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Sign, Type, Artifact

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The paper discusses “type” as the main category in archaeology in the framework of human activity’s approach as a sign. Author delineates the stages of sintagmatic constructing and paradigmatisation of the ideal type consisting of ideal image, language term and signs of the usage of type in different human activity-related situations. The aspects of the production of new types from old ones are considered, as well as actualization of types by getting new artifacts and recognizing the types including the situations of the archaeological understanding.

Keywords: type, artifact, symbol, activity meanings, ideal type, formation of a type, understanding of a type.

Research area: history.

One of the central notions in archeology is “type” (Klein, 2004). Typology is its leading method. Significant theoretical efforts were focused on the problems of the type and typology (Gorodtsov 1927; Klein, 1978; 1991). On the stage of reflecting the formation of archeology as a special science with its own object, subject, methods and concepts the classic triad of concepts “sign – type – archaeological culture” underwent the most intense debates and developments. This topic is developed in most detail in the works by L.S. Klein (Klein, 1978, 1991, 2004 et al.), which have become classics of Russian theoretical archeology, nevertheless, they have not transformed into methodological basis for constructing scientific knowledge for most Russian archeologists. This is due, in some cases, to the lack of interest to the theoretical side of their science among practical

archeologists, involvement in specific tasks of field archeology. On the other hand, the concept proposed by L.S. Klein (Klein, 1991) was based on the assessment of the basic concepts of the triad “sign – type – archaeological culture” considered as insufficient, small to science, and as a result it has the form of a quite expanded, if not cumbersome, classification organized by the taxonomic principle, very difficult to perceive for the majority of archeologists. In many ways, as we assume, the views of L.S. Klein were influenced by the work of D. Clark “Analytical Archaeology” (Clark, 1968). The popular position of strict division of different spheres of knowledge between different disciplines also had some influence, as well as understanding of archeology as a science of source and non-participation of archeologists in the study of many non-archeological topics, including the issues of epistemological specificity

of archeological type of scientific learning, the epistemological nature of the obtained scientific knowledge, activity theory, symbolic nature of artifacts. In this regard, L.S. Klein's works indeed remain the theoretical apex. His ideas about the specifics of the archaeological path of knowledge were formulated as the theory of communication (Klein, 2011, p. 464-467), the essence of which lies in the understanding of archaeological sources as containing information, reading of which comprises the communication process. In our opinion, the acknowledgement of the sign nature of an artifact and semiotic analysis of scientific categories are very important. Our attention was focused on the process of "reading" the information from the source, using the main method, which is the archaeological typology.

Without going into the discussion of L.S.Klein's ideas, we should note that the search for understanding of the artifact as a sign and as a type goes beyond the scientific field of archeology, while this issue has meta-theoretical archaeological specificity. It is not the consideration of the methods of building types in archaeological science (there is a lot of information in this regard) that could possibly contribute to the development of these issues, but the study of the formation of types as mass phenomena of consciousness work on the production, storage, transmission and absorption of symbolic forms of sensory experience. In addition to the semiotic specifics of archaeologists' vision of artifacts as types, aspects of formation of the type as an ideal value of things should be considered herewith. This is, firstly, ontological characteristics of types production as signs and, secondly, descriptions of cultural mechanisms of the type introduction. This article focuses on the ontological properties of the type.

Our position is that it is necessary to give a description of the whole process of formation-functioning – understanding of the type. Such

a description will allow to reveal the nature of development of its various states. The solution to this problem is methodological work within the framework of the activity approach (Schedrovitsky, 1995), since the types of artifacts are seen as products of the mental processes involved in cooperation with the communication, industrial and other, but, in general, also activity processes.

The "simple case" of the type formation represents *an ideal object*. Its simplest structure is reduced due to deliberate simplification, abstraction from the historically relative circumstances, aspects of influence of the cultural environment. The study of the ideal object represents its ontological characteristics. The results of its implementation on the one hand, would be objectified as real specificity of existing phenomena of a certain kind, and on the other hand, should become the basis of objective knowledge, schemes of organizing research activities. The development of characteristics of the ideal object content is the way of "ascent from the abstract to the specific" in cognition.

In dealing with any activity-related tasks, people act basing on the methods of resolving situations that exist in their culture, including patterns of production and use of certain activity-related types of tools. Activity-related situations of the same type encourage people to use previous decisions as a positive experience that can be reproduced. The type appears as a result of imitation and reproduction of a successful new single artifact that comes out as a product of technical and stylistic (aesthetic, symbolic) creativity. At this point, the natural sign – the sign itself in situations of inclusion in the scope of activity – is created (Kodukhov, 1974: 25). Mainly, it is the sphere of production and disposal of artifact, personal ownership, gender, age, class, religious, ethnic and other kind of identity. The experience of the artifact reproduction in case

of successful implementation is conceptualized and becomes a stereotype behaviour in typical activity-related situations. Reflection of similar, same-type situations of using artifacts leads to the development of its typical characteristics that differ from the private and individual ones. An experience-stereotype of instrumental behaviour (materialized and armed with things) equivalent to it, is idealized – the content is recycled in the sense of formulation of the ideal, that is typical, reduced, deprived of individual specifics, enriched and generalized knowledge. By virtue of its nature, this procedure is the work of human consciousness with signs. Herewith, we fix the transition of the natural sign to the state of the ideal type, and will distinguish a connection “perfect artifact image- activity-related values in the idealized experience of human behaviour in standard activity-related situations (stereotypes of activity-related situations performed with its participation and necessary for its reproduction)”. Let us name these values the first *denotative (basic) values of type*. The process of reducing the content of experience towards development of the perfect type, as a rule, is the result of collective activities and work of the collective consciousness. This requires the implementation of such conditions as representation of experience in the sign and language expressions – type nomination (representation by a linguistic term), transmission (transfer-teaching) of experience. Repeated reproduction of situations with stereotypical experience is the condition of its reduction and the development of the formalized ideal type. Logistics of minimization of labour and intellectual efforts leads to bringing the behavioural stereotypes to the patterns of mechanical, weakly reflected, motor behaviour.

The process of reduction of the ideal type of artifact implemented as a problem of optimization of labour instrumental activities provided by artifact aims at idealization of the type of activity

and image (form) of the artifact as the most adequate for it. While this work is carried out, it is represented by open *syntagmatic* procedures of knowledge organization. In other words, the possibility of adding and changing knowledge is open. Nevertheless, this state is not unlimited. The next and the final stage of the formation of the ideal type is *paradigmatization* of the obtained state of knowledge (the result of working with signs). Henceforth, it is closed allowing users to a) determine the type in things, and b) distinguish things of the type from other things. Let us name the very process of type formation “*the process of typification*”. Artifacts of this type serve as signs-symbols with typical behavioural stereotypes, activity-related situations. The type is recognized in the sense of understanding the associated values beyond the thing-sign. The very concept of the type as a morphologically stable class of things with specific cultural value typical for them involves *paradigmatic* nature of the type. Therefore, if according to some guiding features a thing cannot be referred to the type formula, it is not the type with all the semantic consequences it implies. Consequently, in the connection “image (form) of the artifact – stereotypes of activities with the artifact”, the first one is aimed at paradigmatic closeness.

This transition of the syntagmatic chain (meaning) to the status of the paradigmatic structure (value) is described by Shchedrovitsky in his work “The Meaning and Value” (Shchedrovitsky, 1995, p. 545-576). Formalization of the values of the sign, i.e. formation of values, in fact, leads to the formation of knowledge of sign.

The second part of the ideal type is the sum of the constituent values of the values of stereotypes for species and activities with which artifacts of this type are interrelated. In the course of the historical life of the type, these values may vary in culture of the society. In

addition to the basic, denotative values there are additional *value-connotations* demonstrating flexibility of the second component in the content of the ideal type. In addition to the basic values (denotation) of production and utilization during the course of the social history of type, assignment of connotative values of prestige, internalization, marking of certain social strata and ethnic groups and other social practices involving artifacts of this type occurred. It is important to note possible connections of types with ideologies, including religious ones, among connotative co-meanings.

Example. For demonstration, let us turn to the history of the car VAZ-2101 (“kopeika”), a copy of the Italian Fiat. In addition to the basic values of the production technology of cars, we can list the following connotations of 1) selection of the best foreign car, 2) its internalization under its own label (VAZ-2101), 3) the prestige of owning a brand new perfect car in the first years of its production, 4) the status of “people’s car” (“kopeika”), 5) the status of the founder of the legendary Lada cars, and 6) anti-prestige status of an archaic old car. Similar examples can be given regarding the objects of extra-utilitarian, symbolic, and religious, in particular, value. For instance, objects of Christian worship have been accompanied by various connotative history throughout the history of Christianity.

Structural scheme of the type (Fig. 1) consists of the positions (1) of the **ideal type** – a) image (form) of the artifact and the linguistic term, and b) patterns of production and use of the artifact in activity spheres areas and (2) **material product** embodiment forms – artifacts of a particular type and morphology (morphotype). From the semiotic point of view, such a scheme is a sign, which is a symbolic form of artifacts, and the ideal type is the value. Based on the above arguments regarding the origin of additional connotative co-meanings we make an important conclusion of multiple semiosis and polysemy of the type.

Following archeology (E. Taylor, A. Pitt-Rivers, A. Leroi-Gourhan), the ideas of the evolutionary process of changing things, and on the other hand, their concept-values influenced linguistics as well. After determining their nature as symbolic Iu.S. Stepanov (Stepanov, 1997, p.17-18) called such orders “evolutionary semiotic series”. Synchronous links of different semiotic rows form “style” or “paradigm of the era”. Processes can diminish and expand in terms of spreading among narrow or wide circles of population, occur at different rates in different social environments (Stepanov, 1997, p. 39-40). But linguists focus mainly on the issues of cultural and linguistic evolution of concepts.

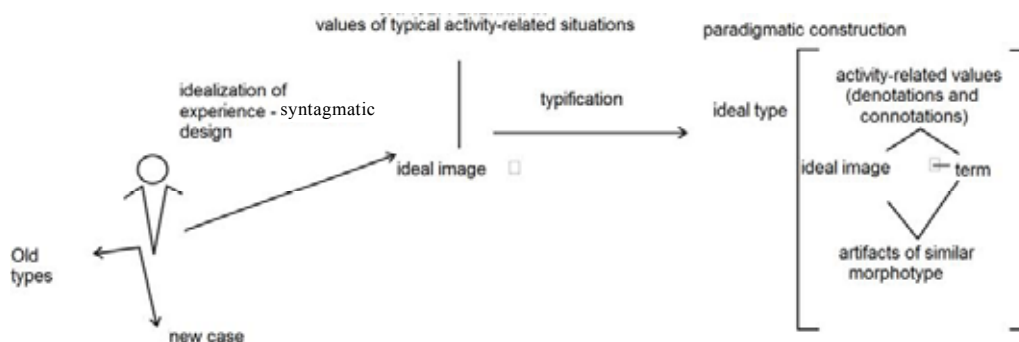


Fig. 1.

There are two modes of the historical life of types of artifacts in the culture of society: actualization and transmission. Types are *actualized* through each new production of another artifact of this type. Types are *transmitted* within a social group (e.g. intergenerational transmission) and beyond through direct transfer of knowledge from the carrier to the recipient, or indirectly via symbolic media (relatively speaking, through the “texts”). Such aspects as *channels* (trade, war, migration, etc.), *barriers* (language, political, religious and others) of cultural transmission are determined (Tetenkin, 2009). Individual artifacts and ideal types can be transmitted (*transmission methods*) – methods for their production, as well as people-carriers of ideal knowledge types.

Having demonstrated that the formation of the ideal form of the artifact is associated and requires idealization of the type of activity as a prerequisite, we should proceed with considering the process of typification as the work of consciousness covering not only artifacts, but also the processes and activities, and further more all of the artificial and natural environment surrounding the human. In this sense, appropriate general philosophical conclusion about human desire to discover the world through reduction of all relations to the world to the paradigmatic worldview and a set of behaviours in it. Basic theoretical position in this case is the assertion that human activity of operating characters is constant, it is a prerequisite and it accompanied all kinds of behaviour. Formation of types has symbolic semiotic nature. The task of the typification process consists in fixing experience, opening the possibility for its storage, sign representation, transmission, recognition and understanding.

The next question to be considered is determination of the role of existing groups, existing types in the ongoing process of typification. Describing the type as a sign, and

typification as work of the consciousness with signs, we see three possible directions of this work, leading to the formation of a new type: increase of the sign (type), division of the sign (type) and combination of signs (types).

Let us consider the aspects of stylistic deviation of types. The emergence of new, additional connotations-values in some cases is accompanied by modification of the form of the type (increase of the content – increase of the type) (Fig. 2a). Seriation, mass character of this phenomenon leads to the formation of a new stylistic type, which is already associated with the relations of symbolic representation with a specific, narrow type of the activity-related situation. Thus, for example, specific ritual types of weapons, utensils and furniture appear. We are talking about the paradigmatic typification of a new and specific connection “stylistic deviation from the original type – specific situation of dealing with things of this new type”. A new, relatively speaking, “stylistic type” with respect to the original type is a sub-type. Artifacts with this new symbolic form become symbols of a particular social situation. Probably, a reconstructive course of demonstration of many subtypes of the second and third generation ascending to the original “parent type” is possible. A general prerequisite for them is to comply with the requirements of the core functions imposed to the parent type. Stylistic variations associated with connotations are logically acceptable until they impede the implementation of the basic functions of the thing – its denotative values (Eko, 1999). Here, a new type is formed according to the scheme “Original type + Stylistic deviation”. Its artifacts are representatives of both the parent type, and the one derived from it.

Another way of typification is disobjectification of the type: isolation and typification of the constructing component of the original form with any significant utilitarian or

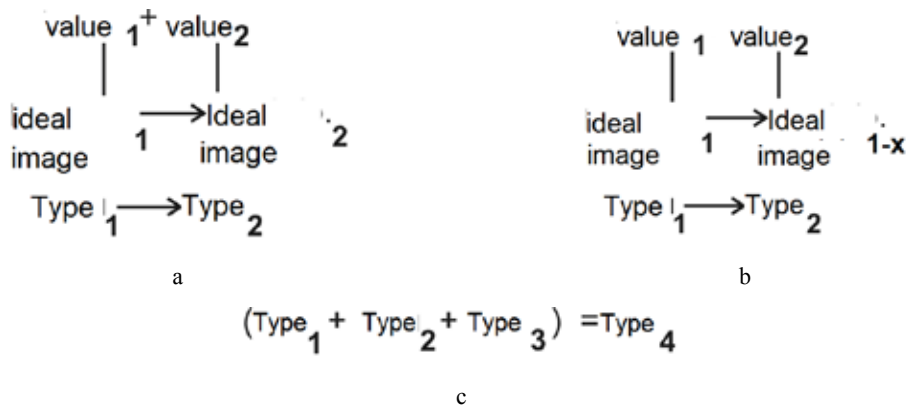


Fig. 2

extra-utilitarian value (Fig. 2b). There is a division of the type, isolation and typification of its parts followed by the possibility of transferring the type-element in the new combination with other elements and on the new material. For example, some elements of the antique architectural orders can be used in the later architecture.

In the third type of cases, the existing and continuously reproducible combination of types (a combination of types) is typified, observed, for example, in regard to wearing clothes, setting an estate or a gas station, interior of a cafe or a temple (Fig. 3). Typified broad combinations of household artificial environment are conceptualized as “the styles of the era”, in conjunction with their inherent life function – as “lifestyles” (with the same meaning in English archaeological literature).

Further, claiming an ongoing process of typification of the world, including things and their values, postulating the nature of this process as everyday work of the consciousness with signs, we should demonstrate the prevailing nature of determining social behaviour by types, including conscious activity. In this matter, we proceed from the four basic assumptions. Firstly, typification has covered all aspects of social life, and there is a cultural proposal of behavioural types and patterns of production and use of artifacts in all

spheres of activity. Secondly, this proposal has excessive nature. This means that in a significant number of cases, the human has the opportunity of choosing between the methods of solving problems proposed by the culture. Freedom of actions and choice determines human behaviour as “playing by the rules”. This is what Bourdieu described as habitus: “products of practical feeling like a sense of the game, a special social game, determined historically, which is absorbed from childhood through participation in social activities. ... This assumes constant invention necessary for adaption to the infinitely diverse situations, which are never completely identical. It does not provide mechanical subordination to the explicit, codified rules” (Bourdieu, 1994, p. 98). Thirdly, the choice of existing types also means the self-identity of the human in the system of cultural axis. Fourthly, following the type as the ideal model is always no more than a guideline. The reality is unreachable and deviations from the ideal model to this or that degree do occur. In some cases, this is due to the bad quality of the material, or lack of skill of the performer. In other cases, there is a creative modification that can auspiciously lead to the formation of a new type.

The next stage of existence of the sign as a type is its implementation in the aspects of

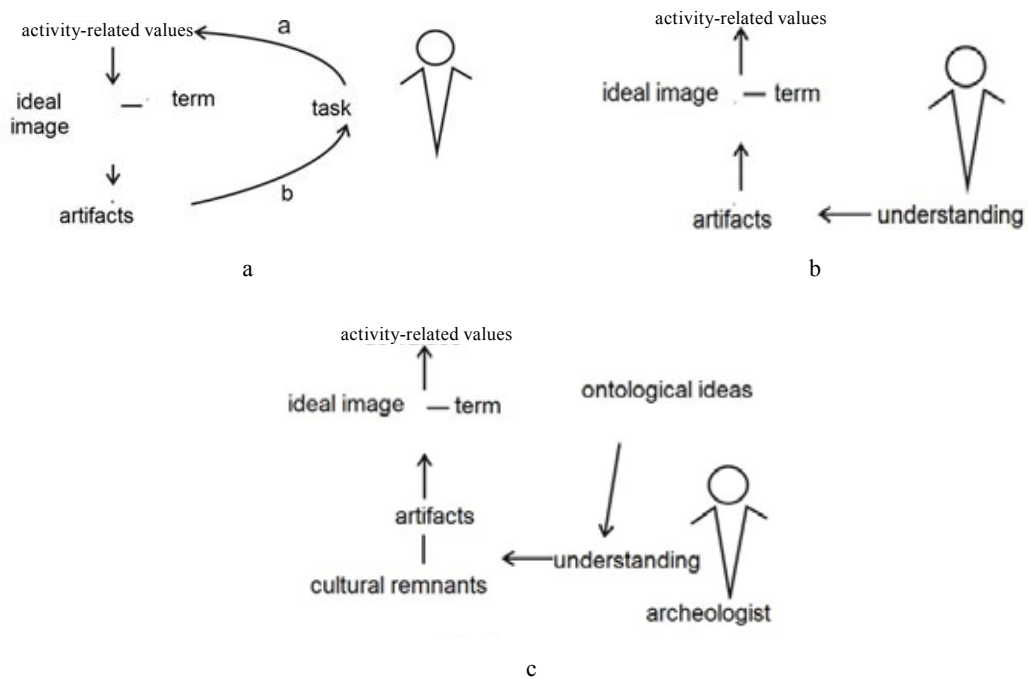


Fig. 3

understanding and inclusion in activities. We see here the two modes of operation of the type.

In the first case (Fig. 3a), we are talking about such a type of situations, when the subject of activity facing the next task uses stereotypes of instrumental solutions through the production and use of artifacts of a particular type existing in the culture. In other words, this is the situation of the urgent demand of the type.

In another series of cases (Fig. 3b) the type identified in the encountered artifact acts as a sign representing the associated activities and meanings of typical involvement in economic, public and ideological relations. In fact, this situation of understanding provided by the acquaintance of the subject with the artifact as a type. The artifact or several artifacts act as a message, and the whole situation looks as communication with the understanding subject reading the information. However, except for special episodes of intentional transmission of messages in the main row of cases essentially it is

not communication, while the production and use of artifacts had different goals, rather than the task of communication (transmitting and receiving messages), and the situation, therefore, should be characterized as pseudo-communication. In any case, we believe that the artifacts themselves without the intention of using them as a symbolic form of messages do not contain information as a kind of natural characteristics.

The archaeological version of this kind of situations (Fig. 3 c) is when an archaeologist finds cultural remains perceptible after certain (historical, taphonomic) procedures as artifacts. Recognition of artifacts occurs precisely because of their symbolic nature as a part of the type (elements of multitude of the morphotype). Knowledge about the artifact – the representative of the multitude – is based on the statistical results of the morphological categorization of artifacts indicating the presence of stereotypes of their target production / utilization, as well as the knowledge of the territorial and chronological

situations of their disposal in archeology. The ideal content of the type itself is not available due to the cultural and chronological gap. The principal feature of the archaeological situation of understanding the types of cultural remnants built on a “simple situation”, is the fact that archaeologists possess theoretical ideas about the ontology of the type of the artifact, cognition-guiding activities. Understanding of the value of the type in this case is achieved as a result of the reconstruction of the ideal form and typical situations of production and use, personal ownership, belonging to a group, etc. The ideal form of the type is not necessarily identical with its individual material manifestations. Deviations are random, individual. The main arguments in the reconstruction of the ideal form of the type (meronymy according to L.S. Klein (Klein, 1991, p. 378)) are the frequency of recurrence of the morphology of artifacts, evaluation of efforts and time spent on the production of this type of thing, rhythmic (natural) organization of the form. The degree of the depth of reconstructing the stereotypes of artifact involvement in activities (denotations and connotations) may be different, respectively, as well as degree of understanding may be different in the intercultural verbal communication. However, we emphasize that, although, due to the typical nature of artifacts, cognition if a semiotic understanding of cultural remnants as signs in the literal sense of the term, the archaeological cognitive situation is not communication, because there has never been the act of semiosis – production of the message originally for anyone, neither the ancient inhabitant, nor the archaeologist of nowadays.

Among all of the tasks of reconstructing the type, an important role belongs to the estimation of the value or the importance of the type for the culture. This value is a cumulative index of connotations of the connection with the elite strata of society as a symbol of prestige and power, mass

production, consumption, due to the ideological sphere of the society (ideological sphere), value of the object in the sense of the value of the material, carefulness, complexity and intellectual capacity of production. Such understanding is built on Spencer's representation of the value of things measured by the share of labour required for the production and possession of these things. Here, in our view, we can see an analogy with the typical practice of archeology in the evaluation of the social status of the buried person judging by the degree of complexity of the organization of his burial, including the degree of richness of the burial rite and inventory (Binford, 1971).

Articles, monographs and texts, in general, are the product of the archaeologist's activities. They record found artifacts in signs. The text, therefore, is a sign-substitute of the excavated artifacts. Scientific semiosis occurs in respect to the object. The object is assigned a value (“what is it?”) along with the transfer of the value on the signs-substitutes of the object. Ultimately, it is the text with illustrations, but there are field and desk stages and all the documentation they require. Fixing differences in the semiosis of objects archeology, between the artifacts-signs and the signs-substitutes (texts and others), we have introduced the following terms: *primary* and *secondary* signs (Teten'kin, 2010). Unlike the semiosis of things when the subject is nominated with a concept and is turned into a sign itself, semiosis in archeology differs by partial or total destruction of the object, which archeologists are so well aware of. Representation of the object, in the first place, is the collections taken out of context during excavations and taken for storage. In fact, this is the first symbolic form substituting the excavated object, which carries the signs of reduced primary and secondary symbolic forms.

The way from field documentation to scientific publications is a process of work with the secondary signs: plans, sections, recordings,

photographs and other things. The legitimacy of these manipulations is based on the assumption that they represent the primary signs, which once were real, and now are represented in the collection of excavated sign – archaeological objects in terms of values assigned to them. This subaudition of “real” artifacts behind the secondary signs is a prerequisite for the continuing semiosis. The reality of their existence is confirmed by the existing collection fund. The value ascribed to the object does not remain unchanged. During the analysis, theoretical understanding it is further elaborated. We are dealing with a continuously renewable semiosis in archeology: the revision of old knowledge, its revaluation.

Further development of the characteristics of ontological content of types of artifacts

should be due to the disclosure of the behavior of the type in a variety of activity-related situations at different stages of development of the process of existence of types in the culture of societies. These are, in particular, such situations as introduction of types in the culture of the social group – socialization of types in the conditions of denial of the predecessor-types, transmission of the types within the social group and beyond, obsolescence, memorialization and elimination of the types in culture. We believe that an objective of describing both invariant and historically transient characteristics of the type should be set. Solving these issues extends beyond the semiotic side of things, being more the field of studies of cultural anthropology.

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Знак, тип, артефакт

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Ключевая в археологии категория “тип” рассматривается в рамках деятельностного подхода как знак. Выделяются этапы синтагматического конструирования и парадигматизации идеального типа, состоящего из идеального образа, языкового термина и значений вхождения типа в различные деятельностные ситуации. Рассматриваются аспекты производства новых типов из старых, актуализации типов через производство новых артефактов и понимания типов, в том числе в ситуации археологического познания.

Ключевые слова: тип, артефакт, знак, деятельностные значения, идеальный тип, образование типа, понимание типа.

Научная специальность: 07.00.00 – исторические науки.
