

Those which invoke not conjuncture, but structure. The use of structure deals not with rhythms or tempos but persistence or endurance. This is the long term as a stable set of forms which explain underlying continuities.

Structures are interesting because in one sense, they don't change at all; they simply are. A good example of the long-term as a persistent structure is Ian Hodder's work on the domestication of Europe from the 1990s where a long-term *mentalité* revolving around the *domus* defined people's relationship to their world and each other.²⁷ In a nutshell, domestication was an ideology before it was subsistence practice. In many ways, this is classic *Annaliste* history with ideology replacing environment as a long-term structure. As Hodder made very clear, this long-term structure was not unchanging – especially as agricultural practices moved from south-east Asia into north-west Europe, the specifics of the *domus* also changed, such as the shift in focus from houses to tombs. However, such change could be glossed as local variation on a theme.

A more recent example, which also uses this notion of long-term structure but with less explicit reference to Braudel, is the work on deep history by scholars like Daniel Lord Smail who argue for the importance of recognizing the role biological structures, such as neurochemistry, have on human history.²⁸ Like Hodder's *domus*, these biological structures are not so much deterministic but enabling, setting up capacities and capabilities which human culture enhances, or not as the case may be. In other words, the historical variations are as important as the deep structure. But it is ultimately the deep structure that provides the common thread, which gives relevance to the long-term as an explanatory framework. But structural change is not confined to the long term; if structural change is defined as the emergence or cessation of a structure – basically as birth or death – then this too happens at all scales. If human biology can work as a long-term structure, then an individual human body is a relatively short-term structure: formed in the womb, dissipated in the grave. Anything can be seen as an enduring structure if its identity is defined as persisting between two points in time. A pottery vessel may only last a few years before it is broken, and can be viewed as a short-term structure, while a pottery type might last longer – a century or more and is a medium-term structure. Anything can be defined as a structure in the sense that what constitutes it, is simply its persistence as recognizably the same thing.²⁹

Time and change

Let me now sum up the points I have been making. In order to avoid confusion, it is probably also beneficial to re-name Braudel's three concepts of event, conjuncture and structure, even if they might still be broadly appropriate. Respectively, I will refer to them now as severance, recurrence and persistence.

Severance: Events as singular occurrences, being unique, seem almost inexplicable. We can describe them, even define the antecedent events which led up to them, but because they are unique, they tend to remain inexplicable except in terms of chance. This is why events were unimportant for Braudel – the froth of history.

But I would suggest we see events more positively, especially events which are taken to have historic significance. Turning points and tipping points, bifurcations or convergences, interruptions or pauses, fractures or discontinuities; these are all event-like changes with different qualities but share one thing in common: they mark a break. For example, drawing on the historian William Sewell's logics of history, Doug Bolender and colleagues have suggested that an event be seen as a cascade of particular occurrences that transform a structure through reconfiguring the material resources and mental schemas that constitute such structures.³⁰ An event is, essentially, a structural disjunction. For a more quantitative approach, one might also cite work in complexity theory and phase transitions which adopts a broadly similar model of change, albeit expressed in very different terms. Moreover, as Serres has suggested, such bifurcations or branching of time has two faces; they both mark a break or rupture with what came before, but they also announce a new beginning, a fresh start: they are advents as well as events.³¹

Recurrence: Moving on from Braudel's events to conjunctures, these are the classic economic or social cycles. In historical and archaeological writing, the simplest and perhaps most common way such iteration is expressed is through bell curves or well curves, or in fact any trends such as linear trajectories of growth and decline. In some ways, there might be a tendency with such trends to link them to natural cycles as with resilience theory. But with any situation looking at multiple cycles, the question of their synchronization or harmonization should always be addressed rather than taken as given. A good example illustrating this point is Valentine Roux's analysis of the adoption of wheel-made pottery in the Levant; it appears and disappears twice in the archaeological record between the Chalcolithic and the early Bronze Age before finally, on the third appearance, it stabilizes and remains.³² Roux's explanation for this has been tied to transmission networks, with earlier potters being mobile and exclusively attached to elites whose power base was unstable; every time a power base toppled, the potters lost their patrons and their craft died out. In the latter part of the early Bronze Age however, wheel-made pottery was less dependent on the elites and as a result, transmission networks withstood economic upheavals. Central to this interpretation therefore, is a sense of *kairos* or timing of these cycles.

Persistence: Finally, we turn to structures defined as enduring or persistent entities. With structures, the burden no longer rests on modelling change but rather explaining stasis; why do things persist? Rather than simply assume continuity or persistence as a given, as the natural state of things like inertia, we must try and understand what mechanisms, practices or properties are in play to keep change at bay. Such mechanisms might be political, where conservative forces or counter-hegemonic, resistant practices act to stem change; or perhaps the material and structural properties of things and assemblages develop an in-built inertia, making change hard to effect. Whatever the complexity of reasons and causes, persistence has to be seen as an active power in tension with change. The work of Lee Panich is important here, especially his re-working of the notion of persistence as less a passive stasis and more a dynamic and active process of balancing continuity and

change within a community.³³ His work comes off the back of critiques of narratives of indigenous tribes where change in colonial contexts is equated with loss, so-called terminal narratives.³⁴ Persistence is then defined not by stasis but change, not as a passive continuity of tradition but an active re-working and perpetuation of a culture. A different interpretation for persistence comes from entanglement theory and its use of path dependence. Ian Hodder draws on path dependence to explain how people become dependent on things – how they get locked in.³⁵ A good example is the work of Dorian Fuller and colleagues on plant domestication and how such dependences creates further entanglements as humans have to construct walls to keep out animals, are tied down to the reproductive cycle of the plants, and how new technologies are needed to process and store the plants which in turn creates further dependencies and so on.³⁶

In substituting Braudel's terms of event, conjuncture and structure for severance, recurrence and persistence, the goal has been to highlight the salient properties of both sets of terms in reflecting a taxonomy of change that is unrelated to the duration over which the change takes place. But in re-working Braudel's three terms however, there is a danger that one gets locked into a tripartite classification. In offering these alternative concepts, I would not want to argue that they exhaust all the possibilities. Indeed, change is a complex phenomenon to which I can barely do justice in a single chapter.³⁷ My main goal here has been to pull apart the concept of scale and in focusing on Braudel's three terms of event, conjuncture and structure, my primary objective has been to 'de-scale' them. To make that fully effective, it was important to render them in terms other than short-, medium- and long-term and to demonstrate that it is possible to perform a Braudelian archaeology which is utterly non-scalar. More importantly though, I wanted to separate the question of change from scale; scale is simply a property of our metrology or chronology. If we want to examine the multiplicity of time, it is not about trying to integrate or co-ordinate different time scales. That is a purely technical matter of dating resolution. Rather the real tension comes in trying to triangulate between different ontologies of change: breaks, cycles, persistence, and probably many more besides.

The analysis of Braudel and scale presented in this chapter brings us to the point where we now need to confront more fully this concept of change. All this talk about different scales, different tempos or durations are all predicated on the notion of change. If there was no change, how would we account for duration? For tempo or rhythm? What are we measuring with our time scales, our metrologies if not change? The concept of change is of course worthy of a book on its own and indeed Rachel Crellin's work, which I have already mentioned, fulfils that need admirably. My aim in the concluding section of this chapter is therefore rather more specific: how does change relate to time? It is an interesting paradox that archaeologists don't observe change, rather they infer it from variation in matter. A stratigraphic section is just a series of more or less stationary layers, one on top of the other. The 'more or less' refers to the fact that of course they do change, but at rates so slow we cannot perceive them. Moreover, the change that we do attribute

to them is based on something else: the superposition of visibly distinct deposits. The same applies to a typological progression of artefacts; formal variations in style or technique become temporal variations in production. What is it that makes us connect material or spatial variation to temporal variation?

In everyday life we might encounter similar situations; I leave for work with a tidy kitchen, only to return and find a mess of plates and cups. Something has changed and probably, it was my hungry children coming home from school. Such a change is discontinuous, but only in the juxtaposition of past memory with present perception. The very discontinuity nonetheless suggests to me a single event has intervened to affect this transformation to my kitchen. On the other hand, if I had put up a webcam to record what was going on, I probably would have had a rather different perception of change; I would see my kids arriving, going into cupboards, pulling out crockery and food, moving to the table and then moving back to pile up the dirty cups and plates. Change now has a very different appearance; now the discontinuity that I experienced upon first coming home is replaced by a perception of continuous movement. Isn't this what we do in archaeology? We see the type series or stratigraphic section and assume it is similar to the experience of being absent while the change occurred; all we get is the before and after. But drawing on our experience, we assume that what was responsible for the change – over and above the specific agents and causes – was movement of bodies and matter.

It is no surprise therefore, that change should largely be conceived in terms of movement. The trees outside my window are now swaying in the wind, the second hand of the clock on my wall is silently sweeping a circle around the face; change is all around me and marked, more than anything, by movement. Looking at a sequence of artefact types or a stratigraphic section is not like watching the second hand of a clock move. But we assume that the changes we observe in the archaeological record occurred in a similar way. That deposits accumulate through movement. But how then, do we relate time to movement? This is where things get tricky; we could follow Bergson and suggest that movement is inherently continuous, a flow but, as I discussed in Chapter 1, most psychological studies of our experience of time suggest this continuity is a *post facto* construction, that sub-consciously, we register time discontinuously. In other words, the discontinuity between memory and perception discussed in my example of the messy kitchen, may actually also represent how my mind processes continuous movement within perception. Now we find that our original assumption has been inverted. Instead of change being derivative of movement, rather movement is now derivative of change.

So if we cannot rely on movement to elucidate change, how can we start to make sense of it? Rather than try and resolve this through further philosophizing, perhaps we just need to stay with what concerns us here: change in the archaeological record. And this kind of change has only one form: the contemporaneous juxtaposition of things presumed to have come from different times, rather like my case of the memory of the kitchen and its present perception. But unlike the case

of memory and perception, there is a difference. Earlier, I characterized this as an absence of intervening time or movement, just the before and after. But it isn't even that of course; in archaeology, there are no 'befores', just a succession of 'afters'. The archaeological record is not like a snapshot or frame from a webcam showing my kitchen at time T_1 and T_2 . Nor is it the same as how our perception registers change in our surroundings. It is far more complex than that as I shall explore in Chapter 5. However, before we tackle that we need to address a more urgent issue. Regardless of how change is constituted, how do we connect together all the changes we do observe? Because in many ways, all this concern for integrating scales in archaeology can be re-cast in other terms. I want to suggest that our primary concern is with integrating the multiplicity of change, not scale. Sometimes this multiplicity is about change occurring over different durations or at different tempos, but not always. Indeed, the main point of this chapter has been to argue that change is broader than that. And so it is that in the next chapter, I turn to this new question: how to address the multiplicity of change in the archaeological record.

Notes

- 1 F. Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, 2 vols (London: Fontana/Collins); see also F. Braudel, 'History and the Social Sciences: The *Longue Durée*', in F. Braudel, *On History* (London: Weidenfeld & Nicolson, 1980), pp. 25–54.
- 2 For example, see J. Bintliff (ed.) *The Annales School and Archaeology* (Leicester: Leicester University Press, 1991); B. Knapp, *Archaeology, Annales and Ethnohistory* (Cambridge: Cambridge University Press, 1992).
- 3 See J. Harding, 'Rethinking the Great Divide: Long-term Structural History and the Temporality of the Event', *Nonwegian Architectural Review* 38, no. 2 (2005): 88–101, for an early statement of this problem.
- 4 C. Gamble, 'The Anthropology of Deep History', *Journal of the Royal Anthropological Institute* (N.S) 21 (2014): 147–164; A. Shryock and D.L. Smail (eds), *Deep History: The Architecture of Past and Present* (Berkeley: University of California Press, 2011).
- 5 A. Bayliss and A. Whittle, 'What Kind of History in Prehistory?' in S. Souvatzi, A. Baysal and E. Baysal (eds), *Time and History in Prehistory* (London: Routledge, 2019) pp. 123–146; A. Whittle, *The Times of Their Lives: Hunting History in the Archaeology of Neolithic Europe* (Oxford: Oxbow Books, 2017).
- 6 J. Robb and T. Pauketat (eds), *Big Histories, Human Lives: Tackling Problems of Scale in Archaeology* (Santa Fe: School of Advanced Research, 2013).
- 7 C. Gosden and L. Malfouris, 'Process Archaeology (P-Arch)', *World Archaeology* 47, no. 5 (2015): 701–717; J. Bintliff, 'Time, Structure and Agency: The Annales, Emergent Complexity, and Archaeology', in J. Bintliff (ed.), *A Companion to Social Archaeology* (Oxford: Blackwell, 2004), pp. 174–194.
- 8 R. Crellin, *Change and Archaeology* (London: Routledge, 2020).
- 9 Also see S. Pollock, 'Commensality, Public Spheres and *Handlungsraume* in Ancient Mesopotamia', in Robb and Pauketat, *Big Histories, Human Lives*, pp. 145–170.
- 10 C. Gosden and K. Kirsanow, 'Timescales', in G. Lock and B. Molyneux, *Confronting Scale in Archaeology: Issues of Theory and Practice* (New York: Springer, 2006), pp. 27–38.
- 11 M.B. Roberts and S.A. Parfitt, 'Boxgrove: A Middle Pleistocene Hominid Site at Eartham Quarry, Boxgrove, West Sussex', *English Heritage Archaeological Report* 17 (London: English Heritage, 1999).

- 12 L. Binford, 'Behavioural Archaeology and the "Pompeii Premise"', *Journal of Anthropological Research* 37 (1981): 195–208; M. Schiffer, 'Is There a "Pompeii Premise" in Archaeology?', *Journal of Anthropological Research*, 41 (1985): 18–41.
- 13 S.E. Bon, 'A City Frozen in Time or a Site in Perpetual Motion? Formation Processes at Pompeii', in S.E. Bon and R. Jones (eds), *Sequence and Space in Pompeii* (Oxford: Oxbow Books, 1997), pp. 7–12.
- 14 H. Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (London: Macmillan, 1910); M. Heidegger, *Being and Time* (Oxford: Blackwell, 1962).
- 15 C. Simonetti, 'Timescales and Telescopes: Optics in the Study of Prehistory', in S. Souvatzi et al., *Time and History in Prehistory*, pp. 42–57.
- 16 See for example, G. Lucas, 'Time and the Archaeological Event', *Cambridge Archaeological Journal*, 18, no. 1 (2008): 59–64.
- 17 For further discussion of historical distance and objectivity in archaeology, see G. Lucas, *Writing the Past: Knowledge and Literary Production in Archaeology* (London: Routledge, 2019).
- 18 Bayliss and Whittle, 'What Kind of History in Prehistory?'
- 19 See Braudel, *The Mediterranean and Mediterranean World*, p. 893.
- 20 Harding, 'Rethinking the Great Divide'; Robb and Pauketat, *Big Histories, Human Lives*.
- 21 P. Corfield, *Time and the Shape of History* (New Haven: Yale University Press, 2007).
- 22 I. Hodder, *The Domestication of Europe* (Oxford: Blackwell, 2018).
- 23 P. Westbroek, *Life as Geological Force* (New York: W.W. Norton and Company).
- 24 See Bintliff, *The Annales School*. For a similar approach to medieval France, see Bintliff, 'Time, Structure, and Agency: The Annales, Emergent Complexity, and Archaeology' in Bintliff, *Companion to Social Archaeology*.
- 25 See, for example, Nelson et al., 'Long-term Vulnerability and Resilience: Three Examples from Archaeological Study in the Southwestern United States and Northern Mexico', in J. Cooper and P. Sheets (eds), *Surviving Sudden Environmental Change* (Boulder, University Press of Colorado, 2012), pp. 197–222.
- 26 Whittle, *The Times of their Lives*.
- 27 I. Hodder, *The Domestication of Europe* (Oxford: Blackwell, 1991).
- 28 D. Smail, *On Deep History and the Brain* (Berkeley: University of California Press); also see Shryock and Smail, *Deep History: The Architecture of Past and Present*.
- 29 Here it might be useful to invoke Aristotle and his discussion of change, which hinges on the distinction between accidental and substantial change. Accidental change refers to changes in the attributes of an entity, while substantial change refers to the actual existence of an entity. For example, any human life is considered to represent a continuous being; it is born and it dies. These two moments mark an example of substantial change. But between these two moments, that being also undergoes various other changes – our skin loses its elasticity and smoothness, our hair stops growing or grows in all the wrong places, our eyesight gets worse. Yes, we grow old. But we still think of ourselves as the same person – something, some x – call it the soul, the ego, the self – persists throughout these changes. This distinction between substantial and accidental change however, opens up the whole problem of identity and change, as some philosophers have suggested there is no x , that we are not the same person we were ten years ago, or even ten seconds ago. This is a problem I have no wish to go into here, as my main concern with discussing structures is to highlight the tension they express between continuity and change which occurs across any time scale.
- 30 R.A. Beck et al., 'Eventful Archaeology: The Place of Space in Structural Transformation', *Current Anthropology* 48, no. 6 (2007): 833–860; also see D. Bolender (ed.), *Eventful Archaeologies: New Approaches to Social Transformation in the Archaeological Record* (Albany: State University of New York Press, 2010).
- 31 M. Serres, *Branches: A Philosophy of Time, Event and Advent* (London: Bloomsbury Academic, 2020).
- 32 V. Roux, 'Evolutionary Trajectories of Technological Traits and Cultural Transmission: A Qualitative Approach to the Emergence and Disappearance of the Ceramic

Wheel-Fashioning Technique in the Southern Levant during the Fifth to Third Millennium BC', in M.T. Stark, B.J. Bowser and L. Horne (eds), *Cultural Transmission and Material Culture: Breaking Down Boundaries* (Tucson: University of Arizona Press), pp. 82–104.

- 33 L. Panich, 'Archaeologies of Persistence: Reconsidering the Legacies of Colonialism in Native North America', *American Antiquity* 78, no. 1 (2013): 105–122.
- 34 S. Silliman, 'Change and Continuity, Practice and Memory: Native American Persistence in Colonial New England', *American Antiquity* 74, no. 2 (2009): 211–230.
- 35 I. Hodder, *Entangled* (Oxford: Wiley-Blackwell, 2012).
- 36 D.Q. Fuller et al., 'Entanglements and Entrapment in the Pathway towards Domestication', in L. Der, and F. Fernandini (eds), *Archaeology of Entanglement* (Walnut Creek: Left Coast Press, 2016), pp. 151–172.
- 37 For a much fuller treatment, see Crellin, *Change and Archaeology*.

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4

THE SHAPE OF TIME

Change and continuity

Change may be constant, but we only recognize it when it happens because of the things that don't change. When a car drives past stationary road signs, when your children outgrow their clothes, when your friends have bought a new flatscreen TV for their living room. We notice when something is different, but only insofar as most of the time, most things around us stay the same. If everything was changing all the time, the world would be chaos. Yet for archaeologists, change has a rather different character. Changes in deposition or in assemblage composition involve interpreting spatial or material variation in temporal terms, as discussed at the end of the last chapter. In these instances, change is perceived not so much against a backdrop of continuity as against an adjacent, that is, previous state of affairs. The best analogy in everyday life is when the change observed is not against a frame of continuity but rather against what came before. When that new flatscreen is not seen as a subtle change to the appearance of an otherwise unchanged living room, but as a replacement for the previous television. This kind of change – let us call it succession – is the kind that is often most prevalent in archaeological descriptions of change; where one type of artefact replaces or succeeds another, one layer is superimposed on another.

The difference between these two kinds of change is of fundamental importance. In the first, change can only be understood in relation to continuity. In the latter, it is always framed in opposition to it. That an artefact type persists for a certain period of time, until it is succeeded by another; that a certain phase of activity occurs on a site until it is succeeded by another one; that a way of life, an archaeological period like the later Iron Age, lasts in a certain area until it is succeeded by another one. Many of the problems around change – and time – result from adopting this successive view of change, what Rachel Crellin has recently

called a block-time approach to change, one where all the action is concentrated at the transitions, while in between are just periods of stasis or continuity.¹ In other words, most of the past seems to occupy broad periods of continuity, where nothing changes, with shorter bursts of change occurring at transitions. In this way, change and continuity are set up as oppositional. In my discussion in the last chapter of Braudel's three concepts of event, conjuncture and structure, one can see the same bias there, especially in the opposition of event and structure (or severance and persistence as I re-named them), which in archaeology are often foregrounded while Braudel's third term of conjuncture is marginalized or silently elided.

The fact that archaeology has been so powerfully caught up in a successive model of change is probably largely due to the legacy of relative chronology, which foregrounds this.² You may recall that one of the most important features of relative against absolute chronologies is that relative chronologies lack duration – they only really define sequence. A relative chronology cannot tell you how long the Iron Age lasted in a certain area, all it can tell you is that it succeeds the Bronze Age. Phrasing it this way of course highlights the deficiency of a relative chronology in comparison to absolute chronologies which can tell you about both duration and sequence. But another way of defining relative chronologies is that they tell us about change; indeed this is their strength. They lack the metrological precision of absolute dates, but what they lack in precision, they make up for in relevance. A date, after all, is just a date; it doesn't tell you anything on its own until it is tied to events and the events and their dates are compared. For example, knowing this deposit dates to c. 1230 AD is not necessarily as informative as knowing that it lies beneath a house foundation and thus pre-dates the construction of the house. It starts to become more informative if we know that all similar houses excavated so far date to before 1200 AD, but again, only because the date is associated with a specific event or state of affairs.

In many ways, the new Bayesian methods applied to C14 discussed in the previous chapters combine the best of both absolute and relative dating chronologies; they exploit the qualities inherent in relative chronology to help refine an absolute chronology and one might even suggest they are the first real glimpse of how the distinction between the two might be dissolved. Not that the individual methods involved in conducting seriation, stratigraphy or generating a radiocarbon date would merge; rather that the chronological framework created was the product of multiple methods. But even if we argue this, there remains a difference between chronology as a means to measure time, and the temporal quality of the events being measured. So although both absolute and relative chronologies are structured on a sequence of events, both in a sense co-ordinate change, the 'events' in an absolute chronology are largely detached from human affairs – the circuit of the earth around the sun, the growth of a tree, the oscillations of a caesium atom. Not so with the events in a relative chronology like the deposition of anthropogenic deposits or stylistic change in artefacts; these events principally (though not always) implicate human or human-related agency. Unlike radioactive decay, archaeological

stratigraphy or typological development, they involve events with an in-built cultural significance. What this significance means and whether it is productive or interesting is another matter of course.

Both absolute and relative chronologies are dependent on events as already noted; C14 is dependent on the event of radioactive decay, of the death of an organism, and others. But the event-dependence of relative chronologies is different not only in being tied to culturally relevant changes, they are also different in another way; they are far more *place-specific*. Time is much more bound to space in relative chronology than it is with absolute chronology. Each excavation uncovers its own, unique stratigraphic profile, each region its own specific sequence of material culture. Although relative chronologies can expand outward to cover larger areas, generally the larger the area, the more risky they become, unless they also become more abstract and reductive. Periodizations are the classic exemplar of these kinds of more general relative chronologies and ones which are familiar to historians, archaeologists, palaeontologists and geologists alike. In terms of human history, the only truly singularized relative chronologies have been the various social evolutionary schemes proposed, from 18th century Enlightenment conjectural histories to 20th century neo-evolutionism and these were common to most of the social sciences even if they also influenced archaeology. These are very abstract systems which define a historical sequence based on very general concepts such as cultural development or social complexity. We are a long way from stratigraphy here.

The Three Age System was the first archaeological, relative chronology to strive for some universality, and it was based on technological innovations in cutting implements. However, unlike the evolutionary schemes, it retains a link to stratigraphy. It was developed by a Danish antiquarian Christian Thomsen in the early 19th century and became the standard framework for ordering prehistory throughout most of Europe by the end of the century. But the further away from north-west Europe (where it was developed) you became, the less effective it seemed to be. Africa always lacked a Bronze Age, China dropped the Iron Age as prehistory had already given way to history with the advent of written records, while in the Americas the system had no real purchase at all. The only global success the system enjoyed was in the early 20th century when Gordon Childe interpreted these technological stages as economic stages based on a Marxist interpretation of prehistory, conjoining it with those social evolutionary models of human society.³ The pivotal markers were now the transition from hunting and gathering to farming, and the emergence of state-level societies which Childe defined as the agricultural and urban revolutions respectively. As befitted a Marxist view of prehistory, these were the major historical events preceding the third great revolution: the industrial one.

Today, although both universal periodizations based on Thomsen's Three Age System and socio-economic transitions based on Childe's revolutions still structure archaeological research to an extent, they have lost most of their force as chronological systems. Relative chronologies still play a vital – arguably central role – in

archaeology, but the aspiration for a singular or universal periodization is not a common objective. Yet there still exists a tension in archaeology between the in-built tendency for relative chronologies to be multiple and the aspiration for a singularity which mimics that of absolute chronology. This tension is manifest in more contemporary aspirations such as Daniel Lord Smail's call for deep history which seeks to erase the boundaries between prehistory and history, or David Christian's vision of big history whose goal is even more singularizing: to link human history with cosmological history.⁴ In Chapter 2, I devoted most of my attention to absolute chronology and portrayed it as a successful effort to create a singular time but one that requires constant vigilance and work. Such singularity is an achievement, created by stitching together through synchronization, multiple and very different materialities with their own times – C14 decay, tree rings, volcanic tephra, ice cores and all the various localized systems which affect the 'clocks' of these things. Attempts at universal periodizations are simply the same operations performed, but with relative, not absolute, chronologies.

Such calls for deep history and big history share with 19th-century evolutionary accounts the same drive toward singularization, even if they lack a sense of a universal periodization. However, such criticism should not blind us to some of the positive messages of these ideas; the divide between prehistory and history is troubling and should be dismantled, as should that between human and non-human histories. My chief concern really, is that breaking these divides is done at the expense of perpetuating a singularized view of time and history. I would argue that we need to keep this vision of a singular history tempered by an equal concern for multiplicity. And the main way in which we can do that, is by abandoning the successive model of change; by seeing change in relation to continuity, not in opposition to it. The rest of this chapter will attempt to articulate one way in which we might achieve this.

Representing change and continuity

Consider a stratigraphic sequence, especially how it is rendered through the Harris matrix: a succession of deposits, one after the other. Each unit marks a change, or more accurately the interface marks a change (represented as the connecting line between units on the matrix); the unit itself rather denotes continuity, a unity, a block of homogenous time. Although the Harris matrix is a wonderful tool, it does have limitations and some of these I have explored in an earlier work.⁵ One of the problems, for example, is how the matrix – like any relative chronology – does not incorporate duration, only sequence or succession. The length of continuity implied in the units is never expressed and often for good reason; we simply don't know how long it took a deposit to form. Using scientific dating techniques and typological dating from artefacts may give us some broad date range, but often this exceeds the resolution implied by the formation of the deposit. For example, it may have only taken a day to dig and backfill a grave, but the dating of this event may – even in best case situations – only be attributable to a broad window of

decades. Moreover, even if we might guess it only took a day to dig and backfill a grave, how enduring was the feature once it was dug? How visible did it remain? It is one thing to assess the duration of formation of a unit, another to assess the duration of its visibility or potential presence in terms of how it impacts subsequent actions. A grave might take a day to make, but its presence in a churchyard can last centuries which will impact how other grave-digging or ground-disturbing activities take place. What these issues show is the impossibility of representing continuity and change together within a matrix diagram.

Solutions to this have involved the construction of alternative time diagrams which show the time-lines of individual units or features and these have the advantage of showing both duration and sequence, although duration is privileged over sequence; what you don't see in the diagram are stratigraphic relations though these will provide the start and sometimes end points of these lines. If these kind of diagrams have not become common, it is largely because estimating the duration of individual deposits remains extremely difficult and on the whole, these diagrams work better for stratigraphic groups like structures which persist for longer periods of time.⁶ This is how I have subsequently used them, as I will discuss further below (e.g., see Fig.4.3). My route into using them however came from studying typological variation in artefacts, that is how we represent change in the form or design of objects. When studying the changing face of clocks 25 years ago, I found exactly the same set of issues here.⁷ Where conventionally, one type replaces another as a separate and distinct entity, where each type represents a continuity of form punctuated by change which resulted in a new type (or variant) I was interested in finding out how we might represent variation in form or design where continuity and change were kept together, rather than separate. I used exactly the same kind of time-series diagrams, breaking objects down into temporal elements, as if an object was like a site, composed of layers (Figure 4.1).

This temporal stratification of an object enabled me to show how objects are always composites of older and new elements, always combinations of what art historian George Kubler called convention and invention.⁸ Moreover, you quickly realize that sometimes there will be a little more invention or a little more convention, resulting in objects that break more with tradition or those that cleave more closely to it. You might also see the recapitulation or revival of older elements which had all but died out, archaisms as they used to be called. It was precisely because any object was a multi-temporal composite that Kubler made a distinction between what he called the absolute age of an element and its systemic age.⁹ The absolute age referred to the date of production, while its systemic age referred to how novel the element was in the wider system of objects; he cites the example of a staircase built in an English country home in 1560 as having a young systemic age because such types of staircases only started to appear in European houses in the early 1500s. Now a staircase type that has been around for half a century might not sound young to us, but of course it all depends on the rate at which types change. Youth is a concept relative to longevity, for organisms as much as for artefacts. More critically, absolute age and systemic age do not have to

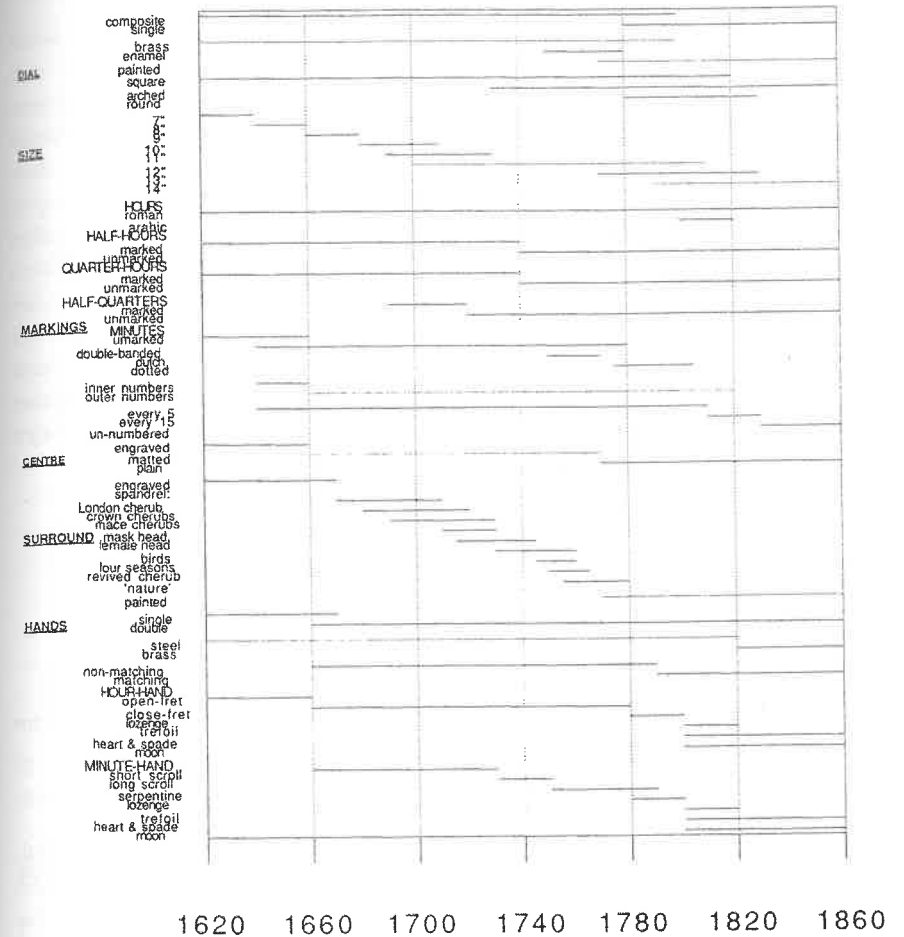


FIGURE 4.1 The temporal layers of clock design.

synchronize; I eat off plates which may have been made only a few years ago but stylistically, they are 200 years old. As Kubler points out: 'Because duration can be measured by the two standards of absolute age and systematic age, historic time seems to be composed of many envelopes ...'.¹⁰ It is precisely this phenomenon that Laurent Olivier discovered in his study of miners' lamps, which portrayed the warped archaeological temporality underlying seriation.¹¹ The trajectory of the design of objects would snake around an ideal line staked out by the regular series of absolute chronology suggesting that seriation will never provide us with an accurate method of dating since it assumes a rhythm of regular change (Figure 4.2).

But the issue of how to relate change and continuity does not stop with specific forms like artefact types; it is also about how a type relates horizontally within a broader cultural horizon. Henri Focillon, who was Kubler's teacher, described this

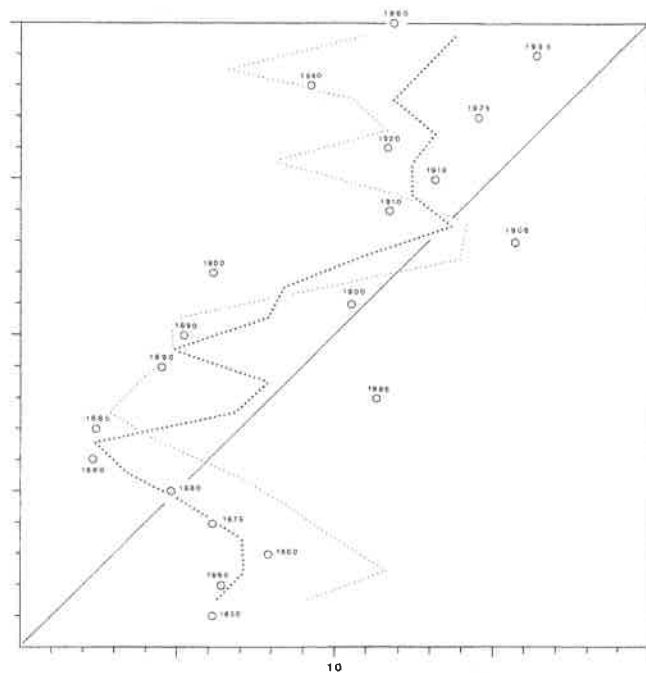


FIGURE 4.2 The disparity between chronological and typological time; a gradient vector analysis of 19th- and early 20th-century miners' lamps.
Source: Image courtesy of Laurent Olivier.

as the double problem of how time relates to form. The first problem is internal, that is how a form relates to its typological system, which is what Kubler discussed through the difference between absolute and systemic age. Focillon referred to this same phenomenon as the difference between the date and the 'wavelength' of an object; like Kubler, he pointed out one should not expect isochrony, that all objects should change at the same rate. Rather, the whole point of dates and absolute chronology was to expose the anisochronisms of different things. But in addition to this internal problem there was an external one too:

What is the relation of this development to other aspects of human activity? If the time of a work of art were the time of all history, and if all history progressed at the same rate, these questions would never need to be asked. But such is not the case. Instead of being a neatly plotted series of harmonic tableaux, history is, throughout its entire course, variety, exchange and conflict.¹²

In short, Focillon prompts us to ask how we draw together all the specific trajectories of things into a larger tapestry. In the context of my time-series diagrams, the issue is then this: while we might represent changes in the archaeological record

through layered time diagrams, how do we start to build synthetic accounts around this? How do we narrate or write about the history of a site in such a way that remains faithful to this connection between change and continuity? Because in many ways, the Harris matrix as a representation of a site history meshed very well with more traditional ways of representing the temporality of a site. Using periods or phases to order a narrative has been a common method in most historical disciplines, including archaeology. Like the matrix, phasing and periodization typically revolves around the separation of continuity and change: periods of life as normal, punctuated by transitions where all change is bunched up. How do we avoid falling back into the pit of all change as successive, where continuity and change are separate rather than correlated? For Kubler, one gets a sense that this is a fruitless exercise; history is nothing more than an almost random juxtaposition of individual trajectories:

Instead, we can imagine the flow of time as assuming the shapes of fibrous bundles ..., with each fiber corresponding to a need upon a particular theater of action, and the lengths of the fibers varying as to the duration of each need and the solution to its problems. The cultural bundles therefore consist of variegated fibrous lengths of happening, mostly long, and many brief. They are juxtaposed largely by chance, and rarely by conscious forethought or rigorous planning.¹³

Is he right? This is what I want to explore next by tackling the topic of periodization.

Problems with periodization

I am in the final stages of preparing a monograph on a large-scale excavation I directed in Iceland in the early 2000s.¹⁴ The excavation focused on the core of an elite settlement called Skálholt which was an episcopal manor and school. Established probably in the 10th or 11th century CE, our excavations largely dealt with the last century of its life as an episcopal seat in late 17th to late 18th century as well as its subsequent transformation into an ordinary farmstead in the 19th and early 20th century. Altogether, we looked at about 300 years of continuous activity and occupation. In writing the basic narrative of the site chronology, I faced a troubling dilemma. On the one hand, ever since I first started writing these kind of site narratives as an archaeologist I had adopted the standard model one can find in almost any site monograph: breaking the chronology down into discrete phases or periods. Sometimes these phases or periods even had sub-phases. Major periods or phases mark the most important changes, whereas less significant or more ambiguous changes will warrant subdivisions within these broader periods. This is relative chronology at its most basic – even if one has calendar dates to link to these phases as I did – though in this case they derived from documentary sources, not C14. It was also quite explicitly a successional view of change.

Periodization is never arbitrary – not in the sense of being random; it always aspires to follow change. When scholars talk about the arbitrariness of periodization, what they usually mean is that it is something imposed by the scholar on the past or on the course of history, rather than something inherent in history itself. The problem – and potential arbitrariness – lies in choosing where to make the cuts; change is all around us all the time, but as scholars studying the past, we usually elevate some changes as being more relevant or significant. And this brings me back to my dilemma. When I looked at my site, even the three centuries we excavated, it was hard to see any obvious way of creating site-wide periods. Each building underwent its own rhythm of change, following repairs and alterations; sometimes they synchronized with other buildings, sometimes not (Figure 4.3). In short, the stratigraphic sequence of the site reflected exactly the kind of transformation you experience walking around any city or town today – piecemeal change, here and there, rather than any large-scale co-ordinated and synchronized transformation. This is what my time-series diagram in Figure 4.3 shows and which honours the co-relation of continuity and change. How then, should I choose to phase my site? Or more appropriately, *why* should I phase my site? Isn't this to revert to a successional view of change which these time-series diagrams avoided?

So my response was to resist this urge to phase the site altogether. After all, what was this urge except the very drive toward singularization that is inherent in absolute chronologies and the need to make the site conform to an image of successive change. Surely it was not necessary. Not only is it hard to do, it simply does not capture the complexity and articulation of change and continuity which all our hard work on careful, stratigraphic excavation and dating revealed. Moreover, perhaps the multiple temporalities are telling us something important about how we *should* be dealing with change in archaeology. Such abandonment of a single,

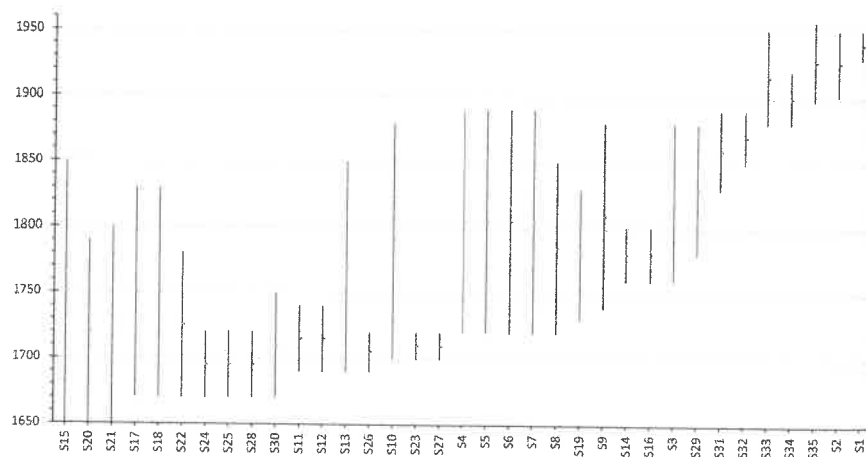


FIGURE 4.3 Longevity of different structures at the post-medieval site of Skálholt, Iceland.

site-wide phasing went against all my training and the general direction in which conventional relative chronologies in archaeology strive toward: a singular, successional view of change. I thought bucking the trend was a good idea. But it had horrible consequences.

In making a decision to dispense with a site-wide periodization, I found I had only traded one problem for another. One of the benefits of using a singular, site-wide periodization is that it enables us to conduct studies in change of material culture – how, for example, a pottery or faunal assemblage changes between periods I, II and III. But if I abandon a singular, site-wide phasing, how should I deal with the problem of tracking change in my artefactual or zooarchaeological assemblages? Initially I was stumped and struggled to find a solution – partly because thinking with phases was so ingrained. However, in the end I realized it was enough to link my material culture to an absolute chronology in the same way my building sequences were. I did not need a singular, site-wide chronology when I already had a singular, universal chronology of years. Because of the nature of my material, I had a very good set of independent dates from clay pipes, coins, pottery, glassware and other items as well as documentary sources about the site. All of which allowed me to date my building phases to quite a high level of resolution – decadal. Obviously it varied between buildings and deposits, but on the whole, the average temporal unit on my site was three decades.

Thus my method involved creating an absolute chronology based on the resolution afforded by the site itself; in this case, units of 30 years or a tricennium. That's not a word you hear much since our decimal system prefers us to think in tens, for example, decades and centuries. But I wanted to remain faithful to the resolution of my site, not some scaling based on an arbitrary convention. Thus armed with a tricennial chronology, I could now bypass the need for a singular, site-wide periodization and once again, focus on the specific rhythms of change exhibited in the material culture at a tricennial scale of resolution.

However, while this got round the impetus to singularize my various relative chronologies through a site-wide phasing, it did present another problem. It is not just the different structures on my site changing at different rates and at different times, but the material culture sequences also had their own internal clocks which, like the buildings, sometimes synchronized but just as often did not. Thus, while ceramics might display a marked change in the early 19th century, window glass had followed its own tune, and so on. And the more materials I track, the more, new temporal boundaries will emerge. In other words, I wanted to resist singularization and embrace the multiplicity of relative chronologies – but beware of what you wish for. I got multiplicity by the bucket load. Every item of material culture could potentially carry its own periodization.

But this is good isn't it? Yes, and no. Yes, I was being more faithful to the different objects and their temporalities than a site-wide phasing would, which would mangle them into a singular, uniform sequence. But no, in the sense that I now had a real headache in how to tie these different temporalities together. After all, at the end of the day I want to tell a story here. Is Kubler right? Isn't it enough to

stick with these fibrous bundles? I think to answer this, we need to pay attention to the way the multiple fibres of time synchronize or not. If the key issue of internal temporality was isochronism, as Focillon suggested, then the important property of external temporality becomes synchronism. Here we are no longer talking about uniform or variable rates of change but rather co-ordinated durations; where different elements or forms stop or start at the same time. In terms of periodization, what this means is that a period transition designates a moment when lots of things all change at the same time. That, for example, the Neolithic signals a shift from hunting and gathering to farming, that new things emerge such as permanent architecture, polished axes, pottery, monuments, and so on.

Synchronization thus, ultimately implies a connection; two or more sites change at the same time, not through some magical coincidence but because they are connected in some way. In a discussion of global periodizations, this is exactly what Jerry Bentley argues; that to talk about a global periodization presupposes talking about the world as inter-connected. How can we use the same periodization in Europe and North America in prehistory if their histories are not entangled in anyway? A global periodization is one which will be based on those aspects which make the world connected: cross-cultural interaction.¹⁵ Such synchronizations are probably quite rare but more significantly, it begs all kinds of questions: how many changes need to be synchronized for us to accept something as a period transition? And what unit of time should we use to measure the synchronization – a century, a decade, a year? All of those features typically listed for the Neolithic clearly emerge at different times in different places and form only a very vague and loose package which raises questions about how much local and historical variability is being lost under such broad periodizations.

Periodization and relevant change

I cannot help feeling that resolving (or smoothing over) these issues are largely due to the fact that one has already decided ahead of time, what the relevant change is; only then do you try and find or ensure other things synchronize around it, adjusting your scale depending on the degree of alignment. We have already decided that farming, sedentism or monument-building is the key factor defining the Mesolithic–Neolithic transition, and so everything else can be fitted in around that. No wonder this transition lasted a long time! These problems highlight, I think, one of the core issues around multiplicity and archaeological studies of change. In part, it concerns a question of politics and the kind of historical narrative we want to write; almost any periodization that cuts across multiple contexts and objects will end up giving some attributes more salience than others. The American historian Jennifer Morgan's critique of how periodization in North American history sits uneasily with studies of slavery is one example,¹⁶ while the Spanish archaeologist Paloma González-Marcén has shown how the Iberian Bronze Age chronology is inflected by an androcentric bias based on the selected range of items used to construct it.¹⁷ Similarly, Maynes and Watner's more general critique of

prehistoric periodizations shows how they are structured on both androcentric concerns such as technology (e.g., Three Age System) as well as Eurocentric narratives.¹⁸

Returning to the context of my site, Icelandic archaeology for example has traditionally followed a, largely implicit, tripartite periodization: the Settlement Period (*landnámsöld*, 870–930 CE); the Free State or Commonwealth period (*þjóðveldisöld/góðaveldisöld*, 930–1262 CE) and later periods (*seinni alder*, 1262–present).¹⁹ The focus on divisions in the earlier centuries reflects an entrenched, nationalist ideology which glorifies the first centuries when Iceland was an independent country before it came under the kingdom of Norway–Denmark in 1262 and remained as such until 1944. The lumping together of most of what we would call the medieval and post-medieval periods reflected a sense of a long, dark age where nothing really changed. This was especially true of archaeology but also to a large extent, history in Iceland as well, until recently.²⁰

If nationalism seems to pervade Icelandic periodization, then other ideologies come into play at the European scale. One of the apparent advantages of shifting from the regional to the global – or at least inter-regional perspective, is that we can also escape the nationalist ideologies which might affix to a periodization focused on a single country like Iceland. However, this only substitutes one political ideology with another. Colonialism has often been acknowledged as the flip-side of nationalism, or rather vice versa, and it is thus no surprise to find that when we start to think about more global periodizations, we enter the political minefield of Eurocentrism.²¹ There are many ways this manifests itself – in prehistory, the work of Maynes and Watner has already been mentioned, but more generally, the very divide between prehistory and history is caught up in a Eurocentric narrative which has especially infected archaeologies of former colonial contexts.²²

But both nationalism and colonialism are closely bound to modernity, and it is modernity that really occupies the central role in periodization of European history, specifically in the classic tripartite schema of ancient, medieval and modern.²³ The problematic term among these three, as many scholars have noted, is that of modernity.²⁴ I do not need to revisit these arguments here, suffice to say that there is a highly loaded set of connotations and associations which positively value modernity and – by implication if not in word – denigrate that which is non-modern. It is this negative space that connects the Middle Ages, the Colonial Other, and Prehistory as non-moderns. Although there have been various attempts to revise or restructure these divisions, they generally only shift the transition points, preserving the basic periods. Thus a number of scholars including Dietrich Gerhard, Geoffrey Barraclough, Jacques Le Goff and William Green have argued for a long Middle Ages, each putting the starting date slightly differently but all agreeing on an end date of the 18th century.²⁵ This is a position to which some archaeologists have also added their voice.²⁶

While of interest, these debates nonetheless still preserve the basic tripartite schema of ancient, medieval and modern. Indeed our current divisions – the big ones, such as between prehistory and history, or between ancient, medieval and

modern history, dominate not only our conceptual landscape of the past but our institutional frameworks within which scholars study the past. This was a point made long ago by Gerhard,²⁷ and perhaps remains one of the biggest obstacles to re-thinking our current periodizations and especially the ideological baggage of modernity. Indeed, these periodizations demonstrate yet again how marking change is caught up in deeper ideological and political commitments; that where to make the cut is never purely an empirical issue of synchronized change, but rather that synchronicity can be 'stretched' to fit a particular definition of relevance. The advent of modernity is as much debated as the advent of the Neolithic – or more topically, the Anthropocene.²⁸ Such advents always have an empirical dimension, but they can never be reduced to it.

But in the context of this chapter, these political dimensions are simply part of a larger issue around periodization: it is all about successional change. As such, let me re-iterate a few key points:

- Periodization is fundamentally a means to *mark change*.
- *Change happens all the time* – is constant, and occurs at different rates because of the different temporal rhythms of different objects, actors etc.
- To effect a viable periodization means identifying *relevant* change, which is both a *political* and *epistemological* problem.

These points are presented in order to underline the fact that periodization is constructed, but not arbitrary; it is also meant to remind us that periodization is critically linked to questions of generalization. In the wake of a revival of long-term perspectives in history, periodization is becoming a more pressing issue and one to which archaeology, because of its long-term perspective, is well-suited to address.²⁹ At the heart of this though, lies the issue of generality – that is across how many different objects and domains can a periodization operate without seriously misrepresenting, simplifying and reducing those objects and domains? Given the violence a site-wide periodization would seem to do to my multiple temporalities at Skálholt, how much more violence is effected when we extend a periodization *across* sites, regions and even continents as with grand periodizations like the Three Age System? Is there any way to do this responsibly, sensitively – and meaningfully?

Periodization as continuity

It is at this point that we now need to consider a very different approach and definition of periodization. To view periodization not as means of marking change, as has been the case so far, but as a means of characterizing continuity. Change does happen constantly, yet somehow we still manage to perceive a segment of time as having some kind of unity or coherence, whether it is the fashion and music of the 1980s, the cultural zeitgeist of turn of the 19th century Europe, or even, yes, the material culture of the Neolithic. In Crellin's terms, periodization is now precisely about those long periods of life as normal, those blocks of time

rather than the transitions between them. Such a stance leads us to Collingwood's forgotten or at least marginalized view of periods as being defined by their epicentre rather than their edges.³⁰ For what Collingwood suggested was that to understand a period such as 5th-century Athens, one needed to do so from the inside; a period was less about what distinguished it from preceding or succeeding periods (i.e., marking change), but more about what held it together as a unity (i.e., its coherence). Such an approach has also played an important, though often less acknowledged role in the construction archaeological chronologies.

Relative chronologies as you will recall, deal only with sequence, not durations. We have no way of knowing how long a certain period or phase lasted, only that it comes before or after another such period. As a result, they work primarily through identifying change as a marker of sequence but also, because of this, they also adopt a model of change which is predominantly successional. But how is this achieved, practically speaking? Archaeology typically has drawn on two methods for constructing relative chronologies or sequences; the standard and preferred method has used stratigraphy where vertical layering or spatial relations of contiguity are interpreted as temporal relations of succession. This is fine, but as any archaeologist who has worked on poorly stratified sites knows, this will not get you very far. Instead, archaeologists depend on other techniques which all share one thing in common; using morphological similarity to generate relations of contemporaneity between features, after which, parcels of contemporaneous features can be ordered sequentially.

One technique, rather misleadingly called horizontal stratigraphy, illustrates this approach. Defining what features are contemporary on a site draws on the morphology and material similarities of deposits as well as their spatial symmetry, chiefly alignment. A line of postholes, right-angled ditches, graves with similar backfill composition; in the absence of close dating from finds or tight stratigraphic relations, symmetry and morphology are what we conventionally rely on.³¹ And even when we do use finds, it is their morphological similarity that is drawn on – that is, typological dating. Yet what is really striking is how marginalized these techniques are in excavation manuals; they are often presented as anomalies, exceptional cases, residual issues after the important work of stratigraphic analysis has been conducted. But for so many archaeological sites – especially in ploughzone areas – these are the norm, not the exception. In many cases of rural archaeology, stratigraphic analysis can be of minimal help in interpreting chronology. This is the power of codification and the way we are victims of our own disciplinary history: stratigraphy being presented as the most important principle in fieldwork. This is simply not true in practice.

Morphological similarity as a technique for defining contemporaneity is of course, only useful insofar as it defines contemporaneity in terms of a broad block of time, but to order these blocks into a sequence, we need to add other methods: either using what stratigraphy there is, drawing on absolute dates, inferring a directionality, or cross-tabulating the data to conduct a seriation. But the basic method of morphological similarity is primarily about defining contemporaneity first, sequence second. As a method of relative chronology, it plays a key part in

archaeology, especially through typology but has a probably stronger presence in related art historical approaches to artefactual and architectural analysis. Think about how we identify a church as Romanesque or Gothic, an assemblage of pottery as Neolithic or Iron Age.

Yet what is it that enables us to group objects together under such labels? For example, to what extent is the succession of Neolithic, Bronze Age and Iron Age informed by the sequence of changes that they mark as opposed to internal features that characterize them? If we think about the Three Age System as it was originally devised, it was largely a relative chronology based on marking a change in cutting tool technology: from stone, to bronze to iron. The direction of this sequence was not guessed at and even if it was informed by older ideologies of technological development, it was ultimately ratified by find combinations with stratigraphic relationships. But if we think about what, for example, the Neolithic means today, is it more a polymorphous entity, characterized by various features such as domestication, monumental architecture, pottery use, sedentism. Significantly, none of these features exclusively define it, its boundaries are blurred. What it points to is a subtle shift from thinking about a period like the Neolithic, less in terms of its edges – its distinction from preceding and later periods – and more in terms of its centre. What holds it together as a recognizable phenomenon.

At the same time, the edges still matter. For a period to be considered a whole, a totality, means it has to have a beginning – and an end. All of which brings us to the issue of historical distance. Historical distance is what allows us to see the past, or segments of the past, as a whole in the first place. Humboldt's 1821 essay 'On the Historian's Task', offers a succinct and condensed explanation for what is ultimately at issue: it is all about seeing the form or shape of history.³² As Humboldt himself put it: 'Thus historical truth is, as it were, rather like the clouds which take shape for the eye only at a distance'.³³ It is why, even into the early 20th century, many historians considered 'contemporary history' an oxymoron; to study the history of recent times was like looking at a painting with your nose pressed to the canvas – how could you possibly determine its subject? If historical distance is about seeing the shape of history then clearly what matters is that the relation between the archaeologist or historian and their subject needs to be defined by one of closure. If contemporary history seems to lack the quality of historical distance, it is because history itself has not finished; it is like living in the middle of a story, whose ending we do not know because it lies in the future, even if its beginning happened over a century ago. How can we possibly discern its form when it is still forming?

And yet there is also a paradox here in relation to periodization. If seeing periods as a whole requires historical distance, surely this contradicts Collingwood's idea of a period being defined from its epicentre? In a sense, Collingwood's definition of seeing the period as a whole seems to require not so much historical distance as immersion into the very midst of events – to see the period from the inside out, from its centre towards its margins. Again, such issues lead directly into epistemological debates about empathetic understanding and the nature of historical

interpretation for which Collingwood is better known. But the more relevant issue for a discussion of time is how this encapsulates a paradox about any periodization as continuity: that it requires we understand it internally, from the inside out, yet simultaneously to achieve this, we must position ourselves outside, at a suitable distance, which means acknowledging, in effect, that things have changed – that we live in an era different to that we are studying.

Synchronicity

The previous discussion of periodization has highlighted what I see as two very different ways of conceptualizing periodization. On the one hand, we have a view that stresses its function in marking change; it privileges the edges of periods – transitions, origins, revolutions – and treats the time in between as business as usual. Stretches of continuity punctured by moments of change. On the other hand, we have a view that stresses the continuity of a period, one which gathers things together as typical or representative of an era; the transitions between periods are not the primary concern. These two views of periodization are not mutually exclusive and methodologically, we can and do employ both to construct our periods; yet they do work only through opposing change to continuity. Maybe in some ways, these two approaches also return us to the discussion of Braudel at the end of the last chapter, especially his concepts of event and structure which I re-worked as severance and persistence. Viewing periods as marking change is highlighting breaks, discontinuities, while viewing them as blocks of contemporariness is to stress the persistence of certain features, qualities which define a period as a whole. But what then of the third term, conjunctions or recurrence? Maybe this oft-neglected third term of the Braudelian trio is the ultimately the most important. The notion of conjunction suggests a coming together, a temporal synchronicity while that of recurrence suggests continuity through change.

Despite the differences between these two approaches to periodization – marking change versus expressing continuity – they do share a deeper affinity in terms of how they resolve their units of analysis. For the first, the problem lies in deciding what constitutes important or relevant change which involves 'synchronizing' an array of key features or elements. The duration of the transition or revolution will depend entirely on how closely synchronized its elements are, but more importantly, such synchronization is dependent on the very features selected. It begs the question: what does synchronicity really mean? For the second approach, exactly the same issues crop up; in defining the limits of a period as an era of continuity, requires that we assume some kind of contemporaneity, some co-existence of the features that constitute its unity as an epoch. What is it that defines the period as a whole? Thus regardless of how we choose to define or approach periodization – as marking change or characterizing continuity – both ultimately depend on a particular configuration of synchronicity: of things happening or existing at the same time. In this way, we may also find a resolution to the problem with which we opened this chapter: how to articulate continuity and change together, rather than as separate

things. Indeed, the irony is that in moving from an internal to an external analysis of time as characterized by Focillon, we have ended up back with an oppositional relation between change and continuity, that is, periods being defined either by change or by continuity. And yet in identifying synchronicity as a problem common to both, I think we may also find a solution to this other problem. That it is only through an investigation into synchronicity that we find a way to talk about continuity and change in a way that keeps them together, rather than posed as opposites or alternatives. It is thus to this topic I now turn.

Notes

- 1 R. Crellin, *Change and Archaeology* (London: Routledge, 2020).
- 2 And not just archaeology; even philosophy, especially philosophies of time and change that define them in terms of movement, where movement is regarded as a succession of positions occupied in space. Such a view results in the various Aristotelian problems of time and change illustrated through Zeno's paradoxes of the arrow in flight or Achilles and the tortoise. See G. Lucas, *The Archaeology of Time* (London: Routledge, 2005) for further discussion of these problems.
- 3 V.G. Childe, 'Changing Methods and Aims in Prehistory', *Proceedings of the Prehistoric Society* 1 (1935): 1–15.
- 4 A. Shryock and D. Smail (eds) *Deep History: The Architecture of Past and Present* (Berkeley: University of California Press, 2011); D. Christian, *Origin Story: A Big History of Everything* (London: Penguin, 2018).
- 5 G. Lucas, *Critical Approaches to Fieldwork* (London: Routledge, 2001), see especially pages 160–162.
- 6 For an early example of this, see M. Carver, 'Digging for Data: Archaeological Approaches to Data Definition, Acquisition and Analysis', in R. Francovich and D. Manacorda (eds), *Lo scavo archeologico: dalla diagnosi all'edizione* (Florence: Edizione All'Insegna del Giglio, 1990), pp. 45–120.
- 7 G. Lucas, 'The Changing Face of Time: English Domestic Clocks from the Seventeenth to Nineteenth Centuries', *Journal of Design History*, 8 (1995): 1–9.
- 8 G. Kubler, *The Shape of Time: Remarks on the History of Things* (New Haven: Yale University Press, 1962), pp. 61–64.
- 9 Kubler, *The Shape of Time*, pp. 90–91.
- 10 Kubler, *The Shape of Time*, pp. 91.
- 11 L. Olivier, *The Dark Abyss of Time: Archaeology and Memory* (Lanham: AltaMira Press), pp. 164–166; also see, L. Olivier and B. Wirtz, 'Recherches sur le temps archéologique: l'apport de 'archéologie du présent', *Antiquités nationales* 35 (2003): 255–266.
- 12 H. Focillon, *The Life of Forms in Art* (New York: Zone Books, 1992), p. 141.
- 13 Kubler, *The Shape of Time*, pp. 111.
- 14 This section draws on an earlier publication; see G. Lucas, 'Periodization in Archaeology: Starting in the Ground', in S. Souvatzi, A. Baysal and E. Baysal (eds), *Time and History in Prehistory* (London: Routledge, 2019), pp. 77–94.
- 15 J. Bentley, 'Cross-cultural Interaction and Periodization in World History', *American Historical Review*, 101, no. 3 (1996): 749–770.
- 16 J. Morgan, 'Periodization Problems: Race and Gender in the History of the Early Republic', *Journal of the Early Republic*, 36 (2016): 351–357.
- 17 P. Gonzáles-Marcén and S. Montón-Subías, 'Time, Women, Identity and Maintenance Activities: Death and Life in the Argaric Communities of Southeast Iberia', *Aegaeum: Annales d'archéologie égéenn de l'Université de Liège* 30 (2009): 69–73.
- 18 M.J. Maynes and A. Watner, 'Temporalities and Periodization in Deep History: Technology, Gender, and Benchmarks of "Human Development"', *Social Science History* 36,

- no. 1 (2012): 59–83; on eurocentrism and periodization, also see, C. Orser, 'The Politics of Periodization', in A. González-Ruibal, *Reclaiming Archaeology: Beyond the Tropes of Modernity* (London: Routledge, 2013), pp. 145–154.
- 19 See, for example, O. Vésteinsson, 'Defining the Medieval in Icelandic Archaeology', in M. Svart Kristiansen, E. Roesdahl and J. Graham-Campbell (eds), *Medieval Archaeology in Scandinavia and Beyond: History, Trends and Tomorrow* (Aarhus: Aarhus University Press, 2015), pp. 213–234.
- 20 For example, G. Lucas, 'Later Historical Archaeology in Iceland: A Review', *International Journal of Historical Archaeology* 16 (2012): 437–454.
- 21 P. Chatterjee, *Nationalist Thought and the Colonial World: A Derivative Discourse* (Minneapolis: University of Minnesota Press, 1993).
- 22 Orser, 'Politics of Periodization'; K.G. Lightfoot, 'Culture Contact Studies: Redefining the Relationship between Prehistoric and Historical Archaeology', *American Antiquity*, 60 no. 2 (1995): 199–217; C.N. Matthews, 'History to Prehistory: An Archaeology of Being Indian', *Archaeologies* 3 (2007): 271–295; P.P.A. Funari, M. Hall and S. Jones (eds), *Historical Archaeology: Back from the Edge* (London: Routledge, 1999).
- 23 J. Le Goff, *Must We Divide History into Periods?* (New York: Columbia University Press, 2015); W. Green, 'Periodization in European and World History', *Journal of World History* 3, no. 1 (1992): 13–53.
- 24 See especially, P. Corfield, *Time and the Shape of History* (New Haven: Yale University Press, 2007); P. Osborne, *The Politics of Time: Modernity and Avant-Garde* (London: Verso, 2010); also see H. Jordheim, 'Against Periodization: Koselleck's Theory of Multiple Temporalities', *History and Theory* 51 (2012): 151–171.
- 25 E. Gerhard, 'Periodization in European History', *The American Historical Review* 61, no. 4 (1956): 900–913; G. Barraclough, *History in a Changing World* (Oxford: Oxford University Press, 1955); Le Goff, *Must We Divide*; Green, 'Periodization in European and World History', 39.
- 26 For example, P. Courtney, 'The Tyranny of Constructs: Some Thoughts on Periodisation and Culture Change', in D. Gaimster and P. Stamper (eds), *Age of Transition: The Archaeology of English Culture, 1400–1600* (Oxford: Oxbow Books, 1997); T.E. Fagerland and K. Paasche (eds) *1537 – Kontinuitet eller Brudd?* (Trondheim: Tapir Academic Press, 2011).
- 27 Gerhard, 'Periodization in World History'.
- 28 S. Lewis and M. Maslin, 'Defining the Anthropocene', *Nature* 519 (2015): 171–180; B. Smith and M. Zeder, 'The Onset of the Anthropocene', *Anthropocene* 4 (2013): 8–13.
- 29 For example, D. Gabaccia, 'Is It About Time?', *Social Science History* 34, no. 1 (2010): 1–12; Corfield, *Time and the Shape of History*.
- 30 R.G. Collingwood, 'Oswald Spengler and the Theory of Historical Cycles', *Antiquity* 1 (1927): 311–325; also see R.S. Baker, 'History and Periodization', *Clio* 26, no. 2 (1997): 135–141.
- 31 See, for example, Carver, 'Digging for Data', pp. 281–287.
- 32 W. von Humboldt, 'On the Historian's Task', *History and Theory* 6, no. 1(1967); J. den Hollander, 'Contemporary History and the Art of Self-Distancing', *History and Theory* 50, no. 4 (2011): 51–67.
- 33 Von Humboldt, 'Contemporary History', 58.

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