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Tatyana Nikolaevna Krasnova

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This study is devoted to the problem of organizing the main terms in the restoration of archaeological ceramics and bringing them to an unambiguous interpretation. The importance of semantic filling of the basic concepts in archaeology, museology and restoration, such as trait, type, kind, property, quality, function is analyzed. This allowed them to identify their differences and similarities. The difference in understanding is due to the objectives of each of the related disciplines. The significance of the raised topic lies in the fact that in the preservation of archaeological cultural heritage it is extremely important to finally resolve the issues related to the translation of theoretical provisions into criteria and guidelines for concrete restoration work. This is connected with the necessity to 1. define the ultimate goal of restoration - what should be restored in the end - the appearance, properties, quality, functions of the monument or to eliminate signs of its destruction, as well as 2. to evaluate the quality of the work performed. Today, in the absence of a clearly formulated conceptual apparatus, unsuccessful restoration often leads to irreversible consequences and sometimes to the death of monuments. Based on many years of work with museum collections, in archaeological expeditions and pedagogical experience, the author has made an attempt to bring the existing terminology to an unambiguous understanding. He does not claim to solve all the above problems, as they need discourse, but considers it necessary to bring them up for discussion.

Keywords: terminology, archaeological ceramics, museum object, functions, restoration, quality, type, signs, properties, authenticity.

Classification: LCC Code: CC135

Language: English

Great Britain Journals Press

LJP Copyright ID: 573342
Print ISSN: 2515-5784
Online ISSN: 2515-5792

London Journal of Research in Humanities & Social Science

Volume 25 | Issue 5 | Compilation 1.0

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I. INTRODUCTION

The extraction of ancient objects from the ground, their incorporation into museum collections and restoration serve the same purpose - to study and preserve the memory of past epochs contained in material objects, without which the development of society is unthinkable. The archaeological heritage is of great importance to the knowledge of human history. Archaeological sites and objects are a priori historical and cultural monuments that can provide a scientific or humanistic understanding of past human behavior, cultural adaptation, and data on related topics through the application of scientific methods (Европейская конвенция об охране.., 1992). Archaeology, museology, and restoration are thus deeply interconnected. With a common goal-setting, they fulfil similar, but not always the same, tasks. The first and important stage of studying a monument is its description. But archaeologists, museologists and restorers, using the same terminology, fill it with different meanings.

When describing monuments, archaeologists, museum workers and restorers always use such concepts as the feature, type and kind of monument, its properties, qualities and functions. The absence of a clearly regulated conceptual apparatus leads to the fact that different interpretations of these terms, above all, affect restoration activities.

Restoration is a relatively young branch of science. For a short period of time it has turned from a craft of repairing old things into a scientific and practical activity of saving all kinds of monuments. Today, this fact is not yet fully

understood by many people. Unlike the tasks of restoration of architectural objects, which can continue their "life way", for example, as museums, movable monuments of archaeology are not subject to further exploitation, but exist as museum objects. (Герасимов, 2021).

The main goal of restoration - preservation of monuments "in all the richness of their authenticity" - was defined in 1964 in the Venice Charter - an international document on protection and restoration (Венецианская хартия .., 1964). But, despite this, restorers strive to preserve the appearance of the monument, based on our modern ideas about it. For example, in the textbook on restoration it is stated: "Restoration is a set of measures to restore the appearance of an object, as close as possible to the original" (Степанова, 2018, P. 56). That is why some museums present new archaeological objects, as if they have just come off the conveyor belt, made by miracle masters-restorers.

J. Carbonara believes that the difficulties of the discipline are related to the methodological problem of monument restoration, i.e. the translation of theoretical provisions into criteria and guidelines for specific architectural work, as well as the solution of individual conceptual issues, the discussion of significant interventions, and the interpretation of exemplary restorations (Carbonara, 1997). Y.G. Bobrov adheres to the point of view that "the lack of unambiguity of words and concepts is a genuine disease not only of Russian restoration science" (Бобров, 1997). Therefore, the purpose of this study is to clarify the basic concepts related to the restoration of movable monuments of archaeological heritage, which is defined as a source of "collective memory and an instrument of historical and scientific research" (Европейская конвенция.., 1992).

II. ANALYSIS OF THE EXISTING TERMINOLOGY

Archaeological objects combine the unity of information and material (substance) carriers. In museum collections they are in the status of museum objects. Today the tasks of restoration of archaeological ceramics are directly related to the exhibition activities of museums. Domestic and international documents require the preservation of the authenticity of museum objects after their restoration (Конвенция об охране.., 1972; Конференция..., 1994).

Archaeological ceramics is a relatively independent system due to the presence of its own features and properties, functions that determine its difference and similarity with other material objects.

In the process of long-term existence of an archaeological object may undergo various changes (Краснова, 2020). For example, a metal object can be completely corroded, fabric can fall apart at a touch, and a ceramic object can consist of many fragments. The essence of the changes taking place in the subject is expressed in a language of terms that form a system of basic concepts. Their unambiguous understanding is the key to the success of restoration and conservation of archaeological sites. The most important concepts in conservation are 'kind', 'type', 'property', 'quality', 'function', as it is essential to understand which of these features of the object should be conserved and to what extent.

The ICOM (International Council of Museums) document "Key concepts of museology" does not contain the terminology we are interested in (Key concepts.., 2012). The 'Dictionary of Restoration Terms for Painting' also does not explain this terminology (Булгакова 2021). 'The Dictionary of Current Museum Terms also excluded these concepts. But it is encouraging that, 'museum terminology is an evolving and growing system of terms that denote museum concepts used in the professional environment of museum workers'. Besides its own, it 'includes terms that are used in theoretical studies from other sciences, which have acquired a specific meaning in museology' (Словарь актуальных.., 2009, P. 62). The second edition of the dictionary 2010 gives a general definition the type of museum objects, still, the meaning of the term is not disclosed, and 'kind' is defined as a unit of classification of objects, based on a single attribute (Словарь музейных..., 2010).

For archaeologists of the Academy of Sciences, the Research Institute of Material Culture has prepared a terminological dictionary-guidebook (Колпеков, 2013). It gives the basic terms as interpreted by different authors, but lacks a uniform standard. In archaeology this is acceptable, because it has no effect on the condition of the monument (Краснова, 2022).

Features

Any research begins with identifying the attributes of the subject. There are many definitions of this concept, but all of them appeal to other concepts. For example, a sign of an object can be: “its characteristic property that distinguishes this object from other similar objects” (Определение..), “an indicator, a note, a sign, by which you can recognize or determine what can be recognized or determined”, “an attribute, a sign”, ”a set of unique qualities”. Consideration of the attributes of a concept as an entity is contained in the works of E.K. Voyshvillo (Войшвилло), M.S. Vlasova (Власова).

Any object has a set of features, so a feature is something that we recognize as evident when we look at an item. Features are any possible characteristics of the object, in what objects are similar and different. A feature can be the presence or absence of a particular quality, condition, property, or relationship of an object to other objects. Classification of objects is based on identifying several common features. The set of features in each case can be individual: by color - red, yellow; by shape - round, elongated; size: large, small; by weight - heavy - light; by preservation – good - bad. Attributes of archaeological objects may reflect their external features, based on the totality of which the objects can be attributed to one time, to one master, to one culture. External signs can be the basis of belonging to one or another archaeological culture (Смирнов). For example, the shape of a ceramic vessel determined the name of such archaeological cultures as the culture of "spherical amphorae", "funnel-shaped cups", and according to the method and nature of the decoration of dishes, the "culture of combed ceramics", "dimpled-combed ceramics", the culture of "linear-ribbon" and "ringed-ribbon" and "ringed-pearl" ceramics. In some cases, the function of objects, which became the main feature, acted as a name – "the culture of battle axes" (Клейн, 1970). Many archaeological cultures were named after the area where the archaeological complexes were found. For example, Saltovo and Tripillya cultures. Thus, the definition of archaeological culture can be based on the general purpose of objects, similarity of forms or ornaments, etc. At the same time, one should take into account the fact that the term “archaeological culture” is the main term when describing ancient prehistoric (pre-written) epochs, and the monuments united in this way by one feature may belong to different communities of people. A feature is a peculiar unit of description of an object, which can also be expressed in physical quantities (in kg; in cm; etc.). By the set of these or those features we judge the preservation of the object. For example, fragments of an item indicate that the item is broken, and different layers on its surface indicate that it is contaminated or affected by microorganisms, etc.

On the basis of the features of an object distinguish its type, kind, properties, qualities. The discovery of new features in an object can occur only in the process of its study.

Type and species

The electronic reference book “Encyclopedia Dictionaries on Academia” states that for the interpretation of the word “type” “there is no universally accepted definition (Словари Энциклопедии..., 2000). Despite the fact even though controversy around it does not subside, this term has found a wide use and is fixed in many spheres of science and culture.. For example, in architecture - ‘types of buildings’ are distinguished according to their direct purpose or use (residential, industrial, public and others), in psychology - personality types are distinguished according to temperament and behavior of people in certain circumstances (according to Hippocrates there are 4 types, according to Abulkhanova-Slavskaya - 6, according to Jung - 8 types) (Рыжова 2024), etc.

In archaeology, when distinguishing an archaeological culture, along with territorial-chronological and sociological, a typological approach is used, which is defined by a complex set of such "essential features as technology, morphology, function, decoration" (Фейферт, 2022), "related to each other functionally and in symbolism" (Clarke 1968, Клейн 1991). Therefore, if a group of objects or phenomena possesses identical (similar), fundamentally essential features that distinguish it from the rest, we can say that they are typical.

The problem of typology in science arises when it is necessary to order and describe a variety of heterogeneous objects and give them an explanation, for example, in psychology, sociology, biology, archaeology and others. In other words, the typological system is used for the purpose of comparative study of the most essential features, relations, levels of organization of objects. The generally accepted typology in ceramics is connected with the raw material base (plastic raw materials - essential, and non-plastic - auxiliary), with the method of production (wet method - plastic, and semi-dry - machine), with the number of manufactured products (single, mass, serial), with the material of the product (coarse ceramic, fine ceramic), with the use and purpose of products (household - containers, dishes; decorative and applied - vases, sculptures, etc.; building materials - bricks, tiles, etc.). But, practically no types and types of destruction of ceramic products are emphasized in any way.

For restoration, the key issue is the question related to the causes that cause the destruction of the product. Destructions are a state or consequence of the process of damage to the integrity of a material or its elements (Панасюк, 1988; Волегов; Фёдорова; Грибов, Трусов, 2015). In materials science, such types of destruction are distinguished: brittle (Каныгина; Гурнов, Осауленко, 2008), ductile (Лапицкая, 2021), fatigue (Олейник, 2014), corrosion (Волегов, 2015), which are characteristic of ceramic materials.

It is proposed to divide the whole period of the object's existence into separate time intervals and, accordingly, to distinguish the types of damage associated with them.

Type 1 - "unforeseen" or "dissonant" damage associated with:

a. The original (unsuccessful) creative idea of the author or not fully thought out design solution of the tasks of manufacturing the object. A striking example of unsuccessful ideas is the Leaning Tower of Pisa and the Leonardo da Vinci's idea to create a fresco of the Battle of Alghero, which, due to a misinterpretation of the encaustic technique described by Pliny, led to the destruction of the finished work.
b. Imperfect manufacturing process (technology of creating the object), which results in a manufacturing defect;

Type 3 - 'natural' damage caused by:

a. Processes of natural ageing of materials, unfavourable environmental conditions, including being in the ground (water), abrupt change of conditions during excavation or storage conditions after excavation.This also applies to particularly fragile objects such as fabrics, glass, organic materials and others.
b. - "Everyday" damages related to the process of using or operating an object;

Type 4 - "introduced" damage due to unskilled restoration (Krasnova. 2021).

These types of destruction are historically conditioned, as they summarize a peculiar result of each stage of existence of the subject.

The concept of "species" as a unit of biological systematics or an element of living nature has gone beyond the boundaries of biological science and spread to other branches of knowledge. The dictionary defines the concept of species as that which is available to the eye. However, it has many more meanings, because each branch of knowledge develops and fills this concept with the content it needs and adapts it to specific tasks. This term still does not have a unified definition (there are different interpretations).

Type is a very comprehensive concept. It is based on a certain particular common that characterizec different phenomena or objects. For example, the single type of production says that a particular

product (it does not matter what material, what shape, etc.) is made in a single copy, that is, it is unique, and the serial type - about a group of identical or close objects by specific features, but it says nothing about the nature of production, materials used, technology and the product itself. Other attributes are needed to clarify these details. If several items have a certain number of identical features, then we can talk about separating specific species features from a particular type of item. Item case, each item, will have the same species features as the whole selected group. Consequently, species is the degree of expression in one object (phenomenon) of typical features (selected on the basis of systematization) characteristic of the whole group of objects (phenomena), which corresponds to the formula 'One of...'. Ceramics are produced by firing clay products. Depending on the quality of clay raw materials, the degree of its processing, temperature and firing conditions, porcelain, faience, terracotta, brick, etc. can be obtained. Porcelain is defined in this system as a type of pottery. For the same reason, terracotta, brick, porcelain and other products made of calcined clay will be types of ceramics. At the same time, the products will have different degrees of sintering, appearance, mechanical density and more.

For ceramic products, the following types of destruction can be distinguished: cracks, swelling, fragmentation, corrosion, abrasion, flaking, delamination, staining, and others. This destruction is evidence that the structure of the monument's material has been altered and, as a result, its appearance has changed (Каллистер, 2023). The brittle type of damage is characterized by types of failure such as tearing, chipping or impact, while the ductile type is characterized by micro-cracks and deformation.

An example of historical "unforeseen" or "dissonance" type of damage is characteristic cracks or breaks on the corolla of vessels with a narrow neck. The reason for their formation is that the peculiarity of the material was not taken into account during the manufacture of the vessel. The crown (edges) of a clay product always dries faster than its body. This causes stress in the material and leads to cracks and breaks. Therefore, experienced artisans, knowing this feature of the material, made a thickening on the corolla - a rim. If this manufacturing defect is not dangerous for the further existence of the object, it must be preserved during restoration.

Property and quality

The meaning of these terms, as a philosophical category, has been repeatedly subjected to adjustments (Уемов, 1963). Because of their widespread use in everyday life, some terms are often replaced by others. For example, the term 'property' is usually interpreted as a quality, a characteristic, an attribute, i.e. it is used to characterize an object, to define its nature, its form, its quality, its distinctiveness. (Колесов, Клейн, 2001).

Museums, not archaeologists, are the main customers restoring museum objects. Museum historians are also concerned about problems in terminology which are still under discussion (Дукельский, 1986). When setting restoration tasks, museum workers proceed from the museum profile and value characteristics, which are distinguished on the basis of the properties and essence of a museum object. Such properties, in their opinion :

Informativeness - the ability of a museum object to act as a source of information about historical events, cultural, social and natural phenomena and processes (Музееведение: 2020, Разгон, 1984).

Communicativeness- the process of communication between the visitor and museum exhibits (artefacts), which can convey to the visitor the information embedded in them (Стронг, 1983, Гнедовский, 1986, 1882; Кондратьев, 1985;).

Memoriality is the belonging of a museum object to some event, person or epoch (Сафразьян, 1990; Цуканова, 1990; Каспаринская, 1973).

Authenticity of the museum object is that it is a carrier of social or natural science information, in other words, a museum object is an authentic source of knowledge and emotions (Разгон, 1979; Решетников, 2017).

Representativeness - the ability of a museum object to restore a fact, event, or phenomenon (Решетников, 2014);

Representativeness - it is the ability of a museum object to restore a fact, event, phenomenon among similar objects (Кондратьев, 1982; Музеведение..., 2020. P. 248);

Expressiveness - it is the ability of a museum object to cause associations and a feeling of involvement in certain events, or phenomena and facts of the past, present and future (Кондратьев, 1982. С.41; Музееведение..., 2020. P. 248);

Attractiveness - the ability of a museum object to attract attention by its external features (Музееведение..., 2020. P. 248);

Associativity - the ability of a museum object to cause associations with specific events (Музееведение.., 2020 P. 248) and others.

Among the definitions are indications that the main properties of an object that has become a museum object are:

- The ability to "be a carrier" or "source";
- "To attract the attention of visitors";
- Belonging to something;
- The property of being a "process".

It should be noted that in these definitions, there is a substitution of concepts, since only a living being, not an object, possesses abilities. Abilities are personality properties that are conditions for the successful realization of a certain kind of activity (Платонов, 1972). An object can be a carrier of information capable of causing certain emotions in a person, but it depends solely on the person whether they perceive or feel something. In the same way, the object itself cannot reconstruct events. Only a person with knowledge about the object can do so. "Belonging to something", also cannot be a property, since it is an element of classification. A process, which is a successive change of states in the development of something a priori cannot be a property. With such confusion in concepts, the main goal of restoration will never be achieved.

In S.I. Ozhegov's dictionary the term "quality" is defined as a set of essential signs, properties, and features that distinguish an object or phenomenon from others and give it certainty, while the term "property" is interpreted as "a quality, a feature that constitutes a distinctive feature of someone or something" (Толковый.., 1992). We see a similar situation in the dictionary of S. A. Kuznetsov with the difference that in the term "quality" an object or phenomenon can be distinguished by one feature or property from the same other object (Большой толковый..., 1998). In V.I. Dahl's dictionary, 'quality' is 'a property or belonging, everything that constitutes the essence of a person or thing' (Даль, 1989). A. Hoffman specifies that quality can be not only a property, but also a characteristic of the object under study, which can vary (Энциклопедия.., 2009).

The same uncertainty about "properties" and "qualities" is also present in philosophy. Thus, Hegel believed: "Something is due to its quality what it is, and losing its quality, it ceases to be what it is" (Энциклопедия.., 2009). D.N. Ushakov also departs from the generally accepted notions and brings these terms into the category of philosophical definitions, pointing out that "quality" is "one of the main logical categories, which is the definition of an object by its intrinsic characteristics", and "property", is evaluated as "a quality, attribute, ability, characterizing someone or something, constituting a distinctive feature of someone or something" (Толковый .., 2000). H. F. Ovchinnikov points out that "quality and property are related things, and sometimes it is very difficult to distinguish between them" (Овчинников, 1960).

A. Uemov defines property as the primary category in the description of things (Уемов, 1963). The concept of "quality" is used when it is necessary to compare the properties of an object and human needs. In this case, the property will be "that which characterizes some aspect of the object and that is revealed in the interaction of this object with other objects and phenomena. What properties a given object displays, that is, which of its facets it 'turns' about, other objects, depends on what objects it interacts with" (Большая советская...,1971).

To eliminate the existing confusion in the interpretation of these terms, I suggest using the method proposed by A.N. Braginets when evaluating an enterprise as a subject of economic activity (Брагинец). Let us consider how the process of revealing the properties of the subject we are studying takes place. To do this, we need to divide the properties depending on the following:

- A source of origin (what is the source of properties: an object or, practical human activity);
- A way of their cognition (with the help of human senses, observation with the help of special devices).

The main thing in understanding the properties of an object is that they, like attributes, do not depend on human consciousness and are objective. Therefore, any archaeological object has certain properties, but they can be revealed only in the process of cognition. Thus, while the object is in the ground (under water) neither it nor its properties exist for us. But when the object is taken out of the ground, we can study those properties that were laid down at its creation and acquired by it in the process of its exploitation.

The basic properties of a ceramic product are laid down during the manufacturing process. These are the following properties:

- Physical (density, porosity, water absorption or, swelling, permeability, etc.);
- Mechanical (hardness, impact resistance, tensile strength, etc.);
- Chemical (chemical inertness, corrosion resistance, etc.);
- Aesthetic (expressiveness of idea, rationality of form, integrity of composition, craftsmanship, iconicity, originality, etc.).

Over time, properties can either be acquired by an object or lost. For example, ceramic vessels made by low-temperature firing have many open leaky pores that do not allow water to be retained in them. However, ancient people began to notice that when misused, for example, to store milk, the pores of the pottery would fill with casein contained in the milk, making the vessel watertight. During restoration, impregnation of the destroyed structure of the object with consolidants can also increase the strength characteristics of the object many times over.

Archaeological ceramics can completely lose their mechanical and aesthetic properties when buried, for example, durability (the object can be broken, split, become brittle). The most difficult thing is to determine the aesthetic properties of an object, because they cannot be expressed in numbers or percentages. Standards of beauty are subjective and depend on the values that are accepted in a particular society.

A property reflects the state of the object itself and therefore it can only change when there is an explicit impact on the object. Features act as an indicator of changes in properties. If we consider the properties of an archaeological object from the perspective of position of the process of cognition of ancient history and today, it can be seen that in the process of cognition new properties of both the object itself and the world around it can be discovered (Krasnova, 2024). Therefore, any archaeological object, from the position of its cognition, can have an infinite number of properties. This process can be divided into several stages, which will be as follows:

- Preliminary evaluation of features as a source of properties, which is given by a person when visually examining an object (size, shape, colour, surface condition, etc.);
- Identifying properties, with the help of special research methods and means of cognition. This depends on the goals and objectives of the researchers (study of the molecular structure of the object, its mechanical strength, water absorption, etc.);
- Identification of properties that appear in the object in the process of existence or burial in the ground (change in the properties material a result of accumulation of various salts from the soil in the process of burial in the ground). These properties did not exist in the object before it was used, so they are new to both the object and the person. The discovery of new properties in an object is related to the observation or study of the object.

- Identification of properties that have not yet been discovered by man due to their non-use or impossibility to obtain them because of weak scientific, technical, methodological or methodological base, lack of knowledge that does not allow to open the code, read the texts encrypted in the materials of the monument, its decorations, etc.

New properties may be discovered when new tasks of studying the monument are set or new technical means become available. Properties of an object can be expressed numerically in appropriate units of measurement (grams, %, kg, cm^3, etc.), chemical in formulas, etc.

The necessity of such a division of the properties of archaeological ceramics into types will help to determine how and as a result of what their changes occur, to identify the causes and mechanisms of destruction that caused these changes, to eliminate them, as well as gives an understanding of the existence of unknown properties of the object.

Any object exists in its material form and possesses specific properties. The change of properties leads to various destructions of the object - its form and content, and when an object loses its properties, it ceases to exist. During restoration, the "quality" of an item should be determined by the degree of change in its original properties. This should be the goal of pre-restoration research. So, it is a variable value, so we can compare the same attributes or properties of different objects with each other. This should be the goal of pre-restoration studies. The values of the changes in the quality of the object's properties obtained as a result of the study should also be expressed numerically. These values will serve as a guideline for restoration activities - which properties of the object and to what extent they should be restored.

This approach will help determine the volume of minimum and maximum restoration interventions, their compliance with the tasks of restoration of a specific monument and, on this basis, assess the quality of the work performed.

Functions

From Latin, 'function' translates to execution or performance, but its common usage meaning is much broader and is interpreted ambiguously (Паренчик). This termite was first used in mathematics, but then spread to other areas of knowledge, expanding its original meaning and significance. We can distinguish the following most used meanings of the function:

- In philosophy, "a relation between elements in which a change in one element entails a change in another" (Философский словарь. — СПб. 1911). "The external manifestation of the properties of a k.- l. object in a given system of relations" (Философский.., 1981).
- In mathematics, a correspondence between two sets in which each element of one set corresponds to a single element of the other or a value that can change, at any time, depending on some implicit change in the system (Математическая.., 1985).
- In creativity, function refers to the ability of its bearer to do some work (Альтшуллер, 1979).
- The main function of science is to obtain new knowledge about the surrounding world, to understand events and phenomena. It plays a significant role in social and humanitarian knowledge, which is focused on studying the purposeful activity of people in various spheres of public life (Понятие науки...).
- In some cases, the function can be a characteristic that defines the purpose of a product. It is determined by the specific conditions of consumption, the structure of the product's structure and the specific situation of consumption. To assess the function of a given product, it is necessary to know the conditions of its use (Зепер, 1970).
- Function is also defined as a property, side of quality manifestation; role, meaning of something; purpose of something. The function of a product can be directly related to the morphology of a thing, and also be a carrier of its usefulness, social value (Функции и социокультурная...). In this case, the valuable function of a thing is revealed by the triad of concepts - purpose, utility and value.

In museology, it is customary to distinguish such functions of a museum object as modelling of reality, communicative and scientific-informational, which are "conditioned by its abilities":

- "To act as a document of history";
- "To convey ideas, feelings, judgments and perceptions not only of the people with whom they came into contact but also of the authors of the exposition";
- "To contain, encode, reflect and store information" (Музееведение, 2020. P. 240).

Function cannot be conditioned by the "ability of an object" to "contain", "transmit" or "perform", it can only be conditioned by certain properties of the object that trigger a particular process (e.g. cognition or use of something). The function (purpose) of an object determines its form, the material of manufacture, the method of production and decoration, and even the number of similar objects produced. Therefore, it is proposed to consider the functions of archaeological ceramics from the point of view of its social role, goals and objectives for which this or that object was created in the context of a particular time. Archaeological ceramic objects are objects that perform unrelated social functions. The function of an archaeological object in a museum is also secondary. A museum object is material evidence of past epochs, and by studying it one can obtain information related to the history, technology, lifestyle and culture of the people (Krasnova, 2024). Therefore, its function of preserving memory is secondary to its original purpose. Therefore, a museum item is a monument (from the word memory). The function of scientists is to extract new knowledge about the past of mankind on the basis of a comprehensive study of monuments.

In the museum, monuments are endowed with such functions as informational, communicative, scientific-cognitive or cognitive, memorial cumulative and others. The definition of these functions is based on the same "abilities of the monument", "to reflect", "to model", etc. Without going into their detailed description, it should be noted that due to the wrong approach, the monument is endowed with the functions of human cognition.

Therefore, a change in the functional purpose of an object in a museum (its public significance as a historical and cultural monument) cannot affect the purpose of restoration.

III. DISCUSSION

The terminology allows us to develop methodological principles for preserving monuments, based on which we can create individual methods for restoring archaeological ceramic objects.

The signs indicate a change in the properties of the object and its quality (the degree of change in properties, different from the original - standard). Based on the species' characteristics of destruction, their type must be determined. The typology will help to identify how the source of damage is related to the historical stages of the object's existence (unforeseen or dissonant, every day, natural, introduced) and to the main properties of ceramics as the material basis of the object (brittle, viscous, fatigue, corrosive).

The necessity of such a distinction lies in the historical significance of each type of damage, as each indicates a specific period of the object's existence. This may be of great interest for further monument study (Krasnova, 2024). Based on the results of the previous stage, the causes of the damage and the extent of the object's destruction are determined to assess the need for restoration. If the damage is not critical to the object (e.g., chips, small cracks, voids formed by the loss or washing out of small inclusions, scuffs, polymerized food residues, etc.) and it can continue to exist in this form and serve as a source of information, then restoration in this case will only be a hindrance. Typical destruction on the monument, which indicates the production process's imperfect technology, should also be preserved for further study.

The necessity of such distinction lies in the historical significance of each type of damage, because they contain important information about the object in each of the periods of its existence.

This may be of great interest for further study of the monument.

Only after a detailed and comprehensive study of the subject should a decision be made on the scope of restoration work and the selection of an individual methodology and materials. If the damage is not critical for the item (chips, small cracks, voids formed as a result of the loss of small inclusions, abrasions, pitch - polymerized food residues, etc.) and it can continue to exist in this form and serve as a source of information, then restoration in this case can only be a hindrance. Typical destruction, which is an indicator of the production process or its individual technologies, should also be preserved on the monument for the purpose of its further study.

If the study revealed external causes (dampness, the presence of microorganisms destroying ceramics, etc.) that are a threat to the existence of the monument, it is necessary to take appropriate measures to eliminate them.

If the properties of an object are damaged to such an extent that it can no longer exist in its original form or there is a threat of loss, then restoration is a necessary condition for preserving the monument. This should be based on a quantitative assessment of the object's properties and the degree of their loss. This can only be done using instrumental research methods.

Knowledge about the type of culture and the category to which the restored object belongs will help the restorer to form a clear understanding of its original properties and choose the appropriate restoration method. Since the properties are defined in specific units of measurement, a comparative analysis of the current properties of the object with a reference (an undestroyed similar specimen belonging to the same culture) will allow to determine the degree of its destruction (the quality of the object) and to express it numerically. In this case, based on objective data on the state of preservation of the object, the restorer can choose the restoration methodology and the appropriate materials. For example, based on the data on the water absorption of a tile, it is possible to calculate its porosity, which is directly related to its mechanical strength (Калатур, 2013; Борисов, 2009). Using simple calculations, it is possible to determine the type, type and amount of consolidant needed to strengthen the structure of the tile and restore the original mechanical properties of the object. Such an approach will help to eliminate traditional restoration mistakes. One of these mistakes is that the restorer uncontrollably saturates the fragile clay object with various polymers, resulting in it acquiring the mechanical properties of porcelain.

When assembling (gluing) a product from fragments or performing reconstruction, the type of archaeological culture and the appearance of such objects are a kind of guideline for finding the right approach to the restoration of the monument (Краснова, 2021).

The type of production indicates the possibility of full or partial restoration of the object. For unique items, reconstructions made directly on the monument (restoration of missing lost parts) are inadmissible, unlike serial or mass-produced items, where, provided there is an analogue, they may be permissible. If the product is mass-produced, it can be fully recovered.

IV. CONCLUSION

The main concepts that constitute the essence of terminology in archaeology, museology, and restoration are characteristics, types, kinds, properties, quality, and functions. When appealing to one set of terms, we inevitably encounter the necessity of using others. Among the multitude of terms, those are highlighted that can fully characterize the subject in terms of its significance as a monument and as an object of restoration. By eliminating one of the causes—terminological confusion in the conceptual apparatus—we made it possible to build a logically coherent methodological system for the restoration of archaeological ceramics in accordance with the requirements defined in UNESCO documents on the preservation of cultural heritage.

The classification system of objects depends on the purpose for which it is created, and therefore,

it is inherently subjective. The concept of "type" is based on the grouping of objects by common characteristics. The same object can belong to different types that are not related to each other. They can be grouped by purpose, morphological features, properties, or other criteria. Everything depends on the frame of reference in which the object is considered. The concept of "species" is determined based on which characteristic (property or function) an object is distinguished from the system. The type affiliation helps to establish the target purpose of the object, its properties, and consequently, its functions, while species determine its individual characteristics. Therefore, all ancient objects excavated from the ground belong to the type of archaeological monuments, and ceramics are one of its species. This classification allowed for the identification of four historically determined types of damage associated with the stages of the existence of an archaeological object. These are peculiar marks or markers of each stage of the object's existence. Each type of damage corresponds to certain types of destruction.

When creating an object, a person defines its functions and appearance: shape, size, color, etc. For this, they select materials and technologies so that the resulting properties of the object correspond to its purpose (i.e., the object performs its functions). However, for various reasons, the functions of objects can change. Archaeological objects in museum collections acquire the status of museum items. The primary role in determining the secondary function of an archaeological object belongs to specialists—archaeologists and museum workers. Only their evaluative opinion determines whether the object will remain in the excavation or become a museum item, and how and in what form it will be used: stored in museum reserves, exhibited, or used for its original purpose (e.g., jewelry, cult structures).

The properties of an object do not depend on whether they are recognized by humans. They are objective and individual for each object. The properties of the object can change for different reasons: production defects, human economic activity, natural factors, natural aging of materials (from which the object is made), restoration and others. The quality of an object is determined by the degree of change in its original properties. It can be expressed numerically or as a percentage.

The historical "memory of an object" is encapsulated in the changes to its original functions, properties, and characteristics that occur over time. By qualitatively and quantitatively analyzing these changes, one can infer the circumstances that contributed to them. The study of these changes can become an important source of information for specialists in various fields of knowledge. The conceptual unity of functions, appearance, properties, and quality defines the essence of the concept of "authenticity." It is the authenticity and the amount of information that we manage to obtain by studying the monument that determines its value to society. This is recognized in UNESCO documents on the protection of cultural heritage and enshrined in the legislative acts of different countries.

The poor preservation of archaeological monuments necessitates restoration. However, restoration, in its current form, cannot ensure the preservation of the authentic properties of the monument (Дрост, Бертильсон, 1994).

Restoration is an extreme measure. It should only be applied when the monument is in danger of destruction. The main function of restoration is to eliminate the causes of destruction and to preserve as much as possible all the inherent properties of the object. The restoration of the original appearance and properties of the monument is fundamentally impossible since modern restoration materials introduced into the structure of the monument deprive it of authenticity. Based on this:

- Restoration interventions should be minimal and should not alter the authenticity of the object.
- The restoration should not hinder further study of the monument, since the information contained in it is unique and cannot be restored.

- The museum object should remain a "keeper of memory" and not a repository of restoration materials. For displaying the object in its original form, various methods of reconstruction and 3D visualization exist.

To meet these requirements, the restorer must clearly determine:

- The original functions of the object, its type, kind, and properties (physical, mechanical, aesthetic, etc.);
- The causes of destruction, their types, and kinds;
- The degree of damage to its properties or loss of any properties;
- The limit of restoration of the properties of the object (the degree of restoration intervention).

Only after analyzing the obtained data should the appropriate materials for the restoration of the monument be selected. This approach will allow for the restoration of the damaged object within the limits necessary for its further existence. Thanks to this, the main goal of restoration can be achieved – minimal intervention in the structure of the monument and maximum preservation of its authentic properties. The use of this approach can become one of the indicators by which the quality of restoration work will be determined.

Funding

This work is not supported by any external funding.

Conflicts of Interest

The author declares no conflicts of interest.

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