Light in Typical Architecture

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ABSTRACT
Architecture for a person is primarily a home. It is a place, inviting to eagerly come back again and again to feel kindness, coziness, safety, support. However, for today, not all space-planning and urban-planning decisions enhance of a person’s psycho-emotional mindset.

Monotonous grey-colored development of typical panel houses with the equal number of stories, lowers the person’s level of curiosity to the surrounding artificial environment, provokes despondency in the daytime and raises probability of criminal behavior at night.

Despite lacking the possibility of rebuilding and reconstruction of panel buildings, there exists a way to generate amazing, creative environment for the person. It is a way of art of the architectural illumination composing an alternative reality in our imagination.

To influence the person positively it is necessary to change initially the building scale, to complicate it’s silhouette image and to make an integral visual perception of the building and the ground surface.

A light drawing is an amazing method to solve this problem.

The first four floors are illuminated in such a manner that gives illusion of a new scale to the development. The light cord fixed on the building’s body copies facades of historical monuments of architecture, involving the spectator’s imagination in the process of co-authorship. Hereby, a disregarded top part of the building merges with the sky. Thus, instead of boring panel houses, the dweller will receive an apartment within a fantastic old city, while someone, staying at home, will be able to float in heavens.

Keywords: Alternative Reality, Illumination, Typical Panel Houses

1. INTRODUCTION
The article is devoted to architectural illumination of typical panel house estate districts.
The aim of the paper is to offer a variant of using architectural illumination as a positive factor changing person's perception of surrounding space.

The author’s interest in the subject draws on personal observations and experience of one who has grown in a new typical panel house estate district with a sense of despondency and tedium.

The investigations resulted in «The Light city» concept. The project most essential points are:
- changing a perception of a development’s scale
- visual complicating of a building silhouette
- creating a qualitatively -new space
To achieve these objectives the author suggests using either light projection equipment, or equipment for a light drawing - light cords, light construction designs.

The concept is based on research of Dietrich Neumann about history of the architectural illumination worded in the book "Architecture of Night"; proceedings presented in "Light Perspectives between culture and technology "; speech of Alfred Borden and Paul Levy at the 2d Global Lighting Design Convention, October 2009, Berlin.

2. LIGHT IN TYPICAL ARCHITECTURE

For a person architecture is, foremost, a space of comfort and meaning. One of the most important spaces in our life is home: a place, inviting to eagerly come back again and again to feel kindness, coziness, safety, support. Competent working out of space-planning, design and town-planning decisions, along with personal relations give to us such inwardnesses. However, for today, it is not all regions promote improvement of a psycho-emotional condition of the person.

House estate zones erected after the Second World War, break into or border various cities of the world. Consisting of panel high storied buildings, grey-colored, with a primitive silhouette and plasticless walls, houses of the type are called typical. The monotonous zones formed by monotonous houses, made an ideal solution to an acute problem of dwelling shortage in the post-war ruin, but, implicitly, though invisible to eyes, created not a less serious new problem of unfriendly influence on mentality and the unconsciousness of their inhabitants, soaring in the course of time. Similar zones have continued to arise some decades later as well, forming the basic available housing of a city.

A striking example of the phenomenon described is the Tushino district (the northwest of Moscow, Russia), which was erected on the place of safe affluent settlement of the like-named city type. The aboriginals have been moved to new houses, workers of the factory located nearby also received apartments. The town-planning lay-out of the district tended to hinder new social bonds Monotonous grey-colored development of typical panel houses with the equal number of stories, lowers the person’s level of curiosity to the surrounding artificial environment, provokes despondency in the daytime and raises probability of criminal behaviour at night. A process of migration of the young enterprising population has begun, their place was occupied by visitors who were searching for a temporary lodge. Former social bonds were definitively broke off. The architecture proved the reason for formation of new groups, whose interests it could satisfy. As a result, gloomy in the daytime and dark at night, the district became a concentration of antisocial formations.

The district is subject neither to pulling down, nor to reconstruction in the next decade, but it does not mean, that the situation cannot be changed. The solution to the problem generated by influence on a person’s subconsciousness may be found in changing this influence from the negative to the positive.

Art is the strongest engine and the ally of emotional sphere of life, subconsciousness, intuition. Therefore, the art of the architectural illumination building in our imagination the other reality is capable to change a state of affairs. The author suggests originating a new district over the former by architectural illumination, called «a light city».

To influence the person positively it is necessary to change initially the building scale, to make it more humane and low-rise. The next step it is to complicate it silhouette image to return the person’s interest to surrounding space. And in end it is necessary to fasten vertical planes of houses and a horizontal surface of the ground in a single whole,
uniform space that will convey the feeling of security and confidence to the person. Currently, the landscape of the night district presents sort of punching of the lit windows. Being inside, the person sees the closed space of the courtyard. The typical districts which are considered small-time and unvisited by tourists, often have only functional illumination of roads and entrance groups. On holidays the scene may vary insignificantly. Light of lampposts located along intradomestic passages normally allocates the first three or four floors, emphasizing the materiality of a wall. The given altitude inevitably designated by light, is viewed the most valuable to research according to the author. Building of 10-15 meters high is comfortable for a person that is proved true by Sustainable development principles. The given height is to prevail in «the Light city».

Creation of a new silhouette may be carried out in two ways. The first is application of a light drawing. The light cord is fastened to facades. It's light copies facades of monuments of architecture, creating an image of an illusory city. Silhouettes should be native for the country of a district. Hence, at night the Tushino district may become the centre of Moscow where on a place of panel houses there will appear chambers of commerce of the 17th century, Mediaeval trading establishment , Cathedral of the Vasily Blazhenniy. The top floors of the building which are falling outside the limits of the Light city» scale will merge with the sky. Completeness of impression can be fed by light construction designs. Continuing a façade of the made-up houses or being thrown like arches from one facade to another they become a part of an accomplishment and will give naturalness to the whole composition.

Positive associations arousen in the spectator's imagination, will involve them in co-authorship process, and make their imagination a participant of art transformations. To unite the creator and the spectator in a single process and to show the new sides of well-known objects and the phenomena is the main intension and value of art. Thus, instead of boring panel houses, the dweller will receive an apartment within a fantastic old city, while someone, staying at home, will be able to float in heavens.

Fastening of a light cord on a building’s body is hampered neither in the way of art or technology. Given using light-emitting diode equipment energy consumption will be so low, that a switch room of a house or a solar battery can serve as the power supply.

The other way to create “the Light city» is using light projection. Architectural illumination of a residential zone is meant first of all to its inhabitants. The comprehension of the term “home” consists of plural associations which might be connected with a favourite tree, a bench, a lane. A person is inclined to come back again and again to places of their childhood. The new district gradually erases favorite trees, shops and lanes from / native persons’ minds. The new district does not allow children to clearly imagine what their parents speak about. The new district does not cause in visitors the desire to learn the history of the district while each earth is rich with the history.

Using light projection is capable to help restoration of values of the past. Recognizable tree being projected on a wall of a house, a contour of a pond or a flower bed on the ground surfaces, a silhouette of a popular club, the bus stop of one’s childhood, once located in the place of the projections, will not leave old residents indifferent and will cause interest of visitors. The projection has a remarkable advantage: being non-material, it is easy to vary. So, various images of the past occurring in different time can revive in the new district, corresponding to a season or festivals, initiate the dialogue with people and the environment. As a result typical houses with rectangular walls will turn into a scene for life of culture and history, and on the snow-covered asphalt one should see wild flowers.
The respect and interest to a place where the person lives, help to create new positive social bonds, which is very important for development and prosperity of the district. It is also crucial for environmental safety.

The first criterion of understanding safety as qualities of ability is “neighbourhood”, a necessity to know people with whom you live side by side. The second criterion is the type of the space organisation. The European culture is inseparably linked with extroversion, an extension «from within to outside». This entails both: certain understanding of the world, and the organisation of a similar artificial inhabitancy. In the European culture there is a steady understanding of safety of life and property in public places - open places. The central areas with compact planing are considered as the most safe places.

The lay-out of a typical district often presents a net of the closed courtyard - cells. Such a planning closeness often provokes closeness of people - children are on friendly “court yard” terms, though sometimes it is «a court yard against a court yard» position. For a European danger is identical to the closed space, so it is necessary to withdraw to the real-life town-planning by architectural illumination, and create an open space. To achieve this purpose «the Light city» organises the light-planing structure to unite the district. The given structure should be created by means of several “centres of attraction” logically placed in structure of the district and issued in a special way, for example, by coloured light. Such “centers” rooted in the general accomplishment should return a sense of continuity of space, its everflowing to the person. A special attention needs to be focused on transitions between courtyards, joints of houses forming a narrow dark corridor, which break the space off. These places need increasing a total level of light exposure and new visual ranges to transform uncomfortable transitions into celebratory windows to a new courtyard.

An open space assumes possibility to foresee unfriendly moods, to address for help in case of need, impossibility to take cover for a potential criminal. But it is only possible to ask for help when you are not alone. The given approach to illumination of typical architecture is aimed at bringing positively set people, acquaintances, friends closer to the person by modifying the area in the prestigious and prosperous district.

3. CONCLUSIONS

The person has a right to feel calm and confident close to the house any time. And if there is no way to change architecture of a house, a courtyard, a quarter in reality, it is possible to find a way to change our perception.

To recap, it should be desirable to underline, that the maximum attention should be given to illumination of inhabited spaces. The poorer from the art point of view is architecture, the more typical is the planning decision, the more closed is the space, the more detailed approach is required from a lighting designer. Focusing on the illumination of the historical centre of the city, the masters work for tourists, lighting typical residential zones experts work for the happiness of the native city.
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REFERENCES