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## ADMISSIONS OF VISUAL TRANSFORMATION OF THE URBAN ENVIRONMENT OF THE CHINA BY MEANS OF ART INSTALLATIONS WITH MIRROR PROPERTIES OF SURFACES

*The article provides an analysis of the main methods of visual transformation of the urban environment of the People's Republic of China based on the formation of the design of art installations with mirror-like surface properties. Visual illusions in the creation of an aesthetically expressive architectural and landscape environment of Chinese cities significantly enhance the artistic expressiveness of this area, contribute to the definition of its individual character and activate the development of communication processes. The special significance of the study is the systematization of the types of art installations with mirror surfaces, which allows us to reveal the main trends of their solution in the conditions of the constant economic and technological development of the cities of the PRC and point to the importance of the communicative function through the interaction of a person with a design object. In the course of summarizing the characteristics of art installations, the main tasks declared by the authors of design projects in the formation of public space by them are defined. A contextual approach in the development of these works of art allows designers to focus the audience's attention on the main socio-cultural problems of Chinese cities and to reflect them through the identification of author's concepts. Spectacular art installations and interaction through them with viewers on a sensory-emotional level helps speed up the process of perceiving the necessary information laid down by the authors of works of art. The value-content level of a person's perception of information allows him to gain new experience at the subconscious level regarding the aesthetic value of an artistic work. In turn, the authors of art installations have the opportunity to reveal at the semantic, thematic and visual levels a whole series of problematic issues of today due to the demonstration of the latest materials, types of artistic object formation, the long-term time of their use and the broadcasting of economic, ecological and socio-cultural problems.*

**Key words:** art installation, design, urban environment, function, admission.

### **Кривуц Світлана, Лу Бін. ДОПУСКИ ВІЗУАЛЬНОГО ПЕРЕТВОРЕННЯ МІСЬКОГО СЕРЕДОВИЩА КИТАЮ ЗА ДОПОМОГОЮ АРТ-ІНСТАЛЯЦІЙ ІЗ ДЗЕРКАЛЬНИМИ ВЛАСТИВОСТЯМИ ПОВЕРХОНЬ**

*В статті надано аналіз основних прийомів візуальної трансформації міського середовища КНР на основі формування дизайну арт-інсталяцій, що мають дзеркальні властивості поверхонь. Зорові ілюзії в створенні естетично виразного архітектурно-ландшафтного середовища міст Китаю значно посилюють художню виразність даної місцевості, сприяють визначенню її індивідуального характеру та активізують розвиток комунікаційних процесів. Особливим значенням дослідження є систематизація видів арт-інсталяцій із дзеркальними поверхнями, що дозволяє розкрити основні тенденції їх вирішення в умовах постійного економічного та технологічного розвитку міст КНР та вказати на вагомість комунікативної функції через взаємодію людини із об'єктом дизайну. В ході узагальнення характеристик арт-інсталяцій визначено основні завдання, що декларуються авторами дизайн-проектів в формуванні ними громадського простору. Контекстуальний підхід в розробці означених художніх творів дозволяє дизайнерам акцентувати увагу глядачів на основних соціально-культурних проблемах міст Китаю та відобразити їх за рахунок виявлення*

авторських концепцій. Видовищність арт-інсталяцій та взаємодія через них із глядачами на чуттєво-емоційному рівні сприяє прискоренню процесу сприйняття необхідної інформації, що закладена авторами творів мистецтва. Ціннісно-змістовний рівень відчуття людиною інформації дозволяє йому на підсвідомому рівні отримати новий досвід щодо естетичної цінності художнього твору. В свою чергу, автори арт-інсталяцій мають можливість розкрити на смислового, тематичного та видовищного рівнях цілу низку проблемних питань сьогодення за рахунок демонстрації новітніх матеріалів, видів формоутворення мистецьких об'єктів, довготривалого часу їхнього використання та трансляції економічних, екологічних та соціально-культурних проблем.

**Ключові слова:** арт-інсталяція, сучасний дизайн, міське середовище, функція, прийом.

**Introduction.** The fast pace of modern life, constant tension, increased irritability of people living in cities, scarcity of time for communication and rest – all these factors have negative consequences for a person. In these conditions, where the absence or lack of public spaces for recreation also becomes an additional negative point, new modern design solutions in the form of art installations with mirror properties of surfaces are of particular importance in shaping the image of the urban space of the People's Republic of China. They positively change the image of China's terrain, its informative and communicative significance, and have an impact on the psycho-emotional state of people. From this, it becomes necessary to analyze the methods of visual transformation of the urban environment by means of art installations, which indicate the activation of communicative processes due to the discovery of the author's conceptual ideas. So, the relevance of the research is determined by several reasons: 1) the insufficient number of scientific sources that comprehensively reflect the main techniques and trends of using art installations with mirror-like properties of surfaces in creating the overall composition of the urban environment of the People's Republic of China; 2) the lack of analysis, classification and systematization of the above-mentioned aspects requires their elaboration in order to improve the educational processes of higher educational institutions, specialization "Design".

**Materials and methods.** The complex research methodology is based on the application of a comparative analysis of the best design samples of art installations that have mirror-like surface characteristics. Aspects of the use of art installations in the design of the urban environment are considered in the theoretical works of scientists highlighting the significance of these works of art for creating the individuality of

the urban environment. The issue of the presence of art in cities was considered by Géraldine Molina) and Pauline Guinard [4]. The authors of the article believe that art is increasingly understood as an integral part of the urban fabric in the post-industrial era, where not only the space and places for accentuating works of art in cities, but also the function of art and its relationship to the urban environment are being redefined. Researchers focus on the symbolism of the dimension of space, which is analyzed between urban territories represented in art and urban spaces with changed functions. At the same time, the main question is how art in the system of the urban environment and its symbolic dimension can change human perception, as well as change the representations and social practices of these spaces, which, thanks to art, appear as places of "visualization" and as places that have be materially and virtually visible to stimulate the arrival of new users of the urban space or potential customers. [4]. The problem of implementing public art in Chinese cities was considered by: Han Cheng, who in his article emphasizes that: "By activating urban spaces and creating a dynamic urban culture, public art plays an effective role in guiding modern urban creative capital investments in the development of Chinese cities..." [5]. The issue of planning works of art within the urban environment was addressed in a non-fiction article highlighting the challenge of using them as a tool for revitalizing urban communities in China. In this case, the authors of the article consider the art and culture of the People's Republic of China as: 1) an opportunity to support economic development; 2) means of improving the built environment of the city; 3) the possibility of preservation and transmission of cultural heritage and history; 4) a means of overcoming cultural,

ethnic and racial differences; 5) the possibility of creating a group memory and identity of the city [1]. Since the beginning of the 20th century, Siying Duan has been engaged in understanding the directions of the development of Chinese public art. The author proves that Chinese artistic practices developed in two directions: 1) identification of traditional features of Chinese culture; 2) the development of art that corresponds to the concepts of Western style [7]. It is worth noting that the problem of the popularity of Chinese art for the international community still did not have opportunities for systematic familiarization, due to the fact that most of the existing documents were written in Chinese. However, in recent years this situation has been corrected; existing documents (articles, manifestos of avant-garde groups, important critical and analytical essays, etc.) have an English translation, so it is currently possible to get acquainted with the sources that testify to the development of avant-garde Chinese art [2]. Therefore, the analysis of theoretical developments showed that among several areas of analysis of the application of public art in the general composition of the urban environment, there are almost no scientific works that testify to the importance of demonstrating art installations that have mirror-like properties of surfaces.

**Discussion.** The term "installation" comes from the English verb "to install", which reveals the technical characteristics of its implementation. Installation art is an artistic genre of three-dimensional works that are often specific and intended to transform the perception of space [3]. The appearance among urban objects of such an aesthetic phenomenon as an art installation, which can be performed on a scale closest to human standards, has a calming effect on the perception of citizens and can satisfy their aesthetic and psycho-emotional needs. As an artistic phenomenon, the design of art installations is currently at the stage of development, which is indicated by its lack of scientific understanding. Therefore, the visual material of the study indicates the need to highlight the main functions and professional techniques in the formation of the design of art installations, which enrich the overall composition of the local space of the People's Republic of China and play a significant role in

defining the author's concept. It is worth noting that among the many functions that are important for our research, the following should be called the main ones:

- *informational and communicative*, which is implemented due to: successive rethinking of the author's concept in the design of art installations with mirror properties of surfaces. This function is implemented at the expense of several levels. 1) Perception of works of art on a *sensory-emotional level* allows a person to feel unity with the art installation, which has the additional effect of optical illusions; 2) at the *psychophysiological level* – the artistic image of objects reflects exactly those properties that are either absent or lacking in the visual architectural and landscape composition of the area; 3) the *value-content level* of perception of art installations pushes a person to actively interact with another person or a group of people, to the possibility of creating favorable conditions in the system of urban space, to the definition of criteria for comfortable living and recreation with a further emphasis on environmental friendliness and safety of the environment; 4) the *cultural level* contributes to the evolution of the artistic form in the design of art installations in accordance with modern requirements;

- *spectacular function* is no less important. In today's conditions, it reflects changes in the paradigm of perception of the design of art installations that have mirror-like properties of surfaces. These changes, as evidenced by the research material, develop in two directions: 1) visual spatial illusion of the presence of an image that exists around the art object itself; 2) an optically distorted double image of elements of an architectural and landscape framework or a person, which attracts with its originality, uniqueness and modernity. The viewer, in this case, becomes a participant in the spectacular game based on the immersive approach;

- an *aesthetic function* that plays a significant role in shaping the overall composition of the architectural and landscape space of the city. Professionally creating an emotional and aesthetic atmosphere of the area by means of art installations, the artist lays down a system of varieties of perception of surfaces that have a mirroring effect. Thus, visual illusions become a modern

method of visual-spatial disclosure of the general composition of a given area;

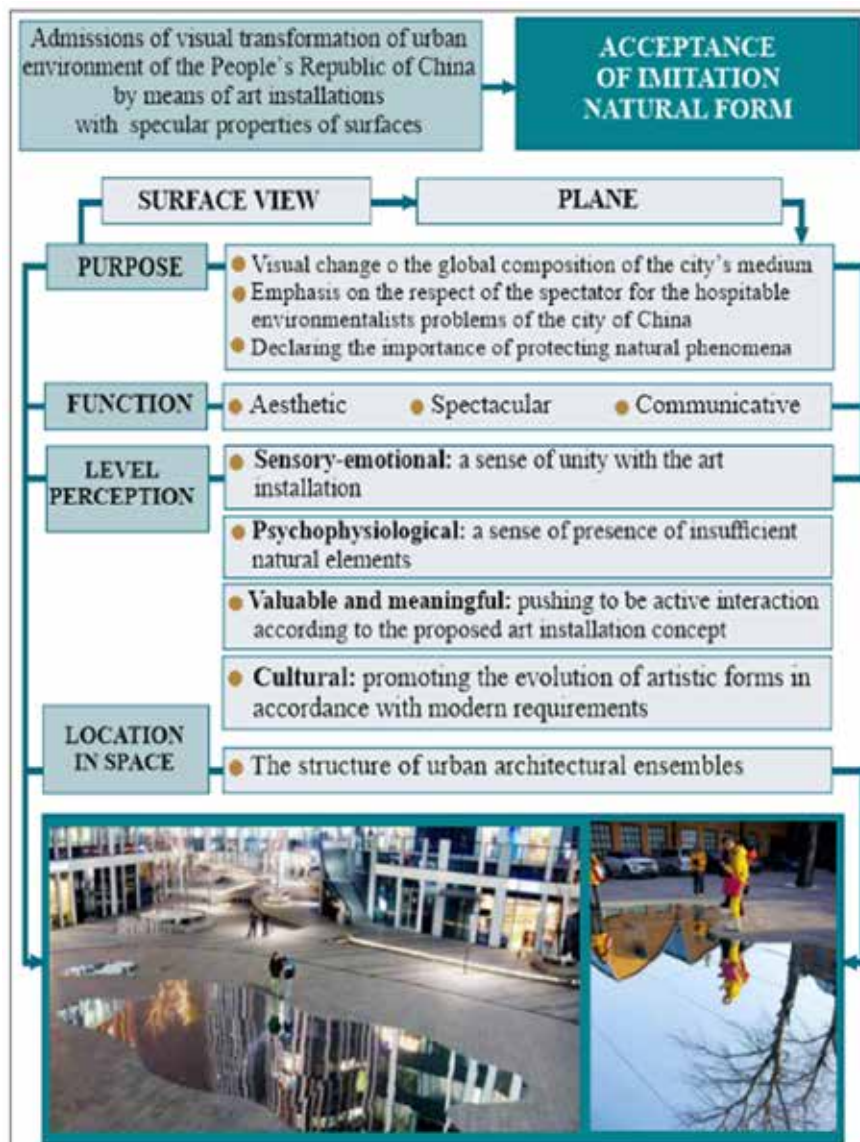
- *game function* – helps to create the necessary conditions for the harmonious development of personality within the framework of the concept of art installation proposed by the author.

The choice of location to reveal the artistic image of the urban environment is not accidental. At the same time, the compositional dominant of the solution of the architectural space of the city is the illusory world of the local environment, which is reflected in the mirror surfaces of the art installations. It is worth noting that the variability of illusory transformations occurs due to the formation of several types of mirror surfaces:

*planar, three-dimensional and multi-element.* Each of the types of art installations broadcasts an emotional and spectacular image of a given area, which strengthens its general composition of the area. We will analyze the main methods of compositional modeling of art installations with mirror properties of surfaces.

- *The admission of imitation of natural form.* A dynamic composition of graphic natural images on the surface of the art object called "Lost Lakes of China", which moves parallel to the elements of the environment, exists in complete harmony with the natural world and architectural space (*Figure 1*).

*The planar view of the formation of art installations, proposed by the author on the analogy*



**Figure 1. The admission of imitation of natural form:**  
<https://www.unfinishedman.com/chinas-lost-lakes-arent-made-of-water-mirrors/>

of a natural puddle – reflects a multidimensional space, forms an impressive imitation of a natural phenomenon, reacts to changes in lighting, movements of trees, clouds and people passing by the mirror surface of the art installation. In this case, the additional *admission of emphasizing the existing compositional dominant* in the urban space successfully reflects the author's concept, which declares the importance of preserving the natural treasury, which is the most important and precious thing on the planet.

The concept of the art object encourages people to slow down and understand the dire problem of water scarcity, as more than 240 lakes have disappeared in China over the

past 40 years. The successfully used *admission of imitation of natural form* allows to feel the acuteness of the problem of Chinese cities in a completely new way and to reveal the artistic and functional purpose of the work of art through the transmission of visual-spatial illusory elements and images of the architectural frame of the city.

• *The admission of visual optical correction of the architectural and landscape frame of the urban space* is used by designers due to the construction of a three-dimensional object on the East Square of Beijing Fun, Sicheng district (Figure 2).

The mirror surface of the free three-dimensional art installation broadcasts the author's ref-



Figure 2. The admission of visual optical correction of the architectural and landscape frame of the urban space. <https://www.urdesignmag.com/art/2018/07/28/wang-yonggang-idea-latitude-public-art-obscure-reality-beijing-china/>



Figure 3. Арно Лап'єр і УАР розміщують занурююче кільце дзеркал у Шанхаї.  
<https://www.designboom.com/art/arnaud-lapierre-uap-ring-chain-shanghai-07-24-2017/>

erence that "the highest good is water." In order to convey an artistic image, the author offers an aesthetic modern form, which in itself already imitates water drops, but is made on the basis of an enlarged scale. The design of this installation, proposed by the Chinese master Wang Yung from the Idea Latitude Public Art Institute, takes into account the physiological, psychological and aesthetic components of the object.

The optical illusions reflected on the mirror surface resonate with the movements of the viewers, who make changes to the images due to the presence of variations in the forms of the

changing surface of the art installation. In this case, the game function of the object becomes no less interesting, because the convenience of its location, the contrasting shape in relation to the surrounding environment and the sparkles on the mirror surface make the installation very attractive for children and their parents. All these aspects encourage playful communication and, at the same time, on a subconscious level, emphasize the acute problems of the ecological state of Chinese cities.

The next example of the design of an art installation, which *reflects the technique of*

*visual optical correction of the architectural and landscape frame of the urban space*, was proposed by the French artist Arnaud Lapierre in the city of Shanghai (Figure 3). The *multi-element* mirror installation "Ring-Chain" is designed on the basis of elements of a cubic shape (reflective brick) and is designed in the form of a cylinder, which can be entered if desired. Each of the mirror elements reflects the visitor and all the elements around him, which leads to the effect of immersion to infinity. According to the author's concept, such an effect changes the perception of a place and, on a subconscious level, breaks a person's usual perception of the universe. Physical contact, in this case, turns into a type of communication for which the possibility of individual participation in creating one's own visual effects is important. In turn, the outer side of the art installation enhances the effect of optical illusions by framing a large number of elements of mirror images of the environment. On a *sensory-emotional level*, this effect captivates the viewer and forces him to constantly move around the cylindrical form of the art installation to enrich unexpected images.

The aesthetic function in combination with the spectacular function makes the design object extremely attractive in the overall composition of the urban environment and emphasizes the individuality of the area.

**Results.** In the course of the research, it was determined that the design of art installations proposed in the architectural environment of the cities of the People's Republic of China has varieties of form formation taking into account the properties of mirror surfaces. All analyzed types (planar, three-dimensional, multi-element) fully reveal the main concepts of the authors of the works of art and focus the attention of the audience on the urgent environmental problems of China.

When solving a visual optical image, designers get an unexpected dynamic effect that draws the attention of the audience; in addition, the addition of a game function has a positive effect on the self-development of the individual. Thus, the varieties of modern techniques for solving the design of art installations testify to a sufficiently high level of professional skill in identifying the author's concept, which on a sensory-emotional level changes the perception of natural phenomena by an urbanized person and indicates the need for their preservation.

The introduction of art installations with mirror surfaces into the architectural framework of the urban environment allows either to completely change the visual perception of the space of the area, or to focus a person's attention on his comfortable stay in the conditions of an aesthetic environment.

Further research is being conducted in the direction of determining the principles of forming conceptual developments of art installations that have a socio-cultural context.

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