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FEATURES OF INTERIOR PERCEPTION

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Abstract: The aesthetic impact of architecture is closely related to the peculiarities of human emotional perception of two types of forms - volumetric in space and spatial.

Keywords: interior, plan, space, characteristics, figure

The interior space has a relative three-part division into plans - front (near), intermediate (middle) and rear (far).

Spatial plans are always real, and their relative depth is determined by the distances of a particular space, varying from several to hundreds of meters. In general, the visual picture (frame) of each plan has substantive content and richness. The deeper the space, the more capacious the frame and the richer the planned gradations. The order of arrangement of the plans can be correlated with the characteristics of their visual pictures and designate the foreground as the perception of a detail, the middle one - of a fragment and the far one - of the general spatial form. In the process of perception, these three planes always find themselves in a state of "figure-background" relationship. Due to the accommodation of the eye, vision is focused on one of the planes, in the plane of the object of interest (figure), and then the rest of the planes become background. Therefore, the object of attention (figure) can be a detail (part of the fence plane, equipment item, workplace), a fragment (fence plane, equipment group, work area) or, in fact, a spatial form (combination of fence planes). With visual assimilation of the environment, all plans are in constant review. The gaze repeatedly returns to them, and the manifestation of increased attention (interest) is expressed precisely in the number of returns. Science has established the stages of displaying an object according to the complexity of perception: initially, contour and silhouette (planar) images are fixed, then the size of objects and distances to them. When perceiving the shape of a volume or plane, the maxima of attention fall on the semantic centers of the image, contributing to the fastest disclosure of information about the object. When identifying the characteristics of the form, "informative fragments" are extremely important - areas with places of abrupt changes in the contour, changes in the direction of the line, places of intersections of planes.

An architectural form, including a spatial one, in contrast to a simple geometric form, is endowed with a specific factor of absolute magnitude associated with its relation to a person as a measure, and is determined in part by the concept of scale. The size of the spatial form in nature is instantly appreciated and is especially acutely felt by a person. It primarily affects the emotionality of perception, giving rise to a feeling of spaciousness, normal proportionality or oppressive tightness.

The architectural space is constantly compared by man with the natural one in terms

of physical and mental sensations and the possibilities of mutual human communication. Experiencing, mastering spatial parameters through distances, visual distinguishability, a person realizes a possible level of communication, he has an appropriate associative emotional idea of a specific space as intimate, chamber, vast, huge or boundless. Based on the critical parameters of modal sensations and their joint action, it is possible to establish the levels of the human concept of the size of space. If we conditionally fix the static position of the viewer at an extreme distant point in space, then in fact the person is moving, the distances and viewing angles change. In addition, the scale of the levels of perception constantly exists in an expanded form, and the estimated quality of perception includes the details of the nearest zones, which are compared with the analogs of the distant zones and provide the decoding they need. However, in general, the regularity of ideas in the development of spaces of different sizes is preserved and is used in practice purposefully, relying on intuition. The desire to give the interior space a certain representativeness, as a rule, leads to an increase in volume. So, the monumental Egyptian temples personified a super powerful deity, in the "huge" inner space a person was simply physically lost, actively pressed by the mass of the framing shell. The interiors of the Greek temples do not overstep the boundaries of the "spacious" volume, which is quite solemn in its tranquility and proportionality to the person. The gradation of sensations from spaciousness to crampedness largely determines the emotionality of perception and is used in the composition of the interior. The conscious distribution of different or identical spatial volumes allows you to create a passive or active dynamics of the structural construction of the interior, which develops in an increasing or decreasing progression. In separate fragments of the structure, the articulation of two contrasting volumes can emphasize the spaciousness of one room after the tightness of the other.

The measuring characteristic of optical perception is determined by factors - field of view, angle of view and visual acuity. From the standpoint of interior perception in large spaces, the "frames" of the field of view are more capacious in content, giving more impression of the whole, and, conversely, in smaller spaces, the "frames" of perception are more fragmentary. Here, the overall impression is obtained by adding them to a panoramic panorama. The parameters of the dimensions of the spatial form and the conditions for their observation, therefore, affect the nature of the emotional perception of these forms. The upper area of the field of view is aimed at determining the nodal points of the connection between the walls and the ceiling. A variety of shape sensations arise due to the deviation of the optimal value of the vertical angle of view, equal to 17° . Depending on the nature of the contour lines (horizontal, vertical, oblique, curves, etc.) and their number falling into the field zone, there is a feeling of low and high. An analysis of the interiors of a number of historical objects shows that, regardless of the absolute size of the room, the architects continued to strive to fill the upper optimal zone of the field of view to the entire height with the plane of the wall, that is, to keep the optimal ratio of height to length of the room constant and to avoid the feeling of an overhanging, pressing ceiling by switching on in the frame of predominantly vertical directions. This empirical experience of finding the best proportions of form confirms an important pattern in the psychology of perception. The feeling of "low - high", "heavy - light" can be illusorily corrected by the ratio of masses in the "form - shell" - by opening or closing the corresponding sides of the fence.

The degree of emotional sensation during perception depends on the characteristics of the associative effect of the spatial form, the clarity or difficulty of reading its geometric parameters and compositional structure. The intersection of the enclosing



surfaces forms linear contours and silhouettes. Moreover, in the absence of filling mass, the reliability of the outline of the spatial form is preserved if the main nodes of the form are fixed (corner supports, beams, railings, canopy, etc.). Consequently, the decoding of the form occurs through the perception of contour lines. Through the "movement" of lines, there is a feeling of movement (dynamics) of a spatial form [1].

The figurative and associative characteristics of the simplest figures and lines have long been known in artistic and creative practice. So, the straight vertical seems to be endowed with an active force of striving upward, expressing a growth trend. The horizontal, on the contrary, seems passive, weak. The diagonal, oblique direction, being in the middle, acts as a kind of force that overcomes passivity. Broken lines, representing various combinations of acute, right and obtuse angles with different side lengths, are, as it were, the result of the alternating action of different forces. Curved lines - and especially uneven ones - express movement more than straight or arched parts of a circle. The parabolic lines are especially prominent, acquiring special beauty and strength in their movement. A straight line expresses acceleration in equal areas and deceleration in curves. Geometric shapes make a different impression: the triangle is sharp and prickly; circle - even, smooth, closed in itself; square - clear, straight, static. The amazing associative definiteness of some geometric figures and volumes seemed in antiquity mystical, endowed with a mysterious meaning, which served to use them as symbolic formal signs. The circle, the sphere symbolized the unity, the continuity of movement, the universe, the world, the sun, life. The square (for example, at the base of the pyramid) symbolized peace, eternity, strength, power. Abstract symbolism of simple "eternal forms" is quite common in architecture. In modern architecture, a symbolic representation of the organic forms of the natural world has been added to it. The movement of the form up, in depth, in breadth or its static nature also cause quite definite associations associated with the innate psychophysiological characteristics of a person. The aspiration of the form upward, the distance of the ceiling mass, the abundance of air above the head invariably give rise to a feeling of relief, freedom, spaciousness (with a fairly normal width of the room). A low ceiling with a wide span "visibly" presses over the overhanging weight, creates a feeling of crampedness, anxiety, and anxiety. In these cases, the shape of the covering plane is also important - flat, vaulted, sagging, inclined. The variety of possible concrete solutions of the spatial form is based on the infinity of combinations of geometric shapes of the enclosing surfaces, both within the contour of the figures and the planes of the figures themselves.

In painting, color is the main means of expression, using all the wealth of the most complex color compositions [2]. In other types of creativity, color is already an additional means, which has, as it were, applied value for emphasizing the main form of expression, enhancing its meaningfulness. In these cases (graphics, sculpture, scenography, design), simpler color combinations are sufficient, located mainly within the plane and volume, perceived from one point of view. Particularly important for such combinations is the inclusion of the color of the "construction" material (paper, clay, marble, etc.), its natural texture.

The architectural form also determines the differentiated placement of colors in space [3]. The architectural "shell form" is characterized by a color combination of fairly large (relative to a person) surfaces, which have a uniform color within their limits. Due to the dual nature of architecture, the meaning of the color tone must satisfy not only the compositional sense (as in other types of art), but also the functional and utilitarian one.

The specificity of the spatial sensation of color characteristics is determined by the

peculiarities of the process of perception of the spatial form. Perception occurs in a progressive movement - with the transition from one space to another, and panoramic - with the observation of only one space. When moving forward, there is a sequential change of color impressions in the space-time relation. The resulting "color combinations" are due to the possibility of storing in memory for some time the image of the color of the previous space. More preferable for these cases are saturated, basic and intermediate, color tones, white and black colors and contrasting color ratios. Certain simple colors are easier to remember than mixed or nuanced relationships. It is known that in the simplicity of symbolic colors the factor of their better memorability is manifested. With a panoramic view of one space, different parts of the environment can be present in the visual frame - from the whole picture to its fragments. A person has the ability, even with angular changes, to reproduce three-dimensional space in consciousness, to quite accurately establish the true outlines of a form, its dimensions, absolute and relative distances to objects. It follows from this that during the "live" contemplation of the room (and not its image) in the mind of the observer, the area of the enclosing surfaces is always larger than the areas of other interior elements, regardless of their location. Consequently, in the composition of combinations of color spots, it is not so much the projection parameters of surfaces visible at a certain moment that are important, but their actual dimensions.

Light has an emotional effect on a person through the illumination of the space of the room and the identification of the plastic "form-shell". The natural change in illumination and color in the natural environment has created a number of stable associative sensations, for example, anxiety from the gloom and mystery of twilight, excitement and cheerfulness from a bright sunny day. It is possible to control the amount of light, its color and distribution in the room. Artistic and expressive tasks and techniques are: in identifying light as a kind of compositional accent; in identifying the plastic characteristics of the spatial form; in creating a specific light environment. Compositional techniques for working with light are based on the organization of concentrated or diffused lighting, or their combination. The position of the light source in relation to the spatial form is important. Light from the sun or the firmament enters the room from the outside through skylights. The size of the latter, shape and location actively influence the nature of the lighting. Illumination is also associated with latitude and dynamic rhythms of day and season changes. In natural conditions, the spatial form is illuminated mainly by diffused light and at the same time the natural spatial and temporal orientation of a person is provided. Sources of artificial lighting are placed indoors and are material elements of the environment [4]. Artificial lighting is characterized by the predominant use of direct light and the possibility of its freely directed distribution over the planes of the "shell-shape". The action of light manifests itself according to physical laws: the illumination depends on the intensity of the light, the distance from the source and the angle of incidence of the light rays. This is visually perceived as the intensity of light and shade and the nature of their modulation. With small openings, the proportion of scattered reflected light increases, and a large gradation of illumination occurs from light to dark areas. Reflected light with multiple reflexes creates a sense of the unusual environment. The extended gradation of illumination by reflected light allows you to create a "picturesque" chiaroscuro and reveal the plastic properties of the form. Directed direct overhead light or reflected side light usually glides over the surface, modulating its plastic. With large openings, "flood" light is obtained, which helps to reveal the geometric

qualities of the fence along the contours and silhouettes. If in the first case the "shell-form" is characterized by the manifestation of the sculpturality of the mass, in the second - its graphicality. Direct light directed to the accent point acquires an independent active meaning in the composition. Another technique of light accentuation is manifested in the creation of a luminous transparent surface - a stained glass window [5]. Artificial lighting has its own compositional techniques, distinguished by some decorative lighting effects. For example, the effect of a "floating" ceiling arises from the contrasting juxtaposition of light and shaded surfaces. Light sources are usually hidden from the viewer. Another technique forms light "spots" on the wall, on the floor to accentuate items of equipment, decoration, etc. The third technique is related to the possible imitation of natural light. The luminous surfaces of the plafond, lanterns, openings are created. The effect of reliability depends on the accuracy of the selection of the characteristics of the light and the naturalness of the situation.

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