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Archaeology and the Multiplicity of Time

Reinhart Koselleck's work is not widely known in archaeology or, perhaps I should say, not widely cited. Even within German and German-speaking archaeology, Koselleck's ideas have not had much purchase. In part, this is due to the general aversion to theory within German archaeology that characterized much of the late 20th century, although since the turn of the millennium, the situation has certainly been changing.[1] Given that theoretical interest is of such recent date, it is perhaps not surprising that discussions of time have been equally limited. Most reflections on time in German-speaking archaeology have been embedded in methodological contexts that primarily revolve around dating and periodization.[2] In a review of the concept of time which takes a more philosophical approach, Mannfred Eggert underlined this neglect and attempted to initiate greater debate, albeit with a somewhat skeptical attitude.[3] For example, although engaging with the archaeological literature on time that largely emerged from England in the 1980s and 1990s, Eggert is generally dismissive of it, especially its heavy use of Heidegger. However, Eggert does cite Koselleck, but only in a minor way and only his work on historical consciousness and its intersection with time, as represented in his book *Vergangene Zukunft*.[4]

This was also the first of Koselleck's works to enter English-speaking archaeology[5], and, indeed, it is probably the delay in translation – nearly

1 Kerstin P. Hofmann/Philipp W. Stockhammer, Beyond antiquarianism. A review of current theoretical issues in german-speaking prehistoric archaeology, in: Archaeological Dialogues 24 (2017), pp. 1-65.
2 See, e.g., Wolfram Schier, Time scales and chronological concepts in prehistoric archaeology, in: Maya Kashuba/Elke Kaiser (Eds.), Principles and methods of dating in archaeology, St. Petersburg 2018, S. 30-53; ibid., Stratigraphy vs taphonomy? Towards an integrative approach to stratification, in: Aydin Abar et al. (Eds.), Pearls, politics and pistachios. Essays in anthropology and memories on the occasion of Susan Pollock's 65th birthday, Heidelberg 2021, pp. 419-443.
3 Manfred K.H. Eggert, Über Zeit und Archäologie, in: EAZ – Ethnographisch-Archäologische Zeitschrift 52 (2011), pp. 215-238.
4 Trans. as Reinhart Koselleck, Futures past. On the semantics of historical time, New York 2004.
5 E.g., Zoe Crossland, Ancestral encounters in highland Madagascar, Cambridge 2014; Gavin Lucas, Making time, London 2021.

a quarter of a century – that until recently may account for the general absence of interest in Koselleck among theoretically-minded, English-speaking archaeologists. The same explanation can account for the fact that Koselleck's studies on the multiplicities of time have received almost no attention within archaeology – and are not even mentioned by Eggert. Koselleck's more explicit writing on this topic was translated only a few years ago, and even in German, the book on *Zeitschichten* appeared only in 2000.[6] So, while there has been an increasingly lively debate within history on this concept,[7] in archaeology it is practically nonexistent – at least at the time of writing.

Given this general neglect of Koselleck within archaeology, the following paper will simply provide some broader reflections on the issues that Koselleck tackled, especially through his concept of *Zeitschichten* or layers of time, namely, the multiplicity of time. This topic has been widely discussed in archaeology even if without explicit reference to Koselleck, and my goal will be to try and sketch out its key features. At the end, I will come back to Koselleck and ask what potential his discussion has for archaeology in relation to this topic.

6   Reinhart Koselleck, Sediments of time. On possible histories, Stanford 2018; ibid., Zeitschichten. Studien zur Historik, Berlin 2000.
7   John Zammito, Koselleck's philosophy of historical time(s) and the practice of history, in: History and Theory 43 (2004), pp. 124-135; Stefan Helgesson, Radicalizing temporal difference: anthropology, postcolonial theory, and literary time, in: History and Theory 53 (2014), pp. 545-562; Juhan Hellerma, Koselleck on modernity, historik and layers of time, in: History and Theory 59 (2020), pp. 188-209; Helge Jordheim, Against periodization: Koselleck's theory of multiple temporalities, in: History and Theory 51 (2012), pp. 151-171; ibid., Introduction: multiple times and the work of synchronization, in: History and Theory 53 (2014), pp. 498-518; ibid., In the layer cake of time. Thoughts on a stratigraphic model of intellectual history, in: Daniel Goering (Ed.), Ideeengeschichte heute. Traditionen und Perspektiven, Bielefeld 2017, pp. 195-214; ibid., Natural histories for the anthropocene: Koselleck's theories and the possibilities of a history of lifetimes, in: History and Theory 61 (2022), pp. 391-425; Achim Landwehr, Von der Gleichzeitigkeit des Ungleichzeitigen, in: Historische Zeitschrift 295 (2012), pp. 1-34; ibid., Die anwesende Abwesenheit der Vergangenheit. Essay zur Geschichtstheorie, Frankfurt a. M. 2016; Zoltán Simon, The transformation of historical time: processual and evental temporalities, in: Marek Tamm/Laurent Olivier (Eds.), Rethinking historical time: new approaches to presentism, London/New York 2019, pp. 71-84; Zoltán Simon/Marek Tamm, Historical futures, in: History and Theory 60 (2021), pp. 3-23 and Idem., The fabric of historical time, Cambridge 2023.

Archaeology and the Multiplicity of Time

Whenever archaeologists talk about time – at least in the English-speaking world – usually a number of adjectives accompany it in contemporary discourse, among the two more common being 'nonlinear' and 'multiple'. What archaeologists mean by these terms, however, is not always very clear, and in the worse cases, they become buzzwords, fashionable jargon to indicate that time is not what we normally take it to be. In fact, it is rare to see an explicit definition of what is meant by 'nonlinear time' or 'temporal multiplicity', although, in most cases, citation to a philosopher or thinker usually implies a certain meaning is to be read. Here, I want to focus on the concept of the multiplicity of time as used by archaeologists and draw out what I see as two very different uses of this notion. In this respect, it will be important to bear in mind two things: First, other words are sometimes used to convey this notion of multiplicity, such as 'plural', 'heterogeneous', and 'multiscalar'. Second, and related to the first, because of this looseness of terminology, when two archaeologists talk about the multiplicity of time, they may in fact be talking about very different things. In part, then, this paper can also be seen an attempt to encourage greater clarity in our discourse about time in archaeology.

So what are the two uses of the notion of the multiplicity of time that occur in archaeology? One concerns the idea that different entities – whether objects, typologies, societies, or processes – unfold at different speeds or tempos. This notion foregrounds multiplicity as a vector, a timeline where the temporal multiplicity is, in a sense, derivative of the multiplicity of things. The other revolves around the idea that the same entity – an artefact, a building, or a landscape – incorporates events from different moments or periods in the past, and that any entity is a polychronic ensemble of multiple pasts. This notion foregrounds multiplicity as an accumulation of time, where the object is derivative of the multiplicity of time itself. Immediately, one should sense the stark differences between these two positions, but I would like to spend time elaborating on them in more detail before drawing out some of the different consequences and concerns that each entail.

Multiplicity as a Vector

The first notion of multiplicity as a vector is very old in archaeology and present in the method known as seriation. This involves the sequential ordering of objects in time, but on the understanding that such ordering
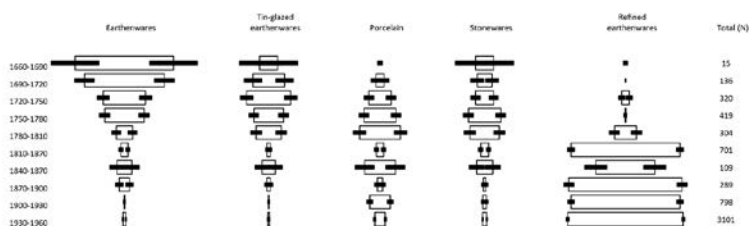
Figure 1: The seriation of ceramics from a postmedieval site in Iceland
(source: author)

does not take place end-to-end, i. e., where C replaces B, which replaces
A. Rather it recognizes – indeed the success of the method depends on –
the fact that any such sequence is always imbricated, that is, where C
overlaps with, as well as succeeds B and so on. Seriation thus depends on
the fact that artefact types have independent timelines, and that these
need not have the same tempo or rhythm (fig. 1). The recognition of
multiple timelines was not just confined to artefact types, however, but
was also a key part of culture historical sequences where, for example,
different parts of Europe exhibited different material culture sequences.
Here, however, the problem was almost the inverse: Whereas seriation
operated within confined spatial limits to exploit a lack of synchronicity
to produce a sequence or chronology, with culture history, the problem
became how to synchronize the different tempos or sequences between
regions. For a long time, this was done through methods such as cross-
dating, and it was not until the advent of radiocarbon that regional se-
quences could be accurately synchronized within a single, calendrical
chronology.[8]

I will return to the issue of synchronization, but for now, let me just
stress that this represents one of the key differences between archaeology
and history, methodologically. Within history, the notion of multiple
timelines for different countries or regions was established in the
18th century through the work of people like Johann Christoph Gatterer[9]
and his synchronistic tables, and synchronicity was never really an empi-

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8 Colin Renfrew, Before Civilization, Harmondsworth 1978.
9 Johann Christoph Gatterer, Johann Christoph Gatterers Einleitung in die synchro-
   nistische Universalhistorie zur Erläuterung seiner synchronistischen Tabellen, Göt-
   tingen 1771. See also Helge Jordheim, Synchronizing the world: synchronism as
   historiographical practice. Then and now, in: History of the Present 7 (2017),
   pp. 59-95; and Lucian Hölscher, Time gardens. Historical concepts in modern his-
   toriography, in: History and Theory 53 (2014), pp. 577-591.

rical problem for history, whereas for archaeology, it was one of the key methodological challenges during the 20th century. However, while synchronicity may have been only an empirical issue for archaeology, theoretically it was a matter of common concern to both disciplines, especially in terms of social evolution. Timelines as vectors – like any vector – have two properties: magnitude (i. e., duration) and direction. While historical and archaeological thinking since the 18th century embraced the notion of multiple timelines as vectors, this also implied that these timelines can be synchronized in two ways: one, in terms of their duration, the other in terms of their direction. Absolute, i. e., calendrical chronology provided the measure of the first, while evolutionary scales of social and cultural progress provided the measure of the second. Contemporary with Gatterer's synchronistic tables were the conjectural histories of the Scottish and French Enlightenment, which placed societies on a continuum from hunting, through pastoralism and agriculture to commerce. Over the 19th century, such conjectural histories morphed into more empirically-based systems, the most influential being Henry Morgan's three stages of savagery, barbarism, and civilization.[10] Such a stadial progression enabled scholars to situate societies on a single scale of social or cultural development, making some more advanced, others less. It basically says that Australian aborigines and European metropolitans in the year 1900 might have been contemporaries in terms of duration (occupying the same position within calendrical chronology), but noncontemporaries in terms of direction (occupying very different positions on the evolutionary ladder). Such nonsynchronicity in terms of direction was most famously articulated by Johannes Fabian through his discussion of the denial of co-evalness within anthropology.[11]

These evolutionary schemes dominated early archaeological thinking, and while they went in and out of fashion over the 20th century, they have never completely left. Nevertheless, although evolutionary schemes are hard to shake off, especially in popular culture, within academia few if any scholars continue to endorse their application today. Concurrent with this was a more pervasive disenchantment with the idea of historical directionality which arguably crystallized in the wake of the First World War in the beginning of the 20th century.[12] What this means is that, since

10 Mark Pluciennik, Social Evolution, London 2005.
11 Johannes Fabian, Time and the Other, New York 1983.
12 Lucian Hölscher, Mysteries of historical order: ruptures, simultaneity and the relationship of the past, the present and the future, in: Chris Lorenz/Berber Bevernage (Eds.), Breaking up time. Negotiating the borders between past, present and future, Göttingen 2013, pp. 134-151.

the late 20th century, multiplicity as a vector has largely lost ground to multiplicity as a scalar. A scalar is defined as a quantity with only magnitude, whereas a vector has both magnitude and direction. And indeed, one of the most common terms used to define temporal multiplicity in archaeology in the last four decades has been that of multi-scalar. However, it may be more accurate to say that the aspect of duration has come to dominate theoretical interest over that of direction; after all, archaeological timelines still have a direction (past to future), only their directionality has been theoretically muted, in large part because of the taint of evolutionary theories of progress. Thus, multiplicity is still predicated on time as a vector, but only one of the properties of vectors is given theoretical attention today, duration, resulting in treating multiplicity as if it were solely a scalar issue. I will come back to the consequences of this muting of directionality later, but for now let me focus on this concept of multiscalar.

It may not be coincidental, but only once the empirical problem of durational synchronicity was resolved (through radiocarbon dating), did this aspect of the multiplicity of timelines become a subject of explicit theoretical, as opposed to empirical concern. Moreover, this also happened just as directionality and its links to social evolution was abandoned. Thus, in the late 1980s and 1990s, one sees the first proper theorization of temporal multiplicity as duration in (English-speaking) archaeology. This manifested itself primarily in relation to the work of Fernand Braudel and his multiple durée's of the long, medium, and short term.[13] These durations were often read as tempos or rhythms, and indeed Braudel compares them to the second, minute and hour hands on a clock.[14] Thus the short term deals with fast-moving events, momentary flashes, the medium term with slower-paced repetitive events, typically rendered as economic cycles, and the long term as the slowest of all, barely changing such as natural topography and geography. Under such schemes, archaeology was often paraded as the discipline best fitted to address the long-term and, in some cases, the medium term but rarely the short term.

One of the most common criticisms of Braudel's scheme is that the three temporalities never seemed to relate; the analysis of events, conjuncture, and structures all take place independently, and often, it is the long durée of structures that trumps the others. Indeed, such failures to

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13   E.g., Ian Hodder (Ed.), Archaeology as long term history, Cambridge 1987; John Bintliff (Ed.), The Annales School and archaeology, Leicester 1991; Athur B. Knapp, Archaeology, Annales and ethnohistory, Cambridge 1992.

14   Fernand Braudel, The mediterranean and the mediterranean world in the age of Philip II, 2 vols., London 1972, p. 893.

integrate the scales has been perhaps the major focus of most archaeologists who have discussed the significance of time scales.[15] For example, how to integrate long-term changes to settlement patterns or artefact styles to shorter-term routines of building houses or making pottery? How does change happen? At the same time, maybe the irreducibility of the three scales is precisely what gives them such potency as a means of expressing temporal multiplicity. Surely, the very attempt to try and reign all these different scales together is to negate the very point: their difference. This is not to argue that we should not look for connections between different temporalities, but we cannot presuppose them; surely, the challenge is to explore specific intersections, to understand when and why some tempos are connected and others are not. To search for a master temporality would end up reducing such multiplicity to a singular temporality.

Multiplicity as a Layer

The second notion of multiplicity is quite different to the last and, in fact, as a topic of theoretical reflection, of much more recent date. Archaeologists have long known that sites, features, and deposits will contain objects of different dates and have also appreciated that any object or feature will incorporate different temporal attributes, most commonly acknowledged through the distinction between date of manufacture and date of deposition, for example, that an object made in the mid-2nd century BCE may be found in a context that dates much later. However, theoretically – and even empirically – they have, until very recently, treated such cases as anomalies to be resolved. Thus, any discrepancy between date of manufacture and date of deposition is subject to varying explanations such as contamination, redeposition, curation, and so on, the assumption being, in a ›normal‹ situation, date of manufacture and date of deposition should be broadly the same (where an archaeologist's notion of contemporaneity is usually very different to that of a historian's, working as the former does with much coarser chronological resolution). And yet is maybe what is anomalous actually the norm?

One of the first archaeologists to really raise this possibility was Laurent Olivier, who repeatedly stressed the polychronic or heterochronic nature of the material world:

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15 Jan Harding, Rethinking the Great Divide: Long-term structural history and the temporality of the event, in: Norwegian Archaeological Review 38 (2005), pp. 88-101; John Robb/Timothy Pauketat (Eds.), Big histories, human lives. Tackling problems of scale in achaeology, Santa Fe 2013.

It is spring here, and we are now in 1999. The house where I am writing this paper was built towards the beginning of this century, in the courtyard of an ancient farm whose structure is still visible. From my open window, I see an interweaving of houses and construction, most of them dating back to the 19th century, sometimes including parts of earlier constructions from the 18th or even the 17th century. The 20th century here looks so localised, so secondary: it is reduced to details, such as windows, doors, or within houses and flats, furniture [...]. From the place where I am standing, the 1990s are invisible on this quiet morning ...[16]

For more than two decades, Olivier has been exploring the implications of such ›anomalous‹ temporality, from his early work on an Iron-Age burial[17] to his recent work on Iron-Age salt-making sites.[18] In recent years, Olivier has been joined by other archaeologists exploring the same themes.[19] Unlike the previous section, which focused on multiplicity as a vector, the discourse on what I am calling here multiplicity as a layer is much more fragmented. In part, this is due to the fact that different archaeologists often use different terms and even frame the issues in slightly different ways.[20] Moreover, unlike the case of multiplicity as a vector, which generally had a single point of reference (i.e., Braudel), here a range of different thinkers are cited including Bergson and Deleuze, but not – let it be noted – Koselleck. Despite such diversity, I find it useful to characterize these approaches under the rubric of multiplicity as a layer, as there is a common, recurrent thread that links all of these approaches and that is a model of time that is topological – or more provocatively, even archaeological.

16 Laurent Olivier, Duration, memory and the nature of the archaeological record, in: Hakan Karlsson (Ed.), It's about time. The concept of time in Archaeology, Goteborg 2001, pp. 66 f.
17 Laurent Olivier, The Hochdorf ›princely‹ grave and the question of the nature of archaeological funerary assemblages, in: Tim Murray (Ed.), Time and archaeology, London 1999, pp. 109-138.
18 See Gavin Lucas/Laurent Olivier, Conversations about time, London 2022.
19 Lucas, Making Time; ibid., Adventures in timeland, in: History and Theory 63 (2024), pp. 166-185; Christopher Witmore, Old lands. A chorography of the eastern peloponnese, London 2020; Graham Harman/Christopher Witmore, Objects untimely: object-oriented philosophy and archaeology, Cambridge 2023; Alfredo Gonzáles-Ruibal, An archaeology of resistance. Materiality and time in an african borderland, Lanham 2014, and Bjørnar Olsen/Hein Bjerck/Elin Andreassen, Persistent memories. Pyramiden – a soviet mining town in the high arctic, Bergen 2010.
20 E. g., see the dialogue in Lucas/Olivier, Conversations.

To illustrate this, it is helpful to draw on Olivier's reference to Freud's interest in archaeology and particularly the way Freud adopted archaeological stratigraphy as a way to model human memory.[21] Freud took a keen interest in archaeology and antiquities, as is well known and has been remarked on numerous times by many different scholars. But Olivier draws our attention to Freud's visualizations of memory in terms of archaeological strata as a way to understand how the past can be co-extensive with the present in the sense of being alongside it, rather than preceding it. And, in fact, one of the most remarkable operations that archaeologists routinely perform is to make us forget this fact. In the ground, observing an exposed section through layers, we do not see these layers as contemporary but rather read them as successive, the lower one being earlier in time, the upper ones later. We convert a vertical column of soil into a temporal sequence of varying durations. The multiplicity of different pasts coexisting together are pulled apart and arranged along a single line. The very multiplicity of time as layered pasts is converted into a single timeline, a conversion graphically rendered through a Harris matrix (fig. 2). Indeed, such is the power of training, that it can be quite hard to fully appreciate the contemporaneity of these pasts materialized in a stratigraphic section.

It is quite important here to pause and fully take in what is implied by seeing temporal multiplicity in terms of layers. By stressing the contemporaneity of these layers, we are not rejecting a sequential interpretation; the lower layers are still older, and there is still a directionality at work here. But what is being affirmed is that such a sequence is not successive but rather *cumulative* (and subtractive). C does not replace B, and B does not replace A; rather, C and B are added onto (or even partially take away) A. In other words, stratigraphic, or archaeological time, is a time that incorporates a multiplicity of pasts whose configuration is in constant flux in relation to a present, which is always changing. What does this mean in terms of material configurations? Consider a field system laid out in the Roman period in northern Italy. Over time, the layout of this system persists, people keep cleaning out and recutting ditches along the same lines, and so a Roman field system actually lives on into the medieval period and right through into the 20th century.[22] To call this field system ›Roman‹ is therefore to deny the greater part of its being, most of which is, in fact, post-Roman. But there is more: To portray the

21   Lucas/Olivier, Conversations.
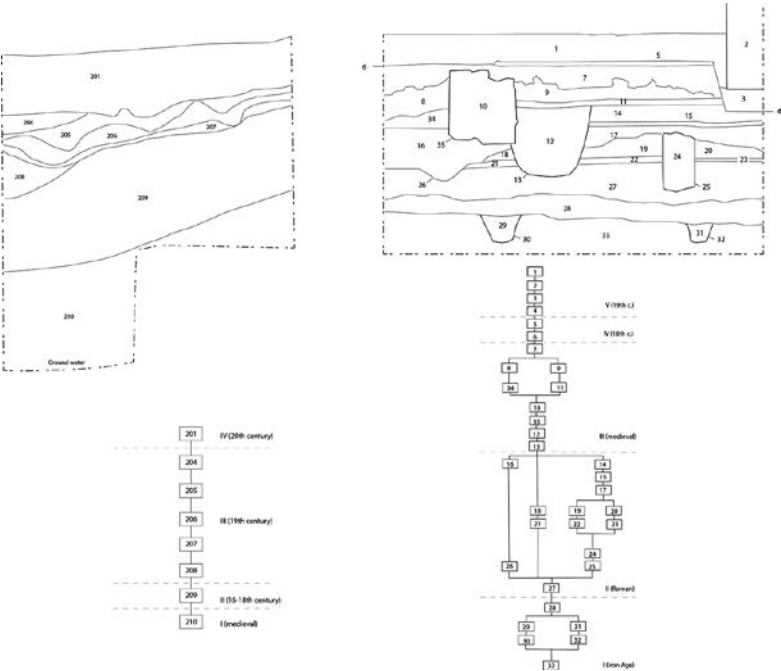22   Gérard Chouquer, L'Étude des paysages. Essais sur leurs formes et leur histoire, Paris 2000.

Figure 2: Section through a midden (left) and section through urban deposits (right) with associated Harris matrices beneath (source: author).

field system solely in these terms is also to reduce it a timeline, an aged being; the point is rather to see it always from the perspective of one particular present. Age is not just a duration, a longevity, it is also a relation to a milieu: An object might be manufactured yesterday but in the style of the last century, while an object that has persisted for centuries can suddenly feel quite novel. In the 20th century, this field system sits alongside other features – roads, trees, buildings, all of which will have different temporal depths, and for any given present whether this is the 20th century, the 12th century, or the 2nd century CE (and it matters not how narrowly or widely you define that present, i. e., in terms of hours or years), the field system will exist in a different temporal configuration because of the way the present changes as new things are built or older things disappear. The temporality of the field system is constantly being recalibrated against other objects in its vicinity, and so it is a multiplicity, also in flux.

Koselleck's *Zeitschichten* and Archaeological Multiplicity

Having outlined the two ways in which archaeologists have articulated the notion of temporal multiplicity, I would now like to reflect on the way in which Koselleck's concept of *Zeitschichten* might intersect with them. Certainly at first glance, relying solely on the words used, one would be tempted to link Koselleck's concept with the second of the meanings discussed above, that is, multiplicity as a layer. However, is this necessarily the case? Let us look at how Koselleck himself describes this term and see to what extent it can be mapped onto one, both or neither of these archaeological meanings.

In his short text where he outlines his concept of *Zeitschichten*, Koselleck explicitly uses the metaphor of geology to accentuate a historical temporality that recognizes that human events unfold at different tempos: "… 'sediments or layers of time' refers to geological formations that differ in age and depth and that changed and set themselves apart from each other at differing speeds over the course of the so-called history of the earth."[23] Immediately, this positions Koselleck's arguments within the first of my conceptions of multiplicity. And if this were not clear enough, he then proceeds to outline three broad layers over which history can be studied: 1) singularities or unique events; 2) recurrent structures or routines; and 3) crossgenerational or transcendental biological structures and belief systems that exceed the span of a single human life. These three layers mirror – but do not precisely repeat – Braudel's three durées, and it is no surprise that Koselleck was influenced by Braudel.[24] One of the ways Koselleck departs from Braudel, however, is his more subtle approach to the interrelationship between these three layers, especially the first two. His conception of a singular event depends on its being lifted out of the background of routine structures because of the element of surprise – in his example, the daily delivery of the post, which suddenly transforms the day as a letter arrives bearing bad news. In other words, it indicates on a small, everyday level the same disjunction as that between the "space of experience" and "horizon of expectation", Koselleck's basic categories of historical consciousness[25], which derived

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23 Koselleck, Sediments, p. 3.

24 See Rafael Marquese/Waldomiro L. Júnior, Plural historical times: Braudel, Koselleck and the problem of african slavery in the americas, in: Historia da Historiografia 11 (2018), pp. 44-81, for a detailed consideration of the relationship between these two scholars.

25 Koselleck, Futures Past.

from Karl Mannheim's 1922 work on structures of thinking.[26] It is the dynamic between these that can also result in changes to routines, and this shows the reciprocal relationship between his first two layers, which also played out in the tensions between political/narrative *(Ereignis-geschichte)* and social/structural history *(Sozialgeschichte)* in German historiography. His third layer however, stands somewhat more aloof, although in principle, one could imagine the same dialectic at work here but on a much slower and longer-term trajectory.

Koselleck's motivation for this layered time is explicitly stated as a means to overcome the linear-cyclical duality of time that is so frequently bandied about. In this way, he underlines his commitment to the first meaning of multiplicity I have outlined in this paper: time as a vector. Such a perspective is reinforced in his other papers, such as the one entitled 'Does History Accelerate?'.[27] For this, and many other reasons, we should seriously question his use of the geological metaphor. Geological processes do operate at different rates of change, and to some extent, this might – and only *might* I should stress – be reflected in their stratigraphy as thicker or thinner deposits. But there is certainly no sense in which the deeper layers took longer to form. Koselleck is conflating age with tempo here, which are not the same thing at all. Moreover, although his notion of layered time is supposed to evoke multiple processes operating within the same time, just at different speeds, this is not how the geological section is conventionally read: The different layers are successive, not contemporary. While in my earlier discussion of temporal multiplicity as layered, I actually stressed the opposite – that we can see these layers as contemporary – this we can only do if we treat this contemporaneity from the standpoint of accumulation. There is nothing in Koselleck's discussion to suggest such a reading, and in fact his subsumption of temporal multiplicity to the attribute of speed makes it quite clear that his main concern is not with accumulation but tempo.

It is hard to imagine Koselleck not being aware of all these problems, and perhaps all it points to is the danger of reading metaphors too far. Yet, even at a superficial level, the metaphor barely carries any water. I am not the first to question Koselleck's use of the geological metaphor.[28] At

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26 Karl Mannheim, Structures of Thinking, London 1982. See Ulrike Jureit, Erinnern als Überschritt. Reinhart Kosellecks geschichtspolitische Interventionen, Göttingen 2023, pp. 136-139.

27 Koselleck, Sediments, pp. 79-99.

28 See Chris Lorenz, Probing the limits of a metaphor: on the stratigraphic model in geology and history, in: Zoltán Simon/Lars Deile (Eds.), Historical understanding. Past, present and future, London 2022, pp. 203-216.

the same time, a stratigraphic model of time can actually be traced quite broadly through the humanities since the late 19th century, but in contrast to Koselleck, it is usually used to support a very conventional model of time.[29] In many ways, this is perhaps precisely the crux of Lorenz's critique: The metaphor just doesn't work. Certainly in the context of how Koselleck deploys it, namely, as a way to articulate temporal multiplicity as a vector, I would completely agree. But if we articulate this multiplicity as a layer – not in a metaphorical sense but in a fully material, archaeological or geological sense – then the notion of time as layered can be made to work.

In some ways, however, Koselleck's metaphor can be saved by focusing on the interplay between his first and second layer – the singular event and recurrent structure. After all, it was really the interaction between these two to which he devotes most attention and which also resonates with his key concepts of the space of experience and horizon of expectation, insofar as the relationship between the two is not successive but reciprocal. The relationship between the future, as the horizon of expectation, and the past, as the space of experience, is not one of ›before and after‹, but one of mutual copresence. Such a relationship is captured by Lucian Hölscher – who was a student of Koselleck – in his recent discussion of second-order times (e. g., past futures or future pasts), which double up the primary tenses in nine different configurations.[30] Similarly, the distinction between the singular event and a recurrent structure is not so much about their different temporal extension or longevity, but that they manifest two kinds of temporal experience: singularity and repetition. It is precisely this ontological reframing of the difference between structure and event that arguably distinguishes Koselleck's ›layers‹ from Braudel's.[31] Zammito expresses this well when he describes their interplay as productive of a third temporal experience: the simultaneity of the nonsimultaneous *(Gleichzeitigkeit des Ungleichzeitigen)*: "What the first two modes occasion is the key experience of the simultaneity of the non-simultaneous, a multilevel, synchronic, and diachronic presence of time."[32] The point being, the multiplicity of time is as much about the experience of different tempos in any given present as it is about the fact

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29 E. g., see Cristían Simonetti, The stratification of time, in: Time and Society 24 (2011), pp. 139-162.

30 Lucian Hölscher, Virtual historiography: opening history toward the future, in: History and Theory 61 (2022), pp. 27-42, here 33.

31 Marquese/Júnior, Plural historical times.

32 John Zammito, Drilling down. Can historians operationalize Koselleck's stratigraphical times?, in: Configurations 23 (2015), pp. 199-215, here 208.

that historical processes operate on different tempos. In many ways, it was this third experience that Koselleck was trying to capture through his use of the geological metaphor of the layers of time.

Conclusion

In ending, I do not want to pass any judgments on the utility of Koselleck's ideas for archaeology – or even history. On the one hand, one could argue they offer nothing new, nothing that Braudel's three durée's had not already done for archaeology in the 1980s and 1990s. Nothing is gained by resurrecting these debates in the language of Koselleck, as to a large extent, they have almost become normalized; we are used to working on the assumption that processes unfold at different tempos. On the other hand, there is an element in Koselleck's work – especially his concern of the 'simultaneity of the nonsimultaneous' – that does resonate with the more recent work on time as layered, whose primary focus is the nature of the contemporaneity of multiple pasts. To the extent that Koselleck does not really develop this idea in the same way, however, but remains within a model of temporal multiplicity as a vector, it remains hard to see how to make his ideas work. Rather than spend more time weighing the contributions of Koselleck, let me conclude this paper by focusing on what I see as the pivotal concepts here: simultaneity, contemporaneity, and synchronization. The question I want to pose is whether the two views of temporal multiplicity that I have been presented in this paper are reconcilable or simply incommensurable. Are we forced to choose between them?

Much of the debate about temporal multiplicity, at least within history, boils down to the issue of synchronization.[33] A common starting point is that history is primordially nonsynchronous, composed of events and processes that happen at different tempos. The paradox, however is that to recognize such multiplicity, we need to perform 'practices of synchronization' such as chronology and periodization.[34] Compare this to a 100m sprint – each contestant runs at a slightly different speed, but to comprehend these differences, we need a master clock. This raises the question: Can we retain a proper temporal multiplicity without these practices? How do we articulate multiplicity in the absence of such syn-

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33 E.g., Jordheim, Synchronizing; Simon/Tamm, Fabric.
34 Jordheim, Synchronizing; Achim Landwehr/Tobias Winnerling, Chronisms: on the past and future of the relation of times, in: Rethinking History 23 (2019), pp. 435-55.

chronization? It is like asking whether we can do history without chronology.[35] In Hölscher's terms, it is to acknowledge the necessary inter-relationship of an empty and embodied time.[36] For me, part of the problem with this whole line of reasoning is that it remains wedded to a view of temporal multiplicity as a vector; it is about how to work with multiple timelines. When you define multiplicity in these terms, I don't think it is possible to avoid practices of synchronization; in many ways, seeing time as a vector almost demands this. It is only by shifting our notion of multiplicity into a different gear, into a layered model, that an alternative approach becomes viable, one where practices of synchronization are not even an option.

I have always found that the best way to articulate this is through the distinction between simultaneity and contemporaneity.[37] In chapter 3 of his book *Duration and Simultaneity*, which is a critique of Einstein's theory of relativity, Bergson seems to get to the heart of this difference. For Bergson, our primary experience of time as duration or flux can be described as the perception of contemporaneous flows; sitting around a table at a restaurant for example, there are waiters bustling around, other diners conversing, a clock ticking on a wall. In our perception, Bergson argues that we see all these events as both one and many simultaneously; we can choose to filter out everything and focus just on one, such as the person opposite us, or we can soak up the atmosphere of all together. It is this very ability to see events as both a unity and multiple that constitutes contemporaneity. For Bergson, time – in its pure state – is »multiplicity without divisibility and succession without separation«.[38]

It is from the primacy of ›contemporaneous flows‹ that we abstract a notion of ›simultaneous instants‹; like the flow, simultaneous events can be perceived as a unity or singled out. A waiter drops a tray at the same time as a child cries at another table. In one sense, these are part of the contemporaneous flows, but in defining them as simultaneous instants, we are implicitly drawing on what Bergson called a spatialized sense of time. Real duration is ›thick‹, it has no instants; the idea of an instant as a unit of time is a product of spatializing time, converting it into something measurable. Bergson explained the difference by analogy to drawing a line across a sheet of paper; by closing my eyes and making the movement with my hand, the experience is one of undivided continuity.

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35   Stefan Tanaka, History Without Chronology, Ann Arbor 2019.
36   Hölscher, Time Gardens.
37   Gavin Lucas, Archaeology and contemporaneity, in: Archaeological Dialogues 22 (2015), pp. 1-15; Ibid., Making Time.
38   Henri Bergson, Duration and simultaneity, Manchester 1999, p. 30.

When I open my eyes and see the line drawn, I now perceive a record of that act, a record that, though it also appears undivided, can now be divided: I can mark cuts or points along it, measure it, and so on. For Bergson, spatialized time depended on the materialization of movement, a transition from what he called the unfolding (i. e., the movement of pencil across paper) to the unfolded (i. e., the line on the paper). It is on such materializations that spatial time – clock time or physical time – was dependent.

Synchronization is a problem around simultaneities – about measurable vectors, timelines that run for different durations and at different speeds. Contemporaneity is about layered experiences, a composite of stratified and partial pasts that involves very different practices to synchronization. Rather, it about parsing these pasts, about how the past both continues to stick and hold onto or shape the present but also about how these pasts can disappear and reappear in different presents and even in the future. There is a recursive relationship between past, present, and future, whereby, on the one hand, the past establishes a ›possibility space‹ for the present and future, i. e., creates the field or terrain within which possible presents and futures are inscribed, while, on the other, the present, in realizing one of these possible futures, thereby subsequently alters the terrain of the past and thus changes the scope of the future.

While insightful, in framing the difference between two kinds of temporal multiplicity as a difference between the concepts of simultaneity and contemporaneity, we have only driven the wedge in further. What hope is there for reconciling these versions? Are we forced to choose between them? While I cannot reasonably offer a clear answer in the space of these concluding remarks, what I can do is maybe point to an issue where both make contact: directionality. Recall that, with the discussions of temporal multiplicity as a vector, we noted the contemporary desire to mute the aspect of directionality with the vector and focus solely on magnitude – duration and speed. Multiplicity becomes a quasiscalar property. This was done because of the deeply problematic entanglement of directionality with notions of progress. And yet, the vectors of a multi-scalar approach to archaeology and history are nonetheless directional; they flow from past to future. Maybe it is time to bring directionality back into the discussion but in new and creative ways, for example, in Lucian Hölscher's suggestion of virtual historiography.[39] The same aspect of directionality inheres in the multiplicity as a layer model, only here directionality is not just facing one way; pasts can come in and out of

39 Hölscher, Virtual historiography.

focus, there is revival as well as survival.[40] But, perhaps more importantly, directionality here is not defined as a teleology, as a movement towards something, but rather as a mechanics, as a force pulling pasts down or pushing them up. What we are talking about is characterizing vectors as subject to temporal fields, where directionality is not so much an attribute of a trajectory as a consequence of the temporal topology of any given present.[41] Whether these metaphors really provide a way to reconcile the two views of multiplicity I have discussed in this paper is a question for another occasion. Maybe they don't, and maybe we cannot – or even should not – reconcile them. But whatever their fate, I believe it has been crucial to demarcate them.

Acknowledgments

40 Gavin Lucas, Survivals and the persistence of the past, in: Journal of the Royal Anthropological Institute 30 (2023), pp. 399-416.
41 Lucas, Adventures in timeland.