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Beyond the ‘Thingification’ of Worlds: New Materialisms for the Archaeologist¹

Abstract

The New Materialisms attend to the very materiality of the world, challenging the privileged position of human agents over the rest of the environment, and highlighting how western representations of the material world have perpetuated Cartesian ontologies of separation. This theoretical perspective is increasingly gaining ground within the wider social sciences and in this article, we consider its application within archaeology. We explore Witmore’s influential discussion paper: *Archaeology and the New Materialisms* (2014), specifically to problematize his focus on *things*; this we demonstrate is peripheral to the main thrust of the New Materialisms discourse, which instead is directed upon brute matter. We unravel complexities in the terminology – materiality, things, assemblages – to highlight the pitfalls implicit in adopting these terms without considering their etymological and epistemological framework. While Deleuzian assemblages have been adopted by archaeologists, we instead explore the potential of applying Barad’s agential realist approach to the archaeological record. Barad’s concept of phenomena moves beyond the notion of things as separate, bounded entities, instead emphasizing becomings of matter, and illustrates how people and other matter co-create the material (including social) world. Our aim is to demonstrate how engaging with matter enables us to better make sense of the material world and *our* place within it.

Key Words

¹ We would like to thank the following people for their helpful comments as we were writing this article. Oliver Harris provided us with much useful feedback on the New Materialisms and their application in archaeology. We have had many fruitful discussions with Luci Attala about assemblages, agential realism and intra-actions, and also with Emma-Jayne Abbots about the use of the terms assemblage and *agencement*. We are grateful to Adrian Davies for his comments on Heidegger and things. Our various undergraduate and postgraduate students have provided useful sounding boards for the application of the New Materialisms in archaeology. Above all we would like to thank Steve Thomas for reading various drafts of this paper and his insightful comments.

materiality, thing, matter(ings), assemblage, agential realism, phenomena

Introduction

This article interrogates New Materialist territory (cf. Barad 2003, 2007; Bennett 2010; Coole and Frost 2010, Delanda 2016, Fox and Alldred 2018) to explore how archaeologists might engage with some of the theoretical notions articulated by this approach. In doing so we are challenging how people have been intellectually prioritized over the rest of the environment within Enlightenment epistemologies, in binaries that separate culture from nature.

Notwithstanding, we also acknowledge the importance and value of identifying people in the archaeological record: their actions and the consequence of their actions, how they shaped and were shaped by past environments. The materiality of people is, to paraphrase Ingold, part of the ‘worlding world’ (Ingold 2017, 24; see also Attala and Steel in press). Our aim in this article is to encourage archaeologists to explicitly engage with physicality of the material world, in particular the properties and capacities of materials (cf. Conneller 2011; Boivin 2012; Drazin and Küchler 2015; Malafouris 2013; Saunders 2012); we are situating our discussion within the intellectual discourse of scholars such as Barad (2003, 2007), Bennett (2010), and Coole and Frost (2010), who have been so influential in shaping our understanding of the material world.

Revisiting ‘Archaeology and the New Materialisms’

The global North – due to the enlightenment foundation of its knowledge base – tends to imagine the world as something compromised of discrete bounded entities
(Attala in press)

New Materialisms are increasingly being employed to interpret the archaeological record (for example Marshall and Alberti 2014; Bonney 2015; Govier 2017; in press; Hamilakis 2017; Harris 2014b; 2017; Harris and Fowler 2015; Steel 2017; in press; Witmore 2014). One piece that has particularly encouraged wider debate of this approach in archaeology is Christopher Witmore’s discussion paper of 2014. Some of the responses (Barrett 2016; Ingold 2014) however, follow Witmore’s focus on things and we would argue that their critiques are in fact tangential to the core principles of the New Materialisms. In particular, we have noted a

tendency to mesh New Materialisms with an Object Orientated Ontology (OOO) (Barrett 2016, 1682), which in fact are epistemologically distinct perspectives (see Harman 2016, x; Leach 2016). Harris and Cippolla (2017, 186–7) make clear the distinction between the flat ontology of symmetrical archaeology (the notion that humans and things are equal, cf. Olsen and Witmore 2015 see, however, discussion in Fox and Alldred 2018), Harman's OOO (inspired by Heidegger and focused on objects), and the New Materialisms, in particular assemblage theory inspired by Deleuze and Guattari (1980; see also DeLanda 2016). Some of these issues we will tease out in the ensuing discussion. Witmore's article (2014) has encouraged our own reflexive engagement with the New Materialisms, in particular, the theoretical underpinnings of this approach. This gives us the opportunity to critically assess the landscape of the New Materialisms in the archaeological discourse, and to present our ontological and epistemological handle on the material world.

Post-processual archaeologists have engaged with concepts such as habitus (Shanks and Tilley 1987), structuration (Barrett 1994) and gender (Gero and Conkey 1991; Joyce 2000) in an attempt to people the past (cf. Lawton 1987; Robin 2001), aiming to replace Tringham's famous 'faceless blobs' (1991, 94, figs. 4.1–4.2) with sociable and socialized human agents. We recognize the inevitable tension between these socialized archaeologies, which foreground people, and the New Materialisms where the emphasis is on matter. Our reading of Witmore suggests that he is also aware of this tension, which he articulates as one between people and things, describing archaeology as a 'discipline of things' (2014, 204). His emphasis on things is a perspective we want to problematize in this paper, drawing upon Barad's work (2003) and in particular her critique of 'thingification'.

In the following discussion we debate the absolutism of Witmore's paper, untangling some of his terminologies, and questioning the implicit 'epistemologies of separation' (Attala in press; see also Barad's *Cartesian Cut*, 2003, 815). Instead, we aim to demonstrate the plurality (Coole and Frost 2010) and inclusivity of the New Materialisms, firmly embedding humans as matter, one of myriad co-constitutive elements in the material world. We contend that the New Materialisms potentially provides a middle ground between scientific based archaeologies and social archaeology (cf. Harris 2014b, 333), bringing together landscape, environment, physical anthropology and material culture, and thereby bridging the chasm between processual and post-processual schools of thought.

Thinking about material culture and materialities

Before we consider the premises of the New Materialisms, we first want to unpick the meanings of material culture and materiality, emphasizing the distinction between the two. Archaeological terminologies tend to equate material culture with things made by people, namely objects and artefacts (Boivin 2008, 26; Hurcombe 2007). These archaeological approaches have tended to be empirical – thick description and scientific analysis – what we might term a measurements, matrices, munsells, and mohs mindset. While this methodology still underpins archaeological understandings of the material world (for example Harris 2009, 114; Martin and Meskell 2012; Nakamura and Meskell 2009; Steel 2013, 53–55) and remains good practice, more recent engagements also acknowledge ‘cultural expressions’ and social relations (cf. Boivin 2008; Hodder 2012; Meskell 2005, 2). Anthropologically informed approaches to material culture focus on the links between people and objects (see Boivin 2008, 19), how objects are represented, given meaning and ascribed values. Material culture has been explored as being culturally constituted within diverse social worlds (cf. Appadurai 1986; Kopytoff 1986; Miller 1998; Shanks and Tilley 1987), conveying symbolic meaning and something that can be ‘read’ like a text (Tilley 1991). This discourse privileges the role of humans, presupposing that the object world is created by (and belongs to) people. Schiffer reinforces this human exceptionalism arguing that what is ‘distinctive and significant about our species [is that] human life consists of ceaseless and varied interaction among people and myriad kinds of things’ (Schiffer 1999, 2). While we do not advocate a move away from analyzing people and their actions (as evidenced in the archaeological record), we question the dominant and pervasive positioning of the human agent at the helm, imposing their will upon a passive and inert natural world.

From the mid-2000s the notion of materiality has been increasingly articulated in the archaeological literature (Boivin 2008; Conneller 2011; deMarrais, Gosden and Renfrew 2004a; Meskell 2005; Saunders 2012; Steel 2012). This reflects a move away from objects as passive static entities awaiting humans to anoint them with meaning, instead recognizing them as social (Appadurai 1986; Kopytoff 1986) and relational beings entangled (Hodder 2012) in complex human-thing networks (cf. Latour 1995; Olsen 2010) or meshworks

(Ingold 2008). Nonetheless, materiality has proven a problematic term, its meanings fluid and slippery. Ingold (2013, 27) for example draws attention to the ‘two faces of materiality’, the physical properties or thingness of things (see also deMarrais, Gosden and Renfrew 2014b, 2; Boivin 2008, 26), something addressed by Heidegger in his discussion of the properties of a jug (1971, 166, 167). Another aspect of materiality is the engagement of human agents and things (Ingold 2013, 27, also deMarrais, Gosden and Renfrew 2014b, 2) within a recursive relationship, described by Meskell as ‘a set of cultural relationships [...] [i]mbued matter and embodied objects [that] exist in relationship to the specificities of temporality, spatiality, and sociality’ (2005, 6). Boivin takes this concept further, seemingly recognizing the agency of matter (2008, 129); her definition of materiality recognizes ‘that it has dimensions, that it resists and constrains, and that it offers possibilities for the human agent (or organism)’ (Boivin 2008, 26). Archaeologists are increasingly critically engaging with the agency of materials (Conneller 2011; Govier 2017; in press Malafouris 2013; Steel 2017.), a concept which is foregrounded within the New Materialisms. Materiality, therefore, inevitably raises the spectre of object and material agency (Gell 1998; Knappett and Malafouris 2008; Chua and Elliott 2013), although traditionally the human actor tends to be perceived as the dominant partner in the relationship (Bennett 2010, 29–30; Witmore 2014, 210). The New Materialisms challenge the anthropocentric understanding of agency, instead recognizing the agency of matter (Barad 2003; 2007; 2012), thing-power (Bennett 2010, xvii, 2–6), and that agency is not simply ‘an essential characteristic of the rational subject, a deity or some vital force’ but a ‘reflexivity, creative disclosure, and transformation that emerge hazardedly within the folds and reversals of material/meaningful flesh’ (Coole 2010, 113).

Witmore’s three propositions

The New Materialisms attend to the tension between human-nonhuman agency, leveling the playing field and effectively dethroning the human from their assumed position of primacy over the rest of the material world (cf. Braidotti 2016, 19); instead it emphasizes that humans are not ‘at the ontological centre or hierarchical apex’ (Bennett 2010, 11; see also Harris 2014b, 329). Witmore (2014) explores the application of the New Materialisms to archaeology, offering archaeologists a route into this intellectual discourse. In this article he highlights three propositions, which he claims underpin this approach: ‘(1) things are assemblages; (2) things are participants; and (3) things are things’. We agree with Witmore’s

identification of propositions one and two – namely the focus on assemblages and agency – as being key to understanding the New Materialisms. The notion of things as things, however, is problematic both ontologically (Heidegger 1971; Preda 1999) as well as from a New Materialisms perspective (cf. Barad 2003; 2007). Moreover, we would argue that there is an ontological contradiction inherent in the framing of propositions one and three, which elides two very different approaches to the material world, without indicating potential pitfalls to the reader. We will return to this below. We have already touched upon the agency of matter; in the following discussion we first draw out the problems created by Witmore’s focus on things specifically and subsequently we turn to ‘things are assemblages’.

Thingification or mattering?

...archaeologists need things, but things don’t need archaeologists
(Ingold 2014, 231).

Witmore embraces the New Materialisms, identifying it as a means of freeing archaeologists from ‘the study of the human past through its material remains ...[instead redefining it] as a discipline of things’ (2014, 204). As archaeologists, we find this claim problematic and would question the value of such an aim. What would our discipline look like ‘without the Past’? Witmore categorizes the past as ‘a separate realm where lives were lived over yonder, to which we gain access through its material remains’ (2014, 204); however, we would contend that our own engagement with the New Materialisms discourse has allowed us to critically engage with matterings and thus to propose a practically and materially embedded interpretation of the past (Govier 2017, in press; Steel in press). Moreover, we would choose to emphasize the plurality of materials with which we, and our colleagues across the discipline, engage: from materials to artefacts, from microstratigraphies to broader past landscapes, even to plastic archaeology (cf. Sosna and Brunclíková 2016) and beyond! We would contend that Witmore’s emphasis on things is not in tune with the timbre of the New Materialisms and, moreover, glosses over wider engagement with past environments, ecologies, geoarchaeology and biospheres, which are equally the focus of practitioners in the field (see for example Owoc 2012; Bates et al. 2016; Bates and Pope 2016a, 2016b).

Like Ingold (2014) and Barrett (2016), the key issue where we would like to respond to Witmore's presentation of the New Materialisms and challenge his interpretation is his overriding emphasis on things; however, where we part company with both Ingold and Barrett is their insistence that the New Materialisms themselves are problematic.

Thingification, the emphasis on things – 'the turning of relations into 'things'' (Barad 2003, 812) – underpins Witmore's representation of the New Materialisms. He explicitly states that he parts company with 'other variants of the 'New Materialism' by beginning with the actual thing' (2014, 204–05). However, Witmore's focus on things perhaps presents a skewed view of the New Materialisms. For example, Barrett, in his critique, writes: 'If antiquarianism is the attention paid to ancient artefacts, then the recent expressions of the 'New Materialisms' in archaeology can seem to be little more than a new antiquarianism' (Barrett 2016, 1685). This perspective is quite alien to our reading of the New Materialisms discourse (Bennett 2010; Coole and Frost 2010). Consequently, we contest Witmore's emphasis on 'things', primarily because the New Materialisms deal with matter – *brute matter* (Barad 2010, 248, our emphasis). Moreover, Witmore does not make clear how he is using 'thing' (contra 2014, 205). Our reading of the article suggests that he is talking about diverse entities, ranging from the microscopic to the hyperobject (Morton 2013), from the natural elements to tangible artefacts and even the immaterial:

So what counts as things? Air and soil, rain and sea, wooden doors and stone orthostats, nitrogen-fixing bacteria and clovers, psycho-political commitments to Rome and Hadrian's Wall, Corinthian perfume jars and dead Etruscans, mycorrhizae and maple trees, hoplites and the Athenian assembly, minke whales and lemmings, the Hudson River and steamboats, the god Apollo and the Pythia: all are things (Witmore 2014, 206).

...nothing should be excluded because of an arbitrary divide between made and un-made objects, artifacts and ecofacts or externs, kinetic and inert, humans and non-humans (Witmore 2014, 206).

We find ourselves lost in a sea of words, wading through lists of things, which are presented throughout the article with little clarity as to their ontological or epistemological lineage. This confusing smorgasbord of seemingly unrelated entities brings to mind Foucault's

commentary on the juxtaposition of the unusual: ‘the mere act of enumeration that heaps them altogether has the power of enchantment all its own’ (1966/1989, xvii). More recent work by Witmore and Olsen (2015), however, does provide us with a clearer definition of their understanding of things:

...every being in the world can equally be seen as a differentiated thing; that is, farmers, centaurs, ruined temples, the goddess Athena, plowed furrows, earthworms and cisterns are equally individual and differentiated entities or units that cannot be broken into their parts
(Olsen and Witmore 2015, 191, italics in original).

The notion of things as bounded, separate entities is situated within symmetrical archaeology, which questions the separation between nature and culture. However, this is problematic in the remit of New Materialisms, which also reject this separation, but instead:

opens up a multiplicity and diversity that exceeds and overwhelms the dichotomies they replace [...] Multiplicity is acknowledged variously throughout new materialist thought: in DeleuzoGuattarian notions of rhizome, nomadology and becoming (Fox and Alldred 2018: 3).

Things, objects, artefacts, and ‘stuff’ (Miller 2010) in fact are problematic terms, which are used variously and sometimes interchangeably by different scholars describing the material world (Preda 1999; Malafouris and Renfrew 2010, 3–4; Knappett 2010). Heidegger (1971, 172) famously described a thing as a gathering, picked up by Ingold as ‘a coming together of materials in movement. To touch it, or to observe it, is to bring the movements of our own being into affective correspondence with those of its constituent materials’ (2013, 85). More recently, Barad (2003; 2007) questions the conceptual validity of the ‘thing’ as a basic entity; instead, drawing upon the work of Niels Bohr, she offers a relational ontology arguing that phenomena are co-produced via intra-actions (for archaeological applications of this approach see Alberti and Marshall 2014; Govier 2017, in press; Steel in press). Barad’s agential realism disputes the Cartesian cut and postulates that things as basic entities do not exist (Barad 2003, 2007; see also Govier in press;): ‘It is through specific agential intra-actions that the boundaries and properties of the ‘components’ of phenomena become

determinate and that particular embodied concepts become meaningful' (2003, 815). We will revisit how archaeologists might engage with Barad's phenomena below.

Knappett (2010) highlights how the distinction between objects and things has been teased out by various scholars (see for example Brown 2001; Ingold 2010, 3–5; Preda 1999; Schwenger 2006). There is a notion that an object is something that is viewed by a knowing (human) subject, it is externalized and objectified, whereas a thing is 'ambiguous and undefined' (Knappett 2010, 82). Knappett, however, notes that these terms in fact are interchangeable, and that there is fluidity between them, contingent upon the perspective of the viewer. We maintain that this focus on objects/things privileges the human subject and effectively perpetuates the separation between humans and the rest of the material world. Although Bennett's discussion of vital materiality begins with *thing*-power (our emphasis) – 'the curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle' (2010, 6), she uses this concept to drill down to the 'materiality of which we are composed' (2010, 12), recognizing that humans/things are a 'heterogeneous compound of wonderfully vibrant, dangerously vibrant, matter' (2010, 13).

Thus, Witmore's focus on things is tangential to the New Materialisms, where the emphasis is consistently on matter, 'its brute "thereness"' (Coole and Frost 2010, 7; see also Barad 2003, 2007, 2012; Bennett 2010; Conneller 2011) and on materials (Bennett 2010; Conneller 2010; Drazin and Küchler 2015). Even Bennett's discussion of thing-power, as noted above, is rooted in matter. Rather than things per se, the New Materialisms highlights the vibrancy and vitality of matter (Bennett 2010), challenging culturally contingent perspectives that define it as passive, inert, something to be acted upon and made meaningful (Bennett 2010; Coole and Frost 2010, 7–15; see also Olsen 2010, 84). Following Barad, we would argue that the material world is made up by flows of agency and intra-actions, 'an ongoing open process of mattering' (2003, 817).

Representation and distance

How did language and culture come to be more trustworthy than matter? (Barad

As noted above, the focus on things reflects an anthropocentric tendency to objectify and represent the world, whereas the New Materialisms, drawing upon Posthumanist writings, specifically and intentionally move away from these ‘doctrines of representation’ (Haraway 1992, 313), which serve to distance humans from the material world (Coole and Frost 2010, 2; Attala and Steel in press). Returning to Heidegger, his understanding of a thing as a gathering, explored through his example of a jug, is partly based on the Old High German etymology of the word; ‘specifically a gathering to deliberate on a matter under discussion, a contested matter’ (1971, 172); this etymology seemingly suggests the discursive practices that separate and distance. Furthermore, he discussed scientific representations and, like the later New Materialists, he noted that within these scientific representations ‘The thingness of the thing remains concealed, forgotten. The nature of the thing never comes to light, that is, it never gets a hearing’ (1971, 168); nonetheless, he is adamant that ‘[t]he jug remains a vessel whether we represent it in our minds or not’ (1971, 165). Representation continues to be a perceived as a problem by Posthumanists (Haraway 1992) and New Materialists (Barad 2003, 2007; Anderson and Harrison 2010; Coole and Frost 2010; Attala and Steel in press). Barad (2003, 804; 2007, 137) for example, critiques discursive practices, the assumption that the material world is inert, waiting to be represented by people, and is distinct and separate from these representations, questioning why peoples’ symbolic and linguistic depictions of the world are prioritized over the physicality of matter. This she suggests is born of a mindset embedded in Cartesian notions of separateness (Barad 2003, 807). She highlights the tripartite structure of representationalism, comprising the represented (the known ‘reality’), the representation (knowledge) and the, by definition separated, ‘knower’ (the ‘thinking subject’ doing the representation) (Barad 2007, 46–7). In doing so, she demonstrates how representations create an ontological gap between knowledge and the world. From a Baradian perspective therefore, ‘[n]either discursive practices nor material phenomena are ontologically or epistemologically prior... neither has privileged status in determining the other... matter and meaning are mutually articulated’ (2007, 152).

Therefore, rather than privileging humans as knowing beings who are conscious of the world, who act upon it, represent it and ascribe it meaning (Coole and Frost 2010, 2; see also Barad 2003; 2007), the New Materialisms recognizes that people are composed of and equally are

part of the substantive matter of the world; they are co-constituted matterings. Human bodies are ‘a seeping, shedding, porous affair mobilizing within an influencing matrix of materials [...] *people (are) matter*’ (Attala and Steel in press, italics in original). The material world and raw physicality of matter, therefore, goes beyond people, the things crafted by humans, and even beyond substances used to craft these (Conneller 2011; Drazin and Küchler 2015) to the ‘common materiality of all that is’ (Bennett 2010, viii) – the very atoms and particles that make up the world (cf. Barad 2003; 2007). The New Materialisms recognize these co-creative dynamics of materials and bring to the fore ‘the very physicality of material interactions’ (Attala 2017, 79), that is to say it highlights ‘how matter comes to matter’ (Barad 2003, 823) and firmly embeds humans as part of these matterings.

Things are assemblages

Returning to Witmore (2014), his first proposition explores the notion of assemblage, a concept that underpins much of New Materialist thought (Deleuze and Guattari 1980; Bennett 2010; DeLanda 2016). But, for the archaeological community this concept of assemblage needs to be unpacked because of the slipperiness of the terminology. Assemblage is embedded in the archaeological mindset, with a very specific meaning (see Conneller 2017, 183; Hamilakis and Jones 2017, 72; Lucas 2017). The basic concept taught to new practitioners of the discipline is of:

A collection of artefacts that can be considered a single analytical unit. The size of an individual assemblage varies considerably.

(Bahn 1992, 34)

Artefacts from a particular period which typically appear together. Also used to describe a collection of materials, for example animal bones from a particular site (Grant, Gorin and Fleming 2002, 308)

These archaeological understandings are categorized by Witmore as ‘normative definitions ... [of] artifacts juxtaposed in site-specific configurations within archaeology’ (2014, 207). Indeed, within cultural historical approaches to the discipline prevalent in the mid-20th century, an assemblage was used to define an archaeological culture from the objects repeatedly found together (Douglas Price and Knudson 2018, 114). Nonetheless, a more fluid

archaeological interpretation and understanding of these ‘combinations of artifacts in context’ is put forward by Douglas Price and Knudson (2018, 114) who offer multi-scalar assemblages from a region, to a site, to even an activity (see also Harris 2014a, 84 for multi-scalar approaches to communities and assemblages).

Assemblages from a New Materialisms perspective however, have a very different flavour from their archaeological counterparts. These derive from the writings of Deleuze and Guattari (1980s) and reflect a different epistemological tradition. Deleuzian assemblages comprise a heterogeneous group of entities that might include social and cultural structures as much as physical bodies, both human and non-human. ‘[A]n assemblage actively links these parts together by *establishing relations between them*’ (DeLanda 2016, 2, our italics). In Anglophone epistemologies our grasp of the notion of assemblage developed by Deleuze is hindered by our understanding of his original French term – *agencement* (DeLanda 2016, 1), which means organization, ordering or arrangement (cf. Collins Robert French Dictionary). According to DeLanda this term encapsulates not only a collection of entities, but equally, and significantly, the process of these things coming together; thus, ‘assemblages emerge from the interactions between their parts’ (DeLanda 2016, 21). There is inevitably flux and flow in an assemblage, to quote Bennett, an ‘assemblage is always open ended’ (2010, 24) and in a constant state of becoming (see also Harris 2014a, 90). Our own research suggests that archaeologists should consider moving beyond the empirical physicality of a material archaeological assemblage (as outlined above) to think how these might be reframed to incorporate other human-nonhuman and material-immaterial confederacies (see for example Hamilakis 2017). Archaeologists therefore might engage with a ‘doing and an effecting by a human-nonhuman assemblage’ (Bennett 2010, 28), at the same time understanding that the human agent should not necessarily be recognized as ‘special’, that human agency should not be prioritized (Bennett 2010, 121).

We would agree with Witmore that the New Materialisms concept of an assemblage is something that the archaeologist can engage with, and indeed many are already doing so (most recently Harris 2014b; Crellin 2017; Fowler 2017; Hamilakis 2017; Harris 2017; Jones 2017). However, there is a tension between his propositions one and three, ‘things are assemblages’ and ‘things are a things’. We would also contend that ‘things are assemblages’

is ontologically problematic, collapsing as it does ‘differentiated things’ (cf. Olsen and Witmore 2015, 191) as entities and collections of entities. We acknowledge that is possible to consider a single artefact as an assemblage; that is to say as flows (or entanglements) of matter coming together, as has previously been articulated by Harris (2014b). Harris explores the flow of relations occurring on a single pot (Harris 2014b, 331–2) and specifically uses Deleuze and Guattari’s term ‘assemblage’ rather than Heidegger’s ‘gathering’ (2014b, 2) to describe this becoming. The relevance of the assemblage in this example is situated in the fact that it merged and emerged in a particular point in time together; moreover, this is still unfolding when the archaeologist excavates the pot and in doing so becomes part of the assemblage (Harris 2014b, 334). For Harris there is always movement, always ‘becoming’ (2014b), and in this respect he views the assemblage as being distinct from Latour’s more static ANT (Harris 2014b, 332; contra Witmore 2014, 208–10).

There does however seem to be a blurring between the notions of a gathering (collection) and an open-ended assemblage. We don’t take issue with either approach per se, if they are applied within a consistent ontological framework, but we do take issue with the elision between these concepts, coming as they do from epistemologically distinct stables. As Leach (2016, 346) notes:

It is the difference between Heidegger’s decidedly static notion of ‘Being’ – or indeed the ‘being of Being’ – and Deleuze and Guattari’s more fluid, dynamic concept of ‘becoming’.

Equally, Witmore’s third proposition is etymologically problematic. Witmore notes the derivation of the word thing from the Old German word *ding* and that it ‘denotes gathering’ (Witmore 2014, 206, see also Heidegger 1971, 172), which he explicitly equates with ‘assemblage’. In doing so, Witmore confuses the very different linguistic concepts of the German *ding* (a gathering or assembly), the French *agencement* (an arrangement or organization) (Abbotts 2017, 25–6; Anderson et al. 2012, n.1; Ingold 2017, 13; Nail 2017, 22; Phillips 2006), and the English word *assemblage*. Phillips (2006) suggests a way of cutting this terminological Gordian Knot by returning to the original French term *agencement* (see for example Van Dyke 2018, who uses *agencement* over *assemblage* in her discussion of

pilgrimage in New Mexico). Although this may be preferable because of the potential archaeological confusion (see above), since assemblage has gained traction in the archaeological discourse (for example Bahrani 2001, 117–18; Conneller 2017; Lucas 2017; Hamilakis 2017; Hamilakis and Jones 2017; Harris 2014a; 2017), we will continue with the term ‘assemblage’ to denote relationality between entities, following DeLanda (2016), or as described by Bennett, ‘Assemblages are ad hoc groupings of diverse elements, of vibrant materials of all sorts... living, throbbing confederations’ (2010, 23).

New Materialisms for the archaeologist

Deleuzian assemblage theory therefore is increasingly influential in archaeological interpretation (e.g. Hamilakis and Jones 2017; Harris 2014a, 2014b). Here, however, we would like to propose an alternative approach influenced by Barad’s relational ontology which considers things as phenomena; this approach has already had some impact in archaeology (Marshall and Alberti 2014; Brittain 2013; Govier 2017, in press; Steel in press). Here we want to further explore the potential application of agential realism and phenomena to archaeological materials. According to Barad, ‘[i]n an agential realist account, matter does not refer to a fixed substance; rather, matter is substance in its intra-active becoming-not a thing but a doing, a congealing of agency’ (2007: 336). Rather than looking at relationships between fixed, static, bounded entities, she encourages us to consider the continuous materialization and ongoing becomings of intra-acting matter, which intermingle to co-produce the material world.

We will explore Barad’s agential realism through two specific examples from the Neolithic in the Near East. Previously, Govier (2017) has examined the interesting combinations of materials at the Neolithic site of Çatalhöyük in central Anatolia using an agential realist approach. At this site, the excavators often find materials in the process of materialization; for example, there is a particular relationship between animal bone tools and pigment, frequently associated with burials within the North Area 4040 (Patton and Hager 2014: 242; Çamurcuoğlu 2015, 37, 42, 152; Govier 2017), and it is not unusual to find the bone tool embedded in a lump of pigment. Other materials informing the emergence of these phenomena include shells, obsidian, and on one occasion a copper bead. We would

emphasize that these are the surviving material vestiges of intra-actions, and we would highlight other perishable agents within the entanglement that are no longer visible to the archaeologist, for example the humans who engaged with these materials to co-produce bone tools, pigments, and beads.

Our second example is the manipulation of human physical remains in the Neolithic Near East, the so-called skull cults of the PPNB in which human skulls were ‘refleshed’ with lime plaster and given cowrie shell eyes (cf. Croucher 2012, 93–117). These practices, in which diverse materials co-mingle, might be viewed as phenomena. Thinking about these co-minglings as the *intra-action* of:

[l]iving flesh and skin (namely the hands of the people performing the ritual), the bony remains of the dead (in particular the skulls)..., lime mortar applied to Neolithic skulls, and cowrie shells embedded in the eye sockets
(Steel in press)

encourages us to reconsider relationships between matter; this perspective illustrates how the co-mingling of matter (living flesh, dead bones, plaster, clay and shell) came together in fluid material entanglements, which collectively co-produced the ancestors, rather than as ‘independent objects with inherent boundaries and properties’ (Barad 2003, 815). In both our examples, we contend that the examination of such combinations of materials as phenomena holds archaeological value, as it allows archaeologists to reconsider the mobilizations of matter as becomings, as processes that carry greater meaning than the sum of their parts.

Concluding remarks

In this article we have explored the intellectual territory of the New Materialisms and its potential uses for the archaeologist. We would emphasize the importance of this discussion, as the ‘turn-to-matter’ is increasingly gaining ground in the wider social sciences (cf. Fox and Alldred 2018) and influencing the ways in which people think about the world. This intellectual approach calls into question human exceptionalism born from Cartesian

ontologies of separation and as a corollary the emphasis placed on how we represent the world. Instead, the New Materialisms embed humans, *as matter*, within the wider material environment.

One of our aims has been to query Witmore's individual slant on the New Materialisms discourse; in particular we dispute his overemphasis on *things*. Witmore explores 'things as things' without first outlining and clearly defining what he means by this term; this is potentially confusing and our own reading of the literature surrounding things, entities, objects, stuff and phenomena suggests that these words need to be rigorously and consistently supported both ontologically and epistemologically. Moreover, we would stress that things are not the cornerstone of the New Materialisms. These instead attend to the brute materiality of matter, rather than the more problematic and anthropocentric representation of things. The New Materialisms thus encourage us to move from thingification to the more fluid concept of *matterings*.

One area highlighted by Witmore that has been eagerly adopted by archaeologists is the Deleuzian assemblage, as developed by Bennett (2010) and DeLanda (2016). While we agree that this approach has great value for the archaeologist, we would encourage careful consideration of the terminology. This should not be thought of simply as a 'gathering' or *collection* of entities; it is a dynamic, fluid and open-ended becoming of matter. Assemblage theory certainly allows the archaeologist to think about relationships between human and non-human entities; however, we would like to draw attention to an alternative approach that we have found inspiring, which likewise engages with entanglements of matter: Barad's agential realism. Rather than thinking of the world as being made up of bounded entities (things!), we have sought to illustrate the usefulness of thinking about the materialization of the archaeological record as things-in-phenomena, which we argue allows us to move beyond the 'Cartesian habit of mind' (Barad 2003, 807) implicit in the traditional archaeological discourse.

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