking and the prodigious cultural elaboration that has surrounded the use of alcohol. In brief, alcohol has been a fundamentally important social, economic, and political artefact for millennia. Because of these features, an analytical focus on alcohol and drinking practices can provide a very useful window for discerning and understanding such things as the construction and performance of identity, gender relations, social boundaries, ritual, politics, colonialism, and the political economy. But, conversely, consideration of these social and cultural phenomena is essential for being able to understand the complex historical relationship humans have had with alcohol, why people drink in the ways they do, and why they have invested so much effort in the production and consumption of alcohol and the elaboration of drinking practices.



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As a final caveat, let me add a note of scepticism about what I see as a rather tenuous relationship between biological evolution and the history of the cultural elaboration and social significance of alcohol. I mean by this, basically, that although the human use of alcohol was originally enabled by a genetic mutation allowing an improved metabolism of ethanol, biological evolution has little explanatory power in understanding the complex subsequent history of what humans have done with alcohol, or why. This comment is certainly not intended to demean the study of the early evolution of the human/alcohol relationship, which is clearly important and fascinating. It is meant simply as a caution against the overly facile direct invocation of genetic or evolutionary explanations of modern cultural practices that one sometimes sees.

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In proposing any arguments about the evolutionary implications of alcohol, I think one has to be very careful about the facts of history and cultural diversity, which are not simply epiphenomena of biology. Culture is not a static bundle of traits passed down over the generations, but rather a constantly dynamic project by which people deal with the changing world in distinctively patterned ways. And we have to be aware that well entrenched drinking practices can change dramatically for diverse historical reasons, none of which may have anything to do with biology. A salient example is the Middle East, a region with a widespread tradition of alcohol consumption dating back thousands of years (and which actually gave us the term 'alcohol'): a region that widely abandoned drinking under the spread of a new religion after the seventh century AD. One could also cite the case of Euro-American colonists in North America, a people who were considered a shockingly hard drinking group by astonished European visitors in the eighteenth century (Blocker, 2006), yet whose descendants currently drink far less than Europeans. This same society of whiskey-soaked early Americans also later produced a national experiment with government prohibition of alcohol and fostered the emergence of evangelical religious groups that targeted alcohol as one of their sacred taboos.

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A volume such as this is extremely useful precisely because it enables scholars with strikingly different disciplinary perspectives and goals to be confronted with alternative views and methods directed towards a common object of analysis. It forces us all to question the taken-for-granted premises that underlie our normal practice and our standards of proof in evaluating the plausibility of competing explanations. The human relationship with alcohol is too important to evade any longer this kind of collaborative polydisciplinary interrogation.

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