

Archaeobotany and the social context of food

CAROL PALMER¹ and MARIJKE VAN DER VEEN²

School of Archaeology and Ancient History, University of Leicester, Leicester, LE1 7RH, UK;
e-mail: ¹ cp24@le.ac.uk , ² mvd1@leicester.ac.uk

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ABSTRACT. The social context of food, rather than the study of subsistence and diet, is currently a key concern within archaeology, and archaeobotanists are increasingly aware of the potential of their data in these debates. Here we review recent archaeobotanical publications in which the social and symbolic meaning of plant remains has been explored. We argue that the context of the plant remains in terms of their archaeological origin – feature, site, and region – and their relationship to other types of material culture is all important, as deposition is socially and culturally defined. Archaeobotanical data have the potential to help identify social differentiation through feasting, access to luxury foods, and spatial demarcation of food preparation, consumption and disposal. Archaeobotanists need to be involved in these debates, ensuring that interpretations are done with a sensitivity to the formation processes and methodological concerns of our data.

KEY WORDS: food, archaeobotany, archaeology, consumption, social context, Old World

INTRODUCTION

‘Like sex, the taking of food has a social component, as well as a biological one’ (Douglas 1975, p. 249).

Over the last 40 years, archaeobotany – the study of plant remains from archaeological excavations – has seen a tremendous expansion, both in the temporal frame and geographical areas studied and in the number of people active in the field. Krystyna Wasylikowa has played a fundamental role in the development of archaeobotany of the Old World, and it is a great pleasure to offer this paper in tribute to her.

The development of the discipline has over time focused on many aspects of research, encompassing both methodological issues and matters of interpretation and integration (for a review see Hastorf 1999). The study of food has always been central to archaeological thinking and has included the scheduling of wild food procurement, the processes involved in the transition to farming, the frameworks of long distance trade and exchange, and the roles of agriculture in more developed economies of the ancient world. Increasingly, ar-

chaeologists are interested in the study of food as a form of cultural expression. Archaeobotanists provide some of the crucial evidence that underpins these debates and have started to engage with these discussions. Here we review some of the publications that have focussed on social and symbolic aspects of food, where the emphasis is on food rather than on plants available for human use. This is a fascinating new area of archaeobotanical research, indicating that there is much to look forward to within the next 40 years.

ANTHROPOLOGICAL APPROACHES TO FOOD

Archaeobotanists have traditionally focused on the reconstruction of agricultural practices and the production of food. These studies tend to rely on uniformitarian principles using the physical properties of plants and their habitat requirements. These properties can be taken as more or less stable mediums upon which inferences can be made. Interpretations of food

involve social concerns, however, and are based upon observations from anthropological, sociological, and historical studies, disciplines with which archaeobotanists have been generally less familiar. Information from these sources is usually seen as culturally specific and the choice of parallels can be daunting or tend towards the anecdotal. The drawing of appropriate analogies is a complex issue (Hodder 1982, Parker Pearson 1999, Wylie 1985) but, generally, relational analogies – those sharing multiple points of contact – are believed to be stronger, i.e. analogies from the same geographical area that are close chronologically or those sharing similar facets of social organisation.

There is a rich literature on food and food consumption within the disciplines of anthropology and sociology; examples include Appadurai (1981, 1986), Douglas (1984), Douglas and Isherwood (2001), Goody (1982), Lévi-Strauss (1970), Mennell et al. (1992), and Messer (1984). These studies emphasize the role of food as a medium of communication. They stress food as a system of signs or categories and point to the role of food in creating or enhancing social relations and in distinguishing between those that belong or are excluded from the group. The consumption of any meal concerns those that prepare the food, those that consume the food, those that share the meal and those that are excluded. Apart from day-to-day and celebratory meals, food is also used in offerings to deities, funerary rites, and other so-called 'ritual' contexts, where the social role of food may seem less obvious, but where anthropologists increasingly identify similar social tensions in action.

The anthropological literature also calls attention to the patterning of food preparation and consumption. In all places where people live, the day-to-day activities of life are ordered according to socially perceived norms and these are recreated each day (Bourdieu 1990). For example, the preparation and consumption of meals is usually spatially defined. The time of the meal and the group participating in its consumption is reflected in what is prepared: cold foods usually represent minor meals, while hot foods usually form the main meal of the day, and an elaborate meal is often prepared for honoured guests or to mark a particular celebration (Douglas 1975). In many societies, women perform the routine prepara-

tion of food, but men are involved in the preparation of special meals, especially those involving meat (e.g. barbecues). These are cross-cultural phenomena, and while the particular dishes served will, of course, vary from region to region, these activities leave archaeological traces, through spatial structuring of the inhabited space, through differentiation of refuse deposition, and through the presence of particular foods. Thus, food preparation and access to particular food types is commonly linked with gender relations, social status, group differentiation and identity, as well as providing insights into belief systems (e.g. through food taboos). Religious rituals, festivals and major rites of passage commonly involve feasting and drinking.

Two good examples of the archaeological application of such anthropological perspectives are the study of alcohol consumption in early Iron Age France (Dietler 1990) and the study of the consumption of feast foods in trans-galitarian societies (Hayden 1990, 2001). Both focus on the role of conspicuous food consumption in defining social relations (e.g. the host acquiring superiority, the guest accepting social obligation) and as a mechanism for change (Dietler & Hayden 2001). Hayden (1990) argues that competitive feasting was a prime force in the development of food production and the transition to agriculture. Dietler (1990) argues that the adoption of foreign drinks by elites, in this case wine, enhanced their opportunity for hospitality, including work-party feasts which allowed them to mobilize labour. This increased their standing within the community, while the hospitality given to rival elites enhanced their regional power and prestige. In a different study, Sherratt (1995) considers the role of alcoholic beverages and other psychoactive substances (e.g. derived from *Papaver somniferum* or *Cannabis sativa*) in European prehistory and Mediterranean antiquity linking, for example, certain vessel types with the adoption of different intoxicants.

ARCHAEOBOTANICAL APPLICATIONS

There is tremendous potential to address issues concerning the social and cultural context of food consumption with archaeobotanical data. Here we mention a few examples.

The recognition of feasting

The importance of cereal grain in comparison to gathered foods in Neolithic Britain has been the focus of recent debate. A review of the plant remains of this period (Moffett et al. 1989) highlighted the comparatively low presence of cereal remains on Neolithic sites, while remains of wild nuts and fruits were often abundantly present, emphasising the continuing importance of wild plants as food (the so-called 'muesli' diet). This observation, as well as the absence of crop weeds and evidence from faunal remains was used to argue for a subsistence base of small-scale, hoe-based cultivation with a high degree of mobility, rather than a fully agricultural settled society (Entwistle & Grant 1989, Moffett et al. 1989). The apparent small part played by cereal farming in the economy was developed by Thomas (1991, 1993) to suggest that cereals may have had a greater symbolic than economic value and that their importance in social negotiations was greater than their calorific content, drawing on an opposition between the wild and the tame. These arguments were phrased in direct contrast to the then prevailing approach in environmental archaeology, which, to a large extent, privileged the economic above the social aspects of food.

The key issue here is that neither the archaeobotanists nor the archaeologists took sufficient account of the actual context of the remains. The majority of plant remains reported on at that time originated from what appear to be non-domestic contexts, i.e. causewayed enclosures, other enclosures, pit groups, barrows and chambered tombs (Legge 1989). Recent excavations of houses and settlements offer a new perspective: here, cereal remains have been found to be abundantly present (Fairweather & Ralston 1993, G. Jones, in prep.). This highlights the fact that the type of plant material preserved in ceremonial sites differs from that of settlement sites: cereal processing and, thus, the potential abundance of cereal chaff tends to be found only on settlement sites (G. Jones 2000, Rowley-Conwy 2000).

Following others, Fairbairn (1999, 2000) argues that causewayed enclosures, such as Windmill Hill, were foci for ritual activity and exchanges, including feasting. Consequently, the plant remains found at ceremonial sites offer not so much an insight into the agricultu-

ral/economic importance of various groups of plant foods but, instead, highlight the social context of consumption. The archaeobotanical remains were associated with those of animal bones and ceramics, in a combination which he suggests is indicative of feasting refuse (for a discussion of faunal evidence for feasting at another Neolithic ceremonial site, see Albarella & Serjeantson 2002). Thus, an appreciation of the archaeological context of plant assemblages, an understanding the formation of the archaeobotanical record, the integration with other archaeological evidence, and the recognition of the symbolic value of food enhances the understanding of our data and, thus, our ability to offer holistic interpretations.

Deliberate depositions

The symbolic context of food is more readily appreciated in the case of burials. Increasingly, plant remains are being collected from cemetery contexts, especially in association with Roman period cremations (Kreuz 1995, 2000, Petrucci-Bavaud & Jacomet 1997). Cereals, pulses, fruits and nuts are a regular occurrence in such contexts, and variations in the presence of native versus imported plants may be used to explore possible differences in identity, gender and status (Petrucci-Bavaud et al. 2000). Speculations on what these inclusions may represent symbolically tend to be reserved, but, from the written sources it is understood that poppy (*Papaver somniferum*), for example, was the bringer of sleep and death and that flowers of the Celtic bean (*Vicia faba*) symbolised death and were eaten at funerary feasts (Körper-Grohne 1987, Kreuz 2000). At present, it is very difficult to identify why certain plants and not others are chosen for these contexts, especially as few such studies have been conducted, but, with an increase in our records, combined with good osteological and artefactual evidence, patterning may be revealed. It also suggests that routine sieving of burial contexts would be valuable.

Burnt food offerings to deities from domestic and religious contexts of the Roman period have been identified by Robinson (2002), Vermeeren (pers. comm.) and Zach (2002). These include some similar species to those found in funerary contexts, e.g. stone pine, dates and figs. Stone pine (*Pinus pinea*) is found frequently in religious contexts such as burials,

temples, and placements of food offerings. Textual evidence and ancient wall paintings, such as those at Pompeii, help interpret these finds and highlight the association of stone pine with fertility (Kislev 1988), as well the cult of Isis and other deities. Though scarce numerically, these plants were important in people's daily lives. Grave goods and religious practices are one way to convey identity and further studies of larger data sets are likely to help identify cultural associations and oppositions.

Another form of deliberate deposition, where we can study food that was consumed by the deceased rather than food offered to deities and/or used in the funerary ritual, is the disposal of bodies in contexts other than graves, e.g. bog bodies. Here we can study the approximate composition of the last meal consumed, though great care must be taken to appreciate that the identified foods may not represent commonly consumed foods but, instead, unusual ingredients related to a specific rite (Behre 1999a, Helbaek 1951, 1959, Holden 1995).

Identifying affiliation and status

Another way in which food is used to mark out cultural affinity, social aspirations and status differences is in the access to luxury foods and exotics. Such foods are usually regarded the foods of the wealthy and privileged of society. Monitoring their spatial and temporal distribution will help identify the social structuring of past societies. A exploration of the nature of luxury foods (Van der Veen, in press a) has indicated that there is a shift in emphasis in the nature of such foods between simple and complex societies. In simple societies the emphasis is on quantity of food, especially of meat and beer, and on elaborating the presentation of basic staples, while in strongly hierarchical societies there is more emphasis on exotics and a differentiated cuisine ('low' and 'high' cuisines). The main case studies to date again focus on the process of Romanization in urban, military and rural contexts (Bakels et al. 1997, Bakels & Jacomet in press, Murphy et al. 2000, Willcox 1977). Both, Bakels et al. (1997) and Murphy et al. (2000) combine botanical, zoological and other evidence to interpret lifestyles and degrees of affluence. The question here is who has access to the newly introduced foods? Is it natives

from Italy maintaining customs from home, members of the military displaying group identity, or is it local ('native') upper classes emulating the new elite? Luxury foods are usually regarded as the symbolic capital of the elites, but they often ultimately lose their status and become widely available (wine, chocolate, coffee, tea, sugar are all well known examples), a process which requires further study (Van der Veen, in press a, b).

Creating variety

Cereals can be consumed in numerous ways and a remarkable variety of dishes can be prepared from one main ingredient, each awarded different meanings. Wheat, for example, can be ground and/or pounded into different sized fragments, eaten as gruel, porridge, or paste, par-boiled, parched, roasted, green or ripe, made into cakes, or any combinations of these processes (Hillman 1984, Hubbard & al-Azm 1990, Palmer 2002, Valamoti 2002). Fragmented cereal remains may represent prepared foods (e.g. friké, bulgur) rather than post-depositional damage. Palmer (2002) has identified important cultural differences in the way cereals are consumed in modern Jordan, and more generally in the Near East. Bread was found to be indicative of urban and settled agricultural society, whereas porridge-like meals were associated more with mobile, pastoral groups. Various preparations of the same staples serve to differentiate between groups and, in addition, can be used to mark different occasions, such as special feast breads or fermented alcoholic drinks. Kemp et al. (1994) and Samuel (1999, 2000) identify beer, together with bread, as a staple item of diet in ancient Egypt. Beer was consumed by all levels of society, but also brewed specially for state occasions and local festivals. As in Iron Age France (see above), wine was the preferred inebriating beverage of the elite (Murray 2000).

Other archaeobotanical studies of beer have focused on the recognition of beer brewing (Hillman 1982, Stika 1996), the variety of beers and their flavourings (Behre 1999b), and touch on the link between its production and agricultural surplus (M. Jones 1981, Van der Veen 1989, Van der Veen & O'Connor 1998). Archaeobotanists have yet to draw heavily on ethnographic observations of the importance of

alcoholic beverages in social interaction, though the occurrence of evidence for brewing and the Type of site where this evidence is found may be instructive.

Dividing space

The spatial distribution of archaeobotanical data is a further area of interest that can provide social insights. An early example of such a study is Knörzer (1988) who discovered marked differences in the contents of the large pits associated with Linear Bandkeramik longhouses at Langweiler 8, Germany. Here most of the burnt chaff was found in pits to the north and west of the houses. Kreuz (1990), in a similar study of Linear Bandkeramik settlements, found that charcoal was usually deposited in the pits alongside the walls of the houses and the chaff in the pits scattered across the yards. Bakels (1995) reviewed the evidence for a further three sites (in France, Germany and the Netherlands), and identified that the pattern recognized by Knörzer does not apply to all sites of this period. All three authors interpret the patterning in strictly functionalist terms, considering where the de-husking of grain may have taken place, where the chaff was burnt and whether the prevailing wind determined these activities, but Cou-dart (1998) uses these data to look at social aspects of space in these houses (public/private, gender, and social hierarchy).

Other examples where the deposition of artefacts, food remains, and chemical analysis have been combined to identify activity areas are those by Smith et al. (2001) and Hodgson et al. (2002) for Iron Age and later houses in Britain. Here the internal organisation of space created through repeated daily living has been related not only to possible functional behaviour, but has also been interpreted as reflecting the symbolic codes embodied within these activities (following Bourdieu 1990, Parker Pearson & Richards 1994).

Considerations of social uses of space usually depend upon the careful integration of different lines of evidence, i.e. spatial associations between artefacts, faunal evidence, plant remains, and structural features. An example of the analysis of the latter is the study by Samuel (1999) of the workmen's village at Amarna in Egypt where she concluded that the supply of raw materials was centrally

organised, but where there was little evidence of communal cooking installations or household co-operation in terms of bread production. In a New World context, Hastorf (1991) identified variations in the distribution of archaeobotanical data across pre-Hispanic Sausa compounds and identified widespread scattering of food remains as relating to a lack of differentiation between individuals and/or genders in the early phase, while the later, more clearly clustered deposition was interpreted as a restriction in the space available to food preparation and disposal. She has linked this to changes in the role and position of women in this society and the circumscription of their activities with the imposition of Inka control. This interpretation is bold, as she herself notes, but is nevertheless an example of the kind of inferences we can attempt.

DISCUSSION

There is rarely a simple correlation between particular foods and certain social activities. The consumption of the same foods can be significant on a number of levels, from daily consumption to special events marking particular occasions or rites of passage (e.g. weddings and funerals). However, the case studies outlined here demonstrate that a great deal can be inferred from archaeobotanical data. While we can hardly ever identify individual meals and the sequence in which the various components of the meal are consumed, we have identified several instances in which the cultural meaning of food has come to the fore.

Unusual consumption events, such as feasting activities, have the potential of leaving a series of archaeological traces, such as: the quantity of food consumed; the presence of rare species and those with 'recreational' properties (alcohol and drugs); unusual food preparation facilities in terms of size or location; unusual preparation and serving vessels and unusual numbers of these; and special storage and discard deposits, such as middens (Hayden 2001). The location of feasting may in some instances take place outside the domestic context; the causewayed enclosures of the British Neolithic (see above) would seem to represent a good example of this.

The introduction of new species is another profitable area of research. Exotic food items

are arguably the most easily identifiable indicator of social context, especially in archaeobotany. In the case of urban contexts, botanical remains are frequently preserved in cess pits – either waterlogged or mineralized – where they also often indicate post-consumption deposition. While these introductions highlight possible trade and exchange contacts and new technological advances, they can also be used to study social relations. Differential access to such foods causes social tension, elites may find their position enhanced or threatened and native groups may seek to emulate foreign elites. Such processes may be recognised archaeobotanically by monitoring the first occurrence and gradual spread of such foods within and between sites of different socio-economic composition. Not all such introduced foods become widely adopted, and the study of these patterns will help identify cultural constructs.

The spatial patterning of archaeological data has been used extensively to reconstruct past human behaviour. The distribution of archaeobotanical data across sites and structures offers the potential to identify a range of activities from the production of food to its consumption and disposal. We can extend this to include attempts to identify the social context of these activities in terms of, for example, gender, private and public realms, status, and cosmological beliefs.

All these new applications build heavily on the important methodological achievements of the last 40 years and could not have been envisaged without these. In order to ensure that the interpretation of archaeobotanical data sets is carried out with a sensitivity for formation processes and methodological concerns, archaeobotanists are engaging more in these types of interpretations and are collaborating more closely with others. These studies are adding a new dimension to our research in subsistence and economy, and it is encouraging to see that this fascinating avenue of research is receiving increasing attention.

In undertaking these new approaches, it is important to distinguish between the different origins of our material: crop processing; food processing and kitchen waste; snack foods and table waste; faecal matter; fodder; animal droppings; decaying mudbrick and plaster; hearth sweepings (fuel/tinder); and roofing material. The spatial distribution of these plant materials, and their associated finds and

archaeological context, can help identify the social and cultural norms of past peoples. We have often regarded the taphonomic factors that influence the deposition of archaeobotanical data as problematic, in that they have to be accounted for prior to the reconstruction of past agricultural practices. What we are suggesting here is that several of these taphonomic factors are, in fact, also interesting and meaningful in themselves. They are indicators of exactly the types of behaviour that we are attempting to identify because the disposal of material is socially and culturally defined.

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