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Tackling an old dilemma anew: a reflective modular approach for analysing the concept of archaeological cultures in European Prehistoric Archaeology

By Johanna Brinkmann and V. P. J. Arponen

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Introduction

Regarding the concept of archaeological cultures, Benjamin Roberts and Marc Vander Linden summarised the view from a dozen archaeological textbooks, stating, "the concept of archaeological cultures is deeply flawed and, as a consequence, should no longer be applied or even discussed"[1]. Similarly, a recent discussion paper noted, "Overall, the concept of archaeological cultures has been utterly deconstructed time and again"[2]. Some of the problems with the concept include its simplistic equation of pots with the people who produced them; that is, the implication that a uniform material culture implied the existence of a uniform people[3]. As a group of commentators stated, "There is no going back to the fantasy that once upon a time there were settled, coherent, and perfectly integrated national or ethnic communities"[4]. Perhaps the more serious flaw is that the concept could and has been put to political use, as indeed happened with the ideas of Gustaf Kossinna[5]. Oliver Nakoinz refers to this relation between the concept of archaeological culture and racist or nationalist interpretations as the "ECNR-System" (Ethnos, Culture, Nationalism, Race)[6].

But if the concept is deeply flawed and has been thoroughly deconstructed, why must we discuss it? Mainly because, as many scholars have noted, the practice of grouping, understanding, and describing archaeological data in terms of archaeological cultures remains the same and is widely used in European and especially in German archaeology (even if the term "archaeological culture" may have been dropped). In contemporary European prehistoric archaeology, perhaps with national differences, we still find labels such as Funnelbeaker culture and other similar standard terms used regularly, which are usually said to represent a reduction of the original concept to a terminus technicus[7]. This is one of the most common "workarounds" to (allegedly) overcome the ethnocentric, romanticist, and nationalist implications of the concept of archaeological culture. These implications can be observed to different degrees in the

[1] Roberts / Vander Linden 2011, 2.
[2] Hofmann et al. 2021, 527.
[3] See Childe 1929, 5–6; Iversen 2015, 139–140. – See also discussion in Chapman / Wylie 2016, 155.
[4] Greenblatt et al. 2009, 2.
[5] See below.
[6] Nakoinz / Knitter 2020; Nakoinz / Andersen 2022, 3.
[7] e. g. Iversen 2015.

archaeological literature, especially after World War II in German-speaking archaeology, but also in other European countries[8]. In German-speaking research, this has been termed the "Kossinna-Syndrome" (i. e. avoiding being associated with G. Kossinna's thoughts and methods)[9]. In addition, nowadays, the concept is often not only described as a "classificatory device" to describe similarities in material culture but also as an expression of someone – the human agents who left behind the material remains that we study today[10]. Furthermore, archaeologists might routinely use language that evokes something like culture groups in statements such as that "humans are defined by their material culture, and the sets of things comprising major social technologies possess strong internal coherences"[11]. Different models of cultural coherence, for example, as more or less rigid "cores" or looser "packages", have already been discussed[12]. Therefore, the precise implications of critiques of the concept in European archaeology seem to remain an essentially "open question" to some[13].

Moreover, it can be argued that the word "culture" comes to us easily, both as laypersons – for instance, in the current politically polarised climate, when we assess the beliefs, norms, and other basic cultural orientations of the "other" political side, as well as the media and other channels through which these are communicated[14]. Additionally, in academic contexts outside of archaeology, culture is often easily understood as a set of implicit beliefs and norms that we routinely use to understand our cultural space[15]. Below, we will suggest that there indeed exists a set of perhaps implicit intuitions about culture that pre-reflectively and pre-theoretically influence our thinking about cultures.

So why do scholars continue to use a concept whose shortcomings seem so apparent? The situation calls for an explanation. Writing as a team consisting of an archaeologist and a philosopher, we propose a reflective modular approach to taking apart the concept of archaeological cultures in this article. Exploring the intellectual history of the concept of archaeological cultures, we present the concept as founded on and supported by a number of intuitions that we refer to as the three pillars. We discuss the pillars and suggest a set of intuitions to convey the view that most concepts, if not all, in archaeology and elsewhere rely on multiple, often implicit, ideas that constitute their role and appeal in science. The concept, any concept, is in this manner pluralistic from an epistemic standpoint[16] or within its paradigmatic background[17], as it can be seen to draw from. Overall, we adopt a reflective, philosophical approach to dissecting the concept of archaeological cultures through analytic distinctions into pillars and intuitions. Analytic distinctions are a pragmatic tool that helps us better understand a given phenomenon, and its fruits can remain essentially contested[18]. Like different building blocks, the pillars and intuitions can be understood as modules. In choosing these analytical units, we are able to examine the concept of archaeological cultures more thoroughly and also show the interconnectedness between the modules.

We suggest that the concept of archaeological cultures is commonly taken to stand on one pillar: the romantic and nationalistic ethnocentrism associated most closely with Kossinna's work. This pillar has been rightly and extensively repudiated and effectively made to fall[19].

[8] Lüning 1972; Veit 1994, 36–39; Hafner / Suter 2003; 2005; see Heitz 2023, 19; 49–55; 61.
[9] Smolla 1979/80, 9.
[10] Iversen 2015, 139.
[11] Robb 2013, 672.
[12] Shennan et al. 2015.
[13] Furholt 2018, 2; see also Hofmann et al. 2021, 527.
[14] McGuigan 1992; Moran / Litter 2020.
[15] e. g. about status: Ridgeway 2019.
[16] Wylie 2012.
[17] Stegmüller 1979; Kuhn 1996; Lucas 2017.
[18] Gallie 1956; 1964.
[19] e. g. Childe 1933; Clarke 1968; Furholt 2014; 2018; 2019a; 2019b; Hofmann et al. 2021; Heitz 2023.

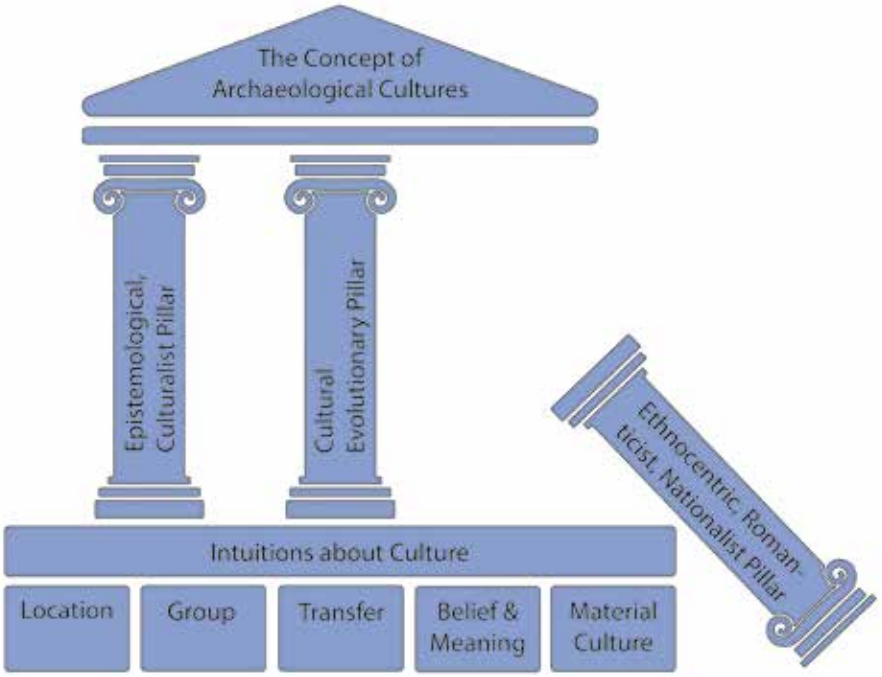

Fig. 1. The concept of Archaeological Cultures stands on three pillars: the Ethnocentric, Romanticist and Nationalist Pillar, the Cultural Evolutionary Pillar, and the Epistemological, Culturalist Pillar. The pillars rest on five Intuitions about Culture: Location, Group, Transfer, Belief and Meaning, and Material Culture.

However, our analysis seeks to show that the concept of archaeological cultures rests on at least two further pillars, both of which are still very much standing, and so does the concept of archaeological cultures itself, for better or worse. Furthermore, this concept may continue to stand, no matter how thoroughly we might rightfully deconstruct the ethnocentric, romanticist and nationalist pillars. In other words, the concept of archaeological cultures draws considerable support from certain cultural evolutionary and culturalist intuitions, which we will flesh out in more detail below.

If the previous observation is correct, it offers an explanation for the persistence of the archaeological culture's concept: while one pillar has fallen, two other prominent ones continue to stand. The question that arises for archaeology from this, which we will consider in the closing section, is: should or could the remaining pillars also be made to collapse, or, following the removal of that one pillar, does the concept stand as it is?

As a summary of the forthcoming argument, the three pillars *(Fig. 1)* of the concept of archaeological culture are presented in the order of exposition as follows:

The Ethnocentric, Romanticist and Nationalist Pillar. This pillar builds upon the idea that archaeological cultures denote racially and ethnically delineable "*Völker*" or peoples.

The Cultural Evolutionary Pillar. This pillar builds upon the idea of cultural evolution as operating in and via groups that deploy, transfer, and disseminate specific traits to new generations and other groups.

The Epistemological, Culturalist Pillar. This pillar builds upon the idea that social groups are centrally defined by their epistemologies – shared ideas, norms, and values – by virtue of which these groups culturally and politically organise themselves.

Throughout the exposition of these pillars below, we shall identify and follow up on five *intuitions* about (archaeological) cultures. We think of these intuitions as pre-reflective and pre-theoretical conceptions of human culture, being widely shared in archaeology and beyond in different forms. Intuitions can be thought of as comprising a kind of general *picture* of culture, as a philosopher put it:

"A theoretical representation which has lost its representational status and has been reified into a peculiarly compelling portrayal of the essence of some phenomenon. Such pictures are really only metaphors, analogies, models and representations, but they are experienced as knowledge"[20].

The idea of intuitions as comprising a picture of the concept of culture will help us to understand the contribution of each particular pillar to the overall concept of culture and, as such, to its continued survival as a technical archaeological notion, among others[21]. The intuitions are summarised here and will be discussed in detail in the sections that follow:

Location. Archaeological cultures or units are typically thought to occupy or exist in definite geographical locations, or they are defined by their spatial distribution, even while we also commonly recognise "periods of structural transformation and rapid change"[22].

Group. At least in the classical conception, archaeological cultures are carried by particular groups of various sizes, from "*Rassen*" to "*Völker*" or "*Volksstämme*"[23], to subcultures or cultural groups[24]. Contemporary evolutionary anthropology also recognises social units of various scales as the locus of human sociality while stressing the "high mobility" and "open-ended multilevel networks" nature of these units[25].

Transfer. Cultures and cultural evolution involve the transfer of their "basic units" via processes such as learning and imitation, but perhaps also cultural hegemony, immigration, and forced adoption[26]. In other approaches, the transfer is said to involve a more holistic unit, such as a niche[27] or an institution[28].

Belief and Meaning. Culture exists in part as "meanings" pertaining to cultural symbolisms, material culture, and any cultural artefact, whether material or immaterial[29] – culture can be "read", and its meanings understood like text[30]. That is to say, "[h]uman culture extends across multiple minds"[31]. Here, the "dynamic" and contested nature of meanings is also typically acknowledged[32].

Material Culture. A natural and central concern of archaeology is the material culture found in static form in the ground, which embodies past dynamics and incorporates and conveys meanings as part of the transfer of culture within and between groups[33].

We are aware there may be national differences in research traditions and their relationships to our suggested pillars and intuitions about culture[34]. In this account, we attempt to suggest and identify certain general yet representative trends. With the three pillars and the five intuitions briefly described, it is time to delve into the details.

20 Pleasants 1999, 3.
21 Compare Stocking 1982.
22 Vandkilde 2007, 12.
23 Kossinna 1911.
24 e. g. Iversen 2015.
25 Migliano / Vinicius 2022.
26 Kuijt / Prentiss 2009.
27 Ready / Holton Price 2021.
28 Shennan 2011.
29 Hodder 1989.
30 Hodder / Hutson 2003.
31 Migliano / Vinicius 2022, 1.
32 Gramsch 2015, 345.
33 Samida et al. 2014.
34 Trigger 2009.

The Ethnocentric, Romanticist and Nationalist Pillar

In the following, the well-known ethnocentric, romanticist, and nationalist implications of the concept of archaeological cultures will be summarised in order to identify which of the five intuitions about (archaeological) cultures (Location, Group, Transfer, Belief and Meaning, and Material Culture) are embedded in this pillar.

The description of archaeological cultures as material manifestations of a particular group of people with shared cultural values within a homogeneous, slowly changing construct with clear boundaries goes back to the early concept of archaeological culture in scholarly discourse. It has shaped the minds of generations of archaeologists and continues to influence us today[35]. As we have noted in the introduction, this worldview contradicts modern archaeological research, which strives for a decided way of looking at the past in which diverse and complex processes and actors become visible[36].

To understand the impact this concept had on archaeological research, at least in Europe, we have to look at its intellectual history. Here, the works of two early researchers, Kossinna and Vere Gordon Childe, come to mind. However, the roots of the concept go back much further than the early cultural historians and can be found in various forms within early archaeological writings.

Johann Gottfried Herder (1744–1803) evokes what the cultural sociologist Andreas Reckwitz calls a totality-oriented concept of culture *(totalitätsorientierter Kulturbegriff)*. With J. G. Herder, culture or *cultures* become a holistic concept that describes specific lifeforms of individual collectives throughout history and, therefore, is also suitable for comparing different cultures. In his romantic interest in individual peoples, communities, and their history, Herder illustrates the diversity of the totalities of human lifeways in different "peoples" *(Völker)*, "nations" *(Nationen)*, "communities" *(Gemeinschaften)*, and "cultural circles" *(Kulturkreisen)*[37].

This totality-oriented concept of culture during the 19th century provided the backdrop for an empirical-scientific analysis of these cultural totalities. For Anglo-American ethnology, for example, which developed under the name anthropology in the last third of the 19th century, the holistic understanding of culture initially had a constitutive significance for the discipline. Characteristic of the totality-oriented concept of culture is linking cultures as forms of life *(Lebensformen)* to individual collectives – peoples, ethnic groups, nations, and cultural circles – and thus, ultimately, to specific communities. It is important to note that although this concept acknowledges that there are radically different ways of life for the individual collective (or even the individual), these are by no means interchangeable or combinable. Rather, a certain way of life *(Lebensform)* ideally appears homogeneous on the inside and closed off from the outside, like – as Herder put it – a "bubble" in relation to other "bubbles"[38].

Another often neglected influence on the concept of archaeological cultures, as we understand it today, comes from the *Kulturkreislehre* (theory of cultural circles). This concept was initially developed as a historical method of ethnology by Leo Frobenius (1873–1938) and later by the Vienna School of Ethnology. It dominated interpretations in ethnology and prehistory at the beginning of the 20th century, especially in Central Europe. Aiming to write a "history of civilisation", the *Kulturkreislehre* covered cultural expressions, regardless of time and space, where prehistoric archaeology provided a window into the remote past. It was this concept

[35] See e.g. Childe 1956, 8; Jones / Richards 2000, 103–104; Iversen 2015, 139–140.

[36] e.g. Furholt 2019a, 57.

[37] Herder 1791; Reckwitz 2008, 22.

[38] Reckwitz 2008, 23–24: "Jede Nation hat ihren Mittelpunkt der Glückseligkeit in sich, wie jede Kugel ihren Schwerpunkt", Herder 1990 [1774], 44.

that introduced the methodology of mapping the spatial distribution of certain find types to prehistory around the turn of the 19th to the 20th century, during which groups of matching types were referred to as *Kulturkreise*[39].

According to the *Kulturkreislehre*, cultural elements were believed to have limited origins, and consistency was assumed to be a main trait in all societies; consequently, parallel inventions in different cultures were deemed unlikely, and change was explained by cultural contact and fusion rather than development. Essential for understanding the *Kulturkreislehre* is acknowledging that the Vienna School of Ethnology, until the replacement of its university staff in 1938, was deeply rooted in Catholicism. Wilhelm Schmidt (1868–1954) was one of the leading proponents of the school, and some of his pupils were priests from the same Catholic missionary order[40]. Given this knowledge, it is unsurprising that the *Kulturkreislehre* was essentially anti-evolutionist and did not change their view in terms of development from primitive to a higher form (a trait that distinguishes them from later cultural-historic movements, which often contain at least the implicit notion of development from simpler "primitive" to more complex societies). This led to methodological problems, as archaeological dating depended on evolutionary concepts to some extent (e. g. the succession of earlier and later stages). Additionally, according to some proponents of the ethnological *Kulturkreislehre*, there were no early hominids, only modern humans. In general, the *Kulturkreislehre* puts an emphasis on description rather than on explanations, and great effort was put into describing the components of each cultural circle as well as defining its boundaries. This emphasis aligns with later cultural-historical approaches[41].

The most influential application of the concept of archaeological culture was applied by the philologist and prehistorian Kossinna (1858–1931). Kossinna does not explicitly refer to the German-Austrian *Kulturkreislehre*, but according to some scholars, he was arguably influenced by them. Additionally, within the political landscape of late 19th and early 20th century Europe, the most urgent archaeological questions focussed on ethnic interpretations of the archaeological record[42]. This does not trivialise Kossinna's positions in any respect but rather acknowledges that he was by no means the only scholar who propagated racist interpretations, even if his rhetoric was one of the most forceful and polemic. Indeed, even today, Kossinna is considered an infamous pioneer of cultural-historical archaeology, whose work is permeated by racist, chauvinistic, and imperialistic undertones. His work was especially influential in German-speaking archaeology and has implications for the work of later scholars, such as V. G. Childe[43]. Although it has been argued that Kossinna's impact has been overestimated, a short summary of his work will shed light on the aforementioned intuitions about culture[44].

One characteristic trait of Kossinna's work is his concern with "space" *(Raum)* and the spatial distribution of material remains. The unity supposedly expressed in the material *(Kulturraum / Kulturprovinz)* is understood to be based on common ideas[45]. In this, Kossinna's thoughts seem to be influenced by the anthropogeography of German zoologist and geographer Friedrich Ratzel (1844–1904), who wrote in 1891:

"Because the artefacts bear the stamp of the people that made them, we recognise in them, wherever they may appear, the people from whom they originated" („Weil die Gegenstände

[39] Winter 2009, 46; Rebay-Salisbury 2011, 41; 43.
[40] Rebay-Salisbury 2011, 43–44.
[41] Rebay-Salisbury 2011, 45–46; 49.
[42] Rebay-Salisbury 2011, 51.
[43] Trigger 2009, 235–236; Hofmann et al. 2021, 9.
[44] Smolla 1979/80, 8.
[45] Veit 2014, 35–36.

den Stempel des Volkes tragen, das sie verfertigte, kennen wir an ihnen, wo immer sie auftreten mögen, das Volk von dem sie ausgingen")[46].

With reference to ethnographic studies, Ratzel attributed an "ethnic character" to weapons, tools, and items of personal ornamentation[47]. He also coined the term *Lebensraum* (living space), which was later used by the German national-socialist regime to legitimise their aggressive expansion and exploitation politics, especially in Eastern Europe. Today, Ratzel's anthropogeography is regarded as the foundation of the imperialist geopolitics of the early 20th century, particularly of the German kind[48]. Like Herder and Frobenius, Ratzel also treated *Völker* ("people") as if they were intentional, acting individuals – an approach that is characteristic of Kossinna's thought in which "cultures" and "people" are personalised. The equation of archaeological finds with a certain people was thus deeply engrained in the zeitgeist of the late 19th and early 20th century in ethnography[49], anthropogeography[50], and the *Kulturkreislehre*. The disproportionate focus on Kossinna in the discipline of archaeology and his infamous reputation stems from the fact that he transformed this zeitgeist into an archaeological "paradigm" that continues to affect the discipline today[51]. In his 1911 work "*Die Herkunft der Germanen*" he famously postulated that "sharply bordered archaeological cultural provinces do at all times coincide with a very specific folk or people's tribe"[52]. He also states that the archaeological material must be "completely collected, strictly sighted chronologically, divided into large cultural groups, and in turn strictly compared chronologically and typologically group by group [...]"[53].

The objects of this consideration were the specific funerary rites, including characteristic grave goods and racial affiliation *(Rassenzugehörigkeit)*. Furthermore, he emphasised that each larger subgroup of the main cultures possesses a distinct racial type *(Rassenart)*[54]. His goal was to use the so-called settlement archaeology *(Siedlungsarchäologie)* to locate the original territory of the Indo-Europeans, whom he regarded as the ancestors of the Teutonic peoples *(Germanen)* and the Germans[55]. For this purpose, he compared the distribution of artefact groups, identified archaeologically known cultural groups with historically known tribes, and then traced them backwards through time to arrive at their "origin" *(Ursprung)*[56]. We see here what has been pointed out by others, namely that Kossinna's worldview was based on a monothetic concept of culture that assumed closed, clearly definable, and homogeneous groups characterised by specific burial rites or other material traits[57]. In many ways, Kossinna's *siedlungsarchäologische Methode* overlapped methodologically with the Austrian-German *Kulturkreislehre*, and even though his settlement archaeology was rooted in history rather than ethnography, it was archaeologically based on Oscar Montelius. Additionally, Kossinna, in his effort to trace the ancestors of the Teutonic peoples back through time, employed a more evolutionary approach, while the *Kulturkreislehre* was fundamentally creationist and believed cultures to be constant over time. The *Kulturkreislehre* focused on the description of the cultural history of the world, whereas the aim of Kossinna's *Siedlungsarchäologie* was to prove the German race's superiority. Both approaches share the ascription of values to peoples, cultures, and races, although in different ways and based on different political beliefs[58].

46 Ratzel 1891, 605: our translation.
47 Ratzel 1891, 605.
48 Grunwald 2023, 81 footnote 34.
49 Tylor 1920 (first published 1871).
50 Ratzel 1891.
51 Nakoinz 2013, 113; 116.
52 Kossinna 1911, 3: our translation.
53 Kossinna 1911, 7–8: our translation.
54 Kossinna 1911, 11.
55 Kossinna 1911, 1–3.
56 Kossinna 1911, 17–30.
57 See Furholt 2019a, 57–58.
58 Rebay-Salisbury 2011, 51; 53.

In its essence, Kossinna's work is characterised by a fanatical glorification of "Teutonic" prehistory *(germanischer Vorgeschichte)* coupled with the assumption that a cultural continuity in the archaeological material goes hand in hand with an ethnic or biological-racial continuity. In this sense, cultural differences are interpreted as racial differences, with some cultural groups ("the Teutons" and "their ancestors") being ascribed biological superiority. In the assumed correspondence of material culture and racial affiliation also lies the rationale for Kossinna's assumption that a transmission of cultural traits is only possible through migration (that is, through the movement of a group of people from one place to another) and not through diffusion[59]. Overall, Kossinna's work expresses a profoundly inhuman worldview, with which (political) territorial claims were scientifically legitimised. "*Die Herkunft der Germanen*", with its underlying *völkisch* ideology, can be seen as a clear precursor for the archaeology under the National Socialist regime[60]. However, Kossinna's influence remained limited outside of German-speaking archaeology[61]. At the same time, semi-professional archaeologists in other countries portrayed indigenous peoples from different parts of the world as inferior to Europeans, reflecting racist attitudes widespread throughout Western civilisation[62].

In the 1920s, a systematic application of the concept of archaeological culture was first made accessible to a broad English-speaking audience through the work of Australian archaeologist Childe. In his 1929 book "The Danube in Prehistory" he defined the concept in three sentences, which have appeared in numerous archaeological publications and are still famously quoted today[63]:

"We find certain types of remains – pots, implements, ornaments, burial sites, house forms – constantly recurring together. Such a complex of regularly associated traits we shall term a "cultural group" or just a "culture". We assume that such a complex is the material expression of what today would be called a 'people'"[64].

Childe completes this original definition with the sentence:

"Only where the complex in question is regularly and exclusively associated with skeletal remains of a specific physical type would we venture to replace 'people' by the term 'race'"[65].

Childe's original definition of the concept of archaeological culture included the assumption that a cultural group defined by a set of different types occurring together represented "a people". In contrast to Kossinna, Childe – whose worldview as a Marxist significantly differed from Kossinna's – was much more cautious about interpreting racial affiliations[66]. He still included them in his original interpretation, only to revoke them just four years[67] later:

"[…] in the prehistoric past as obviously today, culture was independent of physical race, was not a matter of biological heredity but of social tradition […] if we replace the word 'race' in [the context of prehistory] by 'people', we shall more easily avoid such confusions"[68].

Childe combined Kossinna's cultural-historical approach with relative chronological classifications according to the typological method developed by O. Montelius[69]. Furthermore, he adopted Montelius's assumption that technological developments from the Near East had spread in Europe via diffusion[70].

[59] Kossinna 1911, 11–12; Trigger 2009, 236–238.
[60] Trigger 2009, 236–241; Mahsarski / Schöbel 2013.
[61] Trigger 2009, 240–241.
[62] Trigger 2009, 236–237; see also Gramsch 2015.
[63] See e. g. Harrison 1980, 10; Iversen 2015, 139.
[64] Childe 1929, 5–6.
[65] Childe 1929, 6.
[66] Irving 2020.
[67] The article, titled "Is prehistory practical?" is a direct response to Adolf Hitler's appointment as Reich Chancellor (V. G. Childe 1933, 410).
[68] Childe 1933, 417.
[69] Montelius 1903.
[70] Montelius 1899.

The primary goal of the archaeologists who adopted Childe's cultural-historical approach was to no longer view the archaeological material as a sequence of periods to be classified. Instead, previously nameless "peoples" could now be identified as archaeological cultures, allowing the study of their origins, movements, and interactions. Prehistory was no longer perceived as a mere sequence of cultural developments but as a mosaic of sharply distinguishable cultural groups[71]. What we see here is that the monothetic nature of archaeological cultures has been essential to cultural-historical archaeology from the beginning[72]. It involved equating archaeological cultures with "peoples" *(Völkern)*, an interpretation which was adopted both consciously and unconsciously by later authors.

Childe's relatively short and non-elaborate definition of the concept certainly contributed to the acceptance of closed, clearly distinguishable and homogeneous cultural groups. It is also important to note that the concept always includes a demarcation from others (or other groups) in this form. In this way, the diversity and complexity of the underlying cultural and social processes is obscured. Furthermore, such an interpretation also influences our current discussion and understanding of, for example, migration processes. Although the concept of archaeological culture as an integral part of the cultural-historical approach has been deconstructed repeatedly in recent decades[73], a persistence of Childe's concept of archaeological culture is still strongly evident in European prehistoric archaeology. This can be observed, for example, in the research tradition of the Balkan region[74] or in the current aDNA discourse[75].

Returning to the five intuitions (Location, Group, Transfer, Belief and Meaning, and Material Culture) summarised in the introduction, the ethnocentric, romanticist, and nationalist pillars evoke all of these intuitions. From the foregoing discussion, it becomes clear that the Location and Group intuitions were central to Kossinna's attempt to describe the origin of the Teutons. Not only did the Teutons occupy and hail from a particular Location, the *Kulturprovinz*, but they were also essentially a Group – *ein Volk*, a people – and characterised by a racial affiliation. In Childe's work, as mentioned above, parallel intuitions about Group and Location are in use, albeit devoid of racist overtones and evolutionary developmental assumptions, as evidenced in his original definition of the concept. Both of these intuitions were already present in Herder and the totality-oriented concept of culture and later in the *Kulturkreislehre*.

Kossinna clearly understood that the main method for archaeologists to learn about past cultures was through the Material Culture they had left behind in their *Kulturprovinz* or wherever they had spread from there. This became known as settlement archaeology. The same idea of the centrality of the Material Culture intuition can also be found in the work of Childe, who mentions specific traits of material culture (pots, implements, ornaments, burial sites, house forms) in his definition of archaeological cultures. Material Culture is also the main focus point of the *Kulturkreislehre*.

Furthermore, one of the premises of culture-historical archaeology is the intuition that the Transfer of knowledge, cultural norms, traditions, etc., can be seen through Material Culture, meaning that if we see, for example, a change in pottery styles, we see a change in other non-material domains of society. That said, a change in Material Culture is usually interpreted, either explicitly or more often implicitly, as a consequence of the migration of people (see Kossinna; another example would be the more recent aDNA debate around the role of Yam-

71 Trigger 2009, 244–247.
72 Furholt 2019a, 57.
73 Lüning 1972; Furholt 2014; 2019a; Hofmann et al. 2021 with extensive discussion.
74 Gori / Ivanova 2017, 5–6.
75 e. g. Müller 2013; Furholt 2019a; 2020a.

naya in the development of the Corded Ware) or diffusion (see Childe). In general, the intuitions about Transfer, as well as Belief and Meaning are more difficult to trace in the works of the early cultural-historians, mainly because there is naturally a strong focus on the Material Culture. Nevertheless, reading between the lines, we can say that intuitions about Transfer and Belief and Meaning are also inherent in the works discussed above. For example, in Kossinna, cultural affiliation is determined by racial affiliation, which means that the Material Culture, as a form of cultural symbols of "Meanings", is also determined by race. In this argumentation, the intuition is that there can be no Transfer between traits of the Material Culture of different "races", which is factually incorrect. In the work of Childe and other Cultural-historians, people (a Group) in a certain Location have an ideal conception of what a pot, a house, or a set of burial goods should look like. The intuition is that these ideal "Meanings" spread through the diffusion of ideas into other areas (Locations).

We can see that all of the basic intuitions about archaeological cultures were already established in the concept's classic works. However, as we have seen in the introduction, even with the fall of this pillar, the concept itself has not fallen. We will now attempt to demonstrate this by examining the two other pillars of the concept.

The Cultural Evolutionary Pillar

In a separate body of literature, the concept of culture has been intimately connected with that of *cultural evolution*. Despite certain divergent research historical pathways, the concept of cultural evolution nonetheless shares many of the intuitions with the first pillar. In our account, we will differentiate between the atomistic and contextual approaches to the nature of cultural evolution and then illustrate their connections to intuitions about culture.

To start, the connection between cultural evolution and the concept of culture has been described as follows:

"From a Darwinian evolutionary perspective culture can be described as an inheritance system, whereby basic units, whether called memes, traits, or other imaginative names, are transmitted between individuals, accepted, sometimes modified, and used to guide different aspects of behavior"[76].

The notion of cultural evolution as a process parallel to, or perhaps in some ways identical to, biological evolution captivates with its *promise* of a natural scientific approach to human culture. Recently, this promise was articulated as evolution theory providing "a potentially unifying framework for understanding human behaviour"[77]. That is to say, if cultural change can plausibly be conceived as ultimately unfolding through the same or parallel mechanisms as biological evolution, that would give archaeology a solid interpretative scaffolding around which to hang empirical observations. Twenty years earlier, the same promise was articulated by evolutionary ecologists James L. Boone and Eric Alden Smith, based on the potential of the "powerful unifying role [that] Darwinian theory" has played in the life sciences, which could address "the fractured state of theory in the social sciences"[78].

Going all the way back to early evolution theory, we find different articulations of the same idea. The early evolutionist thinker Lewis Morgan noted that his "present generation should be the first called upon to recognize so important a fact" about the close relationship of biological

[76] Kuijt / Prentiss 2009, 253.
[77] Ready / Holton Price 2021.
[78] Boone / Smith 1998, 142.

and cultural evolutionary processes[79]. In another early classic, Edward B. Tylor projected that great discoveries would arise from a position that assumed "the unity of nature, the fixity of its laws, the definite sequence of cause and effect through which every fact depends on what has gone before it, and acts upon what is to come after it"[80]. The idea of the *unity of nature* articulated here by Tylor, along with the adjacent idea of the *unity of science* as studying the unity of nature found in the classical philosophy of science[81], suggests an underlying shared basis – perhaps yet to be empirically discovered – for natural processes, including biological, as well as cultural and social processes. In a somewhat patterned manner, cultural evolutionary theory seems to have been most explicitly pursued in Anglo-American anthropological and archaeological thought[82]. Furthermore, it has influenced "neo-processual" approaches, particularly in contemporary European Neolithic archaeology[83] and in earlier studies[84].

Following the lead from Morgan and Tylor, Childe noted the attraction of reading human cultural change as a process parallel to biological evolution wherein Childe, too, found the promise of offering "historians the rigorous methods of natural science, but at the same time [...] fresh interpretative concepts and heuristic devices"[85]. Childe, however, emphasised the *contextualism* of cultural evolution in that while certain key variables can be studied across historical contexts – such as soil and climate conditions, population aggregation, specialisation, and centralised power – it is also important to account for the accidents of "historical circumstances"[86]. That is, the interactions of different cultural systems that explain particular development trajectories.

This interplay of the biological and cultural is captured in Lewis R. Binford's classic line describing culture as an "extra-somatic means of adaptation"[87]. This suggests that culture somehow affects evolutionary processes of adaptation; however, culture is not strictly or exclusively bodily or somatic but rather extra-somatic. From Childe and through L. R. Binford, the cultural evolutionary framework established itself, particularly in the Anglo-American debate[88]. James L. Boone and Eric Alden Smith suggested that two strands of archaeological approaches to evolution can be distinguished[89]. The approach attributed to Robert C. Dunnell and others posited the "direct action of natural selection and other Darwinian processes" as the underlying process of cultural adaptation[90]. Others, including J. L. Boone and E. A. Smith themselves, have been sceptical of any direct relationship, let alone identity, between Darwinian processes and phenomena designated by archaeological concepts concerning, say, the political forms of social organisation. Furthermore, Boone and Smith argued that the Darwinian somatic processes of biological reproduction and inheritance are too "slow" to account for cultural adaption, instead positing a faster level of "adaptive strategies" as the extra-somatic layer, which is somehow separate but still related to the Darwinian somatic layer[91]. In this line of thought, it is "not by genes alone" that variation arises in human culture, but also from parallel but faster teaching and learning processes[92].

However, the practical adaptations of the idea of an essential connection between biological and cultural processes have proven to be fraught with controversy. For one, in early Darwinian cultural evolutionary theory, the connection involved evoking the concept of *stages* of evolu-

79 Morgan 1877, preface.
80 Tylor 1920, 2.
81 Carnap 1934.
82 Bernbeck 1997, 35–48; 130–152.
83 Schier 2022.
84 Kerig / Shennan 2013.
85 Childe 1957, 214; cited in Shennan 2011.
86 Childe 1963; cited in Shennan 2011.
87 Binford 1962.
88 Dunnell 1980.
89 Boone / Smith 1998.
90 Dunnell 1989; e. g. O'Brien / Holland 1990.
91 Boone / Smith 1998, 144.
92 Richerson / Boyd 2005.

tion and, with that, the evaluative notion of groups and societies progressing from "primitive", "savage", and "barbarian" toward increasingly evolved and "civilised" forms, where some "have been left behind in the race of progress" and persist in early stages of evolution[93]. This is something that Childe already observed and rejected as not truthful to empirical observations[94]. In a later classical approach, a culture's stage of development was defined by the energy throughput it was able to generate by utilising technological and political techniques for population management[95]. Contemporary cultural evolutionary thought identifies "general rules" in the human development of the management of social complexity (defined as the number of people under a single, hierarchical leadership organisation) but denies that increasing complexity implies stages of development or that more complex societies are "better than" less complex ones – even while it is argued that "the Americas were not as complex as those from Eurasia at time of contact, which may be a contributing factor in explaining why European societies were able to invade and colonize the Americas"[96].

There are also certain technical difficulties that evoke fundamental philosophical issues concerning causation. In principle, biological evolution is a *causal* theory of a variation of the hardest kind: when given a set of evolutionary entities and rules or laws about their causal interactions, evolution will execute itself blindly and in perpetuity. For example, it has been argued that the success of the concept of cultural evolution depends on us being able to define certain basic and more complex "units" or "entities", the interaction of which causally underlies cultural evolutionary processes[97]. The question, therefore, arises about the nature of causal entities and units of transmission involved in cultural evolution[98]. What can they plausibly be? In John Barrett's words, there exists the "atomistic" concept of cultural evolutionary entities[99]. Some of the candidates for these "atoms" include the notion of the *meme* as something parallel to the better-known biological counterpart, the gene, which is thought to be transferred to new generations in social evolution[100].

Archaeologists, along with others inspired by central ideas of evolutionary theory, have recognised, in alignment with Childe's contextualist sentiment, that social reality is "messy" and that "history matters"[101]. As we saw above, others have considered faster cultural teaching and learning processes as separate from slower genetic evolutionary processes[102]. If we assume that cultural "atoms" of evolution cannot be plausibly identified, the next logical option is to conceptually separate the causally active entities from processes happening on a higher, yet-to-be-specified, level:

"[the] gene-centric perspective [...] cannot adequately represent or capture the dynamics of higher, particularly human, social systems [...] the right unit of analysis for evolutionary problems includes this larger structured environment"[103].

Navigating away from an atomistic, trait-based concept of evolutionary entities, Stephen J. Shennan has, for example, explored more contextual theories, such as the notion that human *institutions* create conditions – in the form of opportunity costs and discounts – for certain kinds of developments over others[104]. In this line of thought, we may not need to consider

93 Morgan 1877.
94 Shennan 2011, 204.
95 Service / Sahlins 1960; Johnson / Earle 1987.
96 Turchin et al. 2018, e147.
97 Prentiss et al. 2009, 4.
98 Cochrane 2011.
99 Barrett 2013.
100 Sterelny 2001.
101 Shennan 2011, 208.
102 Richerson / Boyd 2005.
103 Caporael et al. 2013, 4–5.
104 Based on the institutional economics of North 1990; see Shennan 2011.

archaeologically visible traits or styles as somehow directly connected to putative causal entities like genes or memes. Traits and styles exist at the level of "messy" teaching and learning processes.

A parallel set of contextualist ideas can be seen to underlie the so-called niche construction theory used in archaeology[105]. Niches, like institutions, can modify "selection pressures in environments in ways that affect both human evolution, and the evolution of other species"[106]. Arguably, it remains an open question whether these sorts of contextualist renderings of the supposed evolutionary entities offer enough traction to maintain the idea of cultural evolution as a species of *causal* evolution. Furthermore, with the introduction of highly contextual and messy teaching and learning, distinct from causal evolutionary processes, the original *promise* that the theory of evolution provides a unifying theory scaffolding by which to understand the messy socio-cultural processes may come under pressure[107].

The cultural evolutionary perspective strongly supports the intuitions of Location, Group, and Transfer, both in its atomistic and contextualist variants. In evolutionary theory, the Transfer must have, so to speak, an ontological essence, whether it be a gene or meme basis that is transferred to the next generation – as it were impressed upon their mental and bodily ontology. This idea is part of the original promise of biological evolution, providing the hard and fast processes through which cultural evolution unfolds. As such, Transfer occurs naturally in human contact, specifically within Groups in particular Locations. If, in the atomistic conception, the Transfer consists of traits or memes (ideas, skills) of a suitable kind, then in the contextualist variant, Transfer occurs in Groups through their construction of a niche, the emergence of an institution, or in the course of teaching and learning processes.

Furthermore, it seems to be implied that the Transfer involves Belief and Meaning as individuals "accept" the memes or other contents of learning as they are conveyed, sometimes in a "modified" form, as described by Ian Kuijt and Anna Marie Prentiss[108]. Similarly, in the contextualist variants of cultural evolution, the role of Belief and Meaning is usually recognised, for example, by acknowledging the role of "cultural traits" in niche construction[109]. It is arguably part of the classic concept of culture articulated by Binford as an "extra-somatic means of adaptation" that evolutionary fitness should be understood in terms of both *technological* techniques – such as tools – and *political* techniques connected to the dimensions of Belief and Meaning as they pertain to the control and management of social complexity and political organisation[110]. In this sense, cultural evolution involves the Transfer of Belief and Meaning and Material Culture.

Overall, the cultural evolutionary pillar arguably holds a prominent place in modern thought – especially in Anglo-American archaeology – as it promises a hard scientific approach to understanding culture as an analogy to biological evolution. It is difficult to conceive of a plausible alternative to the cultural evolutionary perspective on archaeological cultures, especially given the debates in certain contexts concerning evolutionary theory versus creationism[111]. At the same time, as discussed above, evolutionary archaeology arguably provides strong support for all of the key intuitions about culture as something Transferred locally between Groups in particular Locations involving Transfers of Belief and Meaning and Material Culture.

105 Makarewicz 2016; Johannsen 2023.
106 Kendal et al. 2011.
107 For the latest on messiness and theoretical plurality, see Prentiss 2021; see also Arponen / Brinkmann 2025.
108 Kuijt / Prentiss 2009.
109 McClure 2015.
110 Binford 1962.
111 Scott 1997; Berkman et al. 2008.

The Epistemological, Culturalist Pillar

To consider the impact of the third pillar on the concept of (archaeological) culture, we must first turn briefly to the history of philosophy.

The work of the German philosopher Immanuel Kant (1724–1804) was wide-ranging and extremely influential in the German and international philosophical and scientific scene during his time and for centuries to come. One of the longer-lasting impacts of Kant emanates from what he self-described as the "Copernican Revolution" he brought about in philosophy[112]. The comparison with Copernicus was meant to signal a turning inside-out of Kant's philosophical framework, with downstream implications for the concept of archaeological cultures, as we will see.

Copernicus' astronomy had decentered the earth and positioned the sun at the centre of the planetary system. Kant argued that, in philosophy, empiricists like David Hume (1711–76) viewed human knowledge as deriving from sensory observations of reality, whereas Kant was now turning the frame around and arguing:

"Up to now it has been assumed that all our cognition must conform to the objects... let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition"[113].

Two things are of consequence in this Kantian "Copernican revolution". On the one hand, Kant firmly cemented the centrality of human knowledge – specifically, the workings of the human mind and conceptual thought – as a central topic in philosophy. The influential American philosopher Richard Rorty (1931–2007) would later speak of the "epistemological turn" of the "Descartes-Locke-Kant" tradition[114]. In this turn, empiricists and rationalists, like Kant, would make the manner in which humans know about the world around them – their *epistemology* – a central focus of philosophy.

On the other hand, the specifically Kantian contribution was the idea that the human mind had a special role in *shaping* or *construing* its own understanding of the surrounding world– "objects must conform to our cognition," as Kant stated in the quoted passage above[115]. In the words of the well-known French social theorist Pierre Bourdieu: "So far as the social world is concerned, the neo-Kantian theory, which gives language and, more generally, representations a specifically symbolic efficacy in the construction of reality, is perfectly justified"[116].

What is the significance of all this for the concept of archaeological cultures?

Historically, there is a connection between Kant and Franz Boas regarding the concept of cultural areas, specifically in the North American anthropological and archaeological context, which can be seen as akin to the European concept of archaeological cultures[117]. Kant's philosophy inspired a range of German scholars of the 19th century, among them the "father of German ethnology", Adolf Bastian (1826–1905), who was based in Berlin and a teacher of the young Boas[118].

[112] Kant 1999 (originally published in 1781).

[113] Kant 1999, B xvi.

[114] Rorty 2009, 139, 8–9.

[115] A detailed examination of an important complication to Kant's view would take us too far afield. It should be mentioned, however, that for Kant, the preconditions that human epistemology was imposing on experience had not a conventional but a transcendental character (Yovel 1989, 8). In anthropology, for example, Claude Lévi-Strauss (1966, 246) followed Kant as a "transcendental materialist". In this regard, later authors such as Bourdieu (cited in the main text) have arguably misread Kant in their emphasis on the conventional character of his epistemology.

[116] Bourdieu 1991, 105.

[117] See Kelly 2013, 24–39.

[118] Kuper 2000, 13; Mann 2022.

Central to the work of Bastian, Boas, and their contemporaries in Europe, and later for Boas in the United States, was again the question of the role of the *human mind* in the production and reproduction of culture. Alongside the role of the human mind, themes that preoccupied Boas included familiar questions, such as whether racial differences existed in human cognitive abilities, to which Boas argued that this was not so[119]. In any case, Boas proposed a two-fold division of human life into external and internal conditions:

"external conditions under which the people live [and] internal causes which influence their minds"[120].

For Boas and his contemporaries, one of the central issues was the nature of the social sciences and their relationship to the natural sciences, especially biological and evolutionary. Many of his contemporaries sought to establish an independent nature for social sciences, such as anthropology, in response to ideas about anthropological processes as ultimately being reducible to evolutionary, psychological, and / or other naturalistic processes. Max Weber made a famous contribution to this debate by contrasting between *erklären,* or explanation by way of the naturalistic processes that cause given phenomena, and *verstehen,* or understanding the normative and potentially idiosyncratic systems of thought with which different cultures operate[121]. As conceived in the present paper, culturalism seizes and builds upon the *verstehen* strand of the Weberian distinction.

The philosopher of archaeology, Allison Wylie, once characterised the paradigmatic concept of culture that emerged from the "epistemological turn" through Boas and others, stating that in this view:

"the cultural subject is conceived, first and foremost, as a system of intentional, conventional action informed by shared cultural 'norms' or ideals [that] may be entirely idiosyncratic and may diverge radically from any we know or could recognize"[122].

The anthropologist Adam Kuper described this characterisation of culture as a "common currency" in anthropology and, arguably, beyond[123]. It is the widespread view that human beings are "suspended in webs of belief" we ourselves have spun (in Geertz's memorable phrase), implying that "the range of people who are willing to recognise certain forms of value constitutes the extent of what an actor considers 'society', in any meaningful sense of the term, to consist of"[124].

Therefore, the culturalist conception of cultures remains not only a valid but also an incredibly widespread conception that, furthermore, essentially supports many of the intuitions behind the concept of archaeological cultures. In archaeology, recent debates about the significance of certain findings regarding aDNA assert that from a culturalist point of view, kinship, identity, family ties, and other forms of human sociality are not determined by biogenetics but are "generated through social practice" and "influenced by cultural values and aspects of social identity, including class and ethnicity"[125]. We can see that Belief and Meaning are foregrounded in the culturalist approach. If naturalistic approaches espouse *reductivism* to the supposed essential processes or elements of any given phenomenon, then culturalism emphasises the non-reductivism of the cultural: the human creation of Belief and Meaning is free to proceed as it wishes, free or almost entirely free, depending on the radicality of the culturalist thesis that any given author may wish to propose. Culturalism also supports other intuitions,

119 Mann 2022.
120 Boas 1966.
121 Weber 1978.
122 Wylie 1989, 1.
123 Kuper 2000, 228.
124 Graeber 2006, 73.
125 Brück 2021.

such as those regarding Transfer and Group. If cultures are defined by collectively shared bodies of belief, then their Transfer to new members of the Group must be conceived as essential to the continuity of cultures[126].

Some practical solutions and perspectives?

Is it enough for archaeology to repudiate the Kossinna pillar and reject the ethnocentric and nationalist overtones, only to then proceed with using the concept of the archaeological culture as always? Can archaeology actually be practised at all without an idea of archaeological cultures or some functionally equivalent concept? We pose these as open questions to the archaeological community. Generally, our contribution is not intended to argue that the concept of archaeological cultures should or can continue to be used once the ethnocentric and nationalist elements of it have been purged, nor do we wish to argue that the concept is beyond repair. We aim to reflectively discuss and analytically distinguish the various research traditions and intuitions underlying the concept.

In practice, a central problem in dealing with the concept of archaeological cultures is the apparent necessity in archaeology to classify material culture. Still, each act of classification is, in principle, an act of filtering or selection. As Martin Furholt has remarked, "classification is invariably a violation of reality"[127]. Therefore, the need for a functionally equivalent concept has been expressed, which despite difficulties, still unequivocally transcends the monothetic culture concept. One solution – particularly prominent in German archaeology – was the reduction of the archaeological culture concept to a taxonomic, purely classificatory device. This tendency to reject social (and ethnic) interpretations has, with a few exceptions, led to a silent reuse of cultural-historical models, including a monothetic concept of archaeological cultures[128].

In contrast, one approach that aimed to be explicit and analytical in classifying material culture was the well-known polythetic classification model proposed by David Clarke in his 1968 book "Analytical Archaeology". The polythetic classification of material culture was developed in contrast to the monothetic classification schemes of early cultural historians like Childe. The idea is that, in reality, there are virtually no instances in which all examined traits (e. g. specific pottery styles, settlement structures, or a set of burial goods) are present at all sites / features within one material unit as monothetic classification implies. Rather, to get away from these bloc-like, exclusive, and monothetic entities, a polythetic classification model acknowledges that the same traits can be present in individuals within different material units *(Fig. 2a)*, which comes much closer to capturing the variability we see in the archaeological material[129]. In fact, while the polythetic classification model has been frequently cited and suggested as a solution, it has actually rarely been applied to archaeological material[130].

One reason for the perceived unattractiveness of the polythetic classification model may be that Clarke's original model can appear rather unapproachable to most archaeologists. A recent review commemorating the book's 50th birthday noted the "abstruse and challenging character of the terminology, language and ideas" presented in "Analytical Archaeology", which spans

126 Turner 1994.
127 Clarke 1968; Lüning 1972; Furholt 2020b, 5.
128 Lüning 1972; Veit 1994; Heitz 2023, 19.
129 Clarke 1968, 188 fig. 40; Lüning 1972, 166; Furholt 2020b, 3.
130 Vander Linden 2011; Siegmund 2014, 56; Furholt 2020b, 3.

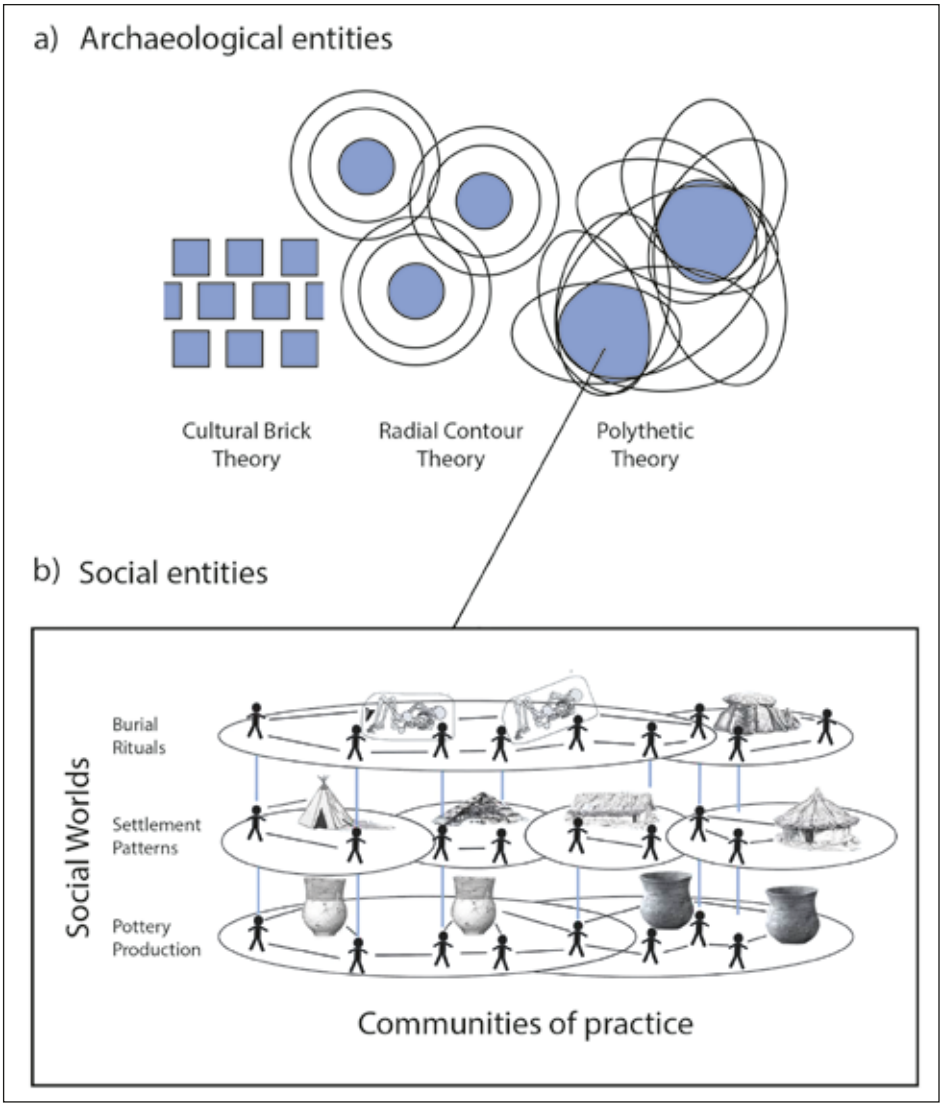

Fig. 2. a. Clarke's 1968 model: Cultural Brick Theory (Cultures as blocks of attributes that do not overlap), Radial Contour Theory (Cultures as combinations of attributes that overlap only in the core area), and Polythetic Theory (Cultures as a set of attributes that can be present in individuals within different material unites). – b Furholt's model: several *communities of practice* exist within distinct *social worlds* (e. g. pottery production or burial rites), individuals can be part of different communities of practice that are connected to different social worlds, which are not necessarily congruent.

over 600 pages[131]. Interestingly, most recipients of Clarke's "Analytical Archaeology" seem to be interested in general theoretical issues rather than in his implicit evolutionary approach. Also, it must be mentioned that Clarke, despite his criticism of cultural-historic approaches, still defined culture as an entity which could be equated with past ethnic groups[132]. Beyond that, Clarke was quite prophetic in terms of his predictions about the influence of computing

[131] Lycett / Shennan 2018, 211.

[132] Clarke 1968, 368–369; Jones 1997, 109.

methods in archaeology, which could be one reason for an increase in interest in this work in the last 20 years or so[133].

These valid and important theoretical questions can get buried underneath methodological complexity, which is evident in the work of scholars who apply a polythetic classification to the material in their area of research. This can perhaps be seen in Oliver Nakoinz's work on the Early Iron Age Central Places of Southwest Germany[134]. In this analytical and well-structured work, the description of the methodology and the utilised concepts and terms take up nearly 200 pages. In comparison, the actual analysis of the archaeological material comprises only 25 pages. Although this is partly due to the quantitative nature of the study and the methods employed by Nakoinz, where most of the work focuses on the creation of a suitable database, it goes to show that the methodological complexity of works applying a polythetic classification can be intimidating for scholars not familiar with the methodology or the theoretical concepts. This, together with the unapproachable nature of Clarke's original work, has certainly contributed to the perception that this concept is unattractive and cumbersome, or at the very least, less intuitive for most scholars. In contrast, Childe's original definition of archaeological cultures, presented on the first page of the preface of his 1929 book "The Danube in Prehistory" seems to be much more approachable, consisting of no more than three sentences[135].

Martin Furholt remarked that a polythetic classification needs to be combined with a similar polythetic cultural model[136]. Therefore, he utilises the concepts of *social worlds* and *communities of practice*, both of which emphasise that social groups are created through collaborative practices of individuals with regard to specific tasks or commitments[137]. Also, both concepts address the fact that individuals usually belong to multiple groups, which overlap in diverse ways[138]. According to Furholt, we can observe different communities of practice in each social world, such as those found in pottery-making or burial rites *(Fig. 2b)*. These communities of practice may encompass "different groups of people who have developed specific cultural standards through continuously or periodically joint practices, or co-socialisation"[139]. Similar ideas have been developed by Alexander Gramsch using the concepts of dynamic, hybrid communities and Bourdieu's habitus[140]. In archaeological documentation, these result in different characteristics, which archaeologists classify as types. Since the spatial and temporal extent of these different characteristics will differ from one social world to another (e. g. between pottery and stone tool production, settlement patterns, and burial rites), these concepts, together with a polythetic classification of the material, offer the possibility to *empirically* detect whether, for example, the distribution of burial rites and a certain pottery style is consistent across space and time. In contrast, a monothetic classification assumes this consistency[141]. One aspect in which the polythetic approach might be said to improve upon the monothetic approach is that consistency is not explicitly a presupposition or a heuristic of interpretation but rather an empirical question that may or may not be confirmed by data. Nonetheless, it is important to remember that despite the existence of polythetic models and various statistical methods to measure the robustness of similarity, a kernel of subjectivity will always remain in classifications by similarity deriving from the initial identification of attributes, their types, and assemblages that cannot be erased by formal methods[142]. As such, the polythetic model cannot be thought

133 Lycett / Shennan 2018, 211–216.
134 Nakoinz 2013.
135 See above.
136 Furholt 2020b, 4.
137 Wenger 1998.
138 Furholt 2020b, 4.
139 Furholt 2020b, 5.
140 Gramsch 2009; 2015.
141 Reckwitz 2008, 43–45; Furholt 2020b 5; Heitz 2023, 118.
142 Brather 2014, 22; Brinkmann in print. See also Chapman / Wylie 2016, 15–54.

of as a fool-proof solution, but it does serve to raise awareness about complications pertaining to defining and detecting similarity.

Similarly, the notion of identity has been used to overcome the dilemma of the monothetic (or static) concept of archaeological culture; however, it often serves merely as a synonym for "culture", arguably evoking similar intuitions about culture as the original monothetic concept[143]. If culture is seen as a process rather than a static condition, identity can be viewed as a multifaceted phenomenon that includes social, cultural, economic, ethnic, and regional identities, attributing more than one identity to members of a community– although, admittedly, these are hard to detect in the archaeological record[144]. Ulrich Veit remarks that identity-inducing demarcations – as constitutive of ethnic groups – are usually not marked by fundamental differences in material culture, at least not in ethnographic studies (contrary to the ideas of early scholars like Ratzel and Tylor)[145]. Focusing on supra-national (e. g. European) or regional identities seems to be an attempt to overcome nationalism. Still, it is often based on similar assumptions, like unity and at least semi-homogeneity, which involve most or all the aforementioned intuitions about culture. This amounts to what the social theorist Margaret Archer once called the "Myth of Cultural Integration appropriated by sociology from early anthropology"[146].

Another point that, to our knowledge, has rarely been explicitly addressed in the archaeological literature is that of language[147]. The importance of language has been highlighted particularly through contemporary discourse on representation and gender-sensitive language. From this, we know that our presumptions can be mirrored or expressed in the language we use, often implicitly. With respect to language, the discussion in archaeology has primarily been limited to the question of whether the term *culture*, in concepts like Single Grave Culture, should be abandoned or if it is acceptable to use the term under the condition that it does not contain any ethnic attribution[148]. In light of the current aDNA debate, it becomes apparent how problematic an unreflected use of the concept of archaeological culture and its terminology can be[149]. For this reason, scholars have been looking for alternative terms like phenomena, ceramic styles, or groups.

The point we wish to convey is that regardless of whether we choose to label material entities, cultures, or phenomena, language is a crucial tool in actively shaping our perception of these entities, including sub-entities. We can imagine a hypothetical excavation where we find an individual in a crouched position, lying on their left side with their head facing north. The dead is accompanied by an All-Over-Ornamented Beaker, a wrist guard, and some tanged and barbed arrowheads. This describes a "textbook" Bell Beaker burial. Furthermore, suppose that no osteologist has examined the bones yet, and no aDNA or other scientific analyses have been conducted. How would we describe the individual? "A warrior of the Bell Beaker Culture", "an individual of the Bell Beaker Culture", "a Bell Beaker individual", or "an individual associated with Bell Beaker ceramics?". All four phrases imply vastly different interpretations and illustrate how a sensibility for language in describing details can change our overall perception of material entities. Another example from current research is found in the work of Furholt, who

143 Brather 2014, 20; 25.
144 Gramsch 2009, 14–15.
145 Veit 2014, 39.
146 Archer 1996, 4; see also pp. b.
147 Lüning 1972, 150; 154.
148 Heitz 2023, 61.
149 Heyd 2017; Furholt 2018; Frieman / Hofmann 2019; Furholt 2019a; 2019b; 2020a; Brück 2021; Hofmann et al. 2021; Papac et al. 2021.

speaks of the *single grave burial rite* (SGBR) instead of the Single Grave Culture[150]. With this phrasing, he is not only avoiding the term culture but also specifying what we as archaeologists mean when we refer to the "the Single Grave Culture" – specifically, a burial rite rather than, for example, an ethnic group.

Conclusion

In this article, we presented an analysis of the concept of archaeological cultures as resting on *three pillars* and *five intuitions* related to human culture, using a reflective modular approach. This analysis was prompted by puzzlement regarding the widespread critique and rejection of the concept of archaeological cultures, despite its continued use in European – especially German – prehistoric archaeology.

In order to understand the contradictory situation with the concept, we proposed that it stands on three pillars, only one of which is generally rejected, while the other two seem to remain strong and standing. The pillar effectively made to fall is the *Ethnocentric*, *Romanticist and Nationalist pillar* associated with the work of Kossinna and Childe. The remaining pillars are the *Cultural Evolutionary pillar* and the *Culturalist pillar*, which continue to enjoy considerable support, even though their full import can sometimes remain implicit.

We further analysed these pillars regarding their five constituent *intuitions*, meaning pre-reflective and pre-theoretical conceptions of human culture. We noted that the classic elements from Kossinna (Location, Group, Transfer, Belief and Meaning, and Material Culture) can be found in various, albeit altered, forms in the surviving pillars. This illustrates how the concept of archaeological cultures can and has indeed survived, even as one of the three pillars has been made to fall. This partly explains why archaeologists continue to use the concept despite being aware of its problematic ethnocentric and nationalist implications.

Following the analysis by pillars and intuitions, we also discussed the perceived need in archaeology for a functionally equivalent concept to the traditional monothetic concept, stemming from the necessity to classify archaeological material. We discussed Clarke's polythetic classification model, noting its theoretical attractiveness as a dynamic, hybrid culture model, and the practical disadvantages relating to the methodological complexity of its use. Also, as we noted above, while the polythetic model does not – and cannot – erase subjectivity from the archaeological interpretation of similarity, it can arguably serve to raise awareness about the difficulty of detecting similarity and, as such, does not take the consistency of culture for granted a priori. And lastly, we note the importance of language in the description of archaeological features and entities.

Where does this leave the concept of archaeological cultures? Our stated aim in this paper has been reflective rather than focused on critiquing or developing methods. Our central conclusion is that if we wish to reject the concept of archaeological cultures, it will not conclusively work to do so just by rejecting the ethnocentric, romanticist, or nationalistic pillar. Our modular approach to the pillars and intuitions about culture has sought to show that all general intuitions present in the rejected pillar can also be found in the other two pillars, which are highly valued and continue to inform archaeological interpretation today.

The modular approach in this paper might also shed light on how easily a new archaeological development – such as the emergence of a new analytic method like aDNA (see the

[150] Furholt 2020b, 7 fig. 3.

previous section for citations) – can evoke and awaken old interpretative models "with the blessing smile of Gustaf Kossinna" shining over the enterprise[151]. The modular approach may clarify why political and propagandistic uses might make it comparatively easy to awaken old ideas about peoples and their origins[152]. This is because, as we believe our modular approach shows, central intuitions about culture continue to linger in other forms despite the rejection.

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Abstract: Tackling an old dilemma anew: a reflective modular approach for analysing the concept of archaeological cultures in European Prehistoric Archaeology

The concept of archaeological cultures has faced vigorous criticism; however, the phrase, concept, and associated practices of grouping archaeological phenomena persist in European prehistoric archaeology. To understand this paradox, we identify the concept as standing on three pillars: 1) the Ethnocentric, Romanticist and Nationalist pillar, 2) the Cultural Evolutionary pillar, and 3) the Epistemological, Culturalist pillar. Only the first pillar has been disputed, while the other two continue to receive substantial backing in archaeology. Using a reflective and modular approach, we demonstrate that all three pillars embody specific (often implicit) intuitions about Location, Group, Transfer, Belief and Meaning, and Material Culture as core elements of culture in archaeology and beyond.

Zusammenfassung: Ein altes Dilemma neu aufgerollt: Ein reflexiver modularer Ansatz zur Analyse des archäologischen Kulturbegriffs in der europäischen prähistorischen Archäologie

Der archäologische Kulturbegriff wurde über Jahrzehnte heftig kritisiert und immer wieder dekonstruiert, dennoch wird sowohl der Begriff als auch das Konzept und die damit verbundene Praxis zur Gruppierung archäologischer Phänomene in der europäischen Urgeschichtsforschung weiterhin selbstverständlich verwendet. Zur Erklärung und Versinnbildlichung dieses Paradoxons lassen sich drei Säulen identifizieren, auf denen das Konzept ruht – 1) eine ethnozentrische, national-romantische Säule, 2) eine kultur-evolutionäre Säule und 3) eine epistemologisch-kulturalistische Säule. Nur die erste Säule wurde bislang hinlänglich kritisiert, während die beiden anderen in der Archäologie nach wie vor breite Unterstützung finden. Anhand eines reflektierten, modularen Ansatzes wird gezeigt, dass alle drei Säulen spezifische (oft implizite) Intuitionen über Ort, Gruppe, Weitergabe, Glaubensvorstellungen und Bedeutung sowie materielle Kultur als Kernelemente von Kultur in der Archäologie und darüber hinaus verkörpern.

Résumé : Reprendre un vieux dilemme : une approche modulaire réflexive pour analyser le concept de cultures archéologiques dans l'archéologie préhistorique européenne

Le concept de cultures archéologiques a été vigoureusement critiqué, mais pourtant l'expression, le concept et les pratiques associées de regroupement des phénomènes archéologiques restent en usage dans l'archéologie préhistorique européenne. Pour comprendre ce paradoxe, on peut identifier trois piliers sur lesquels repose le concept – 1) le pilier ethnocentrique, romantique et nationaliste, 2) le pilier évolutionniste culturel et 3) le pilier épistémologique et culturaliste. Seul le premier pilier a été remis en question, tandis que les deux autres continuent de bénéficier d'un soutien considérable dans le domaine de l'archéologie. En utilisant une approche réflexive et modulaire, nous montrons que les trois piliers incarnent des intuitions spécifiques (souvent implicites) sur la localisation, le groupe, le transfert, la croyance et la signification, et la culture matérielle en tant qu'éléments centraux de la culture dans l'archéologie et au-delà.

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References of figures:
Fig. 1: authors. – *Fig. 2:* authors after Clarke 1968, 67; Furholt 2020b, 5 fig. 2. – Graphics: Lara Hies (RGK).