

# THE LIVES OF THINGS IN HUMAN MINDSCAPES DEVELOPING APPROACHES TO COGNITION IN ARCHAEOLOGY



©ERC HANDMADE: UNDERSTANDING CREATIVE GESTURE IN POTTERY MAKING

## ORGANISERS

Emanuele Prezioso Antonis Iliopoulos Emanuele.Prezioso@keble.ox.ac.uk Antonis.Iliopoulos@arch.ox.ac.uk **Programme:** 

**09:30 – 10.00**. The lives of things as creative gestures. Antonis Iliopoulos, University of Oxford.

**10.00 – 10.30.** What can clay do? Exploring connections between affordance and material agency in pottery-making. Anna Barona, University of Oxford.

**10.30 – 11.00.** What's mind is yours: Exploring the material dimensions of social cognition. Alexander Aston, University of Oxford.

## Coffee Break

**11.30 – 12.00.** Touch and tangibility: Interactive touch and the life of objects. Wendy Ross, Kingston University of London.

**12.00 – 12.30.** Cognition reified through object construction and movement. Frédéric Vallée-Tourangeau, Kingston University of London.

**12.30 – 13.00.** Cognition as choreography. The relationship between eye movements and the morphology of a Jomon flame pot. Paul L. March, University of Oxford.

### List of Abstracts.

#### The lives of things as creative gestures

Antonis Iliopoulos, University of Oxford.

To study the lives of things in human mindscapes, it is probably best that we start at the beginning, when they are being made. An obvious way of accounting for the creation of artefacts would be by treating them as epiphenomenal products of a generative process that takes place in the brains of their makers some time before their actual making. But it should not be hard to see why depriving the material world from actively participating in the creative process would essentially mean leaving it devoid of all life - at least as far creative thinking is concerned. Fortunately, matter can be easily reanimated when our attention is shifted from an archaeology of art objects to one based on creative practice. As will be suggested, one way of seeing things as 'alive' is by focusing on the gesture-driven practice that gives them form and meaning, and conceiving them as creative gestures fixed in a material. In moving towards this end, we start by providing a working definition of gesture, before considering the role of gestures in the expression of intention and signification. Gesture is then presented as a variety of sorts, within which the creative kind holds a special position. In order for things to be eventually framed as creative gestures, evidence will be drawn from ethnographic research recently conducted in pottery workshops spread across mainland Greece and the islands.

## What can clay do? Exploring connections between affordance and material agency in pottery-making

#### Anna Barona, University of Oxford.

In pointing both towards the organism and the environment, the concept of affordance (Gibson 1979) appears to have much potential to add to our understanding of the coconstitutive nature of matter and mind. Over the years, it has garnered interest from archaeology and anthropology, but there has been a lack of real 'domestication' of the concept within the fields. From the side of ecological psychology, recent developments have done much to enrich the notion of affordance, extending its applications beyond immediate motor action possibilities to encompass different temporalities and socio-material contexts. Despite this, materiality, and importantly the idea of material agency, is poorly developed in these accounts. The 'material turn' in cognitive archaeology has increasingly emphasised the crucial role that 'things' play in the emergence of our minds, making material agency a pressing matter to consider. In this context, this paper aims to make some steps towards examining the relationship between material agency and affordance by situating the discussion in the specificities of a particular material and practice – namely, clay and the craft of ceramics. It draws on Material Engagement Theory (Malafouris 2013) and Process



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Archaeology (Gosden & Malafouris 2015) to suggest that affordances — just like agency — need to be understood in relation to the primacy of process, as becoming rather than being. A reformulated idea of affordance that is sensitive to the agency of things has the potential to make it more useful for archaeological anthropology on the one hand, and for the growing field of embodied cognitive science on the other.

#### What's mind is yours: Exploring the material dimensions of social cognition.

Alexander Aston, University of Oxford.

The traditional study of social cognition examines how individuals think about other people, positing mind reading mechanisms (e.g. Theory of Mind) through which individuals infer the intentional states and propositional attitudes of others. Considering the emergent properties of human social organisation, I argue that it is more relevant to examine how humans think together. Building on the insights of MET and Enactivism, I explore how intersubjectivity arises from skilled actions which allow shared knowledge and meaning to emerge. I make two key claims about the material dimensions of social cognition: (1) skilled interactions with material culture can lead to shared semiotic systems which mediate further enskillment and encounters with the world; (2) material culture enables people to perceive, enact, manipulate and sustain concepts over different time-scales or varied complexity. To demonstrate this, I engage with a broad range of examples of ritualised congregation, the formation of extended kinship networks in non-state societies and the emergence of urban settlements. The material dimensions of social cognition should focus on seven core concepts: attention, interaction, enskillment, value, circulation, aggregation and dispersal. By paying attention to material interactions humans become socially enskilled and learn to conceptualise value. The circulation of valued materials forms distributed attention structures which generate shared semiotics and further enskillment. Analysing dynamics of aggregation and dispersal reveals the temporal patterning of social interactions, collective attention, circulation and intersubjectivity, demonstrating how material engagement shapes human social organisation across archaeological timescales.

### Touch and tangibility: Interactive touch and the life of objects

Wendy Ross, Kingston University of London; Paul L. March, University of Oxford; Frédéric Vallée-Tourangeau, Kingston University of London.

Merleau-Ponty's 'blind man with stick' is a recurring motif for exploring how we interact in a landscape. The blind man's stick becomes an extension of the nervous system, allowing him to "see" by turning vision into touch. A neglected consequence of this transformation is the reversal it performs in the long-established hierarchy of the senses in which touch plays handmaiden to vision. Movement, stick and grip join together to blur the clear division between the senses. Touching things does two things: first, it moves the focus away from



## THE LIVES OF THINGS IN HUMAN MINDSCAPES DEVELOPING APPROACHES TO COGNITION IN ARCHAEOLOGY

sensation-at-a-distance thereby spreading and distributing sensation across the whole body. Second, because touch requires a direct, physical connection it is the only sense that exhibits both cause and effect. Touch does not passively perceive the object but engages with it. In so doing, touch alters the world that it senses To study this process of alterinteraction – when a group of human and non-human actants coalesce to create an actionscape – we need to develop a new methodology and observational language. We do this by borrowing techniques from conversation and interaction analysis and we illustrate the method here by using data extracted from an eye-tracking video of a sculptor at work.

#### Cognition reified through object construction and movement

Frédéric Vallée-Tourangeau, Kingston University of London; Wendy Ross, Kingston University of London; Paul L. March, University of Oxford.

In the psychologist's laboratory, problem-solving is typically investigated using 'second order tasks'. Such tasks distil cognition into cranial activity by decoupling the reasoner from the world and changing problem-solving activity into mental simulation. In contrast, the solution to a first order problem occurs through person-environment interaction. Taking the example of the 'triangle of coins', we show how it is possible to investigate in the lab how problems get solved in the world and not in the head. The problem involves 10 coins, configured in a triangular shape pointing down. The goal involves moving just three coins so that the triangle points up. As a first order task, the object (the physical presentation of the problem) is dynamically transformed by physically moving the coins. We have instrumentalized the procedure in order to map and trace precisely the object's transformations. This strategy delivers on two fronts. It reveals that first-order problem solving promotes a cybernetic cycle of perception, projection, action, production and reification: grinding out false leads and solutions until the solution is gradually enacted through the construction of the correct configuration. In turn, by coding the transformations, psychologists become ethnographers of things: exposing the object trajectory in the problem space as it manifests the heteroscalar genesis of a new idea. Archaeological research, informed by Material Engagement Theory, creates hypotheses based upon the interactive engagement with objects. We show how an instrumentalized laboratory procedure can outline the kinenoetic field within which cognition and objects are transactionally co-constituted in space and time.

## Cognition as choreography. The relationship between eye movements and the morphology of a Jomon flame pot

Paul L. March, University of Oxford; Wendy Ross, Kingston University of London; Frédéric Vallée-Tourangeau, Kingston University of London.

Jomon flame pots are prehistoric Japanese, ceramic vessels with a striking but enigmatic sculptural form. Material Engagement Theory offers a way of gaining a contemporary



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understanding of such artefacts in nonrepresentational terms with Malafouris's concept of 'enactive signification' focusing our attention on the way such artefacts facilitate a nonlinguistic performative signification through the actions that occur in relation to their creation and use. Despite its increasing use in the field of Cognitive Science as a window into the mind, eye tracking has not been tested in relation to archaeological artefacts. Here, rather than using it as a marker of cortical activity, we use it to reveal visual performance in relation to somatic movements and sculptural forms. We present a pilot study in which eight artists and 16 non-artists were invited to examine a Mesolithic jomon flame pot whilst wearing mobile eye tracking glasses to follow their eye movements. The gaze data elicited by the vase morphology were analysed. While both groups differed significantly on aesthetic measures taken before they saw the pot, this difference disappeared when their aesthetic reaction and the eye-tracking data were assessed. This preliminary investigation of mobile eye-tracking with a prehistoric artefact provides evidence to suggest that the morphology of the vase choreographed viewing patterns in a consistent way within and across the two groups. The attempts of participants to make sense traced similar pathways. Whether we have captured enactive signification on film or not maybe something to discuss.

