IMPLEMENTATION OF EXHIBITION LIGHTING CONCEPT AS MEANS OF ARTISTIC EXPRESSION THROUGH EXAMPLE OF "RUSSIAN INSOMNIA" EXHIBITION

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ABSTRACT

The article focuses on the disclosure of the artistic possibilities of the exhibition lighting through the example of the "Russian insomnia" exhibition. The key techniques in creating a museum exhibition, increasing the influence of lighting on the viewer, are highlighted. A process of creating a lighting project for an exhibition is presented in successive stages. The first stage is the development of the exhibition concept, which arranges the exhibited items in four halls. The second stage is the setting of artistic lighting tasks for each hall and the search for their solutions. The third stage is the technical implementation of the project.

Keywords: exhibition lighting, theatrical exhibition, concept, object d'art, artistic tasks, game of shadows

1. INTRODUCTION

The exhibition lighting is an essential means of artistic expression of exhibitions and collections of museum pieces. Its principal task is to create the conditions for the complete and emotional perception of the objet d'art by the audience. The lighting is intended to reveal and complement the artistic images embedded in the objet d'art, as well as to focus the viewer's attention on it. If the painting or sculpture is illuminated improperly, the museum visitor will most likely pass it by.

The ability of light to influence the emotional state was noted in ancient times. A good example

is stained glass windows in Gothic cathedrals and other religious buildings. Converting natural lighting into multicoloured mosaic, the stained-glass windows brought life-affirming harmony into the mood of believers.

2. SPECIFICITY OF EXHIBITION LIGHTING AS A MEANS OF ARTISTIC EXPRESSION

Having been engaged in the design of exhibition lighting for a long time, I noticed that under certain conditions the role of lighting for the audience perception is increasing.

The first condition is the dynamism and interactivity of the museum exhibition. We are talking about theatrical exhibitions, in which objects d'art are united by a single concept and storyline. In this case, the spectator turns from a passive observer into an active participant of the events and comes into contact with the artistic space of the exhibition. And the light is perceived as an integral part of this space, not just as a lamp, which should be lit.

The second condition is the combination of light and sound. Our perception of the surrounding reality is arranged in such a way that we feel the light effects sharper and in relief, if they occur in conjunction with the sound effects.

Finally, the third and essential condition is the lights and darks as an element of the exhibition concept. This involves the lighting of objects d'art to be dimmed. The lights and darks involve the viewer in interaction with objects d'art, because their movements create additional shadows. At the same time, the shadows should organically intertwine into the artistic space of the exhibition and in any case not distract the viewer. The ability to create the dancing shadows gives the vast space for the creativity of the lighting designer. Both static and dynamic shadows acquire independent artistic significance.

3. GENERAL INFORMATION ABOUT THE "RUSSIAN INSOMNIA" EXHIBITION

In 2011, I was lucky enough to take part in the creation of the "Russian Insomnia" exhibition project, with its concept meeting all three of the above criteria. It was an interactive exhibition displaying the image of insomnia's impact on the creative person. The exhibition had a clearly developed storyline, which will be further described in more detail. Music, poems and various noises were used as one of the instruments of influence on the viewer. Considering the subject of the exhibition, the lighting of the exhibited items should have been dimmed, which allowed to create the dancing shadows.

The purpose of the exhibition was to show insomnia as an essential element of the inner world of the creative person. The collection image of the Artist suffering from insomnia was created through the sculptures, photographs, sound effects and lighting. The project concept derived the features of the theatrical performance and quest. According to the plan, the viewer moves through the four halls of the exhibition, participating in the story presented.

There are two actors: the viewer and the Artist, embodied through various expressive means. Night comes, and the Artist can't sleep. A variety of thoughts occur to him, he experiences various events, and the viewer feels all this together with him. In fact, all artistic images conveyed in sculptures, photographs, sound and light effects are the experiences arising in the Artist's head. The audience is involved in this emotional experience.

A special place in the concept is given to the poems about insomnia by Russian poets. In the thematic collection, the works of A.S. Pushkin ("Poems composed at night in insomnia"), A.A. Fet ("In the midnight silence of my insomnia..."), O.E. Mandelstam ("Insomnia. Homer. Tight sails..."), A.A. Akhmatova ("Insomnia"), D.S. Samoylov ("Insomnia"), B.L. Pasternak (Marburg), B.A. Slutsky (Conscience at night, during insomnia...) are used, as well as other poems creating the atmosphere of sleepless night. The poems sound in the four halls of the exhibition, develop the dynamics of the plot and make the viewer feel that the Artist communicates with him.

In my opinion, the Artist's image is close to the lyrical hero of the poetry by I.A. Brodsky. Loneliness is both a source of inspiration and a great suf-



Fig. 1. Sketch on paper and description of the exhibition halls



Fig. 2. Hall No.1 "The Artist's Studio"

Fig. 3. Hall No. 2 "Night Guests"

fering for him. He is tormented by the longing for communication, but in any event he takes the role of an indifferent observer. On the one hand, he believes in his mission as a creator, and on the other hand, he is constantly hesitant that he is losing time and will soon lose his talent. This Artist is full of contradictions.

4. GETTING STARTED ON THE PROJECT: DEVELOPMENT OF FOUR HALLS CONCEPT

By the beginning of my work on the exhibition project, the exhibited items were already collected, but it was necessary to unite them with a backbone idea. I decided that in order to make the plot more dynamic, the narrative should be more linear so that the viewer could perceive and experience it as a real life. After a searching study of the sculptures and photographs intended to be used as exhibited items, I developed a concept that consistently revealed the four stages of insomnia and their impact on the Artist. Each stage correlated to one of the four halls, while the moving from one hall to the next one meant a transition in time (Fig. 1).

The first hall ("Artist's Studio") symbolized the creative process of the Artist, smoothly passing from twilight to night. It is known that for creative people evening and night hours often are periods of greatest productivity. Sometimes Mozart wrote music scores in one night, Gogol created his best works at night, and Van Gogh specially set candles on his hat to work in the dark. The purpose of the first hall was to show the archetypal image of the Artist, who is so absorbed by the process of creative search that he forgot everything. His mood is perfectly conveyed by a quote from Brodsky's poem "Loneliness": "When your loneliness at night spits on humanity."

The second hall (Night Guests) moved the Artist into the world of images inspired by the tired consciousness and insomnia. These images embody his night mares, they serve as triggers that get hidden fears from the corners of his subconscious. In creating this hall, I was inspired by the images of the Forest King spirit (from Schubert's ballad),



Fig. 4. Hall No. 3 "The Horror of Loneliness"

Fig. 5. Hall No. 4 "Return of Light"

the witches' sabbath (from Goethe's Faust and Bulgakov's "Master and Margarita") and the evil force from Gogol's "Viy". The night is thickening, and the Artist is evidently becoming uncomfortable.

The third hall ("The Horror of Loneliness") speaks for itself. The Artist is overcome by longing, fear falls upon him. He begins to engage in selfanalysis, the conscience tortures him. He has doubts about his talent and prospects of his creativity. The sense of loneliness ends the personal breakup of the Artist. This hall is the darkest, in terms of time it refers to the night hours before dawn.

Finally, the fourth hall (The Return of Light) symbolizes the eternal rebirth of life. The dawn brings relief by pulling the Artist out of the tenacious clutches of darkness. The new day brings hope to the Artist and to everything existing.

5. DEFINING ARTISTIC LIGHTING TASKS FOR EACH EXHIBITION HALL

When the concept was approved by my project colleagues, I started creating with the simplest

sketches on paper. The lighting tasks had to be defined for each hall, and this is what I have as a result. *Hall No. 1*

Lighting should focus the viewer's attention on the Artist's involvement in the creative process. He is self-absorbed and awaiting the inspiration. The light should capture this breathless expectation. Everything in the design of the hall is subject to the charisma of the Artist. There's only his genius here. For the sculptures representing the Artist, the light is clothing, and it should be noted that the sculptures are made of different materials (Fig. 2).

Lighting concept: centre lighting and dark walls (two screens were installed on them).

Hall No. 2

Lighting should convey the mystical atmosphere of the hall. The evil spirit comes to life, incarnating from dreams, and the lighting should help it to impress the viewers. This makes them thinking about the inner emotions. In this hall the Artist welcomes his friends – Night Guests. Some of them are playing cards at a table. Nobody talk, everyone

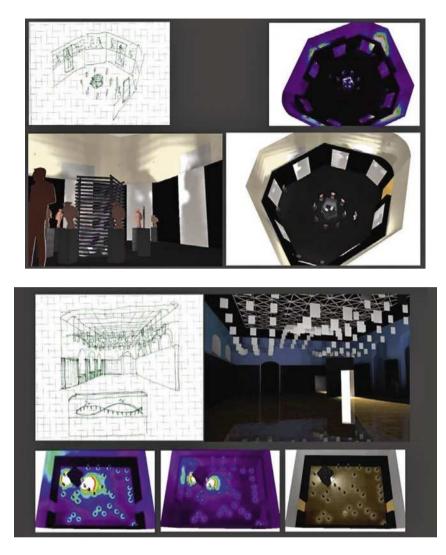


Fig. 6. Technical realization of lighting, Hall No. 3

Fig. 7. Technical realization of lighting, Hall No. 4

is focused on the game. The other guests are sitting around a large festive table: laughing, drinking and telling stories – the late dinner. The characters of their stories are incarnating and are sitting at the table like sculptures. In one of the corners, in a large armchair with a headrest, almost in the dark, an old friend is sitting and reading the fairy tales for night visitors, surrounded by mystical figures generated by these fairy tales. Lighting gives a touch of surrealism to what is happening: werewolves and other supernatural beings can't walk under the light of night lanterns. These beings seem to talk with each other and involve the viewers in their conversation (Fig. 3).

Lighting concept: insular lighting (tables, an armchair with a headrest), darkness.

Hall No. 3

This is a hall of terrible feelings and gloomy thoughts, so everything should be decorated in dark colours here. The leitmotif running through this hall is the dancing shadows. The following technical solution has been developed for this purpose: the light source is surrounded by light scattering surfaces as dissolving the light flux and focusing it on the sculptures in a circle, a little further away. The sculpture shadows fall on the wall, becoming the objects d'art. The idea was that at any motion of a viewer, more shadows would appear, "jumping" on the walls as a train of thoughts (Fig. 4). The peculiarity of lighting lies in the fact that the integral image of the sculpture arises only when the viewer approaches it.

Lighting concept: Symbolic "fire" in the centre of the hall. The shadows are dancing on the walls.

Hall No. 4

In this hall, the lighting embodies the gradual coming of the dawn. The light carries hope and an eternal revival to a new life. The following technical solution has been developed for this purpose: illuminated sculptures of angels are arranged on one spatial diagonal, symbolizing the path to an eternal light. At the end of this path there is a black cube

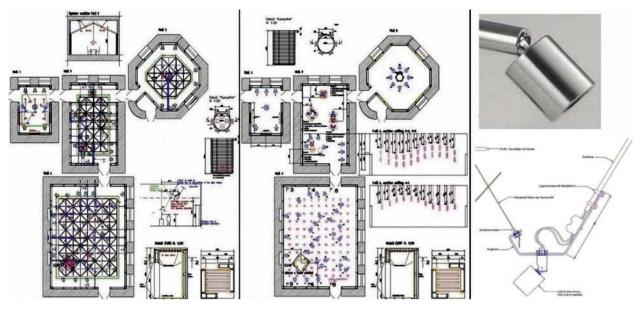


Fig. 8. Lighting Fixtures Layout

with two entrance doors arranged diagonally, with a completely white room of 2.50 x 2.50 m. The ceiling of the cube is made of translucent white polycarbonate, behind which, beyond the eye of the viewers, the fluorescent lamps with a correlated colour temperature 4000 K and a total luminous flux more than 20000 lm (!) are installed. The idea was precisely to make the viewers bodily feeling the light, its infinity. This purifying whiteness relieves from the experiences of a sleepless night and completes the exhibition.

Lighting concept: diagonal lines coming out of the infinite cube (Fig. 5).

Acoustic design

In cooperation with the famous composer Alexander Gerasimov, a thematic sound design was created for each hall.

In the Artist's studio, we hear the noise from the street, the barking of a dog, the distant singing of a night bird, and all this is dominated by the noise of the old clock resonating with the music of Gerasimov. In the second hall, the main themes were the sounds of the card game and the conversations of the guests at dinner. The third hall is filled with a lonely scream, a painful moaning of a man who woke up from nightmares in the darkest hour. The fourth element of sound design is an atmosphere filled with the singing of the first morning birds and a quiet whisper of stars talking to each other in anticipation of a new day. The symbiosis of sound and light create a unique atmosphere for each exhibition hall.

6. TECHNICAL IMPLEMENTATION OF THE PROJECT

The *DIALux* lighting design program was used to determine the optimal arrangement of the sculptures and photographs in each hall. With its help, the sketches on paper were transformed into computer visualization of all four halls (Fig. 6). As a result, full images of all rooms were obtained, showing the real illumination levels, the location of shadows and other key aspects. After some rearrangements of sculptures, the way was found and further implemented. It is important that *DIALux* allowed me to see the predicted result even before the installation of equipment (Fig. 7).

The lighting equipment for the project tasks was made in my WINKELS CONCEPTS design office in Germany. Especially for this project in three weeks the design of LED luminaries with a length of only 30 mm and a diameter of 25 mm, the power of 4 W and with a correlated colour temperature of 3000 K, with the LEDs by Cree (USA) and five different types of lenses (very narrow, narrow, wide, very wide, with prismatic diffuser) by Ledil (Finland)) was developed. Five types of optics were used, depending on the requirements of the geometry of the illuminated space and the specificity of the sculpture material. The design concept of lighting devices allowed us to change the illumination level of each exhibited item, "play" with accents and flexibly adjust to specific artistic tasks (Fig. 8). 80 luminaries were used in total.

Can say, we had two sources of LED illumination for each sculpture in total. Depending on the position of the source relative to the sculpture, a luminaire with a wide or very wide luminous intensity curve was used for the basic lighting, which, if necessary, was supplemented by the luminaire with narrow or very narrow luminous intensity curve to set accents in accordance with the peculiarities of the sculptures. This meant the understanding of the artistic concept, what ideas the author wanted to convey to the audience, and only then – the development of the lighting project. Small sculptures were illuminated by only one luminaire, and some of the large sculptures – by three or four luminaires, depending on the size of the sculptures. We were limited by the possibility to use only LEDs with a correlated colour temperature of 3000 K, so the right choice of optics and the exact arrangement of the light spots were very important for giving expression to the texture of the sculptures. For example, some clay sculptures were highlighted only using a diffuser to emphasize their delicate texture without any excessive reflections of light.

7. CONCLUSION

The participation in the project convinced me that technical possibilities of exhibition lighting allow me to solve the most interesting and complex artistic tasks, and even to create objects d'art. The visitors to museum exhibitions already perceive the lighting as an integral attribute of creative self-expression. The lighting design technologies advances with time, and there is no doubt that new developments will reveal new light resources.



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