1
Introduction

This book examines the role of stone vessels throughout the eastern Mediterranean and over a period of two millennia during the Bronze Age (ca. 3000–1200 BC). This period and region saw perhaps the most prolific and diverse tradition of such objects in human history and their treatment as a group represents an unusual interpretative opportunity. Stone vessels offer important analytical advantages over other classes of material, making them a favourable vantage from which to consider concepts of object value and how they might be approached in the archaeological record. Although comparative longitudinal studies like this one are increasingly rare, they provide a clarity which a narrower focus does not and are the type of contribution to the social sciences that archaeology is particularly well placed to provide. The following discussion addresses why a seemingly straightforward object-based analysis might offer wider archaeological insight, especially with regard to object value. It then goes on to justify the scope and coverage of the book before setting some relevant terms for comparative analysis. Finally, it outlines the main focus of each the succeeding chapters.

Stone vessels offer interpretative advantages over most other classes of material culture for at least five reasons: (1) their virtual indestructibility, (2) the subtractive properties of stone, (3) the potential for macroscopic, petrographic, or geochemical provenancing, (4) their numbers and regional diversity within the Bronze Age eastern Mediterranean, and (5) their flexible range of values and functions. Firstly, stone is one of the most consistently preserved types of material in the archaeological record, matched perhaps only by pottery and with a considerably longer history. Occasionally, the physical robustness of stone vessels can make for a rather bewildering archaeological picture, because it encourages these objects to have long use lives and potentially confusing reincarnations as heirlooms, antiquities, or stratigraphic kick-ups. However, for the most part, their frequent survival in the archaeological record means that we can hope to recover a much more representative sample than metals (that get recycled) or organics (that biodegrade) and, under the right conditions, even use them as tracers to understand the more elusive social lives of other material classes (e.g. through skeuomorphs). Secondly, stone is a subtractive medium which often retains marks from human alteration. Refits of knapped stone debitage are the most well-known and evocative example of this, but ground and carved stone artefacts also preserve informative traces of manufacture, use, modification, and repair. Thirdly, stone can often be provenanced to specific source areas on the basis of visual identification, study under a microscope, or analysis of trace elements. The first of these, macroscopic recognition, is a particularly important property, lending certain stones a prominence both in the past (as fundamentally branded objects) and in the present (as equally branded finds that consistently catch the archaeologist's attention).

Fourthly, stone vessels are not only found in comparatively large numbers in the Bronze Age eastern Mediterranean but also made in a variety of distinctive crafting traditions revealing spatial and chronological variation which is of considerable interest. As suggested earlier, the prehistoric Mediterranean sees arguably the most intensive and diverse outpourings of this type of material culture in human history, linked unequivocally to important large-scale changes such as the move to more sedentary foraging, the spread of farming, the emergence of early state societies, and the Bronze Age intensification of interregional exchange. Finally, stone vessels can have a wide variety of perceived values and functions, not least because different stones have very different working and aesthetic properties and vary tremendously in the location and frequency of their source outcrops. Stone vessels occupy a very wide range of roles, from those used for grinding crops or pigments to cooking pots to lamps and possible fumigatory devices to containers for well-known organic commodities to highly charged and heavily decorated ritual objects. By comparison, and in contrast, metals are often more precious (relatively rare and complicated to process), more heavily commodified (in part due to their convertible bullion value), and susceptible to very different recycling patterns, while pottery is usually more commonplace and almost always of lower value.

More broadly, few other areas of the world offer such a rich setting in which to explore the relationship between material culture and society as does the eastern Mediterranean, and it is no surprise that most of the key anthropological approaches to issues such as trade or early state formation were developed with this area partly in mind or were applied to it at a very early stage. In this regard, the combination of textual sources, a wide range of representational art, and a richly explored archaeological record are both a boon and a curse, challenging us to reconcile three very different types of evidence. For example, both chronologically and geographically, the eastern Mediterranean straddles the divide between areas with written sources and those without. On the one hand, this throws up textual deserts where studying concepts such as value present a greater challenge. On the other, it provides sufficient texts in certain regions to allow written evidence and archaeological interpretation to complement and, if necessary, to correct one another. Many of the subtleties of how materials and shapes were perceived by particular societies may well be best understood with the help of written texts or images, but it would be a mistake to assume that either of the latter sources is wholly unproblematic. Both are partial samples biased by the archaeological robustness of the material on which they were produced and the priorities of the people or institutions by or for whom they were created.

The archaeological material that can be harnessed in an analysis of stone vessels is impressive. In the Aegean, a substantial amount of research has already been carried out and more than 5,000 stone vessels are known from Bronze Age contexts. Elsewhere, there are perhaps fewer than 100 published Bronze Age Anatolian vessels, a slightly greater number of Cypriot examples, nearly 2,000 vessels published from Levantine contexts, and literally hundreds of thousands from Egypt. This skewed distribution reflects some recovery bias (e.g. with less attention having been paid to Anatolia), but nevertheless it offers a broad indication of the relative importance of this class of material culture in different regions. These varying numbers also demand very different analytical strategies, especially for Dynasties 1–4 in Egypt, where a selective approach to the primary evidence is inevitable. Moreover, the ease with which museum collections of stone vessels can be accessed, the extent of published records,

and the depth of existing synthetic or interpretative discussion are highly varied and often biased by the traditional archaeological preoccupations with monuments, palaces, and cities. The approach adopted throughout this book is to be comprehensive and quantifying where possible,[1] to build on existing studies where available, and to balance a broad general analysis with the detailed investigation of a few particularly rewarding contexts.

Comparative Terminology

One awkward result of the emphasis on specialist study in the region is the lack of coherent terminology. The analysis in succeeding chapters crosses several regional disciplinary specialties and draws heavily on more focused typological works. However, for such a broader comparative perspective to be effective, especially in the context of early complex societies (e.g. Trigger 2003), it needs to declare a particular set of terms that are sufficiently broad for general application but do not lose all analytical strength. This section outlines the chronological framework, vessel shapes, stone identifications, and social categories used throughout the rest of the book.

Stone vessels rarely allow the kind of chronological resolution that can be found in pottery. This is partly a result of less intense modern study of their forms and materials but also because of lower levels of surface decoration, the smaller numbers of artefacts produced, and the increased possibility that any given vessel might be deliberately curated for quite long periods before deposition in the ground. So while chronology provides an important analytical framework, it will rarely be appropriate to attempt extremely fine temporal distinctions. A rough correlation of established regional period divisions is presented in Figure 1.1, along with the period and regional abbreviations used throughout the rest of the book. This study follows the Egyptian chronological sequence outlined by Hendrickx (1996, 1999) for earlier periods and by Kitchen (1987, 2000) for later ones. For the Levant, it uses the period divisions suggested by Albright and others (Albright 1949: 84; Mazar 1990: 175, 238, 295). In the Aegean, it follows the Early Bronze Age (EBA) radiocarbon chronology outlined by Manning (1995) but assumes a traditional short chronology for later periods (Warren and Hankey 1989), addressing specific problems of interregional synchronisation (e.g. those raised by the debate over the dating of the Theran eruption: Wiener 2003, 2006; Manning et al. 2006) when necessary. All dates are BC unless stated otherwise.

The individual terms used for vessel shapes have been standardised where possible to conform to more explicit modern definitions (in particular Aston 1994: appendix C), but existing terms have been retained where they refer to particularly well-known artefact types (e.g. alabastra). Summary regional vessel typologies are offered in the appendix, adopting existing schemes where these are broadly reliable and developing new ones where necessary. As with the shape terms themselves, this complementary (some old, some new) strategy has its problems, not least because levels of classificatory detail vary as a result, but it seems more important to conform to an existing consensus where one exists rather than offer yet another alternative. Shapes are frequently referred to in Chapters 5–7, along with their type identifier in brackets (a regional prefix followed by a shape number) to allow easy cross-referencing with the type drawings, short descriptions, and relevant references in the appendix. There remain particularly ill-defined analytical boundaries between straightforward stone vessels and various forms of permanent stone installations, rough mortars, or grinding slabs. None

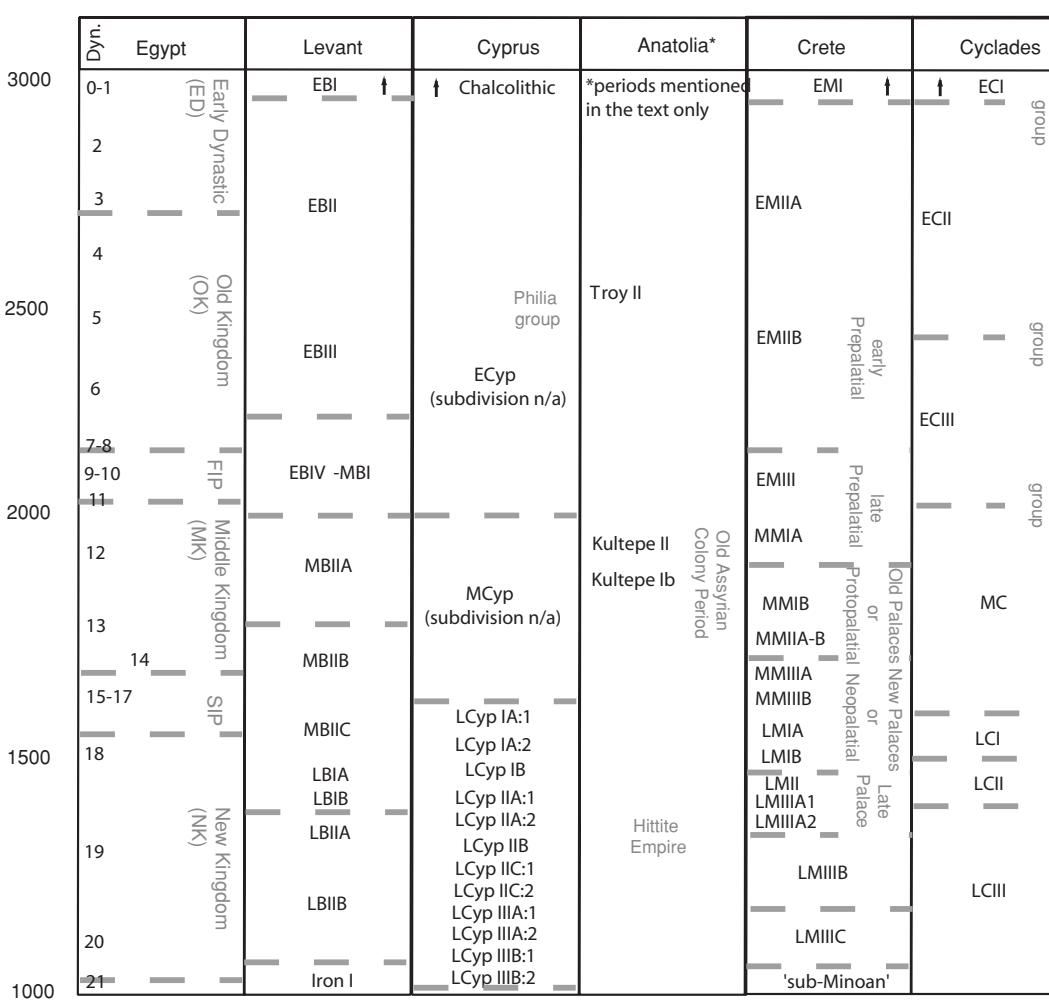

FIGURE 1.1. Chronological table by region for the eastern Mediterranean Bronze Age. The abbreviations used are as follow
Second Intermediate Period; E, M, L = Early, Middle and Late, respectively, and are found with B = Bronze, Cyp = Cyp
'C' but extended here to avoid confusion), M = Minoan, C = Cycladic, H = Helladic.

of the latter are treated in as much detail here although the long-term links between them and more clearly defined stone vessels are an extremely interesting issue and are returned to in Chapter 8.

The study of stone vessels is bedeviled by a lack of clarity when it comes to stone identification. This is nowhere more obvious than in published descriptions of gypsum (hydrated calcium sulphate and, for vessels, mainly the alabastrine variety) and travertine (calcium carbonate, 'Egyptian alabaster'), both of which have misleadingly been grouped under the label *alabaster* in much of the archaeological literature. Likewise, *steatite* is the most commonly published term for a range of dark-coloured softstones (that all come from the same broad green schist facies), even though in most cases where vessels have been studied by a geologist, the actual material turns out to be either a chlorite-rich rock (hereafter occasionally shortened to the overly specific term *chloritite* for convenience) or a slightly harder serpentinite.[2] Where it has not been possible to correct traditional terms or problematic identifications, these have been deliberately broadened into a wider classification (e.g. steatite/chloritite) and, for Egyptian stones, Aston's terminology (1994) has been adopted whenever possible. We can also draw upon relatively well-studied evidence for ethnotaxonomies of stone, in both Egyptian (Harris 1961; Aufrère 1991) and Sumerian/Akkadian (Postgate 1997). In fact, these typologies prove to be both subtle and relatively precise, given that they were based on provenance, colour, and working properties rather than any microscopic or geochemical profiling. Even so, one-to-one correlations with our own geological categories are often elusive, arguably less because of gross mismatch (though this does occasionally exist) and more because of the imprecise nature of our evidence.

The discussion in succeeding chapters refers repeatedly to the relationship between stone vessel use and the expression of social identity and status. Some key vectors for variation in object use and value are likely to be age, gender, lineage, social class, and political faction, but many of these will be difficult to identify in the archaeological record (e.g. gender distinctions in the absence of clear iconography or carefully sexed burials). Social class is probably the one most open to analysis. For smaller-scale societies that were still present in many areas at the beginning of the Bronze Age, particularly in the Aegean, neutral descriptions are initially preferred for discussing apparently powerful or influential people over those that might assume too specific an organising principle (e.g. 'chief'). For the larger, more complex, and palace-based societies whose interactions with each other were often important, we require some generally applicable comparative terminology for discussing social categories, despite the fact that any scheme of this coarseness will inevitably fail to capture many important regional variations. Nonetheless, during the Bronze Age, much of the region was broken up into kingdoms of various sizes and types of territorial organisation. Most of these polities were ruled by kings who often referred to their dominions as a royal household and estate and, beyond this, carefully ranked their relations with other kingdoms, treating some as potential equals and others as vassals. Across society as a whole, we can usually suggest a three-way division amongst a small upper elite group, a larger lower elite, and the wider population which offers us a comparative framework for thinking about the way stone vessels, object value, and status relate to social structure.

While these crude distinctions are useful in a general analytical sense, there is important cultural variation in the sharpness of social hierarchy, the relative size of different social

groupings, and their particular ideological preoccupations.[3] Even so, the upper elite was an often volatile and incestuous inner community, usually surrounding a royal family (where we know one exists) and including extended family members, concubines, and the most powerful state and religious administrators. These people sometimes owned impressive rural houses but frequently dwelt in cities, and we see them in close contact with the politics and fashions of the court. There is often a degree of overlap in official roles with courtiers also being administrators, priests, traders, and/or important patrons. Likewise, at this level there were relatively common instances of direct contact between courtly circles, sometimes over long distances, with the exchange of messengers, wives, and palace personnel that encouraged the convergence of elite taste (or, conversely, the conscious expression of difference) over quite a wide area of the eastern Mediterranean. By contrast, the lower elite often held lesser bureaucratic posts and/or appear as powerful figures in certain local or provincial contexts but were generally much less well connected. The rest of the population is by far the largest group, including both urban and rural populations, but their archaeological visibility varies tremendously, depending on recovery bias (e.g. whether survey and excavation beyond the monumental urban structures have considered them directly), textual samples, archival reach, and their varying mobility and material impact within the wider landscape.

Chapter Summary

The structure of this book reflects a compromise between the need to proceed in a sensible chronological and geographical order and a desire to address certain issues more holistically. Chapter 2 looks at theoretical approaches to value, drawing in particular on recent studies of cultural transmission and the logic of social relationships to suggest ways in which a potentially ephemeral property such as value might reveal itself in archaeological recoverable ways. The next two chapters define some practical and analytical parameters: Chapter 3 begins with an analysis of the Mediterranean environment and how Bronze Age people and objects might have moved around it. Thereafter, it addresses the theoretical models through which we have traditionally considered Bronze Age trade, devoting particularly critical attention to the conceptual divisions that have often been drawn between what we construe as modern and premodern behaviours. Finally, it offers a brief summary of the overall evidence for interregional interaction in the third and second millennia BC. Chapter 4 then looks closely at how stone vessels are made, offering a summary of the range of possible manufacturing strategies, the working properties of different stones, common manufacturing sequences, and what departure from these norms might imply in terms of local production priorities. Chapters 5–7 deal with the regional stone vessel traditions found in the Bronze Age eastern Mediterranean. The chapter breaks were chosen because they provide a convenient and necessary subdivision of the bulk of the analysis, but they also reflect important points of large-scale, sociopolitical change. The third millennium is treated in a single block in Chapter 5, though reference is occasionally made to earlier periods where this seems particularly relevant (e.g. the later fourth millennium). Chapter 6 considers the earlier second millennium, a period that sees the emergence of new political, social, and economic structures throughout much of the region, including the Middle Kingdom Egyptian state, increased urbanism in the Levant; Assyrian colonies in Anatolia, and the appearance of palatial society on Crete. Chapter 7 addresses the highly connected world of

the later second millennium and begins at another relatively convenient break in discussion, ca. 1500–1450 BC, with the reign of Thutmosis III and his expansion of Egyptian power into the Levant. This conquest has clear implications for patterns of production, consumption, and exchange and is also roughly contemporary with the apparent collapse of Neopalatial Cretan society. For each of these three chapters, analysis begins with Egypt and continues in an anticlockwise path via the Levant, Cyprus, Anatolia, and the Aegean, which has the interpretative advantage of following both the prevailing movement of Bronze Age maritime traffic (see Chapter 4) and the flow of stone vessel exports from Egypt, the industry with the largest and most extensive foreign impact. Following these detailed regional discussions, the last two chapters adopt a broader perspective once again. Chapter 8 takes a comparative approach to its logical conclusion by briefly considering the roles played by stone vessel industries across the world and throughout human history. It aims to distinguish both smoother cross-cultural regularities (of which several important examples are considered) and those rougher idiosyncrasies specific to the cultural development of the Bronze Age eastern Mediterranean. Chapter 9 ends the book by returning to the theoretical challenges raised in Chapter 2, identifying where the preceding analysis has important insights to offer on the concept of object value and where further research might lead. Value is too resonant a social concept to avoid but too analytically fraught to treat lightly, and it is to the discussion of useful theoretical perspectives that we turn first.

2
Agreeing on Things

Value is a term that cries out for careful definition. It has a curiously ambivalent semantic power, referring to both tangible and intangible culture, to objects that we think of as commodities and those that we do not, and to meanings that we think of as personal and those that we treat as collective social givens. Indeed, object value arguably inhabits exactly this social space, an interface between what we assume to be objective and what we recognise as subjective (Simmel 1900). This is reflected nicely by the fact that the terms people often use to describe this domain—for example, in English, *value(s)*, *taste*, *worth*—evoke wider social mores, natural sensory skills, or even innate moral rules but thereby often conceal definitions that are potentially vulnerable and up for negotiation (Bourdieu 1994: 99). This chapter considers these rather ambiguous meanings, the way object value may reflect the wider ordering of human relations, and how, if at all, it might manifest itself archaeologically. Some of the issues raised are declared merely to make the analytical preoccupations of Chapters 4–8 more transparent, while others are revisited directly in later analyses, particularly in Chapters 8 and 9.

Value is not something inherent in things but is a culturally constructed property. The following discussion is interested primarily in object value; intangible things can have value (e.g. a piece of music, an idea, a brand) in a way which floats free of any particular physical object, but it is curious that such value is often most obvious when manifested concretely and objectified in some way (e.g. a recording, a performer, a patent, or a branded commodity). Shared logics about ways of making, exchanging, using, and destroying objects are cultural norms and as such structure people's individual social strategies. These norms can be argued over and modified, but they are also learnt and passed on, both horizontally between people and vertically between generations. They therefore form part of inherited cultural traditions that have a wider evolutionary context and reveal a degree of cross-cultural consistency about which it might be possible to generalise. Because value logics are often grounded in material things, they are partially structured by this physicality. Indeed, if value is to be more than merely an evocative term for archaeologists, its study needs to focus on material variation whose physical or contextual signature we can reasonably hope to distinguish in the ordinary archaeological record.

With this inferential leap in mind, five possible approaches are combined in the following chapters: (1) highly comparative analysis across time and space; (2) contemporaneous comparisons between different types of objects; (3) highly contextual analysis of archaeological deposits where possible; (4) attention to the wider implications of typological variation; and (5) careful combination of archaeological, documentary, and representational evidence. The first of these allows us sufficient investigative scope to address the broadest temporal and

spatial scales at which object value is likely to be influenced, for example, in the form of long-lived cultural traditions or supraregional economic systems. It also encourages us to distinguish the socially and historically contingent features of stone vessel value from those that are repetitive and cross-cultural in their impact. The second approach involves a similarly wide-ranging strategy but seeks to break down the traditional barriers separating the study of specific material categories, wherever such synthesis can be achieved efficiently. The third approach refers to the need to pay particularly acute attention to archaeological contexts where our preservation, recovery, publication, and/or sample size is unusually good. This needs little justification in terms of archaeological practice but can sometimes be sidelined in the search for broad-scale comparisons. The fourth approach is, of course, reflected in the construction of object typologies, a fundamental aspect of archaeological method but given greater significance where such phylogenies are suggestive of the selective pressures and processes of cultural transmission. The fifth and final approach allows us to explore the consistent or contradictory expressions of value present in textual, iconographic, and material records.

Value evokes a whole host of overlapping but potentially conflicting meanings: labour cost, use value, exchange value, added value, social value, moral value, sentimental value, and shock value, to name but a few. At one extreme are traditional economic perspectives such as Marx's emphasis on value as embodied labour-time (i.e. the cost of making or doing something; 1969: 45) or the tyrannical, if often unfairly stereotyped, utility functions associated with classical economics (e.g. Nash 1950). These perspectives tend to assume, either as a theoretical proposition or for analytical convenience, that value can be treated as a rational variable, inherently measurable and universally understood. At the other extreme are valuations construed as inherently personal and sentimental, which only really have meaning for the individual concerned. Ironically, both ends of this spectrum provide models that are almost wholly asocial, whereas in fact value is usually part of wider social norms and crucial to the way people forge and structure their relationships with one another (see below).

Assumptions about object value exist in most artefact-based studies, but the degree to which they are recognised and accounted for varies wildly. For example, arbitrary measures of prehistoric wealth (e.g. the 'scoring' approach used on some cemetery assemblages), art historical speculation about the creative intentions of prehistoric craftspeople, or unmoderated emphasis on the past importance of an archaeologically prevalent indicator such as pottery are all examples where value is undertheorised. However, following a wider reorientation of social science research on such problems, the more theoretically explicit of existing archaeological discussions (e.g. Voutsaki 1997) emphasise the need to move away from seeing value as related to a unique process such as production (prioritised by Marx), exchange (emphasised by Simmel and others), or consumption (often emphasised by anthropologists: e.g. Miller 1995) to one in which this property can potentially be transformed at any of these stages. Revaluation is in fact a very important part of an object's biography (Kopytoff 1986), sometimes seen as a subversive act and subject to strong social sanction but also recognised as a recipe for success. A range of examples are discussed herein, but archaeologists most commonly encounter the ambiguities of revaluation in the spectre of the modern antiquities market and the destructive effect that Western value

determinations and connoisseurship can have on the surviving archaeological record (e.g. Broodbank 2000: 58–65).

Classification and Transmission

A useful first analytical step in understanding this topic is to ask what encourages things to be ascribed high value regularly and in a manner which is sometimes *perceived* as intrinsic by the people who esteem them (Colin Renfrew's 'prime' value, 1986: 159ff). For example, the ability of certain things to be recycled (e.g. metals) or reproduced (e.g. certain livestock) encourages their recurrent use as wealth indices and/or exchange media. The durability of objects is another important factor, especially their ability to resist decay, heat, breakage, or wear. The direct effects that objects have on the human senses (e.g. shiny, hard, colourful, textured, melodic, sweet) is another, though there is a balance here between those sensory responses that are evolved propensities and those that are culturally learnt. Finally, the natural rarity of a material or the symbolic potential offered by its provenance (e.g. gemstones from a particular mountain) can be very significant, especially if it can be tied to the preferred cosmology of the consumer in convenient ways (Helms 1993). Similarly, we might expect groups of materials and products from the same natural landscapes to engender shared values and consistent associations, based on the fact that they will often be acquired, manufactured, and distributed along very similar paths (see Chapter 8). All of these properties encourage certain objects to be valued highly and/or more consistently than others, but the particular meanings assigned to them will nonetheless be formulated in culturally specific ways. For example, objects will be associated with particular epithets and/or adjectives, a periodicity of use (e.g. occasional or everyday), and appropriate human actors, props, or gestures. Their value may be further enhanced by conspicuous acts of added investment (e.g. labour-intensive decoration) or reflected in repeated references by other material culture (e.g. skeuomorphs).

Value is also a comparative concept, one defined between perceived social and physical classifications (Thompson 1979: 7–8). While a fundamental part of this classificatory process is the reification achieved through language (Tilley 1991), objects can also carry meanings in ways that are not analogous to language (Chippindale 1989; also Miller 1985), such as those often evoked by their choreography with the human body. Some objects resist convenient classification, but for many, a combination of style, material, and/or habitual function makes them highly recognisable members of a particular category of thing, at least for those with the relevant cultural background. The drive to categorise, and thereby to recognise, is arguably a fundamental aspect of human cognition, but in all such orderings, there is a necessary balance between too much lumping (offering insufficient capacity to distinguish) and too much splitting (leading to a scheme which is confusing and cumbersome to use).

Given that such classifications structure the way individual human actors think and act, it certainly makes sense to try to reconstruct their meaning and understand them as a kind of information system (albeit an imperfect and polysemic one). However, while undoubtedly necessary, such an approach, at best, offers interestingly thick description and, at worst, risks becoming no more than a frustrated ethnography (Shennan 2002: 9). An important complementary perspective which the archaeological record is far better placed to offer is to explore object value over larger spatial and temporal scales, including ones that individuals may not have necessarily been conscious of in the past. For the transmission of such ideas