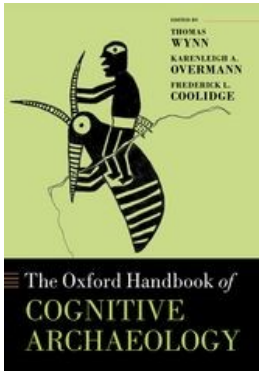

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CHAPTER

Time and Clay: The Clayful Phenomenology of Jōmon Flame Pots in a Post-modern World

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Abstract

The aim of this chapter is fourfold. First, it introduces an artistic mode of enquiry to a cognitive archaeology readership. Called *clayful phenomenology*, the method depends upon the sense-making potential of material change. Unlike the outcome of scientific research, the ideas created by a clayful phenomenological investigation are not expressed in words or numbers but become manifest through the morphosis and metamorphosis of clay. Meanings that are made with a clayful attitude lack the clarity of logical or semantic statements; their sense derived from connections that are metaphorical, allegorical, and mythical. Method and meaning are non-coherent. Second, the chapter gives the theoretical framework for clayful phenomenology, principally provided by Material Engagement Theory, with additional support from Heidegger's phenomenological accounts of *Dasein*. It shows how this ontological backdrop transforms the agent of enquiry from an individual artist to a "transient system of creation," a temporary assembly made not of whole things but a collection of processes. Third, it shows how an engagement with *Project Holocene* changed the contemporary signification of a specific prehistoric artifactual type, a Jōmon flame pot. The change was born, not of prior intention, but happened non-coherently, through the confluence of the sort of disparate events that gather as a transient system of creation. Fourth, the chapter describes what time feels like from inside a system of creation. Inside, instead of creative activity happening in time, the creation of temporal experience is part of the activity of the system.

Keywords: Material Engagement Theory, Dasein, phenomenology, Jōmon flame pots, temporal, non-coherence, myth, sensory, emotion, art

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Part 1: The Background

If, instead of focusing on thinking, Descartes had said something like, "I feel that I am" (*Je sens que je suis*), you might now be holding a copy of *The Oxford Handbook of Emotional Archaeology*. As it is, Descartes' wariness about feelings was so influential that, to contemporary ears, such a title suggests a discipline needing therapy. Following Descartes, the enlightenment made feelings oppositional to thought, creating a view of rationality that was partial and disjointed (Midgley, 2003). I am not trying to dismantle the enlightenment order; I am highlighting a serious side effect of it. Feelings do not exist separately from thoughts, perceptions, and sensations—quite the contrary. This chapter deals in nuance: affective perceptions, emotional sensations, and thoughts that are felt. Emotions can be troublesome—sometimes very troublesome—but they are also responsible for turning an existence in to a life. If we want to understand life, it is best to do it with emotion.

Feelings shake the foundations of traditional research. They undermine the need, the desirability, and even the onticity of objectivity. Midgley (2003) claims that feelings also demand that we become reacquainted with the important role of mythmaking in the development of ideas. The Enlightenment was tasked with bringing an end to the influence of myths and so, in post-Enlightenment science, the way myths facilitate scientific advancement is obfuscated by the very process that they underpin (Midgley, 2003). In the name of the inductive method, myths are relegated to the creative arts, a safe space where knowledge may be represented but, ironically, cannot be created.

In his chapter in this volume, Malafouris asks, "What is cognitive archaeology?" and responds by dividing the domain into six overlapping areas: evolutionary; comparative and anthropological; experimental; reflexive; semiotic; and affective and sensory. Regarding the latter, he too argues against the separation of emotion from cognition and encouragingly points to the way sensory and affective considerations are seeping into archaeological methods. This chapter is a case study in affective and sensory cognitive archaeology, one that is informed by the reflexive and semiotic framework of Material Engagement Theory (MET).

The aim of the chapter is fourfold. First, I want to introduce an artistic mode of enquiry to a cognitive archaeology readership, one that depends upon the sense-making potential of material change. I call the approach *clayful phenomenology*. If we accept that mythmaking has a clandestine but crucial role in the production of scientific knowledge, there remain crucial differences between artistic and scholarly methods and the quality of knowledge they produce. During a clayful phenomenological investigation, new ideas manifest themselves, not as words or numbers, but as a physical change in, by, and through clay. Unfortunately, to argue for this gets me into trouble. I need to use words to write this chapter, and words are the very things that I believe misrepresent the unique conceptual quality of knowledge acquired through clayful engagement. Hamilakis (2013) found himself caught in a similar trap when writing *Archaeology and the Senses*. As Law (2004) says, the trouble is this:

> [I]f matters are non-coherent, then to try to describe them as non-coherent may miss the point since it insists on generating a form of coherence. Some other allegorical mode might be better. Some other kind of gathering. One that stutters and stops, that is more generous, that is quieter and less verbal.
>
> (Law, 2004, p. 147).

Heeding Law's warning, instead of trying to translate the meaning of making into words, I will limit myself to describing the process by which meaning is made. Even so, I hope an empathic reader may make some, non-coherent sense out of material transformation.

Second, I will lay out the theoretical framework for clayful phenomenology. This is principally provided by MET (Malafouris, 2013), with additional support from Heidegger's (1962) phenomenological account of what it is like to be in the world (*Dasein*). I will explain how this ontological backdrop changes the agent of enquiry from an individual artist to what I refer to as a transient system of creativity—a temporary assembly made up, not of whole things, but of certain human activities and material qualities, made briefly indivisible by the dynamic reciprocity of their relationship.

Third, I want to show how engagement with a specific course of artistic activity changed the contemporary signification of a specific prehistoric artifactual type, a Jōmon flame pot. The change was born, not of prior intention, but happened non-coherently through the confluence of the sort of disparate events that gather into a transient system of creation. The artistic activity, *Project Holocene*, did not begin with research objectives that correspond to the aims of this chapter; instead, there was only an intention to extend and develop artistic patterns that had established themselves during previous projects. It proceeds on the assumption that a system of activity, of which the activity of an artist is one element, will create its own goals intrinsically. This open-ended, indeterminate approach to investigation is familiar to the world of art (Rawlings & Nelson, 2007; Reinders, 1991). If applied to archaeology, the method may appear haphazard and spurious. However, this perception, I suggest, assumes that research must depend on the goal-setting activity of an individual and on a view of intention as a uniquely human attribute, one that lies outside the domain of investigation.

Fourth, I want to describe what time feels like during a period of creative making. Normally, when making stuff, time acts as a resource that we use up as we move from inception to fruition. For example, in the introduction to her book about the role of time in cooking, Linford (2019) describes time as "the universal ingredient in the food we cook and eat … To cook well, one needs to know how to use time appropriately" (p. 2). Normally, we experience time either when it is running out or when it drags under the weight of a task that moves too slowly. I argue that this is the view we get when we step outside a system of creation, a maneuver performed ubiquitously to create the separation necessary for an objective appraisal. By remaining within the system, I experience things differently. Instead of creative activity happening in time, temporal experience is created along, within, and by the creative system itself.

Lining up thoughts in an orderly manner is not the only way to create knowledge (Law, 2004). Nevertheless, I will structure the chapter in the following way. In Part 1, I begin by giving some background. I relate my own introduction to Jōmon flame pots and the excitement they caused me. I go on to explore the reasons why such sensorial reactions are treated suspiciously in archaeology. I briefly review two attempts to make archaeology more sensitive before returning to Jōmon pottery from the perspective of the typological approach and its underlying assumptions. I follow this by describing another way of thinking about Jōmon pottery, one that is informed by the philosophy of Heidegger and structured around MET. I end with an argument for non-coherent methods.

Part 2 begins with an introduction to *clayful phenomenology*, followed by a case study, taken from my work as a ceramic artist. I describe how and why Jōmon flame pots and a contemporary sculpture workshop got tangled up, and I consider the effect of this entanglement, both on the evolution of the contemporary sculptures and on the transformation of the quality of experience of flame pots. I focus on how the creation and development of a flame-pot-contemporary-sculpture system changed the intra-system experience of time. Finally, to help make sense of this temporal change, I consider the system in relation to the temporal behavior of modernist painting and poetry.

Introducing Jōmon Flame Pots

A few years ago, as I stood next to an installation entitled *Extended Phenotype 4* (Figure 1), a friend asked if I had been inspired by Jōmon flame pots. When I told him I had not, and that I had never heard of them, he gave me two books about prehistoric Japanese art (Egami, 1973; Stanley-Baker, 1984). The books gave me a glimpse of flame pots that took my breath away. At the next opportunity, I visited the British Museum, which houses several examples. Serious, dignified, and austere—and flamboyantly decadent to the point of absurdity—the pots presented an extraordinary experiential paradox, rendered even more extreme by their modest, yet virtuoso, sculptural sensitivity (Figure 2). My introduction to flame pots was deeply affective. As I read more, my first sustained introduction to archaeological literature, I found that although many authors commented on the esthetic power of flame pots, the profoundly serious craziness of Jōmon pottery was not a major scholastic concern. On the contrary, I got the sense that esthetic appreciation was seen as something dangerous. As Kobayashi (2004) wrote: "Whilst appreciating these pieces we must not lose sight of the fact that they are the material representations of mental images and symbols shared by the inhabitants of the Jōmon Echigo style zone who made and used the pots" (p. 68).

Figure 1

Extended Phenotype 4. Stoneware installation (2013), 1.0 × 1.0 × 3.5 m.

Photograph by the author.

Figure 2

Jōmon flame pot, earthenware, excavated from the Iwanohara Site, Nagaoka City, Niigata Prefecture, Japan and dated to about 5000 BP. Located in the British Museum.

Photograph by the author.

Emotional Archaeology

Kobayashi's warning expresses a more general ambivalence about the place of subjective and esthetic responses in archaeological research. As I have previously reviewed this (March, 2021), I will not go into further detail here (also see Taylor et al., 1994). It will suffice to say that concern centers on the risk of confusing contemporary esthetic responses with the feelings of the original makers/users of prehistoric artifacts; concerns confounded and reflected by the way we use the word "art" to refer to artifacts that we find particularly expressive. To avoid this and to help situate the Western esthetic tradition within a wider anthropological approach to affective or sensorial culture, Robb (2017, p. 595) suggests replacing "art" with "powerful objects," an exchange that facilitates the use of associated contextual evidence to situate hypotheses about ancient and prehistoric sensory experience within a wider network of contemporaneous material culture (Crnobrnja, 2011; Knappett, 2005; Meegan, 2014; Sofaer, 2015; Wells, 2017). By encouraging researchers to filter contemporary emotional experience through a network of material evidence, the contextual approach mitigates the confusion that sets in when artifacts are used empathically to intuit prehistoric emotions and reduces the risk that contemporary archaeologists anachronistically project their sensorial reactions onto the minds of the past.

In a similar vein, Gell's (1992) methodological philistinism, by encouraging the development of "an attitude of resolute indifference toward the esthetic value of works of art," aims to release the study of material culture from the powerful grip of Western estheticism (p. 42). Once again, creating a context around powerful objects ensures that emotional responses are titrated through scholarship. This is mostly a good thing, and I do not want to take issue with it. But I think there is something extra to be gained by embracing and celebrating, in an emotionally direct way, the vitality of flame pots. Let me illustrate what I mean by juxtaposing two passages; both concern the ubiquitous convolutions and protuberances that define the upper rim of flame pots. The first comes from an archaeological source.

> Some of these rim adornments were so large, cumbersome and freely formed that although some may have served for hanging or carrying one doubts their utility … Small lugs may have been functional but larger handles were so ungainly that, like the ornate rims, their serviceability is doubtful …
>
> … the sculptural representations that swarm around the rims … are concrete manifestations of zoomorphic and anthropomorphic repertories that form a consistent iconography … accepted by many archaeologists as offering firm evidence of an ideology, and associated ritual.
>
> (Kenrick, 1995, p. 53).

By taking a dispassionate approach, Kenrick assigns a default, ritual, role to the convolutions (see also Nyord, 2020, who finds a similar problem in the analysis of Ancient Egyptian images). The second passage are the words of one of Japan's foremost modernist artists.

> There are projections that rise up on the surface of the vessel. As one traces the thick, protruding lines as they run across the body of the vessel, one's line of vision also moves. A line soars and whirls about, then suddenly drops. It weaves to the right and left two or three times and then drops down vertically. Just then, it runs up at an unthinkable angle and crawls upward as it draws a strange arc in the air. ln an unbalanced fashion the line gouges and cuts away high up on the face of the vessel, then calmly return to its original path …
>
> This phenomenon is beyond words. But that is not all. When one follows the horizontal line that connects with this pattern, suddenly one comes across a discordant ornament in the form of a handle, which is like a stalactite that twists and turns and dangles down. When compared with the overall size and weight of the vessel, the handle is disproportionately small. Yet, as ornament, it stands out as inharmoniously large …. This amazing quality shakes the viewer to the depths and resonates with a strange melody inside the viewer's body.
>
> (Okamoto, 1952, pp. 54–55).

Okamoto's description turns the embossed lines and clay-work into sculptural performance. If we too are willing to experience, in the present moment, the extravagance of a flame pot exclusively for the sake of that experience and accept that the knowledge that we seek is enacted within that experience, then we may lose interest in the search for meanings that have passed. Encouragingly, an interest in sensory archaeology has been mounting in recent years. Hamilakis offers a comprehensive and effective critique of modernist archaeology and he and his colleagues (Hamilakis, 2013, 2017; Hamilakis & Jones, 2017; Papadopoulos et al., 2019) make a convincing case for sensorial archaeology. However, Hamilakis portrays sensorial experience as "multitemporal." By this he means that senses "are past and present at the same time; they entail the simultaneous co-existence and communion of perception and memory" (Hamilakis, 2013, p. 124). From this position, he argues that artifacts have the capacity to enact the past. I do not find it controversial to claim that perception and past experience are blended across a continuum and connected through an evolving series of systems, nor that familiar things like tools enact habitual behavioral patterns. But, by suggesting

that giving access "to the material world from early prehistory to the present, which expands infinitely the sensorial capabilities of the body, archaeology can unearth the lost and forgotten sensorial modalities of humans" (Hamilakis, 2013, p. 199), he extends the perception-memory blend far beyond directly connected systems. He appears to suggest that contemporary, sensorial reactions to prehistoric artifacts offer a portal to a domain of sensibility that is shared across time. This claim for temporal universality risks reintroducing the confusion between past and present feelings that has been the longstanding criticism of the sensorial approach. Referring to the impulse to bring back the prehistoric sense of the Odin Stone, Raffles puts the issue in these terms:

> Stone persists, perhaps for eternity, requiring only to be animated. The frustration is that this archaeological animation—ultimately, simply the rediscovery of the animating principles of its time—relies on the conceptual and theoretical repertoire of our own time (symbolism, mimesis, process, hermeneutics, structuralism, phenomenology), a repertoire too distant and disenchanted for the task. Still, this is the alluring gap that these stones open, evidence, but refuse to fill, the gap of which that long-lost gap about a quarter of the way up the Odin Stone, peephole to an expanded universe, is iconic.
>
> (Raffles, 2020, p. 57).

In contrast, Bailey's art/archaeology proposal explicitly avoids making an amalgam between past and present. In his paper about prehistoric figurines of south-east Europe, Bailey (2017a) makes a distinction between the care taken in fieldwork and contextualization of figurines found at the Serbian site of Stubline and the anecdotal and unverifiable nature of the subsequent searches for meaning. Bailey's analysis leads him to seek less scholarly, more experientially exploratory connections instead. In *Disarticulate—repurpose—disrupt* (2017b), he breaks with the past altogether. By making links between prehistoric artifacts and contemporary art practice, Bailey encourages us to reconsider the former through an experience of the latter. By disarticulating artifacts from their context and repurposing them within a contemporary one, Bailey claims that they can serve to disrupt cultural assumptions about both past and present societies. This disruptive process creates uncertainty about the validity of received wisdom, while at the same time, it emphasizes that disruption cannot produce stable truths either. In *Breaking the Surface*, Bailey (2018) follows and extends Renfrew's (2003) encounters with contemporary artists by arguing the case for aligning specific thematic artistic interventions with the evidential remains of physically similar prehistoric remains. Bailey's intention is not to claim equivalence between past and present meanings, nor to argue that the process of contemporary art resembles in some mystical or shamanistic way the cognitive architecture of the past. Instead, juxtaposing contemporary art and prehistoric artifact introduces archaeologists to non-coherent ways of making knowledge and to the benefits of the sort of vivid experience recounted by Okamoto.

Jōmon Culture and the Typological Approach

In this section, I introduce the field of Jōmon archaeology (for a more detailed introduction see Habu, 2004; Kenrick, 1995; Kidder & Esaka, 1968; Kobayashi, 2004; March, 2021; Steinhaus & Kaner, 2016). Jōmon flame pots were produced by a complex forager society in the Echigo region of Japan. Findings are concentrated along the Shinano valley. The word "Jōmon," which means "cord pattern" in Japanese, refers to both the repetitive imprint of twisted cord found on the surface of many specimens of Jōmon pottery and their culture of origin. Lipid analysis suggests that flame pots were used to cook aquatic animals (Lucquin et al., 2016, 2018), and their burial context indicates that they were used to prepare feasts (Pearson, 2007).

The archaeological ceramic record dates the beginning of Jōmon culture to more than 14,000 years ago and presents a continuous development in culture and pot morphology that ended only around 3,000 years ago

with the arrival, from the mainland, of the Yayoi culture, rice farming, and a more refined ceramic tradition (Kenrick, 1995; Kidder & Esaka, 1968; Kobayashi, 2004). The development of Jōmon pots is separated into six stages: (i) Incipient, (ii) Initial, (iii) Early, (iv) Middle, (v) Late, and (vi) Final.

The relative isolation of the Echigo region led to the development of a style, *shinbo ninzaki*, that progressively distinguished itself from the pottery of surrounding regions. Based on construction method and appearance, Kobayashi (1998, 2004) divides the evolution of the *shinbo ninzaki* style into three stages, parsing the final stage into a further four groups. He locates flame pots in the fourth (D), along with so-called crown pots. Flame pots appeared about 5,000 years ago, toward the end of the Middle Jōmon stage. The word "flame" refers to the vessels' convoluting rim, but there is no evidence to suggest a connection with fire.

All *shinbo ninzaki* vessels, including flame pots, were made using the coiling method, a technique still used today. The potter rolls a lump of clay into a thin cylinder, building up the vessel sides by spiraling the coil onto itself and then smoothing the joints between the layers. The rim protrusions and body convolutions of a flame pot were added afterward by modeling or pinching slabs or rolls of clay, and the vessel body was then embossed using the shaped point of a bamboo stick.

The above summary gives a flavor of the extensive, detailed, taxonomic approach that has characterized Jōmon scholarship since the work of Yamanouchi in the 1930s. As Ghobadi et al. (2015) describe it, the aim is to map the mental connections between groups of potters based on pot morphology. This network of geographical and chronological relationships between types offers clues about what pots meant to their original users. Kobayashi (2004) predicates the typological approach on the notion of a "community template," a shared mental image of pot morphology. Potters create variations on the template and, and the emerging body of work manifests and maintains the style: "[I]nvestigating the history of Jōmon pottery style zones provides an insight into the Jōmon mind, even if we are left guessing at the actual contents of the stories the pots were used to tell" (Kobayashi, 2004, p. 56).

Ingold (2010) calls this view of the creative process "hylomorphic" because the form (morphe) that something takes is understood to exist separately from the matter (hyle) from which it is made. Kobayashi's position is consistent with mainstream information-processing models of the mind (e.g., David et al., 2004) and of creativity (Boden, 2004). A Jōmon pot is taken to be an external representation of an internal creative process, a window into the mind of its maker. The assertion that creative decisions take place in an internal conceptual space determines not only how we understand the creative process of the original maker but also prescribes the perceptual process of the contemporary viewer. If a pot's shape is a representation of an internal mental procedure, then to understand the meaning of the pot, the elements of pot morphology must become symbols to be decoded.

For example, Kobayashi suggests that Early- and Middle-phase Jōmon pot were conceptualized differently. In the Early phase, makers/users saw them primarily as containers but, as the Early phase evolves into the Middle phase, the pots develop a narrative function. Kobayashi (2004) explains the transition as follows:

> The establishment of these narrative patterns indicates that Jōmon potters had moved from just holding mental images of the object they wanted to create in their heads, to having particular concepts in mind, which they wanted to express through combinations of symbols, which carried meanings that would have been understood by other people in their community. In other words, by this stage, meaningful concepts existed prior to the designs used to express them, and these concepts were given a reality in the Jōmon world through appearing on Jōmon pots.
>
> (Kobayashi, 2004, p. 45).

A hylomorphic view, as we have seen, separates mind from matter. In the next section I will present another way of understanding what it is like to be sensate, one that does not divide the world into active subjects and passive objects. I will begin with Heidegger, who—despite the notorious obscurity of his writing—provides an influential, philosophical framework for various enactivist approaches to cognition, including MET, which I will move on to after Heidegger.

Heidegger, *Dasein*, and Temporality

The most relevant feature of Heidegger's philosophy is his concept of *Dasein*, "being-in-the-world." *Dasein* means something radically different from an-individual-in-the-world. In *Dasein*, there is no such thing as "I." *Dasein* is an indivisible, ongoing, temporal process that is characterized by an intention to gain an understanding of being-in-the-world. *Dasein* makes sense of itself through its everyday activities, and especially, through the quality of care it takes in those activities. Heidegger (1962) refers to the unconsciously familiar way in which *Dasein* undertakes everyday activity as "readiness-to-hand" (p. 98). An example of readiness-to-hand is an experienced hand, wielding a hammer whose heft is adapted to the task. Heidegger contrasts this with "unreadiness-to-hand," the situation in which the hammer is ill-adapted or damaged. Finally, he contrasts ready/unready-to-hand with present-at-hand, a situation in which a hammer is not experienced through its use but analytically, as an object that stands apart from its handiness.

The indivisibility of person and world means that the temporal experience of *Dasein* is different from that of an individual. A person uses past experience to guide the search for information in the present in order to decide actions in the future. *Dasein*, on the other hand, means "being-ahead-of-itself-being-already-in-(the-world-) as being-amidst (intraworldly encountering entities). This being fulfils the meaning of the title care" (Heidegger, 1962, p. 236). What Heidegger means by this is that as an ongoing "being-in-the world" system, *Dasein* is prescient in the sense that it acts itself into the future. For example, the readiness-to-hand of a wielding hammer knows what comes next—hammering. Heidegger called this "fore-having." And it is fore-having that takes *Dasein* into the future. The following passage, to which I return during the case study, introduces the term.

> In every case this interpretation is grounded in *something we have in advance—in a fore-having* … In every case interpretation is grounded in *something we see in advance—in a fore-sight*. This fore-sight "takes the first cut" out of what has been taken in to our fore-having, and it does so with a view to a definite way in which this can be interpreted. Anything understood which is held in our fore-having and towards which we set our sights "foresightedly," becomes conceptualizable through the interpretation … In either case, the interpretation has already decided for a definite way of conceiving it, either with finality or with reservations; it is grounded in *something we grasp in advance—in a fore conception*.
>
> (Heidegger, 1962, p. 191; emphasis in original).

By "interpretation," Heidegger is referring to an understanding that comes from an incident of being-in-the-world. Each interpretation is guided by a triumvirate of prejudices or assumptions: fore-having, fore-sight, and fore-conception. Together these create a fore-structure (see Leung, 2011, for a more detailed analysis). The fore-having is brought forth by the specific nature of the incident—for example, hammering. Fore-having occurs through an act of appropriation; an interpretation takes an erstwhile external entity and incorporates it into being-in-the-world. Heidegger refers to this act of appropriation as fore-sight and sometimes, more evocatively, as "fore-grasp." Fore-grasping contains two contradictory aspects. First, it determines the way in which an entity is unveiled to *Dasein*. Secondly and concurrently, *Dasein* decides the manner of fore-grasping, using an understanding that already exists between it and the veiled entity. The

interpretive process of an entity through fore-having and fore-grasping produces fore-concepts. It is through these fore-concepts that the unveiling of the entity takes place.

To sum up, the fore-structure means that *Dasein*'s interpretive position is guided by prior understanding. But this prior understanding is not imported from the past but is constructed in the ongoing activity of *Dasein* in the present (Heidegger, 1962, pp. 191–194). That present understanding should be based upon prior knowledge makes common sense. But here, Heidegger is suggesting that presuppositions suppose themselves, not in the past, but in the present.

Material Engagement Theory

Since it was first introduced (Renfrew, 2004), Malafouris (2012, 2013, 2014, 2015, 2019) has developed MET into a comprehensive description of how thinking (or *thinging*, see below) takes place through, with, and by things. The philosophical backdrop of MET is found in the work of Whitehead, Merleau-Ponty, Husserl, Heidegger, and Bergson, and MET shares some common ground with other approaches within archaeology and anthropology (e.g., the work of Hodder, Ingold, and Hutchins), as well as ecological psychology and the recent 4E (embodied, embedded, enactive, and extended) movement. And there are important parallels with Latour's ontological position (see, for example, Latour, 1999).

In terms of developing the clayful phenomenological perspective, there are three reasons why I rely on MET rather than one of these other approaches. First, MET presents a systematic and systemic formulation of the mind that conflates subject and object, creating a continuity of activity between humans, materials, and things. Such an outlook provides an ideal as a framework for understanding artistic activity. Second, MET is informed by detailed anthropological fieldwork with potters (e.g., Malafouris, 2007), making it directly relevant and applicable to understanding a creative relationship with clay. Third, and following the previous two, specific concepts associated with MET such as "creative *thinging*" and "enactive signification" are invaluable when it comes to describing how artwork proceeds.

Malafouris sets out the three main MET hypotheses (see Malafouris, 2013 and his chapter in this volume). The summaries below are partial, influenced by my work as an artist and by the specific concerns of this chapter.

The extended mind. As we have seen, hylomorphic approaches to cognition locate the mind in the head. Clark and Chalmers (1998) extend the mind by describing how external artifacts play a constitutive role in thinking. Nevertheless, they still assign a central, executive role to the brain. In the MET version, the mind becomes a process extending across time rather than space. It exists spatially only in the sense that we can locate and track the shifting coordinates of human-material interaction. In terms of this chapter, it is important to note that this temporal extension is bidirectional. The mind extends backward to encompass the habits and cultural patterns that provide ongoing activity with the predictive rhythm to allow the mind to reach forward. In these terms, an opportunity for creative *thinging* is precipitated when the rhythms from the past become out of step with the requirements of the future.

Enactive signification. If the mind is a property of temporally extended material engagement, then activity finds meaning in what it makes and vice versa. Signifier and signified create each other and emerge simultaneously. This means that an artwork is not a stand-in for something else. It is no longer necessary or desirable to wait for activity to make a material mark before searching it for presumed, symbolic content. For an artist like me, the concept of enactive signification is compelling because it suggests that both making a mark and enacting an existing mark are affective-cognitive, non-linguistic actions in themselves. To translate such actions into words makes no more sense than do the shadows on the wall of Plato's cave.[1]

Material agency. The notion of a temporally extended mind undermines any attempt to locate a single, stable source of agency; no longer a personal attribute, agency is an emergent property of ongoing activity. Like the extended mind, agency is shaped by the evolution of patterns over time. And, although this patterning occurs at different temporal scales—cultural/phylogenetic, ontogenetic, task-in-hand—all are expressed during a single moment of action in a spatially and materially specific location.

These three hypotheses are brought together by the concept of "creative *thinging*" (Malafouris, 2015), a useful notion for understanding how MET applies to working *with*, *by*, and *through* clay. Heidegger converted "thing" to "*thinging*" to undermine the view of things as passive, immutable objects, recasting them instead as bundles of auto-generative activity (Heidegger, 1975). By adding "creative" to "*thinging*," Malafouris links a temporally extending mind to the mutability of things and draws our attention away from human intention, away from the pot as an object and toward the point of sensation where hands and eyes touch the clay, a moment in time and space where mind and matter are indistinguishable. For Kobayashi (2004), flame pots distinguished themselves from earlier pots by becoming mediums for the symbolic representation of the Jōmon mind. Whether or not this hypothesis is true, creative *thinging* takes us back to the present—a time when the mental images of Jōmon people and their representational intentions are long gone. By returning to the sensorial present, we give a prehistoric artifact the freedom to resonate, and we give ourselves the possibility of attending to "the non-spiritualistic spirit of Jōmon culture's primitive art … a spirit that is completely adapted to reality in a material and dynamic way and has no ideological utility" (Okamoto, 1952, p. 59).

Okamoto (1952) exhorts us to "seize this purposeless purpose and this meaningless meaning as our method" (p. 59), which reads to me like an endorsement of non-coherence. In the next section, I will summarize Law's argument for non-coherence as a method.

In Praise of Non-coherence

Following the Enlightenment, myths have been understood as stories that misrepresent reality rather than frameworks that support systems of knowledge (Midgley, 2003). In *After method: Mess in social science research*, Law (2004) deals with the epistemological consequences of this position:

> In Euro-America the inscriptions that condense ontic/epistemic imaginaries belong to the novel or to poetry or to art and not to serious research method. As do those that condense non-coherences (James Joyce?), overpowering fluxes (Edvard Munch?), indefinitenesses (Mark Rothko? Franz Schubert?), multiplicities (Georges Braque?) or fractionalities (Steve Reich?). Perhaps all this is fine … On the other hand, it is also costly. It is costly since it Others imaginaries, fluxes, indefinitenesses and multiplicities—even as it draws on them. And, at the same time, it denies the various desirable effects—the various goods—that these might carry and enact.
>
> (Law, 2004, p. 148).

Modern (post-Enlightenment) knowledge-making methods aim to develop clear, unambiguous, coherent representations of reality. But reality is often messy and ambiguous, and Law (2004) fears that the pursuit of clarity risks misrepresenting reality:

> [Social] science should … be trying to make and know realities that are vague and indefinite because much of the world is enacted in that way. In which case it is in need of a broader understanding of its methods. These, I suggest, may be understood as methods assemblages.
>
> (Law, 2004, p. 13).

It is important to note that Law does not pit coherent and non-coherent approaches against each other. He makes it clear, for example, that a non-coherent approach to organizing alcohol addiction services would be disastrous. Rather, he believes that restricting research methods to those that seek definite results leaves many questions unanswered and unanswerable, question like why alcoholism services are so difficult to manage. To answer messy questions, he suggests:

> [We might] keep the metaphors of reality-making open, rather than allowing a small subset of them to naturalise themselves and die in a closed, singular, and passive version of out-thereness. That we refuse the distinction between the literal and the metaphorical (as various philosophers of science have noted, the literal is always "dead" metaphor, a metaphor that is no longer seen as such). That we refuse the dualism between the real and the unreal, between realities and fictions, thinking, instead, in terms of degrees of enacted reality, or more reals and less reals. That we seek practices which might re-work imaginaries. That we work allegorically. That we imagine coherence without consistency.
>
> (Law, 2004, p. 139).

A non-coherent approach has much in common with the way artists proceed. For example, studies of artistic creativity by Reinders (1991) and Rawlings and Nelson (2007) show how artists maintain an attitude of uncertainty and not-knowingness. Reinders uses Merleau-Ponty's term "circumscribed indeterminacy" to describe this mode of functioning. A painter interviewed by Reinders gave the following description of indeterminacy.

> You can say: "I like this orange. Therefore I am going to put it here." And the orange says: "No, I won't go there because I'm coming off," or, "I'm falling away" ... You start with one idea and it changes into something else. And you think [of what] you are going to do ... For instance, I thought this would look ... as an example ... more like the drawing or the monotype. It didn't. It looked less like it, and for reasons that were almost beyond my comprehension of why it was happening that way.
>
> (Reinders, 1991, pp. 121–122).

Following interviews with eleven artists, Rawlings and Nelson (2007) summarize the artistic mode in the following terms.

> The immersion in the artistic activity and the dominance of intuition give rise to a unity in sense of self ... The divisions inherent to selfconscious experience—referred to by one participant as "decision-makings," "worryings" and "deliberations"—seem to break down. In fact, this unity of self can be experienced as a lack of self, as illustrated by one participant's description of a "bracketing of the self." A sense of self as "pure action" emerges—that is, a lack of distinction between thoughts and the act of expression in the art form; the artist does not contemplate the work and then proceed, but uses the medium in an immediate, automatic flow. This experiential state involves a lack of awareness of the physical body and of the passing of time.
>
> (Rawlings & Nelson, (2007, pp. 231–232).

In his book *Make to know*, Buchman (2021) interviewed 48 artists from diverse fields about the creative process. He too identifies the importance of being unsure:

> Make to know ... is not "winging it": There is a direct link, in fact, between the quality of making, no matter the medium, and the level of skill, experience, education, ethics, and engagement that

> one brings to the work. But those are elements that serve as scaffolding on which the artist stands in creative activity to enter the unknown and the unimaginable.
>
> (Buchman, 2021, p. 78).

One artist he interviewed, Ann Hamilton, linked unknowingness and uncertainty to a loss of a sense of intention.

> How do you cultivate a space where you can allow yourself to do something you don't understand at all … that allows you to dwell in not knowing? … the goal is to find a process that is unselfconsciousness … so that you lose your sense of intentionality in order to become responsive.
>
> (Buchman, 2021, pp. 78–79).

Another artist, Diana Thater, described the evolution of her installation *Radical as reality* (2017) as follows:

> I had no idea I was going to do that in the installation. I found the thing that I didn't expect to creep in … It became the starting point for the next piece, the thing I realized after making the work. The thing that is there that I never plan to be there, that appears and, in turn, produces a new idea in the making.
>
> (Buchman, 2021, pp. 61).

I continue with two excerpts from interviews I conducted with artists. In the first, Markus Karstieß describes how for him too, the creative process happens in a state of uncertainty, vividly communicating the unsettling nature of "working in the open field," as he calls it.

> If you work into the open field, it's like walking up … stairs and you think there is a fifth stair coming and there isn't, and you step into this nothingness, and this is the feeling that you have … this is what I think we should work towards when you want to succeed in creating a new artwork.
>
> (Karstieß interview with March, 2015, unpublished).

The second comes from an interview with textile artist Matthew Harris, during which he explores how much control he feels he has over the process and outcome of making. I cite him at length to give a flavor of the complexity of the issue that Harris is wrestling with.

> MH. Most of the time my process is about creating something that's unintentional … There was always this tension between … Maybe I should just make them and then have the courage to just exhibit them the wrong way round because, actually, I was really excited about, you know, the quality of the marks on the back … Suddenly there are these other lines just crisscrossing across the surface … I want my unexpected marks to come through—to disrupt …
>
> PM. So what does that mean about the nature of intention? Because now, would you now call them intentional?
>
> MH. No they are still unintentional because I mean I know that they're going to have an impact but I have a very … clear sort of procedure that I use… I tend to think, well … I have to use a colour of thread that corresponds with the colour of the lime stitching down there (pointing to a part of the work) but I make sure that it's a darker tone than the one that I would use if it were on the front so it becomes visible. Yes, so then, I don't know … I don't know what the full impact (will be) but that is an intentional decision. It is a decision, well, I know … I know that that procedure will lead to something, I mean … They're all a series of procedures that lead to things that I have some control

> over but also there are these elements, uncontrolled elements, that just kind of come about through that process.
>
> (Harris interview with March, 2019, unpublished).

Harris' technique is a perfectly coherent procedure; he is certainly not "winging it," and yet the process has no clearly defined arc of intent, no predetermined goal. Keats (1817) invented the term "negative capability … being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason" to describe Shakespeare's creative capacity (p. 528). The psychoanalyst Bion (1970, p. 125) subsequently used "negative capability" to describe the requirement for an analyst to remain in a state of free-floating unknowingness, tolerate the associated anxiety, and resist the pressure to end indeterminacy with false certainty. When she began painting, Milner, herself a psychoanalyst, encountered similar anxieties. As soon as the lines of a drawing were suggestive of something, she reports:

> [She] would develop them to make it look like that object. It seemed almost as if, at these moments, one could not bear the chaos and uncertainty about what was emerging long enough, as if one had to turn the scribble into some recognisable whole when in fact the thought or mood seeking expression had not yet reached that stage. And the result was a sense of false certainty, a compulsive and deceptive sanity, a tyrannical victory of the commonsense view which always sees objects as objects.
>
> (Milner, 1950, pp. 75–76).

I end this series of vignettes with three descriptions from *Project Holocene*, the case study I will present later. They describe, in a context of uncertainty, the strange juxtaposition of skilled gestures, purposeful action and unintentional activity.

> The dexterity of the cube-making gesture came from having repeated it hundreds of times during a previous project. Dow (2017) suggests that such continuous and expert bodily gestures contain an implicit awareness of self. There was certainly a mild sense of mastery that went with these gestures. Indeed, it was quite disconcerting to experience purposeful action in the absence of a sense of personal agency … I felt a clear inclination to bring forth form from clay but I do not think it is accurate to describe it as my inclination. It was something I was a part of
>
> (March, 2019, pp. 143–144).

> … adding bits by impulse—on a bit-by-bit basis. With no plan and no understanding of how several of these decisions join … up. Long periods when I am working at a fast pace—adding bits without hesitation, whilst at the same time—no understanding how such a process can create something that is interesting to look at … How do the individual impulses form together to form an overall intention? I do not feel part of that intention. I am not conscious of it—I am only conscious of what I should do next
>
> (Notebook entry *Matrix 4*, February 11, 2018).

> I am confronted by configurations that do not fit into what I would describe as sculptural forms. They clash but seem to impose themselves … a tension between the canons of art and what the system seems to want to do.
>
> (Notebook entry *Holocene 9*, December 18, 2018).

While the above accounts suggest that art sometimes proceeds in a non-coherent manner, they also suggest a distinction between two modes of creative making. There are episodes of discontinuity, rupture, and

discordancy, and times when the apparent pointlessness of gestures makes them feel clumsy. However, there are also periods of continuity and rhythm associated with embodied knowledge—examples of craftmanship, contingent on the moment-by-moment attunement of gesture, tool, and material (Baber, 2023). There are indications that such technical competence is a prerequisite for tolerating prolonged periods of uncertainty, and that the episodes of non-coherence exist to challenge habitual patterns of engaging with the world.

Enactive theories of cognition, including MET, are predicated on the view that humans think by engaging with the world. But while enactivism is well suited to describing and accounting for embodied knowledge, situations of non-coherence are another matter. In their introduction to *Enactive cognition at the edge of sense-making*, Cappuccio and Froese (2014) lay out the problem. They define cognition as situated sense-making and describe intelligent behavior as a function of the dynamic coupling of organism and ecosystem, suggesting that:

> [T]his reciprocal belonging of living body and world-environment is the defining, nonmetaphoric underpinning of cognition itself, so that living and cognizing are modes of the same sense-making capability and therefore are, in their essences, coextensive... [But] if cognition is essentially a process of sense-making, then how does the enactive approach account for non-sense?
>
> (Cappuccio & Froese, 2014, pp. 6, 8).

Their use of the term "non-sense" parallels Law's choice of "non-coherence." As Law distinguishes non-coherent from incoherent, Cappuccio and Froese separate non-sense from senseless. For them, senseless means, "devoid of sense," while non-sense points toward a proposition—whether it is true or not—that is either unthinkable or cannot be adequately captured by language. How can enactivist theories deal with the paradox of being confronted by something that does not make sense, yet feels like it might, but ... then again, maybe it does not? What happens when the activities of a human and the behavior of the environment are non-compatible but not necessarily incompatible?

To resolve the paradox, Cappuccio and Froese (2014) turn to Heidegger's use of the word "uncanny." When *Dasein* shifts from being-in-the-world into being-in-a-world-of-non-sense, then it loses the sense of "ready-to -hand," the implicit familiarity of world-human activity. In short, *Dasein* becomes unfamiliar to itself. Things that are normally taken for granted within *Dasein* are called in to question, creating anxiety. Although the structure of the world remains unchanged, being-ahead-in-the-world is no longer attuned to it. For Heidegger, this is the basis of the uncanny. Cappuccio and Froese describe it well.

> If non-sense emerges from anxiety, this is not because the fluid stream of habitual coping with the world had been overlooked, forgotten, or impaired, but because it was objectified under the focus of hyperreflective consideration, turning into a petrified body of factual information virtually separated from its cognizer.
>
> (Cappuccio & Froese, 2014, p. 11).

The situation of unready-to-hand introduced earlier is a less disorienting version of the uncanny, and in such cases, action is not brought to a complete halt. Instead, *Dasein* tries new things that we might call "anticipatory ready-to-hands." Cappuccio and Froese suggest that these provisional action patterns are phenomenologically bracketed as non-sense, remaining so until and unless patterns are found that do make sense.

For Cappuccio and Froese (2014), feeling something is absurd encapsulates the uncanniness of non-sense. The absurd is not the result of having simply overlooked or misinterpreted sense, but the consequence of finding oneself in a situation of indeterminant salience. As a result, implicit sense-making habits are made

conscious by their failure in the absurd situation. The sense of absurd comes from an awareness of the failure of sense-making accompanied by a failure to pinpoint the reasons for that failure.

In Part 1 of this chapter, I have argued for the importance of being emotional about archaeology and, by introducing the philosophy of Heidegger and MET, I have indicated a preference for process over substance (Gosden & Malafouris, 2015). I ended Part 1 by making a case for approaching messy things in a non-coherent manner. I begin Part 2 by presenting *clayful phenomenology*, a non-coherent, artistic approach, the rational for which is provided by MET in partnership with *Dasein*. In a previous paper (March, 2021), I used *Project Holocene* to illustrate the ontological and epistemological benefits of *clayful phenomenology*. In Part 2, I revisit *Project Holocene* to give a further account. I describe the clayful relationship that developed between flame pots and the activity of a contemporary ceramic workshop, and I explore what this relationship reveals about temporal experience.

Part 2: The Feeling of Time

Clayful Phenomenology

I begin with the neologism "clayful." One advantage of taking an artistic approach to knowledge-making is the relative freedom it offers to explore unusual or unfamiliar avenues of enquiry in ways that are unconstrained by expectations about the value of the artistic activity itself or its outcome. Essentially, a system of creation does what it feels like doing. But, as *Project Holocene* will demonstrate, this liberty may include the freedom to be rule-bound, as for example, being constrained to repeat a similar action many times or limiting the construction method to a cuboid form. This combination of spontaneity and auto-imposed constraint is distinctly playful (Bateson, 2017), and by collapsing the words "clay" and "play," I emphasize that the playfulness of sculpting comes, not from a human state of mind, but from the metaplastic qualities of clay-in-the-hand.

In her interviews with artists, Reinders (1991) identifies a paradoxical mode of functioning that she calls "purposive-playfulness," which she relates to "a tension between the vaguely intuited artistic demands of the intentional object and the attitude of 'circumscribed indeterminacy'" (p. 55). Purposive-playfulness is similar to the clayfulness of non-coherence as this excerpt illustrates.

> As the artist assumes the attitude of circumscribed-indeterminacy, he holds at bay the knowledge which he derived from previous artistic experiences … The artistic configurations themselves that emerge in the playful manipulation of the artistic materials are recognized by the artist rather than produced by him. They come into being out of the artist's actively manipulating his artistic materials in a certain mode in which his artistic intuition and artistic perception play a primordial role against the background of an open-ended receptive attention.
>
> (Reinders, 1991, pp. 55–56).

I turn next to "phenomenology," which normally refers to subjective experience: to the perspective of a cognizant agent. But, in *Dasein*, the cognizant agent is not an individual but a state of being-in-the-world. The seat of consciousness is neither the brain nor the individual. Although *Dasein* exists in time, it has no fixed spatial abode.

Let me give an everyday example. One Saturday morning, I took a break from writing this chapter and went to have breakfast in a café with my wife. I looked up from our table to see a small, framed picture hanging lopsidedly on the wall. The sense of skewness was surprisingly present, making it difficult to concentrate on the picture itself. I stood up to straighten it, but my wife told me not to, so I took a photo instead (Figure 3).

The issue of whether experience is extended depends on where, if anywhere, I locate the sensation of skewness. Orientation-sensitive cells in my visual cortex were firing, setting in motion a chain of neural activity across my cerebellum, basal ganglia, and motor and prefrontal cortex. But I did not feel skewness in any of those areas. The brain has no capacity to feel anything. The sensation of skewness felt like it came from the picture itself, but a picture has no more capacity to feel skewness than the brain. I asked my wife what she thought. She said that she didn't know and that she didn't need to know.

Figure 3

Where is lopsidedness experienced?

Photograph by the author.

Whether we need to know or not, I hope the story shows that there is no clearly identifiable spatial locus to experience.

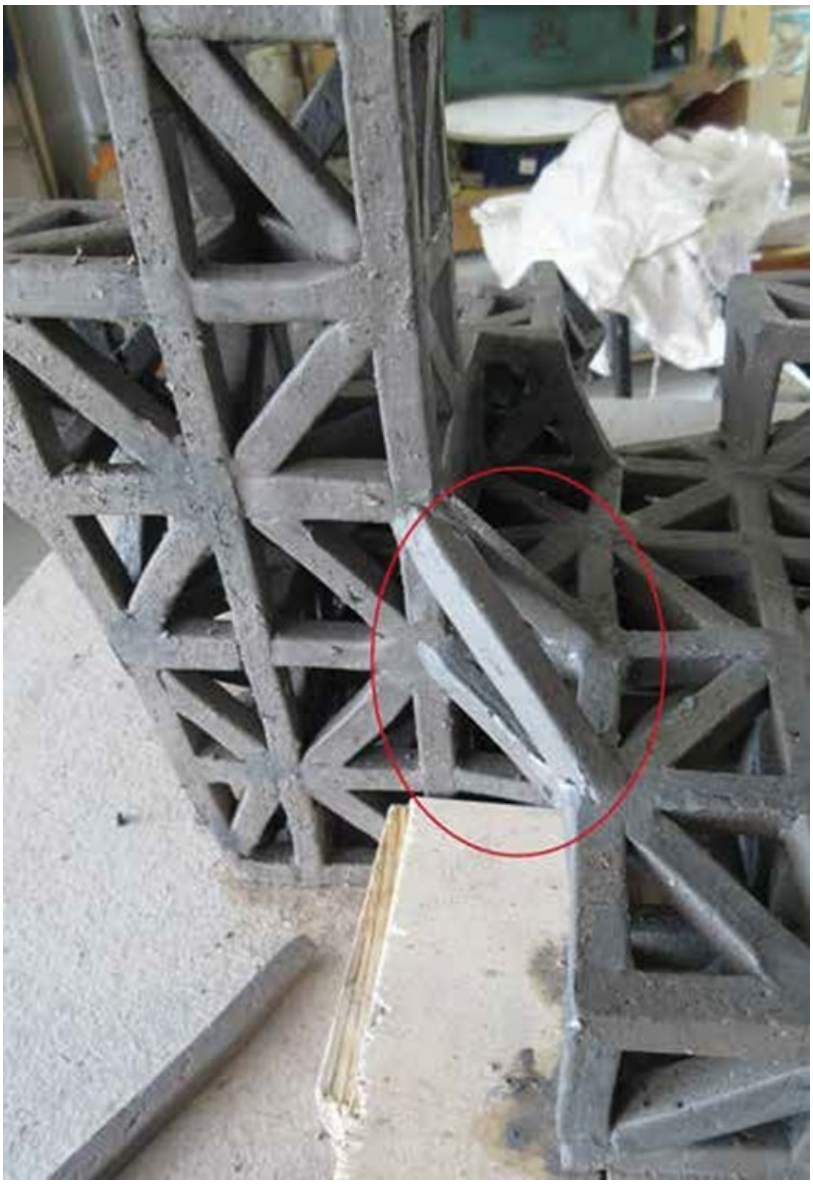
Like *Dasein*, MET is predicated on the notion that cognition, agency, and signification are temporally extended and spatially dynamic. I find it helpful to understand creative *thinging*, "a point in time and space where movement makes mind and matter indistinguishable" (March & Vallée-Tourangeau, 2022, p. 164) as a specific, experiential manifestation of *Dasein*. Creative intention comes not from the artist but from what I call a "transient creative system," which can be delineated pragmatically by the walls of my workshop. A transient creative system is made up of mind-matter elements. These are not the stable and recognizable objects like tables and chairs found in a substance-oriented account of the world. The movement of hands, a squishing lump of clay, and the hardness of a few square centimeters of work bench interact and auto-

generate a brief, chimeric existence. The moment-by-moment interaction forms and maintains the system as an intentional force (March & Glavneau, 2020; March & Malafouris, 2023; March & Vallée-Tourangeau, 2022). Here are two examples from the *Holocene* notebook of what I mean.

> One thing that is happening more—instead of whole cubes—breaking down—so I only see the future in terms of one strut.
>
> (*Holocene 8*, October 7, 2018).

> Sometimes it is so obvious where to put the next piece (rectangular length of clay) that it is like deciding whether or not a line is horizontal or vertical—(the sense of) verticality come from where?
>
> (*Holocene 9*, November 12, 2020; see Figure 4).

Figure 4



The decision to place this piece here could be described in terms of a moment-by-moment auto-sculptural configuration.

Photograph by the author.

The ongoing, creative intention of sculpting is an example of what Kirchhoff and Kiverstein (2018) refer to as a "self-organizing process," one in which:

> control and coordination are distributed over and propagated through the media taken up in cultural patterns of activity … one in which a set of components that make up a system enter into non-linear interactions according to local rules, without the intervention of any global executive control process.
>
> (Kirchhoff & Kiverstein, 2018, p. 20).

Hutchins (1995) gives a similar account of the experience of meaning:

> It is difficult to place the meaning of the step cleanly inside or outside the person, because some component of the meaning may be established by a kind of situated seeing in which the meaning of the step exists only in that active process of super-imposing internal structure on the experience of the external world. That is, at some point in the development of the task performer's knowledge the step may not have a meaning in the absence of the world onto which it can be read.
>
> (Hutchins, 1995, p. 300).

Hutchins goes on to propose that, if such an episode of situated meaning is consciously experienced, there are three possible, non-exclusive mechanisms by which it might become manifest. First, experience is likewise situated; in other words, consciousness is extended. Second, experience runs as a separate process within a subsystem (person). And third, the subsystem (person) exhibits awareness beyond its (his/her) boundaries. My interest lies in making a case for the first: extended consciousness (EC). What follows is an adaption of Kirchhoff and Kiverstein's (2018) argument for EC.

In his paper "Spreading the joy," Clark (2009) accepts the case for dynamic entanglement within and between brains, bodies, and worlds, conceding that "some specific experiences … require a kind of 'signature' temporal evolution of neural states that simply cannot (in the natural order) occur in the absence of the right extra-neural scaffolding" (Clark, 2009, p. 979). The feeling of lopsidedness, or of creative decision-making happening between my hands, is exactly this type of experience. Clark is suggesting that neural activity is not sensitive enough to capture the dynamics of lopsidedness or creative change without the temporal presence of a fistful of clay or the skewed painting. Kirchhoff and Kiverstein (2018) propose that such a unique temporal signature is captured by Sensory Motor Contingencies (SMCs). SMCs are a specific sort of dynamical entanglement. An SMC describes an established, reciprocal link between sensation and familiar, body-centric, object-centered, or environmental movements. SMCs link movement to sensation dynamically (nonlinearly) so that sensation and movement become phenomenologically indivisible as "perceptual presence." SMCs are also responsible for what Noe (2005) calls "presence in absence" (the sense of experiencing the whole of something while perceiving only a part). Along similar lines, Silberstein and Chemero (2015) use dynamical systems theory to argue the case for "extended cognitive-phenomenological systems":

> Dynamical systems theory is especially appropriate for explaining extended cognition because single dynamical systems can have parameters on each side of the skin. That is, we might explain the behaviour of the agent in its environment over time as coupled dynamical systems … Our cognitive, conscious, and behavioural capacities co-explain and co-determine each other dynamically. The systems that cognitive scientists have identified as extended cognitive systems are in fact extended phenomenal-cognitive systems.
>
> (Silberstein & Chemero, 2015, pp. 189–190).

And, some years earlier, Hurley (2010) came to a similar conclusion:

> The interactions of an active agent with her environment generate what I've called a dynamic singularity (Hurley, 1998): a tangle of causal and informational feedback loops centered on herself that moves with her and ropes in her brain, body, and elements of her environment. Dynamic singularities are extended in the same sense that phenotypes can be extended (Dawkins, 1982); the skin is transparent to the dynamic feedback processes whose character explains what phenotype, or what type of experience, is in question.
>
> (Hurley, 2010, p. 149).

SMCs are predictive; their rhythm is projected onto possible future sensory movements, as when we turn an object to see its back. We can therefore consider habits as semi-contingent networks of SMCs. The sense of gestural certainty about the placement of the next piece of a *Holocene* sculpture, described earlier, illustrates this point; patterns of behavior are prescient by virtue of being established in the past. Here is another entry from my notebook.

> [A]ll movements in making the Holocenes are mundane. They feel like construction gestures (like tiling or brick laying) rather than creative gestures like sculpting. This means that (it feels that) the origin of creativity is unclear-obscure. Unlike the S.I series [*Substantia Innominata*, a previous project. See Figure 7, right] where it felt collaborative between clay and hand. The clay here does not follow plastic, manual gestures so as to join the dance. Here the hands have a job to do, and the way the material presence is constructed happens, in some part, separately from the forming sculpture.
>
> The hexagonal template of a honeycomb is not decided in relation to the present ecosystem—it arrives as a habit … This is like the cubes. Cubes = habit, deformation = disruption (of habit). Pattern of form and deformation—deformation always in relation to form. (Unlike normal sculpting gestures, when amorphous lumps of clay are added to a body and then modelled on the body, here, the lengths of clay are made apart and are then cut before being attached to the body).
>
> (*Holocene 8*, September 7, 2018).

For Husserl (1989), when habits are consistent with the present context *and* correctly predict future circumstances, then the experience of past, present and future are linked by implicit or procedural knowledge:

> From a phenomenological standpoint, the "habitually" or the "experientially" has its intentional relation to circumstances. If these circumstances become real then the experiential steps forth as something belonging to them, as something expected. An instinctual drive would also have to be related to circumstances, and to that extent we have there an experiential expectation, but this expectation has, in the case of genuine habit, an implicit horizon of similar memories.
>
> (Husserl, 1989, p. 268).

Habits follow SMCs in being relational; organism and habitat exist, define, and develop themselves and each other in concert. As such, SMCs can provide a framework for extended consciousness, especially in the case of skilled activity in predicable situations. It is perhaps therefore not surprising, in situations of non-coherence, that when habits stop working, things start to feel uncanny. Even when running smoothly, a system of creation inhabits a disquieting, liminal world. Within the system, there is a sense of artistic activity, but no notion of an independently sensate artist. Things come together. Things fall apart.

There are affective consequences to following a line of research in which the sense of self fragments and disperses into a system that "deals with the propagation of deformed and reformatted representations, and … dissolves individuals into peculiar loci of coordination and coalescence among multiple structured media" (Sutton, 2010, p. 213). In a previous description of *Project Holocene* (then called *The Matrices*; see March, 2019), I described how purposeful engagement in unintentional activity was like being trapped in a double-bind (Bateson, 1973). And Milner (1950) describes how "[i]n one part of the mind, there really could be a fear of losing all sense of separating boundaries … in fact a fear of going mad" (p. 16). The artist Engelfriet talks of how "[c]lay can give you the feeling of being pulled into it, sucked away out of existence. It can go as far as an experience of death" (Higgin, 2016, p. 110). It is clearly difficult to tolerate an attenuated sense of self (March, 2021; March & Vallée-Tourangeau, 2022), and I am often tempted to pull myself together, step out of the system, and return to the familiar world of cause and effect, of immutable objects; a world where my hands move the clay and my intentions move my hands (March, 2019).

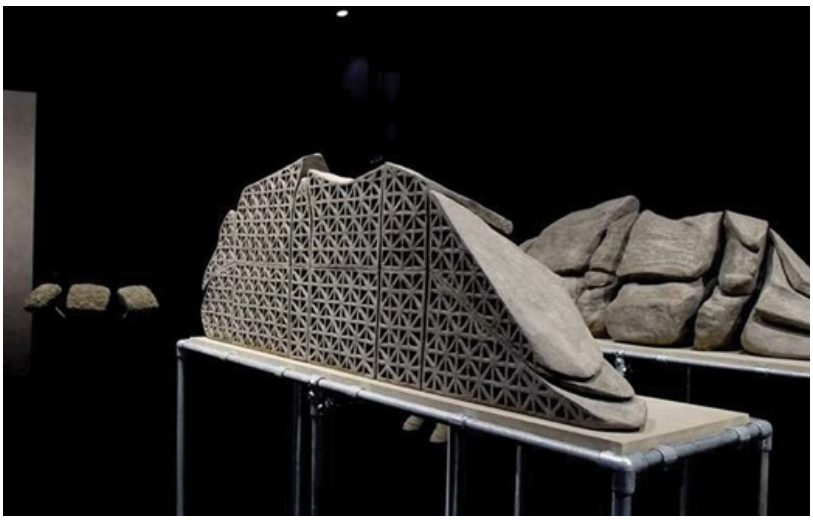
Having described Clayful phenomenology and given some examples of what it feels like to be part of a system of creation, I will move to the case study.

The Beginning of the *Holocene*

Where to start? If "prior intention" is defined in terms of three sequential propositions—having an idea, thinking it's a good one, and deciding to act on it, all occurring in a mental space—then I hope it is now clear why I think that "prior intention" does not pinpoint the beginning of anything and does not originate in a place that is separate from the material context for which the intention is about. Instead, and consistent with the MET formulation of the extended mind and of material agency, I see intention as transactional and transitional, emerging from the integrative reciprocal activity of human and non-human subparts. So, I begin the story with the joyful feelings of absurdity associated with the repetitive actions necessary for making a flat, geometric matrix out of clay.

Absurd and joyful because making a geometric structure from clay seemed delightfully silly. The matrix work was part of a project called *Claustra* (Figure 5; also see Vallée-Tourangeau & March, 2020 for a case study). In parallel to the joyfulness, there was a sense of frustration because the *Claustra* project required the matrix to be constrained to two planes. *Claustra* was finally completed in 2015, leaving the matrix free to develop its three-dimensional potential. Intermittently, over the course of the next three years, the matrix-making process developed into a series of sculptures, provisionally and predictably called *The Matrices*. The sculptures grew by the multiplication of a quasi-identical cuboid structures of clay. They were quasi-identical because the cube would occasionally become deformed by shortening an edge or diagonal (Figure 6).

Figure 5



Claustra, sideview showing matrix wall. Stoneware installation (2015), 1.8 × 2.0 × 1.8 m.

Photograph by the author.

Figure 6

Holocene 8. Left: Grid-like cuboid structure. Right: Deformation by addition of foreshortened edges.

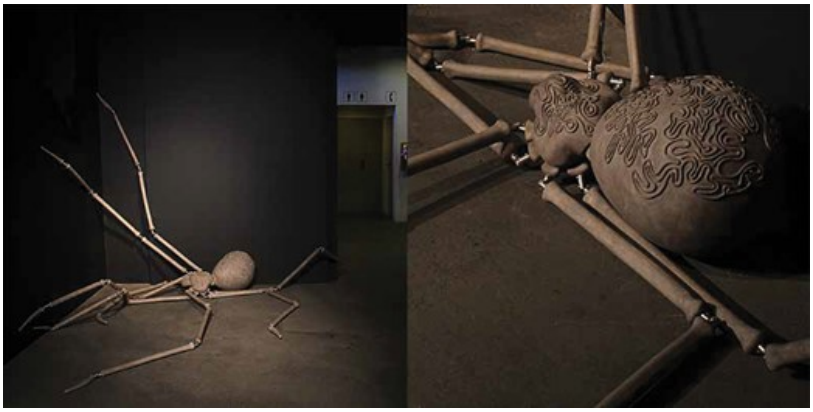
Photographs by the author.

I took notes and photos throughout the project, and a time-lapse camera took snaps at 20-second intervals (an edited version of the time-lapse footage of *Holocene 6* is available online at https://vimeo.com/288572786). There were six sculptures in my workshop in May 2018, when two fellow artists came to visit. Both artists were struck by the sculptures' undefinable cultural and geographical origins and temporal indeterminacy, a feeling that these objects might have been made any time from the distant past, through the present, and into the future. The incertitude about the sculpture's temporal origins brought the word "Holocene" to mind. I wrote in my notebook:

> The extent to which work is both precise and intricate—clumsy and approximate. [This] relates to [the visit] of R.-A. and L. [the artists] about time and place—every continent, past and future. Were Jōmon done in the same way? Jōmon = Holocene?
>
> (*Matrix 6*, May 14, 2018).[2]

Jōmon pottery, particularly flame pots, have inhabited the extended mind of my workshop for several years, either explicitly (Figure 7) or implicitly (Figure 8; also see March, 2021).

Figure 7



Left: Jōmon spider kit (2013). Right: Detail, stoneware, steel and stainless steel, 4 × 2 × 1.5 m.

Photographs by the author.

Figure 8

Left: Dogū figurine (3000–2400 BP). Copyright Ueno Museum and distributed under a Creative Commons license. Right: *Substantia Innominata 10*.

Photograph by the author.

Nevertheless, flame pots insinuated themselves into the project opportunistically. There had been no plan to use the *Matrices* project to investigate Jōmon pottery. Aside from both being made from clay, it is difficult to give a reasoned account of what drew flame pots and the *Matrices* together. The reasons lie not in words but in the enactive signification of their union. Within the newly forming *Holocene* system, the connection between contemporary, geometric structure and flamboyantly prehistoric pottery was clear and manifest.

Whether it remains clear, extricated from the system and inserted into this account, is for you, the reader, to decide.

Approaching the End of the *Holocene*

Following comments by the two artists about their temporal lability, the activity of the workshop became explicitly associated with Jōmon flame pots and the *Matrices* changed their name to *Holocene Pottery*. Focusing on the penultimate phase of the project, *Holocene 8*, I now want to look in more detail at what this temporal incertitude is about and what it says about an encounter with flame pots (Figure 9). See an edited, time-lapse video of the making of *Holocene 8* here: https://youtu.be/HoqqO3WTnic.

Figure 9

Four views of *Holocene 8*. Stoneware installation (2018), 0.45 x 0.45 x 0.45 m.

Photographs by the author.

To recap, flame pots were built using the coiling technique in which a spiral of clay is wound into an inverted conical form. The coiling action leaves a series of horizontal lines on the surface of the vessel, which potters usually go on to efface. Jōmon potters did likewise, and once the surface was smooth, they used a sharpened bamboo stick to make vertical stratifications, within which they incorporated spiral motifs.

While working on *Holocene 8*, it dawned on the system, in a moment of outsight (so-called because the realization happened not internally as insight, but externally, as part of an extended mind; see Vallée-Tourangeau & March, 2020) that the system had been obliterating the lines left between the edges of the cubes. I wrote in my notebook: "Why correct all the joins and make smooth? … Efface the hand of man. The history of production disappears—[it means that we] can't see how a cube forms" (*Holocene 8*, July 19, 2018). The habit was transferred automatically from the *Claustra* project, and it was only when flame pots joined *Project Holocene* that the reason for effacing the joints came under scrutiny.

The explanation that came to the extended mind of the system of creation goes like this. Visible joints divide the sculpture into its constituent, construction elements, constraining the viewer to engage with the piece in relation to the way it was made and to the actions of the artist; creative *thinging* possibilities between viewer and sculpture are restricted to the period of production by the indexical evidence of the process. You might think that this provisional, in-the-making status would emphasize creative process over creative product, but what gets highlighted is the historical fact of the process rather than its dynamism. In a sense, the sculpture gets stuck as model of what it might have become. With the process temporally fixed, creative *thinging* is diminished by the constraint to experience the sculpture in reference to its making and its maker. In his analysis of the origin of an artwork, Heidegger (2002) describes how important it is for art to separate from the hand that made it.

> The more solitary the work, fixed in the figure, stands within itself, the more purely it seems to sever all ties to human beings, then the more simply does the thrust that such a work is step into

> the open, and the more essentially the extraordinary is thrust to the surface and the long-familiar thrust down.
>
> (Heidegger, 2002, p. 40).

By covering its tracks, the *Holocene* creative system helps those who subsequently encounter it to ignore past intentions and concentrate instead on a creative encounter in the present.

This reasoning by the system of creation took place primarily through material transformation, occurring when the gestures of contemporary sculptural activity evoked flame pot production methods and projected them onto the morphology of the contemporary sculptures that were being constructed using the same gestures. By bringing together flame pots and contemporary sculpture, the projective act opened a new arena for creative *thinging—Project Holocene.* What I am describing here is a version of "blending theory" or "conceptual integration" (Fauconnier, 2018), which is adapted to include enactive (material-conceptual) blended spaces as well as mental ones. I will not go into more detail here, but those interested can consult Malafouris (2013), where in Chapter 5, he presents blending theory as the primary mechanism underlying engagement with material.

I have described above how a newly blended conceptual process, *Project Holocene*, brought about a conceptual change in the *Holocene* sculptures. This, in turn influenced how flame pots were experienced within the system, in the following way. The efforts by the makers of flame pots to smooth and re-stratify the surface were now seen to be disrupting the chronologically ordered indexical strata by rotating it 90 degrees. The vertically inscribed lines take attention away from the horizontal chronology of construction and redirect the gaze upwards, past embedded spirals and toward the gyrating convolutions of the vessel's rim. This journey metaphorically transforms the indexical traces of coiling to iconic signs of the mode of production. In transforming from index to icon, the coiling action explores and celebrates the role it plays in bringing itself in to existence. The metamorphosis feels pleasurable and elevating but, as Okamoto (1952) also senses, the pleasure has little to do with a disinterested appreciation of visual form:

> Rather it is bound up with an intensely religious and magical meaning that points, if one is to put it in words, to a fourth dimension … The life balance that was achieved between nature and humans was dynamic and dialectical in nature. What is concealed in this aesthetic view, with its strange and dignified serenity, is dialogue with the fourth dimension.
>
> (Okamoto, 1952, pp. 57–58).

Exactly what Okamoto means by the "fourth dimension" is unclear. The Cubist movement was associated with four-dimensional geometry (see Ambrosio, 2016 for a review), and Okamoto studied art in post-Cubist, 1930s Paris. But rather than referring to a spatial dimension, Okamoto's use of the term fits more closely with Duchamp's exploration of the fourth dimension, as a temporal extension of spatial experience (Gell, 1998). Duchamp said of his work, *The Bride stripped bare by her bachelors* (or *Large Glass*, 1915–1923):

> I thought of the idea of a projection, of an invisible fourth dimension, something you couldn't see with your eyes.... the fourth dimension could project an object of three dimensions, or, to put it another way, any three-dimensional object, which we see dispassionately, is a projection of something four-dimensional, something we're not familiar with. It was a bit of a sophism, but still it was possible. "The Bride" in the "Large Glass" was based on this, as if it were the projection of a fourth dimension.
>
> (Cabanne & Duchamp, 1987, p. 40).

Duchamp distrusted the notion of perception, believing that its analytic and synthetic qualities make it insensitive to the essence of objects as they come into existence. What Duchamp tried to capture in his work was a moment when energy emerges from matter. When I walk around *The Large Glass*, I glimpse some activity that lies beyond the physical work itself. I get a similar feeling when I walk round a flame pot. I think this is what Okamoto is hinting at.

As the *Holocene* project approached its end, I noticed that the transformations taking place as I sculpted also had a transformative effect on the previous sculptures in the series. It was as though *Holocene 8* foreshadowed earlier work in the sense that some of the influences at play during earlier sculptures were only brought into existence during work on the later one. It makes sense that the creative *thinging* of later sculptures might retrospectively explore the cognitive/material processing of preceding sculptures. But, in addition to this, I am describing a sense that the *Holocene 8* system of creation sculpted itself into a temporal position that pre-dated earlier Holocenes. I wrote the following in my notebook: "Forehaving = 'possibility of this coming to pass' = the experience of making the Holocenes … The later Holocenes may be realisations of what could have preceded earlier ones" (March 8, 2018).

The reference to "fore-having" comes from the Heidegger passage about fore-structure (1962), cited earlier, and the idea that presuppositions do not pre-exist but unfold during a present, ongoing encounter. I am suggesting that the *Holocene 8* creative system sculpted the presuppositions (the fore-structure) of antecedent *Holocene* sculptures and thereby inserted itself before them. I mean by this that *Holocene 8* shaped the material-concepts that were to guide its forebear's development and, by extension, its own. This gave a fluid, bidirectional feeling to the sense of time within the system of creation. Like most activities, sculpting is normally associated with feeling that time moves forward. Here, I am suggesting that there was also a sense of certain eddies and whorls in the flow of time during which the creative *thinging* of sculpting dragged the temporal experience of time into reverse.

To help you appreciate what I mean, here is another everyday example. Sometimes I work on my computer in the kitchen. I may be so absorbed in the task that I am unaware of the noise of the fridge's cooling system until it stops turning. But when it does stop, I do not hear silence. I hear the noise of the motor *after* it has stopped. For a moment, it feels like time goes forward into the past.

In Kobayashi's typological analysis of Jōmon pottery, flame pots take their place in a temporal and geographical network in which regional and chronological patterns of influence connect earlier pots to later ones. Kobayashi describes the changing face of Jōmon pottery in terms of an evolution of cultural and traditional practice. The proposal that *Holocene 8* anachronistically pre-empted antecedent sculptures suggested to the system-of-creation that flame pots might relate to their predecessors in a similar way—by enactively signifying the fore-structure of earlier Jōmon pots.

There are two strands to this anachronistic relationship that can be disentangled if we think about them in relation to the modernist art movement. I will summarize the evolution of modernist painting and then return to the strands. Consistent with the notion of enactive signification, Bernstein (1992) suggests that an artistic encounter arises partially but directly from the materiality of the medium: offering us "a thing's meaning in excess of our meaning it" (Bernstein, 2006, p. 261). This means that how we judge a painting depends, first, on how we define the art of painting and second, on how the material agency of the medium is expressed. Fried (1964, 1968) argues that the transition to modernism took place when the second judgement was integrated into the subject matter of the painting. In a similar vein, Cavell (1979) argues that if the task of modernist art is to create its medium, then we cannot call a painting art just because it is a painting. To qualify as (modernist) art, a painting must express concerns about the nature of painting. Fried (1964) summarizes the development of modernist painting:

> Roughly speaking, the history of painting from Manet through Synthetic Cubism and Henri Matisse may be characterised in terms of the gradual withdrawal of painting from the task of representing reality—or of reality from the power of painting to represent it—in favour of an increasing preoccupation with problems intrinsic to painting itself.
>
> (Fried, 1964, p. 642).

I return now to the two tangled strands, left hanging when I suggested that flame pots have the potential to enactively signify the fore-structure of antecedent pots. The first strand concerns the proposal that a Jōmon flame pot system-of-beholding can engage in a self-conscious exploration of its genesis, a contention mirrored by Fried's definition of modernist painting. It suggests that flame pots may be seen to withdraw from their role as vessels and become preoccupied with the nature of becoming a flame pot. The reorientation and transformation of the indexical traces of coiling to iconic signs, as discussed earlier, exemplify this preoccupation. Fried's definition suggests a straightforward exchange of roles. But Harris' (Harris et al., 2005) analysis of Manet's work captures a nuance in the transition that is otherwise overlooked. Harris suggests that Manet never altogether stopped trying to paint pictures of the world. Rather, in revealing the world by painting, Manet also revealed the means by which its unveiling took place in the painting of it. Applying Harris' analysis to flame pots suggests that they do not need to be experienced as either "a container of food" or as "an ontological exploration" because the pot performs the latter role by fulfilling the former.

The first strand shows how a flame pot might develop self-awareness. The second strand involves temporal experience and how Heidegger's (2002) investigation into the origins of a work of art can explain how a flame pot system-of-beholding can upset the chronology of time. Shmugliakov (2012) draws a parallel between the development of modernist painting, as described above, and Heidegger's view of the artistic process.

We have seen that the central preoccupation of modernist painting was the requirement that a painting justify its painterly manner through emerging materiality. In this respect, Cavell (1976) claims that the concerns of modernist painting were not so different from those of art in general. He argues that self-consciousness was central to all art but went unrecognized until the modernism made it explicit. Shmugliakov sees this as a retrospective application of the lessons of modernism to previous art movements. In practice, this meant that after modernism, it was impossible to experience pre-modern art from a pre-modernist perspective. Shmugliakov links Cavell's paradigm shift with Heidegger's contention that Hölderlin's poems, specifically "The Ister," changed our understanding of the nature of poetry-making forever: "[A]ll essential poetry also poetizes 'anew' the essence of poetizing itself. This is true of Hölderlin's poetry in a special and singular sense" (Heidegger, 1996, p. 9). As with modernist painting, "The Ister" creates itself as a poem through the act of "poetizing," and by doing so, reveals in the experience of reading it that such a meta-creative position has always been a defining quality of poetry. It is as though "The Ister" loops back to change its own historical foundations.

There are two ways of experiencing this looping back. First, if poetry reading is seen as an act that is separate from the poem itself, as expressed by the sentence, "I read the poem," then subject and object are ontologically separate. I (the subject) observe the temporal fluctuations in the way the poem (the object) poetizes itself (becomes its own subject), but my own temporal experience is not disturbed by those fluctuations. In object-subject mode, having read the poem and from my perspective in the present, I see the past differently, but I believe that the past itself remains unchanged. In contrast, consider what happens if the action of poetizing happens as *Dasein*; in a system where the poem and me are a single *thinging* thing. The temporal disturbance created *within* the system is experienced *by* the system and this changes how the flow of time feels. Enactive signification brings forth meaning that is oriented toward the future. But in doing so, it also traces its own past, a trace that did not exist until it was enacted in the present. As a result,

the influence of the poem feels like it happens prospectively toward the past, and time feels like it moves forward into the past.

Returning to flame pots, I am arguing that, within the *Holocene* creative system, the temporal experience of flame pots was analogous to Heidegger's experience of "The Ister." As part of becoming a self-referential ontological act, a flame pot creates a past for itself that is ontologically active in the present and toward the future.

Conclusion

Bailey (2017a) contrasts the rigor with which prehistoric figurines of south-east Europe are contextualized with the anecdotal attempts to understand their meaning. It seems that however well archaeologists situate artifacts in the past, their original sensorial significance will always escape us. Bailey's (2017a) alternative is to "release the restraints of standard archaeological reasoning, and work in a more creative world" (p. 17). If we follow this advice, juxtaposing contemporary art and prehistoric artifact, what do we get in place of anecdote? This chapter offers one answer by presenting *clayful phenomenology*. The approach is predicated on two, interconnected, principles: the importance of mythmaking in the development of knowledge/meaning, and the value of approaching knowledge-making non-coherently.

"Myths are not lies. Nor are they detached stories. They are imaginative patterns, networks of powerful symbols that suggest particular ways of interpreting the world." So Midgley (2003, p. 1) begins her book, *The myths we live by*. She goes on to show the vital role myths play in organizing thought, determining and constraining ideas. In post-Enlightenment culture, the influence of myths, for the most part, is implicit and denied. By shining a light on them, Midgley does not want to reduce the influence of myths, but bring them out of the shadows so we can see the role they play. Although I use "myth" in the sense that Midgley does, as a pattern or network (rather than "myth" as opposed to "fact"), the ontological backdrop to *clayful phenomenology* takes Midgley's definition and pushes it in a direction that I suspect, for two reasons, she would not have liked. First, in *clayful phenomenology*, the patterns and networks are not arranged as symbols linked in imagination, but as material-conceptual events, transformed and connected by temporal contingencies. Second, mythmaking is presented as a system within which myths do not determine the actions of people. Nor do people make myths. In a *clayful phenomenological* system, becoming human is enacted *en boucle* through the iterative weaving and disentangling of mythical, materially expressed, spatially localized networks. "Myth" here refers to an affective-cognitive transaction that takes familiar, culturally accepted notions and transforms them into thing-ideas that were "unthingable" at inception.

This brings me to the second principle, that of non-coherence, a word coined by Law (2004) to describe an assemblage of methods that he thinks we need in order to "rethink our ideas about clarity and rigour and find ways of knowing the indistinct and the slippery without trying to grasp and hold them tight. Here knowing would become possible through techniques of deliberate imprecision" (p. 3). And what he thinks we need are:

> tools that allow us to enact and depict the shape shifting implied in the interactions and interferences between different realities. There is need for assemblages that mediate and produce entities that cannot be refracted into words. There is need for procedures which re-entangle the social and the technical. There is need for the coherences (or the noncoherences) of allegory. There is a need for gathering.
>
> (Law, 2004, p. 122).

Clayful phenomenology is one such gathering, one that enacts the shapeshifting necessary for interaction between realities, that produces entities that cannot be spoken, that makes the social and technical indivisible, that makes allegory from material engagement. A contextual approach to knowledge-making seeks to provide evidence-based explanations based on inferential reasoning. As long as it is not exclusive, there is nothing wrong with that. Non-coherent methods do things differently. Knowing exists ephemerally and synergistically within the reciprocal activity of transient assembly (gathering). Its transience means that the validity of such knowledge cannot be assessed using a truth scale that lies temporally or spatially outside that assembly. I am not suggesting by this that all non-coherent connections are of equal value. I mean that their strength must be assessed by and within the relationships that make them, a situation that is problematic in cultures where education is based almost exclusively on training in coherent methods like numeracy and literacy.

The case study in *clayful phenomenology* presents a process of creative *thinging* that gathered flame pots and a contemporary art process into a system of creation, propagating a new, blended, material-conceptual process. The case focused on temporal experience and how it was experienced by the system. I described how the *Holocene 8* system of creation influenced its experience of itself in relation to antecedent sculptures. The system seemed to shuffle the chronological order of events, inserting itself before its forebears, making time sometimes feel like it was moving forward into the past. Flame pots were drawn in to a similar, phenomenological reversal of time's arrow as they transformed themselves into celebrations of their own mode of production, and as they enacted the materialization of the fore-structures of former generations of Jōmon pots.

In terms of trying to make sense of the archaeological record, the most important point is that the action reported here takes place within a materially and temporally continuous creative system, *Project Holocene*, with signification enacted in and by that system. The confusing non-coherence of *clayful phenomenology* therefore makes one thing clear: Artifacts exist phenomenologically within a contemporary system. They do not return to repeat the sensorial patterns of a prehistoric past.

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Notes

1 With reference to the multitemporal model of the senses proposed by Hamilakis, it is worth noting that enactive signification, as a systemic-specific feeling of meaning-in-the-making, precludes any possibility of gaining access to previously enacted meanings in systemic configurations that are discontinuous with the present one.

2 To improve intelligibility, I add some words (in brackets) that were not in the original.