

# BEYOND BORDERS AND BOUNDARIES IN PREHISTORIC RESEARCH

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**Abstract:** *This text reflects a desire to move beyond established boundaries in the study of the prehistoric past. On the one hand, it embodies the intention to overcome a disciplinary regime characterised by mutually exclusive schools of thought. On the other hand, it is contextualised in a growing demand for a critical evaluation of narratives founded on the notion that prehistoric societies were composed of bounded and distinct populations of human beings, internally connected by shared cultures, kinship relations, and the occupation of a discrete geographical territory. Actually, the parallel development of archaeogenetics, post-humanism and the new materialisms, has destabilised our understanding of the relationships between things and people and the way that we can think about collective identities. I will seek to tease out the implications of these parallel developments and pursue the argument that we can think of identity more as a process than as a stable entity.*

**Keywords:** *Epistemological boundaries; Archaeogenetics; Post-humanism; New materialisms; Identity.*

**Resumo:** *Este texto assenta no desejo de ultrapassar as barreiras estabelecidas no estudo do passado pré-histórico. Incorpora, por um lado, a intenção de ir além de um regime disciplinar caracterizado por escolas de pensamento que se autoexcluem. Por outro lado, contextualiza-se também numa crescente avaliação crítica de narrativas baseadas na ideia de que as sociedades pré-históricas eram compostas de circunscritas comunidades de seres humanos, internamente ligadas pela partilha cultural, relações de parentesco e pela ocupação de um território geográfico. Na verdade, o recente desenvolvimento da arqueogenética, das correntes pós-humanistas e dos novos materialismos desestabilizaram a nossa ideia da relação entre pessoas e coisas, bem como do modo como se pode pensar a identidade coletiva. Procurar-se-á, assim, destrinçar as implicações do desenvolvimento destas correntes e discutir o argumento pelo qual devemos entender a identidade mais como um processo do que como uma entidade estável.*

**Palavras-chave:** *Barreiras epistemológicas; Arqueogenética; Pós-humanismo; Novos materialismos; Identidade.*

## 1. INTRODUCTION

This volume and the conference that gave rise to it demonstrate a desire to move beyond established boundaries and restrictions in the study of the prehistoric past. This aspiration operates simultaneously at two different levels. Firstly, it embodies the intention to overcome a disciplinary regime located in the present that is characterised by mutually exclusive, and perhaps also mutually uncomprehending schools of thought. These might be defined philosophically, or on the basis of different objects of study (types of evidence, periods of the past, geographical areas), or in terms of distinct national research traditions. It is undoubtedly the case that in their various careers, different archaeologists have been

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nurtured, sustained, and empowered by distinctive conventions of investigation. But these disciplinary communities surely lose nothing, and certainly not their identities, by entering into a mutually enriching dialogue. They do not have to be maintained in a territorial fashion, jealously guarding their subject matter and repelling incursions into their areas of interest.

Secondly, there is a growing demand for a critical evaluation of narratives about the ancient past that are founded on the notion that prehistoric societies were composed of bounded and distinct populations of human beings, internally connected by shared cultures, kinship relations, and the occupation of a discrete geographical territory. These notions, doubtlessly, originated in the nationalisms that were integral to the formation of archaeology as a discipline in the nineteenth century<sup>1</sup>, but nonetheless continue to be reinforced by the way that prehistories often remain nationally circumscribed. Over the past century and a half, the question of the relationship between material culture patterning that can be detected in the present, and human identities in the past has been addressed in a variety of different ways. However, it is arguable that at the present moment this question has become especially volatile for two parallel sets of reasons. On the one hand, the accelerated development of archaeogenetics has revolutionised the study of human population history. But on the other, the equally swift emergence of post-humanism and the new materialisms, both in the human sciences in general and within archaeology in particular, has destabilised our understanding of the relationships between things and people, and by implication the way that we can think about collective identities. In this contribution, I will seek to tease out some of the implications of these parallel developments.

## 2. CULTURE AND IDENTITY

It is arguable that the appearance of a series of successive forms of archaeological thought in the course of the twentieth century was distinguished above all by changing ways of understanding the relationship between material culture and past human collectivities. Nineteenth century «scientific» prehistorians such as John Lubbock<sup>2</sup> and Daniel Wilson<sup>3</sup> brought together the empiricism of the established antiquarian tradition and the rationalism of the Enlightenment, with its stadial schemes of social and technological evolution<sup>4</sup>. Numerous authors have suggested that the emergence of culture historic archaeology from out of this background of unilinear evolutionism can be attributed to a growing interest in geographical variation toward the end of the

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<sup>1</sup> TRIGGER, 1984: 358.

<sup>2</sup> LUBBOCK, 1865.

<sup>3</sup> WILSON, 1862.

<sup>4</sup> KEHOE, 1998: 105.

century, and to the influence of Romanticism<sup>5</sup>. These two strands were linked together by nationalism, which had been growing in influence since the Congress of Vienna. Romanticism was an internally contradictory phenomenon, and some strands within the movement were certainly preoccupied with ideas of shared cultural inheritance and the way that this may represent an expression of collective sentiment, as well as notions of attachment and belonging<sup>6</sup>. Ultimately, this might manifest itself in essentialised notions of an unchanging and homogeneous national character, expressed through artefacts and material culture<sup>7</sup>. But it may be an error to categorically oppose Romanticism and Enlightenment modes of thought, as both Kristiansen and Sherratt do, explicitly or implicitly. For although the Romantics emphasised sensibility and criticised an excessive reliance on rationality, Romanticism is better seen as an extension of the Enlightenment, or an attempt to correct it, rather than an outright rejection<sup>8</sup>. Both were modern ways of thinking, which were often opposed to the unquestioned acceptance of tradition and religion, and to arbitrary forms of authority. Where the Enlightenment sought to liberate humanity through the exercise of reason, Romanticism wanted to extend this freedom through the operation of the imagination. Enlightenment thinkers aspired to reveal nature and humanity through systematic observation, but the Romantics preferred to extend human understanding through the unfettering of creativity.

So, although the culture historic archaeology that developed in the earlier twentieth century may have been concerned with the notion of culture as a collective expression (at least in its European, if not always its American version), and its modes of explanation were overwhelmingly particularist, it was not exclusively a reflection of romantic nationalism. On the contrary, the epistemology of culture history was inductive and empiricist, and the entities with which it concerned itself were the products of categorisation and typology<sup>9</sup>. While Gordon Childe, for example, considered «cultures» to be organic totalities, he acknowledged that they were in the first instance classificatory entities<sup>10</sup>. For Childe, it was the capacity of material things to be classified that rendered them a comprehensible record of past human activity, and this in turn enabled them to form the foundation of prehistories constructed at the continental scale. In this respect, culture history inherited the thinking of the Enlightenment as much as Romanticism. The classifiability of things facilitated the identification of patterns in the evidence, and these patterns had been engendered by the shared cultural norms that had been passed down between generations within prehistoric communities. Although it was not possible

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<sup>5</sup> TRIGGER, 1996: 235; SHERRATT, 1993: 120; KRISTIANSEN, 2014: 22.

<sup>6</sup> BERLIN, 1999: 67.

<sup>7</sup> VOUTSAKI, 2002: 111.

<sup>8</sup> CANTOR, 1993: 111.

<sup>9</sup> JOHNSON, 2011: 764.

<sup>10</sup> CHILDE, 1956: 31.

to work backward from the pattern to the ideas or values that had generated it (since these had been lodged in the minds of past people who are now lost to us), the presence of a structure within the material was sufficient to identify distinct assemblages and the borders or boundaries that separated them. Consequently, variations in the styles and forms of artefacts faithfully reflected the existence of internally homogeneous social or ethnic entities in the past. It was unfortunate, but not entirely coincidental, that this approach to archaeology developed alongside an enthusiasm for tracing the wanderings of ethnic and racial groups in the past, which was in some cases linked to notions of eugenics and racial hygiene (see, for example, Grant, 1916<sup>11</sup>).

Famously, processual archaeology rejected the normative model of material culture, arguing that culture is not a set of ideas or representations that are carried in the mind and automatically shared by all members of a community. Instead, it constituted a set of strategies that can be mobilised and differentially participated in, in response to the changing pressures of the environment<sup>12</sup>. For Lewis Binford, archaeology should seek to investigate the dynamic cultural systems that had existed in the past, rather than sets of cultural traits that might be observed in static form in the present<sup>13</sup>. The inert materials that made up the archaeological record reflected not simply a set of cognitively installed concepts and behaviours, but the interacting elements of a human ecology, including the various subsystems of a society, all of which converged upon and were manifested in material culture. Culture existed at the interface between the various elements of an overarching system. However, this did not necessarily mean that archaeological materials were unrelated to human identity, since for some processual archaeologists aspects of culture might serve as an information system, conveying messages, whether about the status of deceased persons in mortuary practice<sup>14</sup>, or in relation to group affiliation<sup>15</sup>.

Despite this radical revision of the way that archaeology pursued its investigation, there were also underlying continuities between culture history and processual archaeology. As Alice Kehoe points out<sup>16</sup>, archaeological evidence continued to be organised according to classificatory principles drawn from the natural sciences, on the understanding that the structure of the data reflected patterns of past human behaviour. This was now to be subjected to deductive hypothesis testing rather than inductive argument-building. Only later would Binford<sup>17</sup> acknowledge the flaw in this reasoning: that static materials in the present and dynamic activity in the past are different in kind,

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<sup>11</sup> GRANT, 1916.

<sup>12</sup> FLANNERY, 1967: 120.

<sup>13</sup> BINFORD, 1964: 425.

<sup>14</sup> SAXE, 1970.

<sup>15</sup> WOBST, 1977.

<sup>16</sup> KEHOE, 1998: 102.

<sup>17</sup> BINFORD, 1983: 19.

and that one cannot test hypotheses about one sort of phenomenon on an entirely different kind of data. The process of archaeology is therefore one of inference, decoding or «translation», in which the regularities in the data alert us to material formation processes that need to be disentangled before we can proceed to any further arguments about what happened in the past<sup>18</sup>. None the less, Binford persevered with the understanding that archaeological evidence represented a record of some form, and that the processes of development that he sought to disclose were universal ones, which could be accessed using methodologies that were independent of space and time<sup>19</sup>.

The subsequent development of a postprocessual archaeology owed its inception to some extent to the realisation that relationship between material things and collective human identities remained unresolved<sup>20</sup>. From the 1980s onwards, archaeologists increasingly understood that artefacts might be deliberately and skilfully employed to construct, negotiate, transform, misrepresent or mask social relationships. Material things were now no longer seen simply as subconsciously reproduced traits that alerted prehistorians to the presence of a particular cultural tradition, or as tools engaged in adaptive strategies. Instead, artefacts might be deployed in diverse practices through which people made a place for themselves in a world: accumulation, fragmentation, enchainment, containment, repair<sup>21</sup>. This concern with the multiple practices in which objects might be serially involved was a factor in the growth of interest in object biographies, which emphasised the temporal sequences of manufacture, use and circulation through which people and things constituted one another<sup>22</sup>.

But these perspectives introduce a series of tensions: objects do not merely convey or reflect human identities that are already given, while material things were increasingly identified as being active, and having effects and consequences of their own, rather than being limited to the status of tools through which human purposes were achieved<sup>23</sup>. While Ian Hodder's original reflections on the efficacy of things were principally concerned with the role of artefacts as material symbols, they introduced into archaeological discourse the proposition that objects are not just an outcome or by-product of human behaviour, and that they can generate impacts of their own. Significantly, a different but complementary set of arguments were simultaneously being developed within the philosophy of science and technology, where Michel Serres<sup>24</sup> pointed to the capacity of material things to stabilize and canalize social relationships, facilitating the routinisation of practices at an unconsidered level. In the work of Bruno Latour, this would blossom

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<sup>18</sup> PATRIK, 1985: 35.

<sup>19</sup> KEHOE, 1998: 107.

<sup>20</sup> HODDER, 1978: 200.

<sup>21</sup> BRÜCK, 2019: 76.

<sup>22</sup> GOSDEN, MARSHALL, 1999: 174.

<sup>23</sup> HODDER, 1992: 14.

<sup>24</sup> SERRES, 1997.

into the proposition that, in the context of networks composed of entities of diverse kinds, objects can constitute social actors in their own right<sup>25</sup>.

Further, one of the distinctive preoccupations of a postprocessual archaeology had from the start been a concern with agency<sup>26</sup>. Culture history had presented human beings as the passive reproducers of cultural traditions from which they would rarely depart, while processual archaeology had emphasised the role of behaviour as a set of adaptive responses to environmental pressures. Both had emphasised the collective rather than the individual, and neither had demonstrated great concern with creative improvisation, interpersonal negotiation, or intra-societal competition and inequality as routine aspects of social life. The growing concern, from the 1980s onward, with past people as skilled agents who knowingly utilized bodies of knowledge and symbolic systems brought with it a degree of epistemological humility, and a concern with our ethical relationship with the humans whom we represent in archaeological narratives. But the focus on the capacity of material culture to affect the world ultimately led archaeologists to echo other social scientists who had begun to ask whether things too can have agency<sup>27</sup>. Such a proposition raises the further question of what kind of ethical commitments we should now have toward inanimate objects<sup>28</sup>.

### 3. ARCHAEOGENETICS

This rather sketchy outline hopefully brings us up to the present moment and sets the scene for two radical challenges to the way that we imagine past identities. Although there is good reason to be sceptical about the idea that archaeology has repeatedly undergone fundamental paradigm changes in the course of the past century<sup>29</sup>, and we should be alert to continuities in thinking and practice as much as to revisions, we seem to have arrived at a point where established ways of identifying social groups in the past demand a radical re-evaluation.

The first of these challenges comes from recent developments in the study of ancient DNA, or deoxyribonucleic acid, the hereditary material carrying the genetic instructions particular to any organism, recovered from the remains of humans and other creatures. Technological developments over the past two decades have resulted in a remarkable escalation of aDNA research, and these include shotgun sequencing and the recognition that dense concentrations of endogenous DNA often survive in the petrous bone in the base of the human skull<sup>30</sup>. Ancient DNA is generally recovered in a very damaged

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<sup>25</sup> LATOUR, 2005: 64.

<sup>26</sup> JOHNSON, 1989: 194.

<sup>27</sup> GELL, 1998; JONES, BOIVIN, 2010: 333.

<sup>28</sup> DOMAŃSKA, 2006.

<sup>29</sup> THOMAS, 2015.

<sup>30</sup> EISENMANN *et al.*, 2018: 1; CHARLTON, BOOTH, BARNES, 2019.

form, but it is now possible to recombine multiple fragments of a sequence in order to form much more complete stretches<sup>31</sup>. While earlier aDNA analysis was concentrated on short strands of genetic information, such as mitochondrial DNA, it has been possible since 2010 to sequence entire ancient human genomes, the complete genetic code found within the cells of a single person. On this basis, it has proved more readily possible to define haplogroups, or populations who share a common ancestor on either the male or female line. Each human being's genome contains the traces of a great many different ancestors, although over the course of ten to twenty generations the proportion of a person's forebears that are represented in their DNA begins to decline<sup>32</sup>.

The relationship between ancient DNA studies and social archaeology has been a slightly fraught one, since they operate on different philosophical assumptions, and sometimes struggle to communicate with each other<sup>33</sup>. «Social» archaeologists are not always equipped to evaluate the contents of genetics papers that may be highly technical in character, while geneticists may not be familiar with the convoluted disciplinary history that stands behind contemporary debates on material culture and identity. As Scott MacEachern points out, the consequence of this has been that prehistorians have gravitated toward polarised views of aDNA: either outright rejection or unbridled and uncritical enthusiasm<sup>34</sup>. Yet a middle position is possible. It is evident that ancient genomes provide an unparalleled source of information concerning the biological structure of past human (and animal) populations<sup>35</sup>. However, it should be noted that this is only one aspect of the variability of past societies, and that therefore archaeogenetics represents one legitimate and useful methodology amongst several others, rather than a new kind of archaeology that can supplant and replace all the others. Further, ancient DNA, extracted from the surviving remains of formerly living organisms, exists in the present rather than the past. In this respect archaeogenetics shares with disciplines like geology and social archaeology the characteristic that aspects of the processes that it seeks to investigate are not now directly observable. The meaning of ancient genomes is to be inferred, rather than being self-evident, much like all other forms of archaeology<sup>36</sup>.

One of the ways in which aDNA data may prove highly useful lies in the way that it could theoretically provide a check on the degree of biological boundedness that distinguished past human groups, and the extent to which they represented open or closed kinship networks. That is, it has the potential to undermine atavistic accounts of prehistory that discuss the movements and migrations of integral and sutured «peoples»<sup>37</sup>.

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<sup>31</sup> LINDERHOLM, 2016.

<sup>32</sup> REICH, 2018: 11.

<sup>33</sup> SØRENSEN, 2017.

<sup>34</sup> MACEACHERN, 2013: 65.

<sup>35</sup> REICH, 2018: XXII.

<sup>36</sup> ION, 2019.

<sup>37</sup> BOOTH, 2019.

This is important, for the notion of collective identity as an enduring essence, which may in some cases be identified with race, is one that continues to exert an influence. However, in practice the existence of internally homogeneous genetic communities that correspond precisely with distributions of artefact types is sometimes assumed by archaeogenetic research, rather than identified as a thesis to be falsified<sup>38</sup>. Distributions of genetic lineages and of artefact types are presented as relating to entities of comparable kinds<sup>39</sup>. Although culture historic archaeologists in the mid-twentieth century were generally aware that artefact classification was a heuristic means of identifying patterns that might correspond with past human communities, Martin Furholt<sup>40</sup> points out that in some contemporary aDNA research these patterns are reified into mutually exclusive social groups whose existence is a given. So, established culture historic constructions of the past come to influence the way that aDNA evidence is interpreted, although in a streamlined form in which genetic heritage, linguistics, ethnicity and material culture assemblages are presumed to overlap precisely<sup>41</sup>.

We have seen that each single genome contains the traces of hundreds of ancestors, and a consequence of the richness of this evidence is that it comes to be identified as «big data», complex sets of information collected at speed that can be mined for large-scale patterns. Ironically, this militates against more fine-grained studies of local populations that might more easily be integrated with other forms of archaeological evidence<sup>42</sup>. Instead, massive quantities of information that actually relate to more modest numbers of data points are used to develop analyses that are pitched at a pan-continental level. Furholt explains how in these arguments coherent and delimited human populations take on the character of collective agents, acting in concert on the world stage<sup>43</sup>. On this basis, migration becomes the default explanation for the displacement of human genetic material. However, migration is here conceived as a series of discontinuous events separated by horizons of relative stasis, rather than a protracted process which is near-universal in character<sup>44</sup>. The probability is that prehistory was characterised by much more intricate processes, in which change was continuous rather than restricted to brief busts<sup>45</sup>. In a world in which social aggregates were not fixed, but were continually remaking themselves in processes of fission and fusion, and persons and sub-groups were breaking away and attaching themselves to other communities, we should expect

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<sup>38</sup> CRELLIN, HARRIS, 2020: 41.

<sup>39</sup> KING, UNDERHILL, 2002.

<sup>40</sup> FURHOLT, 2018: 162.

<sup>41</sup> FURHOLT, 2021: 54.

<sup>42</sup> CRELLIN, HARRIS, 2020: 39.

<sup>43</sup> FURHOLT, 2021: 57.

<sup>44</sup> ANTHONY, 1990.

<sup>45</sup> CRELLIN, 2020: 6.



unending genetic «churn» rather than the sporadic relocation of blocks of population<sup>46</sup>. The potential of aDNA to contribute to a rewriting of prehistory is colossal, but to date it has contributed more in the way of narratives of massive migrations, which possess troubling political ramifications<sup>47</sup>. In some cases, such accounts of abrupt population relocation and replacement are difficult to reconcile with the smaller-scale detail of conventional archaeological evidence<sup>48</sup>.

#### 4. POSTHUMANISM AND NEW MATERIALISM

If aDNA studies have sometimes had the effect of reinforcing traditional models of human collective identities in prehistory, it is arguable that recent developments in archaeological theory have undermined them more comprehensively than ever before. In the past few years, archaeological thinking has embraced a series of tendencies that are not necessarily entirely new, but which have been developing within the human sciences. These include (but are not limited to) posthumanism<sup>49</sup>, assemblage theory<sup>50</sup>, new materialisms<sup>51</sup>, speculative realism<sup>52</sup>, a renewed concern with ontology<sup>53</sup> and explorations of animacy and vitalism<sup>54</sup>. These perspectives are by no means always mutually compatible, and the working-out of their clashing implications for archaeology has been a source of lively debate within the discipline. Here we will particularly emphasise posthumanism, new materialism and the «ontological turn», since these have profound consequences for the archaeological concerns addressed in this chapter. Critical views of humanism, the understanding that a stable and changeless human nature can both be assumed, and form the basis of our approach to the world, have a long history<sup>55</sup>. However, the growing impact of the environmental crisis, and an emerging preoccupation with the Anthropocene have rendered the imperative to overcome anthropocentrism and human exceptionalism more critical<sup>56</sup>.

Related to this project of recognising that the world does not exist for the convenience of humans, and that we find ourselves in a space of teeming «others», is a demand to take material things more seriously. This requirement might seem self-evident to archaeologists, but it has been suggested that we, like other academics, have principally seen artefacts as entities that we can «see through» to the more important entities

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<sup>46</sup> LEWIS-KRAUS, 2019: 7.

<sup>47</sup> VANDER LINDEN, 2016; HAKENBECK, 2019.

<sup>48</sup> CARLIN, 2020: 32.

<sup>49</sup> BRAIDOTTI, 2013.

<sup>50</sup> DELANDA, 2016.

<sup>51</sup> COOLE, FROST, 2010.

<sup>52</sup> BRYANT, SRNICEK, HARMAN, 2011.

<sup>53</sup> HOLBRAAD, PEDERSEN, 2017.

<sup>54</sup> CHEN, 2012; BENNETT, 2010.

<sup>55</sup> HEIDEGGER, 1993.

<sup>56</sup> DOMAŃSKA, 2018: 24.

beyond, whether the «Indian behind the artefact» or the «system behind the Indian behind the artefact»<sup>57</sup>. The redoubled concern with things as such emphasises that artefacts are integral to social relations rather than a support to humans who are positioned centre-stage<sup>58</sup>. As we will see, this has significant consequences for the way that we might think about groups and identities. The framework of «materialisation» that was influential in archaeology and anthropology immediately before the turn of the millennium proposed that human beings create material things which can then influence or determine subsequent human activity. People make things, which subsequently make people<sup>59</sup>. However, it is now more common to maintain that there is no point at which human beings exist independently of a material world that they later engage with and transform. Humans and materials are mutually co-constitutive<sup>60</sup>.

Finally, the turn toward ontology is a more diverse development. In one form, it stems from a conviction that since the time of Kant modern thought has become overly preoccupied with how the human mind can access reality, never progressing beyond epistemology to whatever is «out there» to be known<sup>61</sup>. However, this speculative philosophy that valorises attempts to discuss the fundamental character of worldly things is complemented by an anthropology of ontology, which seeks instead to take seriously the ontologies of other societies, rather than view them as emic constructions<sup>62</sup>. Taken together, these approaches encourage us to reconsider the character of the entities that we encounter as archaeologists<sup>63</sup>. A related (but not identical) development has been the advocacy of a «flat ontology» within archaeology. This term was first employed pejoratively by Roy Bhaskar<sup>64</sup> in attacking the point of view that we should only concern ourselves with those things that are directly accessible to perception, found in positivism. Bhaskar supports a stratified ontology, in which there are deeper, but equally real, causal mechanisms that underlie the superficial appearances of things. This view was rejected by Manuel DeLanda<sup>65</sup>, who questioned the assumption that the universe is governed by changeless, transcendental organizing principles, or that material entities possessed fixed essences.

The term «flat ontology» is therefore an ambiguous one, and one that we might choose to employ only with considerable caution. It can reasonably be objected that if have a view of the universe that is genuinely «flat», then everything is the same:

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<sup>57</sup> FLANNERY, 1967: 120.

<sup>58</sup> BROWN, 2001: 2; OLSEN, 2010: 2.

<sup>59</sup> MILLER, 1987.

<sup>60</sup> JOYCE, GILLESPIE, 2015: 6.

<sup>61</sup> MEILLASSOUX, 2009.

<sup>62</sup> ALBERTI, 2016: 164.

<sup>63</sup> DOMAŃSKA, 2018: 26.

<sup>64</sup> BHASKAR, 2008: 57.

<sup>65</sup> DELANDA, 2013: 58.

everything is simply a node in a network, and everything is equally employed in the processes of translation and mediation<sup>66</sup>. Furthermore, it might imply that human beings and stones are ethically indistinguishable<sup>67</sup>. Now, at a time of ecological crisis, we might wish to affirm that no thing or being is ever devoid of ethical significance, and that moral responsibility is often caught up in a tangle of relationships between entities of very different kinds<sup>68</sup>. But we might nonetheless reject the view that all entities are ethically equivalent. However, «flat ontology» can also denote an outlook in which no particular entity is privileged in advance of investigation. Although the world is characterised by endless diversity and complexity, things can be treated equally in the rather more restricted sense that they are found alongside each other, are equally susceptible to influence, and are equally capable of causing effects<sup>69</sup>. Yet the character of these influences and effects may be radically different. This insight is important for our question of identity, for it indicates that identities are not fixed and given in any essential sense, but are emergent within historical processes<sup>70</sup>.

## 5. AGENCY AND ANIMACY

As we have noted above, the concept of agency was critical for postprocessual archaeologies in displacing prehistories populated by aimless drones who spent their lives reproducing their cultural traditions, or responding to environmental *stimuli*. However, this agency was often conceived as the sovereign property or capacity of an individual human subject. This is problematic enough, but when transferred to material things «object agency» became a kind of entelechy, a potency contained within the thing itself<sup>71</sup>. As Tim Ingold puts it, agency becomes a «magical mind dust» that empowers objects with volition<sup>72</sup>. Part of the problem here may be that we tend to conflate agency, as the capacity to bring about change in the world, with subjectivity, rationality, responsibility and autonomy<sup>73</sup>. But more significant is the reality that agency is always relational, confederate, and distributed. Even human beings — least of all human beings — are able to get things done in isolation, and agency is always the agency of an assemblage. It is not simply that artefacts are never autonomous agents: the notion of the autonomous agent is itself a modernist fiction, which does not apply to human beings either<sup>74</sup>. Qualifying the concept of agency in this way brings us to the question of animacy.

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<sup>66</sup> RIBEIRO, 2019: 3.

<sup>67</sup> VAN DYKE, 2021: 5.

<sup>68</sup> BENNETT, 2005: 464.

<sup>69</sup> ALBERTI, 2016: 168; CRELLIN, 2021: 122.

<sup>70</sup> DELANDA, 2013: 39.

<sup>71</sup> RIBEIRO, 2019: 3.

<sup>72</sup> INGOLD, 2007: 17.

<sup>73</sup> BENNETT, 2005: 452.

<sup>74</sup> THOMAS, 2004: 139.

As Ingold notes, the conviction that non-organic materials are in some way «alive» was understood by previous generations of anthropologists as a kind of «fetish»<sup>75</sup>, characteristic of an unsophisticated or unscientific mode of thought<sup>76</sup>. Again, the difficulty lies in imagining that life is a quality that is contained within an object, so that inanimate things are «possessed» by something like a spirit or an enchantment. The alternative is that we consider an animate lifeworld, within which life is a condition that precedes the division of the totality into separate organisms and entities<sup>77</sup>. In Gilbert Simondon's terms, life belongs to the domain of the pre-individual<sup>78</sup>. The world is animate because everything is constantly in motion, and continually falling into new configurations before collapsing again. It is the entire field of relations and materials that is continually in motion, and matter is not static but in a tumult of self-organisation, at various different speeds, so that any kind of «inanimacy» is an illusion<sup>79</sup>. Ingold describes this as a process of knotting and weaving, through which materials and organisms are unendingly bring each other into being<sup>80</sup>.

If we imagine materials (stone, sand, earth, timber, metal) to be inert, then our presumption is that form must be imposed onto it from outside, often as an idea or template that issues out of the human mind. This opposition between form and matter is what Gilbert Simondon referred to as «hylomorphism»<sup>81</sup>. However, in an animate world, materials are understood as being metastable, always trembling on the edge of becoming something else, whether through decay, erosion, collapse or interaction. This is the sense in which things are self-organising, for they will always temporarily come to rest in some new configuration, before falling apart again. The process of making is therefore not an external imposition, but an intervention in the flows through which form emerges. Yet the matter from which forms are composed continues to move and flow, so that supposedly «finished» artefacts remain in process, and will ultimately devolve into versions of their constituent materials<sup>82</sup>. One consequence of this insight is that we need to dramatically re-think the notion of artefact biographies, for the lives of things are not composed of a series of re-locations of fixed and static objects. On the contrary, the materials from which artefacts are composed form a series of flows through time and space, meeting, entangling, meshing and falling apart<sup>83</sup>. The framework of «object itineraries» is an attempt to capture the way that rather than forming coherent, linear narratives,

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<sup>75</sup> INGOLD, 2007: 17.

<sup>76</sup> DOMAŃSKA, 2018: 28.

<sup>77</sup> INGOLD, 2011: 68.

<sup>78</sup> BARTHÉLÉMY, 2012: 222.

<sup>79</sup> BRAIDOTTI, 2013: 56.

<sup>80</sup> INGOLD, 2015: 14.

<sup>81</sup> SAUVAGNARGUES, 2012: 57.

<sup>82</sup> JONES, DÍAZ-GUARDAMINO, 2019: 14.

<sup>83</sup> JOYCE, GILLESPIE, 2015: 5.

objects can break down into their constituent elements, and be recombined, or modified. Things do not simply pass from place to place or person to person, because they are themselves continually being transformed (worn, altered, repaired, amended, subjected to maintenance or updating). An object itinerary is therefore a spatialization of the process of assemblage<sup>84</sup>. It should be immediately apparent that the culture-historic model of objects «standing for» the identities of persons is woefully inadequate in the face of this degree of complexity. Equally, the view of material culture as an «extrasomatic means of adaptation» places it as an exteriority, positioned between humans and their environments, a clear-cut relationship that cannot really be sustained. Artefacts are not solid entities so much as movements or processes<sup>85</sup>.

## 6. THINGS ARE NOT A RECORD

Since the time of Gordon Childe, it has been conventional to describe the totality of the residues that have been, or could potentially be investigated by archaeologists, and sometimes also the notebooks, photos, context sheets and drawings that they generate on site as «the archaeological record»<sup>86</sup>. In a series of publications, John Barrett<sup>87</sup> has comprehensively demonstrated an important flaw in this thinking. Such a «record» is understood as representing the detritus or waste matter that a human society leaves behind it, which faithfully records the behaviour of that community. As we have seen, Lewis Binford developed an altogether more sophisticated conception of the archaeological record, which demanded an «artefact physics» to explain the disposition and composition of material residues as a precursor to any inference about past behaviour. Barrett points out that archaeological materials are not simply a product or outcome of social life, since they constituted the physical settings that people inhabited, and the tangible resources that they drew on and employed in the conduct of everyday life. Taking this argument a step further on the basis of the discussion in this chapter, we might understand artefacts, buildings, tools and ornaments as integral elements of past societies, rather than a pale reflection of the otherwise absent presences of past people. But by contradistinction, Barrett's position is that archaeological evidence is composed of materials that sustained forms of life in the past, and provided the context for the emergence of various kinds of humanness<sup>88</sup>. Consequently, he is at pains to distinguish between organic life and inanimate things. Only the former are capable of the processes of self-making that involve the directed exploitation of energy sources found in the

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<sup>84</sup> JOYCE, 2015: 22.

<sup>85</sup> INGOLD, 2015: 7.

<sup>86</sup> LUCAS, 2012.

<sup>87</sup> BARRETT, 1988, 2001.

<sup>88</sup> BARRETT, 2016: 1684.

environment<sup>89</sup>. The implication of this is that for Barrett the world of material things is an externality, within which agentic forms of life emerge and develop.

This distinction between life-forms and material conditions is in some ways comparable with those between organisms and environments, and objects and contexts. In each case, the arguments developing within posthumanism and the new materialisms question how far such categorical divisions can be sustained. For instance, thirty years ago, Tim Yates<sup>90</sup> pointed to some of the problems involved in developing a «contextual archaeology». Ian Hodder had defined context as the relevant dimensions of variation surrounding an object<sup>91</sup>. But in practice, on a complex archaeological site each artefact forms part of the context of each other object, and the distinction between the two ultimately breaks down. Everything is object, and everything is context. Further, Yates pointed out that what constitutes the context of an object (the pit in which it was found, the layer within the pit, the house within which the pit was located) is always to some extent arbitrarily defined by the archaeologist in the present, and need not correspond to the understandings of past people. For Yates, context is a kind of consoling trick that we play on ourselves to restrict the potentially limitless significations of things. We might now argue that context could be replaced by the concept of assemblage, which is an open set of connections rather than a closed (and bounded) container of things<sup>92</sup>. While a context is relatively static, an assemblage is always in process and in movement, endlessly reconfiguring itself. Most importantly, if a context is defined by the analyst, an assemblage is distinguished by its outcomes: it is what it does, identified through its effects and affects.

## 7. INORGANIC LIFE

The model of an animate lifeworld provides an alternative to the picture of active organisms surrounded by inert environments<sup>93</sup>. We have seen that although organisms are «alive», all things are caught up in the process of life. This radically transforms the way that we think of archaeological materials, since buildings, pots and stone tools are not the signifiers of past identities or the material supports of vanished forms of life, but were constituent elements of past societies. However, is there not still a fundamental distinction to be made between living and dead things? The position proposed here is that although it is very easy to distinguish between, say, a stone and a horse (in that the former is static and inorganic, while the latter is an organism that acquires energy from its environment, and is capable of movement to achieve its goals), in practice the things of the world

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<sup>89</sup> BARRETT, 2018.

<sup>90</sup> YATES, 1990.

<sup>91</sup> HODDER, 1987: 5.

<sup>92</sup> ALBERTI, 2016: 167.

<sup>93</sup> INGOLD, 2015: 9.

form a continuous range of variation. Inorganic things are all (at some temporal scale) in motion, and capable of having effects, and there are significant «grey areas» between what is and what is not «alive». This does not mean that a stone is «the same as» a horse, but they occupy different positions on a continuum that does not readily break down into categorically different sets of things.

Non-organic entities can have dynamic properties, which sometimes explode into operation, bringing about various forms of morphogenesis<sup>94</sup>. Systems or assemblages like weather systems and computer viruses are «active» and bring about profound changes in the world, although we would not say that they are «alive»<sup>95</sup>. Sometimes, chemical systems composed of nucleic acids and enzymes can behave in extremely complex ways, approaching the kinds of behaviour associated with living systems<sup>96</sup>. Indeed, these may have been the immediate precursors of organic life, in distant prehistory. It is arguable that organic life emerged with the formation of enclosed systems contained within some form of membrane, creating both interiority and circulation<sup>97</sup>. However, scientists remain divided on the question of whether viruses constitute organisms, and whether they are really alive<sup>98</sup>. While the core of a virus is formed of a nucleic acid contained within a protein capsid, they are incapable of independent reproduction, depending on the metabolic and replication apparatus of a host cell. So, although the two ends of the continuum between the stone and the horse are very clearly distinct from each other, we could actually break the spectrum up in a number of different ways: geological, chemical and biological; plant and animal; vertebrate and invertebrate; conscious and unconscious; linguistic and non-linguistic; and so on.

## 8. CONCLUSION

The parallel development of archaeogenetics, posthumanism and new materialisms destabilizes the way that archaeology has periodically (and implicitly) resorted to what is fundamentally the nineteenth century model of past societies as bounded, internally homogeneous groups of people characterised by an enduring spirit or character that expresses itself through art and material culture. When conducted at a very large geographical scale, the analysis of ancient DNA sometimes conflates biological identity with artefactual assemblages or linguistic groupings. But it also possesses the potential to undermine naïve monothetic conceptions of identity. It is highly likely that a given human group would look very different depending on whether we choose to define it on the basis of kin relations, mode of dress, place of birth, language use, artefact use,

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<sup>94</sup> DELANDA, 1992: 132.

<sup>95</sup> INGOLD, 2015: 55.

<sup>96</sup> DELANDA, 1992: 144.

<sup>97</sup> SAUVAGNARGUES, 2012: 67.

<sup>98</sup> BOYER *et al.*, 2010; MOREIRA, LÓPEZ-GARCÍA, 2009.

or how people would identify themselves verbally. The boundaries of human groups are therefore likely to be «fuzzy». But equally importantly, it may no longer be adequate to conceive of societies as being composed exclusively of intersubjective relationships between human beings. We have argued here that the social is composed of people, animals and things, which form continually emerging and changing compositions<sup>99</sup>. The elements that make up these aggregates have different temporal characteristics, persisting for different periods of time before dying, dissipating or being transformed, so that although there is continuity, the precise composition of the whole is endlessly being transformed. It may be that some of the material things within any social entity endure for longer periods than people or animals, securing the long-term durability of the whole<sup>100</sup>.

The persistent spirit, character or essence of a society in the traditional model is, of course, its collective identity. It is this stable identity that was presumed to reveal and reflect itself in the material works of the community. Borders or boundaries in the distributions of artefact types were therefore the predictable outcome of the adjacent existence of multiple human groups in a geographical region, within a particular period. But the argument that has been pursued here is that we can no longer think of identity as a stable entity of any kind. Rather, identity is a process<sup>101</sup>. Identity is something that will be constantly emerging, and never completed. It follows from this that the extremities, perimeters, and overlaps of the distributions of artefact types encountered by archaeologists will need to be considered in more sensitive and imaginative ways than has often been the case in the past.

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<sup>99</sup> DELANDA, 2006.

<sup>100</sup> JOYCE, GILLESPIE, 2015: 11.

<sup>101</sup> BRAIDOTTI, 2013: 25.



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