

Posthuman Archaeologies, Archaeological Posthumanisms

Craig N. Cipolla¹, Rachel J. Crellin², and Oliver J.T. Harris³

Abstract

This paper maps and builds relations between posthumanism and the field of archaeology, arguing for vital and promising connections between the two. Posthuman insights on post-anthropocentrism, non-human multiplicities, and the minoritarian in the now intersect powerfully with archaeology's multi-temporal and long-term interests in heterogenous and vibrant assemblages of people, places, and things, particularly the last few decades of 'decolonial' re-imaginings of the field. For these reasons, we frame archaeology as the historical science of posthumanism. We demonstrate the discipline's breadth through three vignettes concerning archaeology's unique engagements with multiplicities of objects, multiplicities of scales, and multiplicities of people. These examples, we argue, speak to the benefits of becoming posthuman archaeologists and archaeological posthumanists.

Keywords: *Archaeology; Collaboration; Non-humans; Posthumanism; Multiplicities; Scale*

Introduction

Outside of its metaphorical appropriation by scholars like Michel Foucault (2002), archaeology has rarely been associated with the cutting-edge of philosophy. As a subject that is dedicated to the slow excavation and recovery of the past, including a plethora of non-humans, archaeology struggled to keep pace with the linguistic, symbolic, structuralist and post-structuralist turns of the 20th century. Posthumanism, however, seems somehow different. Now philosophers dwell on the critical role of the non-human in people's lives (Harman, 2016; Roffe & Stark, 2015). No longer secondary and representational, non-humans have come to take centre stage (see for example the archaeologist Bjørnar Olsen's *In Defense of Things*, 2010). Simultaneously, the strident calls for decolonisation from Indigenous scholars (e.g., Smith, 2012; Tuck & Yang, 2012), have reminded us all of the locality, contingency, and specific perspective of our own positions. Indigenous thought drives home that the humanist paradigm inevitably weighs all members of our species against a singular ideal, with most found wanting. Posthumanism offers a critical alternative, one with potential to forge new connections with non-western perspectives. Such concerns chime with the commitment of some archaeologists to forge collaborative links across (and challenge) the divides between western/non-western, past/present, Indigenous/colonist; and indeed, the fact that some archaeologists are Indigenous themselves (Atalay, 2006; Cellin et al., 2021).

¹ Craig N. Cipolla, Royal Ontario Museum & University of Toronto, Ontario, Canada. E-mail: craigc@rom.on.ca.

² Rachel J. Crellin, University of Leicester, Leicester, England, UK. E-mail: rjc65@le.ac.uk.

³ Oliver, J.T. Harris, University of Leicester, Leicester, England, UK. E-mail: craigc@rom.on.ca.



Posthuman archaeologies

Posthumanism and archaeology thus make a natural pairing. Yet there is more to it than that; both archaeology and posthumanism, we suggest, have a deep need for each other. In archaeology, to date, much of the engagement with posthumanism began through an encounter with the concept of assemblage drawn from the work of Gilles Deleuze and Félix Guattari (2004) and readings by Manuel DeLanda (2006; 2016). The Deleuzian concept of assemblage is one that sits easily in archaeology as a discipline that excavates collections of varied types of material culture and uses them to recreate past worlds (for applications see, Jervis, 2018; Jones & Hamilakis, 2017 and papers therein). The move towards assemblage thinking facilitated a move towards the broader field of posthumanism, as a means to engage with the political consequences of rethinking the notion of the human (e.g., Bickle, 2020; Cipolla, in press; Crellin, 2020; Crellin et al., 2021; Crellin and Harris, in press; Fredengren, 2013; 2015; 2016; 2018a).

Yet the translation of posthumanism into archaeology, particularly for practitioners trained in North America and who usually think of their profession as part a sub-branch of anthropology, has been bumpy. Posthumanism's critique of anthropocentrism is well established. For those who see their job as the 'study of humans' a call for post-anthropocentrism is not always well received (e.g., Van Dyke, 2015). Anthropologically trained archaeologists often question notions of post-anthropocentrism on ethical grounds as they falsely read posthumanism as a call for the erasure of difference and as a means of distributing and diluting human accountability across the non-human world (they often cite Jane Bennett's (2010) power outage example). Lurking behind or alongside these ethical framings is usually a deep-seated anxiety over the deterritorialization of disciplinary boundaries and traditions. *I study humans*, they argue as they simultaneously, and ironically, wrestle with the myriad material traces they dig up, classify, interpret, and curate—some of these *are* human remains (see Fredengren, 2018b for a posthumanist handling of human remains), but none of them are humans. Indeed, behind these straw-person arguments lives a staunch need to purify humans apart from everything else (Latour, 1993). For the discipline of archaeology (according to these sceptics), *the everything else* represents human history. And once we agree that humans are not so separate from everything else, we begin to lose something—our discipline's identity, as the study of human pasts, that has been coded into hundreds of years of practice, writing, and pedagogy.

Posthumanism offers archaeology more than this though and this is clear in the ways that it challenges standard archaeological framings of humanity, non-humans, relationality, and, crucially, *difference* in general. For archaeologists the emphasis in posthumanism on the exploration of the minoritarian (Braidotti, 2013; Deleuze & Guattari, 2004) drives a focus on stories that might otherwise be missed, and demands that our discipline recognise and celebrate the differences of past worlds. The critical engagement with the non-human in posthumanism reminds even archaeologists that their material informants are not somehow secondary, or lacking, that they are not less-than other forms of knowledge or just a means to get to past humans. Posthumanism intensifies archaeologists' search for difference. From a long-standing emphasis on cultural difference, however, posthumanism instead guides archaeology towards a more critical encounter with the category of human itself, its multiplicities, and its historical depths. Such a moment not only facilitates new ways of thinking about the evolution of our species (when did we 'become' human?, e.g., see Sterling,



2015), but also new ways of taking non-western knowledge seriously as a means to open up the deep possibilities of difference in past and present worlds. Archaeology has much to gain from posthumanism.

Archaeological Posthumanisms

In this paper, we argue that posthumanism needs archaeology too, however. Posthumanism is often touted as a philosophy of our age (Ferrando, 2019, 187)—concerned with the proliferation of objects, the climate crisis, and the various injustices of our world that treat some humans as more human than others. Posthumanism speaks to our current politics: from the #MeToo movement to school children on climate strikes, to the proliferation of a virus with the power to re-organise societies and economies. As archaeologists, however, we believe that posthumanism has much to learn from the time depth our discipline can provide. In the debates about whether or not we are now posthuman, the archaeologist replies, “we have always been posthuman” (cf. Olsen et al., 2012, 161). The category human has been changing and shifting since it first emerged; humans are always *becoming*. Humans have been engaging with, shaping, and being shaped by non-humans since before we were *Homo sapiens*, whether that is through the forging of our neural connections by working with tools or the impact of the environment on human cultures and practices (cf. Malafouris, 2013). Similarly, a deeper engagement with archaeology would allow brilliant posthumanist philosophers to go beyond talking about Palaeolithic figurines as mother goddesses (Ferrando, 2020, 147). Such claims not only sustain humanist ideals of gender and identity, but are also outdated, and a world away from how many archaeologists would conceptualise that period today. The stories that archaeologists are telling today are richer still than the concept of a mother goddess. Instead they capture emergent historical specificity with engagements that ask questions about the emergent qualities of humanness, animality, bodies and flesh (see for example in a Neolithic context Pearson and Meskell, 2015).

Archaeology offers something quite different from history in this context. As Deleuze and Guattari (1994, 110) put it: ‘[w]hat History grasps of the event is its effectuation in states of affairs or in lived experience, but the event in its becoming, in its specific consistency, in its self-positing concept, escapes History’. The contrast with archaeology could not be stronger, where the event, from the formation of the site to the transformation of worlds, echoes back and forth in our writing. Archaeology is always forced to confront the event: the sudden discovery in the field, the unexpected revelation in the lab, the realisation of difference in the library. Here the comparatively looser chronology of archaeology is a strength, not a weakness; the absence of order creates a multiplicity of possibilities, of potentials, in how to actualise the past in the present. In contrast to the human driven and selective narratives of history, archaeology dwells on relationships from the very beginnings of its methodology. The first stroke of the trowel begins a process of analysing relations and connections (Edgeworth, 2012), the ‘contexts’ archaeologists have long examined. The patient study of the object in the laboratory reveals connections between materials of many kinds, plant, animals, and humans that stretch across millennia. From the perspective of the academy, history is Royal Science *par excellence*, archaeology, by contrast, its nomad cousin, crisscrossing boundaries of science and humanity, past and present, human and non-human, never settling down for more than a moment (cf. Deleuze & Guattari, 2004, 405-7). Archaeology is thus, we claim, the historical science of posthumanism.

Archaeologists and anthropologists alike are used to dwelling with others - much of our work has been about exploring other ways of being and doing; we study the minoritarian in a globalised world. We recognise that many of the pasts that we compose were populated by people who did not see the world as we do. Beginning in the 1990s archaeology began grappling with this tension, exploring how Cartesian dualisms, western concepts of gender, and ideas of individual personhood were not universal, but highly specific (e.g., Gosden, 1994; Thomas, 1996). Archaeology's encounter with posthumanism takes place within this emphasis on specificity and locatedness; one can contrast this with Juanita Sundberg's (2014) critique of posthumanist approaches in geography where she discusses the lack of engagement in geography with non-dualistic approaches to nature and culture. Archaeology was concerned with moving beyond dualisms, because they are an inappropriate imposition on the past (Thomas, 2004), before its engagement with posthumanism. This issue has come into further relief as theoretical discussions have engaged with how long-standing Indigenous and anti-colonial critiques raised awareness of the Eurocentric and colonial groundings of the discipline, especially in places like the settler colonies of North America. New forms of archaeological practice emerging out of these critiques offer alternative vantages on difference, relationality, and collaborative becomings. Initially, archaeologists couched the Indigenization of archaeology in terms of stark, oppositional identities based on monolithic cultural differences. In practice, however, Indigenous archaeology grew into something infinitely more complex. This is especially true of collaborative Indigenous archaeologies built specifically around the sensitivities, interests, needs, and respective expertise of a diversity of participants (Atalay, 2008, 2012; cf. Cipolla and Quinn, 2016); in other words, these emergent forms of collaborative archaeology frame difference as a productive force—much as posthumanism does. Although rarely theorized explicitly (cf. Cipolla et al., 2019; Crellin et al., 2021; McNiven, 2016), collaborative archaeologies stand to make useful, albeit humble, contributions to broader discussions of anti-colonialism, radical alterity, ontological difference, and futurity.

Our aim in this paper is to open a dialogue beyond our own discipline; in what follows we do not focus on the creation of past worlds, therefore, or the telling of the changing story of life on earth—the usual bread and butter of archaeology. Instead, we focus on the discipline of archaeology itself. Working from the premise that 'archaeology is what archaeologists do' we explore theories, practices, and tensions in the discipline through discussion of three vignettes. These brief forays into various forms of archaeological dwelling, we hope, allow readers to enter into the world of archaeologists. The vignettes allow us to take readers into museum laboratories, offices, and the field. The aim here is to show what archaeologists do: how we attend in detail to the narratives non-humans can tell, how we map a changing minoritarian narrative of what it means to be human across time and space, and how collaborative ontologies work and grow. Our goal is two-fold—we want to show what posthumanism contributes to archaeology and, inversely, what archaeology contributes to posthumanism. Following our vignettes, we review our key themes— further highlighting the benefits of becoming *posthuman archaeologists* and *archaeological posthumanists*.



Archaeological dwellings: three vignettes

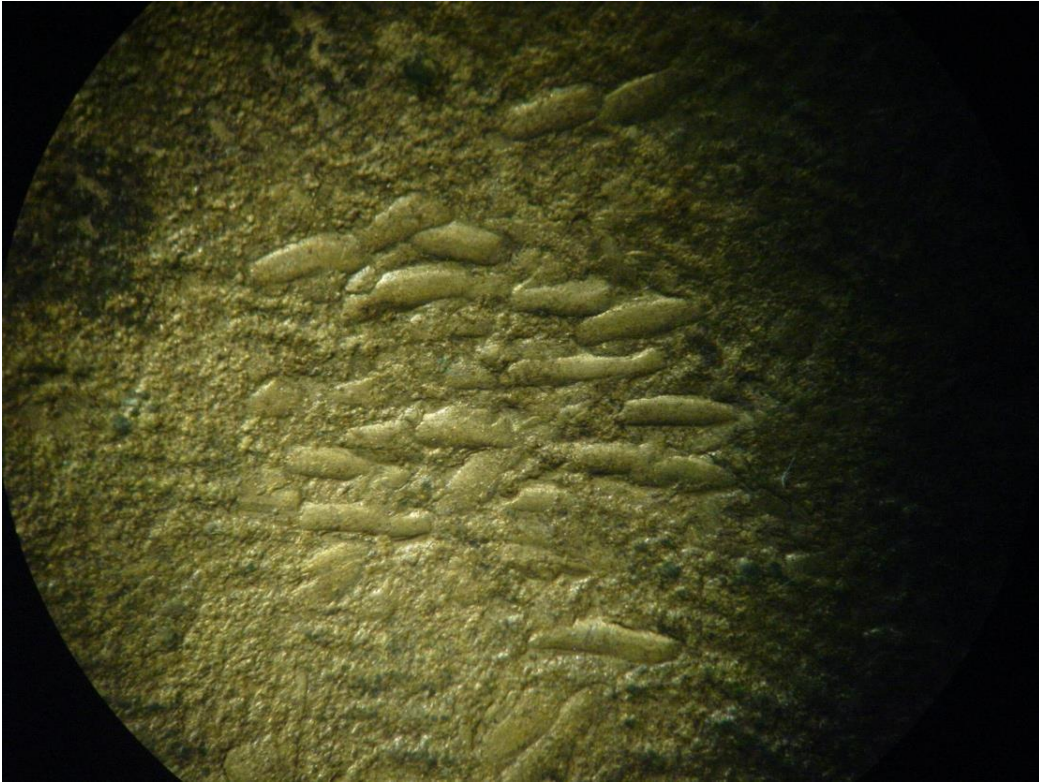
In the lab - Observing non-human vibrancies

I've rushed across London on the underground to an unprepossessing building in an unloved but up-and-coming neighbourhood. At the front desk I meet the security guard who is there to protect the mass of objects hidden from the general public in a storage facility they barely know exists. The curator appears and we go through a labyrinth of corridors past all manner of objects into a room filled with shelving – here in the store are the material remains of Britain's deep past. The building always feels still and empty. The thousands of objects rest within with only occasional humans for company. The processes of conservation and curation work to arrest the flow of time and hold these objects still: frozen, pickled, disentangled from the webs of relations in which they were once caught up. The humans who dwelled with these objects are long gone but the objects remain to tell stories of other times; it is the extended temporality of the non-human that allows us into these past worlds.

The objects I am to study are already out on the desk and my microscope is set up from the previous day. I take a deep breath and settle into my chair. I only get a few hours here each week and need to rush to get through the material. I select the next object, find it in my datasheet and begin to photograph it. As I do so I am taking in its shape, its colour and the marks upon its surface. I open a document on my laptop and write two paragraphs of thick description – giving textual form to everything my senses are taking in. I slow down to draw the object, a deep engagement with this single axe from 4000 years ago; drawing makes me really observe the axe. Having noticed new things I go back to my document and type some more. I move to the microscope, scanning across the surface looking for the familiar (and unfamiliar) marks that reveal the memories it carries (see Figure 1). The stories from the axe are revealed only by my collaboration with a plethora of non-humans.

I ask myself: What is this material I am looking at? What are the properties of this material? What other materials has it come into contact with? What materials existed at the time of its first uses? How did they effect the properties and potentials of this material? I am studying bronze axes that existed in a world filled with flint tools, ceramics, wood, and animal flesh. I look at the marks left on the surface of hundreds of axes to try and reveal the properties of bronze 4000 years ago – what could it do? What assemblages did it exist within? What kinds of properties and capacities did these assemblages allow to emerge? I tack back and forth between the understanding of bronze I have from material science to the understanding of bronze that communities had when they first began to make and use metals.

Figure 1. The surface of a Bronze Age axe under the microscope where the textures and forms of the surface reveal histories. Image: Rachel J. Crellin.



There are many kinds of archaeologists. People are perhaps most familiar with the idea of archaeologists digging in a field but there are many who do their research not (only) in the field but in the laboratory studying the many material traces of the past. Their attention focuses on the masses of material remains that have been recovered and curated by centuries of past archaeologists. Their work involves a close and often extended interaction with past materials: from metals to ceramics, human remains to animal bones, botanical remains to soils. Archaeology is traditionally defined as the study of the material remains of the human past. This definition captures the human-non-human tension. We often study non-humans to try and piece together the human past: the non-human is at the heart of what we do yet also strangely peripheral. A hierarchical dualism is evident: these non-humans are the datasets by which we get to humans. The theoretical underpinnings of the discipline have been wrestling with this and other dualisms for decades (Harris and Cipolla, 2017).

In the process of materials analysis, we use our training to turn our senses to the stories and histories that are written on and in the surfaces of these objects. It is hardly surprising then that archaeology finds an easy affinity with new materialism (Bennett, 2010; Coole & Frost, 2010; Dolphijn & van der Tuin, 2013). We work with objects to learn from them, and with them, about their pasts. Following Deleuze (2004), our laboratory techniques work to actualise virtual histories that are part of these objects (Tzoraki et al., 2021). Drawing on the concepts of the virtual and actual from Deleuze and Guattari (2004) and DeLanda (2002) we can see



how new techniques allow new possibilities to emerge for actualising virtual pasts; from isotopic analyses to chemical composition each new technique reveals different aspects of the pasts of ancient objects. These new stories are actualised by complex assemblages of humans and non-humans (Fowler, 2013; Harris, in press; Lucas, 2012). Each archaeological technique is a process where humans and non-humans are always thoroughly entwined together and the stories which result therefore have complex authorship (cf. Barad, 2007). The archaeologist and her laboratory processes focus on relations—it is only when the objects are studied immersed in relations both and past and present that we can begin to tell new stories.

The material world is in constant motion and past materials are no different—their colours shift, their fabrics crumble, their chemical composition changes. All of these processes of becoming happen whether or not humans are manipulating the materials (Crellin, 2020). In museum cabinets and stores, archaeologists, heritage and museums practitioners work to halt this constant motion. For the western public, museums are home to vestiges of long-dead past communities and the objects stand frozen, cut off from our ever-changing present-day world, trapped in glass cases as testaments to past achievements and lifeways (Lucas, 2005). In reality, conservation practices might slow the vibrancy of these materials, but they can never stop it—the humans are not powerful enough for that. Indeed, some of the changes that are on-going within these objects are the very things that allow us to tell their stories; isotopic decay allows radiocarbon dating (cf. Harris, 2014). These museum objects are not dead they are entangled in archaeological research where their vibrancy and long lives reveal stories about time scales through which humans can never persist.

In the long-term - Writing big-scale histories

Proudly carrying your PhD from a provincial university, you step off the train in one of the great educational centres of the world, about to start a new intellectual adventure. You have spent years training for this moment; your mastery of archaeological theory is unchallenged. You have dedicated long hours in the library learning the secrets of Bourdieu, Giddens, and Heidegger, the language of practice, agency, dwelling, and phenomenology come easily to you. You can take an archaeological feature, be it a small pit full of pottery and animal bones, or a monument featuring all sorts of unconventional practices, and use them to create narratives that tell us about the individual moments of past human lives. Bring on the post-doc.

But you soon find that the different scales at which archaeologists work can be dizzying. Your new job is to write something very different. Not the intimate histories of a particular time and place – albeit a few thousand years ago – but something on a rather bigger scale, something that all the linguistic turns, practice theory, and phenomenology in the world haven't trained you for. You have to write a history of the human body over the last 40,000 years. Well in Europe anyway, at least it's only one continent...

Of course, you can comfort yourself that writing at the large scale is something archaeologists have long done, it is a discipline that prides itself on big histories: from evolution, to the human colonisation of the globe, or the origins of agriculture. But the reason you loved practice theory and phenomenology, was because they took you away from the general, they asked you about what made people in the past different

from today and different from each other. How do you do that at the largest scale? How do you write about a world stretched over 40,000 years without the twin sins of reductionism and essentialism? What does it mean to embrace the challenge of the long-term and what tools can help you to do this?

It is here that posthumanism comes to the fore. Its emphasis on radically open bodies, on the intersection of humans and non-humans, on the interweaving lives of humans and animals challenges us to reconceptualise the modern world in radically different ways. This might seem quite different to a subject like archaeology, which reaches back towards a past that is no longer immediately present, or at least no longer immediately actual. Yet when we attend to these pasts it becomes clear that, over the long-term, the human body was no more fixed in the past than it is today, its capacities open to change, to forming new relations that created new possibilities. As archaeologists work with human bodies directly, we can map these alterations in skeletal materials, looking at how our bodies change in relation to the non-humans we interact with from new muscle attachments forming on our bones, to the shape of our ribs shifting through interactions with plants like tobacco (cf. Sofaer, 2006).

Over the 40,000 years that *Homo sapiens* have occupied Europe human bodies have changed dramatically; not necessarily in looks or appearance, but in what it is they could do (cf. Deleuze, 1988). Relationships between human and non-human animals were transformed as agriculture started, their bodies interacting in ever more intimate ways. With that came new understandings of both the similarities and differences between humans and animals. This changed who it was that counted as a person. In some places, and at some moments, cattle could become persons, ancestors even; in others these newly intimate relations emphasised how distinct humans and animals could become. Vibrant materials like metal (cf. Bennett, 2010) provided new ways of shaping bodies, especially from around 4000 years ago; these helped to create new ways for humans and non-humans together to produce concepts like gender (Robb and Harris, 2013; 2018).

The radical openness of what it means to be human is thus not an outcome of the blurring of modernity, but a critical condition of emergence over the long-term (cf. Braidotti, 2013). More than this, however, such a long-term perspective also asks us to historicise the condition, not just of the human, but of posthumanism itself. Identifying the openness of the human is no longer sufficient, but becomes merely a starting point. ‘What can a body do?’ Spinoza, via Deleuze, asks us. This is a question situated in specific historical moments, and we can use our answers to map how these changes emerge at a variety of scales. How do particular assemblages of bodies (human and non-human) come together and endure, whilst others fall away? What makes the very specific moments of conjunction of bodies work in one place, perhaps the joining of humans and fish on the banks of the Danube 8000 years ago (Borić, 2005), but not in others (Figure 2)? What allows other melding of humans and non-humans last for so much longer?



Figure 2. One of the fish-human sculptures from Lepenski Vir, c. 6000 BCE. These figures capture hybrid images of fish and humans, and were often placed above burials within houses constructed along the banks of the Danube between present day Serbia and Romania. It has been powerfully argued they capture the tensions of humans becoming fish within these hunter gatherer communities (see Borić 2005; image after Robb and Harris 2013, fig 17, photo courtesy of Dušan Borić).



Yet posthumanism asks difficult questions of archaeologies of the body too, especially of the kinds of long-term narratives we have touched on here. How easy it would be to trace only the majoritarian traditions in these histories, the emergence of what is familiar in the present, modern ideas of gender, age, or personhood, for example. Whilst this is important in its own right because it historicizes and denaturalises these categories, this leaves many stories untold and many voices unheard. How can the minoritarian emerge even in the largest scale? The

current fashion in histories of ancient Europe is to draw on new scientific technologies, particularly in the study of ancient DNA, and use them to tell narratives that seem worryingly simplistic. Hordes of warriors sweep off the Russian Steppe and slay all before them. Settlers from the continent arrive in Britain and replace the population (Olalde et al., 2018). These stories are grist to the mill of nationalism and populism across Europe because they reify ideas of identity over difference and treat DNA as a sole signifier of who a person is; a biological reduction if ever there was one. Here too we need to turn our attention to the minoritarian and to the other stories untold, of the bodies that slip between the cracks of these narratives. Thus, if archaeology offers posthumanism an essential corrective to a focus on the here and now, so posthumanism is essential for an archaeology that does not merely reflect the dominant concerns of the present, but rather takes the past that surrounds us, and makes of it something that is both more accurate and more productive.

In the field - Remaking archaeology through collaboration

Each day over the past few weeks you've worked within a series of 1-x-1 meter squares (Figure 1), bound by a string grid that stretches over the ground surface. This is held in place by a series of iron spikes that have been driven into the earth where the rocky soils—characteristic of this particular place—permit them. You were told to always mind those strings and spikes, put in place by a team working with computerized mapping equipment, including an EDM (electronic distance measurer) that calculates distance by shooting a laser into a mirrored prism and analysing the time it takes to bounce back. One false move could set the whole grid off from where your supervisors want you and your peers to dig.

At this stage, you feel that you know your fellow crew members reasonably well; dwelling together daily in the woods can do that. You started out as strangers, but that quickly changed as the group endured the long days of meticulous and highly repetitive work. As the rhythms of each day's work sets in, you listen to their stories and sometimes share your own. Your digging partner—now kneeling to the side of your shared square—is filling out paperwork that helps the project track the provenience of the objects you've been finding. In this particular setting, one of the differences that matter most between you and her are your respective orientations to the colonial history that you work together to dig up. You are descended from settler-colonial peoples, she is Indigenous. Sometimes your discussions gravitate around these differences, particularly how they relate to the things and patterns you've been finding in your squares. Those traces—including the rocky, intractable reservation soils you dwell in daily—are part of a colonial past and present.

Of course, the act of doing archaeology itself is also part of those colonial relations. That too is a popular topic of discussion on site, particularly Indigenous perspectives on archaeology (a discipline that both you and your partner have interest in pursuing as a career). You both tend to agree that there is a lot wrong with the discipline, but you also share an interest in the ways that archaeological materials forge new relations and inspire visions of a shared future, a world that could be radically different from today's.



At this stage in your excavation, you and your partner agree that you've successfully completed a phase of the work. Accordingly, you signal to your supervisor that it might be time for them to offer tobacco to the land. This is a way of paying back the earth for the inconvenience of disturbing it with the project's excavations. It is one example of how collaborative Indigenous archaeologies admix aspects of western and Indigenous sciences, allowing your team to maintain good relations with the world according to local epistemologies and ontologies. Another example of this is your early morning routine. Before you begin your daily hike into the woods, you and your colleagues use sage and cedar smoke to cleanse your tools and your bodies. You are not required to do this. As a visitor, it is your choice to participate in this local, specialized practice. It is taught and demonstrated by several members of the Indigenous Nation (their archaeological team), who invited you onto their lands this summer so that you could learn how to do archaeology in a different way, part of a collaborative-Indigenous remaking of the field.

Figure 3. The Mohegan Archaeological Field School excavating a nineteenth-century Mohegan household. The field school is a long-running collaboration between the Mohegan Tribe of Connecticut and Cipolla (see Cipolla and Quinn 2016; Cipolla et al. 2019). Image: Craig N. Cipolla.



As discussed throughout this article, the general practice of archaeology presents many examples through which to rethink relational, post-anthropocentric, and post-dualistic critiques of western defaults. In need of further discussion, however, is the part played by different situated knowledges and subjectivities in the colonial and western-dominated field of archaeology. Simone Bignall and Daryle Rigney (2019) recently brought to light some related questions about the relationship between posthuman philosophy and anticolonial and Indigenous perspectives. The authors emphasize how certain posthuman framings of Indigeneity could inadvertently serve as colonial tools that essentialize Indigenous peoples and history as *lacking* certain key elements that are commonly associated with western states, namely sovereignty, law, and governance. For anthropologists and archaeologists, such as Severin Fowles (2010), this focus on what is *absent* compares with traditional, unilineal, and essentialist evolutionary thinking and classification in their discipline. These polarizing, hierarchical, and Euro-centric approaches have long dismissed continuities and overlaps between the ‘West’ and the ‘rest,’ leaving limited room to recognize forms of Indigenous sovereignty, law, and governance that do not precisely mirror western forms.

Bignall and Rigney (2019, 176-177) highlight important directions in posthumanist and anti-colonial critiques. They note the promise of ‘nonimperial styles of thought and cross-cultural conceptual communication’ and suggest that posthumanists seek out models of thinking that engage seriously with Indigenous alterity in a non-hierarchical fashion. For them, it is imperative to understand the *local* importance of Indigenous thought for specific places and peoples, but also for its broader potential within conversations with western thought that might help to reveal ‘allied’ tools between the two (cf. Todd, 2016).

Collaborative Indigenous archaeologies, such as the one represented in the vignette, stand to make humble but useful contributions to these posthuman discussions (Cipolla et al. 2019; Crellin et al. 2021). This is particularly true regarding posthuman commitments to decentering Euro-colonial sensibilities. As Bignall (2014) argues, collaboration is often thought of as animated mainly by *conflict and opposition*. In other words, western frameworks often naturalize and privilege stark oppositional (dialectical) relations between collaborators.

This tension is reflected in archaeological critiques of collaboration (e.g., LaSalle & Hutchings, 2018; McGhee, 2008). For example, Robert McGhee (2008) argued that western archaeologists who engage in collaboration with Indigenous peoples simply take what Indigenous people say about the past and make that their own western archaeological interpretations. According to this critique, these supposedly uncritical appropriations of Indigenous epistemology are fuelled by western archaeologists’ essentialization of Indigenous collaborators as fundamentally different from western peoples (e.g., cyclical time versus linear time, nature versus culture, stasis versus dynamism). Archaeologists Marina LaSalle and Richard Hutchins (2018) recently took a different approach to critiquing collaboration; for them, instead of essentializing and privileging Indigenous difference, collaborative archaeology simply maintains the status quo under the mantle of new ‘decolonized’ terminology. In fact, they argue that a truly decolonized archaeology is one that does not exist at all—‘decolonization means the end of archaeology’ (2018, 14); this argument rings archaeology’s death knell with very little consideration of actual Indigenous perspectives or consideration of the possibility that not all Indigenous peoples relate to archaeology in the same ways. In either case, collaborative archaeologies are often much more nuanced than these critics imply.



For Bignall (2014), the default role that negative, oppositional thought has in western canons is detrimental and counter-productive to collaboration; this is because it overlooks the complicated nature of relating and glosses over the potential that collaboration has to construct and *transform* collaborative communities (cf. Atalay, 2012; Cipolla and Quinn, 2016; Cipolla et al., 2019). Within many western paradigms of thought, collaboration follows one of two main directions: self and other become alike (cf. McGhee above) or self and other create a respectful separation where oppositional differences remain (Bignall, 2014, 349-350). Instead, collaboration should be thought of positively, as ‘immediately causal and constructive,’ and as framing contrasts and continuities as immanent and subject to change. Instead of opposing clearly bounded and essentialized collaborators, we must open up to the messiness of collaboration and how different collaborative entities are ‘spiky,’ to use Bignall’s term. Collaborative relations never entirely relate or combine participants (something is always held back). This also means that collaborative disagreements do not apply to all dimensions of how participants relate. We must maintain room for both similarity and difference. Collaboration is unruly and context specific. These complexities of relating are well known in collaborative archaeology, which has been struggling with similar challenges now for several decades.

Collaborative Indigenous archaeologies stand as experiments and exemplars of ‘non-imperial’ thought, means of ‘cross-cultural’ communication, and allied tools that help us to imagine new futures. The physical act of doing archaeology—of kneeling in the dust, literally shoulder to shoulder with someone who relates to the histories you simultaneously seek and live out in very different ways than you do—provides a very different experience than does a discursive argument about the merits of the posthuman critiques. This quality relates to one of the challenges that Braidotti (2019a, 128) poses for posthuman knowledge production—how to articulate posthuman ideas and goals in a way that is accessible to ‘most actual people.’ In addition to the visceral experience of doing archaeology collaboratively, these approaches also offer post-dualistic frameworks built from and around Indigenous ontologies and epistemologies. These collaborative models offer fresh perspectives on how we conceptualize and work with radical alterity—they recognize the continuities and the contrasts between different participants without dismissing either. They are assemblages, greater than the sum of their parts, meaning that the pasts and futures that emerge through them are likely different than those that might emerge with ‘traditional,’ non-collaborative approaches.

Conclusion

Our three vignettes highlight the potential archaeology has to speak to posthumanist concerns, and to reveal itself as a fundamentally posthumanist subject (in both senses of the word). This is in stark contrast to the way the discipline has attempted to position itself. Seduced by the grandeur of history, and the wealth of the natural sciences, archaeology has always had Royal Science Ambitions. Archaeology emerges in Europe from collections—vast collections, which drew together, diverse objects from other times and places (see Figure 4). From its outset it saw itself as bringing order to these collections and thereby to the past, the chaotic spread of materials discovered across the world could be placed in sequence, to build a teleological chain linking the past to the present: the people we were, to the people we are. Here, the ‘we,’ is far from neutral, of course. Those trying to bring order to the past saw themselves as the traditional humanist subject: male, white, middle classed, heterosexual Europeans; majoritarian *par excellence*. The colonial encounter formed a critical second element

here; the past could be found in materials brought to order and compared with ‘primitive’ people living elsewhere. Who did ‘we’ use to be? ‘We’ used to be them.

Figure 4. Ole Worm’s cabinet of curiosities, from *Museum Wormianum*, 1655. Image: Wikimedia Commons, original source Smithsonian Institution Libraries.



Whilst a century or more later, no archaeologist would make such comparisons, the Royal Science Ambitions stand. One more scientific technique, one more set of improved radiocarbon dates, and we will be there (e.g., Kristiansen, 2014). One might think that the growing physical weight of the past, the ever-greater amounts of material archaeologists have excavated, might lead to ever more varied stories. Yet many archaeologists see each discovery as increasing evidence that their vision of the past is correct. Such claims, and such appeals to the potential for Ancient DNA, Big Data, or the next positivist peril, fail to recognise that an appeal to Royal Science will always leave archaeology as a failed discipline, reaching towards a Majoritarian subject always just out of reach.

Something quite different happens when we stop to embrace what it is archaeologists actually do. Archaeologists revel in the multiplicity and uncertainty of our material, asking questions of it in countless intriguing and inventive ways; *that* is at the heart of our practices. Archaeology happens as the you turn a bronze axe in your hand, as you feel the soil on the edge of your trowel, as you type and write about a place and people long ago. There is not a singular past, nor are there multiple pasts, archaeology reveals instead the multiplicity of the



past (Deleuze, 2004, 254). There are multiplicities of objects, multiplicities of scales, multiplicities of people—as our vignettes discuss.

Posthumanism is essential for archaeology, because it allows us to recognise what it is our discipline does, and to refocus our efforts not on the unachievable task of revealing the singular grand narrative, but on reveling in the nomadic, the minoritarian, and the non-western. Such a position allows us to reconfigure archaeology as future oriented, committed to a reshaping of our discipline where the pasts we compose from materials in the present have stories that help inform and shape the future. Alongside this, however, we suggest archaeology has material to offer our more-than-human siblings in the posthumanities (cf. Braidotti, 2019b). Archaeology is a discipline that has always attended to the more than human, to the minor, to the stories left behind. Archaeology's apparent weakness is that people are absent (cf. Leach, 1973), but from a posthuman perspective this is partial to put it mildly. Instead, archaeology offers the posthumanities a route to a new materialist, posthumanist, non-dualist past. One where the question becomes not when did we become posthuman, but rather what forms of posthumanity, past and present, are possible?

Acknowledgements

We would like to thank the journal editors and the anonymous peer reviewer for helpful comments and feedback on this article. In addition, we are grateful to all we have learned from many of our colleagues, and especially on this occasion Yvonne O'Dell and John Robb. Parts of the research here were funded by the Leverhulme Trust. Finally, special thanks are due to the Mohegan Tribe of Connecticut.

References

- Atalay, S. (2006). Indigenous archaeology as decolonizing practice. *American Indian Quarterly*, 30, 280-310.
- Atalay, S. (2008). Multivocality and Indigenous archaeologies. In J. Habu, C. Fawcett, & J. Matsunaga (Eds.), *Evaluating multiple narratives: Beyond nationalist, colonialist, and imperialist archaeologies* (pp.29-44), Springer.
- Atalay, S. (2012). *Community-based archaeology: Research with, by, and for Indigenous and local communities*. University of California Press.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Bennett, J. (2010). *Vibrant matter: A political ecology of things*. Duke University Press.
- Bickle, P. (2020). Thinking gender differently: New approaches to identity difference in the central European Neolithic. *Cambridge Archaeological Journal*, 30, 201-218.
- Bignall, S. (2014). The collaborative struggle for excolonialism. *Settler Colonial Studies*, 4, 340-356.
- Bignall, S., & Rigney, D. (2019). Indigeneity, posthumanism, and nomadic thought: Transforming colonial ecologies. In R. Braidotti & S. Bignall (Eds.), *Posthuman ecologies: Complexity and process after Deleuze* (pp. 159-182), Rowan & Littlefield.
- Borić, D. (2005). Body metamorphosis and animality: volatile bodies and boulder artworks from Lepenski Vir. *Cambridge Archaeological Journal*, 15, 35-69.
- Braidotti, R. (2013). *The posthuman*. Polity.
- Braidotti, R. (2019a). *Posthuman knowledge*. Polity.
- Braidotti, R. (2019b). A theoretical framework for the critical posthumanities. *Theory, Culture and Society*, 36, 31-61.
- Cipolla, C. N. (in press). Posthuman potentials: Considering collaborative Indigenous archaeology. *Cambridge Archaeological Journal*.

- Cipolla, C. N., and J. Quinn (2016). Field school archaeology the Mohegan way: Reflections on twenty years of community-based research and teaching. *Journal of Community Archaeology and Heritage* 3, 118-134.
- Cipolla, C. N., J. Quinn, and J. Levy (2019). Theory in collaborative Indigenous archaeology: Insights from Mohegan. *American Antiquity*, 84, 127-42.
- Coole, D., & Frost, S. (2010). Introducing the new materialisms. In D. Coole & S. Frost (Eds.), *New materialisms: ontology, agency and politics* (pp. 1-43). Duke University Press.
- Crellin, R. J. (2020). *Change and archaeology*. Routledge.
- Crellin, R. J. and Harris O.J.T. (in press). What differences does posthumanism make? *Cambridge Archaeological Journal*.
- Crellin R. J., C. N. Cipolla, L. M. Montgomery, O. J. T. Harris, & S. V. Moore. (2021). *Archaeological theory in dialogue: Situating relationality, ontology, posthumanism, and Indigenous paradigms*. Routledge.
- DeLanda, M. (2002). *Intensive science and virtual philosophy*. London: Continuum.
- DeLanda, M. (2006). *A new philosophy of society: Assemblage theory and social complexity*. Continuum.
- DeLanda, M. (2016). *Assemblage theory*. Edinburgh University Press.
- Deleuze, G. (1988). *Spinoza: Practical philosophy*. City Lights Books.
- Deleuze, G. (2004). *Difference and repetition*. Bloomsbury.
- Deleuze, G., & Guattari F. (1994). *What is philosophy?* Verso.
- Deleuze, G., & Guattari F. (2004). *A thousand plateaus: Capitalism and schizophrenia*. Continuum.
- Dolphijn, R., & van der Tuin, I. (2013). *New materialism: interviews and cartographies*. Open Humanities Press.
- Edgeworth, M. (2012). Follow the cut, follow the rhythm, follow the material. *Norwegian Archaeological Review*, 45, 76-92.
- Ferrando, F. (2019). *Posthumanist philosophy*. Bloomsbury.
- Ferrando, F. (2020). Posthuman feminist ethics: Unveiling ontological radical healing. In Rosendahl M. Thomsen & J. Whamburg (Eds.). *The Bloomsbury handbook of posthumanism*. (pp. 141-160), Bloomsbury.
- Fredengren, C. (2013). Posthumanism, the transcorporeal and biomolecular archaeology. *Current Swedish Archaeology*, 21, 53–71.
- Fredengren, C. (2015). Nature:Cultures: Heritage, Sustainability and Feminist Posthumanism. *Current Swedish Archaeology*, 23, 109–130.
- Fredengren, C. (2016). Unexpected Encounters with Deep Time Enchantment. Bog Bodies, Crannogs and “Otherworldly” sites. The materializing powers of disjunctures in time. *World Archaeology*, 48(4), 482–499.
- Fredengren, C. (2018a). Archaeological posthumanities: feminist re-invention of science and material pasts. In, C. Åsaberg and R. Braidotti (Eds.), *A feminist companion to the posthumanities* (pp, 129-40). Springer.
- Fredengren, C. (2018b). Becoming Bog Bodies Sacrifice and Politics of Exclusion, as Evidenced in the Deposition of Skeletal Remains in Wetlands Near Uppåkra. *Journal of Wetland Archaeology*, 18(1), 1–19.
- Foucault, M. (2002). *The archaeology of knowledge*. Routledge.
- Fowler, C. (2004). *The archaeology of personhood: An anthropological approach*. Routledge.
- Fowles, S. (2010). People without things. In M. Bille, F. Hastrup, & T. F. Sørensen (Eds.), *An anthropology of absence: Materializations of transcendence and loss* (pp. 23-41). Springer.
- Gosden, C. (1994). *Social being and time*. Blackwell.
- Harman, G. (2016). *Immaterialism*. Polity.
- Harris, O. J. T. (2014) Revealing our vibrant past: Science, materiality and the Neolithic. In A. Whittle & P. Bickle (Eds.), *Early farmers: The view from archaeology and science* (pp, 327-45). Proceedings of the British Academy.
- Harris, O. J. T. (in press) *Assembling past worlds: Materials, bodies and architecture in Neolithic Britain*. Routledge.
- Harris, O. J. T. and C. N. Cipolla (2017) *Archaeological theory in the new millennium*. Routledge.
- Jervis, B. (2018). *Assemblage thought and archaeology*. Routledge.



- Jones, A., & Hamilakis Y. (2017). Archaeology and assemblage. *Cambridge Archaeological Journal*.
- Leach, E. (1973). Concluding address. In C. Renfrew (Ed.), *The explanation of culture change: Models in prehistory* (pp. 761-71). Duckworth.
- Kristiansen, K. (2014). Towards a new paradigm: The third scientific revolution and its possible consequences in archaeology. *Current Swedish Archaeology*, 22, 11-34.
- LaSalle, M., & Hutchings, R.M. (2018). 'What could be more reasonable?' Collaboration in colonial contexts. In A.M. Labrador & N.A. Silberman (Eds.), *The Oxford handbook of public heritage theory and practice* (pp. 223-38). Oxford.
- Latour, B. (1993). *We have never been modern*. Harvard University Press.
- Lucas, G. (2005). *An Archaeology of Time*. Routledge.
- Lucas, G. (2012). Understanding the archaeological record. *Cambridge University Press*.
- Malafouris, L. (2013). *How things shape the mind: A theory of material engagement*. The MIT Press.
- McGhee, R. (2008). Aboriginalism and the problems of Indigenous archaeology. *American Antiquity*, 73, 579-97.
- McNiven, I. (2016). Theoretical challenges of Indigenous archaeology: Setting an Agenda. *American Antiquity* 81, 27-41.
- Olande, I., Brace, S., Allentoft, M., Armit, I., Kristiansen, K., et al. (2018). The beaker phenomenon and the genomic transformation of northwest Europe. *Nature*, 555, 190-196.
- Olsen, B. (2010). *In defense of things: Archaeology and the ontology of objects*. AltaMira.
- Olsen, B., Shanks, M., Webmoor, T. & Witmore, C. L., (2012). *Archaeology: The discipline of things*. University of California Press.
- Pearson, J. and L.M. Meskell (2015). Isotopes and images: Fleshing out bodies at Çatalhöyük. *Journal of Archaeological Method and Theory* 22:461-482.
- Robb, J. E., and O. J. T. Harris (2013). *The body in history: Europe from the Paleolithic to the future*. Cambridge University Press.
- Robb, J. E., and O. J. T. Harris (2018). Becoming gendered in European prehistory: Was Neolithic gender fundamentally different. *American Antiquity* 83:128-47.
- Roffe, J., & Stark, H. (Eds.) (2015). *Deleuze and the non/human*. Palgrave MacMillan.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and Indigenous peoples, second edition*. Zed books.
- Sofaer, J. (2006). *The body as material culture: A theoretical osteoarchaeology*. Cambridge University Press.
- Sterling, K. (2015). Black feminist theory in prehistory. *Archaeologies*, 11, 93-120.
- Sundberg, J. (2014). Decolonizing posthumanist geographies. *Cultural Geographies*, 21, 33-47.
- Thomas, J. (1996). *Time, culture and identity: An interpretive archaeology*. Routledge.
- Thomas, J. (2004). *Archaeology and modernity*. Routledge.
- Todd, Z. (2016). An Indigenous feminist's take on the ontological turn: 'Ontology' is just another world for colonialism. *Journal of Historical Sociology*, 29, 4-22.
- Tsoraki, C., H. Barton, R. J. Crellin and O. J. T. Harris (2021). Making marks meaningful: New materialism and the microwear assemblage. *World Archaeology*. Online first: <https://doi.org/10.1080/00438243.2021.1898462>
- Tuck, E., & Yang, K. W. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society*, 1, 1-40.
- Van Dyke, R. (2015). Materiality in practice. In R. Van Dyke (Ed), *Practicing Materiality* (pp. 3-32). University of Arizona Press.