

THE COMMUNICATIONAL AND INFORMATIONAL VALUE OF PARK ENVIRONMENT AS AN AESTHETIC OBJECT AND ITS IMPACT ON THE AESTHETIC VIEW FORMATION OF THE SOCIETY

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Abstract

The purpose of the research is to identify the specific features and patterns in the formation of the communicational and informational structure of the park environment as an aesthetic object of anthropogenic origin, which provides a connection in space-time continuum between its formation and perception subjects. As a result of analytical researches of scientific sources of literature, it is revealed that an important general aspect of natural landscape perception, as well as urban and park landscape perception as an aesthetic object, is multisensory (perception is due to all senses), which is fundamentally different from works of art that are calculated on the visual sphere of perception (works of fine art) or hearing (music). Along with the multisensory of the perception, park landscape, as a rule, is impossible to reach immediately, perception occurs as a series of landscapes. It is revealed that the main factors limiting the formation and the perception of the park landscape as a communicative-informational aesthetic object is the time that affects the variability of the material forms of the object on one hand and the aesthetic experience of the person – on the other. Such circumstances determine the logical changes in the information-value function of the landscape in the structure of the object-subjective relations of the park environment-man system. On the basis of the results of the analysis of scientific works aimed at studying the aesthetics of the landscape, a model of subject-object relations of man and a park environment as a unified system was developed.

Key words: communicational and informational value, multisensory of space perception, park environment.

Introduction

The interconnection of nature and art has been observed throughout the history of human development and at different times has acquired peculiar forms and manifestations. In particular, Albrecht Dürer argued that art is hidden in nature, and the

ones who find it, would be able to have it. In turn, Leonardo da Vinci, comparing scientific and aesthetic cognition, noticed that painting embodies in the form of proportions the same laws that are hidden in nature, which in the form of a numerical law learns any scientist (Kravets 1994). Also Stolovich (1972) notes on the aes-

thetic value of objects in which the natural laws are reflected. In addition, V. Hegel believed that the beauty of art is superior to the beauty of nature. However, the idea of the domination of the beauty of works of art over natural objects radically changed in Europe during the Romantic period, when the landscape was regarded as an object with aesthetic qualities (Lothian 1999, Gross 2002).

Works of scientists of the XX century focus not only on the study of the landscape (both natural and anthropogenic) as an aesthetic object, but cover issues of their interaction within a single system. On constant interaction between urban landscape and man, Ikonnikov (1985) emphasizes the urban environment as a constant interaction of human society and the subject-spatial environment, diverse systems of activity and forms of behaviour with material structures united in space. The presence of the relationship between man and the environment also notes Lynch (1982), who argues that the urban environment is perceived not by itself, but in relation to the environment, the related chain of events, memory of the previous experience of the individual.

The influence of the environment, mainly natural, on the formation of human consciousness and its aesthetic flavours was experimentally proved by Kravetc (1994), on the basis of revealing correlation connections of colour harmony in nature and works of art. The author showed that the fundamental signalling structure of the natural environment was reflected in the structure of the palette of colouring masterpieces of painting of different genres. Investigated by the author, the structure of colour harmony in works of art was identical to the structure of the organization of colour information of the natural environment and objects, including land-

scapes, flowers, etc. Kravetc (1994) identified the chain of connections in which the reflection in the system of nature-man-art can take place. First, it is a mental form of reflection in the perception of a person of nature (in one direction) and a work of art (in another). Secondly, this is a specially defined type of human activity – aesthetic activity, which is reflected in its specific forms and according to its own purposes. After all, as Kravetc (1994) notes, the artists reflected the patterns of nature describing them in a certain way. In other words, the reflection of the properties of natural environment – the nature inside the human nature and the images created by it in the psyche of this environment, as well as the formed artistic images, due to cultural and social and individual experiences, is a manifestation of the structural and material integrity of the world.

Thus, it has been experimentally proved today that the qualitative characteristics of the components of natural environment, main component of which is the landscape, influenced the formation of the notion of beautiful and aesthetic preferences of man, whose creative expression was the fine art, and his material expression was works of art. At the same time, the attention of scientists focuses mainly on the study of the aesthetics of natural landscapes, which occupy vast spaces, are formed without the participation of man and for a long period of time and aesthetics of the urban environment, as an autonomous structure formed by man according to his needs, technical capabilities, aesthetic looks, etc. The question of aesthetics, namely of park landscapes, can be considered in the context of the natural and urban environment and is determined by the characteristics of the park.

The purpose of the study is to find out

the communicational and informational value of the park environment as an aesthetic object of anthropogenic origin, which provides a connection in the space-time continuum between the subjects of its formation and perception.

Park Landscape as an Aesthetic Object

Despite the great attention of scientists from various fields of scientific knowledge to the question of the nature of aesthetic qualities, there is a discussion of the nature of the aesthetic qualities that act as signs of the object, but on the other hand they are subjective and are assigned by man. An ambiguous issue in the study of the aesthetics of the park environment is also the definition of the aesthetic object and the definition of its place in the context of this general scientific interpretation. Important in this context is the work of Sepännmaa (1993), which formed the classification of aesthetic objects, which includes two types and three kinds. According to her, aesthetic may be an object that has aesthetic qualities, as well as one that acts as an object of aesthetic research. Considering the park environment in the context of the work of Sepännmaa (1993), the park environment combines both natural and artificial type of aesthetic object, which in turn determines the presence of signs of two kinds of aesthetic object – environment and art (Fig. 1). In addition, the park environment can be both natural (natural parks) and a personal (parks of different functional purposes).

The landscape of natural parks, in the formation of which a person did not participate, cannot be defined as a work of art, but can be the subject of aesthetic research. In turn, the park environment

created by a person according to a certain goal with taking into account certain aesthetic and ideological considerations can be considered as an art of forming the landscape as an aesthetic object. Accordingly, based on the analysis of the types and kinds of aesthetic objects allocated in the classification of Sepännmaa (1993), the following are found:

1. Park environment is the result of the art of forming the landscape along with the urban environment and inextricably linked with it.

2. Park environment is an object that has aesthetic qualities, and can act as a subject of aesthetic research.

In turn, the dual interpretation of the nature of aesthetic resulted in further development of concrete scientific approaches to the study of the aesthetic qualities of the object in two directions – the analysis of the object of perception (landscape), the definition of qualities that can be characterized as aesthetic and study subject perception – the person, as well as mechanisms of its interaction with the object.

Vygotsky (1987) defines aesthetics as a doctrine of the aesthetic attitude, that is, the general state that embraces a person and is determined by the aesthetic impression. That is, aesthetics is considered as a psychology of aesthetic pleasure and artistic creation of man. The issue of aesthetic pleasure as a motivational aspect of the formation of works of art is set out in Zangwill's (2007) work, where the author states that aesthetic pleasure comes from the idea of an object to the desire for contemplation in the real world. In addition, Zangwill (2007) notes that aesthetic pleasure has a special appearance, but it is still a pleasure, and the desire for pleasure is a reasonable and rational pursuit of time. In his turn, van Etteger et al. (2016) consider the theory of Zangwill (2007) in

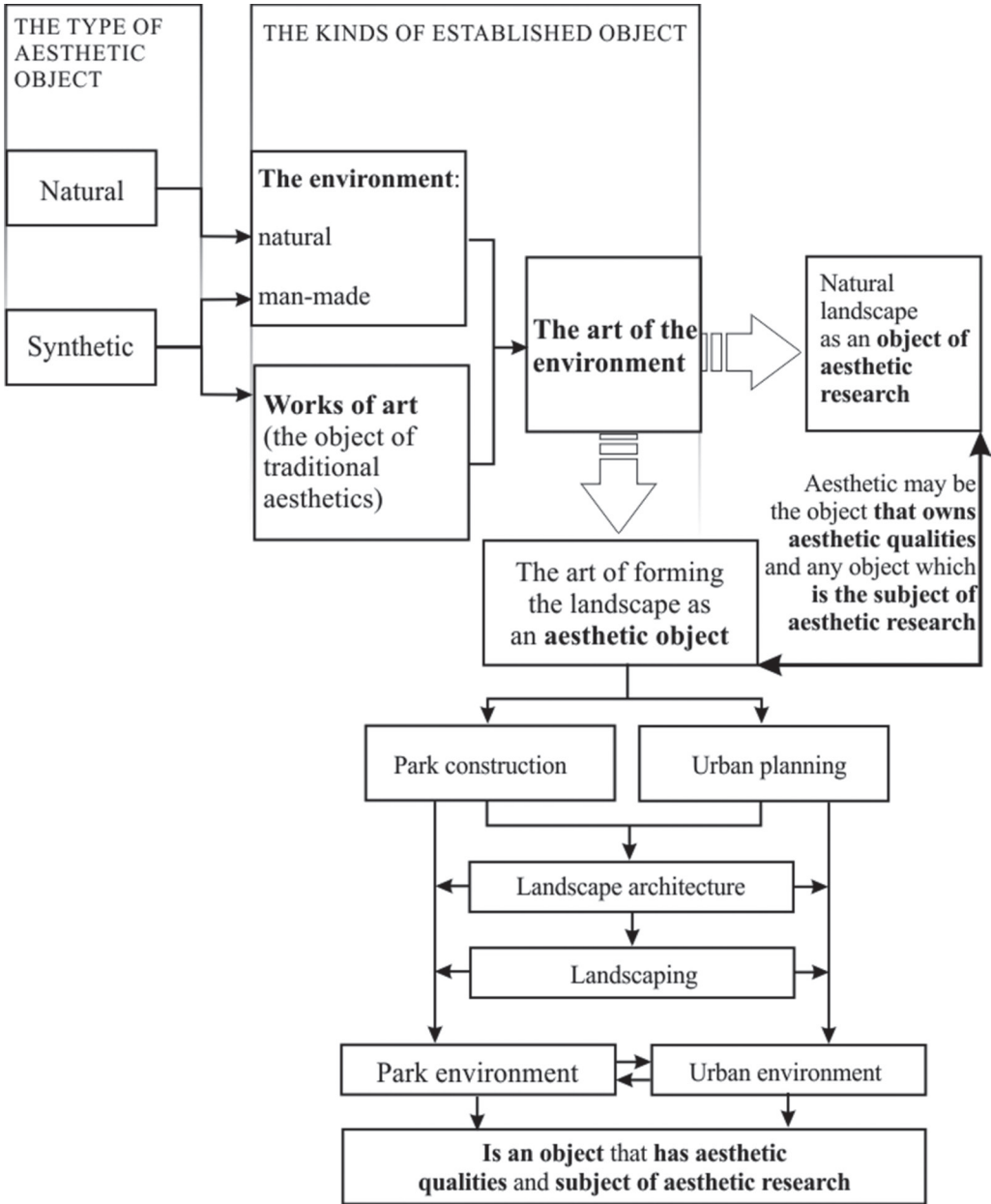


Fig. 1. Park environment as an object of aesthetic research (according to Sepänmaa 1993).

the context of landscape architecture.

Focusing on the person as the subject of perception, we should pay attention to the theory of personality development

by Vygotsky (1987), according to which a person is the result of phylogeny (biological evolution), sociogenesis (history of culture) and ontogenesis (individual

development). The theory of Vygotsky (1987) formed the basis of the paradigm of research in the field of landscape aesthetics Bourassa (1990), which distinguished three types of aesthetic human experience – biological, cultural and personal. Each type of experience has a number of special qualities that characterize the limitations and possibilities of aesthetic perception. In particular, biological experience identifies a group of factors of similarity of aesthetic preferences, while cultural (or sociocultural) and personal determine the range of differences.

The socio-cultural context of aesthetic perception of landscape was explored by Paul Vidal de La Blache and his students who discovered that there are groups of people characterized by spatial perceptions and landscape-aesthetic preferences and even developed the concept of 'cultural codes'. These 'codes' define the spiritual and rationalistic landscape and aesthetic sympathies of people (Dirin and Popov 2010).

Brookfield (1969), who was one of the founders of behavioural geography, introduced the concept of 'environment of perception' – a set of external factors (natural and sociocultural) that form thinking stereotypes in different groups of the population. This contributed to the development of studies devoted to the study of the spiritual and symbolic importance of landscapes, ethno-cultural stereotypes of perception. Therefore, there are the concepts of 'national landscape', 'native land' (Brookfield 1969, Haerynen 1996). In this context, it is worth paying attention to the work of Gold (1980), who, during the study of human perception of the landscape, identified three elements of this process: the perception of material tangible forms, both natural and man-made; the visible processes of human activity in

the landscape, as well as the symbolic meanings given to it by human consciousness. Affecting natural objects in the process of meeting their needs, people reproduce them as 'symbols expressing her feelings' through which collective beliefs are transmitted, as well as a value system of knowledge. However, there is also the other side, when contemplating the landscape causes a certain sense of the person, that is, the landscape causes certain associations and symbols (Gold 1980). In this way, there is a connection between the subject of shaping the landscape and the subject of its perception through time. Therefore, anthropogenic landscape (including park) serves as the object of the transfer of collective or individual information within the spatial-temporal continuum.

Information Significance of the Park Landscape as an Object of Communication

In recent decades, the question of assessing the aesthetic qualities of natural and anthropogenic landscapes has become increasingly relevant and has been highlighted in a number of scientists: Linton (1968), Kane (1981), van Etteger et al. (2016), Hrozdynskyi and Savytska (2005), Motoshyna and Vdoviuk (2012), Frolova (1994), Kochurova and Buchatck-aia (2007), Nikolaev (2005), Hoisl et al. (1985), Dirin and Popov (2010) Hrynasiuk (2014), Osychenko (2011abc, 2012), Stoycheva (2016). Thus, at the present stage, trends in the study of aesthetics of the landscape have been formed, one of which is the focusing of attention on its information function and the object of communication between different societies and generations. First of all, information and cognitive approach within which

information is considered as an important component of aesthetic preferences of people and is central in the study to both urban and park environment, but has different meanings. For the urban environment, information is the basis of constructing a cognitive map, which causes the ease of orientation in space, while in the park or natural landscape information, first of all, determines the formation of the image in the imagination to meet the aesthetic needs.

The subject of the information-cognitive approach is the peculiarities of the expression of information in the subject-spatial environment and the significance of the cognitive process of perception, and accessibility, clarity of reading increases the aesthetic evaluation (Fig. 2).

The question of information function of the subject-space environment of scholars in the post-Soviet space is encountered, in the first place, in the theory of architecture (Belyaeva 1977; Ikonnikov 1985, 1986; Barabanov 2002, and others). In particular, Ikonnikov (1985) emphasizes a number of features of architecture, among which – pre-programmed information that is laid down when it is created and has a general cultural and ideological and artistic content, important for the practical orientation of man, the formation of its psychological formation and perception of personality. This medium is both a product and a process of interaction, the object of the formation of information and its reading. Thus, architecture as the basis of the subject-spatial environment of cities has a double value – material-practical and information-aesthetic. System architecture, as its characteristic feature defines the structural basis of the subject-spatial environment, which enters into interaction with the subject (an individual, a group of people, a city community, a nation – it

depends on the level at which the environment is considered) and updated its behaviour (Ikonnikov 1986). Along with this, Barabanov (2002) considers the urban environment as a system of replacing emotional and aesthetic signs, symbols and images, visible in architectural forms that determines the emotional and aesthetic, symbolic and figurative perception of a person in the picture of the world. Urban environment as 'hypertext' is considered by Osychenko (2011ab, 2012), and aesthetic perception is characterized as a communicative act that 'immerses' man into the sea of sustainable values and integrates it into society.

In turn, the information functions of the landscape were studied by foreign scientists – Kaplan and Kaplan (1978), Antrop (2005) Kaymaz (2012) and others. In particular, Kaplan and Kaplan (1978) define perception as a process of obtaining information through the senses, its organization and interpretation.

Park landscape, as part of the subject-spatial urban environment, inextricably linked with it, its functional and imaginative information system is (along with architecture) the carrier of information that was laid upon its formation, actualized in perception and affects consciousness. This way creates a 'sensible landscape' (the term introduced by Lynch 1982) – a tangible medium that affects interpersonal communication, focuses on its importance for human comfort and manifests itself in sounds, aromas that can both promote and interfere with communication. The combination of stimuli of all human sensory receptors forms information that Lynch (1982) considers to be one of the most important forms of assessing the urban landscape, which is to analyse the forms of its functioning as an incentive, as well as the environment for learning and self-de-

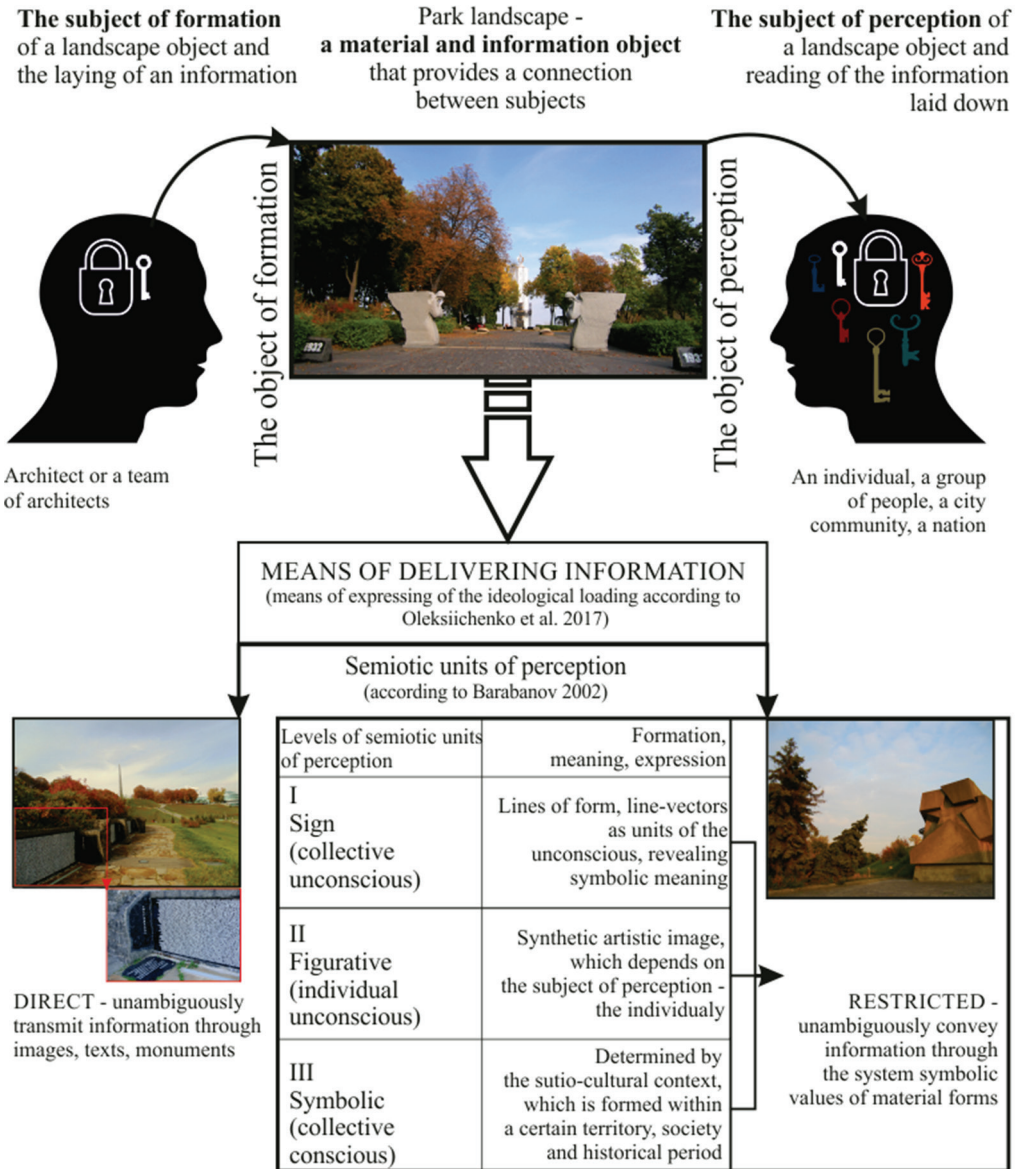


Fig. 2. The conceptual scheme of the process of communication between the actors of creation and perception of the park landscape as a material and information object.

velopment. The thought of Lynch (1982) has developed in subsequent years in the writings of such scholars as Ungar (1999), Antrop (2005), Forster (2010). The latter, in turn, highlighted the peculiarities of the

perception of the natural environment:

1. Environmental perception is not immediate and takes time.

2. The scale affects the perception of the environment.

3. The environment is surrounded by people, which causes perception from the inside.

4. Navigational skills are required to perceive the environment.

5. Interaction with the environment, as a rule, is carried out for a certain purpose. As a result, a person chooses spatial information related to its purpose (Ungar 1999, Forster 2010, Kaymaz 2012).

A similar approach can be traced in the studies of Vygotsky (1987), who determines the emotional and aesthetic qualities of the object of observation art as the beginning and the ultimate goal in the chain of the consumer architect. The work of art in terms of psychology is considered by the author as a system of stimuli, which is deliberately organized with the intention of causing a certain aesthetic reaction. Thus, due to the analysis of stimuli, the structure of reactions is reproduced.

Comparing the perception of the architectural environment as the closest feature to the park, one should note the constant development of the latter, which is determined by the spatial-temporal characteristics, which is due to the constant change of landscapes due to seasonal dynamics and life cycle of plants. The compositional structure of the park is constantly changing, which makes it impossible to have a definite result, but is a continuous sequence of states, each of which must be distinguished by aesthetic appeal, readability and informativity. Lynch (1982), an important characteristic of landscape informativity, considers the density of information placement and its comprehensiveness. The clarity of information is determined by orderliness, ease of reading and relevance. According to Lynch (1982), the form and colour correspond to the message, which in turn affects the ease of reading.

An important characteristic of understanding and correct interpretation of information is the simplicity of the means of its communication, in particular at the expense of the simplest elements that organize the architectural form and influence the emotions of a person. It is on the importance of the elementary forming elements of architectural forms and the need to study their influence on the perception of man emphasized Le Corbusier (Barabanov 2002).

Consequently, the notion of informativeness of the urban environment is connected both with direct means of information (Lynch 1982) and with the system of symbols, images, signs (Vygotsky 1987, Barabanov 2002, etc.) that form a certain semiotic structure and most characteristic for the park landscape. At the same time, trees and other vegetation located around monuments can play an important role in increasing their impact. On the other hand, unsuccessful plant composition and invasive vegetation can destabilize the influence of the monuments located nearby (Galev et al. 2016). Particular importance is given to studies in the study of memorial parks, which provide a connection to the past generations at the expense of the symbolic, semantic and sign system, which, first of all, manifests itself in planning structure, monumental decoration and general compositional solution. The most semiotic approach to the formation of the image of the park landscape, as well as the manifestation of 'collective consciousness', is observed in memorial parks of military subject, the content component of which is based on the figurative, symbolic and sign level. In particular, Oleksiichenko et al. (2017), in the research of military parks of war themes, direct and indirect means of expressing the ideological load of the park are distinguished, which may

contribute to the correct interpretation of the information structure and the semantic values laid down during their formation, and to alleviate them. Such circumstances make it expedient to analyse the research of the semiotic structures of landscape objects in the context of informational-cognitive approach, since semiotic perception can be regarded as the highest level of cognition. Osychenko (2011c) highlights the significance and symbolism of architectural forms, as well as the interpretation of the content of objects as the subject of the study of aesthetic qualities of objects within the framework of the semiotic approach.

The study of 'semiotic units of perception', is important in the context of formation of the landscape objects semiotic structures which is distinguished by Barabanov (2002), based on three levels of perception: the sign level (collective unconscious); figurative level (individual unconscious); symbolic level (collective conscious). To the sign level, which is actually the original, which is the same for all people, Barabanov (2002) classifies lines of form, line-vectors as integral units of the unconscious and reveals their symbolic meaning. At the figurative level, vectors of the line and holistic visual images form a synthetic artistic image, which depends on the subject of perception – man.

The synthetic image changes in time, because it is related to the individual experience of a person or society as a whole. It is worth noting that over time, not only the subject (man, society, society, humanity) is changing, but also the object of perception – a park landscape whose stability lies only in its variability. Thus, the content of park landscapes as media carriers changes, which respectively affects its interpretation. It becomes obvious that in the conditions of conscious laying

of symbolic values through the sign system in the formation of landscape objects should take into account the variability of the components of the park environment.

In turn, when investigating the semiotic structure of a landscape object, which in this case can be considered as the object of mass communication, the particular difficulty lies in the revealed socio-cultural content, which is perceived by man at the third, highest level of visual perception – the symbolic (collective conscious). Collective consciousness is determined mainly by the sociocultural context, which is formed within a certain territory, society and historical period, and the park landscape, in this case, is a material embodiment of the socio-political, ideological and cultural-aesthetic aspirations of this society. The change in the sociocultural context in society leads to a change in the interpretations of the sign and information structure of the landscape object (see Fig. 2) and the incorrect interpretation of the content, the unpredictability of its impact on contemporary cultural and ideological views, and the formation of a worldview of the subject of perception (an individual, a group of people, city community, nation).

Model of Subject-object Relations of Man and the Park Environment

Accordingly, the process of human perception of the park environment can be regarded as a subject-object unity that develops over time and is constantly updated. Attention is focused on the study of mechanisms and conditions for its conservation in the change of the subject-object relations themselves. Accordingly, based on the conducted research, a structural model of the object-object relations of man and park environment was formed

(Fig. 3). An important aspect of this model is the closeness and interdependence of the stages of personality development, the process of perception of the park environment and the formation of its images. Thus, the process of forming landscape images based on Hrozdynskiy and

Savytska (2005) is defined by the stages of personality development, identified by Vygotsky (1987), on one hand, and the material and image systems of the park environment on the other. In this case, phylogeny causes the appearance of sensory and operational images, which are

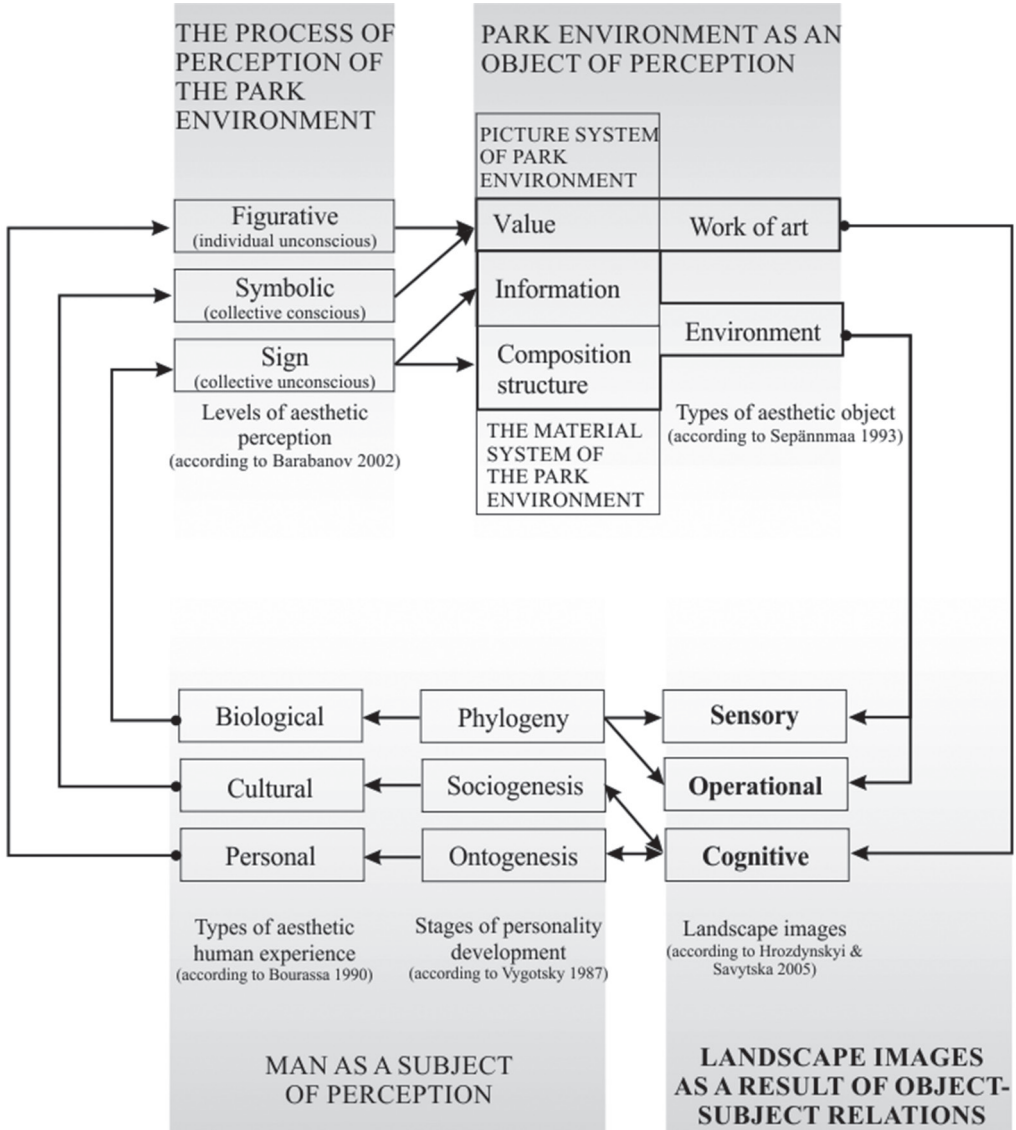


Fig. 3. Conceptual model of subject-object relations between man and the park environment.

formed as a result of sensory perception of the material system of the park environment. Ontogenesis and sogogenesis determine the peculiarities of the cognitive image of the landscape, which is formed on the figurative (individual unconscious) and symbolic (collective conscious) levels of aesthetic perception (according to Barabanov 2002), a figurative system of the park environment – its value and information structures. Those levels of aesthetic perception are determined by the kinds of aesthetic experience Bourassa (1990), which are formed as a result of the corresponding stages of personality development.

The cognitive image is the most complex and individual in nature, since it is determined by sociology and ontogenesis, whereas the sensory and operative images are similar to most people and are due to phylogeny. In this context, one should pay attention to the notion of a perceptive-cognitive system (Osychenko 2014), in which the subject and object of perception act as its components, and as a result of this interaction, we have the mutual change of state of both an object and the subject. The author emphasizes on the dynamics and self-development of the perceptive-cognitive system and allocates three levels of its organization: micro, macro, megawave.

Thus, a perceptually cognitive microsystem is formed under the influence of the need for information about an object or phenomenon that unfolds within the sensory field of the individual, that is, the 'material' and informational image system of the park environment is 'read'. As a result, sensory and operational images of a particular park landscape in a certain time period or a series of landscapes in relatively small spatial boundaries are formed. The cognitive image formed by the per-

ceptively cognitive macrosystem is more complicated and wider than in space and time. Formation of the image occurs as a result of 'reading' a valuable figurative system of the park environment, comparing the one seen with its own normative and value system of the individual, which was formed as a result of socio- and ontogenesis.

Megasystem is the largest within the time and space, its formation occurs throughout the life of the individual, and the images formed as a result of the perception of the medium are stored in the long-term memory and serve as a context that allows the subject to extrapolate the sensory characteristics of reality, to match what has been seen with the previous experience, to consider park landscapes from a philosophical point of view. At the same time, Osychenko (2014) distinguishes the individual and external mega-image and notes that the first one can arise only in the context of the second, formed during this historical period in the culture of the national or world community.

Time as a Limiting Factor in the Development of Subject-object Relations between Man and the Park Environment

An important aspect of the analysis of the subject-object relations of man and the park environment in the context of studying the aesthetics of the latter is to determine the peculiarities of changes that occur under the influence of time. The aesthetic object is the park environment, which has (as noted above) a material and figurative system. The material is formed by the components of the park landscape, most of which are natural objects, which determines their development

in time and space, and the most dynamic are plantations. At the time, as one of the changing components of the park space – emphasizes Bell (2004), who considers time in different aspects – from time to time, it is spent on the movement of the landscape object to natural cycles, the development of the universe and our lives. In addition, the author distinguishes cyclic (change of day and night, seasonal dynamics) and progressive time changes, which are related to the linear motion from the past through the present to the future Bell (2004). Accordingly, the spatial relationship of the park environment changes over time, and the peculiarities of the changes are defined as external (biotic and abiotic factors) and internal – biological and ecological peculiarities of plants, which usually form the basis of the composition structure of the park. The life cycle of plants, along with spatial changes in the park environment, causes continuous variability (seasonal dynamics). In turn, the variability of the material system of the park environment determines the transformation of the information and value structures of the figurative system (Fig. 4).

Man (or *socium*) as a subject of perception of the park environment as an aesthetic object is also changing over time under the influence of external – sociocultural and internal – personal factors. Accordingly, the figurative and symbolic level of aesthetic perception is changing, which irreversibly affects the interpretation of the content of the information and value system of the park environment and, as a result, the interpretation of the cognitive image of the landscape.

Interpretation of the content is conditioned by the human need to endow the surrounding objects and phenomena with content, and in this way long-term memory is formed, which, unlike short-term,

uses meaning, not an image. It is the empowerment of the seen with the meaning allows you to memorize the information about them. In turn, objects that are attracting attention are remembered, and in the park environment the emphasis components are changing. However, the volatility of the emphasis of the material system, the park environment changes several times a year, while changing aesthetic views of a person as a subject of perception requires much longer period of time or significant socio-cultural or political events.

Conclusions

Park landscapes, depending on their features, can be considered as a part of the natural landscape (natural landscape parks, biosphere reserves) or as a part of the urban environment (urban parks of various functional purposes, located within the settlements and characterized by the presence of a significant proportion of artificially created components). Speaking of natural landscapes, it's worth noting that the aesthetic object is a natural form, while in the park – natural objects are formed in accordance with certain views and human needs.

Focusing on the process of creating a park landscape as an aesthetic object, it is advisable to note its proximity to urban planning, since the park, like the urban environment, is a product of various authors, which sometimes do not intersect in time both with each other and with the subject of perception. While the natural landscape is formed without the participation of man, and the visual perception, definition of aesthetics and, moreover, the symbolic interpretation depends solely on the subject of perception. Such circum-

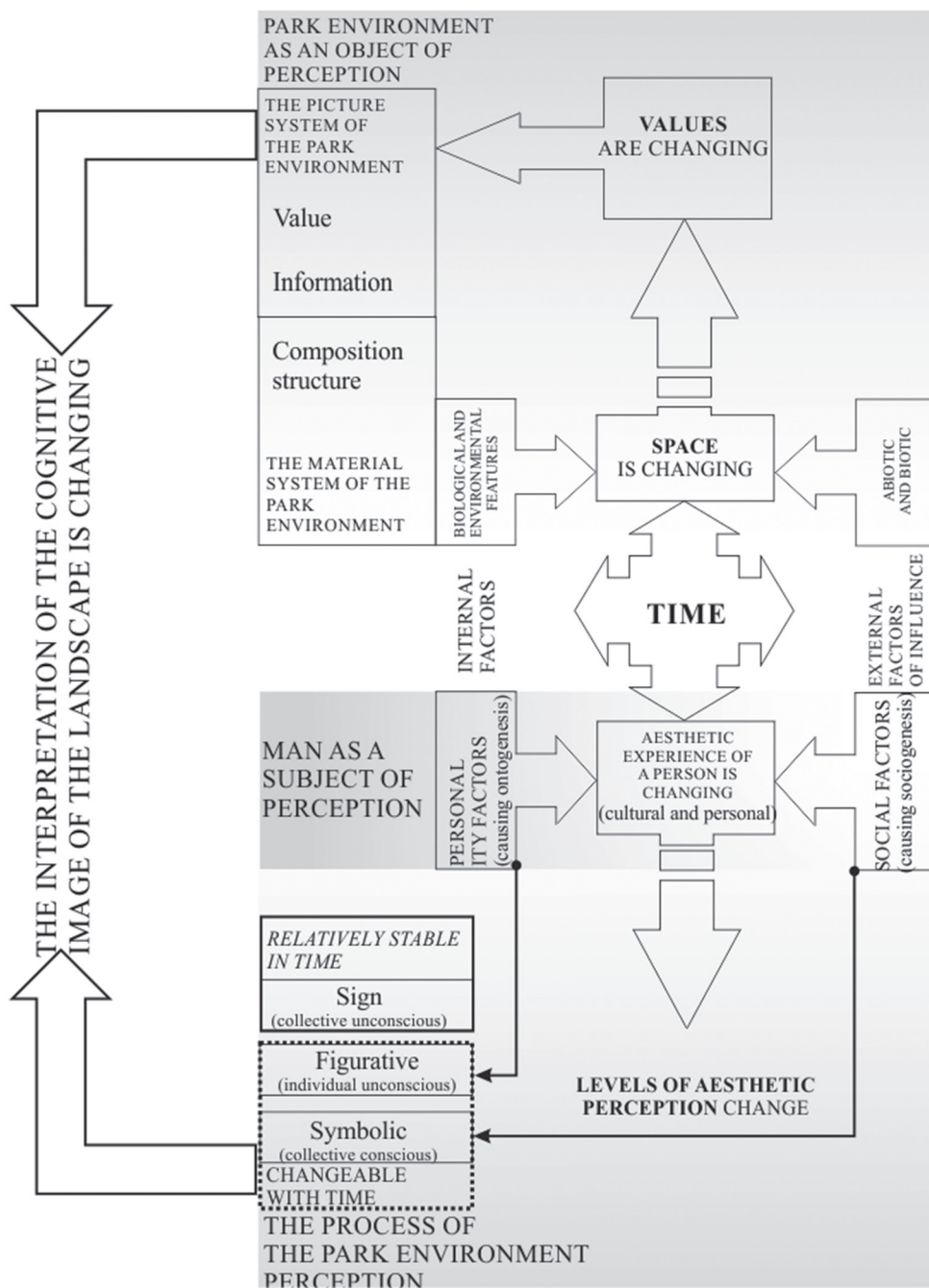


Fig. 4. Structural-logical scheme of changes of subject-object relations of man and the park environment under the influence of time.

stances determine the unpredictability of the aesthetic assessment of the natural landscape, while the park was formed as an expression of certain aesthetic representations of the author(s) and provided for the emergence of certain emotional impressions in the observer. However, the aesthetic and informational value put forward by the author may differ significantly from the value perceived by the observer.

An important general aspect of perceiving the natural, urban and park landscape as an aesthetic object is multisensory (perception occurs at the expense of all senses), which is fundamentally different from works of art that are designed for the visual sphere of perception (works of fine arts) or rumour (music). Along with the richness of the perception of the park landscape, as a rule, it is impossible to reach immediately, perception occurs as a series of landscapes. The main factors that limit the formation and the perception of the park landscape as a communicative-informational aesthetic object is the time that affects the variability of the material forms of the object, on one hand, and the aesthetic experience of man – on the other. Such circumstances determine the changes in the information-value function of the landscape in the structure of the object-subject relations between man and the park environment.

References

- ANTROP M. 2005. From holistic landscape synthesis to transdisciplinary landscape management. In: Tress B., Tress T.G., Fry G., Opdam P. (Ed.). *From Landscape Research to Landscape Planning: Aspects of Integration, Education and Application*. Springer. 434 p.
- BARABANOV A. 2002. *Man and Architecture: Semantics of Relations*. Cloud-Cuckoo-Land 7(1). Available at: <http://www.cloud-cuckoo.net/openarchive/wolke/rus/Themen/021/Barabanov/Barabanov.htm>. (Accessed on September 2012).
- BELYAEVA E.L. 1977. Architectural and spatial environment of the city as an object of visual perception. [Arkhitekturno-prostranstvennaia sreda goroda kak obekt zritel'nogo vospriiatii]. Moskva, Stroiizdat. 124 p. (in Russian).
- BELL S. 2004. *Elements of Visual Design in the Landscape*. Second Edition. London and New York: Spon Press. 220 p.
- BOURASSA S.C. 1990. A paradigm for landscape aesthetics. *Environment and Behavior* 22(6): 787–812.
- BROOKFIELD H.C. 1969. On the environment as perceived. *Progress in Geography, International Reviews of Current Research*: 51–80.
- DIRIN D.A., POPOV E.S. 2010. Otcenka peizazhno-esteticheskoi privlekatelnosti landshaftov: metodologicheskii obzor [Estimation of aesthetic appeal of landscapes: methodological review]. *Izvestiia Altaiskogo Gosudarstvennogo Universiteta* 3: 120–124 (in Russian).
- FORSTER P.M. 2010. A brief introduction to environmental psychology. Charles Darwin University. Available at: <https://ru.scribd.com/doc/45853873/Introduction-to-Environmental-Psychology> (Accessed on 22 January 2012).
- FROLOVA M.I. 1994. Otcenka esteticeskikh dostoinstv prirody landshaftov [Estimation of aesthetic advantages of natural landscapes]. *Vestnik Moskovskogo Universiteta, Seriya 5, Geografiia* 2: 30–33 (in Russian).
- GALEV E., GURKOVA M., GALEV N. 2016. The role of plants on the impact of cultural and historical monuments Landscape and the philosophy of aesthetics: is landscape quality inherent in the landscape or in the eye of the beholder? *Junior Scientific Researcher* 2(1): 1–15.
- GOLD J.R. 1980. *An Introduction to Behavioural Geography*. New York: Oxford University Press. 290 p.
- GROSS S.W. 2002. The neglected programme of aesthetics. *British Journal of Aesthetics*

- 42(4): 403–414.
- HAERYNYEN M. 1996. National landscape imagery in the making of Finland. *New Comparison* 21: 146–162.
- HOISL R., NOHL W., ZEKORN S., ZÖLLNER G. 1985. Landschaftsästhetik in der Flurbereinigung – Skizze eines Forschungsprojekts. *Zeitschrift für Kulturtechnik und Flurbereinigung* 26: 346–353.
- HROZDYNSKYI M.D., SAVYTSKA O.V. 2005. Estetyka landshaftu [Aesthetics to the landscape]. Kyiv, Polihraftsentr 'Kyivskiy universytet'. 183 p. (in Ukrainian).
- HRYNASIUK A.R. 2014. Metodichni osnovy otsinky atraktyvnosti landshaftiv [Methodical basis of evaluation of landscapes attraction]. *Pryroda Zakhidnoho Polissia ta prylyklykh terytorii* 11: 132–135 (in Ukrainian).
- IKONNIKOV A.V. 1985. *Iskusstvo, sreda, vremena: Esteticheskaia organizatsiia gorodskoi sredey* [Art, environment, time]. Moskva, Sovetskii khudozhnik. 336 p. (in Russian).
- IKONNIKOV A.V. 1986. *Funktsiia, forma, obraz v arkhitekture* [Function, form, image in architecture]. Moskva, Stroizdat. 288 p. (in Russian).
- KANE Ph.S. 1981. Assessing landscape attractiveness: a comparative test of two new methods. *Applied Geography* 1(2): 77–96.
- KAPLAN S., KAPLAN R. 1978. *Humanscape – environments for people*. North Scituate, Mass: Duxbury Press. 480 p.
- KAYMAZ I.C. 2012. Landscape Perception. In: Ozyavuz, M. (Ed.). *Landscape Planning*. Rijeka, In Tech: 251–276.
- KOCHUROV B.I., BUCHATSKAIA N.V. 2007. Otsenka esteticheskogo potentsiala landshafta [Estimation of the aesthetic potential of the landscape]. *Iug Rossii, ekologiia, razvitie* 4: 25–34 (in Russian).
- KRAVETC V.I. 1994. Tseli i sredstva koloristicheskogo formoobrazovaniia v arkhitekture [Objectives and means of color shaping in architecture]. Kharkov, Kharkovskii gosudarstvennyi tekhnicheskii universitet stroitelstva i arkhitektury. 371 p. (in Russian).
- LINTON D.L. 1968. The assessment of scenery as a natural resource. *Scottish Geographical Magazine* 84(3): 219–238.
- LOTHIAN A. 1999. Landscape and the philosophy of aesthetics: is landscape quality inherent in the landscape or in the eye of the beholder? *Landscape and Urban Planning* 44(4): 177–198.
- LYNCH K. 1982. *Obraz goroda* [Image of the city]. In: Ikonnikov A.V. (Ed.). Moskva, Stroizdat. 328 p. (in Russian).
- MOTOSHYNA A.A., VDOVIUK L.N. 2012. Otsenka esteticheskikh svoistv landshaftov Tobolskogo raiona Tiimenskoi oblasti v rekreatsionnykh tseliakh [Estimation of aesthetic properties of landscapes of the Tobolsk district of the Tyumen region for recreational purposes]. 'Geograficheskii vestnik', Permskogo universiteta 4(23): 10–20 (in Russian).
- NIKOLAEV V.N. 2005. *Landshaftovedenie: estetika i dizain* [Landscape science: aesthetics and design]. Uchebnoe posobie. Moskva, Aspekt Press. 176 p. (in Russian).
- OLEKSIICHENKO N.O., GATALSKA N.V., HRYCHUK M.O., MAVKO M.S. 2017. *Memorialni parky Kyieva* [Memorial Parks of Kyiv]. Monohrafiia. Bila Tserkva, Oleksandr Pshonkivskiy. 336 p. (in Ukrainian).
- OSYCHENKO H.O. 2011a. Informatsiini pidkhody do otsinky estetychnykh yakosteï mistobudivnykh ob'iektiv [Information approaches to the estimation of aesthetic qualities of city-planning objects]. *Suchasni problemy arkhitektury tamistobuduvannia: Naukovo-tekhnichnyi zbirnyk* 28: 76–89 (in Ukrainian).
- OSYCHENKO H.O. 2011b. Kohnityvni pidkhody do otsinky estetychnykh yakosteï mista [Cognitive approaches to assessing the aesthetic qualities of the city]. *Mistobuduvannia ta terytorialne planuvannia. Naukovo-tekhnichnyi zbirnyk* 39: 312–319 (in Ukrainian).
- OSYCHENKO H.O. 2011c. Semiotichni pidkhody do analizu estetychnoho spryiniattia arkhitektury [Semiotic approaches to the analysis of aesthetic perception of architecture]. *Mistobuduvannia ta terytorialne planuvannia. Naukovo-tekhnichnyi zbirnyk* 11: 319–327 (in Ukrainian).
- OSYCHENKO H.O. 2012. *Evolutsiini vytoky estetychnoi potreby liudyny* [Evolutionary origins of aesthetic human needs]. *Mis-*

- tobuduvannia ta terytorialne planuvannia. Naukovo-tekhnichnyi zbirnyk 44: 404–413 (in Ukrainian).
- OSYCHENKO H.O. 2014. Kontsepsiia paradyhmy estetyky mistobuduvannia [Concepts of the paradigm of urban development aesthetics]. Mistobuduvannia ta terytorialne planuvannia. Naukovo-tekhnichnyi zbirnyk 51: 413–422 (in Ukrainian).
- SEPÄNNMAA Y. 1993. The Beauty of Environment. A general model for environmental aesthetics. Sccond edition. Denton, Texas, Environmental Ethics Books. 212 p.
- STOLOVICH L. 1972. Priroda esteticheskoi tsennosti [Nature of aesthetic value]. Moskva, Politizdat. 88 p. (in Russian).
- STOYCHEVA M. 2016. A Spatial Method in the Park Design. PhD thesis, University of Forestry, Sofia, Bulgaria. 108 p.
- UNGAR S. 1999. Environmental perception, cognition and appraisal. Environmental Psychology 4 lecture Notes, Glasgow Caledonian University, Scotland.
- VAN ETTGER R., THOMPSON I.H., VICENZOTTI V. 2016. Aesthetic creation theory and landscape architecture. Journal of Landscape Architecture 11(1): 80–91.
- VYGOTSKY L.S. 1987. Psikhologiiia iskusstva [Psychology of Art]. Moskva, Pedagogika. 344 p. (in Russian).
- ZANGWILL N. 2007. Aesthetic Creation. Oxford, Oxford University Press. 192 p.