

Symbolism in Prehistoric Man

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ABSTRACT

*The aptitude for symbolization, characteristic of man, is revealed not only in artistic representations and funerary practices. It is exhibited by every manifestation of human activity or representation of natural phenomena that assumes or refers to a meaning. We can recognize functional symbolism (tool-making, habitative or food technology), social symbolism, (language and social communication) and spiritual symbolism (funerary practices and artistic expressions). On the basis of these concepts, research into symbolism in prehistoric man allows us to recognize forms of symbolism already in the manifestations of the most ancient humans, starting with *Homo habilis* (or *rudolfensis*). Toolmaking, social organization and organization of the territory are oriented toward survival and the life of the family group. They attest to symbolic behaviors and constitute symbolic systems by means of which man expresses himself, lives and transmits his symbolic world. The diverse forms of symbolism are discussed with reference to the different phases of prehistoric humanity.*

Introduction

In the history of life, symbolization appears with man and characterizes his behavior. This statement might prompt some objections by those who observe behaviors in some animals that simulate the ability of symbolization. However in these cases, one must really speak of signals to which correspond certain contents or messages in a bi-univocal correspondence between the sign and the message. This correspondence could be determined by genetics, by imprinting, by training or even by random association. and is determined by cosmic factors. However there

is no lack of reports of activities interpreted as symbolic in the behavior of the chimpanzee and gorilla.

In contrast, with regard to prehistoric man, various scholars limit symbolism to the manifestations that *Homo sapiens* has left us in the field of art¹ or that Neandertal Man exhibited with his burial practices^{2,3}. According to Chase and Dibble⁴ there is little archeological evidence for symbolism in the Middle Paleolithic of Eurasia and it is only in the Upper Paleolithic that symbolism appears. Davidson and Noble⁵ linked culture to the symbolic language that can be

recognized only in fully modern man. Accordingly »it will therefore be misleading to talk of culture for any hominids before fully modern humans.« The manifestations of art and thus of symbolic activity are observed beginning from the Upper Paleolithic, hence with *Homo sapiens sapiens*¹. According to Lindly and Clark⁶ »neither archaic *Homo sapiens* nor morphologically modern humans demonstrate symbolic behaviour prior to the Upper Paleolithic«. Also according to Leroi-Gourhan⁷, the ability of abstract and symbolic thought is recognized only in the forms of *Homo sapiens*. For the previous humans he speaks of technical thought.

However these ways of viewing symbolic activity are framed within a rather reductive conception of symbolism, which indeed is limited exclusively to manifestations of figurative art. In our opinion, to avoid seeing symbolization where it is not and not seeing it where it is, it is necessary to clarify what is meant by symbolism. This problem is more hermeneutic and philosophical than scientific, but it cannot be avoided, as we pointed out in a previous paper⁸.

The symbol: hermeneutic aspects

The symbol is an element of recognition. In the etymological meaning, it consists of two halves of an object, possessed by two people, which allow them to recognize the object. According to Ries⁹ »the symbol is a concrete and sensible signifier that suggests the meaning and reveals it transparently«. »The symbol has a visible basis, an identifiable aspect. The meaning is the invisible and unknown part, the content that man must discover«¹⁰. »The function of a symbol is to reveal a total reality, inaccessible by other means of knowledge«¹¹.

The symbol is therefore a sign, a material reality, visible, which refers to some-

thing else that is invisible, to a meaning that is part of man's imagination. However the concept of symbol is distinguished from the concept of mere sign. The symbol goes beyond the sign. The sign is a thing, an element of the physical world that takes the place of another thing or indicates it, whereas the symbol is not a thing, but a meaning that structures reality. According to Cassirer¹², all reality can assume a »symbolic pregnancy« and the symbolic represents the meaning that in consciousness acquires objective reality. As observed by Ricoeur¹³, »Cassirer assigns to this concept a magnitude equal to that of concepts of reality on the one hand, of culture on the other; thus a fundamental distinction disappears, which to me constitutes a real dividing line: between the univocal expressions and the multivocal ones.« According to Ricoeur, the sign has a univocal character, related to pure functionality or physical phenomena, while the symbol has a multivocal character, it contains a superabundance of meaning.

It is man who attributes symbolic meanings to things (graphic sign, representation, sound) or recognizes in natural phenomena and in the cosmic elements the reference to something else. »The symbol leads to thinking,« affirmed Ricoeur¹⁴, referring to an aphorism of Kant, »it is the dawn of reflection«¹³. Where there is thought, there is capacity for reflection.

Symbolization constitutes the deep core of the human psyche, a specific expression of man's cognitive activity.

In modern hermeneutics, with the fundamental contributions of Dumézil, Jung, Corbin, Eliade, Durand, Ricoeur and Ries, the symbol has assumed a fundamental value. It constitutes the framework in which human activity occurs and develops, bringing forth *Homo religiosus*, i.e. the sense of the sacred, and forms the

basis of the communication on which society is founded.

According to Eliade¹¹, in recent decades there has been a rediscovery of symbolism, especially its gnoseological value and its belonging to the substance of man's spiritual life, to which is linked history.

For Ricoeur the symbol is the indicator of human activity. Where there is thought, there is ability to symbolize. He believes that »each symbol is ultimately a hierophany, a manifestation of the link of man with the sacred« and he adds: »in conclusion the symbol speaks to us as an index of the position of man at the center of being in which he moves, exists and wishes«¹⁴.

Gilbert Durand¹⁵ identified an anthropological itinerary in symbolization beginning from the messages that reached man from the cosmic reality, which is encountered with the subjective impulses of the human psyche. According to Ries¹⁰ »the symbolic apparatus is constituted by all the possible gestures of man and by the primary and universal images (celestial vault, sun, etc.)«. However, as Eliade¹¹ observed, »the symbol cannot be the reflection of cosmic rhythms since they are natural phenomena, since a symbol always reveals something more than what the aspect of cosmic life represents«.

Words, gestures, signs, like the natural reality in which they are immersed, can acquire a symbolic value in an infinite variety of meanings. It is man's imaginary world. The different aspects of human behavior, from technology to language to social organization, constitute symbolic systems through which man expresses himself and transmits his own image.

The concept of symbolic is thus very broad, being able to include the various expressions of human behavior. At the same time, symbolism is the spiritual en-

vironment in which man lives and of which man lives, starting from the cosmic reality in which he is immersed.

Symbolic expressions in the human activity

The broad meaning of a symbol allows not only language and the representations of mural and portable art to assume a symbolic character, but also many manifestations of human behavior. They come to assume, in the words of Cassirer, a »symbolic pregnancy«. Thus the responses to biological needs, tool technology and the relationship with the land are also enriched with meaning. (for instance, the habitation (hut or house) is not only a place of shelter, but a symbol and the means of family cohesion; clothes are not only for protection of the body, but can have an esthetic or social meaning, or one of modesty, etc.). Even the products of technology reveal the abstract ability of man. He thinks about the tool that he wants to make, represents it ideally and provides the manufactured tool with a meaning within the context of a system of relations with physical reality and with the human environment. However this meaning is not limited to the specific function to which the tool is primarily devoted. For this reason, the tool is not only manufactured and used, but is preserved within the context of life and improved with regard to its possible uses. Unlike what we see in the animal world, including the apes, the tools made by man are not accessories to be used and then discarded. They are preserved or, if abandoned, are replaced by better tools. The relationship with the land, by means of the delimitation and organization of spaces, not only responds to a plan but also provides the inhabited place with numerous meanings, social ones as well as protection.

For these cases, I propose to speak of *functional symbolism*. The artifact assumes a meaning in its objectivity, a reference to an idea, to a purpose imagined by the person who manufactured it, and it is part of a complex of activities and of a system of relations that form the social life. Technology gives a symbolic value to the tool or to the organized space because it develops in man's imagination.

By means of signs or sounds with symbolic content, it is possible to communicate and establish relationships not only in relation to emotional states but also to situations that are distant in time. In this way, there is a memory of events and a projection into the future, as well as an expansion of the sphere of social life and interpersonal communication. This occurs especially with language and other symbolic systems of social communication which in man are linked to the mind, to his cognitive ability. It differs radically from the forms of non-verbal communication of other mammals, even though »primate communication should tell us a great deal about the evolutionary background of human gesture-calls«¹⁶. Words provide communication in the absence of the things to which they refer, making an abstraction of what is immediately available to the senses. Thus one achieves a particular communication of one's own internal world and experience. Symbolic communication through language represents the environment in which social relationships and new systems of relations are formed and it produces the efficient transmission of culture. Symbolic language, culture and social life are closely related in man. I propose to attribute these behaviors to *social symbolism*.

Other forms of symbolism are those in which the communication concerns the interior life of the person without particular relation to individual or social necessities. Indeed, this goes beyond biology and social organization, as occurs in the

world of art, religion or ethics. These expressions could be related in some way to biological and social life, e.g. representations of animals or scenes of life in prehistoric art which reflect the mentality of man. At other times the representation is based on physical observations, e.g. astronomical ones, as in cosmic symbolism. However there is always a transcendence of phenomenal reality, a passage from the object to its image; this operation can be attributed to a conceptual activity. In this case I would propose to speak of *spiritual symbolism*.

Functional symbolism is connected with the survival of the individual and of the group. The purpose of social symbolism is also individual and group preservation; it includes the aims of functional symbolism, but exceeds it, being placed on a biological-social plane. Spiritual symbolism goes beyond the sphere of both functional and social purposes.

Individual and social life is soaked with symbolism which represents not only the deep core of the human psyche but also the environment in which man is immersed and lives. Symbolization and projective ability constitute the fundamental elements of culture, whose importance emerges in relation to adaptation to the environment and to survival^{8,33}.

Symbolic activity in prehistoric man

Expressions of symbolism by prehistoric man can easily be recognized in recent prehistory, from the manifestations referable to the sun cult or the mother goddess (in the Chalcolithic and Neolithic) to the representations of mural and portable art of the Upper Paleolithic to the funerary practices. These are demonstrations of spiritual symbolism whose profound nature is indubitable, whatever the meaning they may have had in relation to individual and social life.

The propitiation of hunting, the exaltation of fertility and thus a magic-religious meaning have instead been recognized by many scholars in the manifestations of prehistoric art (Breuil, Begouin, Lantier, Graziosi, etc.). According to Leroi-Gourhan¹⁷, without excluding religious symbolisms, one can recognize references to sexuality in the preferential representation of some animals, while Laming Empereur¹⁸ emphasized their connection with social life.

However it is not these manifestations of symbolic behavior that I wish to discuss. One could say that there is general agreement in recognizing that they are the products of a *Homo symbolicus*.

Problems can arise when one seeks symbolic expressions in the most ancient phases of prehistoric man. In this regard, if human behavior is essentially symbolic, we will find man where there is symbolism and the origins of symbolism must coincide with those of man. Perhaps it is this intimate connection that should be investigated thoroughly. As Sahlins¹⁹ points out, »men begins as men, in distinction to other animals precisely when they experience the world as a concept«. But from what moment can we recognize the signs of a cognitive ability, i.e. symbolic behavior, so that we can consider that we have found man and not a hominid yet to cross the human threshold? It is the same old question: when did man appear on earth?

In my view, the presence of man cannot be restricted to the forms of the Upper Paleolithic and not even to those of the Middle Paleolithic, as if only in that era was there the awakening of knowledge and the beginning of specifically human tradition, i.e. that of our species, as proposed by Halverson²⁰. Even less convincing is the opinion that the discontinuity between Paleolithic and Neolithic, marked by symbolic representation, is so great as to make us believe that »true«

man was born or »reborn« in the Neolithic, on account of his infinitely increased symbolic ability²¹.

Certainly there has been a strong acceleration of manifestations of culture in the last 30,000 years. Nevertheless projective ability and symbolic activity can also be recognized in the Lower Paleolithic, as we will try to illustrate.

On the strictly biological plane, the start of human cognitive activity required a certain development of the brain. Keith²² spoke of a cerebral Rubicon, a threshold of about 750 cc. However Piveteau observed: »in such research the anatomical criterion can be only a factor of indecision: the psychic criterion is decidedly preponderant«²³. To recognize when the threshold of reflective thought was crossed is not easy. Indeed it must be admitted that there is a zone of uncertainty. As Teilhard de Chardin observed, man entered the world on tiptoes, when we see him he is already a crowd.

Technology and functional symbolism

According to many paleoanthropologists (Tobias, Coppens, Piveteau, De Lumley, etc.), it is with *Homo habilis* (or *rudolfensis*), 2–2.5 million years ago, that the manifestations of culture begin and then develop in time. With the earlier Australopithecines, there are no signs of true culture, expressions of projective and symbolic behavior, even though Leroi-Gourhan⁷ considered them as men, endowed with reflective technical activity.

There is evidence of flaked stones in the era of the Australopithecines (3 million years ago) which must be attributed to those hominids unless more advanced forms referable to the genus *Homo* existed, as some authors have suggested on the basis of postcranial fossils discovered in the Hadar formation in Ethiopia and at Kanapoi in Kenya²⁴. According to Coppens²⁵ »the retouched tool was cre-

ated before man by prehumans.« Davidson and Noble⁵ believed that it was not necessary »to invoke a mental template for the handaxes of the Lower Paleolithic.« We can ask then: when should a tool be considered the work of man? In effect, the simple presence of a tool, when we are dealing with roughly broken stones, or its use is not sufficient to attest to the presence of man. Something similar has been reported also for the chimpanzee (cf. among others, McGrew, Tutin and Baldwin²⁶).

In our opinion, the human trait of toolmaking is indicated by the planning by which the tool was made, by the meaning that it had in the mind of the maker and in the hominid lifestyle of which it was part²⁷. Bergson²⁸ remarked, »The intelligence observed in what seems to be the original trend is the ability to manufacture artificial objects, particularly tools to make tools, and to alter them independently of their manufacture.« That is not seen in the Australopithecines (nor in the chimpanzee) because the possible flaked stones found in some strata which also contain their remains do not have these characteristics: they do not form a symbolic context, they are not found along with signs of deliberate activity. This is instead observed with *Homo habilis* who, in addition to flaking stones, preserved them, improved the techniques of their manufacture, used them to make other tools, intentionally organized the territory by means of the delimitation of spaces and of activities. In contrast, the Australopithecines lived for a very long time (more than 3 million years) without leaving evident signs of behavioral progress and perhaps became extinct in the competition with other savanna species and with the environment because of this inability. For man, the tool that he manufactures is necessary for survival²⁹, it is not a luxury.

Therefore the signs of projective and symbolic activity can be recognized in the systematic manufacture of tools, the organization of the territory, subsistence economy and social organization. When the tool is produced intentionally, in a variety of forms, when it is used in a certain environmental context, when it is preserved (and not only used occasionally and then discarded, as in non-human beings), when the tools are accompanied by an organization of the territory and a social structure, when there is development in time of the techniques employed, then we can say that all this expresses a symbolic system of relations.

Particular significance is attributed to the regular division of food within the family group, considered a characteristic of human behavior²⁹.

Toolmaking and the organization of the territory, oriented to subsistence and to the life of the family group, constitute a symbolic system of relations that developed during evolutionary history. I agree with Deacon³⁰ who stated: »stone and symbolic tools, which were initially acquired with the aid of flexible ape-learning abilities, ultimately turned the tables on their users and forced them to adapt to a new niche opened by these technologies. Rather than being just useful tricks, these behavioural prostheses for obtaining food and organizing social behaviours became indispensable elements in a new adaptive complex. The origin of »humanness« can be defined as the point in our evolution where these tools became the principal source of selection on our bodies and brains. It is a diagnostic trait of *Homo symbolicus*.« This could be considered a »noospecies« (obviously a virtual species) characterized by a patrimony of information and characteristics with symbolic content, transmitted as a cultural fact³⁰. According to the same author, »the introduction of stone tools and the ecological adaptation they indicate

also marks the presence of a socio-ecological predicament that demands a symbolic solution.«. When that began is difficult to establish, assuming a phase of transition between *Australopithecus* and *Homo*. However a global approach is needed, one not limited to fragmented manifestations.

What should be observed is that the symbolic activity expressed in the products of technology is found in the succession of human species or subspecies, in which we tend today to recognize morphological stages (Coppens, Jelinek, Piveteau, etc.) rather than different species. The real problem could be to identify systems of social relations with symbolic content.

Many authors see signs of symbolic activity in the Oldowan culture of *Homo habilis* (or *rudolfensis*), although the evidence is not always obvious for all the specimens attributed to this phase. But there is not a general agreement about this interpretation. In our opinion the pebble-tool culture and the organization of the territory documented in this phase seem to suggest a symbolic ability. In the choppers and chopping tools manufactured, used and preserved by the group, in the transmission of the toolmaking techniques, in the organization of the territory of *Homo habilis*, we can recognize the adaptive behaviors that presuppose symbolic systems of relations.

The paleosurfaces of Olduvai in Tanzania, of Melka Kunturè in Ethiopia, of Okote in Kenya, dated to between 2 and 1.6 million years ago, reveal a certain organization of the land and strategies for food-searching related to the tools³¹. As has been mentioned, according to Deacon³⁰ the introduction of stone tools and the adaptation that they show characterize a socio-ecological situation that requires a symbolic solution. Julien Ries⁹ has observed that the flaking of flint implies experimentation, imagination, choice of the

material and the form; he also attributes a symbolic meaning to the organization of space.

These behaviors are included in what we have called functional and social symbolism. With regard to *Homo erectus*, the cultures of the Lower and Middle Paleolithic exhibit more clearly the elaborate techniques of workmanship (bifacial, Levallois), organization of spaces (habitational, for hunting) and forms of social life that cannot be explained without human cognitive activity, characterized by planning and charged with meaning. Even the construction of spears for hunting, as documented in the deposit of Schoeningen dated to 400,000 years ago, must have required a conceptual activity. According to Marshack³² »rare instances of symboling and problem-solving in the archaeological record of the European Acheulean and Mousterian suggest highly evolved potentially variable hominid capacities... They also reveals a capacity for planning and mapping or modeling the territory and culture in time and space«.

As we pointed out, planning and symbolization have been of decisive importance for human survival in the long times of lower and middle Palaeolithic³³. It seems incorrect to minimize the importance of symbolism with regard to daily existence before the Upper Paleolithic, as Lindly and Clark⁶ maintained, even though the archeological record is less rich than that for the behavior of modern man.

Symbolic communication and social symbolism

As Rindos³⁴ puts it, »the evolution of the symbolic capacity is the evolution of the social and vice versa«. Symbolism and social life are strictly linked, and a particular expression of social symbolism is language. Indeed there is nothing more human and social than language, but lan-

guage does not fossilize. The discussions and different interpretations of the development of language are well known..

Certainly symbolic communication reaches its most rapid and immediate expression in language, but language does not leave signs that document it directly. Some scholars would limit it to the period in which prehistoric man left pictograms or signs of evident symbolism (i.e. funerary practices). According to Noble and Davidson³⁵ the origin of language as we know it today is to be placed between 100,000 and 70,000 years ago. However in addition to impoverishing its presence, this would not agree with the other aspects of projective technology and symbolization mentioned above. According to Milo and Quiatt³⁶ language and culture would be developed parallelly. For long time, as pointed out by Hewes³⁷, an indiffrentiated culture would not have required a highly elaborated language. Mile and Quiatt distinguish a premodern humanity with an early language in which a substantial portion of the information content was conveyed by gesture (multimedial model) and a modern humanity (*Homo sapiens sapiens*) with a vocal-auditory language as we know it today (phonemicized, syntactical).

We agree with those who see a close relationship between the manufacture of tools, social behavior, language and neuronal development^{38–41}. Only a global approach (anatomical, technological, social) can help, albeit indirectly, to identify the presence of language in fossil man, particularly in the more ancient phases^{42,57}. Conclusions based solely on one type of analysis could be misleading. However taking a global approach to the topic, we believe that human language is very ancient.

From the anatomical point of view, the function of language requires organs for phonation and suitable nervous centers. The structures for phonation do not fos-

silize but the skull base can provide information about the upper respiratory tract. Indeed there is a relationship between the descent of the larynx (leading to enlargement of the pharynx for the formation of sounds) and the base of the skull. According to the observations of Laitman and Heimbuch⁴⁴ and Laitman⁴³, in man basicranial flexion occurs after the first years of life in relation to the descent of the larynx. This flexion is not observed in the great apes nor even in the Australopithecines. Signs of flexion are observed in *Homo erectus* of Lake Turkana (KNMER 3733) and complete flexion, as in modern humans, 300,000–400,000 years ago. With regard to *Homo habilis*, the data are still uncertain. Nevertheless this type of approach has been criticized by some scholars.

In addition to the organs of phonation, language also requires nervous centers, identified as the areas of Broca and of Wernicke in the left hemisphere of the brain. »The primary function of Broca's area is to direct the sequencing of the vocal chords«⁴⁵. According to Falk⁴⁶, Broca's area in *Homo habilis* closely resembles that of modern humans, while no difference has been observed between *Australopithecus* and the great apes. On the endocranium of *Homo habilis* there is not only the imprint of Broca's area (devoted to the formation of sounds), but also that of Wernicke's area (for the comprehension of sounds); this imprint is exclusive to human beings (Tobias^{47,49,50}). Broca's area may have played a role in the hierarchical organization of manual abilities⁵¹.

The increase in the size of the brain and the differentiation of the areas related to language would reflect a selection for the production of language that could have begun with *Homo habilis*^{47,48,59}.

In effect there seems to have been some correlation between the development of Broca's area and the ability to make tools both in *Homo habilis* and in

*Homo erectus*⁴⁸. According to many scholars, both the learning and transmission of toolmaking techniques required the mediation of language.

Toth⁵² has shown that the ancient populations at Koobi Fora manufactured tools between 1.9 and 1.4 million years ago (Oldowan tools have been found in the relevant strata) and that the right hand was used preferentially to strike the cores. This was inferred from an analysis of the cortical surfaces, indicating a preferential clockwise direction of the cores, which agrees with what is seen in modern right-handed stone cutters⁵³. The tendency of the dominant hand to accompany language with gestures, regulated by the left hemisphere, also suggests a relation between right-handedness and language ability. The evolution of toolmaking, right-handedness and the lateralization of language were probably interdependent⁴⁸.

These considerations and the discussion of the meaning of the Oldowan culture suggest that we should not attribute to the development of the areas of Broca and Wernicke in the most ancient human forms (Lower Paleolithic) only a meaning of »preadaptation«, i.e. that the anatomical structures for language emerged before the function⁵. It is very likely that there was already in *Homo habilis* a form of symbolic linguistic communication, perhaps with simple phonemes, although the first humans must have had a simpler set of grammatical rules and syntactic aspects than those of modern language. Even Lieberman, who maintains that the full development of human language occurred in a recent era, now concedes some degree of language and syntactic ability to *Homo habilis*, although he denies that it was fully modern language⁵⁰. In this regard, Tobias⁵⁰ argued that we should not think in terms of two stages of linguistic evolution (not fully modern and fully modern); »rather there

might have been a succession of stages of increasing complexity of the conceptual and syntactic modes of languages«; however »the earlier forms and the later, more evolved modes of language all qualify as human spoken language«.

Saban⁴¹ has observed: »although the Neandertals and with them the whole of *Homo erectus* could not pronounce all the present phonemes, the complexity of their way of life required oral communication to evoke water, fire, hunting, harvesting of edible fruits and vegetables, the different tool-kits they used, as well as the ritual practices.«

The human trait of language does not derive from syntactic complexities but from the ability to utter sounds, possibly accompanied by gestures, which have a symbolic content and are logically connected in the expression of a thought. This form of communication should be considered closely correlated with the other forms of social communication required by and related to family life, the organization of the territory and hunting, the manufacture of tools and the transmission of cultural knowledge. After all, true culture would not be possible without symbolic communication. Language must be considered an expression of social symbolism closely linked to culture and to the life of man. *Homo loquens*, because *Homo symbolicus*.

Artistic and religious expressions as spiritual symbolism

Although it is true that research on human symbolism cannot be limited to the direct signs of conceptual activity, these remain the most significant ones. The frequency with which they are present in the Upper Paleolithic, especially in the artistic representations, has prompted talk of a true »explosion« in this period (whose early signs can be attributed to archaic *Homo sapiens* in Africa). This has induced some authors to claim that the

birth of symbolic thought occurred with *Homo sapiens sapiens*, anatomically modern man. Nevertheless the absence of manifestations referable to art is not a motive for the *a priori* exclusion of the possibility of artistic expressions. Indeed there is evidence from more ancient eras that represents direct signs of a conceptual symbolic activity, although this not always easy to interpret. The first clear reference is to burials, whose certain documentation goes back to 90,000 years ago (Skhul, Qafzeh). Although some scholars deny a symbolic dimension to the funerary practices of the Neanderthals^{5,56} it is plausible to recognize a symbolic meaning for the burials, in particular when it is accompanied by equipment. The intentional burials attest that death has changed its meaning for the man^{53,54}. They became more frequent in the Upper Paleolithic. However the deliberate treatment of skulls, which can be recognized in various Middle Pleistocene sites, also reveals an interest that is not merely material.

We can mention numerous objects left by prehistoric man before the Upper Paleolithic. A collection of ostrich eggshells and fragments of seashells belonging to an ornamental object, dated to 40,000 years ago, were found at Enkapune Ya Muto in Kenya. Collections of stones with strange shapes or of fossil shells have been found in Neandertal sites; these attest to interests and attentions not related to merely material needs (the interest in collecting shells for ornamental purposes would thus precede what is known for the Upper Paleolithic). A bone fragment with a zigzag incision was found at the Mousterian site of Bacho Kiro in Bulgaria. Two beads or pendants made of animal bone in a Micoquian site of Bocksteinschmiede in Germany (100,000 BP) were discovered. The site of Tata in Hungary has yielded an manufactured article made from a mammoth molar and colored with red ochre, from the

Mousterian era 100,000 to 50,000 years ago. A flint point with incised concentric arcs from 54,000 years ago was reported from Quneitra in Israel. Some Acheulean bifaces found at Norfolk (Great Britain) exhibit the imprint of mollusk shells at their center, which were carefully preserved by the toolmakers⁵⁵.

According to Schaefer⁵⁷, at least from the beginning of the Middle Paleolithic there is ample evidence of non-utilitarian objects (crystals, minerals, fossils, organic substances) collected and preserved by man which may have had the same meaning they have today. At Pech de l'Aze, a fragment of a bovine rib with deliberate incisions was found at an Acheulean level of the Riss era. A figurine, perhaps female, was discovered at the Acheulean site of Berekhat in the Golan in Israel, dated to 250,000 years ago⁵⁸. Even older is a fragment of elephant tibia, found in a stratum of Bilzingsleben from 400,000 years ago, which bears deliberate (albeit not easily interpreted) incisions.

We can also mention the presence of red ochre in various deposits, some very ancient, e.g. in Ethiopia (1.5 million years ago), in Bed II of Olduvai (Tanzania) and at Terra Amata (300,000–400,000 BP) in France, at Becov in Czechoslovakia (250,000 years ago). We do not know exactly what purpose it served. According to some scholars^{32,55} it was probably used for symbolic or decorative signs which have not been preserved for us.

Limitation of the symbolic representative ability of man to the Upper Paleolithic or to the last 40,000 years seems to have an ever shakier foundation in the light of the frequent discovery of specimens with symbolic content from more ancient eras. Unfortunately their fragmentary nature does not allow us to make specific hypotheses about symbolic systems of reference, as instead we can

infer from the spiritual manifestations of the Upper Paleolithic.

Each time more ancient finds are discovered and make us think of conceptual activity without reference to material needs, some researchers speak about the »beginning« of symbolic activity, which is thus shifted back in time. In reality, abstract and symbolic activity must be considered connatural to man; it can also be recognized in his responses to material needs, as has already been argued. The roots of symbolization are in the nature of man, in his cognitive and abstract ability, whether it is manifested in material realizations useful to survival or in non-utilitarian interests.

General remarks

It can be stated that symbolism and projective ability have distinguished human behavior from the beginning. Although they reveal interests that can transcend the sphere of physical and social needs, they have had great importance in strategies of survival and adaptation to the environment. In addition, we can make the following general remarks.

Symbolization is not something added at a certain point of man's evolution, but is an essential expression of the human psychism that has always accompanied man, whatever its expression may have been.

To the context of symbolization can be attributed intentional technological behaviors. These are documented by the tool-kit, by the method of making it (choice of material, technique employed) and by the meaning of the manufactured articles, as well as by the organization of spaces of habitation or frequentation (e.g. for hunting, for protection) and by the domestication of fire. These activities attest to a symbolic behavior and constitute symbolic systems through which man ex-

presses himself, lives and transmits his imagination. In these cases, one can speak of functional and social symbolism: *Homo oeconomicus*, *Homo technologicus*, *Homo faber*, because *Homo symbolicus*.

Symbolic ability is attested to directly by artifacts, paintings, sculptures and funerary practices which refer to non-material conceptions or interests. Although they may have some relation to biological needs (fertility, nutrition, sexuality), they transcend them in the meaning that is attributed to them. They are expressions of spiritual symbolism.

Although language does not fossilize, there are direct arguments (suggested by anatomical evidence) and indirect arguments (inferred from archeological evidence) to support a form of articulate and symbolic language since the most ancient phases of humanity (*Homo erectus* and perhaps *Homo habilis*). It enriched social communication and favored the transmission of culture. Language is the highest form of social symbolism. *Homo loquens* because *Homo symbolicus*.

Since the most ancient phase of *Homo habilis* (or *rudolfensis*), there have been correlations among the various expressions of the symbolic human world (technology, language, communication and social life), in the sense that one evokes or favors the other. Thus the human environment has always been characterized by symbolic systems. Because of this, the approach to the symbolism of prehistoric man must be a global one.

Expressions of the symbolic world are not the same through time but exhibit developments and innovations (e.g. techniques of the working of flint, domestication of fire, organization of hunting, etc.). With time, non-utilitarian interests are better documented. However the absence or paucity of similar documentation in the more ancient periods does not constitute proof of the inability of prehistoric

man to occupy himself with such interests. The esthetic sense can be recognized not only in manifestations of the Upper Paleolithic, but also in many Acheulean industries of the Lower Paleolithic, in which the symmetric manufacture is not required by the function. The awareness of death can be recognized in the treatment of skulls in very ancient phases of *Homo erectus*.

There has been an evolution of symbolic manifestations. Nevertheless the aptitude for culture, expressed in planning technology and in functional symbolism, appears to be a constant of human behavior. Whatever were the subsequent developments, it can be recognized in the most ancient representatives of humanity.

Culture, particularly the symbolic world, is the environment that man has

created and in which he develops his relationship with the habitat. With time, this relationship has been more and more influenced by social organization and the development of technology. The more recent phases (Upper Paleolithic, Neolithic) seem to be marked by a more rapid cultural evolution, documented by archeological evidence in which we can recognize gradually more complex symbolic systems. The discovery of evidence that shifts the expression of spiritual symbolism further back in time is confirmation that symbolism is a particular manifestation of man's specific cognitive ability. This ability is revealed in the products of technology (which are more easily preserved) and in social communication and linguistics since the first appearance of man.

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SIMBOLIZAM U PREHISTORIJSKOG ČOVJEKA

S A Ž E T A K

Sklonost simboličkom izražavanju karakteristika je čovjeka, otkrivena ne samo u umjetničkom prikazu i pogrebnoj praksi. Ona je manifestna u svakoj ljudskoj aktivnosti ili prikazu prirodnih fenomena koji se odnose na značenje. Možemo prepoznati funkcionalni simbolizam (izrada oruđa, tehnologija stanovanja ili prehrane), društveni simbolizam (jezik i društvena komunikacija) i duhovni simbolizam (pogrebni običaji i umjetničko izražavanje). Na temelju ovih koncepata, istraživanje simbolizma u prethistorijskog čovjeka dozvoljava nam prepoznavanje oblika simbolizma već u prikazima najstarijih ljudi, počevši od Homo habilisa (ili rudolfensisa). Izrada oruđa, društvena organizacija i organizacija teritorija upravljene su prema preživljavanju i životu u obiteljskim skupinama. Oni svjedoče simbolička ponašanja i konstituiraju simboličke sustave pomoću kojih čovjek izražava sebe samoga, živi i prenosi svoj simbolički svijet. Ovdje se razmatraju razni oblici simbolizma obzirom na različite faze prethistorijskog čovječanstva.