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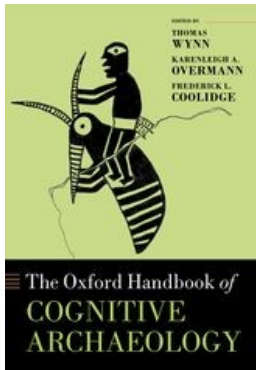
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CHAPTER

Symbolism in the Middle Palaeolithic: A Phenomenological Account of Practice-embedded Symbolic Behavior

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Abstract

The existence and extent of symbolism among Middle Palaeolithic pre-modern humans present a significant point of controversy. As with any scientific dispute, there is a substantial conceptual component to these discussions, here in particular concerning the concept of symbolism, which is often poorly defined. The present chapter approaches the problem from a different, philosophical, angle. It opens with a brief reflection on the phenomenological method in philosophy and its largely unexplored potential for paleoanthropology and evolutionary psychology. The midpart develops a phenomenological framework involving separate levels of expressive and symbolic behavior. It is argued that Middle Palaeolithic pre-modern humans, given the current evidence, are best understood as capable of symbolic behavior, but that symbol use is still tied to expressive behavior and shared practices in the so-called living present. It is further argued that such “practice-embedded symbolism” represents a necessary stage in the evolution of symbolism in the hominin lineage, as its use and interpretation are significantly less cognitively demanding than the free symbolic activity of behaviorally modern humans. The final section reviews evidence for the decorative use of pigment and beadwork in Middle Palaeolithic communities. It is argued that while their production plausibly relied on practice-embedded symbols, free symbolism in the modern sense need not be presupposed, and it is unlikely that either pigment or beadwork had itself a symbolic function.

Keywords: [symbolism](#), [Middle Palaeolithic](#), [practice-embedded symbols](#), [beadwork](#), [phenomenology](#), [intentionality](#)

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Introduction

The existence and extent of symbolism among Middle Palaeolithic pre-modern humans is one of many intriguing controversies in contemporary paleoanthropology. The past decades have seen significant shifts in these debates, spurred by certain findings, including eagle talons from Foradada Cave in Spain (Rodríguez-Hidalgo et al., 2019), possible burial sites at Skhül (Vandermeersch & Bar-Yosef, 2019), at Sima de los Huesos (Arsagua et al., 1997), and the infamous “flower grave” at Shanidar (Solecki, 1975), as well as by the apparent use of pigment and perforated shells at Cueva de los Aviones (Hoffmann et al., 2018), Grottes des Pigeons (Bouzouggar et al., 2007), Pinnacle Point (Marean et al., 2004), and Blombos (Henshilwood et al., 2002), among others. Most of these findings are dated to the late Middle Palaeolithic; the earliest pigment, possibly for body decoration, dates back 400 kya to *Homo heidelbergensis* (Wynn, 2012, pp. 290–291). At least some findings at Shanidar, Cueva de los Aviones, and Foradada Cave have been ascribed to Neandertals, with dating going back to around 120 kya.

Some authors have taken such findings to definitively overthrow the long-standing idea of a “creative explosion” (Pfeiffer, 1982) in the Upper Palaeolithic, as well as the idea that behavioral modernity is underpinned by a distinctive genetic and cognitive basis unique to *Homo sapiens* (Wolpoff et al., 2004; Zilhão et al., 2010). Recent evidence has been taken to indicate that behavioral modernity “is not a species-specific phenomenon” (Zilhão, 2007, p. 1). Vanhaeren and d’Errico (2006, p. 1107) and Zilhão et al., (2010, p. 1023) take recent findings to imply modern symbolism for pre-modern humans, including Neandertals; Hoffmann et al., (2018, p. 1) suggests that the “roots of symbolic material culture may be found among the common ancestor of Neandertals and modern humans, more than half-a-million years ago.” More recently, Prévost et al. (2021, p. 1) claimed “symbolically mediated behavior” for Middle Palaeolithic *Homo sapiens*.

As with any scientific dispute, there is a substantial conceptual component to these discussions, which here largely boils down to the concept of symbolism. Both pigment use and beadwork—both for presumed decorative purposes—are almost standardly assumed to indicate symbolism (Henshilwood & Dubreuil, 2009, p. 50). More often than not, however, the meaning of symbolism is vaguely specified, if at all, even in those contributions that deal explicitly with the issue. This “poverty of appropriate interpretive concepts” (Wynn & Coolidge, 2010, p. 5) in the discussion of symbolism—as well as of related concepts as “behavioral modernity,” “language,” and “syntactical complexity”—remains a serious deficit up to this day. Without a more fine-grained understanding of the various cognitive processes involved in symbolic behavior, and possibly of various types of it, it seems impossible to settle the matter any further.

Our modern understanding of symbolism is by and large an early twentieth-century invention. The structuralist philosopher de Saussure, who greatly influenced twentieth-century anthropology, elevated the sign to a field of study in its own right, and distinguished the signifier—the material form of a sign—from the signified—that which is referenced. According to de Saussure (2011, p. 67), “[t]he bond between the signifier and the signified is arbitrary.” Peirce, one of the founders of American pragmatism, defended a tripartite distinction between icon, index, and symbol (Atkin, 2010). An iconic relation is one of resemblance, as when a painting or photograph depicts a person. In an indexical relation, one thing indicates another in virtue of a natural relation, as when smoke indicates fire. Finally, a symbolic relation is again one characterized by rule or convention.

Generalizing, the modern concept of symbolism is defined in terms of one thing referring to another in virtue of arbitrary convention. Traditionally, this capacity is further taken to define humans and only humans; demarcating humans from non-human animals in terms of essential characteristics is itself indeed an important aspect of modern thought. Moreover, it is generally held that symbolism is a universal function characterized by a free availability of symbols for the subject in question. As the philosopher of

anthropology Ernst Cassirer (1972, pp. 36–52) put it, human symbolism involves “universal applicability,” such that for humans “everything has a name.” Even the anti-modern existentialist philosopher Martin Heidegger (2012, pp. 203–210), in seeking to outline the essence of the human being (here famously called *Dasein*), claimed it possesses a universal language function that can be used to articulate anything perceived. The free availability of symbols in turn specifies that humans are essentially free to retrieve symbols at any time, effectively allowing them to speak of anything whenever they want.

This modern concept of symbolism, defined by arbitrariness, universal applicability, and the free availability of symbols, still dominates contemporary anthropological and archaeological discourse. For instance, universal applicability is now called “semantically unbounded discourse” (Rappaport, 1999, p. 4), and free availability is called “retrieval ... under voluntary control” (Tallerman, 2011, p. 181). At the same time, recent archaeological findings pose serious challenges to this concept. Difficulties mount when interpreting, for instance, early uses of pigment, the use of manuports such as at Wonderwerk Cave, dated 180 kya (Chazan & Horwitz, 2009), or the decorative use of beadwork and eagle talons by Neandertals. All these findings significantly pre-date the representational art of the Aurignacian, long thought to represent a clear threshold to behavioral modernity, and as such effectively reveal the outdatedness of the century-old concept of symbolism for addressing the evolution of complex social-linguistic behavior in the hominin lineage.

The starting point for the following investigation is that deciding where and when symbolic behavior first occurred is not going to be settled through empirical evidence alone. As Lewis-Williams (2002, p. 8) puts it, we are less in need of “more data” and more in need of “a radical rethinking of what we already know.” This chapter explores the thought that addressing the evolution of symbolism in the hominin lineage requires more fine-grained concepts for differentiating various mental processes and correlative meaning apprehensions involved in the sorts of behaviors generically called “symbolic.” We thus need to rethink symbolism in order to make sense of the data. The method employed for this is a philosophical one called phenomenology. While related to cognitive psychology, phenomenology focuses less on abstract cognitive processes and more on the description of the first-person viewpoint, analyzed in terms of so-called intentional acts and the meaning structures apprehended through them.

The first sections briefly introduce the method of phenomenology and discuss its potential for current research in archaeology, paleoanthropology, and evolutionary psychology. The theoretical midpart develops a phenomenological framework for expressive behavior and early symbol use. A necessary transitional stage in the evolution of human symbolic language is hypothesized, characterized by “practice-embedded symbols”: a form of symbol use without free availability for the subject but instead tied to expressive behavior and shared practices in the “living present.” The final section reviews empirical evidence for the use of pigment and beadwork in the Middle Palaeolithic, which is commonly taken to imply modern symbolic behavior. It is argued that neither pigment nor beadwork were themselves symbols, and that modern, free symbolic behavior is not implied in their production. Their production does, however, presuppose practice-embedded symbolic behavior. It is concluded that, in light of current evidence, pre-modern humans are best understood as using symbols, but that their symbols lacked two components typically associated with symbolic thought, namely, “semantically unbounded discourse” (Rappaport, 1999, p. 4) and “retrieval ... under voluntary control” (Tallerman (2011, p. 181).

The Phenomenological Method

Phenomenology is a school of philosophy founded by philosopher and mathematician Edmund Husserl at the turn of the nineteenth century. Almost all main currents in twentieth-century Continental philosophy either directly involved self-proclaimed phenomenologists or were developed in discussion with phenomenology. Throughout the twentieth century, phenomenology profoundly influenced philosophical thinking in mainland Europe and the United States. More recently, it has found widespread application in psychology, neuroscience, psychiatry, architecture, medicine, and other fields (Zahavi, 2013).

Classic phenomenology as conceived by the founder comprised an ambitious attempt to clarify the sense of the world through an exclusively first-person viewpoint analysis: the way the world *appears* to consciousness. It rests on the presupposition, elevated to an *a priori* insight, that the world can exist only as a correlate of consciousness, hence as appearance (also “phenomenon,” hence phenomenology). In the ordinary attitude of life and science, however, the so-called natural attitude, we allegedly overlook this, as we naively comport ourselves to the objects which make their appearance to us as existing independently of our consciousness (Husserl, 1983).

In the tradition of Husserl, the concept of *intentionality* is central. This concept is unrelated to the ordinary concept of intention: It captures instead the mind’s character of being *directed at* something. Classic phenomenologists analyzed the various ways consciousness is directed at things. They described, for instance, how in talking to another person, one intends the other’s inner states, even though such states are not empirically available. Likewise, in seeing paper money, one is directed at an abstract object, inaccessible to uncultured minds. Being human means to stand in a world of such abstract meaning structures.

Through sober description of first-person intentional consciousness, Husserl sought to make insightful how something like a communally accessible, external world can be “constituted by” (made to appear to) consciousness. Moreover, Husserl held that this constitution is a layered process with an order of complexity. For example, apprehending logical laws is more complex than apprehending the sense of a \$1 bill, and perceiving representations is more complex than direct perception, which is in turn more complex than mere sensation. All such claims are here to be derived exclusively from first-person reflection, not from third-person empirical observation. The “constitution”—the mind’s access to a new class of objects or abstract meaning structures (e.g., “thing,” “tool,” “person,” or “symbol”)—is thus understood to be a stratified achievement, with an order of complexity and development, and with separately analyzable levels (Husserl, 1997, 2001).

Phenomenology, Archaeology, and Evolutionary Psychology

There are at least two good reasons to expect phenomenology to hold promise for the study of cognitive and cultural evolution in the hominin lineage. First, there are empirical reasons to assume “a scaffolding effect” in the evolution of cognitive faculties (Tallerman, 2011, p. 182). This fits well the phenomenological postulation of layers of mental acts and meaning apprehensions, with more complex ones being “founded upon” simpler ones. Phenomenological, first-person descriptions could shed a different light on the stratification of cognitive capacities and the evolution of the subjective viewpoint within the hominin lineage, thereby providing scientists with a new theoretical basis to formulate research hypotheses, and to interpret their findings more accurately.

Second, our efforts to understand the past revolve, to a larger extent than is often acknowledged, around a reconstruction of past subjects and their subjective comportment toward a world as it was once constituted in their living experiences. This is not so much a normative as it is a descriptive claim. Without a general

reference to a horizon of experience of past subjects, no stone tool, perforated shell, or potsherd could mean anything to us. That is to say, we can only understand the use and meaning of such findings in reference to acting, goal-driven, and affective subjects like ourselves. Acknowledging this fact makes it all the more surprising that, to date, there does not exist a subfield of archaeology concerned specifically with the subjective lives of individuals and the worlds once constituted in their living experiences.

A new, phenomenological archaeology is the obvious candidate to fill this lacuna, as phenomenology is the only philosophy concerned exclusively with the first-person viewpoint. In contrast to classic phenomenology, such an undertaking would have to be thoroughly interdisciplinary, in order to reconstruct in a well-informed manner the structures of experience of past subjects, thereby coming to an understanding of the experienced worlds of the past within which the meaning of the artifacts of our records lies. While similar in ways to evolutionary psychology, in particular of the type of intentional analysis made famous by Tomasello (2014, 2021; Tomasello et al., 2005), the phenomenological method would be oriented specifically at the first-person viewpoint: the way the world was subjectively experienced.

To this day, the immense potential of phenomenology for archaeology, paleoanthropology, and evolutionary psychology has been left almost entirely unexplored, in spite of mainstream influences of other branches of continental philosophy, the relevance of which is often far from obvious, such as Marxism, feminism, structuralism, and post-structuralism. The present chapter is not on phenomenological methodology, however. Instead, it aims to outline the basics of a phenomenological approach to symbolic behavior and to apply it concretely to debates on symbolism in the Middle Palaeolithic. While the proof of eating is undoubtedly in the pudding (this chapter being a small slice of that pudding), it goes without saying that more rigorous methodological reflections ought to complement an inquiry of this type, and for these matters I must refer to other work (van Mazijk, 2022).

Before Symbolism: Expression and Communicative Intent

To a large extent, questions concerning the origins of symbolism are analogous or even identical to those concerning the origins of language. To consider the difficult question of symbol use in Middle Palaeolithic communities, it makes sense to look at the evolution of language in the hominin lineage first, including its early phases which are not usually considered symbolic. Departing from the metaphor of a “scaffolding” of mental acts and correlated meaning apprehensions, it is to be expected that certain aspects of modern symbolic behavior are already present in earlier stages.

According to Tomasello and Call (2019, p. 461), there are two broad ways of viewing human language and its evolutionary origins. The first is representationally, as “systems of representation in which symbolic vehicles represent external realities”; the second is “conventionalized forms of social action in which communicative agents attempt to influence one another’s psychological states.”

While these views are not necessarily incompatible, the view that language represents reality seems less appealing from an evolutionary viewpoint. Although popular during large parts of the twentieth century—the earlier discussed modern concept of symbolism fits this general outlook—it has the significant disadvantage of driving a wedge between the “rational” symbolic behavior of humans, which alone involves the active representation of an external reality, and non-human, “dumb” behavior, which would fail to do so.

The second viewpoint takes a more practical stance, as it emphasizes the actions and volitions of intentional subjects in social practices. As such, it also fits better the phenomenological, first-person viewpoint. From this perspective, the evolution of symbolic activity can be regarded as the evolution of complex forms of social behavior by acting, desiring, and affective subjects. More specifically, it concerns complex ways of

“manipulating” others and environments, ultimately for the sake of an occurrent volitional or affective state in the subject.

In an attempt to understand the evolution of language somewhat along these lines, scientists have looked in detail at our closest observable relatives. Great ape communication has been studied extensively over the past decades, in particular its gestural form (Pollick & de Waal, 2007). It is now clear beyond reasonable doubt that great apes are attentive to the viewpoint of others, and that they express themselves with communicative intent (Tomasello & Call, 2019). Yet, apart from in controlled settings, their gestures and sounds are not symbolic (Griebel & Oller, 2021). Chimpanzees rarely point out objects for declarative purposes or just to show interest; most gestures serve to request immediate actions from others (Pika & Mitani, 2009, 169). They do not refer to absent events or objects (Gibson 2012, p. 130), and while sometimes following gazes, they do not spontaneously understand gaze in terms of communicative intent (Pepperberg, 2012, p. 114). Moreover, their gestures are highly contextual and variable even within groups and individuals, and lack syntactical structure (Byrne et al., 2017, p. 755).

Generalizing a fair bit, what great apes in the wild and certain other non-human animals do can, from a first-person viewpoint, be summarized as “expression with communicative intent.” Expression can be understood plainly as the behavioral display of volitions and affections. Even a plain expression without communicative intent is, contrary to first appearance, already intentional in the earlier specified sense. For instance, my desire for food might be frustrated, which I express in outcry. In this case, I crave a food-object which I do not possess; I am directed, no matter how vaguely, at *some* food-object through my state of hunger. Husserl (Husserl, 1984, pp. 409–410) captured this point by saying that “dark longings and urges” relate to an “undetermined ‘something’.” At the same time, what is expressed in outcry is not that undetermined something. With expression, the intentional, “transcendent” (outside of me) object rather lies firmly hidden in what is really expressed, namely the “immanent” (in me) state of hunger. I thus express my feeling of hunger, but both that feeling and its expression are already tacitly directed at an undetermined something.

The higher expressive act with communicative intent naturally presupposes expression, but not reversely. Expressing hunger need not have communicative intent, and then does not constitute language on any reasonable definition. Expression with communicative intent, on the other hand, presupposes what phenomenologists call the “constitution of the other” and psychologists call “Theory of Mind” (Gamble et al., 2018, pp. 52–53). That is to say, it requires that I subjectively apprehend, at least to some extent, that some “thing” I perceive is “another”: an acting, desiring, and affective unity like myself. Without this constitution of the other, there can naturally be no communicative intention, as there would be no-one to communicate with. That the constitution of the other is itself a complexly layered achievement is also reflected in the observable behaviors of non-human animals and human infants, which psychologists and ethologists have studied in detail (see in particular, Tomasello, 2014, 2021; Tomasello et al., 2005; and references therein).

Expression with communicative intent thus presupposes some apprehension of the other. After all, the other is ultimately to be “manipulated” through the expressive behavior, say, by scaring them off. The other in turn understands the expression more or less directly and intuitively, to such extent it has been said this capacity seems “hardwired” (Pika & Mitani, 2009, p. 167). Phenomenologically speaking, this intuitiveness typical of expression is rooted in the fact that, unlike with symbolic behavior, the intentional (here undetermined) object of expression is irrelevant to its successful communication. Expression does not seek to establish joint attention to a determinate object like symbolic acts do; the object or aim of my anger or hunger expression, as well as the reasons why I seek to “manipulate” the other through them, need not be apprehended at all by the other for the immanent state to be successfully communicated. This is different with symbol use and joint attention, where we must invoke an intentional grasp of the reasons of the

speaker, which gives the interpretation of symbols its peculiar character of mediacy, relative to the intuitiveness of expression.

Symbol Use and Relations to the Living Present

Few today would argue that expression with communicative intent amounts to symbolism, and for the same reason many scholars now oppose comparing primate vocal sounds to human language. From a phenomenological viewpoint, expression is characterized by strict ties to consciousness's "living present." On Husserl's (2001, pp. 162–174) innovative account of time consciousness, the living present is the ever-changing "now" of our consciousness-of-the-world, which includes besides the "primal impression" also bits of the future and past in terms of "protention" and "retention." Heidegger (2012, pp. 370–377) later reformed this theory into the "temporality" of *Dasein*, which "stretches out" over both future and past. For instance, my practice of cooking food would be bewilderingly confusing if we took away the future directedness which is included in it, namely, to prepare food for myself and my guests. Likewise, the meaning of this sentence could not be disclosed if consciousness would not keep in retention the sense of the previous word in every new moment. No meaningful practice or directedness toward things is possible save for consciousness's relation to both past and future, both of which are in their distinctive way included in the living present.

Expression as discussed previously is closely tied to this "streaming living present" (Husserl, 2001, p. 170). If I express pain, it is because I am currently in a state of pain. If a chimpanzee invites another for grooming, it is because of a felt desire to be groomed in-the-now. Both such expressions are inherently tied to the affective and volitional states in the living present which they express. This contrasts with human symbolic language, which appears to involve a certain breaking free from expression. I can, for instance, say random things like "dogs are striped animals," without thereby expressing any volition or affective state, without currently seeing dogs, or even believing what I say to be the case. Such a statement is what Searle calls "desire-independent," something great apes appear incapable of (Searle, 2001, p. 2).

In *Experience and Judgment* (1997), originally written in the 1930s, Husserl distinguished various levels of conceptual-symbolic activity, each one "founded upon" the last, in line with the scaffolding metaphor discussed earlier. The novelty of this account, compared to the modern concept of symbolism developed by Peirce and De Saussure, lies in the fact that each of these levels would involve a further severing of the ties to the here-and-now of the living present. It thus provides a theoretical framework for conceptualizing symbolic behavior in terms of distinct types of activities, with varying degrees of dependency upon the living present. This way, it rejects the metaphor of a sudden leap toward free symbolic behavior, in favor of a scaffolding approach.

For present purposes, it suffices to look at the first two levels Husserl described. The first is the so-called (i) extraction of the state of affairs, which concerns an explicit grasp of a perceptually pre-given situation. This is what some contemporary philosophers such as John McDowell (1994) call "demonstrative reference." For instance, I might perceive a use-thing and subsequently point out to others: "this use-thing." Perception already manages to give us relatively stable unities belonging to certain "types" (a kind of proto-generalities), but such unities are constantly built up and broken down in the ever-streaming flow of changing impressions. By pointing out "this use-thing" to others, I manage to "extract" a unity from this flow of perceptions; it is, so to say, lifted out of this ever-decaying stream. At the same time, the extracted unity is still distinctively bound to the stream of perceptions unfolding live, insofar as the new activity is directly founded upon it.

Second, it is for us (behaviorally modern humans) possible to subsequently (ii) disconnect the newly intended unity from the perceptual situation. This way, I might exclaim "this use-thing" without its

physical presence in the living present, and others may subsequently understand what I mean regardless of sharing perceptions or practices with me. This important step makes the extracted unity freely available at all times. According to Husserl, this free availability would not yield a new type of intentional object. It does, however, presuppose new mental processes which a given subject need not possess. Put differently, subjects capable of extracting unities from the living present, and of motivating others to do the same through speech acts establishing joint attention, yet without being able to disconnect those unities from the living present, is conceivable.

Experience and Judgment explores still further grades of freedom in symbolic activity, which cannot be dealt with here. Although no concern of Husserl, it is to be expected that all these activities have their distinctive cultural and evolutionary genesis in the order presented, given that each new level is cognitively more demanding than the last. The reason for this increase in cognitive demand is that each level involves more freedom *vis-à-vis* the living present, meaning there is less cognitive support provided by the living present. This thought is further explored in the next section, which offers an account of “practice-embedded symbols” which are tied to the living present, and hypothesizes their use by pre-modern humans. While using practice-embedded symbols is less cognitively demanding than free and unbounded symbolic activity, their ties to the living present would significantly constrain creativity, often deemed essential to the success of late *Homo sapiens* over competing hominin species (Nishiaki & Jöris, 2019).

Joint Attention and Constructing Reasons

Today, the use of symbols is still frequently said to include “semantically unbounded discourse” (Rappaport, 1999, p. 4), and it has been suggested that even the “earliest kind of word-store used by hominins” must presuppose “retrieval to be under voluntary control” (Tallerman, 2011, p. 181). This section argues that it is more productive to view the evolution of human symbol use in terms of a gradual scaffolding of activities, with an ever-increasing freedom of symbols *vis-à-vis* the living present.

This living present must here be understood not just in terms of the live unfolding of perceptions (which is predominantly how Husserl viewed it in *Experience and Judgment*), but foremost in terms of occurrent volitional states and shared practices. An advanced proto-language could be composed of symbols which, used in speech rather than *Pan*-typical gestures, are cognitively available only when their use is motivated by an occurrent volition and a fitting social practice. Both the volition, which in its initial stage can also be expressively understood by conspecifics, as well as the shared practice serve as a heuristic background for the interpretation of those symbols. This way, symbols would at first retain something of an expressive character. At the same time, their form is arbitrary and has to be culturally transmitted. Such symbols, still closely tied to the living present, can be called “practice-embedded symbols.”

Practice-embedded symbols are a logical fit if we suppose continuity in the evolution of symbolism. To see why, we need to appreciate the different intentional structures of symbols and expressions once more. Expression, as we saw earlier, was already intentional in relating to an undetermined something, but the intentional object lied hidden in what was expressed, namely the immanent state. This meant that while expressing anger involves directedness at some object or goal, that object is not the focal point of the expression. What is expressed, and likewise communicated, is the affective state of anger.

Since the intentional object remains undetermined in expression, it can never become the focal point of joint attention. This is different for symbols: They are characterized precisely by an intentional relation to determinate things, states, or actions. Symbols serve to bring something to the explicit intentional awareness of another. This can happen, for instance, through extraction from a live perception, as in saying “this use-thing,” possibly while simultaneously pointing to or looking at it, in order to establish joint attention. While the other is thus oriented at the tool-thing pointed out by me, they can no longer directly

apprehend my inner state, as was the case with expression. Now that the external object has become the focal point, the inner state, in reverse, must be said to lie hidden in the intentional relation.

In contrast to expression, the successful apprehension of the symbolic act by others presupposes their understanding, no matter how vague, that I am deliberately seeking to “manipulate” their attention. In other words, they must apprehend me as an intentional agent having specific intentions that involve the other. In a way, an expression of anger might also involve the other’s understanding of some intention I have. However, as we have seen, the intention here lies hidden in what is expressed and communicated, namely the inner state of anger. Here, the other seems to understand my expression directly and intuitively, so that the object of my anger and the reason why I “manipulate” the other need not be apprehended for successful communication. Symbolic activity, by contrast, is oriented outwardly at others and the world, and presupposes apprehension of the speaker as having some—now hidden—*reason* for wanting to draw another’s attention to something. Without this grasp of the speaker’s intentions with the addressee, no matter how vague, there can be no shared intentionality or shared goals, and the symbolic act is then inevitably misinterpreted as a direct expression of an inner state.

Now it makes a lot of sense to suppose that the interpretation another has of my reason for drawing their attention to something is especially cognitively demanding in the case of free symbolic activity. This is because free symbols lack supporting expressive structures as well as an immediate, shared practice to which their use is tied. On Husserl’s account, even the plain talk of things that are not perceptually present belonged to a “higher” cognitive level. It is likewise to be expected that, at early stages in its evolution, symbolic behavior would not have been free; there would have been no retrieval under voluntary control. Instead, symbol use would have been closely tied to supporting expressive behavior as well as shared practices that unfold live in the living present. Such expressive behavior and shared practices serve to make the interpretation of abstract symbol use cognitively lighter, as will be shown next in more detail.

Practice-embedded Symbols

Unlike expression, symbol use involves intentional directedness at determinate objects. If I say “this use-thing,” I do so in order to establish joint attention to a determinate object, for instance in an attempt to motivate another to get it for me. With modern, free symbol use, it is also possible to focus another’s attention to non-perceived, abstract, or even impossible objects, and the ways in which modern speakers can do so appear almost infinite. For modern symbol interpreters, there is usually little immediately shared context available for interpreting symbol use by others. For instance, the content of this chapter is not supported by any expressive behavior or occurrent shared practices. This makes its interpretation so cognitively demanding that no other species appears capable of any behavior even remotely resembling it.

Symbols can, however, be used to establish joint attention and to coordinate joint action with far lesser cognitive demands. Such symbols would be tied to the living present, understood in terms of expressive behavior and shared practices, and are called “practice-embedded symbols.” Here, expressive behavior and social practices function in different ways to make successful communication cognitively lighter.

First, expressive behavior is already understood by conspecifics. Building symbolic activity directly onto it requires fewer cognitive innovations than leaping to free symbolism. Early symbol use in the hominin lineage would have been founded directly upon the sorts of bodily expressions which are grasped more or less directly and intuitively, such as expressions, gestures, and (at a later stage) pointing and following gazes. Referential gestures can in fact already establish joint attention to a determinate object; they can bring the explicit attention of others to a unity which is extracted from a flow of perceptions, as in pointing out “that use-thing.” By being immediately founded upon such gestures, symbols can be successfully communicated with little new cognitive processes involved. The only extra step from a gesture to a symbolic

speech act is that an arbitrary sound comes to stand in for the gesture, which requires little more than repeated association. Such a smooth transition from expressions to symbols is to be expected from an evolutionary viewpoint, and it is also mirrored in ontogenetic studies of modern human child development (Liszkowski & R  ther, 2021; Tomasello, 2005).

Second, practice-embeddedness also serves to make interpretation of symbolic meaning cognitively less demanding. Contemporary extended mind theorists would say their meaning can be partially “offloaded” onto the environment (Clark & Chalmers, 1998). For instance, “this use-thing” might at first have been immediately extracted from live perception and closely tied to an ongoing Acheulian practice of tool making, possibly in the Lower Palaeolithic. The social practice of tool making is one others are intimately familiar with; there is a shared understanding of activities, expressions, arm movements, etc., and the intentions and goals they serve. Such a practice is not theoretically known but functions as a background horizon for the interpretation of expressive and symbolic behavior. A shared understanding of a practice can thus serve as a framework for the apprehension of speech acts, and effectively delimits the scope of possible reasons one can be presumed to have for a given symbolic speech act.

Expressive behavior and practice-embeddedness guarantee that conspecifics need consider only a limited set of options in interpreting symbolic speech acts. Rather than a sudden leap to free symbolic behavior, the use of symbols would at first have been contained within shared practices and founded upon expression. Such a community of humans, without semantically unbounded discourse or retrieval under voluntary control, is not only conceivable but moreover appears a necessary stage in the evolution of symbolism, as it is significantly less cognitively demanding than the free symbolic activity of behaviorally modern humans.

Following this theory, an important part of the evolution of symbol use must be said to consist in the gradual severing of ties to the living present. As practices gradually involved more complex shared intentionality and future planning, the living present also expanded, and so did the availability of symbols involved in such practices. Compared to an Acheulian handaxe, the production of beadwork presupposes a far greater temporal unity of the living present: Searching shells, perforating them, and painting them here form a single practice, which must be intended as a whole for each of its steps to be purposively executed. It is to be expected that the availability of symbols, being an integral part of shared practices, will have co-evolved with the gradually increasing complexity of such practices and the living time spans they occupy. This way, the evolution of symbolism would have been part and parcel of the evolution of complex forms of social practice, which in turn can be expected to involve a broad range of cognitive capacities, and thus to be irreducible to a single language capacity (as famously defended by Hauser et al., 2002).

In summary, the concept of practice-embedded symbols allows us to view the evolution of symbolic activity as continuous, rather than as breaking with, expressive behavior. While complex compared to chimpanzee behavior, compared to the symbolic activity of modern humans, which involves around 50,000 distinct lexical items per person (Tallerman, 2011, p. 182), these processes are still quite basic. Practice-embedded symbols may have varied from a dozen to thousands, most likely commencing in the Lower Palaeolithic, where distinct cultural practices such as tool-making originate. This view fits well current evidence for speech capacities in pre-modern humans, including studies of the vocal tracts of *Homo Heidelbergensis* and of Neandertals (Gibson & Tallerman, 2012; Mart  nez et al., 2013), as well as of the presence of the *FOXP2* gene in Neandertals and early *Homo sapiens* (Diller & Cann, 2012). Moreover, a scaffolding of mental activities is a more attractive metaphor than that of a leap—a “spontaneous and sudden invention of language” restricted to *Homo sapiens* (Tattersall, 2021), as some still defend it today.

At the same time, it is far from clear that the free symbolic activity of behaviorally modern humans needs to be invoked to explain the social behaviors expected from pre-modern humans, which include food processing, hunting strategies, cooperative foraging, crafting wooden spears, and painting objects. In general, ascription of more capacities than necessary to explain the data should be avoided (philosophers

name this principle “Ockham’s Razor.” after the Medieval philosopher). There also remains substantial independent evidence that the cognitive capacities of pre-modern humans, particularly Neandertals, were very different from ours (Bruner, 2004; Miura et al., 2019; Roseman et al., 2011; Spikins et al., 2014). This should discourage the ascription of modern (free and unbounded) symbolic capacities to pre-modern humans, if not strictly necessary to explain existing data.

The next and final section turns directly to the most important existing data, namely concerning the use of pigment and beadwork in the Middle Palaeolithic, which is often taken to indicate free symbolism in the behaviorally modern sense. It is argued that while the social activities on which their production relied plausibly involved a host of practice-embedded symbols employed in complex social practices, free symbolism need not be presupposed, and it is unlikely either pigment or beadwork had a symbolic function. Empirical evidence from the Middle Palaeolithic therefore does not directly support free symbolism, but fits the theory of practice-embedded symbols.

Reflections on the Use of Pigment and Beadwork in the Middle Palaeolithic

The problem of symbolism in Middle Palaeolithic pre-modern humans has been debated over extensively in recent years. Debates have centered on the use of pigment and beadwork in both Neandertal and early *Homo sapiens* communities, with attention focused on sites in southern Africa and the Iberian Peninsula. The use of pigment in the Middle Palaeolithic is now beyond reasonable dispute, and use may go back 400 kya. Beadwork is a more recent accomplishment, but still predates representational art such as figurines and cave paintings significantly. Although a practical function cannot always be excluded (Hodgson, 2021; Hovers et al., 2003), both pigment and beadwork are usually presumed to have served decorative purposes. However, the meaning and symbolic function of both are disputed.

Some even earlier candidates for symbolic behavior date back to the Lower Palaeolithic, but these are usually set apart from symbolic behavior in the modern sense. One famous example here is the Acheulean handaxe from Norfolk with a fossilized shell. This is an early case of found art, possibly dating back some half a million years ago. However, it is generally agreed that found art of this type need only suggest that a certain affective state is invoked in the subject in virtue of perceived qualities of the object. It does not involve one thing referring to another, as a symbolic relation on the modern understanding demands. Another well-known example is the Makapansgat pebble, likewise a case of found art, which may have been appreciated by Australopithecines well over 2 million years ago (Oakley, 1981). Although here the result of a stimulated capacity for facial recognition, the Makapansgat pebble probably also instilled a certain affective state in the subject, perhaps producing a “funny inner feeling” (Taylor, 2002, p. 202) or “excit[ing] their merriment” (Dart, 1974, p. 168). The pebble, then, did not refer to anything: It is rather a case of seeing “meaningful patterns”—a face—in “meaningless data” (Bednarik, 2017, p. 101).

Debates on symbolism in pre-modern humans therefore mainly center on the Middle Palaeolithic. Pigment use and beadwork, both presumably serving decorative purposes, are often taken to indicate symbolism (Henshilhood & Dubreuil, 2009, p. 50). Vanhaeren and d’Errico (2006, p. 1107) take the function of beadwork to be “exclusively symbolic,” and further argue that it indicates syntactical language capacities. Zilhão (2007, pp. 40–41) concludes that “a Rubicon had already been crossed” some 400 kya, and Zilhão et al. (2010, p. 1023) takes body ornamentation to imply behavioral modernity and thus free and unbounded symbolism. Dated by Hoffmann et al. (2018, p. 5) at 115 kya, perforated shell findings at Cueva de los Aviones are suggested to leave “no doubt that Neandertals shared symbolic thinking with early modern humans.” Most recently, Prévost et al. (2021, p. 1) suggests “symbolically mediated behavior” for Middle Palaeolithic *Homo sapiens*, based on findings in Israel dated some 120 kya.

From a phenomenological viewpoint, the use of pigment, which is the oldest of the two decorative items focused on, does not of itself imply symbolism. This is because the use of pigment does not immediately indicate the use of any symbolic form through which an intentional relation to a determinate object is brought about. Put simply, pigment refers to nothing. It is in this regard worth pointing out that pigment is striking precisely for its perceptual qualities. This suggests that its immediate visual effect is what mattered, rather than, as with symbols, a relation to an object through arbitrary form. The use of pigment, then, cannot straightforwardly be taken to suggest a symbolic function, as archaeologists often assume.

Colored beadwork is significantly more complex than pigment use, as it requires the active creation of composite tools with a decorative function. Still, it is not clear that its use must have involved free symbols. As mentioned already, Vanhaeren and d'Errico (2006, p. 1107) argue that the function of beadwork “is exclusively symbolic.” They claim to derive this from ethnographic studies, but their case is not wholly compelling. Beadwork may, as they claim, help “within-group cohesion and fixing boundaries with neighbouring groups.” However, this implies neither free symbolism nor syntactical language. After all, shells, like pigment, have a decorative function, and it must be presumed their use is motivated first of all by perceptual qualities. In terms of use and meaning, beadwork is similar to body paint; neither establishes joint attention to any determinate object. The claim made by d'Errico and Vanhaeren (2012, p. 301) that beadwork shares “social information ... by means of a shared symbolic language” thus appears unfounded, even when it cannot strictly be excluded.

Others have been more critical of ascribing free and unbounded symbolic behavior to pre-modern humans, including Wynn and Coolidge (2007), Henshilwood and Dubreuil (2009), Botha (2012), and Hodgson (2021). Wynn and Coolidge (2007, p. 88) correctly point out that a certain “intentionality typical of modern human social interaction” is presupposed, but not that “beads stand for anything at all.” Henshilwood and Dubreuil (2009, p. 52) similarly note that beadwork “suggests that one person can understand *how* she looks from the point of view of another,” which involves complex theory of mind, but not modern symbolism necessarily.

From a phenomenological viewpoint, it seems likely that the use of both pigment and shells was motivated by associations awakened in virtue of natural, perceptual qualities. Rather than bringing any determinate thing before the mind, direct visual presence would have associatively awakened certain qualities which give, in case of ornamentation, its wearer some unspecified advantage. Such associations might rest on resemblance—menstruation and fertility are sometimes suggested (Marean, 2010). Interestingly, the Enlightenment philosopher Kant already illustrated the role of such associations in his *Anthropology* lectures. He noted that we often cannot prevent “the impression that a well-dressed person makes of obscure representations of a certain importance” (Kant, 2007, p. 137). In other words, perception represents people with qualities of importance, strength, and the like. A certain beadwork might, like a fancy suit today, associatively awaken ideas of importance, and such associations subsequently feed into the intentional relation: The other is visually represented as an important person.

Generally speaking, such associative processes are shared with other extant hominids. It is far less clear, however, that great apes are capable of explicating such obscure representations in the way in which we, also on Kant's account, can do this (van Mazijk, 2020, pp. 53–57). For us, behaviorally modern humans, these processes do not stay wholly unconscious; we can, with little effort, become explicitly aware of such representations. The fact that pre-modern humans actively manipulated objects such as colors and shells for decorative purposes indicates that for them associatively awakened representations no longer stayed wholly in background awareness. Instead, they were most likely apprehended in their own right, as objects were explicitly manipulated in light of such apprehensions. This could point to increased cognitive fluidity (Mithen, 1996) and globularity (Boeckx & Benítez-Burraco, 2014). It almost certainly indicates a higher capacity for reflection or “access consciousness” (Block, 1995), enabling the subject to survey associations and their intentional effects, also for the minds of others through simulation.

In summary, current debates about modern symbolism in Middle Palaeolithic communities revolve around the use of pigment and beadwork. It seems undeniable that the use of pigment and beadwork presuppose various complex intentional activities. Both practices rely on joint attention, shared goals and cooperating in achieving them, and the capacity to apprehend the perceptual-intentional effects of decorations, both for oneself and for others through simulation. These are complex mental activities, yet most of them seem within the reach of modern human infants at about three years of age (Tomasello, 2021, p. 8). The complexity of such activities does not indicate that either pigment or shells themselves had a strict symbolic function, or that free and unbounded semantic discourse was conditional to their production. Nevertheless, it is likely, as I outlined earlier, that a great deal of practice-embedded symbols were involved, with varying ties to shared practices in the living present—not because pigment or shells were themselves symbolic, but because their manipulation in social practices presupposes complexly orchestrated joint attention toward determinate objects, sharing goals, and awareness of the perceptual effects of modifications for others.

Conclusion

Pre-modern humans used speech with symbolic meaning. Unlike with behaviorally modern humans, such symbols were limited in number, and successful communication relied on expressive behavior and an occurrent social practice, which first made their successful communication possible. This theory of practice-embedded symbols fills an important gap in our understanding of the evolution of language, and allows of evolutionary continuity between expressive behavior observable in great apes and modern free and unbounded symbolic behavior.

Furthermore, current archaeological evidence for modern symbolism in the Middle Palaeolithic is not compelling. It is not necessary to suppose that either pigment or beadwork had a symbolic function, or that free and unbounded discourse is conditional to their production, even when their use presupposes a host of intentional activities characteristic of modern behavior, such as shared intentionality and simulating viewpoints of others. Current evidence is better compatible with the theory of practice-embedded symbols outlined.

This chapter is part of a bigger project which seeks to combine phenomenology with archaeology, paleoanthropology, and cognitive psychology. Phenomenological analysis can be used to differentiate various layers of mental activities and subjective meaning apprehension. Used in a new, interdisciplinary fashion, this type of analysis can help us to better understand the first-person viewpoint and its evolution in the hominin lineage. More phenomenological research on a variety of topics concerning human cognitive and cultural evolution should be encouraged. As Jackendoff (2003, p. 651) put it, “everyone will have to give a little in order for the pieces to fit together properly.”

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