Innovations in the Architectural Environment: the Impact of Society on the Positive Perception and Conflict of the Incomprehensible

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Abstract. The article is focused on issue of human perception of new objects of architecture and design, overcoming people's commitment to the old and familiar. New ideas often face a negative reaction from society. Modern architecture, any projects of modern style, cause not only curiosity in its viewers but irritation, stress, negativity, psychological aversion as well. Original and common information of perception of the architectural environment is characterized by a dialectical unity. With complete originality there is a conflict of the incomprehensible. With complete commonness – the conflict of oversaturation. Unapprehensiveness generates the transfer of functions, the transfer of an object to another functional group. The more developed the society and the specific observer are, the easier it is to perceive new forms and technologies for them. There is a larger amplitude scale at the stage of information filtering. The development of society brings perception to a new stage, new forms and styles transform into typical ones, a psychological adaptation occurs. Crisis situations in a country and the general perception of life as critical, non-positive notion forms a negative reaction to new proposals. The situation is similar to "Seligman's dogs", the so-called learned helplessness. The psychological impossibility of non-action is the impossibility of thought, the unwillingness to look for analogies and images that would lead to metaphorical matches. Often the perception of a new object can be influenced in advance by technologies and mass media. In order to resist these technologies, to have his own, personal opinion, a person needs a high level of knowledge, world outlook, synthesis of information about the object. The formation of new human values, raising living standards lead to an adequate perception of the new architectural environment.

1. Introduction
A person lives in a constantly changing world that contains immense amount of diverse information, both necessary and unnecessary for their adequate existence. Only one thing remains in a human life mostly unchanged – architecture. Architecture embodies cognitive, semantic, emotional needs, speaks about the past and the future, and reflects certain values. The semantic and visual diversity of the architectural environment is an important basis for human contact with the outside world. Thus, the willingness to accept or not to accept the innovations in the architectural environment directly depends on human values, both personal and "imposed" by society, laws, local preferences and so on. Moreover, no matter how properly the architectural environment is designed according to all building
codes, modern trends and ergonomic indicators, it can still be rejected by an individual or a society. Having analyzed the existing architectural objects of Kyiv (as well as almost all major cities in the world), we can say with confidence that architects mostly do not consider the most basic psychological principles of human perception of space. Whereupon, the architecture and its environment, its saturation with visual elements contributes to the mental state of a person, which, in turn, has a great influence on human psychosomatics, behavior, social development and more.

2. Perception of new in a sustainable architectural environment
The main parameters that affect the emotional perception of the architectural environment are:
- saturation with stress factors, environmental factors, anthropogenic factors, oversaturation with stimuli, etc.;
- social orientation of the environment, participation in the development or limiting of social interaction;
- orientation factor, "easy use" of the city by its residents and guests in accordance with their ideas and values;
- fullness of emotions, aesthetics of the subject-spatial environment;
- cultural and educational factor, the city as an intellectual, cultural and visual environment;
- the opportunity to participate in solving issues – how residents perceive specific decisions on the development of their environment and how fully they participate in making such decisions.

It is the last parameter that is very often rejected in our society. Foreign experience shows that any city-planning project of a town or district should begin with a dialogue between the project architect, builder, designer and ecopsychologist, as well as with the search for subject-spatial solutions that will favor positive regulation of human behavior through emotions. In some European countries, architects in their pre-project work often use the empirical method in identifying the specifics and preferences of people who will be in direct contact with the environment daily. For example, the yard of the house was landscaped and all ergonomic parameters, safe pavement, aesthetically pleasing content had been taken into account, but people living in this house try to be in this area as rarely as possible, avoiding it. So why does a person reject this healthy zone? The reason is very simple - most people who live here do not feel comfortable in areas where trees are over a meter high, they would be more comfortable if shrubs or shrub-type trees were planted instead. Thus, when designing this yard area, it would be desirable to conduct a survey of residents about their preferences, and then the architects would design an environment that residents would accept for its psychological comfort [1].

3. Conflict of the incomprehensible
The perception of modern interventions in the existing architectural environment (both positive and negative) is associated with resistance, overcoming the commitment of people to the old and familiar. Progressive architecture is implemented in the life and consciousness of our society and country not only physically but also morally, so it can be noted that this is a manifestation of some resistance, a crisis in man – the psychological perception of new information in the format of architectural space. It should be noted that today there is a lot of verbal violence in speeches, comments to publications, on television and on all social networks: strange invectives, attempts to offend, provocative statements, even death threats. Almost any new idea, direction, proposal, even positive a priori, very often faces a negative reaction from society. Furthermore, the more atypical a new work is, the more negativity it can induce. People subconsciously (or consciously) look for disadvantages first, underestimate the value of the idea, look for (and are sure to find) something bad.

One of the most famous historical examples of this attitude to the bright innovations in architecture was the Eiffel Tower in Paris. At first, the French perceived it very negatively, but over time it became one of the main symbols of the city. The famous Sydney Opera House was also received negatively during its long-term construction and at the start of its operation. Now, speaking about Australia, this distinct object cannot go unnoticed. These architectural works have even become the main visual
symbols of their countries. There are many more examples in history when an architect tries to design a work of their time, even look ahead a little stylistically, but the understanding of the quality and necessity of this work by contemporaries comes a little later. Therefore, authors will consider the perception of new architecture and design in urban environments, why new works are perceived neutrally or more optimistically by the population in some countries, while in others they face complete rejection, or even provoke aggressive reaction.

This reaction extends almost entirely to modern architecture, especially in historic city centers, the reconstruction of historic buildings, any projects of modern style. The person unequivocally perceives a situation of "the-new-in-historical" as stressful, atypical and non-positive [1,3]. A new construction presenting itself as a historical building, though a fake one, a conscious compilation of architectural styles of antiquity is perceived in a calmer way, almost imperceptibly. This architecture is often considered “bad taste” by professionals, while the viewers on average like it. Alternatively, they do not notice anything at all, do not feel any changes in the environment.

At the same time, we can say that anything new, unknown, unfamiliar and unrecognized causes not only curiosity in its viewers, but irritation, stress and negativity as well. An unfamiliar silhouette, the novel shapes, unusual designs are perceived as stressful, induce a psychological rejection. In order to perceive the new adequately, it is necessary to overcome the internal resistance. Connecting progressive architecture and its implementation with the life and consciousness of our society and country not only physically but also morally, we can note another manifestation of the crisis of society – the psychology of perception of new information in the format of architectural space. However, the somewhat provocative modern stylistics, which have become commonplace in Europe, America and some Eastern countries, often provoke lively debates in Ukraine, which are far from positive (Figure 1).

Figure 1. The model of adequate perception of a new object

The average observer does not possess a professional understanding of architecture and makes his opinion about what he sees based on his own values, which were formed by certain factors. The basis of human perception of a new object of the environment is physical phenomena that allow analyzing information with the help of sensory organs. Each person has his own perception of the environment, which is influenced by his age, education, life experience, religious views, fashion, personal preferences, professional qualities, country of birth and residence as well as many other reasons that shape the personality of a particular observer. Therefore, the question arises: is it possible to determine
the composition of emotional and aesthetic factors, their nature and form with sufficient quality [2]? Thus, an individual perceives and analyzes the subject environment not only as a separate set of sensations and emotions, but also as a certain integral image of individual elements. Through the unification and generalization of specific details, a person's consciousness establishes a general image or content, subconsciously comparing it with similar objects and ideas. The consciousness of an individual also has the property of assigning different qualities to the objects of the environment, at the same time endowing it with positive or negative features. Dependence of the perception on the personality of the subject, the peculiarities of their psychodynamics, experience, volume and content of memory is defined as apperception. Even the apperception of a particular person can change under the influence of changes in his age, world outlook, preferences, raising of cultural level and knowledge. It follows that the more educated the society, the higher its general level, the easier and more optimistic the innovations will be perceived.

Why are the first impression, the first human emotions from what is seen so important? Drawing a parallel with the animal world, we can say that a person often acts in accordance with emotions or even solely on instincts. For example, after receiving a dose of negativity, during an argument or a push, a person begins to shout back under the influence of his emotions and instincts, behaves aggressively morally and physically. This is the reason why so often people in a state of affect do terrible things that they regret later, that is, act only as animals that are unable to analyze and process information. Even people who are engaged in self-development, psychology, yoga (or other psychological practices), who train their emotions and learn to control them, cannot always follow how their body unconsciously activates certain reactions. What can be said then about the majority of the population, who do not even think about what an emotion is, where and why it arises and what to do with it, how to manage it? In addition, even though the perception is a controlled process in its part, the other part, the subconscious perception, is an unknown, unconscious, unexplored region of the human self. Innovations in the architectural environment stimulate a person to certain actions and reactions, to interaction in a society, to building a dialogue.

U. Pavlov derived the sequence of pyramidal arrangement of levels of perception on the model of the subjective world of a person. This sequence corresponds to the sequence of formation of social and individual experience of a human being. For their effective existence and functioning in a complex social environment, people had to develop the intellectual abilities to effectively communicate, learn, and, most importantly – to understand not only the actions but also the thoughts and desires of their fellow tribesmen. A human being is adapted to abrupt changes in the environment and its functional systems are represented by five other levels of perception in addition to the lower two. All major functional systems of animals are represented only by the two lower models of environmental perception. At the same time, the above-mentioned formed systems are basic and necessary for coexistence in natural conditions for animals. Therefore, basic levels of perception are important for both the human and animal worlds. An architect who has the knowledge and the means to influence human behavior and perception of the world has a powerful weapon that can either "protect" and develop society or cripple it (Figure 2).

It can be observed that some new buildings do not cause any reaction in society, and the appearance of others causes considerable public attention, more often negative than positive. Why does a person like or dislike a new building, the reconstruction of a historic building in a modern contrasting style? A striking example is the Podil Theater in the historical environment of the Andriyivsky Descent in Kyiv, which has invoked completely opposite opinions of citizens, most of whom have condemned the implementation of this object for one reason or another.

What exactly does this building represent? The Podil Theater is a challenge of a new time for the paradigm of today. This architectural product has violated the boundaries of people's usual perception of architecture, especially sharply seen against the background of the historic buildings of the Andriyivsky Descent, which is also one of the hallmarks of the city. Color, shape, style of the building look completely different, there are no usual outlines, no features of the classical style, a bold coloristic scheme of the facades. But can we say that "unlike others” means worse? “Unlike others”
may mean a more progressive, modern, an element of the architecture of the future, utilizing a new approach, a new style etc.

**Figure 2. Levels of perception on the model of the subjective world of a person**

In the process of observing the object, a person perceives images, which are special cases of signals-codes, which, on the one hand, are symbols of their time, the period when the building was created, and on the other - can be perceived by future generations by taking into account the knowledge and emotions pertaining to this period of history. For example, the allegories on which the medieval and classical art of painting, mosaics and reliefs in the temples and palaces of Europe is based, are not always clear to modern viewer at first sight. Their perception requires special knowledge and intellectual level. An ignorant person will see just a ram, a snake, an eagle or a flower, not realizing the biblical images behind these symbols, and not understanding the deep allegorical meaning presented by the author. Meanwhile these allegories were clear for their contemporaries, perceived and read, apparently, at first sight.

The same thing happens with the perception of spatial objects. An architectural or design work reflects the artistic and aesthetic mastery of reality, which a person learns based on their spiritual strength and the activation of life-affirming symbols. A person perceives a new object via the following main stages:

1 - designation - "Something new!";
2 - question - "What is it?'";
3 - review (outside, from afar, up close, inside) - "How does it look?" (visuals, touch, taste, sound, etc.);
4 - search for identifiers, signs, symbols and other known meanings - "What does it looks like?'";
5 - identification, recognition - "It's it!'";
6 - doubts, the right to make a mistake, the possibility of variability - "Maybe something else?'";
7 - matching the expectation - "yes or no?'";
8 - conclusion about the quality, the result of perception - "Positive/negative/neutral" (Figure 3).

Thus, an object is perceived most positively when it is quickly recognizable, but not commonplace. Original and commonplace information in architecture, subject design and architectural environment design is characterized by a dialectical unity. Therefore, in the absence of preliminary knowledge by the observer, with the complete originality there is a conflict of misunderstanding at its sign system. With the complete banality of information there is a conflict of oversaturation. In both cases, the
observer’s perception of the object is blunted. The person simply does not notice the object or, alternatively, does not want to make an effort for the perception of it due to irritation by its incomprehensibility. People perceive familiar forms faster and better than unfamiliar ones. With great originality or incomprehensibility there is a conflict of the incomprehensible [3].

The result of the complete final perception of the object is highly dependent on the criterion of novelty for a given observer. If the subject does not fall into any category of the imagination, it either causes excessive attention, or may go completely unnoticed. Another option for objects with complete novelty is the transfer of functions. The mobile phone can be perceived as an ornament, or a tool for digging the ground by the inhabitants of the wild tribe… That is, ignorance creates a transfer of functions and the transfer of the object to other functional group than its inherent one. There are many graphic parodies of well-known architectural works that were not perceived well by contemporaries, in addition to verbal expressions.

4. Psychology of apperception of the individual and society
I. I. Seredyuk called the perception of architecture, formed by the combined experience of past generations, a relevant vision. Because of genetic perception, our vision does not always respond immediately to current needs, being influenced by outdated patterns of the past. Therefore, a new, relevant perception must fight the genetic, which at the same time serves as the basis of its development [4].

The famous Japanese architect Kenzo Tange formulated his attitude to traditions: “in order to turn a tradition into something creative, it must be denied and, in a sense, destroyed. It must not be canonized, but debunked ”[5]. This means a new reincarnation of history, a new view of it through the prism of modernity. By accepting this maxim, we can talk about the adaptation of both the new in the historical space and the historical, which acquires new qualities in the modern environment [6].

The more developed the society in general and the specific observer, as an individual, the easier it is for them to perceive the new, to take on new forms and technologies. This is because of the existence of a larger amplitude scale at the stage of filtering information, finding matches, the...
subconscious listing of known images; a person with a broader mind is better prepared to perceive a new image. The development of society brings perception to a new stage. When new forms, constructions and styles become typical, occur more often, it leads to psychological habituation and cognition of forms. The situation ceases to be critical and stressful, a psychological adaptation occurs. Brand new, atypical, original, first becomes familiar and typical. The observer ceases to wonder what she did not like before, becomes accustomed and begins to perceive it as normal, and later – as positive. Over time, the atypical becomes typical, the original – commonplace.

It is important to note the fact that the general state of society always has a psychological effect on the individual and shapes their perception of the environment as a whole, as well as its individual elements. The tensions and crises in a country, the general perception of this part of life as critical and non-positive forms a person's negative reaction to positive things, such as new proposals, modern architecture, the latest works of design. And the more atypical they are, the worse the reaction. This situation is similar to the situation with "Seligman's dogs" described as learned helplessness, wherein they cannot control negative, unacceptable events.

By definition, learned helplessness is a condition of a person or an animal when the individual does not try to improve their condition (does not try to avoid negative stimuli or get positive ones), although they have such an opportunity. It usually appears after several unsuccessful attempts to influence the negative circumstances of the environment (or avoid them) and is characterized by passivity, refusal to act, unwillingness to change the hostile environment or avoid it, even when the opportunity arises. According to several studies, it is accompanied for humans by a loss of sense of freedom and control, disbelief in the possibility of change and in their own strength, melancholy, depression and even the acceleration of death [7]. The phenomenon was discovered by American psychologist Martin Seligman in 1967 [8,9].

It can be stated that for a person who is under pressure of circumstances, or society that is in a critical period, in a critical, depressed state, there is a psychological impossibility of new, independent thoughts, actions and movements. Apathy and depression are defined not only by the inability to act, but also by the negativism of the psychological reaction, unwillingness to open to the new. Impossibility of non-action is the impossibility of thought, unwillingness to look for analogies and images, to compare signs and symbols, which would lead to at least some metaphorical matches and, consequently – recognition and psychological perception of the modern new image. To some extent, such reactions can now be observed in Ukrainian society, which on the one hand is in a state of development, and on the other hand is under great pressure by the crisis conditions of present day. It can be asserted that all societies of different countries experience a somewhat slow reaction to the new, modern and atypical in difficult crisis conditions. At such times, the creation of commonplace works and the return to the images of the past occur, classical styles are often reinterpreted, and the copying and stylization of images is abundant (Figure 4).

Often, a positive or negative perception of a new object can be psychologically prepared by society, technology, mass media, if someone needs such a reaction. A person subconsciously prepares themselves for perception, ready in advance for a programmed reaction; they will look for (and always find) exactly those qualities (positive or negative) for which they were psychologically prepared. The observer arrives at this thought, expresses it, not even realizing that it is not their personal choice, that they have been carefully prepared and programmed for it. In order to oppose these technologies, to have an independent personal opinion about the newly created object, a fairly high level of knowledge, world outlook and the synthesis of information about the object are paramount.
5. Conclusions

In conclusion, the importance of the comprehensive development of society for the best movement forward, for a full understanding of the prospects of new and modern solutions in various fields of art needs to be emphasized. The formation of new human values will lead to a change in architectural demand, which, in turn, will affect the quality of the architectural environment. The execution of this algorithm of actions will increase the living standards of the population and its psychological stability.

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