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Transforming Archaeology, Transforming Materiality

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Abstract

The archaeological contribution to materiality has to date been less widely appreciated by practitioners outside the subdiscipline. This chapter argues that this is in part due to the identification of archaeological materiality with things, objects, or material culture, deriving from the twentieth-century history of Americanist archaeology in particular. While archaeologists have made important contributions to debates about the agency of objects, object biographies, and critiques of object/subject dichotomies, there are specific perspectives that archaeology could contribute that derive from the nature of archaeological sites as places consisting of material traces. This article examines in depth the concept of *trace* as it is used in broader social theory, and as it is instantiated in archaeological materialities. It is argued that for materialities of everyday life, in particular, traces have been the most effective kinds of materialities explored by archaeologists.

Keywords: Materiality, trace, temporality, history, practice

A thing, an object, an artifact, a piece of material culture; for all that we archaeologists specialize in finding ways to understand the referents of terms like these, we still, I would argue, are groping for ways to communicate how we know, what we know, and what we would like to know about the domain these belong to, which has come to be called *materiality*. Contributors to this volume move from materiality to materials, to technologies, and to things (whether artifacts or fragments), and each of these trajectories leads to a somewhat different set of debates about

materiality. In this chapter, I sketch out what I hope is a useful way of thinking about this terrain, moving away from the archaeological fascination with things to understanding materiality as the embodied, experiential, and dynamic medium of practice.

Points of Reference

Interest in materiality extends across a range of humanities and social science fields (Alder 2007; Bennett 2004; Gieryn 2002; Knappett 2005; Miller 2005; Myers 2001).

Archaeologists are in a unique position to contribute to these discussions, due to our emphasis on long-term histories and the reproduction of things over time. Yet to engage productively with scholars in other disciplines, I argue that we need to rethink how we characterize our own procedures and present the way we engage with materiality quite differently. We have made significant contributions to broader understandings of things as such, especially through explorations of the biographies and effectiveness (or agency) of non-humans (Gosden 2005; Gosden and Marshall 1999; Hoskins 1998; Knappett 2005; Kopytoff 1986). Yet there remains a less widely understood, distinctive contribution we make due to our understanding of places in the world themselves as materialities.

We can begin by proposing that there is a unique archaeological contribution in our understanding of archaeological sites as composed of material traces at multiple scales of temporal granularity (Joyce 2006, 2008a). Some parts of any archaeological site represent episodes as short as the few minutes required for someone to sweep out a house, or as long as the time involved in rebuilding that same house after it has been flooded or decayed. Other parts of

the same archaeological site may be the products of continued but sporadic human action, such as the production of things for use in a short-term festival held every year, and the disposal of those same things after the annual event is over. Others may stem from repeated sequences of action over periods ranging up to generations by individual actors who start as apprentices in crafts and gradually develop to mastery, producing works that are historically connected but may change subtly with each repetition or be subject to dramatic innovation. Talking historically about sites as evidence of ongoing human action from the level of the everyday to the sporadic would allow us to better connect current theories already well developed in other branches of the social sciences, such as object biographies, to the understanding of the accumulation of sediments and discarded materials that make up the bulk of sites of human dwelling.

One of the things that stands in the way of our articulating such a contribution to understanding materiality, I would suggest, is a history of dealing with things conceptualized as *material culture*. Archaeology fit within Americanist anthropology as the subdiscipline that reconstructed “culture history” through excavation of material culture. This obliged American archaeologists of the first half of the twentieth century to develop such ideas as the “direct historic approach” to account for how the things recovered in archaeological excavations could be connected to the living cultures being reconstructed by ethnographers (Willey and Phillips 1958; Wylie 2002). This required an emphasis on shared characteristics and less interest in human action, intentionality, or decision-making.

Material culture studies in the 1930s and 1940s, many employing older museum collections as the basis for interviews with members of the communities from which they had been collected, did document the roles of individual preferences, learning, and a variety of more particularistic features on the forms of ethnographic material culture (Schevill 1992). At the

same time, within archaeology, fierce debates raged about whether similarities in form used to group things recovered in excavations had unequivocal causes (Ford 1954; Spaulding 1953, 1954). Categories of material culture were understood as reflecting such things as group identification, “norms,” or “culture” in general, of which “material culture” was an extension or externalization. This tension between the ways being part of a group shaped the material world, and what we would today recognize as intentionality and agency, continues to block some of our potential progress today.

The “New Archaeology” of the 1960s and 1970s began with a bold claim that nothing in human life was outside the scope of a “processual” archaeology (Binford 1962). In practice, the focus rapidly narrowed. In the 1980s and into the 1990s a number of critical archaeologies formed in reaction to what was perceived as environmental determinism and reductionism in processual archaeology. While actually quite varied, these critical archaeologies, today often grouped together as “post-processual,” shared concerns with subjectivity, agency, and relations of power (Preucel 1995).

The concept of *material culture* underwent transformations along with this history. Once understood as reflecting a fundamentally ideational “culture,” a means by which people could express pre-existing identities more or less consciously, things became more active, “constituting,” “materializing,” “embodying,” or otherwise causing specific forms of social relations to take shape. Today, similar archaeological approaches to material culture, now understood as *materiality*, are firmly rooted in a variety of (sometimes incompatible) social theories: the practice theories of Pierre Bourdieu or Michel de Certeau; the structuration theory of Anthony Giddens (Hendon 2000, 2010; Pauketat 2001; Pauketat and Alt 2005; Robin 2002); and even Bruno Latour’s Actor-Network-Theory (Martin 2005; Olsen 2007; Shanks 2007;

Witmore 2007) all have developed substantial followings within archaeology globally and in the United States specifically. For some archaeologists, materiality has already been left behind, in pursuit of the insights of the cross-disciplinary debates called new materialisms (Bennett 2004, 2010; Coole and Frost 2010; Dolphijn and van der Tuin 2012; see Alberti et al. 2011; Alberti et al. 2013; Watts 2013).

Nonetheless, many contemporary archaeological studies rooted in social theory have had difficulty transforming approaches developed to understand modernity or shallow-rooted ethnographic events into approaches to longer histories of the reproduction of societies over time, whose traces are the stratified deposits that archaeologists excavate. I include here my own work in the 1990s and 2000s on subjectivity, embodiment, and the culturally productive nature of things such as pots, ceramic figurines, jewelry, buildings (both houses and monumental platforms), and landscapes (Joyce 2000, 2003a, 2003b, 2007a, 2007b, 2008b). These works were guided by an interest in everyday routinized practices as socially productive, in embodied performance as the incorporation of routinized practices, and in the reproduction of practices as a product of individual life-long learning and remembering, small-scale familial teaching, and larger-scale community commemoration. These different scales of action produce archaeological deposits that encompass multiple degrees of temporal granularity, from the relatively fine grain of events, to the relatively coarse grain of major historical conjunctures. This work has led me from temporality understood as units of time to overlapping scales (Joyce 2000, 2003a); from human-object relationships to assemblages (Joyce and Pollard 2010); and from materiality to the trace. In this chapter my focus is primarily on the last of these three: the trace.

Clearing Away Some Beginning Assumptions

I want to begin with an expedient definition of archaeology embedded in a conference statement I received a few years ago. This stated that archaeology is “dedicated to the ‘study of old things’ by contemporary people.” Now, as it happens, a few weeks earlier in Bristol I had heard Tim Ingold question this very kind of construction of temporality with respect to phenomena. Ingold’s claim was that it makes no sense to ask the question, “how old is [something]?” That would mean that to say archaeology is dedicated to the study of old things would also make no sense. And of course, literally, archaeologists do not (anymore) discriminate against things on the basis of their relative age. For a very long time, archaeologists doing actualistic studies, whether formally framed as such or not, have worked at understanding contemporary things, new things, even things that are emergent or, especially, were emergent at the times we want to understand. There is, consequently, a question of temporality that is fundamental to archaeology—but it isn’t the one we might infer from thinking about what we do as concerning “old things.”

Also included in the same conference statement that I received in 2009 was the claim that “archaeologists tackle [a] fundamental relationship between people and things.” Do we? I may be one of the more thing-oriented archaeologists I know, fretting over and over about specific material forms and even specific instances of material forms, and I certainly am a completely social archaeologist, interested ultimately in understanding people, not just the materiality of the phenomena about which I fret. But the concept of tackling some “fundamental relationship” between people and things started me worrying, yet again, about what qualifies as a thing, and how would we distinguish things and people so as to talk about their “relationship?”

One category of material forms that I have obsessed about are the fired clay, small-scale, three dimensional, hand-modeled, iconic and indexical things made in such a way as to resemble the human body between 1100 B.C. and C.E. 200 in Caribbean Honduras (Joyce 2003b, 2007b, 2008b). I have pursued the ways in which these things, as we receive them—almost always broken, deposited in ways that suggest curation and structured deposition of their parts, not just the wholes—relate to the people whose hands surely did shape, finish, fire, use, break, and dispose of them. I have noted that the fired clay bodies are made in ways that echo or repeat or simply instantiate the layering of thin skins over denser internal matter, around a schematic core. I have remarked on the points of connection and disjunction of the fired clay forms with living and more concretely dead bodies created by the provision on the imperishable clay forms of markings resembling the body ornaments recovered in human burials, or more commonly in trash. The connectivity of the fired clay things and the flesh things extends, I have argued, to the use of some of the ceramic forms as suspended ornaments attached to human bodies, and possibly anchoring immaterial portions of the human being that we often badly translate into English as spirits, souls, or “animal companions.”

I am hard pressed to think about representing this complex web of connections between living human bodies, dead human bodies, and fired clay bodies as relationships *between* people and things. The tropes I have used instead draw on post-human terms like N. Katherine Hayles’ *prosthetics* (Hayles 1999), or the perhaps more familiar if more opaque to most ordinary people concept of *distributed personhood* developed within anthropology (Strathern 1988).

If we take absolutely seriously what ethnographer John Monaghan (1998) tells us about the animal spirit companions that are a repeated presence in ethnographies from Mexico and Central America, then the ceramic bodies and the flesh bodies that I study must be seen as co-

essential with a single shared spirit, and we cannot give priority to the flesh body simply because it is the one we feel is most like us today. For me, this is underlined as well by the fact that enduring parts of the once unified human body circulated post-mortem as material for transformation into, among other phenomena, body ornaments, just as material about to be incorporated in the living human body circulated through, among other phenomena, hollow serving vessels at times explicitly figured with iconic imagery of human bodies.

So I have come to think about the question not as the relationship *between* people and things, but rather, the framing of connections between phenomena with various kinds of material extensions, in which some may persist over long periods relatively unchanged, while others are subject to shorter temporalities of material cycling. In that framing process—which is what I take archaeologists as being very, very good at through more than a century of practice—we are at a historic juncture when language is literally betraying us. When I talk about objects, I implicitly introduce subjects; when I talk about things, I introduce a particular understanding of what counts as a “thing” that tends toward a materialism that is truly vulgar, as it automatically assumes a universal human scale of value in which solidity and long-term stability (imperishability, if you like) is what matters more than that which is fleeting, consumed in a moment, or rotting over a short period of time.

We have no warrant to simplify our lives as archaeologists by assuming that the things that endure the passage of time to persist as phenomena for our analysis automatically count more than the things that did not last. Wanting things to last is a specific cultural position, one in fact the contemporary human species seems to be abandoning as we wish all the trash we produce would just somehow go away—perhaps leaving in its wake recaptured energy to be reused in some version of a frictionless perpetual motion machine.

Computers and digital media should give us pause, and one of the divides we need to bridge is the one between us and the people in Information Sciences or allied fields who are way ahead of us in thinking about the paradox of having immaterial things that exist everywhere in general and nowhere in particular and that are nonetheless amply evident in the economies that grow up simply to reproduce, shape, and innovate digital “things.” You may say this is unfair, since archaeology after all is about “old things.” I specifically rejected that formulation above, but in computer generations, digital media are now very old indeed. Whose time scale should we use: the deep time of Paleolithic archaeology where nothing changes over thousands of years; the centuries-long phases of “prehistory”; the individual years of historical archaeology? Why not use the temporality of Moore’s law, in which 18 months is a generation (e.g., Greene 2011)?

I would argue that the implications of digital media are not all that new. The ramifications of cotton textile production in pre-Hispanic Mexico and Central America provide a way to think about this. As a form of “soft wealth,” cotton cloth is an excellent example of a materiality in which persistence was not actually the key thing. Indexing vast amounts of human labor—especially, although not always exclusively, women’s labor—cloth was constantly produced and constantly consumed. It was displayed, offered as tribute and religious donation, and used in daily life as much as in stylized moments of social practice.

The vast amounts of cloth that must have been produced over 3000 years in the region, today are represented archaeologically by a few handfuls of scraps preserved in unusual environments in caves and wet, oxygen-poor environments. Equally, they are indexed by vast agricultural fields that must have existed, only a few of which have been traced by archaeologists, where cotton plants grew to provide fiber. They are materially evident in secondary industries that existed simply to provide tools for spinning and weaving, those made

of fired clay and bone surviving, while others we suspect were made of wood normally are not found. And they are at least potentially materially present in the alterations of human bone that testify to muscular patterns worked by now vanished flesh. The routes I am tracing do not constitute a “relationship” between people and things—they are something for which I do not quite have words, an integrated circuit of more or less material phenomena linked in causal chains which do have direction, and thus temporality, but—as Ingold suggested—may not easily be given precise ages.

The question then becomes: how do we imagine *the materiality of everyday life*? There is no doubt that the linking of everyday activity to social structuration gives greater weight to the *things* that are the most abundant part of archaeological assemblages—the built environment and the objects and materials through which people address their pragmatic needs *are* how human beings learn to navigate the world, how we learn what a world is and what matters in it. Even the tombs and temples of kings are part of everydayness.

In talking about materiality, we need to escape either/ors, like that of James Scott’s once-useful but long-contested contrast of hidden and public transcripts, and question the utility for our specific practices of terms like the somewhat unfortunate word “transcript” (with its suggestion of a singular account that would be universally accepted). This is where materiality really comes into its own. Archaeologists never solely depend on the narrativization of experience. Instead, we deal with materiality, including the materialities through which narratives are conveyed. We think in terms of how widely knowledgeability might have been shared, under particular circumstances, and how difference might be inherent in engagement with materialities. To do so we need to disentangle studies of materiality as things, as materials,

and as technologies, in order to re-entangle the social relations that form around mobilizing materials in social life.

I begin by arguing that materialities are an accumulation of *traces of actions*. In this volume, Anna Boozer draws on historian Carlo Ginzburg's notion of *trace*. In his formulation of trace, Ginzburg discriminates between more discursive evidence of identification and less conscious, and therefore potentially more telling, traces. I endorse thinking about material traces, while cautioning against dichotomies introduced by reliance on documentary historical theory, with its imperative insistence on an absolute difference between intentionality and unintended traces. If we know anything about everyday action, it is that it has both intended and unintended effects, simultaneously. A wider range of discussions of material traces exist that we can draw on to help us in archaeology think of materiality.

Traces of the Human Presence

I have used the word *trace* for more than a decade as an alternative to the (for me) problematic “data” or “evidence” in discussions of the archaeological process. “Data” for me is best understood as a record made, of observations taken under some theory, which means we have already moved away from the world of phenomena that we engage. “Evidence” adequately registers the fact that we enlist things in specific arguments, but has the tendency to make it seem like the phenomena speak for themselves, replacing things in the world with terms in arguments.

Like other archaeologists inspired by aspects of practice theory, I have seen one of our greatest challenges as moving from what is registered in the ground to an account of the actors and actions that produced the marks we recognize. I have argued that if we

understand archaeology as founded on the idea that we can talk about the lives people led in the past through *traces* of past action perceptible in our present, our attention should be directed to the ways archaeologists rematerialize traces of practices in the past, traces of materialities that in their time themselves materialized practice. [Joyce 2012:121]

So I have found myself using “trace,” even undefined, to capture a sense of the simultaneous distance and ineradicable linkage of material mark and the absent phenomenon it registers.

Most broadly, I argue for treating every materially perceptible difference as a potential trace, saying that “archaeological sites actually provide us with abundant *material* traces of the process of creating social relations” (Joyce 2007a:54; emphasis original). This broad view of what might be called traces is closely related conceptually to work by my colleague Ruth Tringham (2013) on “contact traces.” She describes the “main premise of contact trace studies” as “that any contact between two materials will leave traces...that can be identified by observation with or beyond the naked eye” (Tringham 2013:180), a premise she underlines is shared by archaeological and criminal investigation—a link I will return to below.

More restrictively, I have proposed that there is a tension in much of archaeology between those things understood to be significant due to external hierarchies of value (the monumental) and traces, which in this contrast I gloss as “archaeological materiality that is more subtle and contextual,”

the stuff of the fleeting everyday world of repeated actions. Traces are often all that remain of living sites of the majority of people. Traces attest to placement of work spaces

and thus directly to the labor through which individual actors produced the things that they needed, things that sometimes persisted to be taken up today as evidence for archaeological interpretation. Products of everyday labor rarely survive as complete and unaltered objects... Rather, products of everyday life survive as discarded material that ceased to have its original purpose and was transformed into refuse. The sense of unexpected survival against the odds that such traces embody stands in sharp contrast to interpretations of monuments as things *intended* to endure intact and without significant decay, conveying set meanings over time. [Joyce 2006:15]

To take things as traces in this contrasting sense is to adopt a point of view. It inverts the perspective Claire Lyons (2002:131) identifies, in which “sites ... are essentially monuments—monuments that go down into the earth rather than rise up from it.” The sensibility this more restricted use of trace encapsulates, peculiar to archaeologists, is one in which traces of past human actions that we document as we disassemble sites have a significance equal to, or more important than, the meaning assumed to reside in conventional monumentality (Joyce 2006).

Considering traces in this way can lead to consideration of intentionality and meaning. As I wrote elsewhere, when we treat phenomena as traces of practices

recording and analysis are transformed from a description of products of unexamined action to sequences of action that can be recognized as traditional or innovative, intentional or unreflective. This is a shift from a simple referential model of archaeological language to a more complex semiotic one. [Joyce and Lopiparo 2005:369]

“Referential” here is aligned with what John Barrett (1994:87–90) calls “representational” approaches, in which traces are “simple residues of events,” “mere traces of a past in the past” (Joyce 2001:12).

Trace, for me, thus captures the sense that what we are interested in is more than the thing itself, while reminding us that the thing itself is *part* of what interests us. An emphasis on “materials as traces” leads us to attend as much to the rare and particular as to the typological and uniform. I have suggested that in archaeology, “the trace we recognize is a sign of history, not a thing recaptured from a past lived experience and revived in our present circumstances” (Joyce 2012). Traces bind different temporalities together. Traces are, in this sense, active movements. Thinking about the kinds of assemblages that form landscapes, I wrote that we need to take seriously Bruno Latour’s (2005:129) advocacy of “descriptions that ‘trace a set of relations’ as a network” (Joyce 2008a:34).

Trace thus serves for me as a term that embodies a variety of tensions or contrasts and preserves a sense of dynamic connection and implies a history. These senses of what a trace does, of course, have rich echoes in social and historical theory that provide precedents for rethinking materiality as traces.

Precedents

What is a trace in theory? We can start within anthropology, with the signally powerful statement by Tim Ingold, in his *Lines: A Brief History*, where he defines his notion of what a trace is: “any enduring mark left in or on a solid surface by a continuous movement” (Ingold 2007:43). Here we have the clear idea that the legible mark is the endpoint of a gesture, a history.

As one of two kinds of lines that Ingold discusses, the trace contrasts with the thread, “a filament of some kind, which may be entangled with other threads or suspended between points in three-dimensional space” (Ingold 2007:41). Threads and traces can be transformed one into the other: “It is through the transformation of threads into traces ... that surfaces are brought into being. And conversely, it is through the transformation of traces into threads that surfaces are dissolved” (Ingold 2007:52).

In Chapter 3 of *Lines*, “Up, Across, and Along,” Ingold expands at length on the way a line—“intrinsically dynamic and temporal”—can be turned into nothing more than a set of dots, missing the *trace* of the original gesture:

Although the dots are located on the path of the original gesture they are not connected by its trace, since what is left of the trace and the movement that gave rise to it is wound up in the dots. Each appears as an isolated and compact moment, broken off from those preceding and following. [Ingold 2007:74]

We might take this as the condition we are in, of coming in the aftermath of action, recognizing it solely in its unconnected residues. Ingold demonstrates how we can join the dots into a new assembly, made of segments that he calls “point-to-point connectors” (Ingold 2007:75). The contrast he recognizes, between what he calls *the walk* and *the assembly*, is a fragmentation of what originated as a continuous gesture, the walk the phenomenon that we (archaeologists) engage with through assembly of its trace.

One of Ingold’s touchstones in his discussion of the fragmentation of the trace is Michel de Certeau, my next precedent for thinking about the trace. Ingold cites de Certeau’s (1984:120-

121) discussion of medieval maps and their replacement by discontinuous spatial representations. He identifies the resulting map as the disconnected dots of his general model: “In mapping as in travel, *the trail left as the trace of a gesture* is converted into the equivalent of a dotted line” (Ingold 2007:48). Continuing his discussion, Ingold contests de Certeau’s (1984:134) description of writing as “a walk,” arguing that a written text is “not a movement along a path but an immobile chain of connectors” (Ingold 2007:52).

The equation drawn between Ingold’s *trace* and de Certeau’s *walk* is productively pursued by other scholars. Hobbs (2009), in a study of specific movement practices, offers some useful ways to think about walking and traces in the work of de Certeau. He writes that “De Certeau’s trace is inscribed through the act of walking,” where walking is understood as a practice through which a person “transforms each spatial signifier into something else,” so that the “body traces meaning across the urban landscape through movement through, upon, over, around, and into space” (see also Morris 2004). Hobbs recalls de Certeau’s central distinction of place (*lieu*) and space (*espace*) where space is specified “by the actions of historical *subjects* (a movement always seems to condition the production of a space and to associate it with a history).”

Valentina Napolitano draws on de Certeau to a similar end, but in place of the vocabulary of the trace uses a broader gamut of related terms. Citing de Certeau (1984:105), she suggests we consider a “path of remainders and returns”: walking in the city becomes a space where the histories of people are “put in motion by the remaining relics of meaning, and sometimes by their waste products, the inverted reminders of great ambitions” (Napolitano 2007:80). It is in the same sense that I called for an archaeology of the trace in opposition to the archaeology of the monumental (Joyce 2006).

Napolitano's consideration of de Certeau points to what we might call a methodology, or as she says, an *approach*, based on "two ways of approaching reality":

On the one hand, it identifies a mode of *seeing* that collects, classifies objects and events and makes them the hosts and the objectives of human reflections—in short an idea of understanding the world through a process of accumulation of knowledge. On the other hand, through a process of internal mirroring a mode of *gazing* emerges. The intuition is the concentrated and distinct act of the mind that transforms all objects in possible mirrors—alias a transformation that is at work in the picture that animates it, but that cannot be fully textualised, nonetheless being present as "the inter-textual form of a *forward*: outside the text, neither conclusion nor proof." [Napolitano 2007:83; citing de Certeau 1987:8]

This "mirroring animates the world in its encompassing sense: as an encounter of a tangible reality and the real—that which cannot be grasped by analytical experience and exists in the residue of analytical and textual articulations" (Napolitano 2007:83)—yet another way to conceptualize a trace.

There is, as Napolitano (2007) says, a connection here to Lacanian concepts, which she has elsewhere noted emerges when de Certeau "engages narratives and histories through the presence of loss" (Napolitano and Pratten 2007:2). "The presence of loss" would be another way to think about the relationship between some thing in the world that we archaeologists treat as the presencing of some other thing that is no longer there.

John Berger articulates a related sense of a trace as a discontinuity replacing what once was continuous experience in his discussion of photos as

relics of the past, traces of what has happened. If the living take that past upon themselves, if the past becomes an integral part of the process of people making their own history, then all photographs would re-acquire a living context, they would continue to exist in time, instead of being arrested moments. [Berger 1980:61]

The photograph as an *inert* trace, like Ingold's series of unconnected dots, contrasts here with a potential assemblage connecting the photo as trace with its temporality, its history. Berger's account of photographs of course recalls Walter Benjamin's tension between the photograph as a work of mechanical reproduction and the "aura" attributed primarily, but not exclusively, to the works of art photography replaces (Duttlinger 2008).

For Benjamin, the trace is intimately connected to aura, which Carlo Salzoni writes comes from the unique existence of an object 'that bears the mark of the history to which the work has been subject' ...aura is thus the result of the transmission of traces as an instance of tradition. Benjamin, however, explicitly counterposes the two. In an entry to *The Arcades Project* he writes: 'Trace and aura. The trace is appearance of a nearness, however far removed the thing that left it behind may be. The aura is the appearance of a distance, however close the thing that calls it forth. In the trace, we gain possession of the thing; in the aura, it takes possession of us.' *The problem revolves around the concept of*

a tradition, its conservation, cancellation, or rewriting, and our relation with it. [Salzoni 2007:181; emphasis added].

Salzoni (2007:177) quotes Benjamin: “To dwell means to leave traces,” linking this phrase (a commentary on modern consumption) to his concept of the work of the detective. “Personal traces thus become incriminating clues, dangerous evidence in the hands of the detective-as-spy” (Salzoni 2007:180).

Salzoni continues:

The detective, whose job it is to follow traces, becomes in this context a possible instance for reconstructing the condition of production from the collection of evidence or traces of social relations in commodities. *Benjamin’s detective becomes thus an archaeologist.*

[Salzoni 2007:182; emphasis added]

Consequences

A gesture, a history, the ground for an assembly that points back at a walk: this is the trace as a way for archaeologists to recognize the presences of absences they engage in a multitude of spatial and temporal scales. The job of the detective, the archaeologist, “becomes in this context a possible instance for reconstructing the condition of production from the collection of evidence or *traces of social relations*” (Salzoni 2007).

There are several ways that archaeologists currently explore materialities of everyday life that exemplify this approach, in Ingold's terms, making an assembly of traces of what originally were walks, a dynamic re-tracing of traces (e.g., Hamilakis and Labanyi 2008; Holtorf 2013). I want to end here with a few examples that emphasize the materiality of sites themselves, not because the materialities of movable things are unimportant, but because it is in our work on places as material traces that archaeologists are still most distinctively engaged.

In Maya archaeology, Robin (2002) long ago demonstrated how soil chemistry in a modest village could reveal patterns of land use, circulation, and likely activities through which everyday social connections were created and recreated. Continuing analyses of this kind have transformed household archaeology, moving it from a focus on buildings as objects, containers for action. Soil chemistry literally is a trace contact. What we see today is a particular concentration of an element or elements, which is often the only remaining sign of actions that once took place, a mixture of intentional and unintentional orientations through which humans assembled a variety of non-human things and materials for pragmatic ends. Soil chemistry is not merely a sign pointing to somewhere else; it is the point where we directly connect with action that is not contemporaneous with us, seeing those actions through the variation of chemical profiles in our present.

We can also consider examples where the materialities we examine are explicitly understood as traces of an absence. Pauketat and Alt (2005) demonstrate how a widely employed archaeological notion, a posthole, serves both to identify a set of traces in the present, and to allow us to suggest a variety of materialities in the past that are no longer physically manifest. The posthole itself is materially evident as a pattern of soils of different colors and textures. These serve as indirect indexes on the basis of which we infer a spectrum of past presences: a

piece of wood, selected, shaped, and put in place, perhaps replaced, perhaps left to decay or removed to another place.

As a final example, consider the material history that I have explored for the early village site of Puerto Escondido, Honduras (Joyce 2007a). There, most of the materiality for the first five hundred years of occupation is not artifacts, but deposits composed of sediments of varying kinds. As I have written elsewhere,

the humans occupying this space repeated practices of post-hole placement and re-
placement, of processing of clay for house walls and the destruction and
reconstruction of houses, using the same technologies over centuries, they produced
the multiple superimposed layers of soils with subtly different characters that we
interpret today as signs of their history. [Joyce 2008a:28]

In other words, materiality as traces. The deep deposits that resulted are, like the separated points that Ingold shows a line can become, the result of continuous human action in assemblages where human/nonhuman distinctions are not particularly helpful.

These traces are ours to reconnect, using (among other things) their very characteristics as materialities. What remains challenging is for archaeologists to convey to other scholars with interests in materiality that our understanding is more than just a contribution to thinking about things or objects: it is our ability to understand what assemblages of humans and nonhumans accomplished at some earlier point, from the thinnest of traces that exist as shadows of the lines and walks that once took place. Materiality not as stuff, but as medium.

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