
provocation

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The material constitution of humanness *John C. Barrett**

Abstract

This contribution responds to recent calls to establish a ‘symmetrical archaeology’ that will assign agency both to humans and to things. My case is that living and non-living things should be distinguished, and for archaeology to be particularly concerned with the ways different qualities of *humanness* have been constituted in the symbiotic relationships between *Homo sapiens* and other living and non-living things.

Keywords

symmetrical archaeology; humanness; material; agency

Introduction

Archaeologists have long characterized the conditions of the past as the operation of a complex system of relationships between different kinds of component (Childe 1951, 1–29; Clark 1957, 169 ff.; Binford 1962; Clarke 1968, 43 ff.; Renfrew 1972; Van der Leeuw and McGlade 1997). Most accounts have tended to give priority to systems comprising different categories of people (variously defined as categories of age, gender, status and activity) who used a range of technologies to exploit a spectrum of available resources and to express ideological commitments to the forces that they believed governed the cosmos and validated the obligations of political authority. The historical challenge has been to understand how such different levels of systemic integration arose and were transformed over time, processes that have normally been described in terms of ‘social evolution’. From such a perspective it would appear that, in making history, it was humans who did the making. It was people who *used* technologies, *exploited* resources and *maintained* ideologies. This is a prejudice that seems to define archaeology as the study of institutionalized patterns of human behaviour and it has led, inevitably, to prioritizing human social relations in accounts of the past.

The analytical priority claimed by the agenda of a social archaeology, namely that it was the system of relations between people that drove history, has now been called into question (Webmoor and Witmore 2008). The

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isolation of the 'social' has been described by Latour (1993) as a kind of 'purification' in which agency is assigned to the activities of humans alone instead of being recognized for what it can only ever be, the product of a hybrid network including people and 'things'. Consequently the active role of things in affording the possibility of human existence becomes obscured, if not actually denied, by the rendering of things as merely the passive recipients of human actions. Things appear to have been made, used and abandoned without ever actually 'doing' anything. The critique has now been taken to its logical conclusion with the demand that a 'symmetrical archaeology' should avail itself of an understanding of the historical role of all material conditions (Witmore 2007).

Archaeology's initial encounter with systems theory involved modelling the organization of human institutions assumed to be represented by the patterns of material residues. These institutional arrangements tended either to be defined in terms of different functional categories of human behaviour ('social', 'technological' and 'ideological' in Binford's classic definition (1962)), or as different kinds of production process that were linked by exchange, either through some kind of administrative centre (functionally equated to chiefdoms by Renfrew (1972)), or by chains of political obligation (as in the archaeological adoption of world systems theory (Friedman and Rowlands 1977)).

The more fundamental insight of systems theory, beyond the observation that various components interact, is, however, that a system's properties only emerge at the holistic level of its total systemic organization and cannot be explained by reduction to the operation of any lower level of organization within the system (Dupré 2002). Webmore and Witmore's discontent with 'social archaeology' accuses it of just such reductionism by privileging human relations as determining the functioning of the larger, hybrid system of which people were simply a part. I argue that we must certainly accept that the characteristics of any system are determined by the ways all of its components are networked to enable the processing of energy and information, either to sustain or to transform that level of organization. However, we must recognize that the emergent properties of hybrid biological and material systems operate as living ecologies and not as machines (cf. Boivin 2008, 187 ff.).

The archaeological problematic

The separation of the 'social' from the 'material' is implicit for an archaeological methodology that treats material residues as the static evidence for past dynamics and distinguishes social/cultural dynamics from taphonomic processes (Schiffer 1976). The material evidence has been used in three ways to bring into view extinct social categories of humanity situated within certain systemic contexts. The first is to signal particular social categories (e.g. by reference to 'status' items), the second is to demonstrate how the social world articulated with its environment (e.g. via the functional attributes of tools), and the third is to establish how certain social distinctions developed and were maintained (e.g. by mapping patterns of exchange and redistribution, and by identifying monuments and deposits resulting from

competitive display). Thus have emerged the various images of social systems, operating through the use of material culture, and extracting resources from various environmental conditions (e.g. Binford 2001).

All this has long seemed to be uncontentious. The separation between an active social world and passive material residue is enshrined in the concept of the archaeological record with the well-worn formula that a human social agency must have acted on, and thus moulded, the things that have survived. Archaeological materials have, as a consequence, come to be treated as the representations of a human agency's motivations (cf. Knappett 2005, 3–4).

The question of agency

Much of the debate that was prompted by the New Archaeology arose from the unresolved need to establish the motivation for the actions that are supposedly represented archaeologically. Given that we do not normally have testimony regarding such motivations, archaeology has fallen back upon various a priori assertions (cf. Bintliff 2011). Processual archaeology assumed that human motivations were self-evidently represented in their outcomes (the functionalist notion that things were made to do what they did), whilst postprocessual archaeology laid emphasis initially upon actions as expressive of a cognized order (things were the 'symbolic' representations of that cognitive order). Both processual and postprocessual archaeology have therefore founded their analyses upon a priori assumptions about the kinds of force and motivation that determine human behaviour, and it was into this debate that the concept of agency was introduced.

Agencies are mechanisms that have a material effect. One possible way we might identify an agency, therefore, is as a quality or mechanism that directs action, in the way a signpost or a manual directs a person's behaviour. This is similar to the way Gell treats 'art' objects as instigating an emotional and behavioural response in the observer (Gell 1998). However, both Gell and Robb (2004) distinguish this kind of effect as secondary to the mobilization and application of the sign itself. In other words, the text that you are currently reading is a secondary mechanism mobilized by my own agency that desires to have an effect on the way you practice your archaeology. Obviously my agency can only have an effect through this text (if indeed it does) in virtue of the way that it is distributed across my typing, the work of commentators and editors, and the medium through which you are currently reading, as well as your own disposition as a reader. However, if the status of a 'secondary' or 'extended' agency were to be accepted, then the definition of agency *sensu stricto* would seem to be that agencies do work to mobilize the mechanisms that change material conditions, and it follows that agencies have the ability to do work in virtue of their ability to direct the expenditure of energy. Consequently, analysis should be very interested in distinguishing the different mechanisms by which such energy is managed and its expenditure compensated for (if indeed it is).

Postprocessual archaeology seized upon the concept of agency to establish the case that human agency operates at a level of autonomy independent of various environmental determinates. The implication was that the work

undertaken by human agency was not secondarily orientated on behalf of some externally derived stimulus, but was internally motivated by the primacy of its own desires. Nonetheless, those desires were necessarily expressed through the strategic use of existing conditions, in the same way that to say something original requires the strategic use of an existing grammar. This last point was captured in the idea of a duality uniting an existing structure (grammar) with an agency's practice (talking) that could, over time, modify that structure. This is the cyclical renewal of the structure–agency duality then being developed in the social theory of Anthony Giddens (1979; 1981). The potential problem is that human agency becomes just that – a quality seemingly possessed by humanity in general which is mobilized contingently by the use of available structures of rules and resources (to use Giddens's terminology). Thus an essential human quality (agency) is supposedly expressed with reference to specific structural conditions (cf. Casper 1994). This perspective returns us to the mechanisms of a secondary agency where the human reach is extended, or distributed, by the use of various technologies and forms of material expression. Postprocessual archaeology therefore claimed that the fundamental quality of human agency was expressed in historically specific ways, and that these were represented by the surviving arrangement of archaeological residues (Hodder 1982).

Processual and postprocessual archaeology made radically different claims as to whether human agency was a secondary product of certain external stimuli, or primarily motivated by internally formulated desires. Both start from conflicting uniformitarian assumptions, defining humanity as the possessor of different but nonetheless essential qualities. But is the claim that humanity is reducible to some essential quality not in need of a more critical evaluation? How might such an essential 'human nature', if it were to exist, have come into being, let alone have been maintained across the millennia? There is a growing suspicion that the humanity being studied in these different ways is all too easily taken as a given: it is what most archaeologists assume it to be, without considering how it might have been constituted historically. Perhaps we need to be more radical in what we hope to achieve archaeologically, making the ongoing creation of different kinds of *humanness* the historical problem that we need to investigate, rather than use archaeology to account for what a taken-for-granted humanity once did. The need for such an investigation is prefigured in calls for an archaeology of personhood (Fowler 2004), although this call can itself all too easily be reduced to treating personhood as a kind of social identity that clothed, rather than transformed, a form of life.

Archaeologies of life

The notion that humanity is not a given, but has to be brought into being, reorientates our use of the concept of agency away from being the possession of humanity to being the systemic context within which humanness was created. This finds parallels in the desire to question the dualism that distinguishes human agency as the already existing 'social' maker of history from the inert fabric of materials upon which that agency supposedly worked. This questioning has given rise to the demand to treat 'symmetrically' the

contribution of material and biological things ('actants') to the rise of the various 'entities' that have emerged in history (Olsen 2003; 2007; Webmoor and Witmore 2008). The definition of such entities is, however, never entirely clear. John Law (1999, 3), for example, suggests that they 'take their form and acquire their attributes as a result of their relations with other entities. In this scheme of things entities have no inherent qualities'. However, if entities are entirely relational then things must exist that mobilize those relationships. This level of things must presumably possess some kind of primitive quality, for otherwise 'that would deny any form of stability of different ontological kinds' (Johannsen 2012, 326). Entities are therefore emergent possibilities, born out of the networks created when one thing is brought into relation with another and, from this perspective, possible forms of life might be expected to emerge out of the networking of biological and inorganic materials.

If entities emerge from relationships between things, then we might accept that to treat humanness as an entity substantiates the view that, rather than being a given quality, it instead emerges as a product of the intersecting and changing relationships afforded between numerous organic and inorganic conditions. For Latour, this has meant that the social can no longer be isolated as a system of purely human relationships that are extracted from a background noise of objects and an 'externalized' natural world (Latour 1993; 2005). If social entities, whether presumably expressed as forms of human identity or in terms of 'personhood', have existed then they only emerged in the work undertaken by the entangled relationships of bodies, nature and things (cf. Hodder 2012). This would certainly explain why various abstractly formulated sequences of social types have never fulfilled their promise of revealing the mechanisms that drove the transformation of one type into another. The evolutionary process did not work in abstraction; it only worked through the reproduction of actually existing (i.e. historically specific) material conditions.

The recent argument that things achieve an agency, in as much as they can make a causal contribution to the process of creating entities, has been taken to imply that the agency of things is made manifest when one thing works upon another (Olsen 2012). Malafouris (2008, 34) characterizes this as an agency that is distributed: 'Agency is a property or possession neither of humans nor of nonhumans. Agency is the relational and emergent product of material engagement'. However, this claim only renders agency as a force or quality identified as a 'product of material engagement', which neither is specific enough for our purposes, nor clarifies what, if anything, instigates such an engagement (another agency?) (Johannsen 2012, 333 ff.).

If we follow Malafouris's argument that agency is not a property of things but is afforded by the ways assemblages of things operate, then humans achieve an agency that is afforded by the various ways their bodies, materials and natural resources work with each other. Humans might thereby be regarded as developing and learning their competences as actors (their humanness) by the practical and embodied security that comes by simply getting on with growing and living amongst things. But humans also become self-reflexive; they think about their own subjectivities and act accordingly. Humanness is therefore defined by embodied actions relative to things and

by the consequent practical and discursive knowledge of knowing how to go on, which arises from experience.

Language enabled modern humans to objectify their practical awareness of knowing how to proceed (Noble and Davidson 1996), but its possession, and thus self-consciousness, do not mean that consciousness itself is restricted to humanity. The process of consciousness that is able to objectify that which is known practically may be understood with reference to the threefold system of categories presented in the work of Charles Sanders Peirce. Whilst few are likely to claim that the writings of this philosopher are easy to access (Misak 2004), and whilst Peirce's commitment to triadic classifications can appear to have verged upon the obsessive (Burch 2010), his system of categories works well for our purposes. It is important to recognize that Peirce's system is abstractly formulated as a system of logic (Hookway 1985), being heavily influenced by his familiarity with the work of Kant (Peirce 1955, 2). Peirce is not concerned with the description of different types of thing (it is not a typology), but is instead concerned with the logical development of conscious dispositions that arise from the relationships between things. His work is thus committed to a phenomenological understanding of the way the world is given to an embodied being. In this scheme Firsts are things in and of themselves, Seconds are relations of impact or the clash between things, and Thirds arise in the practices that recognize the qualities made manifest in that clash. It is therefore the direct impact of one thing upon another that facilitates a conscious entity's ability to respond to the existence of certain qualities. Thirdness is emergent in the ways that categories of quality, revealed by the hybrid relationships of organic and inorganic things, are given to consciousness and made manifest in practice. Different forms of consciousness might be distinguished in the ways that they clump together qualities that seem similar or appear to be of the same kind despite arising from different material relationships (Seconds). This hierarchical scheme therefore clearly distinguishes between consciousness as a general and emergent quality arising in all forms of life (for example, animals identify the qualities of danger, security, sustenance, sexuality, solidarity, and so forth) from assemblages of non-living, non-conscious things, such as chemical reactions (contra Knappett 2005, 12 ff.).

Life in all its forms is thus a particular level of organization within the wider assemblages of things with which it engages. Organisms are metabolic systems that make themselves, facilitating growth, cellular renewal, and the self-production of their internal order. Organisms and machines certainly both do work, but the work of the organism, unlike that of the machine, is directed towards its self-affirmation and renewal (Thompson 2007, 140–49; cf. Johannsen 2012, 328–31). It is difficult to understand why this distinction appears to be so easily missed (cf. Olsen *et al.* 2012). Maturana and Varela (1980; 1987) defined autopoiesis as the condition expressed by the simplest form of organism operating as an autocatalytic system with a semi-permeable boundary whose internal structure, workings and boundary conditions are self-produced. The boundary of an organism is necessarily semi-permeable because the organism can only exist relative to sources of energy whilst maintaining its internal organizational integrity. This means

that, while necessary, the organism's genetic inheritance is not sufficient for the ontological process of growth. The information encoded within the genome has to be utilized to build the proteins of the cell by means of the complex internal process of translation. The latter depend upon, and are guided with reference to, a number of external, environmental factors (Oyama 2000; Oyama, Griffiths and Gray 2001). Forms of life can therefore only exist, grow and develop the particular qualities that they display in their agency by being intimately engaged within the particular conditions provided by their environments. '[A]utopoiesis always has to be ecologically embedded. "Self-producing" refers to the kind of circular organization that makes the cell an individual: it does not mean that the cell makes itself apart from its environment' (Thompson 2007, 118). Thus the development of a living organism arises from an internally organized process that requires the organism to orientate itself towards the environment in ways that provide it with the necessary energy and security for its own development. It follows that *all* life is conscious by virtue of the ways in which it is practised as a subjective awareness, displaying intentionality in the phenomenological sense of being directed towards the conditions that will sustain it (Thompson 2007). As a consequence, forms of life will act in ways that sustain and enhance the niche conditions necessary for their survival (Odling-Smee, Laland and Feldman 2003); their actions in doing this work (expressive of their agency) are a form of 'sense-making' (Thompson 2007, 152 ff.). Hominin life forms are subsumed within this general characterization of life, although it has been through the evolution of their particular physical characteristics, and their inhabitation of the material debris of an increasingly enculturated world, that different kinds of humanness have become possible.

Conclusion

Contrasts are useful, if somewhat crude, ways to highlight the distinctive characteristics of different archaeological approaches. Thus we might contrast the processual and early postprocessual programmes with the agenda that is proposed here in the following way. Both the former programmes accepted that the task of archaeology was to trace and explain changes in human behaviour by reference to the material results of that behaviour. They based their analysis upon the assumption that humanity defined an invariant form of life, although they differed as to what motivated that humanity to act. The first drew on behaviourism to suggest that inputs in the form of stimuli from an external environment resulted in behavioural outputs (Leach 1973), whilst the second drew its inspiration from structuralism to claim that human actions were structured by inherent schemes of cognized classifications (Hodder 1982). The approach outlined here proposes that the task of archaeology is to understand how the various manifestations of humanness are the historical result of a particular biological form of engagement with various assemblages of organic and inorganic materials. It treats humanness as a hybrid level of organization that is historically contingent upon the evolution of an embodied hominin competence which learns how to grow and renew itself through its ongoing participation within a changing assemblage of things and in the company of others (Barrett 2012; 2013).

Human entities, therefore, emerge within particular hybridized networks of bodies, things and nature that metabolize energy to sustain life: the characteristics of ecologies. Recent demands to treat things as agents (because their very existence has causal consequences), and for a ‘symmetrical’ commitment to the analysis of how all materials contribute to the constitution of entities, are in danger of missing a crucial distinction, that between living and non-living matter (Johannsen 2012). They appear to be incapable of investigating those distinctive features of hominin biology that have contributed to the emergence of different kinds of humanity under different material and historical conditions. We may rightly question the structure–agency duality because it continues to privilege humanity as if it alone was endowed with agency. It does not follow that we should fail to recognize the self-producing process that defines life as being distinct from the physicality of other things, and then fail to acknowledge the particular biological character of hominins as enabling the constitution of different forms of humanness.

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