"As time goes by?"

Monumentality, Landscapes and the Temporal Perspective

edited by

Martin Furholt, Martin Hinz and Doris Mischka

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MARTIN HINZ

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Concepts of Time and Prehistoric Monumental Architecture

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Preserving the Past, Building the Future?

Concepts of Time and Prehistoric Monumental Architecture

Martin Hinz

ABSTRACT   Temporality and the different concepts of time are closely connected to the investigation of monumentality. In the archaeological literature a dichotomy between a cyclic and linear notion of time seems to be prevalent. Also the general notion that these concepts are present seems to be valid; they represent two aspects of a dialectic relationship rather than a total phenomenon that guides the actions of past and present societies. This mainly theoretical article tries to explore the different levels of temporality, on the one hand as part of a cognitive framework in which ancient societies acted and the link between action and time, but on the other hand also the tension that exists between the perspective ancient societies could have held and the perspective of the present investigators of past processes. It tries to illustrate the fact that in order to interpret the meaning of things and events, archaeologists have to consider that actions are mainly guided and directed by the present necessities, and that an interpretation can only be made from the present perspective of the past individual. A consequence of this is that the importance of material remains of rituals, for example, may be overvalued by scientists today.

Introduction

Time as duration is only recognisable if one is waiting for something. This is true in more than one sense. On the one hand it means that time is only present in the changes we can observe, be it the change of seasons, the progress of work or the movement of the hands of a clock. But to have an idea about time in general a general framework is necessary. Such a general framework is present in many recent societies, which mostly calculate their time in relation to the advent of a prophet. But for example the calculation AD only found wider acceptance from the 8th century. One could speculate that this was due to the approach of the world's end, which was expected to occur 1,000 years after the birth of Christ (Augustinus, De civitate Dei 20,9).

One visualisation of our notion of time is the opus of Roman Opałka, a polish painter who decided to paint eternity. In 1965 he started his work "1965/1 – ∞": he painted a 1 onto top left-hand corner of a canvas and started counting up. Later he started to mix one percent white in the ground of every new canvas. The final goal was to paint white on white some day. On the 6th of August 2011 he died without reaching this goal. Although the aim was to paint eternity, the structure of this work reveals the following aspects: time is visualised to have a fixed beginning, a measurable progress and a state when at least the actual process comes to an end. Here eternity is reached when further actions no longer change anything: the first white-on-white painting will essentially be the same as the thousandth. Our scientific universe starts with the Big Bang, it can be measured in its duration, and it will reach a status of finality either when it collapses in a Big Crunch or in the death of entropy. This idea of time's arrow seems to be plausible, rational, natural.

Why then do we deal with time concepts in archaeology at all? One reason is that talking about the flow of time incorporates ideas of cause and effect, of causality. If we wish to understand the reasons for actions in the past, we have to think about what could have been the motivation for people acting in a specific way, and what could have been merely unintended consequences. The key examples here are the erection of megalithic burials and the change in the sign systems of Early Bronze Age Únětice cul-

ture. I would argue that in these examples different concepts of time were in use, and that some of the interpretations applied to these phenomena probably confuse cause and effect in the processes involved.

As Bradley (1991, 209) put it, "without a clearer conception of time itself, it may be difficult to make the transition from chronological studies to interpretation". As long as archaeology is not engaged with the meaning of things in the past, former conceptions of time may not be that relevant, but still our own idea of temporality deserves attention. But as a subject that deals not only with things, but with humans in (pre- and proto-)history, we have to incorporate attempts to get closer to one of the fundamental organisational axes of human life. However if we deal with the time consciousness of past societies, we are faced with the problem that Nagel (1974) elegantly phrased with the question "What is it like to be a bat?". We very likely will never know how it felt to be a Neolithic farmer, and how the flow of time felt for him or her. But we are in a slightly better position than a biologist studying chiroptera: our "objects" are humans too.

In this article I will argue that some ideas about time may not have been that different from ours or from that of other contemporaneous societies. The link is the necessity deriving from different activities that were and are of importance in dealing with the natural and social environment. But on the other hand archaeologists should respect these necessities and the viewpoints of the past individuals that were essentially different from those of the investigating scientist. I will also argue for and against some generalisations because I think that these are necessary in the process of scientific reasoning from the moment when we expand our interpretation beyond the individual case to a larger field. But it has to be clear that they are generalisations, which means: they are wrong in every single individual case, in one aspect or another.

Time concepts

What is meant if we talk about time? A large semantic field is covered by this term. Because of its complexity and because of its fundamentality, it seems to be impossible to give a definition. Time is duration, time is sequential (older–younger), time is punctual. Time is process as well as state. Like landscape, for example, time is totally cultural and it is not, depending on the point of view. Time is human-made in the sense that it is produced through human

(social) actions and communication. For humans time is only relevant as it is part of their world, as it constrains and forms the way people can act. On the other hand a lot of processes that are not under the control of human actors have their own temporality, like seasons, movements of animals, day and night and so on. The trouble with the term time is that it is used for the process of (natural) change as well as for the processing and appropriation of these changes by the human mind. In this sense it is a dialectic term: it evolves from the interplay of (re)action of humans and the (re)action of their environment, be it natural or social.

The different connotations of time are emphasised also by Ingold (1993, 157 f.). He divides it into the terms of temporality, history and chronology. While chronology is "any regular system of dated time intervals, in which events are said to have taken place", history is "any series of events which may be dated in time according to their occurrence in one or another chronological interval". One is tempted to add that history is a series of meaningful events only, since history is constructed as a retrospection usually in form of a narrative with a certain topic or topos to be covered, with a specific purpose.

Hereafter he constructs an analogy to landscape, saying that temporality is formed as "taskscape", where each task gets its meaning from its position in an ensemble of different actions, including social and functional activities Ingold (1993, 158). What is important here is that in extending the analogy to landscape, he states that there are no real borders in the taskscape, formed by "periodical recurrences of rites, feasts, and public ceremonies", as Durkheim stated, but that these rituals are part of the taskscape like walls and fences are part of the landscape Ingold (1993, 159). This is surely true, but what he is not aware of is that both in landscapes as in "taskscapes" these events or objects form places with meaning, and thereby function as structuring entities for the whole "scape". It is clear that the social meaning of tasks, the order and duration of events are thought of in relation to these places, as well as in the relation to other tasks. Although not all tasks have their endpoint at certain borders in the taskscape, some definitely arise in or point to theses places.

Our ideas of the other perceptions of time are drawn almost exclusively from the investigation of the concepts of contemporary societies, filtered by the methodological and theoretical framework of anthropology (Cooper 1993, 263 f.). Applying this to the past means mixing three layers of time conceptions: that of the "anthropological analogy", that of the investigating anthropologist, and that of the past

society (presuming that the concepts of contemporary anthropologists and archaeologists are essentially the same, otherwise make it four). With each passage from one layer to the other, distortions are inevitable.

Even more we as archaeologists may be the worst possible investigators of past temporal perspectives, because we are so focused on the progression of time and on the past. The past is important for us, so we wish to find our mirror image in the past. And we wish to unravel the mind of past individuals, so we assume that their attitude can be revealed by empathising. For example Hodder (1993) argues that the sequential change of ceramic decoration is part of the narrative of the past societies and that, just as he is aware of living in the decline of the imperial age of Great Britain, past people could have also been aware of the changing tides of time, and that therefore sequencing of time in the past experience could be interpreted in the light of the material culture. But it is not clear how such an interpretation should be proven, because different stories and narratives could be woven out of the same thread. One main difficulty may be that we have a bird's eye perspective onto the landscape of time of the past, instead of that of an ant onto our own position in this landscape.

Not the best position to start from, but nevertheless, as pointed out above, activity on the field of temporal perspectives is necessary as theoretical underpinnings for an interpretative archaeology that doesn't float in free air, and anthropological data about different cultures are our only mean to confront our notion of time with a different perspective. From and only from that differences we can become aware of our own.

Cyclic and linear chronotype?

Most of the concepts about time archaeologists apply to their data originate in anthropological research. Mostly it is the case that these concepts are of a certain age when they find their way to us. Also this article surely does not reflect the cutting edge of anthropology. In general it can be said that time is usually thought to exist in different systems: the cyclic and linear notion of time. Often, especially in older literature, they are thought of as total phenomena for a whole society. This binary opposition, originating from the ideas of structuralism, in the form of "hot" and "cold" societies, is surely not sufficient for describing the complexity of temporal perception. Dietler and Herbich (Dietler / Herbich

1993, 248) argue against the exclusive use of binary oppositions when stating in general that the perception of time is a complex process that interlinks and blends both ideas.

In anthropological research it has become quite clear that there is not solely a notion of constant flow or eternal repetition, but there are also events that mark a sharp change in the historical perception of non-literate societies. One example can be drawn from the Andaman Islands, where time is divided by the arrival of the British colonists, referred to as time before and after the introduction of dogs. The traditional past is named *bibipoiye*, meaning "days when there were no dogs" (Cooper 1993, 265).

Linearity comes in two flavours: one is that which recognises the progression of time with the counting of cyclical events (years, moon phases), the other is that which incorporates a kind of progress, growth, constant change with a direction.

Although there is a referential, cyclic time concept among the Tivs, still they have a notion of linearity of time. It is displayed in the way they recognise the succession of generations. They say that their number increases over time, and accompanied by that, the area of land occupied by them, because every generation of children has a greater number than that of their parents (Bohannan 1953, 326). The same is said about the Ijesha (Peel 1984, 121).

Perhaps one of the most influential studies is the one by Bloch (1977). He criticised the assumption that non-literate societies are more or less trapped in a state of stasis, and that cognition of time according to Durkheim is determined purely by society and not by the natural environment. He believed that both assumptions are strongly connected (Bloch 1977, 279). The idea that "concepts of time are closely bound to social organisation and therefore vary from society to society" implies that there are a huge number of different time concepts around, but in reality there number shrinks down to two or maximum three different concepts recorded in ethnographic literature: cyclic time, linear time and perhaps static time; as long as it regards not only different measurements of time but fundamental frameworks (Bloch 1977, 282). One of the arguments against this multiplicity and incompatibility of concepts is that we are able to communicate about time with other cultures. Moreover he asserts that the fundamental logic in the syntax of all languages has turned out to be the same, so that the (temporal) principles of these languages and with them the mental structures should be comparable (Bloch 1977, 283).

But why, then, have different anthropologists recorded such different (but mainly cyclic) temporal

concepts with respect to other cultures? He believes
that the reason is that most ethnographers concen-
trate on the one hand on the ritual aspects of society
and on the other hand are enthralled by the other-
ness of the Others (Bloch 1977, 290). Additionally
temporal concepts are most explicitly expressed in
rituals. His example is the well known investigation
of the Balinese culture of Geertz (1966). He admits
that in some contexts the Balinese people do have a
"non-durational notion of time", but these contexts
are limited to ritual communication and settings,
while in other contexts they do not – and he men-
tions agriculture, village and national politics or
economy, that is in "practical" domains of culture
(Bloch 1977, 284). In the ritual aspects of culture,
temporality is surely socially determined because
these aspects serve a purely social function. Other
domains are more closely linked to the natural en-
vironment, and therefore a universally comparable
notion of time is in effect here (Bloch 1977, 285)[1].

Some positions of Bloch's paper were not left un-
challenged. Howe (1981, 222) rightly pointed out
that a strict distinction between the "practical" and
"ritual" sphere is problematic. Bourdillon (1978,
592) added that especially some aspects of the "prac-
tical" sphere, like agriculture, do follow a cyclic
concept because they are tied to the change of sea-
sons. But the main points seem to be valid: temporal
notions are not a total phenomenon; they differ not
so much between societies as within societies. The
view of totality is a result of the research strategy of
ethnographers. Thus different concepts of time are
bound to specific realms of actions, to specific activi-
ties and thus to specific necessities. But the number
of possible temporal concepts boils down in the end
to two or three. And the reason for this opposition of
static / cyclic vs. progressive / linear lies in the inten-
tion of the actions. We shall come back to that later.

To sum up, while there is a lot of criticism of the
binary opposition of cyclic and linear time, all in all
they seem to be the basis of our sense of time, and
quite probably also that of our ancestors. But these
terms cannot be seen in contradistinction to each
other. They belong to a dialectic relationship: with-
out progress a cycle cannot be fulfilled, without cy-
cles there is no way to recognise progress[2].

To trace the different usage of cycles and lineari-
ties in the archaeological record is not an easy task,
but there are some examples of trials in this direc-
tion.

The binary opposition is the basis of an article of
Bailey (1993). In a diachronic study about the differ-
ent temporal frameworks in Bulgaria from the Neo-
lithic to the Early Bronze Age he stated that these two
chronotypes are operative simultaneously, but with
shifting importance Bailey (1993, 204 ff.). But what
he is able to show is only that different tasks were
undertaken by the ancient people of Bulgaria that
made different ways of organisation necessary. If he
states that Mesolithic hunter / gatherers relied on the
cyclic activities of animals and plants, and that this
dependence on the seasonal changes increased with
the adoption of an agrarian lifestyle, he only dem-
onstrates that there was a necessity to adopt and to
reflect on cyclic events. He tries to identify a linear
notion of time on the basis of three arguments: re-
cord keeping, indicated by (the interpretation is not
certain) stamp marks that marked the property of
an owner permanently Bailey (1993, 212 f.); burials
outside the domestic area with personalised grave
goods, which represents the consciousness of the fi-
nality of death Bailey (1993, 214 f.); the settlement
custom of tells that indicates a progressive time by
the growth of the tell itself Bailey (1993, 216 f.). Lu-
cas (2005, 82 f.) comments that Bailey's paper rep-
resents "an interesting attempt to actually examine
temporal perception through practice", but it "suf-
fers from an oversimplification and reliance on 'tem-
poral typology' of chronotypes".

Both may be true and false at the same time. Ar-
chaeologically concepts of time are only detectable
by their materialised results, i. e. by the results of
practices that indicate certain conceptual frame-
works. This link is a weak one. But having such
sparse data only general statements are possible.
And also a generalisation of the analytic tools,
coarse-meshed sieves, is necessary and useful in
interpreting these data. Such a sieve is formed by
these chronotypes, and actually seems to have some
substance also in the ethnographic record. Therefore
they are not purely technical terms, but meaningful
maybe also for past societies. Anyhow one should

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[1] When Bradley (1991, 212) referred to this article he combined it with Sahlin's idea of prescriptive vs. performative structures / and
societies. But it is questionable if these two concepts are combinable, since the totality of Sahlin's suggestion is in contrast to Bloch's
critique: He is actually stating that a general attribution of such dichotomies for a whole society is inaccurate.

[2] If e. g. Murray (1999a, 2) following MacCullough (1991, 1–2) distinguishes four separate notions of time, he clearly has another per-
spective: He is concentrating on the domains in which different time concepts are used, not on the concepts themselves, which again
boil down to the difference between progressive and referential time.

not get overfond of concepts, because practice may have been more down to earth than theory today.

The same applies to the attempt of MIZOGUCHI (1993, 223), who tries to link repeated actions in burial practices with an idea of "routine", which would indicate a concept of cyclicality. This routine, this cyclicality constrains possible scopes of action, but can be used as a resource for an active production of meaning, for the strategic use of options. Nevertheless this attempt also has its weaknesses: MIZOGUCHI (1993, 226) is speaking of two burials that form a cycle, but are two events enough to deserve the term cyclic process? Moreover the author assumes a secret knowledge about the position of the already buried, held by certain persons who use this knowledge for strategic purposes. Neither do the sense and benefit of such knowledge become clear, nor is this the most plausible explanation for the regular position of buried individuals in relation to each other: cultural norms represent a much more likely explanation. Cultural norms can act as potent external memory storage device themselves.

But to be honest: is there a way to avoid (over)simplification of a matter that is so complex that even in the philosophical discussions of today there seems to be no consensus about what time is and how our recent time concept relates to the nature or relativistic idea of temporal processes. With the structure of space-time, the connection of landscape and time may become even closer, but not necessarily easier to understand. With the sparse material remains of cognitive processes a critical position is always easy to adopt. Nevertheless time is one of the most basic principles of human thought, and because of that, the organisation of human action is guided by this principle. It is worth being investigated in a constructive manner. In all cases of anthropological research I have come across, the two elements of referential, cyclic and progressive, linear time were present in some sense – though to be sure in most cases the investigators were part of or at least influenced by "western" culture. It seems as if this opposition is at least very fruitful for scientific investigation of temporal conceptions, so long as the two elements are thought of not as mutually exclusive but as part of a dialectic relationship.

Time and memory

The western concept of memory is strongly influenced by our western scientific reasoning as it is a linear process (ROWLANDS 1993, 143). Our time perspective has proven useful in organising and order-
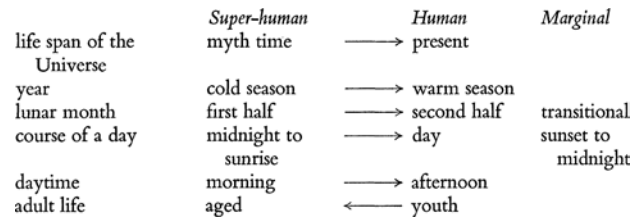

Fig. 1.   Temporal structure among the Ainu, according to OHNUKI-TIERNEY (1973, 293).

ing the material we have to construct a narrative or the past. Nevertheless it is clear that this time is our time, rooted in our present day "modern" society; it produces meaning for our narrative that is not necessarily the same narrative that past societies had (COOPER 1993, 261).

The connection between time and memory is obvious: memory is the reference to the past in the present. But this process could be supported by means of (cultural) transmission from the present for the future, e. g. traditions. Generally there is a distinction between incorporated and inscribed tradition. While the former is enabled by repetitive performance and therefore not necessarily objectified, the latter gets its efficacy through materialisation of information ROWLANDS (e. g. 1993, 142).

Archaeological interpretation often highlights the inscribing practice of memory, the materialisation, because we are dealing with material culture. But maybe it is often rather wishful thinking that processes of preserving memories necessarily materialise. And that these memories are actually memories. What seems to be a reference to the past may have been a reference to something that was thought to represent the past, without an actual memory of how that past really was. Information that is culturally transferred is of two (or maybe more) kinds: one is actually memory of events, the other may be called cultural norms, best practices that have their link to the past in that they have proven useful, without referring to a specific event or person.

In his attempt to characterise the structure of Ainu temporality, OHNUKI-TIERNEY (1973, 293) presented a scheme where most processes are directed in one direction (left to right, one is tempted to say forward), while the most important direction for the individual, his or her personal life cycle, has the opposite direction (Fig. 1). A quite similar pattern is reported by MBITI (1974). He explains that in most African societies time is not tripartite like our western notion (past, present, future) but bipartite. He uses the Swahili terms *sasa* and *samani*. Sasa contains all processes of the present, which could have begun in

the past and range into the future, including the immediate certain results of these processes. The temporal horizon extends two years into the future at most. If a process is complete it has the chance to become samani (Mbiti 1974, 26). In this course of time, the present moves not into the future, but into the past, so essentially time is seen as something flowing backwards. It is important to note that ancestors are part of sasa also, as long as they are remembered as individuals (Mbiti 1974, 32) – one could say, as long as they are history.

Also Gosden and Lock (Gosden / Lock 1998) argued for a division between history and myth in their article about "Prehistoric Histories". Such a distinction may be quite fruitful for the analyses (although Lucas 2005, 85 is not convinced). In this sense history is the product of actions of human actors, while myths "refer back to a previous state of the world, where human beings either did not exist, or had no power, and where processes of cause and effect manifest themselves differently" Gosden and Lock (Gosden / Lock 1998, 5). One could say that these humans are humans in the narrow sense, because it becomes problematic if we are faced for example with a mythological ancestor. Maybe it would be better to loosen this definition a bit, by saying that the myths refer to a stage where human beings also represent principles rather than individuals, ideas rather than persons.

In this sense the idea of (cultural) memory has also to be seen in two different ways: one is the memory of individuals or events in the past that are remembered *per se*, which forms a history of a community. The other is the memory of cultural norms that are preserved in mythological form, maybe connected to events in the past, but their meaning lies less in the actual historic episode than in their value as a topos for the present society. While the former has an intrinsic time, the latter doesn't need this to work.

A question (not only) of necessity

One of the things to keep in mind when thinking about time concepts is the question of what are they useful for.

For example, usually cosmic cycles are only recognised and become part of meaningful chronology if they affect the life of the individuals. We do not react to the cosmic cycles themselves (rotation of the earth, movement of the earth around the sun) but to their effects (day-night, seasons) (Ingold 1993, 163 f.). An exception is the movement of the moon, which in most circumstances does not have an effect

on our life *per se*. Nearly all known calendars that are based only on these movements are of religious or astrological purpose. They are not of "practical" use but are purely cultural constructed time of social importance. Their effectiveness is based on a cultural agreement and the resulting coordination of (social) acts. Because different moons do not have a meaning *per se* they are a very useful resource to manipulate social configurations and actions. The same is true of the concept of weeks, which may be often connected to a quarter of the lunar movement.

And seasonal indications may also differ among one "cultural unit". Dietler and Herbich (Dietler / Herbich 1993, 251) showed that among the Luo there are different systems of seasons, according to the different habitats they inhabit. Also the weekly cycle differs from region to region, but this is clearly an import and an effect of the different missionising Christian communities.

As with most concepts it is only necessary to develop a concept of time if it is necessary. This may sound like a truism, but actually it involves the possibility that on certain levels of life, ancient people had no concept of time because there was no need for it. For example, a linear idea about progress is only necessary if in a cycle of events the preconditions change with every cycle. Processes of (nonreciprocal) exchange over relatively large (temporal; social; spatial) distances need a record of who is in debt to whom (Bailey 1993, 217 f.). In the presented example of the Luo there is a need for a seasonal system that fits with the weather conditions for organising agricultural activities. There is obviously no need for a general seasonal temporal framework to structure activities on a supra-regional level. For the Christianisation there was a need for a system of weeks to arrange religious services, but also this need was different in different regions, and there was no need for a general system.

The question of necessity is also relevant in relation to the idea of "structural time" vs. "oecological time" originating from the most influential article of Evans-Pritchard (1939). Both times are essentially the same, both are "structural time" in a sense; they differ only in the realm of life they are structuring. While "oecological time" structures the activities that happen mostly on a yearly basis, and the duration in that time scale is often of importance (and more easily perceivable), "structural time" often structures the activities concerned with, and the relation to, other individuals. They often take place on a longer time scale, making the perception of duration harder but often unnecessary. This fits with the observation that age is often not given in years, but

in age classes or status changes[3]. Some of these status changes are actively enforced by rites of passage, while others take place silently and gradually. They form a series of sequential events, and only the order of these events is of importance. Social distance (important for marriage or property rights) is measured in generations; if it is necessary to be more precise the order of events is calibrated by commonly experienced events, quite often famines. These events, one could say historic events, are often of limited local importance, but there are ways to synchronise the local sequence with that of other neighbouring communities, but always on an ordinal scale (Dietler / Herbich 1993, 254 f.). The combination of these "historic events" and the personal history of social passage forms the personal biographic time of individuals in a system of ante / post quem, not dissimilar to archaeological reasoning (Dietler / Herbich 1993, 256).

The temporal framework used depends on the realm of activity that is in mind or communication: if distance from the present is important, a linear construct is applied that can be measured in steps of either fixed (duration) or undefined (sequence) length. If this is not the case, a "timeless", static or cyclic concept is used. "Social structure, far from being society, turns out to be a system of classification of human beings linked to other ritual cognitive systems, such as the ritual notion of time. Like ritual time it has phenomenological expression only at certain moments of the long conversation [the discourse of society, M. H.], and interestingly it too also seems to be different from the cognitive social system of other moments of discourse" (Bloch 1977, 286).

The question of cyclicality vs. linearity is also a question of scale. The individual life span is clearly a matter of linearity (maybe only in this world), but for a household e. g. Lucas (2005, 78) pointed out the combination of different individual life spans forms cycles of a household. The scaling up of other aggregations of linearity to cyclicality could be observed (e. g. Bradley 2002, 67 f. for the cycles of households in a settlement unit). Again, linearity is only the succession of cycles. But actions can only be undertaken by agents that are single individuals. If they do reflect about their household, or community, it is quite plausible that they also think of actions on a more abstract level, as an aggregation that highlights the similarity of situations and events, as a cycle. Such a reflection is an act of making sense of society. Rituals

can be seen as a result of such reflections, as a way to display and manipulate social or natural order, as a means to influence expected reoccurring processes.

Time and ritual

Let us begin with the question why there is a separated ritual and every day notion of time, as it is recorded in the ethnographic literature. To answer this we have to define what is meant by the term "ritual". This term, it seems, is problematic in archaeology because it is a container: if some actions do not serve an obvious purpose, they are attributed to "ritual". Additionally the term seems to be so complex or so self-evident that a precise definition seems to be impossible or unnecessary. To cite some definitions from anthropology: Turner (1967, 19) defines rituals as "prescribed formal behaviour for occasions not given over to technological routine, having reference to beliefs in mystical beings and powers". For Rappaport (1999, 24) a ritual is a "performance of more or less invariant sequences of formal acts and utterances". In their handbook of sociology Giddens and Griffiths (Giddens / Griffiths 2006, 1032) speak of rituals as "Formalized modes of behaviour in which the members of a group or community regularly engage".

From these definitions some aspects could be extracted:
1) Rituals are formalised prescribed acts. This necessarily involves the past, from which the prescription originates. This incorporates also the regularity (in both meanings) of the actions.
2) Rituals involve performance that takes place in the present. This performance can alter the prescription according to the actual needs and circumstances.
3) Rituals serve a purpose. They use a performance to "do things with words" (Austin 1978) or symbolic actions. In religious rituals the purpose might be to influence mystical beings and powers – in general one could speak about "invisible entities" (Bloch 1977, 287). To achieve this influence rituals draw their power from the past, from the belief that a certain action has power because in that past it already had the power of this influence. Rituals are referential or cyclic by definition.

One reason for rituals and the connected time concept may be, as Bradley (1991, 211) noted in ref-

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[3] Example taken from the Luo, Dietler / Herbich 1993, 252 ff., but similar processes can be tracked in nearly all ethnographic literature dealing with time perception.

erence to BLOCH (1977), that the form of the ritual and the connected authority raises the actual content beyond reproach. "Ritual is a special form of human communication, and by its very nature it cannot be discussed by the participants" (BRADLEY 1991, 211). This makes rituals a very powerful resource for social discourse among individuals.

So there is a tension between the performative and the referential nature of rituals. This tension is shown by ROWLANDS (1993, 145 f.) in the case of war memorials: on the one hand a memorial has to be unique to be memorable, on the other it has to follow conventions and traditions to enable the link to the past it is intended for. While the former inscribes the notion of the unrepeatable, the latter is clearly a realisation of stabilising cyclic concept.

"The presence of the past in the present is therefore one of the components of that other system of cognition which is characteristic of ritual communication, another world which unlike that manifested in the cognitive system of everyday communication does not directly link up with empirical experiences. It is therefore a world peopled with invisible entities. On the one hand roles and corporate groups [...] and on the other gods and ancestors, both types of manifestations fusing into each other [...]. Another world whose two main characteristics, the dissolution of time and the depersonalisation of individuals, can be linked [...] with the mechanics of the semantic system of formalised, ritual communication" (BLOCH 1977, 287). Again two instances of temporal as well as of social perception can be realised. Differences between these systems can be a resource that is used for strengthening the stability of a system or for change. But the stability of a ritual doesn't mean automatically the stability of society (BRADLEY 1991, 211): a ritual is performed at a particular moment, and its meaning depends on that moment. There is only a loose coupling between meaning and form. The other way round: different meanings can be inscribed or better incorporated in a specific ritual, depending on the necessities of the moment.

In his very illuminating article INGOLD (1993, 160) compares his idea of taskscape with orchestral music, where the whole is a combination of different rhythmic cycles and, more important here, that its meaning is dynamically produced during the performance, and that the performance is the product, not the materialisation of the performance. It is only one possible concept, maybe a typically western one, that the meaning of an (artistic / ritual) activity lies in its outcome, its material product. Other cultures value the process of performance more that its result INGOLD (1993, 161).

In conclusion it seems to be in the very nature of rituals that they follow a referential, cyclic regime, because their efficiency depends either on a performance being acted in the correct, successful way or on its effect being plausible intersubjectively, depending on the viewpoint. On the other hand they are performative actions, which incorporates the fact that they are undertaken to have an immediate effect because the performance itself is the action. This means that every material outcome of a ritual should be thought of rather as a by-product or a focus for the real effect the ritual has. Although rituals depend on the past, and re-enact the past, the past serves a present necessity and is not re-enacted for its on sake. That is why rituals probably, but not necessarily, enforce stability.

Time and power

It is clear that ritual cycles and cyclic rituals represent norms and rules. Whoever is in the position to appoint such rules has power over the actions of other people. Temporal classification, and the authority over this classification, are a matter of social discourse. It is obvious that if one is in the position to give meaning to different moments by this means, one is also in the position to determine what people are to do at such a moment. By doing this and link these meanings to an external authority (gods, nature) the social set-up is legitimised and justified. Time is political. This has been most obvious not only since 1984 (Orwell, Hodder) in the case of history, where meaning for the present is produced from the past, and altered according to the needs of the authority that is incorporated in that production. Rituals are part of politics. It is only logically consistent to assume that where there are more rituals, there is also more exercise of power.

Cyclic, referential ideas of time bear the imprint of stability. The "conception of 'cyclical' time has been [maybe better: could have been, M. H.] thought to help in the reproduction of 'static and organic models' in society" MIZOGUCHI (1993, 233). This aspect is quite obvious: the individuals that are in control over time concepts are most likely also those who represents the top of a social hierarchy. They in particular have good reason to stabilise the social configuration. And they are also plausibly the ones that are important in ritual activities, the authorities of a society. Not by chance was one of the deeds of the by-products of the French Revolution a new calendar system.

Usually annual calendric systems are aligned with the growth of the major crops. If organisation of time and power is connected one could assume that this is connected with the control over these crops. This becomes more evident in the example of the Simbo, Solomon Isles near Papua New Guinea. Here the seasons are divided by the ripeness of two nuts which occurs in opposite positions in the cycle (Burman 1981, 253). These nuts play an important role in the prestige system of exchange (Burman 1981, 257). They are part of the political power structure, they are important for a specific part of the society (usually mature man), and the connection between stability, power and time is emphasised by the way they symbolise the repetition of time literally and as part of an exchange system.

So there seems to be a strong link between cyclicality, ritual complexity, social complexity and power. Again Bloch (1977, 288 f.) gives an illuminating example pointing to the Hazda. These hunter / gatherers puzzled the ethnographers because they exhibit hardly any ritual activities and have almost no social roles. This is accompanied by a strong "present orientation". This absence of anthropologically "interesting" features cannot be explained, according to Bloch, by their mode of subsistence, since other hunter-gatherer societies, namely the Australian Aborigines, who are the paragon example of past-oriented and ritual society, do have a complex system of ritual activities. The difference is the amount of institutionalised hierarchy. "[...] the amount of social structure, of the past in the present, of ritual communication is correlated with the amount of institutionalised hierarchy and that is what it is about" (Bloch 1977, 289). This does not refer to inequality in general, since that can be present also in an uninstitutionalised way. The key element is the fixed regulation of social relations and thereby of power configurations. Bourdillon (1978, 596 f.) remarked here that rituals are partly also used to constrain inequality, but this doesn't affect the original intention: it still means that there has to be a degree of institutionalised inequality, and it definitely relates to a contest of power.

As linear time consists of a sequence of cycles, also power relations can be expressed in the privilege to begin a cycle. Dietler and Herbich (Dietler / Herbich 1993, 253) call such a situation "ritualized sequential time": it is the privilege of the oldest woman of a household to initiate the harvest. Also the correct time for harvesting is thought to depend on the natural cycles; a second, social layer of authorisation is added. To neglect the privilege is seen as a potential cause of danger.

In the end, control of the organisation of time includes control of time itself, in the sense that the actions linked to that time are also subject to that control. Moreover, a complex system of temporal organisation reflects a complex social system in which everything has its time as everyone has his or her place; the necessary degree of organisation is a measure of the amount of possible social conflict that has to be controlled. Or to put in other words, the control over history and mythology as intersubjective believed past is a powerful resource for legitimisation of the hierarchy. It is this form that Max Weber (1980, 130) called traditional authority. Both history (e. g. in the form of genealogy) and myths (as role models) can serve to stabilise existing inequality, especially in institutionalised hierarchical situations. And in their referential nature it is closely linked to cyclicality.

Possible generalisation?

Although there is the danger of oversimplification and different interpretative filters connected especially with the application of anthropological analogies, a generalisation of the different observations should be attempted here as a proposal for a model that also has plausibility for pre- and protohistoric societies:

Quite similar situations can be observed in such different cases like the Saulteaux / Ojibwa, Canada (Hallowell 1937), the Ainu of Japan (Ohnuki-Tierney 1973) and the Tiv of Nigeria (Bohannan 1953): they have all different ways of dividing time into shorter periods (seasonal cycles according to economic-ecological necessities, daily cycles according to social situations, lunar cycles and so on), but these are only "different clocks", as Bloch (1977, 282) called it, and moreover they can vary from region to region of a landscape that is said to house people of the same culture. Above this a measurement / counting of days (years, or other time units) was seldom observed, rather a relational system that linked different events with each other. Such events are often famines, to which individual states ("when I was young") are correlated. These temporal frameworks are local, although they can be correlated with neighbouring communities. But they are also local in another sense: they are relevant only for their sphere of life, only for a certain range of activities, and mostly only to particular activities within that range. This kind of reverential time order applies in the case of actions of the recent past or immediate future, connected to the needs of the actual

present[4]. Disconnected to that the "long ago" exists, like a "once upon a time". Within this horizon temporal correlation is irrelevant, and it has no measured temporal distance from the present. An intermediate time horizon is given by genealogy, which represents a kind of referential sequential time scale that is important to regulate social relations in the present. But for this, too, no unit smaller than one generation is necessary. The question is: is this that far away from our notion of time, beside the fact that we have a commonly shared framework of reference? One could call such a concept qualitative to oppose it to our quantitative, durational concept, but this quantitativity is only used in our society when necessary. Having said this I have to admit that is nowadays necessary more often than not.

An interesting example of perception of chronological quality vs. quantity is cited by Lucas (2005, 86). The history of Ancient Egypt is mostly perceived as a continuum with a shorter duration than its distance to our own time. Yet this is not true, for the distance from Menes to Cleopatra VII Philopator is nearly 3,000 years.

Obviously other cultures also have the idea that the present is a product of the past. The past is present in their social relations to each other. But these pasts are measured in different temporal scales. While for the present, duration is of importance, for the past it often is not. The latter is structured in a system of a relational sequence. And at a certain point this sequential relation is not of importance any more. Myths are role models for activities in the present, their temporal relation is often not of importance, even when a causal order is evident. One example can be taken from (Hallowell 1937, 668): although the people of the Saulteaux are aware that the contest of the North and South Wind must have taken place after the Birth of the Winds in another myth, the temporal relation between these myths is not of importance, so there is no need to have any kind of temporal scale more precise than a nominal one here. One could ask if this is not essentially the same time concept most people of "western culture" share today?

Interim conclusion

One problem is that we are archaeologists. We tend to create a narrative of the past that is a history. Most of our contemporaneous fellow humans do not. For them the past is the unknown land, as is the future.

It is quite plausible that the people of the Neolithic, who weren't archaeologists or historians either, perceived time in the same way. Our focus is the past; their focus is the present. We try to reconstruct the past; they try to integrate knowledge about it into their activities in the here and now.

Another thing is to be noted here: in the different concepts of time from the ethnographic record a clear conception of the future is missing most of the time. This is most evident in the work of Mbiti (1974), but also visible in other descriptions. This fits with the description of time in ancient Egyptian culture which (Assmann 2002, 18) gives us on the basis of the terms *neheh* and *djet*. Both are time in some sense, both are eternity and thus timeless. Djet is the grammatical perfect, it is the fixed past that is not past as it is not temporal and diachronic, whereas neheh is the (cyclic) time that moves, but it is actually also not temporal in our sense since it is instead a storage or pool of time, which is not a future, but a possibility. There is also a possible link between these times since although neheh-time cannot become djet-time, things done in neheh-time can become part of the djet. Here too a duality is observable, between human active time and the vast timeless horizon of the past, but no evident hint for a possession with the future.

So it seems that there is not only one time, but effectively a multi-temporality, depending on what action is attributed. There is an intrinsic time, as McGlade (1999, 156) called it, of different processes, and it affects not only the necessary scale of investigation of these processes but also other actions linked to them, like the (re)actions of past agents. Three temporal horizons seem to crystallise:
• A timeless horizon of myths, that is not history or even past as such,
• a horizon of history that may or may not reach back five or six generations, maybe more (Clark 1992, 42), but in the end becomes blurred into the mythological horizon and
• the present, which has to be understood as a scape of action that links back to the past but also extends somewhat into the future, as far as these actions and their immediate results are concerned.

Right or wrong, generally it cannot be stressed enough that interpretations of past activities have to start in the present of these activities, not in their future. Archaeologists literally see the results of the actions before their cause in the stratigraphic sequence as well as when they look back from their position in

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[4] This could be the reason why, for example, the Tiv say of all men of a certain age group (usually formed about every three years) that they are born in the same year (Bohannan 1953, 323). For the determination of social relations they are equally old.

the future. If we want to reason about the meaning of things and events for contemporaneous societies, we should adopt their temporal view. Meaning is produced in the present, not in the future.

Example 1: Megalithic "monuments"

We are astonished by the amount of labour these people invested into the disposal of the corpses of their dead, but we have still no clue as to the reason. Yet we have developed quite elaborate ways to express this.

The concept of monument is closely connected with the concepts of time. In a common-sense interpretation monuments link the present observer with the past. Monuments are thought to be places of memory, erected or established to install a link to the past directed to future generations to ensure their memorial connection with that past. The Latin root of the word – *monere* – clearly is to be seen in that sense.

We as archaeologists transfer this idea – and the attached meanings – to certain objects of pre- and protohistory. With that transfer we also unconsciously transfer possible motivations onto the builder of these "monumental" objects.

Different levels of reasoning

If we talk about monuments in prehistory, we include at least two layers of reference into argumentation: for us these objects are monuments because for us they are links to a past. Moreover these objects are highly valuable for us (archaeologists), so that preservation for future generations is a main goal of our efforts. But at the same time this meaning is often thought to be the original meaning of these objects, without having indications for that from the objects themselves. The erection of monuments nowadays integrates the three time horizons of our time scale in the common-sense interpretation: they are built in the present, to commemorate events or persons of the (maybe immediate) past and to conserve this memory for the future.

A second form of monumentalisation is performed in the case of objects that were not intended to serve as a monument *in sensu strictu*, but were later attributed as monuments. Here the erection of the object is already finished when an erection of a monument takes place, but only virtually. Maybe

this is the case more often than not with the monuments we are used to designating as such. But also in different times already existing features could have served as monuments. The question is not whether these objects are monuments in general, because they are if we attribute them in this way, but whether a monumental intention is plausible for the time of erection, if we wish to get closer to their original meaning.

One example for the change in meaning can be drawn from the investigations of Cooper (1993). Nowadays the ancient shell middens on the Andaman Islands form part of the history of the people: "a midden is a repository of the remains of ancestors, thereby constituting a direct link with the past"; "the older the site the more respect it earns in terms of symbolising the achievements of the past, of providing tangible proof of a beginning as well as a sense of continuity". But "initially such a deposit constitutes a mere rubbish dump whose stench necessitates the relocation of encampments" (Cooper 1993, 265).

Here the discussion about time concepts is relevant. As the character of a monument is strongly connected to the temporal triplet past – present – future, assuming that objects were erected or installed as monuments in this sense involves the assumption that such a conception of time was also present in past societies.

One of the main problems with past temporal concepts is that we are dealing with purely mental constructs that leave no traces in the archaeological record *per se*. Also analogies with recent non-literate societies cannot be used as proof for this or that concept of time, but allow us to construct some possibilities or constraints for interpretations. With concepts of time it is much like it is with theoretical issues in general: they are unavoidable. Even if we use no explicit theoretical framework, or concept of time, we are still using one: the one that guides the decision not to choose one or the other consciously.

Archaeologists look backwards in time, maybe not dissimilar to the African notion of time described by Mbiti (1974). But the causal arrow of time is pointing in the other direction, so processes have to be interpreted from their present, which incorporates the past of this present, and not from their future and their results. A lot of the interpretation of megalithic burial customs is connected with the idea of ancestor worship. But at the moment when such a grave was erected, its function of symbolising ancestorship is yet to come[5]. In some cases these graves revealed

[5] Although in the Falbygden area there are chambers where a secondary burial took place as at least the first burial activity at that site, indicating the translocation of an ancestor to the newly erected tomb (verbal communication Sjögren).

traces of former activities, for instance a house that once occupied the location of the later grave[6]. But the connection to this past only links the newly erected grave to history, without changing the grave itself into history. This process is yet to come[7]. The meaning of the erection of a megalithic grave cannot be interpreted by its effect, but must be interpreted by its cause. Later meanings associated with the already existing grave are a different story.

One argument could be that having a megalithic grave was an evolutionary advantage for the societies, so that the causality comes again from their effect. But the history of erection of monumental graves, be they megalithic or non-megalithic, is far too short for such an evolutionistic argument. Graves are not erected for past ancestors but for the community of the present and their ritual needs for burying people in the present.

And also if they were connected with ancestry, it can be argued what ancestor was meant. Bearing in mind that in medieval and early modern times they were thought to have been erected by giants once upon the time inhabiting the landscape, one could ask what kind of narrative earlier people attached to the megalithic sites. If the persons buried here where no longer known individually, maybe memory faded or changed into a mythic state. Now these graves could have been incorporated in a narrative that had less to do with the actual history but more with a topos, a metaphor serving purposes of the present, with cultural norms and ideas transmitted by oral tradition having a materialised "proof" in the sites of the ancestors. This does not mean that history is only a product of the present, as some schools of philosophy argue, because all common sense needs a common belief as a basis, and this has to be plausible at least to a certain degree to function. So the basis of history (and myths) is events that took place as long as no scenario like Orwell's 1984 is plausible. But the interpretation of these events is flexible, as different monuments can be laden with different meanings over time.

All in all, a grave is a connection to the past from the moment when it has already served its primary function, that is, when burials have taken place. This link is not the primary intention when it is built. And later the following generations attach meanings to them that may not have much to do with the people buried in the first place.

So in archaeological interpretation it should be made clear who is in focus and for whom the monuments serve a memorial function. It is certain that preparing a proper funeral is part of the grieving, but it is questionable if future generations were addressed with the funeral architecture.

Building for the future?

Burials are clearly part of ritual behaviour; this is still true in our secular society today. In this situation of disturbance of social order it especially seems to be of importance to cling to fixed norms of behaviour. This is mirrored in the idea of the rite of passage, where dangerous passages take place in an ordered sequence to overcome the liminal state that is connected with them. But things are different if we talk about collective burials. Here the burial ritual may be linked referentially to other burials, to a cyclic notion of time, but the erection of the megalithic tomb is a single event.

Here again the difference between inscribed and incorporated (Bradley 2002, 12–13) memory has to be tackled. Monuments seem to represent obviously inscribed memory. Rowlands (1993), too, believes they are. But he adds a second kind of "memorialisation": places where for example sacrifices took place. With such actions the specific place is charged with meaning Rowlands (1993, 146). He believes in the different character of such sites: "They cannot function as aide-memoires and are thus not made with a view towards the past, but towards the future [...]. They do not embody memories of past events but have themselves become embodied memories; objectified and condensed as a thing" Rowlands (1993, 147). But doesn't the practice he refers to, the placement of something at a certain place in the landscape, also include burial practices? The building of a megalithic tomb marks a certain spot in the landscape, but this spot gets its meaning only by the burials, not by the tomb itself. One could ask if the differentiation of inscribed and incorporated memory is not merely representing two poles of a dialectic situation: while inscribing memory it is

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[6] There are some interpretations that link the erection of at least non-megalithic earthen long barrows to the house constructions of the LBK (Bradley 2002, 30 ff.; Hodder 1992, 45 ff.). Still there is no plausible explanation as to how this transfer of ideas should have taken place over the vast distance in time and space.

[7] Additionally it may be the case that more often than not former activities are not recorded at the sites of megalithic burial activities. Is it acceptable to draw a general assumption about a possible connection on the basis of a minority of cases? Is it not rather a confusion of a universal quantifier and an existential quantifier?

also incorporated. And monumental "inscriptions" in the landscape enable processes of incorporation, marking a special place where these rituals could take place best. And in the ritual the performance of the ritual is surely of major importance, while the material parts of that ritual including the grave itself are rather props for the performance.

An often cited example for the perfomative nature of certain rituals, he also refers to, is situated specifically in a burial context: the erection of so called *malangan*, carved wooden statues that were erected during the burial ceremony and then burned or left to decay[8]. They are produced with great effort, only to be destroyed actively or passively later on Rowlands (1993, 148 f.). Great amounts of labour are invested in the burial, only to be consumed during the ritual. The ostensible reason is that during the destruction of the statues, the essence of the deceased is set free. All in all there is no indication that these "monuments" are erected for any future, but rather for the "functional" needs of the moment, for the performative ritual itself.

And to stick to performative interpretation: what is the intention of building a megalithic grave in the first place? Surely it is built to house the dead, but on another layer of interpretation other intentions could be ascribed: beside its function the erection of a grave also does something with the society. They represent a collective effort, so the prerequisite as well as the product of this building process is collective identity. And like feasts such events serve as a sandbox to establish and ascertain the configuration of social roles. Also for contemporaneous monuments it is at least questionable if the function of memorial is the driving force for their erection. Isn't it that local authorities use the erection to connect themselves to a statement that is symbolised by these monuments? And what the monument symbolises is also quite flexible: although it has to connect somehow to a past that is believed in, otherwise it will not function as intended, this past can be flexibly remodelled as long as it stays plausible within constraints determined by the shared belief. One of many possible examples was presented by Dietler (1998) when he investigated the monumentalisation of Celtic oppida during the 19th and 20th century. Collective actions can serve the authorities for the accumulation of social and symbolic capital.

These collective burials are not a statement about the past of a community, but about the present. Elements of the past may be involved, but they are more likely used as a resource for a present discourse about power and politics. This is even more obvious for the collective effort that these graves represent. Different parts of the whole custom of megalithic collective burial are linked with different activities and also with different temporal scales. The erection itself is surely a result of necessities of the current present. It is still a possibility that thoughts and plans about the future are connected with this erection, but it is much more likely that this future was also part of an elongated present. Referring back to the backward flow of time presented by Mbiti (1974) it is rather likely that the people tried to inscribe themselves not into the future but into the past, and that the result of their effort should become samani. And in this monumentalisation of the moment, of the present, the stage was prepared for what possibly had the greatest importance for the society, and of which we only have the materialised tip of the iceberg: the performance of the ritual.

Example 2: Socio-temporal configuration of Early Bronze Age Únětice culture

A second example should be addressed here in contrast. In an investigation of the grave goods of the Únětice culture (Hinz 2009) I tried to disentangle the effects of temporal, social and spatial displacement of the buried individuals. This was done with multivariate analysis in the general lack of ^{14}C-dates. The ones that were present showed that there was an incongruity between the scientific dates and the chronology deriving from typological reasoning: in several instances artefacts like different types of cups and especially bronze objects were dated scientifically much earlier than the traditional chronological sequence indicated, and also than the conventional seriation using correspondence analysis showed.

Using further multivariate methods like partial canonical correspondence analysis it was possible to separate the influences of spatial position of the burial sites as well as the temporal influences using an ordinal scaled temporal sequence as base. The

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[8] Bradley (2002, 41 f.) links these statues to his idea of "remembering by forgetting". But his interpretation isn't convincing, since no real act of remembrance takes place; rather the individuality of the deceased was dissolved in a collective tradition. Moreover, if he connects the dismantling of menhirs and their reuse in megalithic tombs (Bradley 2002, 38) with the malangans, the different durability of the materials should be kept in mind.

remaining pattern was a sequence starting from the so called "princely" graves and ended with burials with rather poor assemblages of grave goods and was therefore interpreted as the result of (horizontal) social influence onto the composition of the burial items (Hɪɴz 2009, 72).

Having eliminated the temporal and spatial influence, the supposed social dimension still correlated strongly with the temporal (Hɪɴz 2009, 77 fig. 3.20). Taken literally this correlation would indicate that while at the beginning of the sequence no higher social rank was present, at the end of it only individuals of high social position were buried, or at least present in the archaeological record. But individuals at the beginning of the sequence were equipped with grave goods of bell beaker origin that are thought to indicate high social position in this cultural context. Moreover a network analysis showed that these individuals showed strong connections with the individuals of supposed high social position in the later part of the sequence.

Thus an alternative interpretation was much more plausible: innovations of sign systems of distinction had their origin in the supposed higher social stratum. But these signs were gradually taken over by lower social strata. To ensure their supremacy the individuals of a supposed higher social stratum had to change their sign system to continue distinction. This process was a motor for change in the system without involving external stimuli.

But in such a situation time and social space is closely linked. On the one hand we have different levels of society more or less on different temporal levels. This is a problem for typochronological dating: is this individual with a certain composition of grave goods a socially high standing individual of an early date, or a socially lower individual of later date? On the other hand the processes of (social) politics here involve not conservatism, but progressivism. To keep society stable, change was necessary. Although we are dealing with burials, with a sphere of ritual activities, we encounter here not a referential time but a linear, progressive time.

But the dialectic of cycle and linearity becomes evident once more. Without the reference to the past the novelty of a sign system cannot become meaningful. It is the very action, the intentional decision to abstain from tradition that makes the progressive meaning.

Conclusion

There seems to be a difference in the notion of progress from the Neolithic to the Bronze Age. While in the case of the megalithic burials the references seem to be affirmative, in the latter (and also in the Chalcolithic of southern Europe) an intentional use of difference, a growth, is visible. With the mode of using different sign systems to ensure the superiority in symbolic capital a progress is set into action which is an indication of a different social setting that involves the necessity to change. According to Bloch this could be an indication that the complexity of roles is lower. Maybe we are faced with a complex, more horizontal social structure in the Funnel Beaker Complex, while in Early Bronze Age the social structure is more straightforward, but also more dynamic. But this is beyond the scope of this article.

Like Bᴏᴜʀᴅɪʟʟᴏɴ (1978, 593) is a cyclic notion of time not hiding the world, contrary to Bloch's interpretation in the sense of the Marxian term of ideology: The relations between humans they express do really exist. The derived concepts are in fact reflections about the world, abstractions such as are also used in modern sciences for example. They represent reasoning about cause and effect. If we as archaeologists wish to come closer to the intentions of actions and hence to the meaning of things, we have to argue from the individual's point of view, from the perspective of the people we are trying to understand. While it may be a hopeless attempt to empathise with the ancient mind, it may be possible and fruitful to take past rationality into account. This is of course conditional rationality, and for the exploration of these constraints the anthropological analogy is one of our major sources, how dangerous this might be. Proposing this model of three time horizons and the dialectic of cycle and linearity is just a compilation of ideas that are used in archaeological reasoning. Also the consideration that the action and the present of that action is most important for the production of meaning may not be new. But especially in respect to the idea of monumentality, a term that has a specific set of connotations in our language, it is important to stress that the act of monumentalisation may be more important that the monument itself, and that the importance we ascribe to the material remains of rituals does not necessarily coincide with the importance that was incorporated in them for the performers of these rituals.

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