

Culture and society in traditional and processual archaeology

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The article discusses the conceptualization of knowledge of culture in archaeology. On the one hand there is the traditional approach to culture connected with the term “archaeological culture”, and on the other the systematic approach to the investigation of past cultural reality. The theory of culture has been developed by processual archaeology, and the systemic approach has led directly to the development of a theory of culture in archaeology. The article also discusses changes in the approach to the problem of culture in Polish archaeology. The importance of the term “style” as a unit of analysis of social structure in archaeological investigation of culture is discussed, it seems more useful for these investigation than other forms of cultural analysis.

KEY-WORDS: culture, archaeological, cultures.

Relatively early in the development of the discipline, culture played a large part as the object of archaeological investigation. The term itself is however not equivocal within the various individual disciplines which investigate it, and these meanings have changed at different stages of their development. The term “culture” has for example a specific range of meanings to the cultural anthropologist (for further discussion see Minta-Tworzowska 1994 : 101–15). In archaeology it has a different range of meanings. Different orientations in archaeological investigation also invest the term with differential significance. Here we will accept the validity of the systemic approach to the ancient social world, and for the investigation of culture. This approach encounters many difficulties, but in practice it is one of the most effective. I understand a system as an epistemological category, as well as an ontological one, which means that culture is both a system and at the same time it is investigated in a systemic manner.

The systemicity of culture is revealed by the “emic” strategy, assuming that the aim of the process of investigation of any culture is to comprehend it “from the inside”, from the point of view of the people participating in it. A necessary preceding stage of this process is the “etic” examination of the phenomena (from the outside), describing a culture from the viewpoint of the observer. Etic observation

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allows access to a given culture, the effect of which may be the emic approach to it. Approaching the “interior” of a given culture, emicity, is the counterpart to the humanistic “coefficients” of Florian Znaniecki. Znaniecki (1991) accepts that elements of reality do not in themselves possess characteristics which define that reality, this can only be achieved by examining the place of other connected elements in the group of elements. It is the same in culture. Incorporation into a cultural system defines the meaning of an element, which in other systems may have completely different meanings. Systemic analysis involves the discovery of the rational relationships within prehistoric realities, the place of material products in systems, the organisation of systems and their interrelationships. The conception of cultural systems allows the observation of the operation of long-term patterns, which create cultural permanence, despite changing circumstances and conditions. Systemic thinking has been fully accepted by the processual archaeology, while it hardly ever occurs in the culture-history mode of practicing archaeology. This defines one of the basic differences in approach to the study of prehistoric cultures between these orientations.

The way the archaeologist uses the term “archaeological culture” in his investigation of prehistoric societies differs from the way that the term “culture” is used by cultural anthropologists. The concept “archaeological culture” is a theoretical term serving to order observed data (Pałubicka 1985 : 106). In the understanding of archaeological cultures we see a combination of two viewpoints: the first emphasises the real observable sense of archaeological cultures, the other understands it as a heuristic device, used simply for typologically ordering data, and hence an investigative tool not corresponding to a concrete real phenomenon. There is no real isomorphism between the culture of a particular society and the archaeological “culture” distinguished by archaeologists – thus the importance placed on investigating the relationship between “living” and “dead” culture.

The use of the concept of archaeological culture led to the development of the culture-history school of archaeology, and the first definition of a unit understood in this manner was given by Gustav Kossinna – who (following Rudolf Virchow) first formulated the ethnic concept of culture in 1911 (Żak 1974 : 42ff). In adopting this concept, archaeology was influenced by cultural anthropology and the way the concept was understood in anthropology. The characteristics of the school of *siedlungsarchaologie* are well-known (Shennan 1989). The formal, spatial and temporal connections between artefact types was interpreted in ethnic or tribal terms. Changes observed in the archaeological material were interpreted as an ethnic change of “peoples”. Thus each discontinuity in the material was unequivocally interpreted as an ethnic change.

Kossinna accepted the identity of phenomena in specific spheres of culture, regarding changes in technology as equal to social and ideological changes.

Anthropology owes the discovery of the existence of the ordering (technological, social and ideological) of cultures to archaeology. The investigations of cultural anthropologists demonstrated that there exists a parallelity of cultural phenomena, but not their identity, which means that social change is not automatically linked with changes in other spheres of culture, and also that changes in the material sphere do not indicate a social change. That is why in the form in which it appears in Kossinna's work, the methods of *Siedlungsarchäologie* were regarded as unscientific (Żak 1974; Adler 1987; Veit 1988), even more so as it possessed an ideological – anti-Slav – aspect.

In Polish archaeology the views on archaeological cultures were shaped by Majewski, Kozłowski, Antoniewicz, and Kostrzewski within the culture-history tradition. The first definition of archaeological culture in Polish archaeology was given by Kozłowski in 1922 in the work *Problem etniczny w prehistorii* [The ethnic problem in prehistory] in the periodical "Lud". He defines a "cultural group" as a certain combinations of tools, weapons, grave forms, houses, a specific lifestyle and (as far as can be determined) religious ideas which occur as a compact group in a specific territory as the reflection of the material reflection of one ethnic group. Unlike Kossinna however Kozłowski did not regard it as methodologically correct to link a given cultural group with ethnic ones on the basis of single characteristic artefact types. He was able to accept such an interpretation when the features of the analysed complex could unequivocally be shown to have local or indigenous.

Józef Kostrzewski understood culture similarly, linking it with the problem – important for the archaeology of the period – of continuities and discontinuities in the settlement record. He saw a culture as a specific group of typical characteristics of cultural phenomena which occur in a specific area at a specific time (Kostrzewski 1961 : 3). Kostrzewski however did not regard each culture as necessarily representing a separate ethnos, whereas a series of successive cultures may represent different developmental stadia of the same ethnic group. He regarded cultural continuity as continuity of habitation of a specific area. In the changes in material culture he saw the results of a process of diffusion and not migration.

The problem of ethnicity in the practice of Polish archaeologists basically concerns the question of the ethnogenesis of the Slavs. Investigations on this problem reached an impasse due to the lack of a theoretical model (Kurnatowski 1977; Hensel 1978; Żak 1985). On the basis of the same material, several different sometimes opposing hypotheses were formulated concerning the genesis and settlement of the Slavs. Recently Piontek (1992) has presented a model which combines the archaeological data with information on the differentiation and biological dynamics of Early Slav societies and palaeodemographic models of their population growth.

In world archaeology the technical problem constantly returns to the forefront in connection with the problem of the identity of cultural, social and economic

features which are usually seen as parallel and not identical. The problem of the possibilities of archaeologically identifying cultures of specific societies is dealt with in the book edited by Shennan (1989). Ethnicity is linked with the concept of “style” and through this with cultural identity.

The reflections of Childe also had importance in the development of the concept of culture, to which he added the concept of economy (1929; see Lech 1992). Cultural changes were characterised in terms of “survivals”, diffusion, influences, and migrations. Under the influence of neoevolutionism he added the criteria of the adaption of cultures to the environment (and *vice-versa*). Childe’s reflections on culture were aimed at a systematic conception with a resignation of the understanding of a culture as simply as a unit of classification. Much later it was shown that the agreement of groups of types discovered in spatial arrangements by archaeologists is not the same as their repetativeness in past culture.

The manner of conceiving of archaeological sources discussed above – of treating them as basic units in analyses in archaeology – lasted with the domination of (“traditional”) culture-history archaeology until 1960 (Klejn 1977:2ff; 1980:265ff). The breakdown of this model occurs as a result of the suggestion that archaeology itself was not able to create theoretical models for archaeological reconstruction, and the use of models derived from social anthropology as a source of interpretation in archaeology. The creation of American processual archaeology was a real breakthrough. European archaeology on the other hand undertook a debate on typology, concerning also the basic concepts used in archaeology. This debate was begun by American archaeologists (Rouse and Ford). A polarisation of views developed concerning the understanding of the concepts of “culture”, “type”, “model” – either the ontological approach to these units and considering them as having had real existences in the past, or they were treated as an instrument useful for the ordering of past phenomena.

CULTURAL THEORY IN PROCESSUAL ARCHAEOLOGY

The New Archaeology (processual archaeology) in general developed from functionalism, and especially from neoevolutionism – from which it derived all determinants: ecological, technological, and demographic. It was from the work of L. White that the New Archaeology drew its understanding of culture as a specific organization of things and phenomena dependent on qualities proper only to human beings, namely concerning the use of symbols. Culture itself is a process, and thus can be analysed in isolation from its components. Things and phenomena which form it are analysed in an extrasomatic context. Culture is understood as a thermodynamic system, thus its development is dependent on the technology

possessed by man, with the help of which he can widen the range of sources of available energy (White 1949). The New Archaeology also adopted the ideas of Steward, opposed to the theory of general evolution. Steward considered the ideas of Childe and White as universal evolution, culture in such an understanding is not restricted to individual societies, but to the human species in general (Chmielewski 1986: 338ff). Steward created the theory of multilineal evolution, and cultural ecology, a field of creative inspiration and for practical application in the processual archaeology. The concept of prehistoric cultures within the processual archaeology was the result of the methodology which was adopted. This methodology was not explicitly stated, but certain of its elements can be reconstructed. The New Archaeologists believed in the possibilities of gaining objective knowledge about the past, believing that it was possible to create laws in archaeology as in the natural sciences. The systemic manner of thinking was introduced into archaeology, and at the same time as a manner of interpretation of culture. This was an important turning-point in the approach to the understanding of past phenomena.

The understanding of culture in traditional archaeology in general consisted of considering it as a collection of characteristics, each of which was representative of ideas, beliefs, preferences, mental templates, and norms appearing in the form of artefacts (material correlates of culture). The characteristics of material items were to be described and compared and their variability was identified with changes in cultural norms, explained in terms of change, diffusion, and influences. Processual archaeologists, with Binford at the forefront (Binford 1962: 219) defined culture as an extrasomatic method of human adaptation to the environment. Culture is a system composed of separate elements which determines the basic function and the range of the realisation of that adaptation. The variables connected with this also found their expression in the system, the most important aspect of which was the processual change. Culture therefore formed a specific structure, a system of interconnected elements, and the change in one element (variable) would cause change in the others, and in consequence lead to change within the whole system (Binford 1962: 217). One factor of change was the natural environment, thus observable changes in the structure of cultural systems was explained as adaptation to changing environmental conditions, or to external variants with relation to the system. The question arose concerning the range of adaptation and its course in various societies. It was therefore accepted that it was the same in all of them. The system by its nature remained in equilibrium, thus the result of changes in external factors was change within the system aimed at maintaining the equilibrium. This requirement was met through new social, economical behaviour or ideological change. The possibilities of creation of new forms was conceived as unlimited.

Three different subsystems were differentiated within cultural systems, the technological, social and ideological (Binford 1962: 219–20). The technological

subsystem was felt however to have played the most important role, regarding it as more important than social structure. The function of the ideological subsystem was to reflect the changes which took place within the two others. Culture is complex, and possesses its own manner of adaptation, and between its levels there exists positive feedback resulting from its systememic character.

The further conceptualisation of knowledge about culture included the quest for external factors creating change, their intensity and the results of their action. At first change was perceived as the result of changes in one factor, for example ecological (climatic change), or demographic (population growth). The latter especially was used as a cause in explanations of economic “revolutions”, *i.e.*, with changes accompanying the change from one economic form to another – for example from an exploitive (hunter-gatherer) to a productive (agricultural) one. The next stage was the awareness of the existence of many causes of change or of cultural differentiation. The complications of the causes and relationships between them was recognized. It also appeared that very similar effects were the result of completely different causes. Culture was also observed as a result of the behaviours which composed it, and the material correlates of those behaviours and activities. The main effort was therefore directed towards the investigation of behaviour through material products. Binford (1962:219) assumed that the structure of arrangements of artefacts is able to inform us about once “living” culture. He thought that within this structure is recorded all information about a culture, that “dead” culture is “petrified” “living culture”. He notes that:

“Granted we cannot excavate a kinship terminology or a philosophy, but we can and do excavate the material items which functioned together with these more behavioural elements within the appropriate cultural subsystems. The formal structure of artefact assemblages together with the between element contextual relationships should and do present a systematic and understandable picture of the total extinct cultural system”.

A similar thought was expressed by other processualists, such as Watson, Le Blanc and Redman (1971), who regard the excavated material as “representing” a template of the whole range of cultural behaviour, in other words “represents” a past culture. The imprecision of the “representation” is here clear. This is expressed in the optimistic view that all information about the past is contained in the excavated material and the demonstration of this is only a matter of finding the right investigator (dependent on his knowledge, and methodological awareness). Only Schiffer (1976) showed that “dead” culture was not a direct “reflection” of “living” culture, because not all aspects of cultural behaviour underwent materialisation. Frerichs (1981) came to similar conclusions somewhat later, stating that only those socio-cultural behaviours which are reflected in relatively permanent material correlates are accessible to archaeology. Frerichs includes as

“behaviours generating remains” those which directly generate material products, as well as those which generate them indirectly. There is a third type of behaviour which neither directly nor indirectly creates any material products, neither does it have any effect on their production, in other words they are archaeologically completely inaccessible, even though they may be important in culture and social life.

Processualist archaeologists concentrated on the development of a concept of archaeological sources, aware that without conceptualisation in that sphere, there was no way to construct a consistent investigative theory and method. Binford (1962) thought that one could assign specific items of cultural material to each cultural subsystem, within which they originally had a function (technomic, socio-technic, and ideotechnic artefacts).

Archaeologists were aware that past reality was dynamic but that the sources for its study were static, thus it was attempted to create an investigative procedure which would break through that situation. Such a possibility was created by an adaptation of the hypothetical-nomological model. The way to the achievement of valid knowledge was through deductive inference, the formulation of hypotheses and their testing. Thus the synchronic perspective became the basis of the analyses of cultural systems. Later criticism showed the impossibility of applying in archaeology all of the requirements of the model of Karl Hempel. This model assumes certain natural laws and utilising deduction explains their action. The humanistic sciences utilising hypotheses, attempt to formulate generalisations, which is why on their basis we may speak of certain adaptations of Hempel’s model.

The example of Processual archaeology demonstrates how the application of the systems approach led to a cognitive advance. Binford intended to create a perfect methodology, allowing the achievement of objective knowledge, being an amalgamation of theory and practice, with reflection upon the nature of the sources. The introduction of tests of the validity of all determinations which was introduced by Processualists was an undoubted novelty in archaeological investigative procedure and is a “discovery” of great significance even today. Verification involves the detection of the relationship between behaviours and their material relicts. This must take place in conditions allowing direct observation, and thus through ethnoarchaeology concerning modern tribal societies. Ethnoarchaeological (actualistic) observations and generalisations arising from them support the existence of regularities concerning human behaviour, and allowing the establishment of the correlates of behaviour in material relicts. The correlation between material products and behaviour was understood as fixed. The meaning of the specific context was not taken into account, which was a feature of the Postprocessual archaeology, which observed that the cultural sense of material products undergoes change depending on the context within which it appears. The

Processualists showed that the main principles of human activity were connected more with ecology, adaptation and functionalism, than with cultural conventions. The functioning of a given social group was considered in the context of adaptation and ecology, less in terms of the characteristics of culture.

The Processualists understood the investigated society as undifferentiated, in other words as representing monosomatic cultures (Piekarczyk 1972: 1–17). This type of society is characterised by internal coherence, without class differentiation. Then both behaviour and articulation of the world are equivalent. Thus therefore information concerning those two categories (behaviour and articulation of the world) are accessible to all and reactions to them in a given group are equivalent. The process of the “polysemantisation” of culture appear in prehistoric cultures. In Europe it is accepted that this process underwent acceleration at the turn of Antiquity and beginning of the Early Medieval period (Tabaczyński 1987). A polysemantic culture is one in which the principles of symmetry no longer apply. Common patterns of behaviour appear in culture, as well as behaviour proper only to certain subgroups. Each subgroup is directed by differing standards of behaviour (there may be two subgroups), as well as differing articulation of the world also differing programming of the behaviour of members of the subgroup.

The above discussion has enormous significance for archaeology. This is why we can accept excavated remains as the reflection of uniform processes occurring in time and space only in the case of monosemantic cultures. In the case of polysemantic cultures the fragmentary excavated assemblages cannot be treated as behavioural indicators for the whole group. It is assumed here that the social disintegration of human groups to a large extent defines the mechanism of the process of deposition. None of the excavated correlates of human culture can be used as behavioural indicators for whole social groups (Tabaczyński 1987; Piekarczyk 1971).

Attempts to order the terminology concerning prehistoric cultures and at the same time new definitions overriding the excessive ontologisation of “archaeological cultures” were undertaken by investigators in many countries, introducing an instrumental understanding of the concept. The work of Tabaczyński (1971: 19–36; 1986: 6off; 1990: 47–57) had important significance, as did work outside Poland, of Hodson (1980: 6) and especially the work of Clarke (1968). The heuristic significance of the concept of “archaeological” culture is stressed, which was most clearly expressed by Tabaczyński (1971: 21):

“For archaeological source knowledge these terms (TRB, Corded Ware Culture, Lusatian Culture *etc.*) have the significance of typological terms (for ordering or arranging) the mass of material sources. Archaeological cultures are therefore the product of the systemisation of source materials according to accepted chronological and chorological criteria. It is necessary to emphasise that it is not – in general – a strictly classificatory division”.

Elements of a similar approach appear in works by Wiślański (1966: 11ff) and Smirnov (1964: 3). As a result the impossibility of the identification of cultural systems with social and economic ones becomes even clearer (Kłosowska 1969: 365ff; Tabaczyński 1971: 25; 1990: 47–57).

Wiślański (1966: 10–14), referring to Polish examples, regarded the basis for the differentiation of a given culture to be a common cultural tradition. For him, culture “represents, connects and serves human groups of common economic, social and religious traditions” (1966: 11). Each culture has a certain number of characteristics or indicators typical for it, and characteristics which are more universal, the differentiation of which results from the developmental stage and external conditioning, greater or lesser isolation. In the understanding of Wiślański (1966: 11–12) an “archaeological culture” is a concept useful in source knowledge, classificatory, concerning a specific culture. On the other hand he regards it as a:

“more or less permanent unity arising in the past of specific connections, repetitive features differentiating archaeological material coming from a specific defined period of time in a particular territory. Besides this throughout the whole period of its functioning there must be a unity of the development of form”

He accepts too that the criteria of the definition of cultures change, depending on the period of history concerned. Thus for cultural definition in the Neolithic and Early Bronze Age, Wiślański (1966: 11) regards the typology and certain features of the typology of ceramic vessels as adequate criteria. In the differentiation of archaeological cultures, typological, spatial and chronological segregation of cultural products is important. This term does not apply to phenomena already formed, but does not detect the symptoms of the appearance or disappearance of a given culture. Wiślański considers the process of the “mixing” of cultures, the constitution of new cultures or small units – proper to small groups (so-called mixed groups 1966: 12–13). He understands mixed groups as the effect of “intra-civilizational exchange” thus not possessing a fixed repetitivity of characteristics as in the case of archaeological cultures. “Archaeological cultures” are not formed just by material products, but also indirectly ideology (1966: 14). These units are not identical to the extent of peoples, ethnic groups or linguistic groups, here he draws on the ethnologic analogies and the extent of European culture. Wiślański also uses the concept of “style” which within the Globular Amphora Culture was to define groups of graves in Mazovia and the Kielce region (1966: 127).

Two works on the Polish Neolithic (Wiślański 1969 and Tabaczyński 1970), mark a new stage in the investigative process, method of conceptualisation and method in Polish archaeology. These two books continue in a creative manner inspiration drawn from the ideas of Clark, enriching them with new theoretical reflection.

At this period there is a widening of the scope of investigations from the “cultural” to the question of economic transformations and changes in settlement pattern seen in a systemic context. This to a large measure results from the popularisation in Poland of the seminal work of Clark *Prehistoric Europe. The economic basis* which was translated into Polish by Józef Kostrzewski and published in 1957. The “discovery” of the importance of economic issues in the interpretation of European prehistory was a consequence of the work of Childe. One may propose that from this moment, the days of the culture-history model in archaeology were numbered. It was gradually replaced by the systemic model in which the basic questions concerned economic change affected by not only cultural but also ecological factors. The reconstruction of culture became a question of lesser interest. Attempts were made to define the relationships between society and habitat (the character of the inhabited territory), taking into account the methods, knowledge, technical equipment and social organization. In other words the development of culture is seen from the point of view of its economy. The changeability of the forms of economy is an effect of the process of the mutual adaptation of man to his environment and *vice-versa*. Their stability is a result of the equilibrium which is an effect of the mutual adaptation, such a situation does not encourage improvement, neither economic nor cultural. The initiators of change are seen in changes within the natural environment, changing social needs, external changes brought about by man.

Wiślański in his book on *The economic basis of Neolithic tribes in Northwest Poland* (1969) reconstructed the basic economic strategy of the North European Plain, cultural changes were seen in terms of changes in types of economy. He compared not only cultures (using the cultural divisions: Danubian Cycle, TRB, Corded Ware and subneolithic peoples), but economic strategies within separate settlement zones. He reconstructed the tempo of development, the tempo of change, the similarities and differences in the economic strategies (livestock rearing, gathering). He utilised archaeological sources, but basically also information from the natural sciences with the aim of reconstructing ecological conditions. Economic and ecological factors became an indivisible element of the analyses of prehistoric cultures.

The approach of Tabaczyński in his book *The middle European Neolithic. The economic basis* (1970) resulted from his search for economic structures typical of the Neolithic elements of which were cultures in co-dependence on the natural environment, thus the distribution of farming economies in central Europe was the result of adaptations and selections in relationship to new environmental conditions. Specific forms of economy evolved as a result of the formation of a certain form of equilibrium, and changes within them were explained as the result of changes within that equilibrium. This was not the

result of one factor, but due to structural changes. In these changes, technology had an important role, allowing the accumulation of surpluses, higher than the minimum necessary for the continued functioning of the system, adaptation, but also diffusion – which was seen as an important phenomenon in the neolithisation of central Europe. The achievement of an economic stadium based on agricultural production opened the perspective to further development, impossible to achieve beforehand (Tabaczyński 1970). The energy generated by man was an important element of systemic and cultural change as seen by Tabaczyński. For the first time the systemic approach to economic problems and the energetic elements of the concept of culture of Leslie White were introduced into Polish archaeology. The achievements of these two works was creatively continued in another Polish book concerning the Neolithic, *The economy in southeast Poland in the V–III millennium B.C.* by Kruk (1980). This was both a narrowing of the field of enquiry, but also a deepening of the theme of discussion, a development of certain ideas.

From the point of view of the theoretical basis, Tabaczyński's book is the more developed, referring to structuralism and systems theory to explain prehistoric processes and phenomena such as neolithisation and the genesis of different types of economic strategies. Present tendencies concentrate on the problems of the reconstruction of the degree of utilisation of different natural environments in short time periods (Kruk 1980). This is achieved by the observation of spatial differences in different cultural groups, and thus the location of settlements in different environments in time and space. An indispensable stage in the solution of problems in the field of settlement geography is the recreation of the cultural and stylistic sequence, the connections between phenomena in time and space. The systemic approach is introduced in connection with cultural and settlement changes. The use of an archaeological scheme concerned with definition of divisions of material, defining the differences between groups rather than stressing their similarities. As an effect of this we gain cultural units which are clearly different from each other (Kruk 1980:35), the detection of the genesis and disappearance of such units is however difficult. Kruk (1980:35–6) proposes a type of analysis considering the chronological differentiation of the regularities in the spatial distribution of cultural units and also stylistic characteristics of the archaeological sources (ceramics, tools *etc.*). There are observable disagreements within the same archaeological culture of the results of the analyses of ceramics, in relationship to that of other types of sources, for example, flint tools or flintwork generally. The observable typological and stylistic differentiation in the ceramics contrasts with a relative stability in the flintwork. Thus Kruk (1980:36) postulates accepting a microregion with evidence of settlement continuity (or its lack) as the basic unit of study.

NEW DIRECTIONS OF CONCEPTUALISATION OF INVESTIGATION OF CULTURE IN POLISH ARCHAEOLOGY

The present state of the study of past cultures is due on the one hand to the superimposition of the research traditions and achievements of different centres, and on the other to connections with the methodological schools outside archaeology, particularly the Poznań school (Kmita, Topolski), as well as with the theories of the natural sciences (for example Piontek's theory of biocultural evolution).

The first of the different theoretical approaches to the basic problems which form the source of the development of Polish archaeology in character has an antinaturalistic approach, proposing for the humanities a manner of explanation which differs from that used in the natural sciences, for example humanist interpretation and the procedures characteristic for the historical sciences. Źak (1975) applied these ideas in a creative manner, considering past socio-cultural processes in the aspect of the processes of social development, and prehistoric culture itself as a system incorporating technical-functional and ideological aspects. He accepted the functional-genetic approach as a basic manner of inference, considering that in a certain sense it may be applied to prehistory. This was inspired by historical materialism and its basic thesis on the determination of the entirety of social life by the means of production. He acknowledged social contradictions as a promotor of change and at the same time development. Long-term socio-cultural stability on the other hand was created by the constant reshaping of the forces of production as a result of the contradictions arising.

Koško (1979: 10ff) applied the assumptions of the humanistic interpretation, and mainly to the definition of culture (Kmita, Pałubicka). The author acknowledges that he understands archaeological cultures as systems of technical-functional and interpretational rules of a specific human group, together with the system of values which is their correlate. The later views of Koško are basically connected with the second research direction, more proper to the natural sciences, more so because he prefers a cultural-chronological approach to the problems concerning societies in Kujavia.

This second direction developed from the traditions of cultural anthropology and the natural sciences, and proposes the use of evolutionary theory as a common ground for the different sciences concerned with the study of society and culture. Socio-cultural phenomena are explained as in the natural sciences, and their description is envisaged as being analogous in formal terms. The systemic approach fulfils an important role, because it allows the search for relationships between cultural, social, biological, ecological and other factors. The model of cultural evolution in connection with the idealising conception of science (according to Leszek Nowak) allows the definition of the relationships between the investigated phenomenon and its essence.

Polish archaeology referring to ideas preferred by the second trend has linked it to ideas close to those of Processual archaeology, or to the opposing ideas of – for example – the contextual archaeology of Hodder (also described as symbolic-structural). An expression of the latter are the concepts of Czerniak and Kośko (1980) and Czerniak (1989). In an application of these ideas to the culture of the Danubian circle, Czerniak (1989) negates the value of archaeological classifications based on the “stylistic characteristics” of ceramics (*i.e.*, formal and decorative trends), since they do not reflect real cultural divisions. This is confirmed by the flintwork, stonework, settlement geography, and technology, which do not agree with the results of stylistic analyses (which was discovered earlier by German archaeology). Studies linking all of these fields only give results in the case of “pure”, clearly defined, cultures. According to this approach, the main problem is the correct hierarchisation of characteristics, usually achieved as a result of seriation, but not resolving the question of the reality or the lack of “reality” of the investigated phenomenon.

Czerniak approaches “archaeological cultures” as “postulated existences” in the same manner as atoms in physics, validated by data, and theory and on that basis “real”. The TRB culture is however for example is regarded as a real community, which is defined by a specific group of characteristics with aesthetic (symbolic) value as a linking factor. From this it may be inferred that archaeological cultures are reflections of real (true) cultural situations and not just the results of theory.

The author proposes the development of “theories of characteristics” in the aspect of a specified investigative aim, and defining their real link with cultural information, and specifying the characteristics by which information is transmitted. A culture would be therefore be defined by characteristics and classes of characteristics which define the identity of a given circle of cultural tradition. Characteristics are thus divisible into “intentional” and “unintentional” and the former would be understandable for the producer and the user. “Tradition” forms an important element, to which is referred the concept of culture – understood as the world of values connected with symbolism, religion, knowledge, communication of social status, and unconscious habit.

The specific dynamics of cultural “traditions” are evidenced by specific characteristics of variable dynamics, thus, it is necessary to examine their relationships. They are however chosen by the investigator. Intentional characteristics, and the methods of their recognition, description and method of passing from them to real taxons are important. This leads to productive behaviour and the related characteristics in a given culture.

An application of these ideas concerning the techniques of production of Neolithic ceramics, is seen from the symbolic-structural perspective (Czerniak and Kośko 1980; Czerniak 1989). The potting techniques, including the temper, underwent interpretation in a symbolic context, in this were discerned a possible ritual context

which would concern rituals ensuring repeatability of the required effects. The choice of technique would be connected with "ritual" (repeatability), or with more direct magical sense (the function of vegetable temper). Temper is in this understanding a variable character, expressing symbolic behaviour and not related to stylistic divisions. Technology defines productive and symbolic behaviour. The concept of culture has a symbolic-structural character, and in connection to Hodder's theses, that technology is also symbolised, as is vessel decoration. This is based on the assumption that material culture for the archaeologist is a part of reality, but is also imbued with significance, which the archaeologist is able to discover.

The evolution of Koško's and Czerniak's concept of culture developed from humanistic interpretation, to the crystallisation of a systemic formulation in the framework of the theory of biocultural evolution with the emphasis on ecological factors, to ideas from symbolic-structural (contextual) concepts.

Apart from the work of the Poznań milieu, however, the symbolic-structural approach has not found greater application in Polish archaeology. This does not mean that it is an insignificant trend, the problem concerns rather the aims and directions of Polish archaeology itself, which is closer to the Processual school of New Archaeology, or the logicist trends than to the post-processual.

The systemic approach to culture with greater attention paid to ecological, demographical, factors and seen from the viewpoint of economy alongside cultural factors is gaining more ground. These are problems from which American archaeology especially departed since the beginning of the 1960s and resolved them with the use of "Middle Range Theory". Certain concepts in Polish archaeology developed independantly from those in other countries. The emphasis on ecological besides cultural conditioning was introduced as a result of considering humans as biological phenomena, and material culture as an apparatus for adapting to the natural environment (Kozłowski and Kozłowski 1983).

Among the barriers to theoretical reflection has been the entanglement of Polish archaeology in the problems of ethnicity which has dominated it for a lengthy period. An attempt to lead Polish archaeology out of this conundrum was the reformulation of the theoretical problem of cultural "continuity" and "discontinuity" by Tabaczyński (1984) and Żak (1985). The second barrier was the exclusiveness of the attention on fieldwork in the 1960s (the "millennium programme"), and interest in the techniques of collecting of raw data overshadowed other problems. Attention was focussed on problems of typology and chronology. Taxonomy served to build typological-chronological-cultural sequences. Their aim was the description of culture, groups (often ethnic), influences and interactions between groups. The attention which was paid to economic matters came more from the work of Clark and Childe than Marxism. The principles of Marxism were often cited in Polish archaeological works without greater understanding or utilisation.

The situation in Polish archaeology was determined by two tendencies – on one hand the attempt independently to develop theoretical and practical propositions in the field of theory and classification, and on the other hand the tending towards modern currents in American, British (and partly French) archaeology. The first however prefer Józef Kostrzewski's model of resolution of archaeological problems – the chronological-typological approach (having its genesis in post-Kossinnist ideas). There is no need to emphasise that this is the dominating tendency.

The adoption of certain ideas from outside of central Europe has not, however, resulted in a coherent theory, but this is not a problem restricted to the area. There is an increasing number of archaeologists convinced of the need for change, but this is an extremely difficult problem. There are many post-processual currents, but none of them has created a coherent methodology, thus all the more reason why Polish archaeology should join in the search for new directions, undertaking the discussion on the basis of the principle of integration with the archaeology of other countries as well as supplying its own propositions. Polish archaeology is in the favourable situation that it possesses as a source of inspiration for creative solutions Topolski's *Methodology of history*, the methodology of the Poznań school – with Kmita at the forefront, and the methodologists and theoreticians of archaeology (Tabaczyński and the late Jan Żak); together with their own resolutions of problems also creatively utilising the ideas of modern directions, among them the Marxist current and the structural-symbolic one (termed here contextual archaeology).

STYLE AS A UNIT OF ANALYSIS OF SOCIAL STRUCTURE

In recent years, discussion has been initiated on the explicatory power of concepts used in archaeology such as that of “archaeological cultures”, aiming either at defining or eliminating them and replacing them by others utilised in other sciences. Such a concept is that of “style” utilised in the study of art, and used in other sciences of culture, among them in archaeology. This is connected with the discussions on the connection between material products and defined social wholes (Kobyliński 1981). The acceptance of this connection implies the use of the concept of “Style” as embracing the totality of the complex problems connected with the manifestation of “ethnicity” in material products. The concept of ethnicity, appearing in the Anglophone literature does not possess the “Kossinnist” meaning, in other words it is not the equivalent of “ethnos”, but has instead a wider significance as the reflection of social matters, social organization and the place of the individual in cultural material. This problem has been discussed in the Polish literature by Kobylińska (1980b). “Ethnicity” is in the significatory context the antonym of

“activity”, that is the utilisable aspect of material culture (Kobylińska 1980b). The concept of “style” however has many uncertainties in archaeology. Its general definition suggests that it is an “ethnic idiom expressed in form” (Sackett 1982: 104), it is the “general configuration of elements reflecting the essence of the whole society” (Kroeber 1957: 4) or “the subtle play of elements defining the most direct ethnic personality” (Brezillon 1971: 32).

It was Sackett, an American specialist in the Palaeolithic who has considered the concept of style most widely in archaeology (1973, 1977), creating a certain conception of his own, a model of social interaction, at the basis of which lies the assumption about the integral connection between style with the formal changeability of material products. Sackett, as Kroeber (1957) before him concentrated his attention on the cognition of the essence of style, defining its basic, standard characteristics (Kobylińska 1980a: 413). Style is closely connected with specific and characteristic manners of making something and that manner is dependent on place and time when that activity takes place. Here it is necessary to mention that in Polish archaeology, these questions were studied much earlier by Krukowski. The model of Sackett is described as “isochrestic” and assumes an integral connection between style and the formal variation of material products referred to by Sackett as “artefacts”. In archaeological investigations, style complements function, and together they create the formal aspect (dimension) of archaeological source material. Excepting random post-depositional processes, it is style and function which together create the variability of artefacts (Sackett 1977: 270).

In the model of style it is therefore assumed that function and style are complementary in the formulation of artefacts. On the one hand they were material products of utilitarian function, on the other they are signs, indicators of specific historical and spatial-temporal contexts situated in culture. The products in this approach have different characteristics and dimensions composing particular perspectives – such as the perspective of artefacts as cultural indicators, or artefacts in action (in direct function). In other words, each material product – depending on the aim of the investigation – can be understood either as an amalgamation of functional and stylistic characteristics, or each of them separately. This dualism and complementariness of function and style appears equally at the level of artefact assemblages, as well as at the level of the formal characteristics of the individual components. The concept of function appears in the wider understanding as the action of the product (artefact) in each cultural sphere (Sackett 1973: 320, 1977: 370). Sackett differentiates utilitarian and non-utilitarian functions, the second being understood not in material terms, but as a reflection of ideas and social relations. A given product may function in both spheres and not just in one of them, and further, Sackett regards that even the most common utilitarian artefact may be used to structure social connections and ideological content (1977: 370).

Material products function contemporaneously to varying degrees in all spheres of culture (material, social, imaginative-mental), and even so, it is possible to ascribe them an unequivocal character, as long as we know the social context. According to this approach to function, the forms of material products may be divided into utilitarian and non-utilitarian. In this place Sackett introduces an intermediate category – the concept of an “adjunct form” as a form of material product in which, apart from characteristics defining its basic (main) function, there also appear subsidiary characteristics connecting it with a different function within the cultural system (for example the occurrence of ornament on utilitarian items).

Sackett’s general assumptions concern the principles of choice made between equally possible and equally justifiable possibilities within a certain culture of the form of material products. Form is therefore the choice from alternative manners of attaining the same functional aim. This choice has a social character, dictated by a given social situation, it is culturally transferred. This may explain the observable similarity of the choices made by human groups connected historically (spatially-temporally) with each other. Increased social interactions between representatives of these groups determine the degree of similarity between the choices of form which are made. Thus each product is a symptom of the cultural tradition in which it was created.

In Sackett’s model of style, two important questions are posed. The first concerns whether it is possible that there could be a repetition of the method of realisation of a specific functional purpose without transmission of culture between two or more groups. The wide range of potential manners of attaining the same functional purpose within each group would otherwise guarantee non repetativeness. Non-utilitarian forms, or utilitarian forms having an additional non-utilitarian function do not present such problems. These choices however repeat themselves in the the case of the norms affecting the production, for example of pebble tools (Sackett 1977: 373). The second question concerns whether all choices made in the manner of manufacture of a product aiming to realise a concrete functional aim had the same social value and effectiveness. This problem is difficult to resolve, even in the case of utilitarian artefacts (which would require a detailed knowledge of techniques, raw materials, function and subsidiary meanings), but is even more difficult in the case of non-utilitarian artefacts, where a knowledge of the mental sphere of a given cultural group (Kobylińska 1980b: 415ff).

The above discussion shows that style reflects cultural traditions, but Sackett restricts his investigative perspective to the forms of material products, in other words discusses style as a certain type of reflection of the formal traditions of culture. The assemblage of “artefacts” however serves to indicate internal connections between groups of people and social contacts. The measure of these connections could have a mathematical form and include the same functional classes. The

existence of style is witness to a certain state of equilibrium of a given social system, or the absence of style would not be functional, with regard to the need to retain that state of equilibrium (Kobylińska 1980a:417). In general, according to Sackett, style is a method of achieving the same functional aim. In relation to artefacts, Sackett proposes searching for “style” everywhere where we are dealing with an “isochrestic” form – that is with an alternative method of attaining a given aim. Several factors may have stylistic significance, the choice of raw material, and techniques of core-preparation, the manufacture of tools, whole assemblages, industries. Style is connected with the revelation of stylistic preferences, not correspondent with the variability in all sectors of society.

The reduction of style to the material substrate of social systems, that is to material products, makes them into a form of signs, basically connected with function. Thus these material products are formulated as *function-signes*. It is accepted here that utilitarian artefacts are borrowed as a form of signalling, thus the utilitarian and symbolic functions of these items in social life are intermingled. Barthes saw the situation similarly (Kłosowska 1981:151ff). The position of the material sphere of culture with regard to the semiotic sphere is determined by technological factors, thus the deformation of practical use into a symbol of utility is sought. Potentially every artefact, phenomenon or event may become a symbol, sign. Thus often the cultural meaning may be reached by the use of signs.

According to Sackett, the greater the stylistic similarity, the greater is the degree of cultural contact between the makers of the products. He develops his idea of style as isochrestic forms in connection with Palaeolithic stone-working. Style is not therefore a typological convention, based on the degree of elaboration of a tool, but it may be apparent in the choice of raw material, in the type of retouch, in the preparation of the core and its exploitation, in characteristic methods of using tools and their repair. All that has any connection whatsoever with social conditioning with social strategy (such as the degree of the use of unstandardised tools, the degree of their duplication), and thus functional characteristics, is included in the scope of investigation into style. In such an approach the formulation of style and function in mutual relationships is of importance, taking into account the archaeological context (Sackett 1982:79, 105, 108).

ARCHAEOLOGICAL CULTURE IN THE ASPECT OF STYLISTIC TYPES

From the point of view of our consideration of culture, the relationship between “archaeological culture” and “style” is important. An attempt at ordering the terminology of the investigation of culture has been undertaken by Hodson (1980b). Culture is a unit of chronological classification. Different understandings

of the concept of “type” are the cause of different definitions and understandings of culture. Hodson chooses the operational definition of type and the same approach to culture. The definition of type is treated by him as “a cluster of successive units, objects (item clusters)”, a type of definition which has little practical application. The idea recalls the approach of “collecting characteristics” proposed by Cowgill (1977: 127). Doran and Hodson (1975) proposed the terms “cluster” instead of type and “unit” instead of “object”.

A cluster is a certain number of products of internal cohesion and external isolation. Units however exhibit hierarchization at different levels of similarity and their classification depends on the assessment of their relative similarity. The important question from a practical point of view is defining fixed levels of this similarity, having wide application and which should correspond to determined terms-indicators, such as subgroup, variety. Somewhat earlier, Hodson distinguished three categories for metalwork and ceramics from the Roman period cemetery at Münsingen, type, family, class. Nevertheless there was here some variability within the categories, so the terms-indicators did not have a universal applicability.

This same method of “clustering” separate units was applied by Hodson to archaeological cultures (1980b: 6) as units of a higher rank than the level of “type”. In Hodson’s opinion “a culture may be stated informally to represent a number of assemblages that, as a group, display internal cohesion and external isolation: they are relatively similar to other assemblages of their culture, dissimilar to assemblages of other cultures and so on” a little further in the text, Hodson (1980b: 7) writes: “In this view, and with as little jargon as possible, a culture would be defined as a group of stylistically-related assemblages”.

This definition may be applied to archaeological practice, where cultures are as a rule identified as “clusters of similar groups of sites”, *e.g.*, the Hallstatt Culture which fulfills the terms of the definition. “Clusters of groups” define arrangements of types which occur in them, besides which these types have differing character: utilitarian or stylistic. Some groups do not fall under any definition of culture whatsoever, such as hoards of metal scrap, and are linked to culture only with regard to their functional nature. A positive side of such an approach is the possibility of the functional linking of sites such as cemeteries and hoards.

Hodson’s definition of cultures exposes their stylistic aspects, that is the essence of culture are the characteristics and stylistically significant types. The correct reconstruction of culture is reliant on understanding the nature and context of stylistic data accessible to investigation, data which can be of differing nature, complex, and even contradictory. Culture is therefore a “repetative group of stylistic types”.

This definition, just like that of Childe, does not precisely state the methods of differentiating types or cultures, nor define the acceptable levels of repetativity.

Despite these faults, Hodson's definition is practically applicable. Cultures are expressed as groups of sites connected by a wide spectrum of stylistic characteristics. A cluster of stylistic groups of ceramics, metal objects, stone tools of a limited extent designate an "industry", "tradition", "complex" or "stylistic horizon", depending on the object type. These terms can be understood as stylistically differentiated data of differing degree of importance. All these units are defined on the basis of partial definitions, they have a partitive character, which is why it is difficult to determine on their basis of the degree of correspondence to real processes occurring in the past.

A positive side of this manner of definition of culture often emphasised is the possibility of linking single groups with more complex ones, such as groups of small and big settlements, cemeteries, hoards *etc.* and by this means including a wide spectrum of human activity. Affiliation to the same culture is defined by stylistic links, and not chronological or spatial criteria, which means that two contemporary sites lying near each other need not belong to the same culture. The degree of ordering of the groups into "clusters" and the establishment of the links between them have influence on the validity of the determinations, which has connections with the formalisation of the investigative procedure.

STYLE IN ARCHAEOLOGICAL PRACTICE

Investigations of style were begun on groups of stone tools in the framework of the convention of opposing style and function. Investigators sought style in archaeological groups which formed the basis for their grouping in larger wholes. In recent times, which has been emphasised by Tomaszewski (1988:25) the problem of the stylistic preferences of individual manufacturers has been raised (Hill and Gunn eds 1977; Marczak and Królik, 1975; Schild 1980:80-81; Schild and Królik 1981). These investigations in their basic thematic issues apply to prehistoric realities the results of ethnoarchaeological investigations with regard to the accessibility and direct experience of the social context. This concerns especially the investigations of White and Thomas (1972), White, Modjeska and Hipuya (1977) and others. Attempts have been made also to analyses style in a series of products resulting from experiment, for example Ploux (1983), Gunn (1977). Studies of this theme are as yet still far from completely satisfying results. Certain rather favourable situations in the investigation of style appear at the level of larger socio-cultural units, and different categories of material products (*e.g.*, Balcer 1983).

The irregular influence of the function on the form of tools has been noted before, as well as the fact that different tool forms could serve for the same

function. In this sense, however, two approaches become distinct: the first holds that stylistic variation is a correlate of the typological variation, the second does not assume this correlation, but regards function and style as dichotomous.

Stone tools have been regarded by many archaeologists as the most useable material for investigations of style for the reason that potentially they should reveal the most features of the social context of their manufacture (e.g., Wilmsen 1974). The position of Sackett, the main theoretician of style is however in this regard opposite.

In conclusion of the above discussion it is necessary to re-emphasise that various theories and paradigms in archaeology have approached the phenomenon of culture differently. Each of them, especially the processual paradigm as well as Hodder's post-processual paradigm have given us the possibility of understanding cultural phenomena and processes within somewhat different investigative frameworks. It appears however that in the investigation of prehistoric cultures, one can regard them as complimentary, and it would thus be important to attempt to use these different theories in a complimentary manner. It seems that one can detect areas of reality in which the models, definitions and methods are fulfilled, none of these paradigms has the monopoly on the "truth". One may observe a basic improvement in the approach to prehistoric cultures through the systems approach, it is not possible not to observe that the supplementing of these analyses by their contextual significance (the basic premise of the post-processual archaeology) would significantly widen the area of investigation (e.g., Hodder 1986: 64–5 fig. 4). The idea of the complementarity of theories and of conducting an "interparadigmatic dialogue" allows the search for new solutions, where two theories in a common area give two different answers. The discovery of a common ground for the concept of archaeological cultures and the archaeological conception of style would form an important initiator of change and a turning-point leading to the introduction of a real social theory to European archaeology. It would mean the departure from the "traditional" culture-historical model.

Translated by Paul Barford

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