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THE SIGNIFICANCE OF FACTS

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In the present article, I intend to develop some *methodological principles* for dealing with symbolic significance in archaeology, as many authors approach the problem of significance predominantly from its theoretical aspect, not discussing explicitly the question how symbolic significance can be recovered from the archaeological record. It appears to me that methodology is too often considered to be a less interesting, and perhaps dispensable, annex to theory.

Methodology and theory, however, cannot be separated from each other; this is why this article necessarily deals with theoretical problems as well. My 'examples' are meant to represent contributions to archaeological knowledge on two topics (fortifications and sunken floors): they have not been added as mere 'illustrations'. However, I did not attempt to fully exhaust the theoretical potential of the examples.

I would like to draw attention to one particular, but in my view very important, question at the beginning. I firmly believe that the archaeological record consists of dead material objects that are on their way from the past social world to present-day nature. Before they fully return to nature they still contain information about the human past, but the recovery of this information is not simple description based on 'reading' them. It is always seminal to distinguish between the dead archaeological record on the one side, and the living past and its theoretical model on the other side. We constantly have to ask whether our concepts and propositions are about the archaeological record or about the past as it was lived by prehistoric people. This is indispensable if the function, social meaning, and symbolic significance of archaeological facts is to be recovered. To clarify my approach to the problem, I have included some general considerations in the introductory part of the paper.

The fact that I am drawing my empirical evidence mainly from Bohemia, a region which I know intimately, and which has great informative potential, is obviously reflected in my references. As I am presenting a particular variant of 'solution', I do not include an analysis of the existing literature on the subject.

THE WORLDS WE LIVE IN

What human beings perceive by their senses can be divided into the *world of nature* and the *social world*. There is another world, which, because it cannot be perceived and only exists with individuals, can be termed the *individual world*.

Nature can exist independently of human beings, and indeed did so for thousands of millions of years. Nature enters the social world only by becoming a component of an artefact, an institution, or a 'text'; in other words by becoming a building block of human culture. Therefore, nature will not be discussed as an independent concept in this paper.

The *individual world*, the major part of which has no *direct* impact upon human culture, should be distinguished from the internal social world, which is expressed and socially adopted, and is thus transformed into the external social world. In contrast to individual consciousness, the internal world is accessible to archaeological research, since it has well defined inputs and outputs in the external world, which can be perceived by the senses of other people. In this way the bipartite natural/social world becomes in fact a tripartite natural/social/individual world.

The social world

The social world consists of the *internal world* and the *external world* of people. The former is that part of the individual world which has the capacity to be expressed and adopted by other people, whilst the latter is that part of the natural world which is changed (created and/or adapted) by human beings.

These two aspects of the social world are joined by the process of *thinking* and *human practical activity* resulting in a *physical output* in nature be it 'pure' nature or nature transformed by humans. The physical output of thinking does not only consist of changed material things, but can also consist of signals produced by human voice, by dancing, etc. (any such signal must be supported by a physical channel). In this way the social world can always be perceived. This also applies to the internal world, which primarily exists in the heads of people: it can be perceived through its output. This fact is especially important for archaeologists, who can observe the output of the internal worlds of ancient people, and reconstruct it on the basis of these observations. There is no such possibility in relation to the individual world.

The social world is in my view, of course, identical with culture. The reason that I have used the former term is to exclude the definition of culture as extrasomatic means. If culture includes what I have described as the internal social world, it includes something *intrasomatic* by definition.

Subworlds of the social world

There are three main classes of output into which the external human world can be divided. These three classes, however, do not represent a logical (tri)partition of the concept, they overlap on several levels. Artefacts are material things intentionally formed to serve some human purpose, implying that they possess a structure imposed upon them by humans: this structure may be quite elementary, and its 'imposition' may simply consist of a process of selection, but usually they are much more complex.

An *institution* is a rule (or a set of rules) which governs the interaction of individuals or groups of individuals. While artefacts structure the material world, institutions structure human society. The concept of institution as used in this paper reflects the

relationships between persons and groups of persons, it does not simply represent the order of things or human activities (whether practical or other). However, *institutions do appear as relations between things*, a fact reflected in K. Marx's concept of the fetishism of commodities. Institutions represent more than another set of human artefacts: they are non-material entities which order human society. As any kind of order they need material carriers to manifest themselves in the external world.

What I call *text* in this paper (admittedly a clumsy expression for the purpose) are the relationships between concepts expressed by means of symbols and/or signs. Texts, structuring human thought, have a revolutionising impact on human culture, yet they cannot be identified with it. In contrast to texts, in which the relationship between symbols (or signs) and their ideal content is arbitrary or semi-arbitrary, the relationship between material things and institutions is non-arbitrary. For example, the social meaning (the social function) of a flint mine can be the division of labour or another human institution, but the mine will hardly express the idea of a super-natural being. If it does, the mine becomes a symbol and as such it constitutes a part of a text.

I firmly believe that the three concepts mentioned above deserve the attention of archaeologists, irrespective of how they are denoted. Consequently the external world consists of three non-exclusive *sub-worlds*:

- the (sub)world of artefacts, which primarily affect the external world by means of their function;
- the (sub)world of institutions, which operate mainly by imposing social meaning upon the social world; and
- the (sub)world of texts, which primarily provide for the symbolic significance of the external world.

There has always been a tendency to reduce the external social world to only one of the three sub-worlds. Economically minded people have often been inclined to consider exclusively, or at least to overestimate, the world of artefacts (especially those with economical facets). Sociologically orientated people and lawyers have stressed the importance of institutions, and philosophers may easily overlook anything that does not belong to the world of texts. All of these tendencies are well known in archaeology.

The reality of artefacts, institutions, and texts does not imply that they are *separate independent phenomena*. The usual objection raised against the tripartition of culture, as outlined above, is that neither artefacts nor institutions can exist without symbolic behaviour, and this is of course true. It is not less true, however, that symbolic behaviour is unthinkable outside human society, and without the use of artefacts (which is very clear in the case of visual arts, and even poetry in its written form). It is unlikely that anyone would disagree that human institutions could be formed without symbolic texts and without artefacts. The indisputable fact that individual institutions and artefacts cannot be realised unless they first originate in the heads of people, does not prove the omnipotence of the human brain and its symbolic output. There are *complicated feedback relations between all pairs of the basic elements of human culture*.

The live and the dead world

The foregoing division is valid for live culture whether lived or witnessed by prehistoric or modern people. Live culture is a dynamic system which functions in real time, although sometimes distant from us. Live culture is set in motion by the activity of living individuals. Therefore, the subworlds of the living world and their purpose are either immediately accessible as a matter of fact or they can be accessed through written documents (because human language has the ability to express dynamics).

In consequence of many transformations through which the illiterate (or partly literate) social world passed on the way from its past living state to the archaeological record, mainly the exit transformation (cf. Neustupný 1993), this record consists of dead things. All that remains is remnants of the external social world, while the internal world, representing the individual 'movers' of culture, vanishes. This is something not accounted for by many archaeologists who, as a parallel to their contemporary experience, assume that the purpose of things is obvious, given, and not requiring much rumination. By doing this they in fact assume that what I have described as the internal social world is unimportant and, consequently, the individual human beings need not necessarily be considered. Significantly, theories on the active character of archaeological artefacts appear in this connection, as the active role of artefacts is assumed to replace the active role of ancient people themselves.

In the dead culture, i.e. in the archaeological record, however, *everything is represented by artefacts and/or ecofacts*. Institutions and texts do not exist as such any more; not being directly accessible, they only exist in the form of things and their relationships. This 'representation' would be impossible, of course, were it not for the fact that the social world has its external form. The aim of many archaeologists is the reconstruction of the ideas of past people, but it is dead things, not ideas, that archaeologists observe. In this context, it is essential to realise that symbolic significance, social meaning, and even practical function are terms valid within the living culture, and can only be arrived at on the basis of the archaeological record by means of the archaeological method completed by explanation (interpretation).

The main problem of the archaeology of significance is in how to reconstruct the significance of symbols and signs that cannot be grasped directly either by observation or by the practical intercourse with people who created them and used them. While reconstructing symbolic significance of things in archaeology, we constantly have to be aware of the differences between the live and the dead cultures. Parts one and two of this paper are almost entirely about the living culture, while in part three I attempted to describe the process of transition from the dead to the live culture.

THE ANATOMY OF PURPOSE

Human beings, while creating anything, always have some purpose or intention in mind: they behave intentionally, not instinctively. Animals may have some experiences in much the way humans have, but they do not know anything like purpose; for this reason they do not create.

The human mind, led by purpose, is the active agent of culture. Artefacts cannot be compared to the human brain, they are natural things, carriers of concepts of the mind, which remain dead unless humanised and set in motion by the brain. In general, artefacts are the 'tools' of the human mind in the external world. Purposeful activity does not exist outside individual human beings in our present world. Artefacts are not passive in the sense that they are a mirror reflection of something else, and their selection and concrete form can greatly limit what the mind is able to conceive.

The dimensions of purpose

In consequence of the foregoing, archaeological artefacts, and indeed human creations in general, can be looked upon from three points of view, which, taken together, constitute purpose. One of these is the standpoint of *function*, the second relates to their *social meaning*, and the third is their *symbolic significance*. Function, meaning, and significance can be visualised as the *dimensions of purpose*.

I shall now explain what I understand as function, meaning, and significance, as these three words are almost synonymous in everyday speech. Function is perhaps the most general of the three. When conceived in a general sense, 'social meaning' can be described as *social function*, and 'symbolic significance' as *symbolical function*; 'function' itself would then be something like *practical function*.

Function and meaning, however, have often been separated from each other and used as two opposing concepts, because of the important role played by function in functionalism; when this separation is accomplished, meaning usually denotes both what I describe as social meaning and symbolic significance. These two words (expressions) are then used interchangeably.

While many authors use the term 'symbolic function' for what I describe as 'symbolic significance', I. Hodder (1991:124) reverses the tendency, speaking about meaning in the case of 'structured systems of interrelationships', that is, in a sense where most other authors would use the term 'function'. It seems to me that this is mainly to get an all-embracing concept of 'meaning', which is necessary to conceive of culture as a text.

Of course, words denoting our concepts cannot be considered to be of prime importance, unless they conflict with the concepts they denote. I believe that there are three 'meaningful' *concepts* which I have described as (practical) function, social meaning, and symbolic significance. I would not insist upon the retention of these three *words*, were someone to suggest some other, more acceptable trio, but I would insist upon the usefulness of the three *concepts*.

I am now going to introduce some examples to make my meaning easier understood. Let us take firstly a stone axe. Its function (practical function) is to cut wood, or possibly other materials. Its social meaning is the 'natural' division of labour, as its use is restricted to adult men in most traditional societies; its occurrence in the graves of adult men in European prehistory tells the same story (if the meaning of the axe in a grave is to work within the other world, and it is not merely symbolic). The axe is the material (artefactual) element which serves as a means of producing the natural

division of labour. Thus, the axe is an expression of certain relationships which are characteristic for a particular society. It makes these relationships look as if they resulted from the axe. This has nothing to do with the question of whether the axe also becomes a symbol for a social group or for a deity; we know from prehistoric graves that this was frequently, but by no means always, the case. However, if an axe appears in a non-adult grave to manifest the idea of the supernatural powers of the deceased, it becomes a symbol and acquires symbolic significance.

Another example is the location of dwelling areas within the overall settlement. It can be assumed to have had certain functions (reflected, for instance, in choosing dry, flat ground in the vicinity of a sufficient source of water), a certain social meaning (e.g. the creation of social ties enabling the cooperation between members of the community), and a certain symbolic significance (i.e. a set of socially approved ideas that accompanied the choice of a particular location from among the set of possible locations that were more or less equal from the point of view of their function and social meaning). For example, Kuna and Adelsbergerová (1994) argue that the location of settlement sites during certain prehistoric periods in Bohemia observed so-called edges (zones of markedly sloping terrain) which had a symbolic meaning.

The function of culture

Function (or practical function, if you like) is the practical dimension of cultural entities created by humans, an aspect of their purpose. In a way, it is a response to the practical needs of people. By the word 'practical' I am describing the activity that people direct towards the material objects of the surrounding world, irrespective of whether the character of the objects is purely natural or artefactual. *Economic life*, and the use of facts as *carriers of social meaning and symbolic significance*, are both important categories of practical activity. Any human activity that is not restricted to individual internal reflection has its practical aspect, something which does not exclude the presence of the other dimensions. Much of practical activity (but by no means all) can also be described as the economic dimension of entities.

To create society and ideology people must first secure their basic needs by means of what can be termed practical behaviour in the above-mentioned sense. This statement, however, is both abstract and banal, and to be relevant must always be considered within the framework of a concrete historical situation. It is still held by many archaeologists that prehistoric people must have *fought with nature* for their survival which, of course, would make the practical function of cultural items the decisive dimension of culture. The last decades have taught us that prehistoric life was more or less easy, although not always comfortable, as people obtained their living without much effort (the so-called affluent society of the anthropological literature). These ideas do not undermine the importance of economics, but they mean that an economic explanation of every aspect of human culture cannot be maintained.

The social meaning of culture

The social meaning (or the social function) of archaeological entities can be viewed as the social dimension of the human world. Archaeological entities have social mean-

ing which can be formulated in terms of the *social organisation* (the formation of institutions) of the community whose members created and/or used them, i.e. in terms of the interrelationships of individuals and their groupings.

It is important to realise that social meaning is an *objective dimension* of human culture, the relationships which are objectively there, not their reflection in ideology. Thus, during their economic activity people enter certain relations which can be described as the division of labour. There was a strictly defined division of labour in Eneolithic Central Europe which allotted some activities to men and others to women, so that the artefacts connected with such activities obtained clear-cut social meaning, but most of these artefacts never became symbols. In some groups sickles are found in graves but, with the exception of the Corded Ware (Neustupný 1969), sickles almost never became symbols of manhood. Also, the plough was extremely rarely used as a symbol for the division of labour (much more so in the Bronze Age). It was different with axes and battle axes, which had their social meaning as means of expressing the division of activities, but at the same time they frequently acquired the 'symbolic function' of denoting grown up men and/or warriors (Zápotocký 1992).

The symbolic significance of culture

An archaeological entity acquires symbolic significance at the moment when it becomes a symbol or a sign, i.e. when it denotes something different from that which it is. Boar mandibles in Globular-Amphora graves are clearly not only food (in that case one would also expect other parts of other animals), but also symbolise something that is not simply mandibles. The *symbolic significance* (or the symbolic function) of archaeological entities can be formulated in terms of the ideology produced by communities in the framework of which the entities were created and/or used. Significance, being a set of ideological ideas relating to all possible spheres of human activity, can also be conceived as the symbolic dimension of archaeological entities.

Theoretically, any material item of human culture can become a symbol, and from time to time it does, but in everyday life there are many cultural items which carry no symbolic loading whatsoever whilst others do. I have already mentioned the opposition of plough to battle-axe. It has been assumed, and not without reason, that the world of prehistoric communities contained many more symbols than our own world. This is undoubtedly true, but I am still reluctant to believe that the difference between prehistory and modern times is absolute in this respect, as this would mean that prehistoric people *differed* from us *in principle*. For me, at least, this is difficult to believe. The opposition of cemeteries and settlement sites witness the fact that there was much that was profane even in very remote prehistoric times.

Is there any other dimension of culture?

Can the three dimensions of purpose suggested above explain the whole variability of human culture? This is an important question, the solution of which may lead to the overthrow of the present paradigms of archaeology, whether typological, processual, or post-processual. I am going to mention some of the principal problems,

offering no solutions.

One of the possible causes of variability which surpasses function, social meaning, and symbolic significance is *individual variability* caused by the personal predilections of the individual creators. This must be presupposed, but it is very difficult to specify for methodological reasons (Neustupný 1993:398). Another cause of variability is the mutual interplay of the individual constituents of *culture as a system* (Neustupný 1972:116). The so-called historical factors, however, do not seem to add any further dimension.

On the whole, what we have described as purpose leads to the conception of culture as a parallel to *language* in linguistics; much of the foregoing conceives of culture as a parallel to *speech*. Nothing that could be compared to the theory of speech in linguistics has so far been created in archaeology, but the endeavour of some post-processual archaeologists is moving in that direction.

Missing dimensions

Purpose, which humans impose upon their creations, has, in general, the three above mentioned dimensions. There is the important problem whether all human-made entities always have function, social meaning, and symbolic significance at the same time. The other possibility is that some entities have, for example, only social meaning and symbolic significance but no practical function.

Let us consider the example of stone battle-axes. In spite of the fact that some archaeologists have assumed that they were used as cutting tools, most specialists believe that they served as fighting weapons, status symbols (to denote warriors or the like), and symbols of some deities (Zápotocký 1992). Their use as weapons is clearly their social meaning as in this 'function' they become 'tools' for resolving relationships with other people; both the status symbols of warriors and of deities are manifestations of their symbolic significance. In this way the battle axes seem to lack any practical function. Their most abstract practical function, however, is their use as carriers for the social meaning and the symbolic significance they acquire.

Something similar applies to clay figurines used in Neolithic cults in south-eastern Europe. Irrespective of what they signify, they have the abstract function as carriers of significance (as just described above), but primarily they seem to lack any social meaning. If there was any (secondary) meaning, it was connected with the ritual in which the figurines were substitutions for something else (i.e. some concept which they denoted), not with the figurines as such. This situation is clearly different from that of the battle-axes, which were used in battles as fighting weapons, not as symbols of something different.

There is a large group of archaeological entities which clearly have well defined functions, but whose social meaning and/or symbolic significance for past communities is doubtful. As I have already noted, any archaeological entity can be given some symbolic significance, i.e. can be used as a symbol. The things which are given symbolic meaning differ between societies. While eneolithic bowls seem to include some symbolism (cf. Neustupný 1991), I wonder what social meaning or symbolic

significance could be ascribed to plain Iron Age bowls; there are lots of such artefacts with which there is no reason to suppose any symbolism but, admittedly, this is difficult to prove.

THE METHODOLOGY OF PURPOSE

Purpose is not observable in the archaeological record, and must therefore be obtained by means of interpretation (or explanation). As I have dealt with the methodology which leads to explanation in another place (Neustupný 1993), I am going to mention only the most basic ideas of my approach in this paper.

My methodology starts from the fact that the archaeological record consists of static, formal, and object-orientated things which have no observable function, social meaning, and symbolic significance. This is the consequence of a number of transformations that affected the once living culture turning it into a dead, archaeological culture. As a result, the purpose of the structures discerned in the archaeological record cannot be explained exclusively in their own terms: it is necessary to use models derived from contexts of human activity which are either directly observable in their live form or available in descriptions in some understandable language. Such models must be applied in several phases of the archaeological method, beginning with the first step of analysis (the description) and ending with explanation or interpretation. To achieve more reliable interpretation, the method must be applied iteratively. Interpretation in this sense means translating dead things into categories of live culture, it is not simply a recoding from one 'language' into another one (which is more or less the role of hermeneutics).

Models of significance

It has often been assumed that the reconstruction of the function of archaeological entities is fairly easy, while their social meaning is difficult to disentangle; many archaeologists would agree that what I call symbolic significance is most difficult or nearly impossible to grasp. It is the outstanding credit of post-processual archaeologists that they persuaded their colleagues, including me, of the usefulness and feasibility of significance studies. But what is the epistemological process by which symbolic significance of archaeological entities can be recognised? Does any such process exist at all, or is it necessary to *get into the minds* of ancient people on more or less subjective grounds?

The most obvious assumption is that the significance of symbols can be recognised on the basis of their forms, especially if they are widely distributed and persistent in time. Although it can be argued that some symbols are 'realistic', and are met with world-wide, regardless of culture, time, and place (the symbols of sun consisting of circles with a central dot and rays emanating in four directions, the symbols of vulva, and so on), most symbols are abstract and peculiar to societies limited in space and time. Moreover, formally identical symbols may have different symbolic significance even in related societies. For example, symbols of the sun made of amber are associated exclusively with men in the Globular-Amphora group in Poland, while exactly

the same symbols made of river shells (another optically conspicuous material) are met exclusively in the graves of women in the Corded-Ware groups in Bohemia and elsewhere. These two symbols, which are nearly identical from the formal point of view, appear to have had different symbolic significance in the two very close and genetically related cultural environments.

Once symbols develop into signs (i.e. once they acquire forms which do not resemble the objects they designate), nothing is 'obvious' any more and no analogy can help. It is often maintained that *contextual information* can lead to explanation or interpretation (Hodder 1991), but I doubt this. In my view the most abstract starting model must be logically derived from the previous theoretical judgement of the context. The contextual information can certainly be helpful in the course of the enrichment of abstract models by concrete elements, and it is seminal for testing explanations, but it can hardly suggest any interpretation by itself.

This is not to play at 'what is more important'; once we accept the thesis that explanation can be fully derived from context, we automatically accept the empiricist dogma saying that the archaeological record can explain itself. No theory would be needed any more to explain structures, and there would be one-way logic leading from facts to theory. Theory (or, more generally, previous human knowledge) would lose its epistemological significance as it would become an epiphenomenon of hard facts.

The elimination method

While interpreting archaeological structures by means of models, it is frequently necessary to try *several alternative* models to decide which of them do not fit and which fits best (Neustupný 1993:177). The 'elimination' method, as will be described here for sunken floors and so-called fortifications, is in fact a consideration of alternative models.

The logic of this method can be expressed by the assumption that practical function and/or social meaning can be more easily and more reliably determined than the symbolic significance of things. Although this need not always be the case, it is frequently so. It is primarily the time trajectory of structures that helps in considering their function and/or social meaning.

The elimination method for spotting symbolic significance proceeds by asking whether an artefact structure can be fully explained by a certain practical function and/or social meaning. Those aspects of the structure which cannot be explained through their function and social meaning, do not appear to be 'necessary' from the point of view of these two dimensions of purpose. In consequence, they should be analysed for their *possible* symbolic significance.

I admit that it may be sometimes difficult to decide what is 'necessary' in the sense of functioning in a human society. A fairly secure method for making the decision in many cases is to investigate what the archaeological structure looked like in chronologically and spatially similar cultures. Are houses with sunken floors necessary for the functioning of Eneolithic cultures in central Europe? Maybe not, if there were no sunken floors in the Neolithic period and in most groups of the Bronze Age of the

same region. Was it necessary for the Řiváč-culture population of Bohemia to defend themselves in heavily fortified hill-top settlements, if most people of more or less the same archaeological period survived happily without such fortifications?

Most archaeological studies to date have either explicitly or tacitly assumed that the choice of place for founding a village as well as its internal structure, was determined by its function, i.e. more or less practical considerations (such as distance to water or presence of good agricultural soil). Such *practical factors* were no doubt very important, but a theoretical consideration already suggests that they may not have been decisive in every respect. There is often *more than one possible solution* for many 'practical' problems, and it is difficult (sometimes even impossible) to find 'rational' (i.e. practical or functional) reasons for the choice of just the one selected by prehistoric people (cf. the case of prehistoric pottery – Neustupný 1991). However, people were always able to find such reasons within their ideology: they knew how to give symbolic significance to their behaviour.

Example 1: prehistoric fortifications

Prehistoric agriculture required a more or less even ground, as cultivation of a plot mostly began by the slash-and-burn technique, unthinkable on a slope: the first substantial rain would carry away the layer of ashes mixed with seed. This is the reason why prehistoric farmers preferred gentle slopes, or nearly even ground, for their fields and villages (as the latter were mostly situated in close proximity to the former).

Another condition which must have been met in any mixed farming village, was a stable source of running water, necessary for both humans and domestic animals; a temporary source was not sufficient. Where there was plenty of fertile flat land which could be used for fields, but no easily accessible running water, wells could be dug, but the present evidence for prehistoric wells is still insufficient to judge how frequent this solution was.

All this makes it somewhat surprising that a number of sites of certain prehistoric periods were situated on the tops of hills or even mountains, where there was no place for fields in the immediate surroundings, and no running water (although a limited amount of water could be obtained from springs on slopes in some instances). As these places tend to be 'fortified' by ditches and ramparts, and their 'strategic importance' easily comes to the mind of modern people, it is commonly believed that they were 'forts'. This view seemed to be corroborated by the fact that in some cases these prehistoric 'forts' were situated on sites which were later occupied by early medieval fortifications, whose military function is not believed to be in doubt. In consequence of this, prehistoric fortifications have been interpreted as defences with many functions in the sphere that I have described as social meaning. A detailed discussion of the principal problems of prehistoric fortifications in this sense has been compiled by S. Vencel (1984:104–137). In the following paragraphs I am going to argue differently.

As already suggested by their situation on the top of elevated places, most fortifications can be assumed to be devoid of any (practical) function. Various authors,

however, have suggested that some fences, and even certain ditches, were practical constructions used, among other things, for keeping cattle. This may possibly be the correct explanation for some small palisade ditches, but certainly not for complex earthworks. By the way, the doubts that some 'defences' may not be fortifications at all (cf. Zápotocký 1969) have been provoked by the fact that they seemed inadequate for the purpose of defending anything; this argument, of course, can also be used in favour of their symbolic significance.

Normally one would assume that fortifications are an example of an artefactual record that has mostly, if not exclusively, some social meaning or social function, but no practical function or symbolic significance. Let us look at the Bohemian evidence for and against this assumption.

In central Europe fortifications appear in the Neolithic period (Linearbandkeramik culture, see e.g. Buttler and Haberey 1936; Podborský 1988:182) and continue to the very end of prehistory (Smrž 1991). It is important to note that fortifications were not built in all phases of prehistory. In some periods, however, such as the middle-Eneolithic Řivnáč group, 'defensive structures' are so frequent that it is difficult to be sure that at least some sites of this group lack some sort of fortification (e.g. Ehrich and Pleslová 1968, Zápotocký and Zápotocká 1990). It is not exactly known from excavations how settlement sites of the Cham culture (closely related to Řivnáč) were fortified, but all of them are situated in elevated places, on rocks, etc. (J. Neustupný 1952; Bašta and Baštová 1989). In other periods (Šaldová 1977; Smrž 1992; Bouzek, Koutecký, and Neustupný 1966) there is a reliably evidenced dichotomy: there are both fortified and unfortified sites, such as the late Hallstatt period or late La Tène. Of course, this is the most common situation. But other periods have no fortifications whatsoever (Corded Ware, Bell Beaker, middle La Tène, Roman, and migration periods – cf. Neustupný et al. 1960; Pleiner and Rybová 1978; Podborský 1993).

In some periods, fortifications are situated outside densely occupied territory, that is in those parts of Bohemia where contemporary settlement was sparse. This is the case of all Bohemian oppida (cf. Salač 1993). Some other heavily fortified sites (usually difficult to date) are situated in mountainous regions with such a harsh climate that permanent living was almost impossible there (Obří hrad near to Kašperské Hory in the Šumava mountains – Slabina, Waldhauser, and Kopečný 1990). Moreover, there was nothing to defend, and no enemy to deter. Still other fortifications have been built on the tops of isolated mountains, with rare contemporaneous sites around (Velký Blaník, Vladař); considering prehistoric battle technology, these make no sense.

What is even less comprehensible is that in most regions fortifications seem only to occur where the configuration of the terrain is favourable. This frequently happens on the lower courses of streams, where watercourses cut deeply into the surrounding plain, forming spurs with high steep slopes (a situation ideal for building a hillfort). The upper courses of the same streams, with a flat geomorphology, have the same history of prehistoric settlement, but no fortifications. (Incidentally, this also seems to be the pattern for castles of the central Middle Ages.) Was life less dangerous on the upper courses of streams, some twenty or thirty kilometres from the lower courses?

Consequently, the explanation of 'fortifications' in terms of social meaning ('social function') loses at least some credibility. Most archaeologists defending this kind of explanation would probably argue that fortifications mean either the 'invasion' of foreign tribes, or inter-tribal conflicts within a region. It would then be necessary to explain why there was so much fighting during the Řivnáč period (almost everything is fortified), but no conflicts during the Corded Ware and Bell Beaker periods (no fortifications at all), especially if these two cultures are believed to represent invaders from outside. The differences in social structure were slight during the Eneolithic period and in the Bronze Age, but some groups erected fortifications (Michelsberg, TRB, Řivnáč, late Únětice, early Tumulus, late Tumulus and Knovíz, Štítary), whilst others had none (Corded Ware, Bell Beaker, early and classical Únětice, middle Tumulus).

The same argument can be extended to earlier and later periods. Thus the late phase of Linear pottery, late Stroke pottery, Lengyel, Hallstatt D, La Tène D, and the period from eighth century AD onwards built 'fortifications', while the middle phases of the Linear pottery and of the Stroke Ware, Hallstatt D (Bylany culture), middle La Tène, Roman, migration period and the earliest Middle Ages built none.

On the basis of empirical observations, J. Neustupný (1968:77) recognised that those groups that built fortifications did not give their dead weapons to take to the other world, and vice versa (where there were weapons in graves, there were no fortifications); this observation is valid at least for Bohemia. Detailed scrutiny of the evidence may reveal some inconsistency (for example, certain groups of the TRB culture seem to have built fortifications and deposited a small number of battle axes in graves at the same time), but the overall validity of the rule cannot be doubted. In consequence, the 'logical' assumption that the periods with fortifications mean times of intense fighting is clearly not supported, as the two kinds of evidence oppose each other. I am not inclined to believe that the periods during which 'defences' were built represent epochs of consolidation while the periods with weapons represent social changes and internal contradictions resulting in clashes (J. Neustupný 1968:78). In my view, the only possible conclusion is that both so-called fortifications and weapons in graves primarily *mean nothing* (i.e. they cannot be explained as having been built because of their *social meaning* in the sense defined above).

The facts I have described so far do not favour an explanation of prehistoric (and maybe even medieval) fortifications as a factor regulating social relations through the development of fighting technology. If the 'fortifications' were not practical constructions, and if there are serious doubts that they served to regulate relations between groups, it is only symbolical significance that remains as an explanation. But is there any reason to assume such an interpretation? I shall return to this problem shortly.

Example 2: sunken floors

Semi-subterranean huts were built in some periods of Bohemian prehistory, leaving large rectangular pits with more or less even bottoms and nearly vertical sides, while in other periods houses were erected above ground, using posts whose post-holes

Table 1. *Technology of construction used in dwellings (groups with uncertain evidence omitted).*

Period	sunken floor	postholes	no traces
recent			x
early medieval	x		
roman (barbarian)	x		
La Tène	x		
late Hallstatt	x		
Štítary	x		
Knovíz		x	
Tumuli (MBA)	?		
Únětice		x	
Bell Beaker	x		
Corded Ware			x
Řivnáč	x		
Baden	x		
TRB		x	
Michelberg			?
Lengyel		x	
Stroke pottery		x	
Linear pottery		x	
Mesolithic	?		

can be detected archaeologically. Moreover, some periods have left no traces of houses, which suggests that the house foundations did not reach under the surface at all. It is usually easy to decide, on the basis of archaeological evidence, which of the techniques has been used. There is hardly any uncertainty with those culture groups which have been named in Table 1 but, admittedly, further research may reveal more variation. As far as I know, there was no period when building both above the ground and underground took place.

Now what does Table 1 tell us? The usual judgement of archaeologists is that either sunken floors or timber-based houses are better suited to residences for practical reasons, i.e. the function of one of the two (or three) types of houses is better. The possibility that people of the next phase simply 'forgot' about the advantages of the earlier building technique can, of course, be discarded; our predecessors were certainly not that simple.

Is there any evidence for climatic changes that could drive people underground to sunken floors (or, possibly, in the other direction to the surface)? There is no reason to believe this, especially considering the rapid fluctuation between the 'underground' and the 'above the ground' in the Eneolithic period and the Bronze Age. Not even those archaeologists who love climatic explanations for everything would assume that such rapid large-scale climatic fluctuations could explain the sunken floor/posthole phenomenon, as houses of these opposite types are often found on the same sites (built in different periods, of course). I can hardly imagine any other functional explanation for this kind of variability.

Let us consider the problem whether the sunken floor/timber-built opposition can

have had any social meaning (i.e. social function) within prehistoric society. Social evolution was the usual explanation of the opposition between the Neolithic long houses and the rather small (middle) Eneolithic underground houses. The former have been assumed to represent large families possibly living in a matriarchy (Soudský 1966; Pleiner and Rybová 1978), while the latter should have been a reflection of small patriarchal families (many authors, including myself, might be cited). Further research into the problem, however, has revealed that the Neolithic long structures also housed one nuclear family each (or possibly a small household; cf. Moddermann 1970; Neustupný 1984), and in this respect were no different from any of the later houses built in prehistoric Bohemia. The very short and irregular periods of fluctuation between the two building technologies makes it difficult to find any other meaning for this phenomenon.

Is there any reason to assume a symbolic significance for the opposition? I shall return to this problem later in the paper.

Another model for examples 1 and 2

I shall try to formulate one very abstract model of some aspects of the ancient world on the basis of both my contemporary theoretical experience, and of what is already known about prehistory. The model will deal with the *attitude of prehistoric people towards movement in the vertical direction*. I am going to present it as another alternative to the models discussed in the preceding paragraphs.

There is certainly a strong temptation to start by enumerating ethnographic or historical parallels on how people can react to the vertical dimension, but I believe that this would be a mistaken approach to the problem. A satisfactory model of the ancient world can be built in the same way as other archaeological models: by means of the *logical expansion* of the most abstract conceptual category of the field studied (the so called 'key category', cf. Neustupný 1993:165), which in this case is *human artefactual activity in the vertical dimension*. This methodological approach conforms both to my previous views on how models in archaeology should be built (Neustupný 1967; 1971; 1986; 1993) and more or less, to the way in which Ian Hodder described the 'domestication of Europe' (Hodder 1990).

In building up the model, I shall concentrate on what the basic dimensions of our world could signify to prehistoric farmers of central Europe. The basic dimensions of the space were, of course, physically the same as ours in those periods of prehistory, but they need not have been perceived in the same way given specific limitations of prehistoric life.

Before discussing the artefactual activity of human beings in the vertical dimension, I shall briefly touch the problem how prehistoric people moved vertically without creating any artefacts, i.e. how they moved more or less as natural beings. This does not necessarily imply behaving outside human culture, as almost any human behaviour is determined culturally, even if it does not create any artefacts.

In the present context, it is necessary to distinguish between the *functional space* within which human culture functions in the course of everyday life, and the geographical or, more generally, Euclidean space which is, strictly speaking, largely ir-

relevant for the everyday functioning of human society. The functional space, usually much more limited than geographical space, forms a parallel to functional time, i.e. the time during which individuals live their everyday life and artefacts perform their function, and which is different from astronomical time (cf. Neustupný 1986).

There is no doubt that prehistoric people moved in three-dimensional functional space whilst performing the acts of everyday life. In fact, any act of life in general, and any kind of work in particular, is impossible without lifting hands and feet, i.e. moving three-dimensionally in functional space. In addition to working, people went to other houses in the same village, to their fields, to the places where their domestic animals grazed, to the nearest permanent source of water and to the place where firewood or wild fruits could be gathered, and so on. All this amounted to movement within the community area and more or less on one level: everyday life did not involve much vertical movement.

Although prehistoric social units higher than the community cannot be discovered archaeologically, they can be assumed to have occupied the territories of several neighbouring streams in some cases. Moving within the territory of such a higher unit implied moving from one village to the next, and this again meant moving more or less horizontally; the need to traverse high ridges dividing streams in some types of relief must have been exceptional, if paths connecting neighbouring villages led along water courses.

No doubt, there were some occasions on which prehistoric people travelled extensively. They left their community areas

to visit neighbours, possibly to take part in feasts organized above the basic community level;

to take part in religious ceremonies outside their community areas, if such ceremonies occurred;

to obtain raw materials such as flint, quartzite or chert for making cutting tools, to secure slate for axes and adzes in the Stone Age, or to obtain metals for the same purposes in later periods of prehistory;

to make war on neighbours or foreign tribes.

Expeditions aimed at collecting raw materials must often have been different from visits to neighbouring villages. Obsidian from eastern Slovakia has been found in southern Poland together with sherds of the Bükk culture vessels in which the obsidian was most probably traded (Kaczanowska 1971), while other kinds of raw materials went in the other direction (Kozłowski 1971): this meant long-distance trade over uninhabited areas of the Carpathians. Similarly, Bavarian banded chert has been found in Bohemia (Vencl 1971), something that again implies expeditions traversing tens of kilometres of uninhabited space in a mountainous environment. Although no mountains need have been climbed if river valleys were followed, such expeditions must have brought prehistoric people, probably men, into direct contact with mountains. There is new evidence in the Ötztal Alps that people went to considerable heights as early as the beginning of the Eneolithic period without returning home safely (Lippert and Spindler 1991).

Little is known about prehistoric warfare, but it is likely that it was a highly symbolic activity and people engaged in war expeditions were probably expected to be involved in unusual situations.

It follows from the preceding paragraphs that *prehistoric people lived predominantly in a two-dimensional space*, which was sometimes inclined but nevertheless remained largely flat and even. I would argue that *everything that was situated on a mountain, relatively high above the surface of the earth, and everything under the surface, was in fact something unpractical and unsocial and consequently symbolic*, because it lay outside the functional and social space of the everyday life experience of prehistoric people. This seems not to be something limited to the prehistoric period, but it can be demonstrated that prehistoric people were acutely aware of their relationship with the vertical dimension.

Archaeologists (and modern people in general) do not, in the main, realise how uncommon it was for a prehistoric person to dig into the earth and to build anything that reached above the ground by more than a few feet (i.e. to move outside the 'functional space'). This is mainly because archaeologists most frequently deal just with those instances when prehistoric people dug underground hollows and built architecture above the ground; they do not compare these occasions, which must have been rather rare, with the much more common life activities of that period of human history, which took place *on the ground and in two dimensions*.

All of this serves to support the idea that moving vertically was something uncommon, unexpected, extraordinary, queer, and therefore must have been considered to be outside practical life and common social experience. This again implies that equating this kind of activity (i.e. moving vertically) with some sort of symbolic behaviour must have appeared logical to prehistoric farmers. To sum up the key idea of our model: *moving vertically had a strong symbolical loading*.

Interpretation of example 1 (prehistoric fortifications)

Fortifications, whether consisting of ditches or ramparts or both, represented marked vertical artefacts. The ditches opened the earth making it discontinuous; they represented a *symbolic obstacle*, sometimes also a physical obstacle. From the point of view of its symbolic significance it was not particularly important whether the ditch was deep or shallow, and whether it was continuous or not. It was important that the Earth was broken by the ditch, and a *line of discontinuity* was established.

While ditches may represent the idea of discontinuity, the 'entrances' (which are sometimes so many that their role is uncomprehensible within the defensive theory) represent *limited continuity*. In this way, the causewayed camps and similar constructions are examples of real world dialectics expressing continuity and discontinuity at the same time.

Henges are similar to ditches in that they mark a limited area of land by means of a vertical obstacle forming circular lines. There are many entrances, in many cases connecting the monuments with celestial bodies, which have been full of symbolism throughout human history.

Ramparts represent another kind of vertical artefact. They do not break the Earth,

but they complement the discontinuity effect of the ditches by making the interior of the area not only inaccessible but also invisible (or at least partly invisible) from outside. The latter effect may be the reason for their occasional situation outside the ditches, something what seems incomprehensible given the defensive explanation of earthworks. The effect of erecting a rampart outside can be enhanced by combining it with a palisade, or sometimes by building an independent palisade ring.

The fortifications frequently form a set of several concentric lines. They *separate* a piece of land from the surrounding landscape, and sometimes they create a *hierarchy* of separated areas. This can be explained as a reflection of social hierarchy in prehistoric society. What was inside could not *easily* mix with the outside, it was only accessible by means of *entrances*. It can be assumed that it was not ideologically desirable to allow uncontrolled intercourse of the outside with the inside, but that the contact was apparently admissible through a number of predefined entrances which mostly fulfilled some symbolic condition. It is well known, or at least it is often assumed, that the entrances to earthworks were orientated on the basis of astronomical observations (e.g. Pleslová, Marek, and Horský 1980; Podborský 1992).

The lines of fortifications often look as if they were *not finished*. This would be incomprehensible, of course, if the fortifications were truly defensive in nature, but it apparently did not matter too much, if they were symbolic. These 'extra entrances', built in addition to the 'regular' ones, suggest that there were some 'irregular' reasons for communicating between the interior and the exterior of the separated area. We can hardly ever know the 'reason' (or, better, the ideological excuse) why the discontinuity created by these 'extra entrances' was not harmful or dangerous or, possibly, why it could be an advantage; in the case of defense against a human enemy it would always be a serious disadvantage.

The impressiveness of the vertical artefacts forming fortification lines is often enhanced by locating the whole site on a hill, or on the top of steep slopes which surround it from several sides. This is another way of underlining verticality, sometimes going to the extreme, and applies especially to cases where the fortification was located in a mountain range, or on the top of a prominent, isolated mountain.

Another method of enhancing the symbolic nature of many fortifications was through their use as ceremonial centres. This is evidenced in the case of ditches of the Michelsberg culture (Bertemes 1991), the 'Neolithic' fortifications in Britain (Mercer 1980), in the Bronze Age phenomena such as Blučina and Velim (Salaš 1990, Hrala, Sedláček, and Vávra 1992), and the ditch at the oppidum of Titelberg in Luxemburg (Metzler 1991). Many more examples can be found all over Europe. Human sacrifices (sometimes in large numbers, clearly surpassing the community level) are the most frequent manifestations of such ceremonies. They could have been much more frequent in the fortifications, as there are indications that in many cases, for example in the Neolithic ditches in loess areas, skeletons did not survive because of taphonomic processes. Once the Metal Age arrived, many 'fortifications' became favoured places for the deposition of hoards, both of gold and of less precious metals. To give an example, Velim has so far yielded five hoards of gold objects and three hoards of

bronze artefacts (J. Hrala, pers. comm.).

Some of the fortifications were clearly not *inhabited* at all, others disclose some evidence of settlement, and still others show traces of intensive occupation. The latter case, documenting a practical function that demonstrably need not be the same as the function of non-fortified sites (cf. Andersen 1991:486), need not exclude a symbolic significance of the place and, in some cases, not even some social meaning (i.e. the fortification certainly had a secondary social meaning as described below, and could have been used for some limited defence against human enemy). Although I firmly believe that the main purpose of prehistoric fortifications was symbolic, I would not like to exclude the other two dimensions of purpose entirely.

I have argued for the symbolic significance of what have been traditionally described as fortifications. It can be demonstrated that prehistoric life and social order did not demand huge 'defensive' works, which were often not defensible by the usually rather small local communities. In my view, the symbolic nature of the fortification phenomenon is obvious. It can be explained by the symbolism applying to the vertical dimension.

Ideas of discontinuity and limited continuity, as well as ideas of exclusivity and hierarchy, are close to the principles on which human society is based. In this respect the *fortifications could be created to symbolise human society*. If this is true, then the relationship between the signified and the signifying is arbitrary in this particular instance, i.e. the fortifications are signs used by prehistoric people to symbolise their social relations. This is a hypothesis which could be tested by means of empirical observation of the 'defences' and their comparison with the corresponding social order. A parallel is the pottery of the Eneolithic and Bronze Age of central Europe, also explained as a symbol of prehistoric society (Neustupný 1991).

There are some general facts that give this hypothesis a chance of being accepted in the process of testing. The fortifications are clearly connected with the social order; certainly they have been frequently interpreted as doing so. The fact that not all prehistoric sites by far were fortified is suggestive. Fortifications were clearly utilised by only a limited number of communities. As the number of skeletons found at Hambledon Hill, Velim, Blučina, and other sites demonstrates, the fortified places must have been used by groups larger than a single community, in other words by those regional levels of community that are so difficult to identify in the archaeological record. The mere fact that so many 'fortifications' were used as ritual centres and/or displayed special traits in relation to the 'usual' sites, is fully in accordance with this observation. In this way the fortifications fulfilled a *social function* (had a social meaning) *as symbols, not as artefacts*.

To be complete, another 'secondary' social meaning of fortifications lies in the fact that their construction required the participation of persons from many communities and in this way fortified social relations between them. It is likely that in many particular instances of prehistoric fortifications it will be possible to go into greater detail and offer more concrete explanations. I am not trying to do this on this occasion.

Interpretation of example 2 (sunken floors)

While the fortifications discussed in the preceding paragraphs hardly had any function or primary social meaning in most instances, sunken floors clearly had both a well-defined function and a definite social meaning. These two dimensions of purpose, however, are unable to account for the total variability of prehistoric houses. There is something that remains, impossible to explain either by function or by social meaning. One part of this 'something' is the opposition between 'on the ground' and 'under the ground'.

In view of the fact that it is so difficult to find a 'rational' explanation for the habit of digging prehistoric dwellings in Bohemia deep into the ground, it is expedient to look for the possibility of explaining the phenomenon by means of its symbolic significance. In my view, the idea of *separating* the house from the 'wild' outside (Hodder 1990) may not be a sufficient explanation, as it is so general that it applies to any dwelling anywhere at any time; it cannot account for shifting the floor under the surface of the earth.

I cannot find any other explanation except the idea of *protection* before the forces of the non-physical world: movement in the vertical, symbolic dimension may have been sufficient for this purpose. While protection against the forces of nature can hardly be neglected in the long run, it is always possible to neglect the danger from ghosts, for instance, as this can easily be overcome by other, symbolic means. Consequently, dangers of this kind can be considered transient, which in our case opens the way to the other variant of building technique.

I would like to draw attention to another peculiar case of building habits in the European Neolithic which can be explained similarly. It is the long shallow pits that accompany Linearbandkeramik and other Neolithic houses on their sides. Such pits (which should instead be termed ditches in many instances) were originally believed to be dwellings (Buttler and Haberey 1936), but Soudský's (1966) explanation that they served as sources of the clay necessary to daub the walls of Neolithic houses has now prevailed.

This is a perfect functional explanation, and it could no doubt be accepted if it were not in conflict with certain facts. Firstly, there are many cases where the pits were dug into sand or even gravel (e.g. Koutecký 1965), while daub requires clay to which sand can only be added in a limited proportion. Secondly, there are many houses without any pits of this sort, despite the fact that they are found on good clay. How were their walls daubed? Clearly, the long pits were dispensable. Thirdly, the pits hardly improved the quality of living in the houses, they did not represent a functional improvement, as they must have collected water from the roof and thus increased the dampness of the interior of the houses. Fourthly, similar pits accompany some megalithic graves (Hodder 1990:146 with a bibliography), clearly expressing the same idea as those accompanying the houses. They cannot be explained as sources of clay for daubing walls, if the graves had no daubed walls. This could perhaps be explained as a relict which has no function. Lastly, nothing like these pits exists in later prehistory although the building techniques were frequently similar (i.e. the walls of houses must have been constructed and repaired by daubing).

All of this demonstrates that the long pits accompanying Neolithic houses can hardly be explained functionally. Looking at a Neolithic house surrounded by its pits, however, we often get the impression of a small rectangular causewayed camp. The possibility of explaining the pits as symbolically protecting the house is obvious. Such an explanation would remove all the difficulties just enumerated and, as far as I know, would create no new problems.

Turning back to the sunken floor problem, I suggest that the idea of symbolically protecting human dwellings by means of digging them under the ground may have been an ancient one, at least of Neolithic origin.

CONCLUSIONS

It may be necessary to reconsider some previous explanations of prehistoric structures looking for their symbolic significance. This, however, does not mean neglecting their practical function and social meaning. The methodology of significance studies does not differ in principle from that used in the case of function and meaning.

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ABSTRACTS

The significance of facts

This article suggests methods for recognising and recovering symbolic significance in archaeological material. It develops the idea that there are three principal (and overlapping) spheres of the human world. In the first, '*artefacts*' have a practical purpose and function physically on their immediate surroundings. In the second sphere, '*institutions*' have a social purpose and function to organise human relationships. In the third, '*texts*' have a communicative purpose and function through symbolic significance. Application of the 'elimination method' starts by testing the first two spheres before undertaking an analysis of *possible* symbolic significance. The paper uses prehistoric fortifications and houses with sunken floors in Bohemia as examples.

Die Bedeutung von Fakten

Dieser Aufsatz schlägt Methoden vor, die dem Erkennen und Verstehen von symbolischen Bedeutungen im archäologischen Material dienen. Es wird die Idee entwickelt, daß es prinzipiell drei (sich überschneidende) Sphären der menschlichen Welt gibt. Sphäre I besteht aus '*Artefakten*' mit einem praktischen Zweck, die auf ihre unmittelbare Umgebung physisch einwirken. Sphäre II besteht aus '*Institutionen*' mit einem sozialen Zweck, die der Organisation zwischenmenschlicher Beziehungen dienen. Sphäre III besteht aus '*Texten*' mit einem kommunikativen Zweck, die über symbolische Bedeutung funktionieren. Die Anwendung der 'Ausschlußmethode' beginnt damit, die ersten zwei Sphären zu testen, bevor eine Analyse *möglicher* symbolischer Bedeutung unternommen wird. Als Beispiele werden vorgeschichtliche Befestigungen und Häuser mit tief gelegten Böden in Böhmen angeführt.