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Neanderthals and us: Towards a philosophy of deep history

Paleo-archaeology[1] and philosophical anthropology

How did Neanderthals experience their world, compared to their Sapiens contemporaries, who entered what is now Europe more than 40,000 years ago? Was their way of thinking, their "manner of being in the world", as archaeologist Ludovic Slimak (2023) phrases it, comparable, or significantly different? And *why* would we want to reconstruct how Neanderthals experienced the world in the deep past? Is it to compare "us" with "them", or is it to better understand our complex deep history? Is it to draw comparisons and contemplate on what sets "us" apart, adopting an essentialist approach? Or is it rather to document and enhance our understanding of the intricate narrative of our ancient origins, without the necessity of measuring ourselves against our forebears? Such questions seem difficult to answer, but against the backdrop of three decades of highly productive Neanderthal research they do emerge, both among philosophers and among paleo-archaeologists. One of our arguments will be that these questions can best be addressed in dialogue, so that paleo-archaeologists and philosophers join forces and work together. In this contribution we will outline some ideas which philosophy has to offer to the debate, while drawing attention to current paleo-archaeological discussions and the type of data archaeologists may provide. Finally, we will elaborate on the strengths and benefits of a philosophy paleo-archaeology dialogue.

Outlines of a philosophy of deep history

Philosophy has been defined, by Hegel and others, as the study of *thinking as such*, – either systematically (e. g., logic) or historically, tracing the journey of consciousness through various configurations of knowledge: philosophy as a historical *phenomenolo-*

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1 We employ the term paleo-archaeology with the understanding that it encompass all aspects of human evolution research based on the archaeological record, including studies on the biology and skeletal remains of fossil hominins.

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gy of the spirit (Hegel 1807/1986). For philosophers like Hegel, however, human history (the journey of human consciousness) commenced some twenty-five centuries ago – 500 years before the common era –, during the so-called *Achsenzeit* – the axial period, as Karl Jaspers (1949) once phrased it, when the first philosophical ideas still known to us were conceived at various locations around the globe, by thinkers such as Laozi, Confucius, Buddha, Parmenides and Heraclitus, – an intellectual daybreak, when the human world suddenly began to think (Zwart 2020a).

From a contemporary perspective, however, such a timeframe is far too limited. The journey of human thinking must have commenced millennia ago, somewhere in the deep past, and traces of early human reflection (as the outcomes of *cognitive evolution*) are being excavated and assessed by paleo-archaeology as a thriving research field. Thus, philosophers are faced with the challenge to drastically widen their perspective. Human beings have been thinking for thousands of years, and paleo-archaeology may provide some access into past worlds of experience and thought, as part of a pre-history, or rather of a *deep history*, of human action and reflection, – although the precise manner and nature of human *thinking* will have evolved as well.

Corijn van Mazijk (2023) recently emphasised the need for a *philosophy of prehistory*. "Time is ripe," he argues, "for a completely new discipline, which should have already existed." Although we sympathise with his plea, there are also some critical comments to be made. First of all, the prefix "pre" still seems to suggest that history is what really counts. It is an odd word, disparaging even, given the immense duration and crucial importance of the "prehistoric" period. A *philosophy of deep history*[2] or *of the Pleistocene* captures the need for broadening philosophy's temporary horizon more convincingly. Moreover, we agree with Raymond Corbey's comment (Corbey 2024) who argued that a philosophy of prehistory (of deep history and the Pleistocene) already exists. Noticing the results and insights that have been gained by paleo-archaeological research during recent decades, some attention has already been given to considering their philosophical implications, e.g., the impact of paleo-archaeological findings on how we think about ourselves as humans. As argued, such reflections should neither be a purely philosophical, nor a purely archaeological affair. Rather, experts from the two disciplines must join forces to help refine the goals and means of on-going research in paleo-archaeology and philosophical anthropology. What we propose in this paper is a reflective mutual learning dialogue between paleo-archaeology and philosophy concerning the process of anthropogenesis: the coming into being of humans.

Such an endeavour faces numerous challenges and ambiguities, however. One of them is the question whether the nature of human thinking as such evolves over time. Should we opt for *continuity* – arguing that human consciousness is essentially the same today as always, as Edmund Husserl for instance did (van Mazijk 2023)? Or should we rather study how human consciousness evolves and unfolds historically in multiple changing contexts? Many archaeologists, including Ludovic Slimak for in-

2 See also the concept of Paleohistoire developped by B. Valentin (2008).

stance, seem to opt for continuity, arguing that the first modern humans who entered Europe basically "thought like us" and already "understood the world like we do" (Slimak 2023, p. 18). In their flint technologies, Slimak argues, we already recognise "our logic", "our way of being in the world" (p. 25). This view implies that human cognition (the human way of thinking) entered Europe no later than 40,000 years ago with the arrival of Homo sapiens (Cro Magnon humans), separating us (modern humans) from other early humans, including Neanderthals.

Precisely here, recent paleo-archaeological research has a lot to offer, in the sense that archaeologists engage in similar discussions, triggered by archaeological findings. Our understanding of cognitive evolution has gained from palea-archaeological excavations and interpretations. The size and shape of Homo sapiens brain became like ours at least 35,000 years ago, but maybe even as early as 100,000 years ago (Neubauer et al 2018). In palaeo-archeology, it is generally accepted that all the major behavioural and biological traits characterising anatomically modern humans emerged, consolidated and spread sometime between 100,000 and 35,000 years ago (Neubauer et al 2018; Scerri and Will, 2023). Some archaeologists still argue that Neanderthals were not included in this, that their way of thinking and their manner of experiencing the world was allegedly very different from ours, and that they did not yet develop the "package" of modern human cultural and behavioural traits that are found in Homo sapiens. Precisely this conviction, however, has come increasingly under siege, both for philosophical and for archaeological reasons. In the past, the archaeological understanding of "modern behaviour" in the deep historical sense was confined to a binary framework, characterized by the presence or absence of certain traits (Scerri and Will, 2023, p. 2) and this binary logic has historically dominated discussions on the evolution of human behaviour.

The shift from binary thinking towards a more dynamical and inclusive view was documented quite extensively by Eleanor Scerri and Manuel Will (2023). Until recently, they argue, the concept of "modern behaviour" in the archaeological (i. e., deep historical) sense was viewed within "a binary framework of presence and absence" (p. 2). This binary logic has long dominated discussions on human behavioral evolution. Modern humans were distinguished from Neanderthals by a trait list based on a range of (primarily European) archaeological materials. In their paper, Eleanor Scerri and Manuel Will listed this "package of traits" that are considered to reflect the spectrum of modern behaviour in Africa (see Tab. 1).

Table 1. List of traits thought to reflect the spectrum of 'modern behavior' in Africa (Scerri and Will, 2023).

Trait	Inference	Bridging theories
Long-distance transport, e. g., of raw material, shells, etc.	Social networks, exchange	Social groups pooling risk in situations of demographic stress
Standardization of regionally distinctive artifacts and tool	Social networks, signaling of emblematic style	Representation of group identity, shared concepts and signaling po-

Table 1. List of traits thought to reflect the spectrum of 'modern behavior' in Africa (Scerri and Will, 2023). *(Continued)*

Trait	Inference	Bridging theories
forms (e.g., point forms, backed pieces)		tentially linked to risk-pooling groups
Notching, incision, patterns, art	Intentional designs, abstract thinking, intragroup codification, and symbols with language?	Representation of identity (personal or group), the intersection of habitual disposition and concrete social conditions that create meaningful visual codes
Collections of shells, some intentionally perforated	Personal ornamentation, esthetics, symbolism? collections of sets	Personal ornamentation points to sense of identity of self vs. others, collections indicate concepts of esthetics and value
Intentional burial	Coping mechanisms for grief, shared values, belief systems	Mortuary treatment relates to bonds of affection and group identity. Burial ethnographically also relates to systems of shared belief
Artifact diversity in form, material and method; hafting and composite tools; pigment use	Task specialization, innovation, teaching, planning depth, memory, abstract thought?	Task specialization drives social cohesion, and may also require language. Diversity in use of forms, materials and methods including composite products implies advanced cognitive processes, increased creativity and problem-solution distances, and expanded subsistence and lifeways
Structured living spaces	Group cohesion, planning depth, social order	Denotes an understanding of the optimal organization of space relative to lifeways and subsistence
Diet breadth	Adaptability, flexibility, and plasticity of behavior	Humans are 'generalist specialists' whose specialty is to rapidly adapt to new environments and foods
Expanded ecological niche	Innovation, planning, experimentation, flexibility, and plasticity of behavior	Ability to test and learn new adaptive strategies and pass these horizontally and vertically within group
Diverse use and control of fire	Cooking, heating including heat treatment of raw materials, control of plant life and ecosystems.	Using fire to control landscapes, food, and raw material demonstrates unprecedented control of the natural environment
Seasonal habitation or resource exploitation	Planning depth, understanding of cyclicity and periodicity	Ability to project and plan into the future based on modeling of the past

This modern package, Scerri and Will argue, was often presented as emerging at a specific point in time and envisioned as a big leap or 'revolution' in human evolution: a sudden origin of behavioural modernity *as a package* around ~50 – 40 thousand years ago. This view on 'cultural modernity', however, has increasingly been criticized, based on theoretical, methodical, and empirical grounds. Scerri and Will's review show that multiple non-linear trajectories can be observed in Africa through space and time, especially for the 300 – 30,000 years time period. In Europe, many traits associated with this package are now also identified in Neanderthals (Roebroeks and Soressi, 2016). This implies that the Neanderthal way of experiencing the world will probably have been different compared to contemporary experience, but not in the sense that their way of thinking was *not yet human.* Some archaeologists have even gone further, suggesting that interactions between Neanderthals and Homo sapiens may have played a role in driving innovations in Homo sapiens (Greenbaum et al 2019).

An important implication of this more inclusive approach is that, while the ways in which humans experience, investigate and interact with reality may have changed dramatically in the course of time, starting from the Pleistocene, there is no rigid dividing line between *human* and *not yet human* that would separate Homo sapiens from Neanderthals. As indicated, while it is evident that cultures and epochs emerge, evolve and decline, the philosophical question is whether such changes affect our basic way of *being in* and *experiencing* the world. Or should we see these various forms of being human as varieties of a basic, continuous structure? Are there multiple (fundamentally different) ways of being human (including the Neanderthal way of being in the world)? Or should we rather posit that the modern way of thinking emerged for the first time in Homo sapiens? Such questions already arose when scholars began to study ancient and indigenous cultures, but discontinuity may deepen as we dive deeper into the past. How to answer such questions for the Pleistocene era? Can we imagine how Neanderthal or Cro Magnon artisans experienced their existence? How to enter those lost worlds of self-consciousness and interaction? Such questions are difficult to address, yet important to open up when it comes to broadening our temporal scope.

The focus of this thematic volume of philosophical anthropology is on the relationship between modern humans and Neanderthals. Neanderthals seem more like us than other early humans, but until recently the guiding conviction was that they were markedly different, so that research tended to highlight genetic or behavioural *differences* between them and us. Recent findings challenge this conviction, as we have seen, and the distance between Neanderthals and modern humans seems rapidly decreasing. One possible response could be to argue that Neanderthals were already fully human as well, – although archaeologists such as Slimak still emphasise significant differences in the technologies and traditions of Neanderthals versus modern humans, so that different artisanal "manners" suggest "different manners of being in the world" (p. 25). Yet, these views, presented in a book directed at a broad audience rather than in research papers, became questionable in the light of recent findings. As indi-

cated, we will argue in favour of a shift from binary thinking (*them* versus *us*) towards a more dynamical view on deep human history.

For us, the implications of Neanderthal research may go much further than the question whether Neanderthals were 'fully human' or not, moreover. We should reconsider our understanding of humanity as such, opting for a more fluid and dynamic view that no longer relies on the logic of dualist thinking that rigorously distinguishes human from *not yet fully* human. Rather than adopting one particular form (e.g., modern human subjectivity, often seen from a Western viewpoint) as our norm, we might study how multiple ways of being human have emerged in the course of (deep) history. Thus, coming to terms with the "human phenomenon", as Pierre Teilhard de Chardin once phrased it, requires an imaginative journey into the past, guided by paleo-archaeological research, taking us back to the world of human experiences as it unfolded fifty thousand or even hundred thousand years ago, emphasizing the need to avoid hierarchical comparisons between ancient humans, studying them in their own context instead. Such a view on deep human history implies that Neanderthals and Homo sapiens are no longer compared and hierarchised but explored and understood in their own context and trajectory.

Our contribution to this volume offers a brief overview of previous contributions to a "philosophy of deep history", from G.W.F. Hegel up to Peter Sloterdijk, while connecting their ideas with developments in paleo-archaeology. We discuss a number of philosophers who developed a dialectical perspective on what archaeology teaches us concerning the deep history of human thinking. While early humans were still embedded in nature, at a certain point they distanced themselves from their natural habitat, and in philosophical anthropology, this *separation* from nature is thematised as negativity, as a *deficit* (e.g., human beings as 'Mängelwesen'). This inevitably calls for a "negation of the negation", e.g. the emergence of culture and technology as instances of *compensation*, allowing humans to establish self-made dwellings, starting with the cave and what it contained: the beginnings of language, tool use, pyrotechnics, symbolism, music, and art. We start our rereading with Hegel who saw history as the "skull site" of the journey of human consciousness: a journey studied in archaeology by excavating the debris, the petrified remains, the traces that were left behind, as evidence of previous manners of human existence. Gaston Bachelard builds on this, arguing that the cave (as the primal human dwelling) itself is shaped like a skull, suggesting a connection between caves, caverns and craniums. Jacques Lacan raises the question whether Neanderthals were already part of the 'symbolic order', while Pierre Teilhard de Chardin, a practicing archaeologist himself, sees Neandertals as a chapter in the emergence of the 'noosphere' (the network of thinking). And Sloterdijk focusses on the cave as a 'clearing' where language and thinking once emerged. For Sloterdijk, by developing technologies, humans not only reshape their environment, but also themselves: their anatomy (e.g., the evolution of the human hand), but also their manner of being in the world. Finally, we assess the implications of paleo-archaeological Neanderthal research for human existence today as well as the importance of interdisciplinary dialogue to think these implications through.

Hegel on skull research

G.W.F. Hegel died in 1831, decades before the fossil remains nowadays known as "Neanderthal 1" were found in the Neander valley near Düsseldorf (in 1856), named after Joachim Neumann, a composer of Christian hymns ("neander" being the Greek version of his German surname, so that, coincidentally, the name *Neanderthals* is literally linked with the epithet "new man" [Bichakjian 1997]). Neanderthal remains had been found earlier, but the *Neanderthal 1* finds for the first time suggested that these fossils, including the upper part of a Neanderthal cranium, belonged to a species of human beings anatomically different from Homo sapiens. Although Hegel obviously never refers to Neanderthal paleo-archaeology, nor to human evolution more in general, his *Phänomenologie des Geistes* does contain an interesting reflection on skull research ("phrenology"), which may serve as a first point of departure.

In *The Phenomenology of the Spirit*, Hegel argues that human skulls attract our attention because they once contained a human mind, thereby indicating the "presence of self-awareness" (Hegel 1807/1986, p. 247). Therefore, already in the time of Hegel, researchers argued that human skulls might inform us about the nature of human thinking, as the cranium is both determined by and determining the size and shape of the brain. A research field known as phrenology had emerged in those days, based on the conviction that the inner shape of the skull contains important information about the consciousness that once inhabited it.

Hegel's comment on this argument contains an important caveat. Although a skull is evidently an intriguing object, he contends, the human mind cannot be reduced to cranial bones. Human thinking is contextualised, as we would nowadays phrase it. Although there is doubtlessly a connection between the brain, the cranium and self-awareness, human beings dwell in a *world*, a symbolic environment if you like, so that the information provided by the shape and size of cranial bones is limited at best. To phrase it in paleo-archaeological terms, Hegel argues that, if we are interested in the history of human consciousness, we should not only study skullcaps, but also explore phenomena such as tool use, crafts, and parietal art at the same time. Research should consider the *connection*, the *interaction* between skull shape and other archaeological items (often) found in caves. This is far from obvious, especially in times of specialisation, where researchers focus on specific questions or items, running the risk of losing sight of the global picture, indicating how partial objects may form a meaningful ensemble. Hegel's comments are important because they already envision human thinking as the outcome of a dialectical process: an interaction (*Wechselwirkung*) between the shape (the evolution) of the brain and other factors, such as tool use and language.

On the final page of *The Phenomenology of the* Spirit, Hegel returns to the skull once more, precisely where he famously argues that "absolute knowledge" is the end for which the spirit in the course of history strives. For Hegel, philosophy is a phenomenology of the spirit, as we have seen, tracing its long and winding progression through

various stages, as revealed and preserved in various *externalisations*, whose remnants constitute the *Schädelstätte* (the skull site) of consciousness (Hegel 1807/1986, p. 591). Thus, according to Hegel, not only paleo-archaeology is devoted to studying skulls. Rather, all material traces and remnants of thinking are like skulls, serving as a point of departure for studying the vicissitudes of the spirit on its way to self-understanding and comprehensive knowledge. For Hegel, the phenomenology of the spirit equals philosophical archaeology.

Friedrich Engels (1925/1962), a dialectical thinker inspired by Hegel, likewise argued that human evolution is a process of interaction between brains, hands, and tools. By developing and using their hands to employ and manufacture tools, human beings also shaped themselves, Engels argued, emphasising the decisive role of *labour* in human evolution. Besides skulls, other parts of human anatomy are equally important, notably our hands, in combination with the products and waste products of human activity. As indicated, dialectics urges us to focus on the *Wechselwirkung*, – the interaction between brain, embodiment, and environment, between human activity (human labour, as Engels phrases it) and the evolution of our organs, notably the human hand and the human brain.

Gaston Bachelard and the cave archetype

Although French philosopher of science Gaston Bachelard (1884–1962), likewise inspired by Hegel, never addresses the philosophical implications of Neanderthal research explicitly, his *phenomenological psychoanalysis* of science nonetheless entails an interesting perspective on paleo-archaeology as a research field. Bachelard was interested in the tension (the interaction) between the *iconoclastic* tendencies of modern science (challenging established worldviews and replacing them with quantified information) and the basic images or *archetypes* that continue to guide scientific research (Zwart 2020b; 2022). We notice this tension also in the monograph by Slimak, already referred to above. Scientific research may both be both fostered and hampered by imaginative thinking. Imagination may broaden our view, but internalised expectations and ideas may also hinder our capacity to consider (allegedly improbable) alternatives. Paleo-archaeology is a research practice which relies on precision measurements for analysis, documentation and replication, but researchers also use their imagination to explore the broader picture, helping them to discern how their findings may fit together.

According to Bachelard, the guiding image (the *archetype*) of paleo-archaeology is the image of the cave, and everything associated with it. Archaeologists often look for fossilised early human remains inside caves. It was in Sumatran caves, for instance, that Eugène Dubois once hoped to discover the missing link, systematically exploring every single cave he could reach, although it was only when he tried his luck on the Solo riverbank near Trinil (Java) that the team of convicts that had been put at his disposal unearthed the famous Pithecanthropus (Homo erectus) skull. The archetypal

image of early humans dwelling in caves inspired him to travel to the Dutch Indies in the first place,[3] and his example shows how this guiding archetypal image can be a source of inspiration, but may also become an "epistemological obstacle", as Bachelard phrases it (Zwart 2019). Dubois had to *give up* his tropical cave image of early humans in order to succeed in finding a Homo erectus skull.

A cave can easily be conceived as a place of human origins, Bachelard argues, first and foremost because its shape is reminiscent of a uterus. Bachelard also points out, however, that a cavern (the inhabitable space inside a natural cave) is shaped in a manner reminiscent of a human cranium, so that an association (an *alliteration* even) can be discerned between cave, cavern, and cranium: three instances of C-minor, as Bachelard phrases it (1948, p. 171), – because of their association with darkness and death, as a heritage or cultural memory from the distant past, linking caves with shamanistic and burial rituals for instance (Halbwachs 1980). The pre-historic cavern was shaped like a skull, Bachelard argued, and its opening was like an eye socket, providing a panoramic view across the landscape. It is no coincidence that later in history, caverns were used by mystery cults for initiation rites. Caverns allow us to return to our primal human origins, allow us to relive the dawn or awakening of humanity. This is what archaeologist aim for, according to Bachelard: to achieve maximum proximity to the "cradle" of humankind (cave – cavern – cranium – cradle). The cranium lies buried in a cavern where human existence once unfolded, – in an interactive manner, sculpting human cognition through tool use, pyrotechnics, and parietal art.

Jacques Lacan on Neanderthals and the symbolic order

Jacques Lacan (1901–1980) developed his psychoanalysis of science along similar lines as Bachelard. Lacan likewise discerns a basic tension between "the symbolic", i. e. the tendency of science to work with symbols or signifiers (measurements, chemical symbols, mathematical equations, technical terms, etc.) and what he refers to as "the imaginary" (the juxtaposed tendency to grasp the real in terms of images, archetypes, fantasies, worldviews, etc). In other words, human beings aim to come to terms with the real in an interactive manner along two dimensions: via the imaginary (the dimension of stories, images, and myths) and via the symbolic (the realm of measurements and mathematics, of symbols and signifiers). Modern science is basically *iconoclastic*, aiming to replace traditional myths and worldviews by symbolisation and quantification, but science nonetheless remains vulnerable to the power of guiding images.

3 Because primates are usually found in tropical regions, Dubois argued that early humans must have evolved in tropical caves as well. Therefore, he expected to find the missing link in a cave in the tropics. Coming from the Netherlands, the Dutch Indies seemed a logical place to start.

Against this backdrop, Lacan became fascinated by Cro-Magnon archaeology, notably parietal art. Lacan's views on Cro-Magnon cave art were influenced by archaeologist André Leroi-Gourhan (1911–1986), professor of prehistory at the Collège de France from 1969 until 1982, who studied parietal drawings from a structuralist perspective, analysing the distribution of images in terms of patterns and binary oppositions. Cro Magnon (Homo sapiens) artworks are up to circa 40,000 years old in Europe (and up to 50,000 years in Asia). Although the precise function of these fascinating murals is unknown, it seems unlikely that they were merely efforts to portray the world outside (e.g., images of animals). Rather, most experts agree that these murals were part of practices of reflection in the sense that the humans who produced these artworks were *thinking* about their world. Maybe these drawings were involved in shamanistic rituals (Clottes 2005), in combination with music, singing, dance, poetry, and meditation, as efforts to influence the behaviour of herds, or implore spiritual forces.

For Lacan, parietal art reflects the shift from the "imaginary" to the "symbolical" (1965–1966, p. 503), i.e., from parietal art as a product of fascination and imagination (triggered by the amazing *Gestalt* of the depicted animal) towards parietal images as something more symbolic: as pictograms, so that these images may have functioned as symbolic elements or "signifiers", presumably in the context of shamanistic rituals.

Against this backdrop, it is interesting to consider two short references to Neanderthals in Lacan's seminars (transcripts of his weekly sessions, conducted from 1953 onwards). In *Seminar II*, during a session devoted to Hegel, Lacan (1978) contends that Neanderthals were already part of what Hegel envisioned as *the self-realisation of the Spirit through history.* Their archaeological remains are part of what Hegel refers to as the phenomenology of the spirit (Lacan 1978, p. 91). Or, in Lacanian terms, Neanderthals were already part of the *symbolic order*, the world of language and symbolic behaviour, involving the use of symbols (*signifiers*, in Lacanian terms, echoing saussurian semiotics).

Yet, in *Seminar III* Lacan (1981) adds that, in the case of Neanderthals, although they dwelled in a symbolic world and probably used some kind of language, "a certain number of signifiers were still lacking" (Lacan 1981, p. 344).[4] Given the context of this remark, Lacan was thinking about the role of prohibitions in human history. Like Hegel, Lacan saw the emergence of monotheism (based on a series of rigid prohibitions announced by an authoritative father figure) as a decisive moment in history, paving the way for modern moral subjectivity (involving modern experiences such as duty, guilt, and individual responsibility). Yet, prohibitions also played a decisive, structural role in earlier human cultures, as Freud had already argued in *Totem and Taboo* (Freud 1913/1940). What Lacan is suggesting, albeit speculatively, is that Neanderthal culture may have been considerably less driven by prohibitions and taboos. Interestingly,

4 "Il est assez probable qu'un certain nombre de signifiants essentiels manquaient à l'homme de Néandertal. Inutile d'aller chercher si loin, car ce manque, nous pouvons l'observer sur les sujets qui sont à notre portée" (Lacan 1981, p. 344)

this resonates with an argument made by Ludovic Slimak, already cited, namely that, while Homo sapiens stone technology was *standardised* and *normalised* by rigid rules (*règles puissantes*, *devoirs*, *tabous*), neanderthal manners by contrast were decidedly less rigid. Precisely because of this standardisation, Slimak argues, we contemporary humans still recognise *the logic of those prohibitions* (p. 37), whereas the manners of Neanderthals seem more distant to us. For Lacan, human culture, the symbolic order, is shaped by prohibitions, and this already applies to early human history.

Furthermore, Lacan, who worked as a psychiatrist at the psychiatric hospital Sainte Anne in Paris, subsequently suggests that some affinities may be observed in the experiences of psychiatric patients today (Lacan 1981, p. 344), who likewise have a problematic relationship with the symbolic order and its normalising prohibitions, historically grounded in monotheism. Lacan hints at the possibility that psychiatric patients may have adopted ways of thinking which are closer to Neanderthal logic than the style of thinking adopted by most other contemporary humans, – but Lacan does not elaborate this suggestion further, although a similar line of thinking had been explored by Sigmund Freud in *Totem and Taboo* (1913/1940), where it is suggested that our understanding of contemporary neuroses can be deepened by reflecting on events that allegedly once happened during a primordial, Pleistocene past, – although also in the case of Freud this line of thinking remained a fairly speculative exercise.

The importance of the link between early human existence and contemporary mental health challenges was again emphasised by the Nobel Prize Committee awarding the 2022 Nobel Prize in Medicine to human origins geneticist Svante Pääbo (Callaway and Ledford 2022). The Nobel committee argued that his research had provided genetic foundations for understanding how our genomic history continues to affect our present biology. Notably, research has suggested correlations between the presence of specific sections of Neanderthal DNA in our genetic makeup and conditions such as schizophrenia (Gregory et al., 2021) or severe COVID-19 (Zeberg and Pääbo, 2020). Additionally, the adaptation to high altitudes in contemporary Tibetans is attributed to genetic material inherited from the Denisovans (Huerta-Sánchez et al., 2014), a population that co-existed with Neanderthals. These ancient genetic fragments will persist throughout the future of our species, underscoring the importance of understanding their implications for our health (as emphasised by geneticist David Reich in Callaway and Ledford 2022).

Teilhard de Chardin and the noosphere

The philosophy of deep Pleistocene history becomes more informed and precise in the case of Pierre Teilhard de Chardin (1881–1955). Although Teilhard was thoroughly trained in philosophy and theology, he was first and foremost a paleoanthropologist, actively involved in the discovery of *Homo erectus pekinensis* ("Sinanthropus") in China in the 1920s and 1930s. He came from a Catholic aristocratic background, was ordained a priest in 1911, survived World War I (as a stretcher-bearer, distinguished

with the Legion of Honour), joined the Jesuit Order, and conducted paleoanthropological field work during the interbellum. While at work in the Ordos desert, he conceived a vision of cosmic evolution, with anthropogenesis as a crucial moment. Because his books were published posthumously, his ideas, although conceived much earlier, became famous in the 1960s and 1970s (so that, in terms of reception, he is a contemporary of Lacan). His core concept is the "noosphere", derived from νοῦς: i. e., *mind* or *intellect* and referring to the evolving layer of language and communication, science and technology, information and communication that is emerging and proliferating *via us*, human beings, pervasively interacting with and transforming both the geosphere and the biosphere quite drastically.

Teilhard was also deeply fascinated by Cro-Magnon parietal art. For Teilhard, cave art represents a turning point in the process of noogenesis (the birth of thinking, the emergence of self-consciousness). He was a close friend of French archaeologist Abbé Henri Breuil (1877–1961), professor at the *Collège de France* from 1929 to 1947, with whom he visited parietal sites such as Lascaux and Mas d'Azil (Aczel 2007, p. 51). Besides being astonishing artworks, Teilhard argued, these paintings reflect a spiritual (symbolic) dimension. Drawings of animals are accompanied by signs, dots and pairs of lines and often seem superimposed on one another, like playing cards. Therefore, similar to Lacan, Teilhard contends that, rather than being mere representations, these paintings functioned as symbols or pictograms in shamanistic rituals, possibly to probe and influence the movements of herds (Zwart 2022).

Teilhard's magnum opus *The Human Phenomenon* (1955/2015) was completed in China in 1940 but published posthumously in 1955. Here and elsewhere Teilhard argues that a direction, an orientation, an axis is discernible in evolution, namely towards increasing complexity and interiority (p. 8), towards integration and sublimation (p. 180), towards self-consciousness and self-directedness, while human beings represent the moment in time when evolution becomes "conscious of itself", becomes "consciously self-directed" (p. 20, p. 126).

The Human Phenomenon contains a chapter entitled *The Deployment of the Noosphere*, and one section of this chapter is dedicated to Neanderthals. Around 60,000 years ago, Teilhard argues, the noosphere, the thinking network was expanding, and this involved a progress in "hominisation", as reflected in cave industry and the emergence of burial practices (p. 135). For Teilhard, Neanderthals were part of this process. They were, Teilhard argues, "truly human… and yet a human still not exactly like ourselves" (p. 136). While "Mousterian skulls" give evidence of a long-lasting Neanderthal presence in Eurasia, Teilhard also notices an "abrupt invasion" of Cro-Magnon or "Aurignacian" human types in Europe and the Middle East and this, Teilhard argues, represented a fundamental "rejuvenation of humanity" (p. 137). Among Neanderthals we already see evidence of an important psychic step, e. g., the appearance of burial places in caves, so that Teilhard is prepared to "grant the flame of true intelligence even to the most confirmed Neanderthals" (p. 139). And yet, their intellectual activity seems to have been largely absorbed by survival and propagation:

> What could these distant cousins of ours really have thought? We have no idea. But, on the contrary, with Homo sapiens, a definitely liberated thought exploded … on the walls of the caves. The newcomers brought art with them. And thanks to the language of this art, for the first time we can enter right into the consciousness of those vanished beings… Spiritually, they are so strangely close to us. (p. 139)

While Neanderthals remain distant, in the case of Cro Magnon art we, for the first time, experience "spiritual nearness", Teilhard argues, allowing us to enter their world of thinking.

Building on decades of research since Teilhard wrote these lines, this experience can now be probed more in detail. First of all, although the evidence is not as abundant or elaborate as that of later Homo sapiens, some findings suggest that Neanderthals engaged in rock art. Notable examples include sites such as Gorham's Cave in Gibraltar (e. g., the famous Neanderthal *hashtag*, Rodríguez-Vidal et al., 2014), the La Pasiega cave in Spain (Hoffmann et al 2018) and La Roche Cotard in France (Marquet et al 2023). These engravings, finger flutings and paintings are believed to be the work of Neanderthals because their dating suggests an age that is older than the presence of Homo sapiens in Western Europe. At the same time, evidence is growing that Homo sapiens may have been present in Central and Western Europe at an earlier date than envisioned until now (Harvati et al 2019; Slimak et al. 2022). Also, the artistic nature of these traces and signs remains debatable.

As to language, language capacities of Neanderthals remain a controversial topic (e. g. Botha, 2020) but recent modeling of the Neanderthals auditory capacities conclude that they had auditory, and hence speech, capacities similar to Homo sapiens (Conde-Valverde et al. 2021). While evidence for Neanderthal burial practices is not as clear-cut as it is for some late (and rare) Homo sapiens during the Upper Paleolithic, there are indications that Neanderthals engaged in some form of burial or intentional disposal of the dead. The multiple Neandertals individuals preserved at La Ferrassie in France or at Shanidar cave in Iraq are among the most intriguing cases (Pettitt, 2010; Maureille and Knüsel, 2022).

Also worth mentioning, because unique and very surprising, are the circular constructions made of broken stalagmites found deep inside the cave of Bruniquel in France, 300 meters from the entrance (far away from any source of natural light: Jaubert et al. 2016; Soressi 2016). Because Neanderthals were the only hominin group present in western Europe at that time, the Bruniquel construction shows that Neanderthals explored the use of underground space. In Teilhardian terms, Neanderthals were not solely absorbed with the challenges of survival. The enigmatic language of their potentially artistic expression may speak to us.

Peter Sloterdijk's views on anthropogenesis

The German philosopher Peter Sloterdijk endeavours to write a history of human thinking (including early human thinking) "from below", which means that it is informed by the archives of human activity, and this evidently includes paleo-archaeological findings. An important source of inspiration is Martin Heidegger's concept of a "clearing" (*Lichtung*), i. e., the idea that humans have distanced themselves from nature by entering an open space, created by language, – albeit in combination with tool use and pyrotechnics (Sloterdijk 2001b). Sloterdijk's guiding question is: how did this clearing come about? Evidently, as he phrases it, humans did not step into this clearing during a forest hike, as if the clearing had already been there, waiting for early humans to arrive. The clearing is closely connected with the process of anthropogenesis, with the emergence of language, pyrotechnics, and tool use. Dialectically speaking, it is the result of interaction. Human thinking emerged in a clearing which these early human beings created themselves.

Although Sloterdijk developed his philosophy of the Pleistocene at various places, in his magnum opus *Sphären* as well as in other works – notably *Nicht Gerettet: Versuche nach Heidegger* (Sloterdijk 2001a) –, he offers a summary of his views in a booklet entitled *The Human Greenhouse* (*Das Menschentriebhaus: Stichworte zur historischen und prophetischen Anthropologie*). Therefore, it is to this booklet that we will refer here. Again, the concept of the *clearing* is the starting point for Sloterdijk's Pleistocene philosophy. He develops a way of thinking about humans which builds on the conviction that humans are more or less *self-made* in the sense that the human condition (the human way of being in the world) resulted from the emergence of human activities (use of tools, fire, domesticated animals and plants, in combination with music, poetry, dance, painting, and other art forms). All these activities, all these practices and techniques not only resulted in modifying the environment, – making the world more hospitable and inhabitable for humans, more human-friendly as it were. They also functioned as anthropo-techniques, as practices for crafting humans, so that modern humans are the *outcome* or *product* of a long history of technical and cultural human activities. The result is an exodus from nature, a process of hominization (p. 13). Whereas other animals dwell in a natural environment, humans exist in a world of their own making and precisely now that we are facing a global environmental crisis, an apocalyptic state of emergency even, Sloterdijk argues, time has come to reconsider how humans beings once upon a time, in deep history, stepped out of nature as it were, and into this clearing. Now that via genetic modification and other technologies we may steer the future evolution of humanity, we become profoundly interested in human evolution, – envisioned as an evolutionary deviance because, on an unprecedented level, humans themselves determined the condition of their own evolution. As Teilhard already phrased it, in the case of humans, evolution became radically self-directed.

Sloterdijk's reflections on early human history revolve around what he considers as the primal dwelling (*Ur-Ort*) of humanity, namely the cave, a semi-spherical space offering protection from meteorological contingencies, where temperature could be conditioned, and language (singing, storytelling, transmission of information) could emerge. The cave was a primal interior where an *internal environment* (a greenhouse) could be established and maintained, more human-friendly compared to the inhospitable conditions outside.

For Sloterdijk, there are important differences between this human primal dwelling and animal dens. First of all, Sloterdijk argues, human new-borns are extremely vulnerable and dependent for an extended period of time (because of their large brains, humans are born prematurely into this world and multiply the size of their brain by a factor of 4 in between their birth and adulthood [chimpanzees for instance do so by a factor of 2, Bogin 2020]). The primal dwelling allows for that. Even adult humans, due to lack of fur, tusks, claws, etc., stay inside for extended periods of time, to process clothing, tools, and food. In the case of humans, the primal dwelling functions as a greenhouse or incubator, significantly reducing selective pressures, notably early in life, but also later (e.g., during the night, when humans recuperate from daily activities in the proximity of a fireplace.) Moreover, the topological essence of the primal dwelling is not only the inhabited cavern as such, but also the opening, which allows humans to gaze into, and reflect on and deliberate about the wide expanses outside the cave, – before stepping out into these environs in a well-prepared manner, wearing clothes, carrying tools and weapons, but also informed by stories, previous experiences, and other forms of communication.

All these preparatory activities, taking place inside the cavern, open up the world. Without them, the natural world would be an inhospitable or even lethal environment, but now, building on anthropo-techniques, humans have artificially enhanced their fitness as it were. The cavern is the site where tool use (litho-technique) evolved, with younger humans learning the craft from more senior humans. And the opening of the primal dwelling is a window into the world, allowing humans to consider, plan and evaluate collective activities, as language users. In caverns, they verbally share experiences concerning how to achieve a particular goal or how to hit a particular target. Via chants and artworks, they create a spiritual and symbolic habitat, allowing them to produce a worldview, indicating how things fit together in a comprehensive manner. Inevitably, a shift occurs from mere adaptation to the external environment towards developing ways to actively *reshape* the environment, either directly (e.g., with the help of fire) or in a more indirect and spiritual manner (via chants and other forms of group art). In other words, the clearing was a hospitable, but also an acoustic ambiance. Although Peter Sloterdijk consistently speaks about Homo sapiens and keeps silent about Neanderthals and other early human species, to the extent that his paleo-ontology (his account of the coming into being of humans) is valid, it would apply to Neanderthals as well, for whom the glacial cavern likewise functioned as a primal dwelling enabling a human way of being in the world.

Although Sloterdijk offers a fascinating view on deep history, at least one caveat must be mentioned here as well. As was already indicated above, the notion that prehistoric people exclusively inhabited caves is a misconception which archaeologists have long debunked, especially with the advent of commercial archaeology, so that the validity of Sloterdijk's imaginative Pleistocene anthropology, although valuable in itself, is nonetheless limited. In 1992, the European Convention on the Protection of Archaeological Heritage, aimed at safeguarding European archaeological heritage, was signed. This initiative led to extensive archaeological investigations preceding or accompanying large construction projects across many European countries. Consequently, thousands of Palaeolithic sites have been discovered in open-air settings rather than caves. In the past, before the use of large excavation machinery (which became available in the late 1970s in France), manual excavations were limited, and caves were considered high-potential areas for Pleistocene archaeology. Before the 1990s, most Pleistocene archaeological work was therefore concentrated in cave settings. While caves are advantageous for preserving bones, open-air sites generally lack such preservation. Yet, prehistoric humans were not confined to caves but also inhabited open-air environments.

Figure 1[5] shows the most well-dated palaeolithic sites in Europe (up until 2020) and the location of rocks in which caves can form.

Let this suffice as a concise overview of the emerging dialogue between archaeology and philosophy concerning our understanding *of deep history* and let us now turn our attention more explicitly to the current status of Neanderthal research before reflecting on the importance of the archaeology-philosophy dialogue more explicitly in the final section.

The current Neanderthal debate: Human or "not yet fully human"?

As Pleistocene humans, both Neanderthals and modern humans existed under similar conditions, and often dwelled in caves. Yet, as we have seen, some archaeologists still try to draw a line between them and us. Ludovic Slimak (2023) claims that *their manner of being in the world* was different. Whereas Cro Magnon cave dwellers allegedly experienced the world like us, Neanderthals represent a different manner of *being in the world*, he contends.

Nobel Prize laureate Svante Pääbo (2014) makes a similar argument, more emphatically even. He explicitly draws a line between *them* and *us*, in his memoir focussing on sequencing neanderthal DNA:

5 We thank W. Chu for his help in drawing this map.

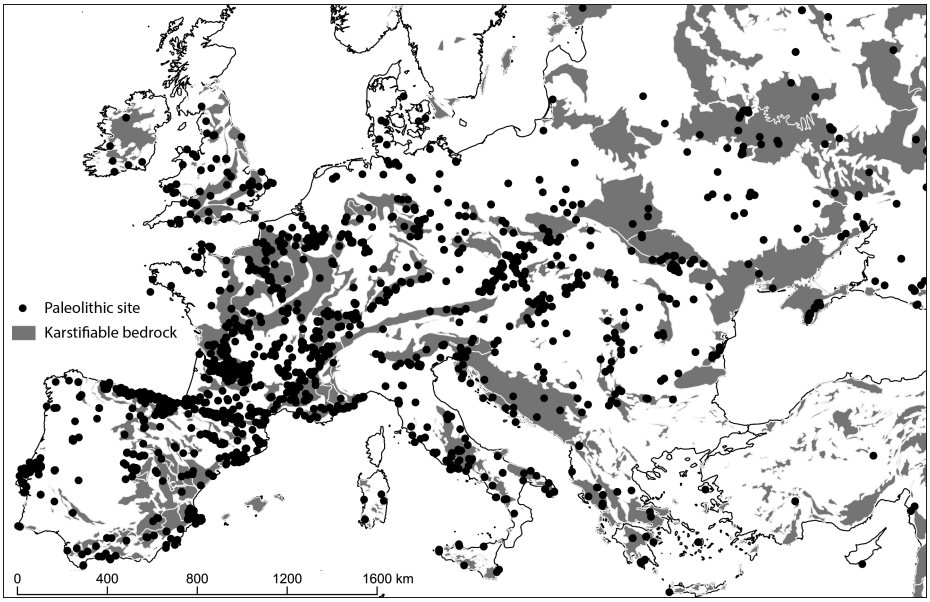

Figure 1. Distribution of reliability dated Pleistocene sites and karstifiable bedrock in Europe (map redrawn after Chu et al. 2021)

> Among the few differences one would expect to find in the Neanderthal genome, there must be those that set us apart from all earlier forms of human forerunners... Those few differences must form the biological foundations of the radically new direction our lineage took with the emergence of modern humans: the advent of rapidly developing technology, of art in a form we today immediately recognise as art, and maybe of language and culture as we now know it. (Pääbo 2014, p. 4)

Pääbo consistently emphasises this: "Neanderthals were profoundly different from us... Neanderthal DNA was very different from the DNA of modern humans" (p. 14). Indeed, his research focussed on one single question: what makes humans unique? What had set humans on an evolutionary track so different? (p. 83). Yet, also in 2014, Paola Villa and Wil Roebroeks questioned this approach in their paper entitled "Neandertal Demise: An Analysis of the Modern Human Superiority Complex". They questioned the prevalent tendency within paleo-archaeology to position ourselves in a superior light without substantial data to support such claims. And in 2023, the authors of this paper joined a panel discussion at the EuroScience Open Forum (ESOF), the largest multidisciplinary scientific conference in Europe, to publicly question the "western perspective on the reconstruction of human history".[6] And in her book *Kindred: Neanderthal life, love, death and art*, Rebecca Wragg Sykes (2020) offers a similar perspec-

6 https://leiden2022.nl/sites/default/files/2023-06/D3.2%20ESOF2022%20Programme%20and%20evaluation%20report.pdf.

tive, arguing that the "renaissance of Neanderthal research" over the past three decades has revolutionised our understanding of "the symbolic dimension of their world" (p. 12). Some of her examples were already mentioned above. She notably refers to the famous Bruniquel cave, discussed earlier, where Neanderthals constructed a circular monumental structure consisting of stalagmite stumps, a sacred chamber in the dark, "made by thinking minds" who "spoken in some form" and "certainly laughed" (p. 245). Besides Bruniquel, the past three decades in Neanderthal research have seen "an explosion in the archaeological evidence for symbolic aspects to Neanderthal life" (p. 246). One spectacular example is a cave painting in the La Pasiega cave. Throughout the cave, surfaces with figures and engravings can be found and uranium-thorium dating suggested a scalariform (ladder shaped) figure to be older than 64,000 years, – and therefore made by Neanderthals (Hoffmann et al 2018), although the dating remains heavely debated. Indeed, the issue of how to interprete such finds (should they be considered as symbols, as representations, as evidence of symbolic behaviour, etc.) is still open to debate (cf. the contribution by Karel Kuipers, Julien Kloeg, and Marie Soressi in this Jahrbuch). It goes without saying that, from a philosophical perspective, these ongoing debates, undecided as yet, are crucially important when it comes to addressing the question to what extent the Neanderthal manner of thinking differed from how Cro Magnons experienced their world, or how we experience the world today.

In fact, the discipline of paleo-archaeology has been delving into in-depth debates during the last three decades to figure out whether Neanderthals were human or not.

In their discussion of Neanderthal finger-flutings on cave walls in La Roche-Cotard, created around 57 thousand years ago, Jean-Claude Marquet and colleagues provide an overview of symbolic productions attributed to Neanderthals. While they are few in number, known examples of supposed Neanderthal art are definitely intriguing, the most famous example being Gorham's cave, Gibraltar, where a geometrical design created with lithic tools (also known as the Neanderthal hashtag) was found. Marquet and colleagues also mention Bruniquel of course. Neanderthal parietal art is different from art forms of later periods, the authors argue. The finger-flutings in La Roche-Cotard were "meticulously made" and reflect an "progression in complexity" from one panel to the next (p. 43). These markings are non-figurative and geometrical (circular, axial, or triangular), but their layout shows "an organised, deliberate composition." It is "the result of a thought process giving rise to conscious design intent" (p. 43). The authors describe these parietal markings as "the frequent repetition of thoughtful gestures" (idem).

Given the limited number of examples of potential Neanderthal art that have been preserved and discovered so far, and the discussions concerning interpretation to which they give rise, we should be careful when it comes to generalisations. Still if we add Gorham's cave, Bruniquel and La Roche-Cotard together, the impression emerg-

es that people living in Europe 60 to 40,000 years ago somehow may have played a ritual function, in interaction with other practices.[7]

Many paleo-archaeologists continue to search for evidence that would set aside Neandertals from Homo sapiens. Recent debates on Neandertal burials for instance (Rendu et al 2016) suggest that the interpretation of the evidence is dictated by the definition given to the word "burial". Interpretations in favour or against Neanderthal burials are at risk of being dependent on the modern views of spirituality and the care of the dead, showing the limit of the dualist quest for absence or presence of burials, which posits a binary (and hierarchical) opposition between them and us, as discussed above. Our option rather is to closely study the history of behaviours related to the treatment of the dead over a longer term, as Paul Pettitt did in his book *The Palaeolithic origins of human burial* (Pettitt 2010). By putting findings in perspective, and embedded them in their own trajectory, paleo-archaeologists may circumvent dualistic interpretations and refine and complexify the reconstruction of the deep past.

The added value of interdisciplinarity

What does the archaeology – philosophy dialogue add to our understanding of early human existence? How may philosophy help archaeology, and the other way around? First of all, the dialogue may help researchers and scholars to overcome some of the tenacious biases inherent in the binary logic, the binary manner of thinking (*them* versus *us*) which dominated the debate until quite recently. Archaeological findings challenge philosophical conceptions about being human, often positing an ontological divide, a significant difference between humans and other, biologically closely related species, using language, culture, and conscious planning as an argument. Philosophers are challenged to explicitly reconsider this logic, which is at work both in archaeological research practices and in philosophical reflections. This will help us to envision deep human history not as being defined by a sudden genetic mutation or cultural leap which separates modern humans from Neanderthals, but as an interplay between epochs of continuity and moments of discontinuity occurring in both groups, – each mostly living for a long time in separate and distinct areas (Europe for the former and Africa for the latter) – thereby seeing Neanderthals as part of a more inclusive and comprehensive understanding of deep human history. The key issue here is not whether Neanderthals should be considered human or 'not quite human'. Rather, we must develop a more fluid way of thinking and of interpreting archaeological finds. Given that we often discuss archaeological findings in a comparative framework that contrasts Neanderthals (who disappeared) with early modern humans (who

7 Steven Mithen (2005/2006) pushes this even further when, via active imagination, he tries to envision a community of Neanderthal humans singing and humming in their caves, while beating sticks on bones, a spectrum of sounds echoing and reverberating along the walls, sparsely decorated with non-figurative designs: an ice-age soundscape (2005/2006, p. 245).

were obviously successful), we may wonder how this framework is biased by Western thought. European culture is known for having emphasized what may be 'uniquely human' and separates 'us' from others, where the concept of 'other' not only involves other primates, but also women, indigenous people, and early humans (cf. the contribution by Susan Peeters et al., this volume). The question is not where to draw the line. Rather, the question is whether a more fluid and inclusive interpretative framework can be developed in dialogue, not only between archaeology and philosophy, but also with other fields.

At the same time, the dialogue may make us more aware of how imagination and quantification may interact in scientific research. To give a concrete example, whereas imaginative reconstructions often build on the conviction that early humans dwelled in caves (as we have seen both in the case of paleoarchaeologist Eugène Dubois and in the case of philosopher Peter Sloterdijk), human existence actually evolved in multiple types of dwellings. The fact that so many instances of Pleistocene art have been found deep inside caves seems to suggest that caves were sites where spiritual preoccupations were enacted, but we may also argue that caves provide optimal conditions for preservation. Yet even here, preservation is finite, and the sparseness of the Neanderthal artistic record may partly be due to a lack of preservation.

Whereas archaeologists may challenge philosophical convictions, philosophy may provide ideas and theories that can be refined and empirically tested by archaeologist. Moreover, the dialogue is not only relevant for bridging the gap between disciplines, as it may also stimulate and deepen the dialogue between academic research and broader audiences, addressing questions that are of interest to society at large (cf. the contribution in this volume by Anna Riethus and colleagues concerning the Citizen Panel at the Neanderthal Museum in Mettmann near Düsseldorf). In the view of contemporary challenges such as mass extinction and climate change, the question of human origins and our place in nature has gained significant urgency. While archaeologists often focus on very specific research questions, these dialogues may help us to develop a comprehensive view. In times of uncertainty and crisis, we tend to take a step backwards and ask ourselves where we are coming from. Besides concrete technological innovations, the current environmental crisis calls for reflection against the backdrop of a deep temporal horizon.

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