

Driven by Drink: The Role of Drinking in the Political Economy and the Case of Early Iron Age France

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The practice of drinking alcoholic beverages has several characteristic important social roles in traditional small-scale societies, particularly in terms of political economy. Cross-cultural survey of ethnographic data reveals that drink is very frequently a fundamental social artifact which plays an integral role in implementing the social relations expressed and created through hospitality. This intimate association with the institution of hospitality, and its frequent ritual and symbolic significance, imbue drinking with a potent social value which is important in its many economic and political roles. It is widely employed in the work-party feast as a mechanism of labor mobilization, and in the implementation of both institutionalized political authority and the informal power associated with leadership in societies without specialized political roles. Moreover, drinking can have a profound influence in producing changes in social relations, and consideration of drinking patterns can be very informative about society and culture in general. The relevance of this anthropological perspective on drinking to the analysis of archaeological data is demonstrated through a model which offers fresh insights for the interpretation of a specific archaeological problem: the process of trade and culture contact between the Greek and Etruscan states and the indigenous peoples of Early Iron Age France. © 1990 Academic Press, Inc.

"I will brew beer very often. Our life depends on drinking beer."—From an essay by an Ngoni schoolboy on the topic of "What I Want to Do When I Leave School"

(Barnes 1959:218)

If it is perhaps hyperbole to contend that many ancient societies may in a sense have been "driven by drink," I hope that it is at least heuristic hyperbole. My intention in pursuing this theme is not simply to be provocative, but rather to alert archaeologists to an analytical perspective which is potentially very fertile in yielding insights for the interpretation of many past social systems, but which has received little serious attention as yet in the archaeological literature.

The basic propositions I wish to explore in this paper are that the practice of drinking alcoholic beverages^{1,*} has a number of characteristic important social roles in traditional small-scale societies, particularly in terms of political economy; that drinking can have a significant role in social change; and that an awareness of the ramifications of these features can aid understanding of archaeological data in a variety of contexts. These points are argued by first introducing a specific archaeological problem which illustrates the relevance of this line of inquiry: the study of processes of Early Iron Age trade and colonial interaction in the Rhône-Saône basin of France. An exploratory discussion of the general question of the social role of drinking in small-scale societies and of the role of drinking in social change is then offered through cross-cultural analysis of ethnographic studies. Finally, the utility of this perspective is demonstrated by the formulation of a model which provides fresh insights and improves understanding of the specific archaeological case with which the paper begins.

COLONIAL INTERACTION IN EARLY IRON AGE FRANCE

The first archaeologically significant traces of trading contact between the Mediterranean states and the indigenous peoples of France date from the late seventh century B.C. and occur along the coast of southern France in the area of the lower Rhône basin (see Fig. 1). While these contacts were originally credited to Rhodian Greek merchants (e.g., Jacobsthal and Neuffer 1933), it is now generally accepted that Etruscans were the first agents of trade in this area (Morel 1975, 1981; Bouloumié 1981, 1987; Py 1985), with the evidence for this trade consisting overwhelmingly of ceramics used for the transport and drinking of wine.

Etruscan wine amphoras constitute the vast majority of this material (Py and Py 1974; Py 1985); however, they are found together with significant quantities of Etruscan *bucchero nero* pottery, with forms almost exclusively related to serving and drinking wine (e.g., kantharos, oinochoe, kylix) (Lagrand 1979; Bouloumié 1987). Associated with this material, and believed to have also been imported by Etruscan traders, are smaller quantities of Greek ceramics of various origin (Ionian, Rhodian, Corinthian, etc.), which are again heavily dominated by wine-drinking cups (Benoit 1965; Bouloumié 1981, 1987). About 30 Etruscan bronze basins and one bronze wine pitcher have also been found (Bouloumié and Lagrand 1977; Bouloumié 1985). That this material represents a substantial trade in wine seems highly probable in view of the four shipwrecks

* See Notes section at end of paper for all footnotes.

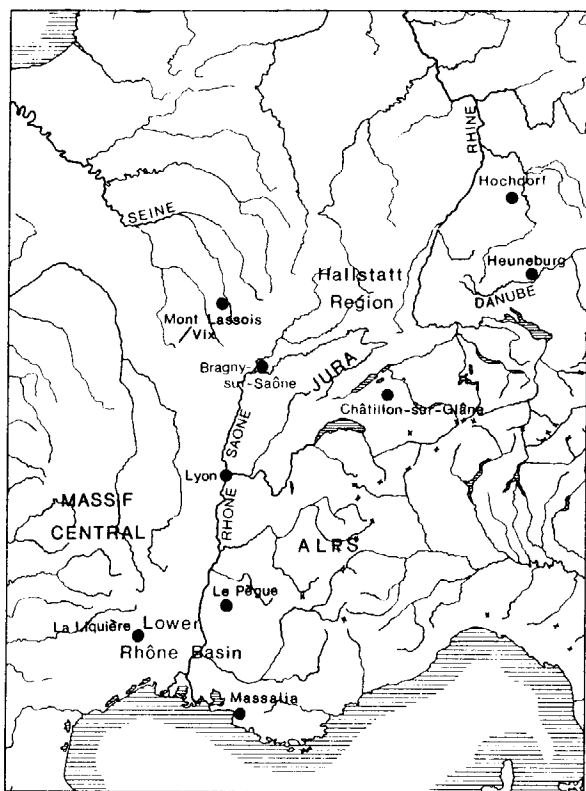


FIG. 1. Map of regions and sites mentioned in Early Iron Age discussion.

loaded with Etruscan amphoras found off the coast of southern France (see Bouloumié 1982), the plenitude of indigenous sites with such ceramics throughout the lower Rhône basin (Lagrang 1979; Morel 1981), and the abundance of sherds of this pottery in collections from surface survey in the region around Marseille and the Etang de Berre (Bouloumié 1986).

About 600 B.C., Ionian Greeks from Phocaea founded the colony of Massalia at the site of modern Marseille. By the second quarter of the sixth century B.C. they had already begun locally producing fine-ware ceramics, called "Pseudo-Ionian" and "Grey Monochrome" wares (Villard 1960:58–71; Benoit 1965:146–162; Py 1979–1980; Arcelin-Pradelle 1984), and trading them to the natives of the Massaliot hinterland. Despite a wider range of forms in use at Massalia (Villard 1960:58–65), finds on indigenous sites are predominantly wine-drinking and service forms and a native form of bowl (Arcelin-Pradelle Form 3). The Massaliots also traded to the natives fine painted-pottery imported from Athens (again, almost exclusively wine-drinking forms such as cups); and they eventually began

local production of their own wine which was traded to the natives in a distinctive type of amphora (Benoit 1965:182–186; Bertucchi 1979; Py 1978a). During the course of the last half of the sixth century B.C. they appear to have gradually displaced the Etruscans as the main agents of trade with the indigenous peoples of the lower Rhône basin (Morel 1981; Py 1985; Arcelin 1986).

By the last half of the sixth century, and particularly during the last quarter of the century and the beginning of the fifth century, when Etruscan trade had dwindled dramatically, objects of Mediterranean origin which most probably first reached France through Massalia were finding their way several hundred kilometers up the Rhône valley to sites of the so-called Hallstatt culture in Burgundy, southern Germany, and Switzerland. They are found there in contexts that have been widely interpreted as indicating dramatic social and political changes, a fact which has stimulated a good deal of discussion of the role of Mediterranean trade in producing these changes (cf. Frankenstein and Rowlands 1978; Härke 1979; Wells 1980; Kimmig 1983a; Spindler 1983; Collis 1984; Bintliff 1984; Gosden 1985; Brun 1987). While the precise agents, mechanism, and volume of the "trade" which was responsible for the arrival of these items in the Hallstatt area are still open to debate (see Dietler 1989a; Bintliff 1984; Bouloumié 1985), what is again very clear is that the majority of these imported items are objects associated in the Greek world with wine drinking (see below).

The only other major element of indigenous cultural borrowing stemming from these colonial trading contacts during the Early Iron Age was the adoption of Greek pottery manufacturing techniques (use of the potter's wheel and controlled-draft kilns) employed in the production in the lower Rhône basin of two hybrid wares combining Greek and indigenous-derived forms and decorative modes, which are variants of the Pseudo-Ionian and Grey Monochrome wares produced at Massalia (Lagrang 1963; Lagrang and Thalmann 1973; Py 1979–1980; Arcelin-Pradelle 1984). What is again very interesting is that despite a much wider range of possible models produced and used at Massalia, only a very limited range of Greek forms were imitated in these wares, and these are predominantly wine-drinking and service forms, such as cups and oinochoai (Dietler 1989b).

Although, as noted above, the majority of Mediterranean goods imported into both the lower Rhône basin and the Hallstatt area are clearly related to the practice of drinking wine, there are marked differences between the two regions in terms of the nature and contexts of the objects found. In the Hallstatt region, the imports are actually relatively very few in comparison both to contemporary finds in southern France (cf. Benoit 1965; Py 1971; Jully 1982; Wells 1980; Bouloumié 1985, 1988; F. Villard

1988) and to the vast quantities of amphoras from a Roman wine trade extending into the former Hallstatt area several centuries later (Tchernia 1983; Fitzpatrick 1985). However, they also tend to be of a luxurious, rare, or even spectacular nature, such as the 1.6-m-tall bronze crater from the Vix tumulus in Burgundy (Joffroy 1979), the 500-liter bronze cauldron ornamented with cast bronze lions from the Hochdorf tumulus near Stuttgart (Biel 1985), or the cauldron and tripod capped with griffin heads from the tumulus of La Garenne in Burgundy (Joffroy 1979). Other wine-related material found includes a few dozen sherds of Massaliot amphoras² and a few hundred pieces of Attic black-figure and black-gloss pottery³ (predominantly drinking cups and kraters) (F. Villard 1988; Bouloumié 1988). Furthermore, this material tends to be concentrated in a small number of elaborate tumulus burials (the bronze vessels, some Attic pottery, and various exotic items) already richly endowed with indigenous prestige objects, and on a few fortified settlements (the amphoras and Attic pottery) around which the tumuli are concentrated⁴ (see Härke 1979; Wells 1980; Bouloumié 1985; Brun 1987).

In the lower Rhône basin the pattern is quite different: aside from their earlier appearance, Mediterranean imports are also vastly more numerous and they are found on a wide variety of settlements of all types and sizes, and, rarely, in a few relatively unostentatious small tumuli and other graves (see Benoit 1965; Py 1971; Lagrand 1987). However, they are also much less spectacular, consisting overwhelmingly of wine amphoras (Etruscan, Massaliot, and a few Punic and miscellaneous Greek types) and wine-drinking ceramics (Etruscan, Massaliot, Attic, Ionian, and other Greek types), with a small number of simple bronze bowls (as described earlier). The regional contrast is well illustrated by the example of the small, rather simple settlement site of La Liquière in Eastern Languedoc from which many more imported amphora sherds have been recovered than have been found in the entire Hallstatt region combined (Py 1984). The same can be said for at least a dozen other sites, including Le Pègue near Nyons in the northern part of the lower Rhône basin (Lagrand and Thalmann 1973), which is more exactly contemporary with the Late Hallstatt sites in question. Neither site, however, nor any other site in the lower Rhône basin, has yielded anything comparable to the spectacular bronze wine-mixing vessels found in the Hallstatt area, nor to the huge and elaborately furnished tumuli in which they were found.

The traditional explanatory framework for this archaeological material, particularly in southern France, has been the somewhat nebulous concept known as "Hellenization" (cf. Jacobsthal and Neuffer 1933; Benoit 1965; Py 1978b:338-339; Bouloumié 1981), a sort of progressive general emulation of "civilized" customs by "barbarians" as a natural and inevitable response to contact. Actually, Hellenization is at best merely a descrip-

tive rubric which offers little insight into the processes of social change resulting from culture contact; and less benignly, it can actually obscure understanding under a haze of tacit assumptions. Moreover, aside from its obvious inability to explain the very different contexts in which imported objects are found (and their relative quality and nature) in southern France and the Hallstatt region, the overall pattern of cultural borrowing and material imports outlined above seems curiously at odds with the idea of blanket emulation of Greek culture. In fact, from the very first contacts, this pattern remained limited, specific, and consistent: it was overwhelmingly dominated by wine and wine-drinking gear. Furthermore, as Morel (1981) has pointed out for the Etruscan material, comparison with contemporary patterns of Etruscan trade in North Africa and Sardinia (where the range of imports is much wider) indicates that the French situation was a result of consumer demand rather than being due simply to the range of goods commonly offered by traders. That this was also the case for the Greek material is further indicated by the extreme selectivity in the emulation of Greek forms within the repertoire of the indigenously produced Pseudo-Ionian and Grey-Monochrome wares (Dietler 1989b). As Appadurai has indicated, demand cannot in any case be assumed to be a natural response to the availability of goods. It must be understood, rather, as the "political logic of consumption," a feature of the overall political economy (Appadurai 1986:29-31).

Other attempts to understand this problem outside the framework of Hellenization have also been problematic. Perhaps the best known alternative focus of explanation, particularly for the Hallstatt area, has been the role of Mediterranean imports as "prestige goods" (as a generalized concept) used by chiefs in networks of exchange and redistribution within indigenous societies to compete for political and economic power, resulting in marked development of social stratification and political centralization (cf. Frankenstein and Rowlands 1978; Wells 1980; Brun 1987). The model of Frankenstein and Rowlands (1978), which has become widely influential, particularly among scholars working within the "world systems/center-periphery" approach, postulates regional centralization of political power as a result of manipulative redistribution of these Mediterranean goods by Hallstatt paramount chiefs in order to secure political ties with vassal chiefs and augment their power. A major feature of the model is the relations of dependency it views having developed in the Hallstatt area, such that the political structure of the Hallstatt domain became dependant on control of access to these exotic items to the extent that a shift in the supply at the end of the Early Iron Age provoked a political crisis and collapse of the structure (Frankenstein and Rowlands 1978:108).

However, contrary to the conclusions of the authors, although the model very convincingly demonstrates how such redistributive mecha-

nisms may have served to support the Hallstatt political structure, the archaeological evidence actually suggests that Mediterranean imports did not play a central role in this process (Dietler 1989a). Rather, it seems that indigenously produced prestige goods were far more important in this regard. There is, in fact, very little evidence of any redistribution of the Mediterranean goods, as most of them are concentrated in a few tumulus burials which are also the wealthiest and most elaborate in terms of indigenous prestige items and structure of the funerary monument, hence those which are deemed to represent the highest level of the social and political structure (Frankenstein and Rowlands 1978:84, 100). Moreover, many of the imported items in the tombs show evidence of wear and repair, or contextual anachronisms which indicate long use before their eventual deposition (Dehn and Frey 1979; Bouloumié 1983, 1988; Bintliff 1984). This feature, combined with their relative paucity, casts serious doubt on the importance of a steady flow of these items through the redistributive network in supporting the Hallstatt political structure, and hence on the dependency of the Hallstatt chiefs on Mediterranean trade for the development or maintenance of their power (Bintliff 1984:167).

I would suggest that the failure of these various attempts to explain both the demand for Mediterranean goods by indigenous societies and the social effects of their adoption stems from a failure to consider the essential feature of the contact situation: why were wine and wine-drinking gear, in particular, the focus of trade and other cultural borrowing? Was this a case of genuine emulation of alien customs or, rather, different patterns of adaptation of alien commodities to native institutions in different areas? In what ways could the adoption of this foreign form of drink and drinking gear affect the political economy of these societies?

Given that the archaeological evidence for trade between the Mediterranean civilizations and the indigenous peoples of both southern France and Central Europe in the Early Iron Age is so heavily dominated by objects associated with wine drinking, it is curious that more attention has not been paid specifically to the possible social role of drinking among these indigenous peoples in prior treatments of Greek and Etruscan trade and acculturation in the area. An understanding of the possible range of processes of adoption and integration of an alien alcoholic beverage and/or associated drinking customs by these indigenous societies holds great potential in elucidating the complex social consequences stemming from cultural contact in general. To address these questions, however, one must undertake a general consideration of the social role of drinking in small-scale societies from the perspective of a cross-cultural analysis of ethnographic and historical data.

THE SOCIAL ROLE OF DRINKING

This is a subject that has received very little serious consideration

among archaeologists,⁵ despite indications of its social importance readily apparent in the growing body of studies on the subject by sociocultural anthropologists (e.g., see Heath 1976, 1987a, 1987b). As with other types of material culture, the form, use, and meaning of alcohol within a society are culturally defined. However, alcoholic beverages constitute an artifact class with certain special properties that distinguish it from many others.

In the first place, although drinking alcohol is not an essential human physiological activity (such as eating and sex), the practice was extremely widespread in its aboriginal distribution: at the time of European contact, only Polynesia and much of North America seem to have been without some indigenous form of alcohol (Marshall 1979a:2) and it remains the most widely used human psychoactive, or consciousness-altering, agent (Heath 1987b). Second, alcohol very frequently has been regarded by the people using it as a fundamentally important ritual and social artifact, with patterns of use deeply embedded in the cultural fabric of various societies to the extent that the form and meaning of drinking in a society may reveal a great deal about the whole social order (Mandelbaum 1965:281).

The realization of this fact has gradually imposed itself upon ethnographic fieldworkers, whose studies dealing with drinking, until recent years, have been more incidental than systematically directed (see Heath 1976). In fact, most of the data collected on the subject have been by ethnographers who went to the field with other interests in mind and ended up noting drinking behavior simply because it was so obviously important to the people they were studying (e.g., Bunzel 1940; Netting 1964; Kennedy 1978; Colson and Scudder 1988). Another indication of its special character within the realm of material culture is that alcohol has rarely if ever been ignored by a people who knew of it: it is sometimes "tabooed," but not ignored (Mandelbaum 1965:281). Furthermore, as the American experiment with Prohibition attests, once the custom of drinking is acquired by a society, it is never abandoned. As Bacon et al. (1965:33) noted, "The consumption of alcoholic beverages apparently performs some function, either societal or individual, which is of sufficient importance so that, once established in a society, it is never entirely relinquished."

ETHNOGRAPHIC STUDIES

A great deal of information about drinking exists, but it comes from a number of academic fields (e.g., social psychology, biology, and anthropology) each with its own methods and research interests, and consequently tends to be somewhat variable in character. Most social psychology studies have been motivated by an interest in explaining pathological

drinking and have tended to be directed toward questions of basic individual motivation for drinking, patterns of alcoholism (which is often incorrectly equated with drunkenness), and socially disruptive aspects of drinking. Anthropologists, on the other hand, have generally emphasized patterns of "normal drinking" (which may include drunkenness) and the socially integrative functions of drinking institutions and practices. Anthropological treatments of the issue have sometimes evinced a somewhat defensive tone in reaction to the prevalent emphasis on alcoholism and drinking as a social problem (see Room 1984 for a discussion of the controversy between adherents of these two perspectives).

As mentioned previously, much of the primary ethnographic reporting on drinking has been of an incidental nature. Until the 1970s, there were almost no field studies designed explicitly to study drinking behavior in a traditional social context (Heath 1976:42), but many ethnographers did make observations on drinking as a peripheral by-product of discussions of other issues of more immediate concern to them. Some researchers who had gone to the field not intending to focus on drinking were sufficiently impressed by its importance within the society they were studying to subsequently subject the topic to detailed analysis, demonstrating the ways in which drinking fit with other aspects of the culture and related to the broader socio-cultural context (e.g. Netting 1964; Kennedy 1978; Sangree 1962). Colson and Scudder (1988) even produced a long-term study of changes in drinking patterns in relation to social change, and others (e.g., Banks 1937; Bunzel 1940) pursued seminal comparative cross-cultural studies based on primary observation of drinking behavior; although this was, again, outside the scope of their original research designs (Bunzel 1976; Colson and Scudder 1988:10).

Most of the cross-cultural studies of drinking that have been done, however, have been based on statistical analysis of large secondary comparative samples, mostly derived from the Human Relations Area Files (e.g., Horton 1943; Field 1962; Bacon et al. 1965; Schaefer 1976) or on less quantitative secondary comparative analysis of ethnographic reports (e.g., Washburne 1961). Despite the disparity of approaches and methods, and the cultural diversity of drinking patterns, some significant general observations about drinking and some illuminating empirical examples of the manifestations of the social roles of drinking can be gleaned from this body of information which are useful in understanding archaeological situations.

SOCIAL ASPECT

The first observation that can be made is that in nearly all societies where it exists, drinking is primarily a social act. This means first that

drinking occurs almost exclusively in the context of social interaction and that solitary, addictive drinking of the type associated with alcoholism in industrialized Western societies is rare in small-scale, traditional societies, particularly in those with aboriginally established drinking patterns (Marshall 1979b:451; Mandelbaum 1965:281). It means also that drinking behavior is almost universally governed by cultural rules and expectations, and these are often very emotionally laden (Heath 1976:43). Aspects of drinking which are, in general, fairly clearly regulated by these rules and expectations include the type and quantity of drink used and the rate at which it is consumed, the time and setting of drinking events, the ritual accompanying drinking, the sex and age of drinkers, the roles embodied in drinking events, and the role behavior appropriate to drinking in different contexts (Mandelbaum 1965:281). Finally, it means that drinking is usually intimately woven into the fabric of the social order and may have a wide range of social functions.

Perhaps the most widespread of these functions is facilitating social interaction and channeling the flow of social relations. Where it is consumed at all, alcohol is very commonly an integral part of the etiquette of hospitality. Examples range from the mandatory offering of *chicha* (beer) to guests entering a house among the Mapuche of Chile (Lomnitz 1976:193), to the traditional beer of friendship offered to guests in homes of the Tiriki of Kenya (Sangree 1962:11), to the *kumiss* (fermented mare's milk) given to guests by the Yakut of Siberia (Washburne 1961:230-240), to the communal cups of palm-wine shared by Nigerian Igbo hosts and guests (Okere 1983:197-198), to the rounds of drinks offered by individuals in British pubs and predinner cocktails proffered to guests in American homes. Indeed, the practice is so prevalent that examples of societies using drink where it is not employed in this manner are very rare.

This intimate association with the institution of hospitality imbues drinking with a potent social value because it becomes an integral element in establishing the relations of reciprocal obligation that bind host and guest in the process of offering hospitality (Mauss 1969). The Baganda of Uganda, for example, say that beer "warms" kinship and that "friendship thrives on beer"; beer is, in fact, the medium used to develop long-lasting, ritually linked drinking partnerships (*abekinywi*) which bond usually unrelated men together in a variety of mutual social and economic obligations⁶ (Robbins 1979:371).

Offering drink in the context of hospitality can be a means of maintaining or building up one's "social credit" within a community or interaction network, and the force of such obligations can result in heavy demands on resources; reciprocal drink exchanges can put severe pressures on individuals or families to the extent that any economic surplus is continually being liquidated in this process (Waddell 1975). For example, Kennedy

(1978:85) estimated that the average Tarahumara household expends at least 200 pounds of its limited maize supply annually in the production of beer for *tesquínadas* (beer parties).

Hospitality, hence drinking, can also be manipulated competitively (and even aggressively) for augmentation of social prestige and power. The well-known "potlatch" is an extreme form of such manipulation, but in more subtle guise it plays an important role in many forms of status claim, economic control, and political power. For example, the Tarahumara *tesquínada* (beer party), mentioned above, operates as a "prestige showcase" and the ability to host such events in the lean season before the next harvest, when many are hard pressed to supply their own food, is a dramatic manifestation of wealth and power; also important in measuring prestige are the size of the drinking party (the distance of the network of people invited) and the degree of drunkenness able to be sustained (Kennedy 1978:118).

Often, where prestige is recognized by formal status categories, drinking plays an important role in obtaining access to them. For example, among the Yoruba the taking of titles by a man requires him to supply large quantities of beer or palm-wine as a display of his prestige (Obayemi 1976). Similarly, furnishing copious drink is a major element of expense in hosting the religious festivals by which ranked prestige is determined in the *cargo* system of Zinacantan in rural Mexico (Cancian 1965).

Drinking also has a common function of promoting social solidarity through its role in facilitating social interaction in the context of informal social gatherings. The Iteso of East Africa, for example, define neighbors as "people with whom one shares beer" (Karp 1980:89). Sometimes, as among the Siriono of Bolivia (Holmberg 1950), drinking may be one of the very few activities through which individuals interact socially with any group outside the nuclear family. In many societies, such as the Kenyan Tiriki (Sangree 1962) and Iteso (Karp 1980), communal beer pots are the center of men's everyday social life, around which gossip is passed, disputes and policy are discussed, and tales are told. Kennedy (1978:125) goes so far as to call the network of beer-drinking parties "the major structural form of the Tarahumara social system above the family and residence group."

In addition to informal gatherings and parties, drinking often plays an important role in the more formal ceremonial life of a society, and drink itself is often imbued with ritual or symbolic significance. Religious rituals, festivals, and the major rites of passage, such as births, weddings, initiations, and funerals, commonly involve drinking parties, libations, toasts, or exchanges of drink. The extent of the integration of drinking into the ceremonial framework of a society varies. The Kofyar of Nigeria represent an example of what might be considered maximum integration,

in that virtually no ceremony, sacred or secular, or indeed any social event or relationship on any scale is conceivable without a flow of beer; and even the days of the week are reckoned in terms of the brewing cycle (Netting 1964). Similarly, for the Tiriki of Kenya, beer parties are such a fundamental part of the initiation ceremonies for the age group cycle that a bad millet harvest is often a reason for postponing these ceremonies, which are held only every 4 years (Sangree 1962:14).

Communal ceremonies and other social events are often hosted by individuals or groups (such as families or lineages) within a community, and any time the consumption group is larger than the production group, the prestige-acquiring potential of hospitality is operative. For example, among the Mapuche of Chile, public events such as war gatherings, weddings, athletic competitions, etc., were hosted by individuals and sponsorship of these feasts lent prestige to the host in proportion to the copiousness of drink and food supplied, (Lomnitz 1976:183). Sometimes, however, production of drink for these events may be divided among the members of the group consuming it, and the function of promoting solidarity is extended to the activity of production as well as the process of consumption.

The most significant variable in determining the extent of "integrated drinking" (i.e., drinking in the context of religious and ceremonial occasions: Child et al. 1965) appears to be whether alcohol was used aboriginally or introduced in post-European-contact times. On the basis of cross-cultural analysis of 110 societies, Bacon et al. (1965:44) noted that a high frequency of ceremonial drinking tends to be common in societies whose drinking customs were developed aboriginally. In other words, drinking tends to be well integrated culturally in those societies which have used alcohol for a long period of time.

It should not be assumed from this that because drinking often functions to facilitate social interaction and is well integrated into the ceremonial framework of a culture it necessarily serves simply to promote social solidarity. Relations of social differentiation and inequality, and hence inherent underlying tensions of social conflict and contradiction, are often expressed, or even created, in the very patterns of social interaction which promote solidarity. Hospitality, for example, promotes social cohesion by establishing a binding relationship between host and guest; but it should not be forgotten that this is a relationship of reciprocal obligation which, if it cannot be repaid, becomes a relationship of superiority and inferiority (Mauss 1969). The potential force of such relations is clearly exemplified in the marked, escalating competitive aspect of drinking friendships of the Mambila of Nigeria, which develop over time from alternating exchanges of hospitality with a few pots of beer between individual partners to open competition between whole communities,

with the provision of hundreds of pots of beer necessary to maintain the reputation of the village (Rehfish 1987). As will be discussed later, this relative power-defining aspect of drinking in the context of hospitality can be important in the implementation of both institutionalized political authority and the informal power associated with leadership in societies without specialized political roles.

Drinking is, in fact, a common and effective tool in the manipulation of social relations through hospitality in many forms and contexts. However, in addition to this potential for competitive manipulation of drinking for prestige, economic advantage, and political power, drinking customs in themselves often reflect and reinforce institutionalized status differentiation within a society.

The most prevalent status differentiation reflected in drinking practices is gender-based. Although in most societies both men and women drink, in general, men drink more than women (Child et al. 1965; Marshall 1979b:454; Mandelbaum 1965:282). This is true despite the fact that women frequently provide the raw material and do the brewing, and, significantly, it is most true in those societies with indigenous drinking patterns (hence those in which drinking is most completely integrated culturally). In the cross-cultural survey of 139 societies conducted by Child et al. (1965), 81% of the societies with a definite sex difference in drinking (in no case were women heavier drinkers) used alcohol aboriginally rather than having it introduced in postcontact times, and aboriginal users constituted only 45% of the societies without a clear sex difference. Correspondingly, a high frequency of ceremonial drinking is also clearly correlated with sexual differentiation in alcohol use (Child et al. 1965:57; Bacon 1976). Expression of sexual differentiation in drinking is not restricted to amounts of alcohol consumed, but may also take the form of seating arrangements, order of serving, kinds of drinking apparatus employed, separation of drinking groups, and particularly expected behaviour while drinking (see, for example, Ngokwey 1987; Karp 1980; Keuls 1986).

These kinds of status-marking practices are also employed to differentiate individuals or groups on the basis of age, role, prestige, or other socially relevant distinctions. For example, among the Luo of Kenya, elders drink from a large communal beer pot through long straws, while junior men and women drink beer from a smaller and different form of pot using calabashes (Dietler n.d.). Similarly, among the Chagga of Tanzania there is a formal etiquette which determines who gets the foam of the beer, in what order people are served, the size of calabashes used for drinking by different individuals, and the seating arrangement (Gutmann 1926 cited in Washburne 1961:24). Because of its integration in ceremonial and religious life, drinking can become a potent cultural symbol ma-

nipulated for ideological ends by groups within a society. Social strata, categories, or classes are sometimes diacritically marked by special drinking and culinary practices, as, for example, in India of the Vedic period, where each of the four main *varnas* had its proper drink (Goody 1982:115), or in Rajasthan, where the warrior Rajput caste were heavy drinkers, while the Brahmans were complete abstainers (Carstairs 1979). This aspect is explored in more detail under the discussion of cultural change.

ECONOMIC ASPECT

One aspect of drinking which is of potentially great interest to archaeologists is that it frequently plays a significant economic role in small-scale societies. The main focus of most anthropological treatments of drinking has been on the ceremonial and symbolic aspects and on the function of facilitating social solidarity, but references to important economic functions are found scattered (often as incidental asides) throughout many studies, and the subject deserves a more systematic analysis.

Perhaps the most widespread and important economic role played by drinking is in the mobilization of labor through work-party feasts (Dietler 1989c). It must be remembered that in traditional pre-money economies labor is not a marketable commodity (Bohannon and Dalton 1962). In such societies, one of the few means available for pooling labor (especially across kinship lines) for a project requiring a larger communal effort is the widespread institution of the work-party feast, in which people gather for a day to work on a specific project and are treated to a feast of drink and/or food at the end. No further compensation is usually required (except, in some cases, the expectation to reciprocate at the feasts of others), and the host owns the proceeds of the day's labor. The practice is extremely common and of considerable economic importance: in politically acephalous societies it is frequently the only means available of mobilizing labor on a scale above the basic productive unit, but it is also widely employed for *corvée* labor by chiefs and other leaders in societies with institutionalized political roles and authority (even where recourse to coercive power exists) and was common even in feudal societies.

A few of many possible examples are offered to illustrate the significance, and some of the ramifications, of drinking (and feasting in general) in this context. Among the Tarahumara of Mexico, the *tesquínada* (beer party) is the standard method of mobilizing cooperative labor. Neighbors come together to aid a family to complete some major work, and the host is expected to provide *tesquino* (maize-beer) in copious amounts. The beer is not considered exactly as a payment for labor, but it is the essential part of the labor exchange pattern, and services will not be performed without it. Wealthier men are able to give more frequent and more lavish

beer parties and thereby gain the labor necessary to maintain larger areas under cultivation and thus generate surplus corn for distribution (*kórima*) to others in times of famine (Kennedy 1978:86). They also gain prestige in the process, as the beer party serves "the important function of publicizing rank and power in the community" (Kennedy 1978:118).

Among the Samia people of western Kenya, pre-colonial iron production, which furnished the needs of the politically acephalous Samia and neighboring Luo peoples, was based entirely upon this practice. A wealthy man with surplus grain and a sufficient number of wives to brew beer for a large group would summon together all of the young men of the area on a given day to collect iron ore from the Samia Hills. The young men departed after the great beer party, and the host was left with a large supply of iron ore which he subsequently converted into hoes through the agency of a smith. The extremely valuable iron hoes were then traded for livestock or used directly in bridewealth payments in combination with cattle to acquire more wives. Additional wives (who did the agriculture) increased the wealthy host's productive base and allowed him to more easily and quickly amass enough grain for another work-party feast, and begin the cycle again (Dietler 1989c).

Planting, bush clearing, weeding, harvesting, thatching, and fence and house construction are all accomplished by work-party beer feasts (*mayket*) among the Sebei of Uganda, for whom "no institution is so central to modern Sebei life" (Goldschmidt 1976:156). Among the Kofyar of Nigeria, the conception of God is even phrased in terms of an important farmer who dispenses beer in exchange for labor (Netting 1964:377). Worldwide, such feasts have been commonly used for everything from mounting trade expeditions to rural American "barn-raising" (cf. Cummings 1976:92-93; Barnes 1959:219; Bohannon and Bohannon 1968:72-76; Lemert 1964:367; Eguchi 1975; Herskovits 1937:70-76; Hunter 1936:88-92). In fact, this feast-driven mechanism of labor mobilization is so common in the ethnographic and historical literature for all continents that, at least for pre-money societies with an agricultural subsistence base, it can be regarded as a nearly universal pattern (Dietler 1989c).

In many cases this practice has persisted even long after the adoption of money into the economy, and there are often strong residual negative feelings about the concept of free men exchanging labor for pay although commercial relations have come to predominate in other aspects of life. For example, Barth noted a strong reluctance to exchange labor for anything but beer among the Fur of the Sudan: government agencies were unsuccessful in recruiting local labor by offering money wages even at a value calculated at roughly 12 times that of the millet (brewed into beer) demanded by an individual in the context of a work-party feast (1967a:167). Barth described the labor-for-beer institution of the Fur as

one of two separate spheres of exchange.⁷ Beer was used to compensate informal reciprocal help and to mobilize large work-parties for millet production (from which beer was made) and for house building. It was not considered proper to exchange either beer or labor for cash, and these two spheres of exchange were effectively insulated due to the lack of a regular means of conversion (1967a). However, key elements in the eventual breakdown of this labor mobilization pattern appear to be the development of extensive cash-cropping and particularly the transformation of drink itself into a commercialized commodity with a monetary exchange value (Colson and Scudder 1988; Hedlund and Lundahl 1984).

It should be pointed out that it is not necessarily a desire for alcohol, per se, which motivates people to work together. Rather, it is the institution of the hosted feast, with the force of relations of reciprocal obligation established through hospitality, and sometimes the implied obligation of the host to perform reciprocal services at the feasts of others. However, given that alcohol tends to be an essential component of feasting in societies in which it was known aboriginally (the "integrated drinking" pattern defined by Child et al. 1965), and given the widespread distribution of aboriginal alcohol use, it is clear that drinking is very commonly regarded as an integral component of work-party feasts (often the sole essential ingredient) and frequently assumes the role of a stimulus for communal work.

An important yet little recognized aspect of the work-party feast mechanism, particularly in terms of the discussion of its potential role in social change, is its inherent potentiality to be employed as a form of exploitation even in nominally egalitarian pre-capitalist economic systems; that is, it can be used to systematically separate individuals from what they produce and, hence, to precipitate relations of economic inequality. In societies with an egalitarian ethos, the mechanism of labor mobilization is theoretically open to all and supposedly promotes a balanced flow of communal labor services and rewards through the society; and this frequently is the general effect. However, in practice, relative access to effective use of this mechanism is in many instances dependent upon differential capacities for subsistence production, and certain individuals or groups will often be in a privileged position to utilize it.⁸ Thus, for example, in the case of Samia iron production mentioned earlier, wealthier men who had managed to amass the cattle necessary for bridewealth sufficient to marry many wives were the only ones able to effectively engage in iron production and trade through very large beer feasts; and this initial position of privileged access perpetuated a cyclic inflation of economic advantage, with an increase in wealth permitting a further increase in the number of wives, ensuring improved potential to re-employ the work-party feast for labor mobilization. Those who performed the

work of gathering iron ore were theoretically able to stage their own work-party feasts. However, practically this was not feasible for most men, especially young ones with few wives, and effectively they became a labor pool alienated from the fruits of their labor which went to augment the "capital" of the hosts (Dietler 1989c).

Barth (1967a) noted a similar potential for "growth spirals" in the labor-for-beer exchange sphere of the Fur economy mentioned above. Because some men were not able to manipulate the delayed return aspects of this system effectively and were continually induced to turn their labor directly into beer by working for others, the villagers had a tendency to separate into two strata: those who operated effectively as work-party hosts and those who, for a variety of reasons, had inadequate grain supplies and served as a labor reserve for the others (Barth 1967a:166). As he also observed, where a pattern develops that some people act consistently more as hosts than as guests/workers and others are consistently guests/workers, the conditions are set for increasing social differentiation where some individuals obtain wealth through the labor of others (Barth 1967b:663).

In addition to its role in mobilizing labor, alcohol has a number of other common economic functions in many societies. For example, among the Kofyar of Nigeria, in addition to being the most prevalent medium of reciprocity for all kinds of services, millet-beer forms part of the bride-price and various gift exchanges associated with the marriage process; it is used to pay rent on land, it is used to pay fines for breaking community rules, and it is a ready means of raising cash quickly (Netting 1964). Examples of drink as a socially valued good used as a medium of exchange or compensation are prolific in the ethnographic literature, although the forms and range of uses in specific societies are more variable than with the institution of the work-party feast.

Several generalizations can be made about the economic uses of drinking in traditional societies which will be shown to be particularly important in the later discussion of change and acculturation. First, examples in the ethnographic literature make it clear that the economic role of drinking is most developed in agricultural societies, and rather less so in hunting-and-gathering and pastoral groups. In part this is due to a general tendency toward greater social embeddedness or "integration" of drinking in societies with a subsistence economy permitting the accumulation of food, a more complex social structure, and a more densely populated settlement pattern (Bacon et al. 1965:40, 44). This pattern of integration into social institutions would tend to make alcohol a more socially valued item in agricultural societies. The greater economic role in agricultural societies may also have to do with a greater need for mobilization of communal labor on a scale above the basic production group and a greater

need for a medium of exchange and compensation in general with a more complex network of economic relations.

Another observation is that because alcohol can be fairly simply produced from fermentation of a wide variety of fruits, grains, roots, or other natural products (e.g., see Crawley 1931:178-188; Darby et al. 1977:529-618), almost every society has locally available raw materials for making alcohol and everyone in a society generally has access to the means of production, that is, the basic materials and techniques utilized locally. However, while monopolistic control of the means of production is unusual, differential capabilities for production and economic manipulation of drink within a community will often depend upon differential capacities for subsistence production, particularly where grain is the basic ingredient. For example, as in the case of the Samia mentioned above, in polygynous societies a wealthy man with many wives will usually have a great advantage in being able to amass a larger grain supply and labor force for brewing beer, and will consequently be able to mobilize communal labor for his own projects more easily and frequently. This increased productive capacity is, in fact, one of the strongest appeals of polygyny in Africa (Boserup 1970:37): it takes wealth to acquire wives, but more wives lead to increased production and greater prestige and wealth.⁹

The potential for economic (and political) manipulation of drinking in a society (beyond the requirements for basic hospitality, household rituals, and small-project work-parties which everyone must meet) will, therefore, generally be closely linked to the potential for differential subsistence production. As will be demonstrated later, under these circumstances, the introduction of an exotic type of alcoholic beverage, the basic means of production of which are not tied to the system of subsistence production, can have significant consequences.

Alcohol as an economic good has some distinctive properties. It is readily adaptable to the requirements of an exchange medium in that it is a socially valued good which is virtually infinitely divisible. However, in the forms indigenous to most traditional societies it is also made for fairly immediate consumption:¹⁰ unlike money or durable valuables, it cannot be stored for long, and its function is to be completely consumed. This means that it acquires economic value in the process of consumption (in the context of a social event) rather than in possession or accumulation. This makes it a special form of what Appadurai (1986) calls a "commodity by destination": that is, an object intended by its producer for exchange, but in this case a special form of exchange (consumption) within a very specific social context and with important temporal limits on its execution. It, in effect, is a medium that allows surplus agricultural produce to be converted indirectly into labor, prestige, "social credit," political

power, bridewealth, or durable valuables; and this is a very useful mechanism of indirect conversion which, for example, can be used to circumvent the normal barriers to direct convertibility of subsistence goods to more socially valued items in multi-centric economies.¹¹ As Kennedy (1978:85–86) pointed out for the Tarahumara, corn is so low on the exchange value hierarchy that direct exchange of it cannot lead to any significant increase in the stock of real wealth (i.e., cattle), but its conversion to beer for the hosting of feasts is a primary avenue to obtaining prestige and political influence. As Netting (1964:380) noted for Kofyar beer, which allowed rapid conversion of subsistence produce to cash with the development of a monetary economy, drink can also prove to be an adaptable means of achieving economic objectives under conditions of social change.

However, the perishability of most traditional forms of drink also places certain restrictions on their use. In addition to the question of obtaining the necessary raw materials, mobilizing large quantities of drink for exchange/consumption in the context of a social event requires the concerted effort of a fairly large labor force, as it cannot be produced in small lots and amassed for the occasion. Obviously, the introduction of a more storable form of alcohol, such as imported European liquor in Micronesia (Marshall and Marshall 1979) and Africa (Pan 1975), or classical wine among the Celts, can have important implications for the availability of drink and the opportunities to sponsor drinking events, as well as for the effects of exchange and accumulation on value.

POLITICAL ASPECT

Drinking is also a primary tool of politics. Its important role in the political domain (i.e., in the context of social activity concerned mainly with relations of power) is related both to its widespread association with patterns of hospitality and to the status of drink as a socially valued good and frequently as a ritually significant artifact. In societies with specialized political roles and a centralized political structure, alcohol often has a prominent institutionalized role in the maintenance of political authority through what Pryor (1977) has termed “centric transfers” flowing both up and down the hierarchical structure; that is, both tribute paid to chiefs and redistributive hospitality by chiefs. However, even (or perhaps especially) in societies without clearly defined political institutions or roles, drinking is often extremely important in the implementation of informal leadership and personal power.

An example drawn from the Chagga of Tanzania illustrates the widespread importance of flows of drink in the former context. A Chagga chief would regularly hold “open house” at his residence, at which people

would come to drink beer and visit. Aside from fulfilling his redistributive obligations, his generosity in dispensing beer assured that he always had the support of a ready supply of warriors. The large amounts of beer needed for this generous hospitality were collected in two ways: the chief used the work-party feast mechanism (in the form of beer parties) to organize *corvée* labor to cultivate his large fields of millet (from which beer was brewed), and he had the right to collect a portion of all beer brewed in his domain as a tax. Gutmann (1926:346) stated that the people were happy to pay the proper beer tax because they liked visiting the chief's residence and enjoying his hospitality. However, he also noted that the chief's agents were “highly sensitive beer-snoopers” and severe punishment was inflicted upon anyone who tried to drink more than two or three pots of beer without paying the tribute (quoted in Washburne 1961:38).

Among the Kofyar of Nigeria, beer is a potent symbol of political authority. Anyone brewing beer is obligated to set aside a portion called *mwos miskagam* (“the beer of the chief”) for the local village headman. This right to tribute in beer is of such importance that, in the colonial period, it became a major source of contention between traditional, hereditary priest-chiefs and government-appointed administrative chiefs. Moreover, even in recent times, a clear sign of the breakdown of political cohesion within a village is the decision by a clan segment to stop furnishing beer to the chief (Netting 1964:376–377). (cf. Barnes 1954:144–147; Hunter 1936:386–388.)

In societies without much development of institutionalized political authority or centralized leadership roles, tribute is less common. However, competition among individuals or groups for extra-institutional power (i.e., the capacity to influence group decisions and actions) is frequently conducted through manipulation of drink in the institution of hospitality. As mentioned previously, the exercise of hospitality creates relations similar to the giving of valuables: in Mauss' (1969:72) terms, it places the donor in a position of superiority (*magister*) and the receiver in a position of subordination (*minister*) unless and until the equivalent is reciprocated. This informal social power in its abstract, passive form is often called prestige, or “social credit.” Salisbury (1962:190) called it “free-floating power” and contrasted it with the relatively fixed, institutionalized authority an individual may have by virtue of a specific social status or role.

In the context of the political role of drinking, it can be seen that in an egalitarian society a man who hosts a large feast gains “free-floating power” in that his informal social ranking, or relative prestige, has increased even though he continues to hold a social position identical to that of all other men in the formal ideology of the group. What he has increased is the informal power that is not inherent in his status, but which

resides in manipulation of the process of personal interaction. As Salisbury (1962:190) noted, this power may be actively employed in implementing leadership (demanding certain rights or influencing group decisions), or it may simply be asserted by a superior attitude.

Under these circumstances, it is usually the individual's capacity for agricultural production (in the general sense, which may include, for example, command of wives or a network of kin relations enabling the accumulation of raw materials and labor for drink production) which determines the ability to host social events on a grand scale and thereby exploit this avenue toward gaining the prestige necessary to become an influential member of the community. In societies with an egalitarian ethos, the very consumability of alcohol makes it an ideal medium for acquiring such prestige and power. In those societies where an open display of durable accumulated wealth may be negatively sanctioned (what Foster (1965) has called "the image of the limited good"), drinking offers an effective means of acquiring influence subtly, with self-interested manipulation and competition concealed in the socially valued and integrated practice of hospitality. In fact, lavish offering of drink is often viewed very positively by the participants as a leveling device by which surplus wealth is liquidated and economic differences are dissolved, as among the Papagos of Arizona (Waddell 1975), but the hidden functions of creating relations of obligation between guest and host and publicizing prestige are simultaneously operative. Every bit as much as the exchange of durable valuables, hosted drinking events can be used to operate what Firth (1983) has called "indebtedness engineering."

Thus, drinking can have an important role in the implementation of both formal and informal power relations in a society. In the process of centric transfers and in the institution of hospitality, it can be seen to have a strong political dimension. It is important both in expressing and maintaining the legitimacy of institutionalized authority and in the acquisition and control of "free-floating power." The significance of feasting, and hence generally of drinking, in chiefdom societies is becoming increasingly evident to archaeologists (e.g., see Earle 1989), but its prominent role in the exercise of other forms of leadership in societies with different forms of political organization also deserves to be recognized.

CHANGE AND ACCULTURATION

It should be obvious from the discussion and interrelated reference that the preceding analytical distinction between social, political, and economic aspects of the role of drinking is artificial and for heuristic perspective only. In fact, it is the very intertwining of roles that gives drinking its potent social significance. Friedman's (1979, 1984) analysis of the

Kachin underscores this point for feasting in general and clearly illustrates the important place feasts may occupy in the political economy, by defining relative prestige among lineages and cyclically linking production, marriage exchange, and the process of social differentiation. This multiple linkage of roles, particularly when the significance of the work-party feast is also appreciated, is very important in understanding the potential agency of drinking in social change.

Because of the common intimate articulation of drinking with social, economic, and political institutions and processes in a society, not only will changes in these social phenomena often be reflected in changes in traditional drinking patterns (see Mandelbaum 1965:283-285, Colson and Scudder 1988), but alterations of drinking patterns may actually have a profound impact on social relations. This latter statement, particularly, is of potentially great relevance to archaeologists interested in problems of culture contact (such as the archaeological example which began the discussion); however, it is a proposition which is not self-evident and it demands some demonstration.

In speaking of acculturative change as it relates to drinking, it is important to first make a number of analytical distinctions concerning the range of possible types of change that may occur. Given the different roles that drinking may serve in a society, change must necessarily involve a number of interrelated variables with different implications depending upon the nature of their interaction. The matter can perhaps best be understood by first differentiating the major properties of potential types of change in patterns of drink and drinking, describing the articulation of these properties with social features, and then demonstrating how these may interact to significantly alter social relations.

The most obvious initial distinction to be made is whether the practice of drinking is being introduced to a society without aboriginal knowledge of alcohol, or whether it is a case of a different kind of drink being adopted by a society with previously established drinking practices. Also important to differentiate are the simple adoption of an exotic form of drink and the possible, but not necessary, adoption of the cultural practices and beliefs associated with it in the donor society. (Equally possible is the adoption of foreign cultural practices governing drinking behavior but adapted to the native form of drink.) Finally, in the case of societies with indigenous drinking, one must also distinguish between the addition of a foreign form of drink and/or drinking practices to the existing native repertoire and the actual replacement of a native form of drink and/or drinking practices. While a complete analysis is obviously impossible here, as will be suggested, each permutation of these possibilities may have very different social implications and it is important for analytical purposes to

initially discuss the variables independently and illustrate them briefly with empirical examples.

Aboriginal vs Novice Drinkers

Where the practice of drinking has been introduced to societies without indigenous forms of alcohol, the results have often been more socially disruptive than in the case of adoption of exotic drinking elements by societies with established cultural drinking practices and widely shared beliefs and values governing drinking behavior (Marshall 1979b), although this has not been universally the case (e.g., see Waddell 1980). Some societies have managed to absorb the new practice fairly easily by channeling alcohol into cultural roles existing for other substances of a somewhat similar nature. In many areas of Polynesia, for example, the *Kava* circle was the common prototype for drinking patterns, thus tying alcohol in immediately to well-established ceremonial and festive roles (Lemert 1964:362). Likewise, in many New Guinea societies beer was incorporated into the traditional hospitality and exchange/prestation patterns and considered a social valuable like pork (Grossman 1982; Warry 1982; Strathern 1982). For many American Indian peoples, however, the adoption of drinking has had particularly disruptive social consequences. This has been credited to a number of factors, including a frequently very destructive form of general acculturation (or deculturation) resulting in the rapid breakdown of many social institutions. Also, in the absence of preexisting cultural norms or institutions capable of prescribing behavioral expectations for drinking, many peoples tended to borrow not only the foreign drink but also styles of drunken behavior from the first agents who introduced it (Marshall 1979b). Additionally, patterns of heavy and reckless drinking in Native American communities have sometimes assumed the role of a form of symbolic protest against the dominant culture (Lurie 1979; Honigmann 1979).

Societies with aboriginally well-integrated drinking patterns have generally had fewer social problems of a dramatically disruptive nature in coping with new forms of drinking introduced from outside, although this is manifestly not to say that such introduced items and practices have not resulted in significant changes in social relations. Occasionally, such societies have experienced radical problems similar to those of indigenously nondrinking societies despite preexisting controls on alcohol use and behavior (see Pan 1975). Often, however, the effects involve a more subtle or gradual realignment of the network of social relations and redefinition of role and status expectations (in ways that will be discussed) rather than a collapse of the institutions governing or associated with drinking. But,

as Colson and Scudder's (1988) penetrating long-term analysis of changes in drinking patterns among the Gwembe Tonga of Zambia illustrates, initial adaptation to new forms of drink is no guarantee against future problems: much depends upon new ways and contexts in which drinking comes to be used.

Adoption of Form of Drink vs Drinking Practices/Beliefs

Another factor of importance in determining the consequences of changes in drinking patterns is whether a new form of drink alone is adopted by a society, whether it is adopted with the cultural practices, beliefs, and behavioral expectations associated with it in the donor society, or whether these latter patterns have been adopted without a basic change in the indigenous form of drink. All of these are possible, and of varying significance.

An excellent example illustrating the difference between the first two possibilities is found in the native section of the Arctic town of Inuvik, where part of the population, in an effort toward integration, has adopted the alcoholic drinks of the dominant white culture along with the corresponding middle-class drinking behavior, attitudes, and general drinking patterns, while another part uses the same forms of drink in a reckless style of drinking completely alien to (and in protest against) this dominant culture (Honigmann 1979:34). Among the Ainu of Japan, a Japanese form of drink (*sake*, rice beer) has replaced the traditional native form (millet beer) as the preferred drink, and Japanese service vessels are used and highly valued; yet the drinking pattern, which is very formally ceremonial, remained (like most other aspects of the culture) distinctly Ainu (Batchelor 1901, 1927; Washburne 1961:187–202).

Where the form of drink alone is adopted, its social impact will depend upon the ways in which the new drink differs from the traditional form(s), and upon how significant these differences are in the performance of the roles played by drinking in a society. For example, when the means of production of a new form of drink are not available to the society adopting it, the economic relations governing its acquisition and political relations expressed by its use are likely to be affected. Among the Ainu, there was apparently little substantive change because, although rice beer was a foreign invention, the technology of its production differed little from the traditional millet beer and the raw material was readily available; hence, the Ainu quickly began to brew *sake* themselves (see Washburne 1961:189). On the other hand, in Micronesia production of European-style distilled spirits was beyond the technological means of the native peoples, with the result that chiefs, as the principal agents of contact with foreign traders, were able to monopolize access to this form of drink and use it in

bolstering their political authority through manipulation of the traditional institutions of redistribution (Marshall and Marshall 1979).

As mentioned previously, the ability to manipulate most traditional forms of drink for economic or political goals is linked fairly closely with capacity for subsistence production. In societies where individuals are not able to exclusively restrict access to external trade, for example in societies with competing lineage heads or "big men" but without institutionalized political authority, the introduction of a foreign form of drink not linked to subsistence production could easily upset the traditional power balance in the society by undercutting some of the established avenues to obtaining wealth, prestige, and power.

Such undermining effects could occur, for example, in the common case of societies in which wealthy men utilize advantages in subsistence production converted to drink to exploit the prestige potential of hosted feasts and the economic potential of work-party feasts. With the introduction of a new form of drink, access to which is tied not to subsistence production (but rather to proximity to an external trade source, control of a resource sought by an external agent, or services performed for an external agent), new possibilities would be opened up for entering and operating in the system for obtaining prestige and power. The new type of drink would be a novel variant of goods used in established institutions of status competition (what Salisbury (1962) called "power tokens"), but with radically new patterns of acquisition. Adoption of such a new form of drink could easily lead to a weakening of the established power structure and an escalation of status competition in the society, similar to that stemming from the introduction of wage labor or cash-cropping among many small-scale societies following European colonial contact (see Robbins 1973; Dalton 1978:158-59).

Lurie (1979:138) described the outcome of such a process among the Ojibwa Indians, where successful trappers began to assume the role of "chiefs" through their control of access to liquor obtained from white traders in exchange for furs. This liquor was distributed and consumed communally within the band, and this form of hospitality became a means of asserting and maintaining leadership of the community. Similarly, in several New Guinea societies, imported beer has become an important catalytic link between the cash and prestige spheres of the economy to the extent that it has sometimes replaced pork as the essential exchange valuable and its acquisition has served as a major stimulus to cash-crop production (Warry 1982; Grossman 1982; Marshall et al. 1982:452-454).

Another potential property of some imported drinks which distinguish them as a class from most indigenous forms of drink is that they may be storable: they need not be immediately consumed. In Micronesia, this was the case with imported distilled spirits. As a result of this property,

chiefs were able to stockpile large supplies of liquor (obtained as requisite tribute from foreign traders before any business could be transacted) as a visible symbol of wealth. This liquor could be distributed to supporters or amassed for consumption in competitive feasting, which was a fundamental element of status display and political rivalry in the area (Marshall and Marshall 1979:227-230).

Foreign drinking customs, as opposed to forms of drink alone, will most often be adopted for their symbolic potential, in either a diacritical or associative sense. That is, exotic drinking practices may be employed to symbolically differentiate groups, categories, or classes within a society (a feature explored further in the following section) or to provide a symbolic link between groups. The exact nature of what is borrowed in this context (i.e., forms of drink, drinking paraphernalia, drinking customs, or any combination of these) will depend upon the position and intent of the borrowing/signaling group.

As Honigmann (1979:35) noted, "Drinking styles that become emblems of membership in particular social groups and categories are constructed and selected, not always consciously, for their symbolic meaning," and, as he further pointed out, the meaning of such styles derives from the styles of drinking to which they are either opposed or are attempting to emulate. Thus, a complete adoption of customs and beliefs would be likely to occur only when the reference group against which the adopting group defines its identity is the external agent from which the borrowed elements originate. When the reference point for defining identity is strictly within the same society, more limited borrowing from outside, determined by the potential for symbolic opposition within the group, is likely. In other words, if members of one society (e.g., the elite members) begin to define their status by comparison to another society, they may attempt wholesale emulation of the customs of that external society. Where a group within a society defines its social position strictly by comparison with other groups in that same society, it may employ elements borrowed more or less randomly (without regard for coherence or meaning of the practices in the donor society) in creating an internally diacritical group style.

For example, in the case of the Inuvik settlement mentioned above, the native population began to define its identity vis-à-vis middle class white society; one group affected complete emulation of the drinking practices and attitudes of this external culture in an effort at assimilation, while another group, using the same forms of drink, adopted a style of drinking in direct contradiction of these practices and attitudes as a sign of rejection (Honigmann 1979). Micronesian chiefs, on the other hand, adopted imported spirits as a symbol of their elevated status *within* their own society. Wholesale emulation of European drinking practices and atti-

tudes associated with these spirits was not attempted, as knowledge of these was limited and status definition vis-à-vis foreigners was not yet an important consideration; the first Europeans were simply the agents through whom one obtained goods which could be usefully manipulated in internal status display, and later missionaries, because of their opposition to drinking, were seen as a threat to their political authority (Marshall and Marshall 1979:227-230).

Obviously, the nature of intercultural contact agents is also important in determining what elements will be borrowed. Knowledge about the original meaning and function of objects or practices tends to become reduced and differentially transmitted as they are separated by greater geographic and social distances (Appadurai 1986:56). This is a result of selectivity in both the range of information presented about these items by the donor agent and interpretive distortions by the recipient due to different perceptual orientations (Social Science Research Council 1954). Borrowed forms of drink, and various drinking objects and customs, must be understood primarily within the framework of practices, institutions, and ideology existing within the *recipient* society. Complete adoption of drinking patterns and beliefs of a donor society is likely to occur only when contacts are close and pervasive, and when, as noted above, cultural identity comes to be defined vis-à-vis the donor society.

Another aspect of the adoption of foreign drinking practices of potential importance is that this may result in the introduction of new contexts in which drinking takes place: ones that are alien to the traditional social institutions of which drinking is an important part. For example, among the Mapuche of Chile drinking was "the indispensable vehicle of interpersonal contact and integration of social units at all levels" (Lomnitz 1976:183), by virtue of its role in hospitality, work-party feasts, formal and informal social and ceremonial events, etc. At the beginning of the eighteenth century, Spanish traders began to penetrate the Mapuche territory seeking cattle in exchange for weapons and spirits. Eventually, the Mapuche were drawn to bring cattle and woolen blankets to established trading posts at which alcohol was one of the major exchange items sought, and these soon became places where alcohol was consumed as well. Drinking at trading posts constituted a new context radically different and divorced from the traditional pattern of Mapuche drinking (only in homes or at community festivals), and drinking consequently assumed a new social meaning and function, no longer being primarily a means of reinforcing community social relations (Lomnitz 1976:184). A change in the context of drinking, particularly when accompanied by a change in the status of drink to a commercialized commodity, can seriously affect behavioral expectations (such as patterns of reciprocity and categories of people engaging in drinking) and can erode the symbolic and ritual asso-

ciation of drink (Colson and Scudder 1988). Moreover, when drinking shifts out of the ceremonial or domestic context to situations which involve interaction with strangers (e.g., at taverns), violence and disruptive drunken behavior may also increase significantly (Marshall 1979b:453).

Addition vs Replacement

The question of whether an introduced form of drink and/or drinking practices serve as an addition to the existing repertoire or actually come to replace native forms also has social implications, the nature of which varies according to, among other things, the social organization of the adopting society. As an additional element, the new form of drink or drinking can often serve a diacritical symbolic function in differentiating groups, categories, or classes within a society.

Nadel (1951:67, 157, 262) specifically defined as "diacritical" those elements of culture (both forms of behavior and objects) which act as symbols of the differential status of individuals within a group or of groups vis-à-vis each other but which are not part of the performance of the roles associated with that status. Where a degree of social ranking or stratification exists, the new drink will often be appropriated in this manner by the dominant social stratum as a symbol of its status. For example, in Polynesia (Lemert 1964) and Micronesia (Marshall and Marshall 1979), imported spirits were generally reserved for the use of the ruling elite. Among the Kofyar of Nigeria, European bottled beer is a luxury item drunk only by chiefs and teachers (Netting 1964:379), and Goody (1982:178) noted a three-tier hierarchy in modern Ghana, where the top echelon drinks imported whisky and Cognac, the urban elite consume bottled beer, and the bulk of the population drinks the traditional beer.

Where an alien form of drink only is involved, the value and longevity of the symbol will usually be related to the degree of privileged access, whether because of high cost or restrictions on trade, use, or production; in other words, it will depend upon whether the drink remains an addition or becomes a replacement of indigenous forms. For example, among the Yoruba, European liquor is used increasingly for ceremonies and parties because it is thought to add sophistication, but its expense ensures that about 90% of the drink consumed in the society is still of the indigenous type (Obayemi 1976:208). On the other hand, among the Gwembe Tonga of Zambia, commercial beer (which is associated with urban sophistication) has gradually replaced native beer for almost all contexts except certain rituals (Colson and Scudder 1988). Where an elite has appropriated an imported drink as a diacritical symbol, but where expense or difficulty of access alone is not a sufficient deterrent to imitation, sump-

tuary laws may sometimes be invoked to maintain the exclusivity of such symbols (see Goody 1982:141, Appadurai 1986).

Where borrowed drinking customs are involved, the symbolic differentiation may be more difficult to maintain, unless the customs involve costly or rare paraphernalia. As Goody (1982:144) noted in his study of differentiation of social hierarchies through cuisine, manners used initially by higher groups to mark themselves off often spread through a society through emulation and lose their diacritical symbolic value. The symposium (the wine-drinking party/ritual of ancient Greece) is an excellent example of this process: originally a ceremony exclusive to and symbolic of a wealthy landed aristocracy, it was gradually emulated by members of other social categories and eventually became simply a common pastime of urban Greek society (Dentzer 1982; Murray 1983). The diffusion of this practice beyond the aristocracy resulted in a "devaluation" of its aristocratic aura (Dentzer 1982:450), and hence of its diacritical utility. Evidently, drinking customs may change slowly, or fairly rapidly, from additional elements to complete replacements for indigenous customs, and this may occur even if forms of drink do not undergo a similar transformation.

Where replacement of a native drink occurs, there can be serious economic consequences, particularly if the new form of drink cannot be produced in the indigenous sector. For example, among the Mapuche of Chile, one of the important changes that occurred in connection with a shift in the context of drinking mentioned earlier was that the Mapuche ceased to rely on gathering or farming for their supply of drink and instead became dependent upon external suppliers for this socially necessary commodity, and were drawn more into the external economy in general (Lomnitz 1976:184). This kind of growing replacement of native forms of drink and growing dependence on an external source can also precipitate a shift in social identity from one focused on internal status relations to one defined vis-à-vis the external culture; and this can, in turn, result in the adoption of alien drinking practices and beliefs through a process of emulation described earlier.

MODEL

To demonstrate the utility for archaeology of the perspective explored in this discussion, it now remains to formulate from the information surveyed a model which will provide fresh insights into the specific archaeological case with which the discussion began: Early Iron Age trade between the Greek and Etruscan civilizations and the indigenous societies of the Rhône-Saône basin of France.

As has been argued, adopted elements of alien drinking patterns may be

more than simply inert cultural borrowings or even reflections of other social changes; they may actually serve as a catalyst for social change, and not simply in the destructive, pathological sense often reported for cases of recent Western acculturation (e.g., among many Native American groups). In any case, little insight is derived from simply treating the adoption of imported wine as the emulation of Greek customs.

In constructing a model with more explanatory potential, it is first necessary to briefly address the question of why elements of foreign drinking practices would be adopted at all. As with other elements of material culture, and culture in general, it is not obvious that such borrowing should occur simply as a result of contact. There are many cases in which the adoption of foreign drinks and drinking practices has been strongly resisted. For example, for the Late Iron Age in the area under consideration here, Caesar (B.G. IV, 2; II, 15) mentioned that, in contrast to many of the Celtic tribes, the Germanic Suebi and the Belgic Nervii both forbade the import of wine into their territory, and the distribution pattern of Roman amphoras may indicate that this was a more widespread practice among the Germanic peoples¹² (Fitzpatrick 1985:311–312). Yet other societies, such as many of the Celtic tribes against which Caesar fought in Gaul, avidly adopted this foreign form of drink while at the same time rejecting other cultural borrowings (a pattern very similar to the Early Iron Age situation).

It is proposed here that explanations of both demand for alien forms of drink or drinking practices and the effects stemming from their adoption must be sought in the logic of political economy. This approach is considered especially appropriate for the analysis of drinking in view of the widespread pattern of intimate articulation with socioeconomic relations and political power demonstrated previously.

"Cultures do not meet, but people who are their carriers do" (Social Science Research Council 1954:980). And as Barth (1967b) further observed, cultural change is an unintended result of a combination of decisions and actions by individuals and households experimenting with change, rather than by cultures or societies:

... most of the salient constraints on the course of change will be found to be social and interactional, and not simply cognitive. . . they can most usefully be analyzed with reference to the opportunity situation of social persons or other units of management capable of decision-making and action: the mechanisms of change must be found in the world of efficient causes. (Barth 1967b:668)

Particularly as drink has been demonstrated to be closely tied to the relations of production and is intimately woven into the fabric of economic and political power, it is assumed here that cultural elements involving drinking will be adopted to the extent that they can be manipu-

lated to advantage in the framework of existing social institutions toward the resolution of inherent conflict in power relations (broadly defined) within a society. Depending upon the particular strategy employed, social conflict may either be exacerbated or concealed, and the existing power relations may be either disrupted or solidified.

In line with the analytical categories outlined previously, the first question to be asked in setting the basic operative conditions for the model is whether this is a case of the introduction of the practice of drinking to a nondrinking society or whether it involves the adoption of elements of drinking by a society with aboriginally established drinking patterns. The latter appears to be clearly the case. Although several centuries later than the period in question, there are numerous Greek and Roman references¹³ to native Celtic drinks: for example, Posidonius (in Athenaeus IV, 36) mentioned the Celts drinking a beer (*corma*) made from wheat and honey, Diodorus (V, 26) noted a Celtic beer (*zythos*) made from barley and honey-based drink (probably mead), Pliny (N.H. XIV, 29; XXII, 82) described grain-based beer (*cervesia*) in Gaul, and Strabo (IV, 5,5; IV, 6,2) mentioned barley beer (*krithinon poma*) as the drink of Liguria (the region in the hinterland of Massalia, including southeastern France and northwestern Italy). All of these are most unlikely to have been introduced by the wine-drinking peoples of the Mediterranean states, who treated beer with disdain.¹⁴ They were undoubtedly indigenous beverages of long standing,¹⁵ most probably dating from as early as the Chalcolithic "Beaker" period (Sherratt 1986), if not before.

Archaeological evidence suggesting the existence of nonvinous drinks and indigenous drinking patterns for the Early Iron Age also exists. This is both in the form of native drinking vessels, such as the gold bowls and gold-adorned drinking horns in the Hallstatt tumulus at Hochdorf (Biel 1985), and in the form of chemical residues from drink, such as the pollen and beeswax residues (probably from mead) from the Greek bronze cauldron in the same tumulus (Körper-Grohne 1985). Moreover the prevalence and symbolic importance of indigenous drinking and feasting in west European Late Bronze Age and Early Iron Age societies in general are clearly attested by the pattern of inclusion of bronze cauldrons, buckets, strainers, ladles, cups, and other probable drinking gear in elite grave furniture (cf. Kossack 1964; Biel 1985; Hawkes and Smith 1957; Verger and Guillaumet 1988; Bouloumié 1988) and by representations of drinking scenes in north Italian situla art (e.g., Bonfante 1981:21–22, Figs. 4–9, 11, 12, 33, 46, etc.), and it is at least suggested by a consideration of pottery forms (especially cups and large urns) from various areas (e.g., Kossack 1959; Dobiak 1980; Patek 1980; Py 1984:252–257; Arcelin 1971:69–71).

It is also probable that Mediterranean wine represented a borrowed form of drink which was adopted without the associated cultural practices

and beliefs in both southern France and the Hallstatt area. Disapproving classical references (e.g., Diodorus V, 26,3) to the practice of later Celtic peoples of drinking wine neat (i.e., unmixed with water) offer clear evidence of the failure to accept one of the essential features of the Greek wine-drinking ceremony, the symposium. Mixing water with wine was more than a question of taste to the Greeks; it was intimately tied up with the meaning and philosophy of drinking (Durand et al. 1984; P. Villard 1988). Failure to observe this practice was a certain distinguishing mark of the barbarian or the deviant (see, e.g., Pliny N.H. XIV, 29; Athenaeus X, 29; X, 39) and was even considered dangerous¹⁶ (see P. Villard 1988). It should be noted that this essential practice was apparently rejected even though certain paraphernalia of the symposium used specifically for this purpose by the Greeks were adopted in the Hallstatt area (see F. Villard 1988; Bouloumié 1988). Most probably, as the mixture of imported and native drinking gear in individual tombs suggests, these material items were adapted, like the wine itself, to native drinking patterns. This creative transformation of the use of wine is abundantly clear in southern France, where the full range of symposium equipment was not even imported.

It is also likely that Mediterranean wine represented an addition to the indigenous repertoire rather than a replacement of native forms of drink. As late as the first century B.C., the Greek geographer Posidonius noted that the vast majority of the Celtic populace drank barley beer, while wine was reserved for the rich (Athenaeus IV, 36). Furthermore, during the Early Iron Age the south French littoral was the only region with a quantity of amphoras even remotely near sufficient to represent a replacement for traditional forms of drink, and even this was significantly less than the quantities of Roman amphoras recovered from sites contemporary with the remarks of Posidonius (see Tchernia 1983; Fitzpatrick 1985).

Given these general characteristics of the pattern of the adoption of wine in the area, in assessing the impact of a change in drinking pattern associated with the introduction of a new type of drink, one must further ask what characteristics of this new item make it distinctive. In the case of Mediterranean wine in Early Iron Age indigenous contexts, these differences are several. First, it was an exotic item, the means of production of which (both the ingredients and technical knowledge) were removed from the local subsistence base, thus making it available exclusively through trade. Equally significant in the Hallstatt area is that this was also largely true of the paraphernalia associated with its consumption. Second, knowledge not only of the techniques of production, but also of the appropriate practice of consumption in its original context (see Appadurai 1986:41) would most probably have been lacking. Finally, although the more common wines of antiquity were certainly not for extremely long

keeping (Tchernia 1986), in general wine was a much less perishable good than native grain- or honey-based drinks,¹⁷ and it could be stored, accumulated, and, most importantly, transported over great distances.

With these features in mind, one can construct several hypothetical variations on a model to explain why Mediterranean wine would have been adopted by indigenous peoples of the Rhône–Saône basin, how this wine would have been used in the native systems, and what social, economic, and political repercussions may have resulted from this process. Several variations are necessary, because all of these aspects will vary according to the social and political structures of the societies in question; and one is dealing here not with a single society, but with many of apparently different structures. As noted earlier, the evidence (from graves and settlements) for marked development of political centralization and social stratification found in the Hallstatt region are lacking in the lower Rhône basin, where settlement hierarchies are difficult to discern and funerary elaboration is neither marked nor widespread. In contrast to the Hallstatt area, the regional pattern in the lower Rhône basin can be characterized as one of “heterarchy” (Crumley 1987) in terms of both settlement and burial evidence and sociopolitical organization.

Given a society with a relatively well-developed pattern of institutionalized political roles, centralization of authority, and social ranking, imported wine could fulfill several important roles. The exact nature of its use and effects would, however, depend upon whether the structure of ranking was what Goody (1982) has defined as “hierarchical” or “hieratic.” In the former, patterns of social interaction (including marriage) tend to be constrained within levels of social ranking and these levels tend to be symbolically differentiated by contrasting styles of life, which include particularly aspects of cuisine. In the latter, styles of life, although perhaps varying in lavishness, do not differ fundamentally in type between upper and lower ranks and patterns of interlevel social interaction are much less constrained.¹⁸ For example, although Goody’s generalization may be overly broad, in contrast to the internally differentiated styles of cuisine (and class-endogamous marriage patterns) found in many European and Asian states, in many African kingdoms the ruler’s basic foods, processes of preparation, and table manners differ little from those of the rest of his subjects (1982).

Given a hierarchically ranked society (in Goody’s sense), or one with nascent hierarchical tendencies, the fact that imported wine was an exotic item, the means of production of which was alien to the society, would make it a useful element in symbolically differentiating elite drinking patterns. This would, of course, depend upon restriction of access to foreign trade, a common characteristic of such societies (Polanyi 1957), in order to ensure an elite monopoly of the supply of wine. If the supply of wine

was regular and copious enough, it could come to replace the indigenous beverage altogether in elite contexts (as, for example, apparently happened in Archaic Latium: Gras 1983). Wine in this context would be a form of what Appadurai defines as “luxury goods,” that is, objects which are “incarnated signs” whose main function is “rhetorical” within the domain of power relations; their value accrues in large part from restriction of access, complexity of acquisition, and specialized knowledge about their proper consumption or use (Appadurai 1986:38). Accompanying durable elements of exotic wine drinking paraphernalia would be extremely useful in ensuring this last aspect, even if the associated foreign drinking customs were not actually properly understood.¹⁹ In fact, they would be equally useful if the supply of imported wine was meagre and irregular. These items could be used to transform elite drinking into a status-marking practice even when the common native form of drink was used more often than imported wine, or exclusively. Limited access and expense would ensure that these markers of elite drinking style could not be emulated as readily as could, for example, manners. Such objects could be highly significant even, or perhaps especially, where an actual regular Mediterranean trade was not in effect, but where luxury items were acquired individually by members of the elite through their exchange links with outside groups.

In the case of a “hieratic” ranked society, the function of symbolic differentiation of drinking styles would be inappropriate, and highly elaborate foreign drinking gear would be of considerably less interest than a steady supply of imported wine. Such wine would be very useful in maintaining established authority and augmenting power and prestige through its use in the institutionalized centric transfer pattern of chiefly (or court) hospitality, and in mobilizing *corvée* labor. This would depend critically upon the pattern of monopoly of access to foreign trade and subsequent redistribution common to politically centralized societies of this type (for reasons which will become clear in the discussion of acephalous societies). Its importance would depend upon the amount and regularity of the supply of wine. Initially, it would simply serve as an augmentation of the native forms of drink necessarily given out by the ruler as part of his pattern of centric transfers. Its advantage would be that it would allow an increase in the supply of drink, and hence the scale of hospitality, without increasing subsistence production or tribute demands. A ruler could thus augment his prestige, assure the support of a larger group of warriors or followers,²⁰ or step up production for trade or public projects through drink-rewarded *corvée* labor. Obviously, the more imported wine came to replace native drinks in this process the more dependent the ruler would be on his external source of trade to maintain the relations based on the flow of drink.

To summarize briefly, in hierarchical systems imported drink and/or drinking practices would be valued mainly for their diacritical symbolic function, and imported drinking gear could be extremely useful in differentiating elite drinking even where the supply of exotic drink was meagre or irregular. In hieratic systems, exotic drink would be valued more for its use in fulfilling status obligations of political authority through centric transfers in the form of hospitality, its use in augmenting "free-floating power," and its use in mobilizing labor to subsidize this hospitality and to execute public projects. However, a regular supply of drink would be required for it to be significant.

The former scenario appears to correspond well with the archaeological evidence in the Hallstatt area, with its notable paucity of wine amphoras associated with an apparently paradoxical array of Greek fine-ware ceramic drinking vessels on a few strategic settlement sites and a range of costly and even spectacular wine-drinking gear (and a few other singular luxury imports)²¹ clustered in a few wealthy tumulus burials. It also seems to offer a better explanation of the meaning of Mediterranean imports in the area than either the Hellenization concept or the "prestige-goods" redistribution model proposed by Frankenstein and Rowlands (1978). As noted earlier, in contrast to the indigenous prestige goods found in Hallstatt tumuli, the Mediterranean imports do not appear to have been redistributed very much. Rather, they were concentrated in a few of the wealthiest burials and in a small number of central fortified settlements. Furthermore, many of these items show clear signs of long use and repair before their eventual burial. These factors would seem to argue against a healthy flow of Mediterranean goods being used by Hallstatt chieftains in networks of redistribution to secure and augment their political power,²² and hence against this model that sees the political structure of Hallstatt Europe becoming dependent upon Mediterranean trade for its growth and stability.

In view, however, of the striking archaeological evidence of drinking and eating equipment featured prominently in elite Hallstatt burials from well before the period of major Mediterranean imports and continuing into the Late Iron Age (see Kossack 1964; Biel 1985:88–95, Pls. 93–98; Bouloumié 1988), there can be little doubt of the symbolic importance of drinking and feasting in the society. If these Mediterranean imports, which, judging from the available evidence,²³ would probably not have included very much wine, are seen as rare and exotic luxury goods (in Appadurai's sense) valued for their diacritical symbolic function in marking off elite (or perhaps, more exclusively, court) drinking and feasting patterns rather than as items destined for networks of redistribution, then their significance and the reason for their acquisition and long use and repair become much clearer. These imports, impressive as they are, need

not have been a major catalyst for changes in Hallstatt political centralization or social stratification, nor an indication of extensive trade with the Mediterranean and concomitant stimulation of production for export: they may have been rare objects acquired gradually through a variety of external exchange relationships and manipulated symbolically to further "naturalize" (see Giddens 1979:195) already existing social and political relations (cf. Bintliff 1984) through a transformation of indigenous drinking practices.

In both of the hypothetical cases outlined above, assuming that the institutionalized central political authority would be capable of monopolizing access to external trade sources, the net effect of the adoption of the exotic drink and/or drinking elements would be to support and strengthen the existing fundamental power and status structure, although the mechanisms by which this was achieved would differ. There might well be competition among individual members of the elite group in a community or among leaders of neighboring groups, in terms of access to trade sources and manipulation of status display and hospitality. This might perhaps even lead to some fluctuation of political relations on a regional level, but there would be little danger of exacerbating the conflict inherent in the institutionalized pattern of social inequality and, hence, of undercutting the fundamental *internal structure* of power and prestige relations in the society.

In societies without institutionalized (and fairly centralized) political roles and authority and without marked social stratification, the effects of imported wine would be quite different, as would the reasons for adopting it. It will be remembered from the earlier discussion that in those societies with an egalitarian ethos, where overt displays of differences in accumulated wealth would be negatively sanctioned, drinking offers a ready means of acquiring prestige and power through manipulation of socially valued institutions. In societies without centralized authority, but with nascent development of institutionalized status ranking, drinking can also be manipulated to accumulate durable symbols of wealth through its potential for conversion between spheres of exchange. It is also true, however, that the capability to exploit this feature is generally dependent upon a capacity for surplus agricultural production.

The introduction of foreign wine into these systems would have several possible effects. Insofar as the lineage leaders, "big men," or members of the senior age group in the society would most probably have the first trading contacts with the outside, the result might initially be a strengthening of their power. They would be able to augment their existing advantage in dispensing drink (based on greater command of agricultural resources) to gain prestige through hospitality and to mobilize labor through work-party feasts. However, in the absence of an effective mo-

nopoly on external trade contacts, this source of alien drink could soon become a threat to the base of their prestige and leadership. It would allow individuals or groups who had previously been disadvantaged in their access to these things, but who were in a good position to exploit this new trading opportunity (through proximity to the sources of wine, through control of resources sought by Mediterranean traders, or by performing services for them), to manipulate the traditional institutional means of acquiring power and prestige while at the same time circumventing the traditional requisites (superior capacity for or control of subsistence production) to operating the system. They would be able to host feasts with imported wine and mobilize labor for production for trade or personal projects without first building up a resource base in the traditional way. This would further enable them to engage in the traditional networks of exchange which linked the indigenous societies in different regions: exchange links which, in the lower Rhône basin, were responsible for such things as the importation of metal goods and other valuables into the area from a variety of sources (Lagrang 1976; Arcelin 1976; Tendille 1984), and which would also be important in establishing prestige locally.

Imported wine in this context would become a power-defining commodity and intense competition would be the likely outcome. This competition would result from a threat to the influence, prestige, and economic control of those in established positions of power and contention among those with newly opened access to the means of acquiring prestige and power. An inflation of demand for drink would probably occur, because as Robbins (1973:115) pointed out, when there is an increase in the number of identity struggles in a society there will be an increase in the frequency of activities which serve to resolve these identity conflicts; and in this case those would be drinking/feasting activities.

Various manifestations of this scenario, I believe, best correspond with the Early Iron Age archaeological situation in the lower Rhône basin which, in contrast to the Hallstatt area, lacks the kind of burial and settlement evidence easily identifiable with marked social stratification or political centralization. They would also better explain the process commonly described as Hellenization. The great quantities of wine transport amphoras and wine drinking vessels found on settlements of all types throughout the area indicate a flourishing trade in wine, and one which was not constrained by monopolistic control of an elite. Rather than being part of an emulation of Greek or Etruscan culture, however, this wine was much more likely to have been an artifact selectively appropriated for its utility in indigenous feasting institutions. In this regard it is telling that wine straining and mixing gear, so essential to proper Greek drinking, are not found in this area. As noted earlier, among the few other aspects of

Greek culture adopted by these natives were the potting techniques (the wheel and controlled draught kiln) that were applied uniquely to two series of hybrid ceramic wares (Pseudo-Ionian and Grey Monochrome) in which imitation of Greek forms was almost exclusively restricted to wine-drinking cups, wine flagons, and small bowls (Lagrang 1963; Lagrang and Thalmann 1973; Py 1979–1980; Arcelin-Pradelle 1984; Dietler 1989b).

Mediterranean wine, in this context, would have been incorporated into traditional patterns of feasting and hospitality and used (along with native forms of drink) in competition for “free-floating power,” and to mobilize labor. This process may even have had a spiraling catalytic effect in stimulating indigenous trade: as demand for drink escalated, wine was used to mobilize work parties for production and transport of goods important in indigenous exchange networks (to obtain metal and other valuables) and particularly for goods sought by the Etruscans and Massalia in order to obtain more wine for hospitality, for labor mobilization, and for exchange in indigenous networks.²⁴

The pattern of access to the source of wine would have had important implications for regional developments in the area. When the source of exotic valuables is localized in one place, the people in closest proximity to that source may become advantaged in their exploitation of those valuables in regional exchange networks. As Salisbury's (1962:116–118) study among the Siane of New Guinea indicated, this can result in a wave-like pattern of inflation in exchange rates radiating out from the source and, where the valuables are employed in marriage transactions, it can result in an inverse wave of “migration” of women toward the source (with patrilocal residence). However, as Fitzhugh (1985) noted for the pre-eighteenth century Inuit, when the source of trade is ship-based, access to imports is sporadic and unpredictable and the same regional inflation pattern is unlikely. Etruscan trade in southern France was most likely of this “float exchange” (Fitzhugh 1985) pattern, thus randomizing access and preventing any similarity to the pattern described for the Siane. However, even after the founding of Massalia, a good deal of trade in southern France was likely to have been ship-based or conducted from secondary trading stations (see Arcelin 1986). Stone for the city wall, for example, was quarried from a coastal site with an indigenous settlement (Lagrang 1962) about 25 km to the west of the city and transported by ship (Trousset 1984), and mica temper for the Massaliot amphoras was obtained from the Maures mountains along the coast about 90 km to the east (Reille 1985). Moreover, later Massaliot colonial outposts were founded almost exclusively on coastal ports (see Clavel-Lévêque 1977:79–84) indicating a general interest in exploration and exploitation of an extended coastal hinterland. Hence, the importance of Massalia as a fixed source, in terms of indigenous trade patterns and the possible development of regional

dominance of an exchange hierarchy by groups in its immediate hinterland, was likely to have been considerably mitigated by the randomizing effect of coastal trade.

CONCLUSION

In many societies, drinking behavior is considered important for the whole social order, and so drinking is defined and limited in accordance with the fundamental motifs of the culture. Hence it is useful to ask what the form and meaning of drink in a particular group tell us about their entire culture and society. (Mandelbaum 1965:281)

This paper represents an effort to demonstrate the fecundity of this perspective in approaching the interpretation of archaeological data. The range of important social roles played by the widespread practice of drinking in small-scale societies was explored in order to gain a better understanding of how changes in drinking customs might occur and what the effects of these changes might be in terms of the political economy. From this discussion, a model was proposed which offers new insights for the interpretation of the archaeological data pertaining to the process of trade and culture contact between the Greek and Etruscan civilizations and the indigenous peoples of Early Iron Age France.

This model is obviously a tentative and schematic representation of complex processes which are not entirely predictable in a simple or straightforward manner. Nor has it been possible in a paper of this length to evaluate it against the archaeological data except in rather general terms suggesting its relative plausibility.²⁵ Nevertheless, I believe its ability to suggest explanations for both demand for imported wine and the effects of its adoption in the political economy of quite different societies demonstrates the potential of this avenue of inquiry. Moreover, in view of the widespread distribution of the practice of drinking in both contemporary societies and those of antiquity (see Darby et al. 1977:529–618), the approach explored here may have utility in elucidating modes of leadership, the dynamics of economic relations, and processes of social change in many archaeological contexts and it is hoped that the discussion may provide some stimulus in this direction.

As an obvious example of relevance, given that wine remained the primary commodity of trade between the Mediterranean world and the Iron Age peoples of western Europe until the Roman conquest (and indeed greatly increased in volume), an anthropologically informed study of changing patterns in its consumption is an evident key to understanding the complex processes of social change resulting from colonial interaction. Such a perspective may also be useful in comprehending such various European archaeological phenomena as the Beaker complex (see Sherratt 1986) and the Late Bronze Age "Urnfield" societies. Moreover,

the mechanism of labor mobilization through work-party feasts is a practice which was undoubtedly extremely important throughout much of prehistory from the Neolithic on,²⁶ and the role of the exploitation of this practice in the development of institutionalized relations of economic and social inequality is a question that needs to be explored.

Drinking is, obviously, not the only social practice through which relations of economic and political power in a society are reflected and manipulated. However, it is very often an important element in this domain which deserves the serious consideration in prehistoric contexts that it has won in ethnographic ones. Even if one is not inclined to accept the suggestions of Sauer (Braidwood 1953) or of Katz and Voigt (1986) that a thirst for beer may have been responsible for the origin of agriculture, it is nonetheless well-advised to heed the words of Pliny the Elder, who wrote (albeit somewhat hyperbolically) of drinking in the first century A.D., "And if anyone cares to consider the matter more carefully, there is no department of man's life on which more labour is spent" (N.H. XIV, 28).

NOTES

¹ For the sake of convenience, the terms "drink" and "drinking" are used in this paper as a form of abbreviation to denote alcoholic beverages and their consumption, respectively, rather than in the more general sense of consumption of any liquid.

² Some doubt exists as to whether all the amphoras in the Hallstatt area, especially several specimens from the Heuneburg, are of Massaliot manufacture. These may be of other Greek origin (Benoit 1965:167; Fillières 1978). Also to be noted with the Attic painted-pottery are a few pieces of Ionian and Massaliot fine-ware (F. Villard 1988) and some fragments of Grey Monochrome and Pseudo-Ionian pottery produced in indigenous territory in the lower Rhône basin (Schwab 1982; Feugère and Guillot 1986).

³ For a recent discussion of the economic value of these ceramics in the Greek world see Boardman (1988) and Gill (1988). Their value in French indigenous contexts would be related to their exotic origin, rarity, difficulty of access, and context of use.

⁴ The best known examples of such settlements are Mont Lassois in Burgundy (Joffroy 1960) and the Heuneburg in Baden-Württemberg (Kimmig 1983b). Among the few exceptions to this pattern are a couple of undefended lowland settlements with small quantities of sherds of Massaliot amphoras, Attic pottery, and other objects, but without surrounding tumulus burials. These are in the southern portion of the Hallstatt zone, at Lyon (Bellon et al. 1986; Burnouf et al. 1989) and at Bragny-sur-Saône (Feugère and Guillot 1986).

⁵ Among the exceptions known to me to this general pattern of neglect by archaeologists is the work of André Tchernia (1983, 1986, 1987), which treats the economic and political aspects of both the production and consumption of wine in the ancient Roman world in great detail. Michel Gras (1983) has examined the role of the introduction of wine in Archaic Latium in symbolically defining aristocratic status. Andrew Sherratt's (1986) discussion of the European "Beaker complex" and the possible date and social meaning of the introduction of alcohol to Europe is also noteworthy. Bettina Arnold (1988) has used ancient Irish and Welsh literature in combination with classical texts to explore the political symbolism of drinking in Celtic society. Finally, the symbolism of drinking in European Iron Age burials has been discussed by Kossack (1964) and Bouloumié (1983, 1988).

⁶ In accordance with established convention, the present tense is used in discussing examples taken from ethnographic reports, although it is clear that many of these describe social situations which have changed considerably since the publications were written. Historical, or "ethno-historical," accounts are rendered in the past tense.

⁷ Karp, however, in his treatment of this same institution among the Iteso of East Africa, points out that it is incorrect to see beer as being an item directly exchanged for labor. More precisely, "The beer party is instead the vehicle through which cooperation is achieved" (1980:88); but it relies on a system of delayed reciprocal obligations rather than balanced, temporally finite exchange transactions. In fact, these two views are both correct, depending upon whether the collective labor pattern in the society tends toward one or the other of the polar types defined by Erasmus (1956) as "festive" or "exchange" labor (see Note 8).

⁸ A labor mobilization mechanism which tends toward the "exchange" pattern (Erasmus 1956), in which obligations of direct reciprocity of labor are very strong, is less vulnerable to exploitation of this type than the "festive" pattern, in which labor reciprocity pressures are much weaker or even nil but in which the demands for copious drink and/or food are much more pronounced (Dietler 1989c).

⁹ While it is difficult to make precise generalizations about intrafamilial, or intrahousehold, production relations, women are commonly, though not exclusively, the major production force (for brewing and often agriculture), especially where grain is the major ingredient for fermentation. However, relations of "ownership" between husbands and wives vary. For example, among the Luo of Kenya, women are the farmers and they own the produce of their agricultural labor but they have an obligation to provide the husband with food and to provide beer for entertaining and ceremonies in the homestead (which is considered the property of the husband and his lineage) (Dietler n.d.). Among the Tiv of Nigeria, women do the brewing (and most of the agricultural work), but the beer and the millet from which it is made are said to belong to the men (Bohannon and Bohannon 1968:132). Among the Fur, both the husband and wife have their own separate fields, grain stores, and budgets; however, the wife is obligated to provide brewing labor for the husband in converting *his* millet into beer (Barth 1967a:151). In any case, whatever the internal relations of production and ownership, it appears to be men who usually profit to the greatest extent socially from the household drink production, as one might expect from the widespread pattern of gender-based status differentiation expressed in drinking practices.

¹⁰ For example, palm-wine begins to deteriorate within a day (Ngokwey 1987; see also Parkin 1972 for some interesting economic implications of this among the Giriama of Kenya), and most traditional grain-based beers will sour within a few days time (see, e.g., Barnes 1959:217; Kennedy 1978:113). Distillation produces a long-lived alcoholic drink, but this is a technique with an historically limited distribution which is still in the process of spreading through adoption in many parts of the world (see Note 18).

¹¹ See Bohannon (1955, 1963:246-265) and Salisbury (1962) for a discussion of the properties of multicentric economies.

¹² This would not necessarily represent an exclusion of alcohol, but only of a specific exotic form of drink. The Germanic peoples had a reputation in antiquity for their strong beer and heavy drinking (e.g., Tacitus, *Germania*, XXIII).

¹³ Aside from questions about the accuracy of observation of alien cultures by classical authors, there are obvious dangers in applying evidence from texts to societies that existed several centuries before they were written. A good deal of social and cultural change is evident in the archaeological record between the Early Iron Age and the observations recorded in the texts. However, they are used here not as a description of Early Iron Age practices, but merely to suggest that certain acculturative changes in drinking patterns had not taken place by the Late Iron Age, and were therefore unlikely to have occurred earlier.

¹⁴ For example, Dionysius of Hallicarnassus (XIII, 10) described Celtic beer as "a foul-smelling liquor made from barley rotted in water."

¹⁵ It is perhaps relevant to note that the French words for brewing (*brasser*), draff (*dreche*), barrel (*tonneau*), and, of course, un-hopped beer (*cervoise*) are all of Celtic origin (Moulin 1984).

¹⁶ For example, Brennus, the leader of the Celtic army which attacked Delphi in 278 B.C., is said to have committed suicide by drinking neat wine (Pausanias X, 23, 12).

¹⁷ The technique of adding hops to beer for longer preservation was probably developed only in the ninth century A.D. by Flemish Benedictine monks. "Beers" before this time, including the various Celtic varieties, are more properly called "cervisam" or "cervesia" (French *cervoise*), Latin renditions of a word of Celtic origin. These beverages, similar to many traditional African "beers" did not keep long, despite attempts to improve preservation by the addition of such things as oak bark and various herbs (Moulin 1984).

¹⁸ The Pondo of South Africa offer a good example of Goody's hieratic type: "But although these social distinctions existed there was, under old conditions, no sharp cleavage between chief and commoner, or between rich and poor. The chief and rich man might have a little more beer and meat and larger *imizi* [beer feasts] than the commoner, but there was no great difference in their way of life. Chiefs married commoners. They and their wives worked in the fields. Every one went to every one else's parties" (Hunter 1936:377).

¹⁹ In fact, at this distance from the source of origin of the drinking equipment, and given reasonable doubts about the plausibility of direct Greek contact (Dietler 1989a), it is highly unlikely that information about the customs associated with these objects, and certainly their meaning, would have been accurately conveyed or comprehended. In view of the distortions that commonly occur in the cross-cultural transmission of such information, resulting from communication barriers between agents of contact, perceptual "screens" of recipients, etc. (see Social Science Research Council 1954), it is safe to assume that creative transformations had occurred in the use of these objects in native drinking contexts. The Hallstatt drinkfest was not a Greek symposium despite the use of the same equipment (cf. F. Villard 1988; Bouloumié 1988). Insofar as classical descriptions of later Celtic feasts, which include the consumption of wine imported from Massalia and Italy (e.g., Athenaeus IV, 36), may have any relevance to the Hallstatt period, it is clear that these certainly bore little resemblance to the symposium.

²⁰ Although, for the reasons presented, imported wine was probably not used in this way by Hallstatt chieftains, beer or mead may have been, and the practice itself is clearly attested in classical references to later Celtic societies. For example, Posidonius (first century B.C.) recorded that Louernius, the son of a Celtic chieftain who was dethroned by the Romans, in an attempt to win popular support passed out gold and silver from a chariot to those who would follow him and ". . . he made a square enclosure one and a half miles each way, within which he filled vats with expensive liquor and prepared so great a quantity of food that for many days all who wished could enter and enjoy the feast prepared" (Athenaeus IV, 37). See also the account of Phylarcus (third century B.C.) in Athenaeus (IV, 34).

²¹ The nature of the non-wine-related imports in the Hallstatt tumuli also tends to support the hypothesis of a diacritical symbolic function: these are almost exclusively unique examples of luxury exotica, such as the silk remnant from the Hohmichele tumulus (Hundt 1969) or the carved ivory objects from the Grafenbühl tumulus (Herrmann 1970). These objects would seem to conform perfectly to the five criteria Appadurai (1986:36) uses to define "luxury goods" (that is "incarnated signs"), and their function would seem to fall within the category defined by Nadel (1951:67) as "diacritical." The only imported item which actually shows much evidence of redistribution is coral, and that is confined largely to inclusions in indigenously produced objects (such as fibulas) or beads (Champion 1976).

²² I am decidedly not arguing against the idea that redistribution of "prestige goods" was an important mechanism for the manipulation of political power in Hallstatt society, but merely against the suggestion that Mediterranean imports played a significant role in this process. The archaeological evidence seems to indicate that indigenously produced valu-

ables were much more important in this role, and in fact, there was a notable stimulation of production of these items in the period contemporary with the arrival of the imports (Gosden 1985).

²³ It is, in fact, impossible to determine exactly how much wine was being imported into the Hallstatt area. Bouloumié (1981, 1988) counters the impressive scarcity of amphoras on Hallstatt sites with the suggestion that wine may have been transported north in perishable containers. Although certainly possible, I find this hypothesis unconvincing given (1) the presence of some of these Massaliot amphoras in the Hallstatt area, (2) the significant quantities of Massaliot amphoras at the contemporary site of Le Pègue (Lagrang and Thalmann 1973) over 100 km inland from Massalia, and (3) the pattern of trade in wine represented by the thousands of Roman Dressel amphoras transported into the former Hallstatt region in later centuries (Tchernia 1983). Moreover, while the presence of some wine in Early La Tène contexts is documented by resinous deposits in bronze vessels from several burials (Navarro 1928; Bouloumié 1988:378), the evidence of mead residues in the Greek cauldron from the Hochdorf tumulus (Körber-Grohne 1985) indicates that imported vessels were certainly being used for native drinks in the Hallstatt period. The presence of Greek wine-mixing and drinking vessels does not necessarily imply the presence of wine.

²⁴ The example of the Kamba of Kenya is illuminating in this respect: without any increase in political centralization, a vast indigenous trading network was developed there following the establishment of coastal trade entrepôts as individuals and families adapted the traditional work-party feast institution (*mwethya*) to mobilize trade expeditions (Cumings 1976). See also the discussion of the demand for imported drink used in the prestige sphere as a stimulus to cash-crop production in New Guinea by Marshall et al. (1982:452-454), and Dumett's (1974:94) comments on a similar phenomenon among the Akan of Ghana.

²⁵ The topic is treated more fully in the author's doctoral dissertation. More attention to the kind of evidence that may be useful in applying such models to archaeological problems is needed. For example, it would be very useful to have analyses of chemical residues from the typical large Hallstatt urns (a shape tantalizingly suggestive of many African beer pots) or the bowls (*écuelles*) and urns characteristic of the Early Iron Age in the Rhône basin in order to better understand precontact drink consumption. Moreover, content analysis of the type undertaken on Roman amphoras (e.g., Condamin and Formenti 1976; Formenti et al. 1978) must be applied to those of Massalia. At present their definition as wine-transport vessels rests on analogy with other Greek amphoras, their ubiquitous association with wine-drinking ceramics, and a few classical references, such as the statement by Athenaeus (IV, 36) that olive oil (the second most likely candidate for amphora contents) was disagreeable to the Celts because they were not familiar with it.

²⁶ For example, it would be interesting to explore the possibility of a connection between the abundance of Roman amphoras in the vicinity of metal-ore mines in southern France (Tchernia 1983:102) and the use of this method of labor mobilization, or at least its use in legitimizing forced labor. Likewise, this practice could explain labor mobilization for the construction and maintenance of various Neolithic monuments in Europe (cf. Renfrew 1973).

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REFERENCES CITED

- Appadurai, A.
1986 Introduction: commodities and the politics of value. In *The social life of things: commodities in cultural perspective*, edited by A. Appadurai, pp. 3-63. Cambridge Univ. Press, Cambridge.
- Arcelin, P.
1971 *La céramique indigène modelée de Saint-Blaise (Saint-Mitre-les-Remparts, Bouches-du-Rhône)*. Editions Ophrys, Paris.
1976 Les civilisations de l'Age du Fer en Provence. In *La Préhistoire française*, edited by J. Guilaine, Vol. 2, pp. 657-675. Editions du CNRS, Paris.
1986 Le territoire de Marseille grecque dans son contexte indigène. In *Etudes Massaliètes 1: le territoire de Marseille grecque (Actes de la Table-Ronde d'Aix-en-Provence, March 1985)*, edited by M. Bats and H. Tréziny, pp. 43-104. Publications de l'Université de Provence, Aix-en-Provence.
- Arcelin-Pradelle, C.
1984 *La céramique grise monochrome en Provence*. Supplement 10 of the Revue Archéologique de Narbonnaise. Bocard, Paris.
- Arnold, B.
1988 *Drinking equipment in the European Iron Age: the material culture of power*. Paper presented at the 87th Annual Meeting of the American Anthropological Association, Phoenix.
- Athenaeus
The deipnosophists. Translated by B. D. Yonge (1854). Bohm, London.
- Bacon, M. K.
1976 Cross-cultural studies of drinking: integrated drinking and sex differences in the use of alcoholic beverages. In *Cross-cultural approaches to the study of alcohol: an interdisciplinary perspective*, edited by M. Everett, J. Waddell, and D. Heath, pp. 23-33. Mouton, The Hague.
- Bacon, M. K., H. Barry, and I. L. Child
1965 A cross-cultural study of drinking. II. Relations to other features of cultures. *Quarterly Journal of Studies on Alcohol (Supplement)* 3:29-48.
- Banks, E.
1937 Native drinks in Sarawak. *Sarawak Museum Journal* 4:439-447.
- Barnes, J. A.
1954 *Politics in a changing society: a political history of the Fort Jameson Ngoni*. Oxford Univ. Press, London.
1959 The Fort Jameson Ngoni. In *Seven tribes of British Central Africa*, edited by E. Colson and M. Gluckman, pp. 194-252. Manchester Univ. Press, Manchester.
- Barth, F.
1967a Economic spheres in Darfur. In *Themes in economic anthropology*, edited by R. Firth, pp. 149-174. Tavistock, London.

- 1967b On the study of social change. *American Anthropologist* 69:661-670.
- Batchelor, J.
1901 *The Ainu and their folklore*. The Religious Tract Society, London.
1927 *Ainu life and lore*. Kyobunkwan, Tokyo.
- Bellon, C., J. Burnouf, and J.-M. Martin
1986 Premiers résultats des fouilles sur le site protohistorique de Gorge-de-Loup (Vaise, Lyon, Rhône). *Revue Archéologique de l'Est et du Centre-Est* 37:247-251.
- Benoit, F.
1965 *Recherches sur l'hellénisation du Midi de la Gaule*. Annales de la Faculté des Lettres, 43, Aix-en-Provence.
- Bertucchi, G.
1979 *Les amphores de Marseille grecque (600-200 av. J.-C.)*. Identification, typologie, chronologie, importance économique. Doctoral thesis (3e cycle): Aix-en-Provence.
- Biel, J.
1985 Die Ausstattung des Toten. In *Der Keltenfürst von Hochdorf: Methoden und Ergebnisse der Landesarchäologie*, edited by D. Planck, J. Biel, G. Süsskind, and A. Wais, pp. 78-105. Konrad Theiss Verlag, Stuttgart.
- Bintliff, J.
1984 Iron Age Europe in the context of social evolution from the Bronze Age through to historic times. In *European social evolution: archaeological perspectives*, edited by J. Bintliff, pp. 157-226. Univ. of Bradford, Bradford.
- Boardman, J.
1988 Trade in Greek decorated pottery. *Oxford Journal of Archaeology* 7:27-33.
- Bohannan, P.
1955 Some principles of exchange and investment among the Tiv. *American Anthropologist* 57:60-70.
1963 *Social anthropology*. Holt, Rinehart and Winston, New York.
- Bohannan, P., and L. Bohannan
1968 *Tiv economy*. Northwestern Univ. Press, Evanston.
- Bohannan, P., and G. Dalton
1962 Introduction. In *Markets in Africa*, edited by P. Bohannan and G. Dalton, pp. 1-26. Northwestern Univ. Press, Evanston.
- Bonfante, L.
1981 *Out of Etruria: Etruscan influence north and south*. BAR International Series 103, Oxford.
- Boserup, E.
1970 *Women's role in economic development*. Allen and Unwin, London.
- Bouloumié, B.
1981 Le vin étrusque et la première hellénisation du Midi de la Gaule. *Revue Archéologique de l'Est et du Centre-Est* 32:75-81.
1982 *L'épave étrusque d'Antibes et le commerce en Méditerranée occidentale au VIe siècle av. J.-C.* Vorgeschichtliches Seminar Marburg, Heft 10, Marburg.
1983 Le vin et la mort chez les "princes" celtes. In *L'imaginaire du vin*, edited by M. Milner and M. Chatelain, pp. 15-24. Editions Jeanne Laffitte, Marseille.
1985 Les vases de bronze étrusques et leur diffusion hors d'Italie. In *Il commercio etrusco arcaico*, edited by M. Cristofani, P. Moscati, G. Nardi, and M. Pandolfini, pp. 167-178. Consiglio Nazionale delle Ricerche, Rome.
1986 Le massif de l'Etoile et les oppida au Nord de Marseille. In *Etudes Massaliètes I: le territoire de Marseille grecque* (Actes de la Table-Ronde d'Aix-en-Pro-

- vence, March 1985), edited by M. Bats and H. Tréziny, pp. 113-116. Publications de l'Université de Provence, Aix-en-Provence.
- 1987 Le rôle des Etrusques dans la diffusion des produits étrusques et grecs en milieu préceltique et celtique. In *Hallstatt-Studien*, pp. 20-43. Acta Humaniora, Weinheim.
- 1988 Le symposion gréco-étrusque et l'aristocratie celtique. In *Les princes celtes et la Méditerranée*, pp. 343-383. La Documentation Française, Paris.
- Bouloumié, B., and C. Lagrand
1977 Les bassins à rebord perlé et autres bassins de Provence. *Revue Archéologique de Narbonnaise* 10:1-31.
- Braidwood, R.
1953 Symposium: did man once live by beer alone? *American Anthropologist* 55:515-526.
- Brun, P.
1987 *Princes et princesses de la Celtique: le premier Age du Fer (850-450 av. J.-C.)*. Editions Errance, Paris.
- Bunzel, R.
1940 The role of alcoholism in two Central American cultures. *Psychiatry* 3:361-387.
1976 Chamula and Chichicastenango: a re-examination. In *Cross-cultural approaches to the study of alcohol: an interdisciplinary perspective*, edited by M. Everett, J. Waddell, and D. Heath, pp. 21-22. Mouton, The Hague.
- Burnouf, J., C. Bellon, J.-M. Martin, and A. Vérot-Bourrelly
1989 Lyon avant *Lugdunum*, un habitat du premier âge du Fer à Vaise. In *Aux origines de Lyon*, edited by C. Goudineau and B. Mandy, pp. 11-21. Documents d'Archéologie Rhône-Alpes, 2. Circonscription des Antiquités Historiques, Lyon.
- Caesar, J.
The battle for Gaul (De bello Gallico). Translated by A. and P. Wiseman (1980). Godine, Boston.
- Cancian, F.
1965 *Economics and prestige in a Maya community*. Stanford Univ. Press, Stanford.
- Carstairs, G. M.
1979 Daru and bhang: cultural factors in the choice of intoxicant. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 297-312. Univ. of Michigan Press, Ann Arbor. (Reprinted from *Quarterly Journal of Studies on Alcohol* 15:1954).
- Champion, S.
1976 Coral in Europe: commerce and Celtic ornament. In *Celtic art in ancient Europe: five protohistoric centuries*, edited by P.-M. Duval and C. Hawkes, pp. 29-40. Seminar Press, London.
- Child, I. L., H. Barry, and M. K. Bacon
1965 A cross-cultural study of drinking. 3. Sex differences. *Quarterly Journal of Studies on Alcohol* (Supplement) 3:49-61.
- Clavel-Lévêque, M.
1977 *Marseille grecque: la dynamisme d'un impérialisme marchand*. Jean Laffitte, Marseille.
- Collis, J.
1984 *The European Iron Age*. Schocken, New York.
- Colson, E., and T. Scudder
1988 *For Prayer and profit: the ritual, economic, and social importance of beer in Gwembe district, Zambia, 1950-1982*. Stanford Univ. Press, Stanford.

- Condamain, J., and F. Formenti
1976 Recherches de traces d'huile d'olive et de vin dans les amphores antiques. *Figlina* 1:143-158.
- Crawley, E.
1931 *Dress, drinks and drums: further studies of savages and sex*. Methuen, London.
- Crumley, C.
1987 A dialectical critique of hierarchy. In *Power relations and state formation*, edited by T. C. Patterson and C. W. Gailey, pp. 155-169. American Anthropological Association, Washington, D.C.
- Cummings, R. J.
1976 The early development of Akamba local trade history, c. 1780-1820. *Kenya Historical Review* 4:85-110.
- Dalton, G.
1978 The impact of colonization on aboriginal economies in stateless societies. *Research in Economic Anthropology* 1:131-184.
- Darby, W. J., P. Ghalioungui, and L. Grivetti
1977 *Food: the gift of Osiris*, Vol. 2. Academic Press, New York.
- Dehn, W., and O.-H. Frey
1979 Southern imports and the Hallstatt and Early La Tène chronology of Central Europe. In *Italy before the Romans*, edited by D. and F. Ridgway, pp. 489-511. Academic Press, New York.
- Dentzer, J.-M.
1982 *Le motif du banquet couché dans le Proche-Orient et dans le monde grec du VIIe au IVe siècle avant J.-C.* Bibliothèque des Ecoles Françaises d'Athènes et de Rome, 246. Boccard, Paris.
- Dietler, M. D.
1989a Greeks, Etruscans, and thirsty barbarians: Early Iron Age interaction in the Rhône Basin of France. In *Centre and periphery: comparative studies in archaeology*. Edited by T. C. Champion, pp. 127-141. Unwin Hyman, London.
1989b *Barbarian borrowing: demand for the exotic and the political economy of Early Iron Age southern France*. Paper presented at the 54th Annual Meeting of the Society for American Archaeology, Atlanta.
1989c *The Work-party feast as a mechanism of labor mobilization and exploitation: the case of Samia Iron production*. Paper presented at the 88th Annual Meeting of the American Anthropological Association, Washington, D.C.
n.d. Liquid material culture: the production and consumption of Luo beer. Unpublished paper.
- Diodorus Siculus
Diodorus of Sicily. Translated by C. H. Oldfather (1933). Heineman, London.
- Dionysius of Halicarnassus
The Roman antiquities, Vol. 7. Translated by E. Cary (1950). Heineman, London.
- Dobiat, C.
1980 Die Hallstattnekropole bei Kleinklein im Sulmtal. In *Die Hallstattkultur: Bericht über das Symposium in Steyr 1980*, edited by D. Clemens and A. Eibner, pp. 185-204. Oberösterreichischer Landesverlag, Linz.
- Dumett, R. E.
1974 The social impact of the European liquor trade on the Akan of Ghana (Gold Coast and Asante), 1875-1910. *Journal of Interdisciplinary History* 5:69-101.
- Durand, J.-L., F. Frontisi-Ducroux, and F. Lissarrague
1984 L'entre-deux-vins. In *La cité des images: religion et société en Grèce antique*, pp. 117-126. Fernand Nathan, Lausanne.

- Earle, T.
1989 The evolution of chiefdoms. *Current Anthropology* 30:84-88.
- Eguchi, P. K.
1975 Beer drinking and festivals among the Hide. *Kyoto University African Studies* 9:69-90.
- Erasmus, C. J.
1956 Culture structure and culture process: the occurrence and disappearance of reciprocal farm labor. *Southwestern Journal of Anthropology* 12:444-469.
- Feugère, M., and A. Guillot
1986 Les fouilles de Bragny. 1. Les petits objets dans leur contexte du Hallstatt final. *Revue Archéologique de l'Est et du Centre-Est* 37:159-221.
- Field, P.
1962 A new cross-cultural study of drunkenness. In *Society, culture, and drinking patterns*, edited by D. J. Pittman and C. R. Snyder, pp. 48-74. Wiley, New York.
- Fillières, D.
1978 *Contribution à l'étude de la production et de l'exportation des amphores dites marseillaises et des céramiques grecques d'Occident du Midi de la France au moyen d'analyses par activation neutronique avec traitement taxinomique des résultats*. Doctoral thesis (3e cycle), Paris.
- Firth, R.
1983 Magnitudes and values in Kula exchange. In *The Kula: new perspectives on Massim exchange*, edited by J. W. Leach and E. Leach, pp. 89-102. Cambridge Univ. Press, Cambridge.
- Fitzhugh, W. W.
1985 Early contacts north of Newfoundland before A.D. 1600: a review. In *Cultures in contact: the impact of European contacts on native American cultural institutions, A.D. 1000-1800*, edited by W. W. Fitzhugh, pp. 23-43. Smithsonian Institution Press, Washington, D.C.
- Fitzpatrick, A.
1985 The distribution of Dressel 1 amphorae in north-west Europe. *Oxford Journal of Archaeology* 4:305-340.
- Formenti, F., A. Hesnard, and A. Tchernia.
1978 Note sur le contenu d'une amphore Lamboglia 2 de l'épave de la Madrague de Giens. *Archaeonautica* 2:95-100.
- Foster, G. M.
1965 Peasant society and the image of the limited good. *American Anthropologist* 67:293-315.
- Frankenstein, S., and M. J. Rowlands.
1978 The internal structure and regional context of Early Iron Age society in south-western Germany. *Bulletin of the Institute of Archaeology, London* 15:73-112.
- Friedman, J.
1979 *System, structure and contradiction in the evolution of 'Asiatic' social formations*. National Museum of Denmark, Copenhagen.
1984 Tribes, states, and transformations. In *Marxist analyses and social anthropology*, edited by M. Bloch, pp. 161-202. Tavistock, London.
- Giddens, A.
1979 *Central problems in social theory*. Univ. of California Press, Berkeley.
- Gill, D. W. J.
1988 "Trade in Greek decorated pottery": some corrections (with a reply by J. Boardman). *Oxford Journal of Archaeology* 7:369-373.

- Goldschmidt, W.
1976 *Culture and behavior of the Sebei: a study in continuity and adaptation*. Univ. of California Press, Berkeley.
- Goody, J.
1982 *Cooking, cuisine and class: a study in comparative sociology*. Cambridge Univ. Press, Cambridge.
- Gosden, C.
1985 Gifts and kin in Early Iron Age Europe. *Man* 20:475-493.
- Gras, M.
1983 Vin et société à Rome et dans le Latium à l'époque archaïque. In *Modes de contacts et processus de transformations dans les sociétés anciennes*, Actes du Colloque de Cortone (24-30 mai 1981), pp. 1067-1075. Collection de l'Ecole Française de Rome, 67, Rome.
- Grossman, L.
1982 Beer drinking and subsistence production in a Highland village. In *Through a glass darkly: beer and modernization in Papua New Guinea*, edited by M. Marshall, pp. 59-72. Institute of Applied Social and Economic Research, Boroko, Papua New Guinea.
- Gutmann, B.
1926 Das Recht der Dschagga. *Arbeiten zur Entwicklungspsychologie*, 7:1-733.
- Härke, H.
1979 *Settlement types and patterns in the West Hallstatt Province*. B.A.R. International Series, 57, Oxford.
- Hawkes, C. F. C., and M. A. Smith.
1957 On some buckets and cauldrons of the Bronze and Early Iron Ages. *The Antiquaries Journal* 37:131-198.
- Heath, D. B.
1976 Anthropological perspectives on alcohol: an historical review. In *Cross-cultural approaches to the study of alcohol: an interdisciplinary perspective*, edited by M. Everett, J. Waddell, and D. Heath, pp. 41-101. Mouton, The Hague.
1987a A decade of development in the anthropological study of alcohol use: 1970-1980. In *Constructive drinking: perspectives on drink from anthropology*, edited by M. Douglas, pp. 16-69. Cambridge Univ. Press, Cambridge.
1987b Anthropology and alcohol studies: current issues. *Annual Review of Anthropology* 16:99-120.
- Hedlund, H., and M. Lundahl.
1984 The economic role of beer in rural Zambia. *Human Organization* 43:61-65.
- Herrmann, H. V.
1970 Die südländischen Importstücke des Fürstengrabes von Asperg. In *Hallstattforschung in Nordwürttemberg*, edited by H. Zürn, pp. 24-34. Staatliches Amt für Denkmalpflege, Stuttgart.
- Herskovits, M.
1937 *Life in a Haitian valley*. Knopf, New York.
- Holmberg, A. R.
1950 *Nomads of the long bow: the Siriono of Eastern Bolivia*. U.S. Government Printing Office, Washington, D.C.
- Honigmann, J. J.
1979 Alcohol in its cultural context. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 30-35. Univ. of Michigan Press, Ann Arbor.

- Horton, D.
1943 The functions of alcohol in primitive societies: a cross-cultural study. *Quarterly Journal of Studies on Alcohol* 4:199-320.
- Hundt, H. J.
1969 Über vorgeschichtliche Seidenfunde. *Jahrbuch des Römisch-Germanischen Zentralmuseums* 16:59-71.
- Hunter, M.
1936 *Reaction to conquest: effects of contact with Europeans on the Pondo of South Africa*. Oxford Univ. Press, London.
- Jacobsthal, P., and E. Neuffer.
1933 Gallia Graeca: recherches sur l'hellénisation de la Provence. *Préhistoire* 2:1-64.
- Joffroy, R.
1960 *L'Oppidum de Vix et la civilisation hallstattienne finale dans l'Est de la France*. Publications de l'Université de Dijon, 20. Les Belles Lettres, Paris.
1979 *Vix et ses trésors*. Librairie Jules Tallandier, Paris.
- Jully, J. J.
1982 *Céramiques grecques ou de type grec et autres céramiques en Languedoc méditerranéen, Roussillon et Catalogne, VIIe -Ve siècles avant notre ère et leur contexte socio-culturel*. Annales Littéraires de l'Université de Besançon, 275. Les Belles Lettres, Paris.
- Karp, I.
1980 Beer drinking and social experience in an African society. In *Explorations in African systems of thought*, edited by I. Karp and C. S. Bird, pp. 83-119. Indiana Univ. Press, Bloomington.
- Katz, S. H., and M. M. Voigt.
1986 Bread and beer: the early use of cereals in the human diet. *Expedition* 28(2):23-34.
- Kennedy, J. G.
1978 *Tarahumara of the Sierra Madre: beer, ecology, and social organization*. AHM, Arlington Heights, IL.
- Keuls, E.
1986 History without women: necessity or illusion? *Dialogues d'histoire ancienne* 12:125-145.
- Kimmig, W.
1983a Die griechische Kolonisation im westlichen Mittelmeergebiet und ihre Wirkung auf die Landschaften des Westlichen Mitteleuropa. *Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz* 30:5-78.
1983b *Die Heuneburg an der oberen Donau*. Konrad Theiss Verlag, Stuttgart.
- Körber-Grohne, U.
1985 Pflanzliche und tierische Reste aus dem Fürstengrab von Hochdorf. Die Biologie als Hilfswissenschaft der Archäologie. In *Der Keltenfürst von Hochdorf: Methoden und Ergebnisse der Landesarchäologie*. Edited by D. Planck, J. Biel, G. Süsskind, and A. Wais, pp. 116-123. Konrad Theiss Verlag, Stuttgart.
- Kossack, G.
1959 *Südbayern während der Hallstattzeit*. De Gruyter, Berlin.
1964 Trinkgeschirr als Kulturgerät der Hallstattzeit. In *Varia Archaeologia*, edited by P. Grimm, pp. 96-105. Deutsche Akademie der Wissenschaften zu Berlin, 16. Akademie Verlag, East Berlin.
- Lagrang, C.
1962 Fouilles à la Couronne, Commune de Martigues (Bouches-du-Rhône). *Cahiers Ligures de Préhistoire et d'Archéologie* 11:258-261.

- 1963 La céramique "pseudo-ionienne" dans la vallée du Rhône. *Cahiers Rhodaniens* 10:37-82.
- 1976 Les civilisations de l'Age du Bronze en Provence. In *La Préhistoire française*, Vol. 2, edited by J. Guilaine, pp. 452-458. Editions du CNRS, Paris.
- 1979 La repartition du bucchero nero dans la vallée du Rhône et en Provence-Côte-d'Azur. In *Actes de la Table-Ronde sur le bucchero nero étrusque et sa diffusion en Gaule méridionale, Aix-en-Provence, 21-23 mai 1975*, pp. 124-134. Latomus, Brussels.
- 1987 Le premier Age du Fer dans le Sud-Est de la France. In *Hallstatt-Studien: Tübinger Kolloquium zur westeuropäischen Hallstatt-Zeit*, pp. 44-88. VCH Verlagsgesellschaft, Weinheim.
- Lagrand, C., and J.-P. Thalmann
1973 *Les habitats protohistoriques du Pègue (Drôme): le sondage no. 8*. Centre de Documentation de la Préhistoire Alpine, Cahier 2, Grenoble.
- Lemert, E.
1964 Forms and pathology of drinking in three Polynesian societies. *American Anthropologist* 66:361-374.
- Lomnitz, L.
1976 Alcohol and culture: the historical evolution of drinking patterns among the Mapuche. In *Cross-cultural approaches to the study of alcohol: an interdisciplinary perspective*, edited by M. Everett, J. Wadell, and D. Heath, pp. 177-198. Mouton, The Hague.
- Lurie, N. O.
1979 The world's oldest on-going protest demonstration: North American Indian drinking patterns. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 127-145. Univ. of Michigan Press, Ann Arbor.
- Mandelbaum, D.
1965 Alcohol and culture. *Current Anthropology* 6:281-293.
- Marshall, M.
1979a Introduction. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 1-11. Univ. of Michigan Press, Ann Arbor.
1979b Conclusions. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 451-457. Univ. of Michigan Press, Ann Arbor.
- Marshall, M., and L. B. Marshall.
1979 Holy and unholy spirits: the effects of missionization on alcohol use in Eastern Micronesia. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 208-237. Univ. of Michigan Press, Ann Arbor.
- Marshall, M., A. Piau-Lynch, and F. Sumanop.
1982 Conclusions and policy implications. In *Through a glass darkly: beer and modernization in Papua New Guinea*, edited by M. Marshall, pp. 451-461. Institute of Applied Social and Economic Research, Boroko, Papua New Guinea.
- Mauss, M.
1969 *The gift: forms and functions of exchange in archaic societies*. Translated by I. Cunnison. (Original: 1925). Routledge and Kegan Paul, London.
- Morel, J.-P.
1975 L'expansion phocéenne en Occident: dix années de recherches (1966-1975). *Bulletin de Correspondence Hellénique* 99:853-896.
1981 Le commerce étrusque en France, en Espagne et en Afrique. In *L'Etruria mi-*

- neraria: Atti del XII Covegno di Studi Etruschi e Italici, Firenze 1979*, pp. 463-508. Leo Olschki, Florence.
- Moulin, L.
1984 La bière, une invention médiévale. In *Manger et boire au Moyen Age*, edited by D. Menjot, pp. 13-31. Publications de la Faculté des Lettres et Sciences Humaines de Nice, 27. Les Belles Lettres, Paris.
- Murray, O.
1983 The symposium as social organisation. In *The Greek renaissance of the eighth century B.C.: tradition and innovation*, Proceedings of the 2nd International Symposium at the Swedish Institute in Athens, June 1981, pp. 195-199. Stockholm.
- Nadel, S. F.
1951 *Foundations of social anthropology*. Cohen and West, London.
- Navarro, J. M. de
1928 Massalia and early Celtic culture. *Antiquity* 2:423-442.
- Netting, R.
1964 Beer as a locus of value among the West African Kofyar. *American Anthropologist* 66:375-384.
- Ngokwey, N.
1987 Varieties of palm wine among the Lele of the Kasai. In *Constructive drinking: perspectives on drink from anthropology*, edited by M. Douglas, pp. 113-121. Cambridge Univ. Press, Cambridge.
- Obayemi, A. M. U.
1976 Alcohol usage in an African society. In *Cross-cultural approaches to the study of alcohol: an interdisciplinary perspective*, edited by M. Everett, J. Wadell, and D. Heath, pp. 199-208. Mouton, The Hague.
- Okere, L. C.
1983 *The anthropology of food in rural Igboland, Nigeria*. Univ. Press of America, Lanham.
- Pan, L.
1975 *Alcohol in colonial Africa*. Finnish Foundation for Alcohol Studies, 22, Helsinki.
- Parkin, D.
1972 *Palms, wine, and witnesses: public spirit and private gain in an African farming community*. Chandler, San Francisco.
- Patek, E.
1980 Die Anfänge der Siedlung und des Gräberfeldes von Sopron-Burgstall. In *Die Hallstattkultur: Bericht über das Symposium in Steyr 1980*, edited by D. Clemens and A. Eibner, pp. 93-104. Oberösterreichischer Landesverlag, Linz.
- Pausanias
Descriptio Graeciae. Translated by P. Levi (1971). Penguin, Harmondsworth.
- Pliny
Natural history, Vol. 4. Translated by H. Rackham (1950). Heineman, London.
- Polanyi, K.
1957 The economy as instituted process. In *Trade and market in the early empires*, edited by K. Polanyi, C. M. Arensberg, and H. W. Pearson, pp. 243-269. The Free Press, New York.
- Pryor, F. L.
1977 *The origins of the economy: a comparative study of distribution in primitive and peasant economies*. Academic Press, New York.

- Py, F., and M. Py
1974 Les amphores étrusques de Vaunage et de Villevieille, Gard. *Mélanges de l'Ecole Française de Rome, Antiquité* 86:141-254.
- Py, M.
1971 La céramique grecque de Vaunage (Gard) et sa signification. *Cahiers Ligures de Préhistoire et d'Archéologie* 20:5-154.
1978a Quatre siècles d'amphore massaliète, essai de classification des bords. *Figlina* 3:1-23.
1978b *L'oppidum des Castels à Nuges (Gard) (Fouilles 1958-1974)*. Supplement 35 of *Gallia*. Editions du CNRS, Paris.
1979-1980 Ensayo de clasificación de un estilo de cerámica de Occidente: los vasos pseudojonios pintados. *Ampurias* 41-42:155-202.
1984 *La Liquière (Calvisson, Gard): village du premier Age du Fer en Languedoc Oriental*. Supplement 11 of the *Revue Archéologique de Narbonnaise*. Editions du CNRS, Paris.
1985 Les amphores étrusques de Gaule méridionale. In *Il commercio etrusco arcaico*, edited by M. Cristofani, P. Moscati, G. Nardi, and M. Pandolfini, pp. 73-94. Consiglio Nazionale delle Ricerche, Rome.
- Rehfish, F.
1987 Competitive beer drinking among the Mambila. In *Constructive drinking: perspectives on drink from anthropology*, edited by M. Douglas, pp. 135-145. Cambridge Univ. Press, Cambridge.
- Reille, J.-L.
1985 L'analyse pétrographique des céramiques et le problème de la provenance des amphores massaliètes (VIème -IIème s. av. J.-C.). *Documents d'Archéologie Méridionale* 8:101-112.
- Renfrew, C.
1973 Monuments, mobilization and social organization in neolithic Wessex. In *The explanation of culture change: models in prehistory*, edited by C. Renfrew, pp. 539-558. Duckworth, London.
- Robbins, R. H.
1973 Alcohol and the identity struggle: some effects of economic change on interpersonal relations. *American Anthropologist* 75:99-122.
1979 Problem-drinking and the integration of alcohol in rural Buganda. In *Beliefs, behaviors, and alcoholic beverages: a cross-cultural survey*, edited by M. Marshall, pp. 351-361. Univ. of Michigan Press, Ann Arbor.
- Room, R.
1984 Alcohol and ethnography: a case of problem deflation. *Current Anthropology* 25:169-179.
- Salisbury, R. F.
1962 *From stone to steel: economic consequences of a technological change in New Guinea*. Melbourne Univ. Press, Melbourne.
- Sangree, W. H.
1962 The social functions of beer drinking in Bantu Tiriki. In *Society, culture, and drinking patterns*, edited by D. J. Pittman and C. R. Snyder, pp. 6-21. Wiley, New York.
- Schaefer, J. M.
1976 Drunkenness and culture stress: a holocultural test. In *Cross-cultural approaches to the study of alcohol: an interdisciplinary perspective*, edited by M. Everett, J. Waddell, and D. Heath, pp. 287-322. Mouton, The Hague.

- Schwab, H.
1982 Pseudophokäische und Phokäische Keramik in Châtillon-sur-Glâne. *Archäologisches Korrespondenzblatt* 12:363-372.
- Sherratt, A.
1986 Cups that cheered. In *Bell beakers of the western Mediterranean*, edited by W. H. Waldren, and R. C. Kennard, Vol. 1, pp. 81-106. BAR International Series 331, Oxford.
- Social Science Research Council
1954 Acculturation: an exploratory formulation. Social Science Research Council Summer Seminar on Acculturation, 1953. *American Anthropologist* 56:973-1000.
- Spindler, K.
1983 *Die frühen Kelten*. Reclam, Stuttgart.
- Strabo
The Geography of Strabo, Vol. 2. Translated by L. Jones (1923). Heineman, London.
- Strathern, A.
1982 The scraping gift: alcohol consumption in Mount Hagen. In *Through a glass darkly: beer and modernization in Papua New Guinea*, edited by M. Marshall, pp. 139-153. Institute of Applied Social and Economic Research, Boroko, Papua New Guinea.
- Tacitus
The Agricola and the Germania. Translated by H. Mattingly and S. A. Handford (1970). Penguin, Harmondsworth.
- Tchernia, A.
1983 Italian wine in Gaul at the end of the Republic. In *Trade in the ancient economy*, edited by P. Garnsey and C. R. Whittaker, pp. 87-104. Chatto and Windus, London.
1986 *Le vin de l'Italie romaine: essai d'histoire économique d'après les amphores*. Bibliothèque des Ecoles Françaises d'Athènes et de Rome, 261. Boccard, Paris.
1987 Modèles économiques et commerce du vin à la fin de la République et au début de l'Empire. In *Actes, I Colloqui d'Arqueologia Romana: el VI a l'Antiquitat Economia Produccio i Comerç al Mediterrani Occidental*, pp. 327-336. Museu de Badalona, Barcelona.
- Tendille, C.
1984 Le mobilier métallique. In *La Liquière, Calvisson, Gard: village du Premier Age du Fer en Languedoc Oriental*, by M. Py, pp. 279-294. Supplement 11 of the *Revue Archéologique de Narbonnaise*. Editions du CNRS, Paris.
- Trousset, P.
1984 *Marseille antique d'après les vestiges de la Bourse et les musées de la ville*. Centre Regional de Documentation Pédagogique, Marseille.
- Verger, S., and J.-P. Guillaumet
1988 Les tumulus de Saint-Romain-de-Jalionas (Isère). Premières observations. In *Les princes celtes et la Méditerranée*, pp. 231-240. La Documentation Française, Paris.
- Villard, F.
1960 *La céramique grecque de Marseille (VI-IV s.)*. Essai d'histoire économique. Bibliothèque des Ecoles françaises d'Athènes et de Rome, 195. Boccard, Paris.
1988 Des vases grecs chez les Celtes. In *Les princes celtes et la Méditerranée*, pp. 333-341. La Documentation Française, Paris.

- Villard, P.
 1988 Ivresses dans l'antiquité classique. *Histoire, Economie et Société* 4:443-459.
- Waddell, J. O.
 1975 For individual power and social credit: the use of alcohol among Tucson Papagos. *Human Organization* 34:9-15.
 1980 The use of intoxicating beverages among native peoples of the aboriginal Greater Southwest. In *Drinking behavior among Southwestern Indians: an anthropological perspective*, edited by J. Waddell and M. Everett, pp. 1-32. Univ. of Arizona Press, Tucson.
- Warry, W.
 1982 *Bia and bisnis: the use of beer in Chuave ceremonies*. In *Through a glass darkly: beer and modernization in Papua New Guinea*, edited by M. Marshall, pp. 83-103. Institute of Applied Social and Economic Research, Boroko, Papua New Guinea.
- Washburne, C.
 1961 *Primitive drinking. a study of the uses and functions of alcohol in preliterate societies*. College and Univ. Press, New York.
- Wells, P.
 1980 *Culture contact and culture change: Early Iron Age Central Europe and the Mediterranean*. Cambridge Univ. Press, Cambridge.

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