STAGE IN THE SPOTLIGHT AND PARADOXES OF THE PROFESSION: ARTIST, LIGHT, THEATRE

Elena A. Zaeva-Burdonskaya¹ and Yuri V. Nazarov²

 Moscow State Stroganov Academy of Design and Applied Arts (S.G. Stroganov MGHPA)
National Design Institute, Moscow E-mail: lenartt@gmail.com

> Light is a worldview Federico Fellini

ABSTRACT

Nowadays, the lighting designer is becoming one of the leading figures in forming of the concept of theatrical scene design. Lighting technologies with great potential of illumination, colour and graphic capabilities allowed the profession to occupy the leading positions in the space of any object. Today's orientation of the whole visual culture to staginess alongside with avant-garde inventions of stage designers in the early 20th century have formed the main artistic trends of this art. Nowadays, the modernistic findings of the past are supplemented by innovative multimedia technologies. Visual techniques worked out in stage shows have seriously affected the people's attitude towards the stage space. They have made theatrical performance very dynamic by using lighting and media effects, sufficiently widened the scope of visual and expressive abilities of an artist.

The new paradigm of light as an active tool of form-making allowed modelling the space by means of lighting technologies. Stage light has become a form possessing great emotional power inseparably associated with the dramatic composition of performance. At the same time, the goal of a lighting designer cooperating with theatre designers and costume designers should permanently lead the audience to *catharsis* and innovative light engineering techniques play a great role in it.

Naturally, such innovations in theatre art made it necessary to correct the programmes of training of universal specialists required in this area. Professional education of a theatre lighting designer, apart from knowledge of technology and basics of scenography, requires serious artistic training.

The methodological experience obtained in scenography training of future designers in the Environment Design sub-department of S.G. Stroganov MGHPA may provide an example of new design approaches to solving of comprehensive problems of scenography. Design training techniques used in the sub-department include the method of environmental approach, the method of script modelling using a virtual design model and the method of conceptual design.

Key words: light designer, light design, scenography, design training, conceptual design, script modelling, catharsis, building of the stage space

1. INTRODUCTION

1.1. Basics of the Contemporary Trends in Theatrical Lighting

"The ramp goes out – there is no theatre any longer," M. Bulgakov used to say. The light is the basis of a theatrical performance as it is built in the structure of scenography as one of the key players. Expression of a theatrical performance is influenced by

its synthetic nature. The architectural, artistic, dramatic, dramaturgic and musical model of a performance comes to life in a visual plot played on the basis of a light script. There is an aphorism by one of the today's most sought-after theatrical designers A. Melnik: "A lighting designer should listen with own eyes".

The newest trends of the contemporary synthetic theatrical performance were founded back in the last quarter of the 19th century by R. Wagner in his version of "national drama". On the basis of the national epic, dramaturgy of the great composer's operas united music, visual and applied arts, decoration landscape and light. Technical achievements and stylistic mobility of art nouveau established new genres of colour music (A. Skryabin, M. Čiurlionis). V. Meyerhold synthesised scenography with avant-garde futuristic solutions in the field of graphic design which is rooted in mass culture. By means of light projection, the director introduced text images of mottoes, slogans, eye-catching names of episodes, advertisements, etc. in performances [1].

In the art deco era, alongside with search for interdisciplinary synthesis, a reverse process is notable: a theatrical performance itself becomes a force initiating innovative processes in light design and other types of visual art. Such processes appeared due to global reorientation of culture from "figurativeness" to "expression", its refocusing from literature to spectacles on the cusp of the 19th and the 20th centuries. "...To the least extent, our epoch is being verbal... in the 20th century we are facing the "echo" of the forms of communication created at the early stages of the human history. Today, expression of these forms is concentrated in visual communication." [2].

The project of interior lighting developed for French oceanic liners SS Paris and SS Normandie (1930's) also obeyed the laws of scenography. According to the René Lalique's idea, shining jewellery of the visitors of the ship restaurant and flaring light columns should blind the guests and demonstrate the luxury and beauty of the interior (architects Patout and Pacon) turning it into "the newest version of the Versailles mirror hall." [3].

New capabilities allowed economically feasible methods to use for industrial production of pressed glass. Substantially, a new sphere of architectural glass industry was established, with its high thickness, transparency, shine and mat surface sometimes engraved. Mysticism of the visions of illuminated pressed embossed glass in the Lalique's interior decorations formed the dramaturgy with tension similar to that of a liturgy in the St. Matthew's church known as the Glass Church in Millbrook (Jersey Island in the Channel Islands).

Theatricalised game with the interior space originated new forms and types of artificial lighting: lighting cornices made of pressed glass panels with quarter round cross-section and a cast ornament on the outer curve. For the first time, cast forms of glass used for suspended ceiling lamps and chandeliers (designed by R. Lalique) created unusual stray light with the ceiling acting as a reflector. The electric light created an effect of two levels on the ceiling lamp – the reliefs of the decoration and the background (as continuation of the game with the space and the spectator). According to art critic Gabriel Mourey (1865-1943), "It is commercial art, greatly thought-out and clear, which allows us to use a really modern and lively feeling in decoration... and in arrangement and decoration of public buildings such as... dance halls, shops, banks, theatres, concert halls, etc. It definitely bears the sign of our complex civilisation eager for elegance, originality, comfort and luxury." [3].

1.2. Factor of Innovative Technologies in Light Scenography

Theatre is distinct from other synthetic arts due to the great power of tradition. "Pursuits and discoveries of theatre designers of the beginning of the 20th century, had defined the development of the world's performance art for many years to come. Modern technologies just develop the directions founded decades ago." [4]. One of them is the experimental field of light scenography which keeps enriching itself by lots of innovations originated by the digital era.

Dramatic change of paradigms in the lighting art turned it from a supplement to objective and spatial environment into a real tool for form-making and artistic modelling. Such terms as "light plastics", "light form" and "light environment" (N.I. Shchepetkov) appeared as self-consistent design formats capable to cover the whole stage space. Such conceptual setting resulted from the stage-by-stage development of the field of activity of a light designer proposed by the English researcher Christopher Cuttle "...to identify the main themes that have di-

rected the objectives of the lighting profession. It is proposed that the objective of the first stage was provision of uniform illumination over a horizontal plane, and that of the second stage has been to provide illuminance suited to human need, based on visual performance. This brings us up to the current era, and... That the second stage has failed to achieve its objective... Familiar notions of lighting effectiveness and efficiency are turned upside down, and an entirely different way of thinking about interior lighting design is revealed... The essential difference is a switch from assessing light incident on planes to assessing light arriving at the eye. Such change in thinking may be seen as a precursor for the third stage of the lighting profession" [5] which takes a spectator's emotional state into account.

In the 21st century, theatre has changed the nature of visual perception of a performance even as compared this to thirty years ago. Today's consumer fed-up with excessively dynamic media flow often lacks emotions and psychological tension in an environment formed by a conventional light plot. We cannot imagine ourselves beyond the elements of a show which brought additional elements of dynamics to theatre. Of course, they include video mapping in the form of 2D and 3D projections (semi-transparent curtains, smoke, water flow, etc. act as a screen). Laser installations, holographic sculptures, art objects based on light and colour dynamics, etc., which are gradually being introduced in stage dramaturgy, may also be included in this list. Television projections and special concert light effects are pro-actively embedded in stage performance. Their goal is to efficiently affect emotions of the audience, to emphasise accents, to express director's remarks. However, suggestive nature of light embodied "in unpredictable dynamics of light flows affecting nerve centres of human body hides lots of mysterious and non-studied mechanisms which are intended to provide the hypnotism so required by theatre in different portions." [6]. Given the powerful psychological effect of light on a spectator's state of mind, it is necessary to use correct approach and to be very careful when arranging the light stage space.

Illusory space often becomes an analogue of romantic "expression of inexpressible" which is finally within an artist's control. Friedrich Schiller noted that "...everything that our souls feel in the form of vague and unclear senses is provided to us by theatre in loud words and bright visions with astonishing power." [7]. In the Human Voice one-woman performance (Helicon Opera, designed by R. Protasov, directed by D. Bertman, 2019), at the moment of the highest emotional tension the microphone on stage begins to shine brightly during the aria performed by T. Gverdtsiteli symbolising the singer's "soul light" (equality of light and reason is recognised since the Enlightenment).

In The Government Inspector (Alexandrinsky Theatre, director V. Fokin, designer A. Borovsky), in order to create phantasmagoric, amplified, grotesque plots and to solve the visual space of Saint Petersburg capable to "twist, sevurity, destroy", I. Epelbaum from the Shadow theatre was invited, and planar decorations acted as the screen surface [8].

Opinion of a reputed director M. Zakharov confirms artistic priority of such effects. The maitre admits that "...light should serve as a catalyst of acting processes and even the detonator of possible emotional explosion leading to catharsis, the shock..., for which people burdened by modern information still keep going to theatres. Fancifully developed light plot in a talented scenography uniting with actors' inspiration on the same energy basis forms an integral whole." [6]. Answering the question about the future role of video projections in design of opera and dramatic performance and whether the projectors will replace traditional decorations, E. Roller, light designer of the Zurich Opera House (known for his innovative light engineering approaches in performances – author's note) was confident: "Everything depends on the director's ideas and scenography solutions. But I don't think that projection technologies will fully replace theatrical decorations." [9].

1.3. Aspects of Theatre Light Designer Training

It is obvious that further development of dualistic artistic and technical light plot of a performance has two dimensions. The first one is using of the wider technical and technological innovations which are infinite in terms of possibilities. The second one is involvement of artistic imagination formation of which is due in no small part to the training programme of a future specialist. This is the nature of the universality phenomenon of the profession of theatre light designer which is still a result of random choice for many specialists.

In fact, schools of theatre arts train their students as technician artists, however, the programme is full of theoretical disciplines detriment of practical ones. This situation is common not only for theatre light designers but for light designers in general. M.A. Kanatenko and O.M. Mikhailov note in their work [10] that "...today's students who have been trained much better and are more all-round than their peers were 50 years ago still have to start at the same point as their fathers and grandfathers...".

Due to its conservatism and medieval structure, theatre has kept the guild principle of transfer of skills from a master to an apprentice. Due to the fact that "there is no education [in the profession], a feeling of a school is very important... Funny as it is, there is no normal theatre light design school." [11]. The roles of a "master" and an "apprentice" make theatre related to the methodology of artistic education where, similar to theatre, the mission of a mentor keeps defining the quality of professional knowledge and skills of a student actualising author's, free and creative attitude to the work material. Thanks to emotional and artistic potential, we still consider interesting the performances by the great theatre designers: E. Gansburg, a light designer (A. Bryantsev Youth Theatre, Lensoviet Theatre, BDT, Alexandrinsky Theatre); O. Sheintsis, chief scenographer, and M. Babenko, a light designer with Lenkom Theatre (Juno and Avos, The Memorial Prayer); D. Borovsky who cooperated with directors of the Moscow Art Theatre, Maly Theatre, Taganka Theatre, Sovremennik Theatre, etc. "The power of his scenography... drafts and sketches... the performance itself... transformations of space, colour, light, interaction of the decoration and the music" [12] certainly give evidence of an artist's synthetic talent. Not coincidentally, the academic tradition of the classics of stylistic allusions can be seen in works by D. Borovsky (The Gambler opera by Prokofiev) where "architectural sources from the High Remus to Art Nouveau are edited by a constructivist." [12].

In his Stage Lighting Lessons, Neil Fraser, the director of Technical Training with the Royal Academy of Dramatic Art, London, listing the results to be achieved by means of stage lighting, emphasised, among others, "the feeling of the stage and overcoming by special effects". He focused on innovative and artistic approaches to design: "...test your ideas practically, try something new, explore and create learn from painters to use light and build

composition of your picture. The works by Rembrandt, Caravaggio or David Hockney may serve as good examples." [13]. The master's programme of the famous *Parsons School of Design* (New York), the world's leader in the spheres of theatrical, architectural, interior and exhibition lighting as well as design and manufacturing of equipment, offers "interdisciplinary variants of learning allowing students to develop deep technical and aesthetic understanding of interrelations between light, architecture and interior design" [14].

1.4. Design Training

Let us try to consider the main principles of theatrical light application and related artistic capabilities as exemplified by the training projects of the Environment Design sub-department of S.G. Stroganov MGHPA. In 1906, in his Handbook for a Dramatic Actor, K.S. Stanislavski wrote: "There is no and there is not should be neither a study guide not a grammar of dramatic art. As soon as it becomes possible to fit our art into narrow, dull and straight-lined framework of a grammar or a study guide, we'll have to admit that our art no more exists." [15]. All these make the way to an experiment performed in scenography training projects much more complex. The selected methods of design are justified by necessity to make creative searches totally free, to keep respect for position of an author, by aspiration for stimulation of artistic processes when considering fundamental compositional and artistic and visual laws of stage space building.

2. METHOD OF STUDY

The main principle of a theatre designer is possibility to talk only about creative principles but not about abstractive universal methods of formation of stage lighting space. In each case, this will be its own approach to design selected basically within the dependence on the artistic challenges of a performance. However, in any case, the artistic and humanitarian component is the priority of the design approach.

2.1. Environment Approach Method

The environment approach, the analogue of the system approach, has become the basis for analysis and development of scenography projects cre-

ated as part of design training in the Environment Design sub-department. It is based on the most important concept adopted by design together with the post-modernism paradigm back in 1970's. The context always implies the dialogue of two components (according to M.M. Bakhtin): "text-context", or "object" and its contextual "background". Basically, the environment approach includes the more complex system of "designed environment" as the main component which is the basis for synthesis of arts and use of expressive means contained in it. Light is contained in the "text" of scenography as an integral giving the true life to a performance.

2.2. Method of Script Modelling with Building of a Virtual Design Model

As part of the environment approach, the method of script modelling is formed which contains "... methodology aiming at active use of designer's intuition and reflection, by virtue of which, a designer may initiate introduction of innovative form-making processes into a designer environment. Uniting of script modelling methods may serve as the groundwork for creation of such design methodology." (V.F. Sidorenko [16]). A script is allowing to plan the work with an object stage by stage, in accordance with the goal and challenges, forming the most optimal parameters of an environment affected by a large number of factors (which also include the synthetic theatrical performance).

The design method of script modelling is similar to space theatrecalization techniques. This deliberate creation of "successful" points of perception implies frame by frame showing up of sights (stage settings) forming a spectator's environment perception with consideration of role positions of "environment explorers", distribution of script axes, stage settings, introduction of "intrigue", etc. [17]. A script provides naturally stable lighting environment with visual dynamics. Visualisation of immaterial virtual light objects and visions, changes of visual light frames have exclusively author's emotional and creative foundation. It's no coincidence that the profession of a light director is similar to the profession of light designer. Use of multimedia techniques of light arrangement on stage reflected in engineering, directing and artistic components has opened a gate for interactivity of the stage space and its dynamic filling, active effects of light visions, including as part of the psychological dialogue between an actor and a spectator. Digital modelling has made it easier to build volumetric and spatial analogue models facilitating the work with light plot with consideration of different "points of view".

2.3. Conceptual Design Method

The principle of conceptual design is based on humanitarian approach to environment design, with human always acting as a starting point. In many cases, the concept of a light project may interfere with the common environment scenario but most frequently goes beyond the storyline dealing with artistic and technical aspects, design technologies and visual effects. The concept involves the project of light arrangement of stage environment from elaboration of ideological strategy (as a result of pre-design analysis) and definition of the system of design approaches to creation of a visual work model of a light environment, i.e. the visible image of a future object. Legitimacy of selection of conceptual approach to light design of a performance is confirmed by priority of artistic component in the work of a light designer. Due to introduction of innovative lighting technologies in scenography, light designers have been pretending to a right to form the light image of a stage space more actively. The established procedure of work with a lighting project including setting up a problem, origination of an idea and creation of art images provides an evident analogy with academic art which possesses a wide potential of design capabilities for creation of a light scenario.

3. RESULTS

All of the training projects are distinctive with their conceptual basis. Design technology prioritises the visual artistic component of scenography including development of the structure of subsequent shift of performance stage settings, design of volumetric-and-spatial and planar decorations (if any), 3D visualisation of the stage space, development of costumes, and preparation of advertising materials.

3.1. Metaphor of Light

Modern technologies allow us to interpret familiar and already classic stories in a new manner. De-





Fig.1. Design concept of a performance based on Hans Christian Andersen's Snow White (Design project, 5th year of education, specialist programme. Author: Yu.A. Malyutenko. Educators: Prof. E.I. Ruzova and Prof. E.A. Zaeva-Burdonskaya, 2009)

veloping traditional scenography directions founded in the past, light technologies are allowing to create bright and dynamic light images providing the decoration with a nature of a "speaking" object. *Metaphor of Light* embeds in the script texture, manifesting itself not so much at the form level as at the sense level.

In the scenography project of the famous fairy tale The Snow Queen by Hans Christian Andersen (Fig. 1), light becomes a metaphor of bluish white ice acquiring an image of moving semi-transparent figure and modular decorations. By means of a video projection, an illusion of show fall and a blizzard is created, giant roses "grow" and frost winter trees appear on a transparent net screen. The light "lightens" the Moon in the sky, illuminates the windows, etc. An advantage of the project is minimum amount of decorations with high compositional variability in changing of the episodes. The stage space is built with consideration of maximum freedom of movement provided for the actors.

Capabilities to create projects integrating innovative multimedia digital content into the system of traditional plastic form-making of stage and projects based on light technologies appeared on the cusp of the 20th and 21st centuries. A number of technological methods may be united in one performance, which partially resembles the environment of variety shows with their goals to create a complex and fairy image - "expression of inexpressible". By means of laser projection, a whirlwind accompanying appearing of a genie out of a lamp is created, projection technologies are allowing to make characters "fly" on a magic carpet, to build the walls of a mirage town, etc. Directed light beams of a fountain supplement illuminated semi-transparent screens of the decorations of a sultan's palace interior (Fig. 2).

Light not just creates the forms and visions of a theatrical environment but also arranges the space, emphasises plans, provides the stage "box" with a feeling of infinity, depth and dynamics.



Fig. 2. Design project of the Aladdin performance based on the Aladdin and the Wonderful Lamp (Design project, 5th year of education, specialist programme. Author: E. Shonia Educators: Prof. E.A. Zaeva-Burdonskaya, prof. E.I. Ruzova, 2009)

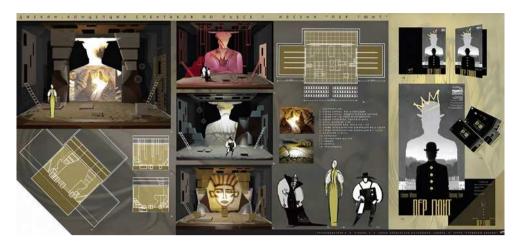


Fig. 3. Design project of a performance based on Peer Gynt play by H. Ibsen (Design project, 5th year of education, specialist programme. Author: N. Zykova. Educators: Prof. E.I. Ruzova and prof. E.A. Zaeva-Burdonskaya, 2009)

Constant projection on a stage background becomes the main technique supporting the kinetics of a performance. For the duration of a performance, the process of creation of pictures for a specific act of a performance using sand animation is being demonstrated. Smartness of Henrik Ibsen's dramaturgy is metaphorically reproduced through transience and fluctuation of flowing sand particles, the colour palette of light on the picture plane. All the sand pictures demonstrated in the project were made by the student (Fig. 3).

A project based on a famous tragedy by A.S. Pushkin is designed for performance in the Mimics and Gesture Theatre (Moscow). The performance is intended for deaf spectators, which defines the distinctions of visual arrangement of scenes

(Fig. 4). Dramatic dance, plastic movements of actors are forming the basis of the "text" of a play are accompanied by video projections in the style of shadow shows. Selection of black and white silhouette light images and red light of projectors (the image metaphors of blood and poisoned wine) increases the mystical dramatic effect of the stage. Reflective surface of deformed floor multiplies the blood-red and white light flows and LED strips of improvised "columns" imitate the infinite depth in the space of black box of the stage.

3.2. Performance in Reflection

W. Shakespeare's classic is immortal, which makes it a constant source of inspiration. The fol-



Fig. 4. Design concept of a performance based on Mozart and Salieri by A.S. Pushkin (Design project, 5th year of education, specialist programme. Author: E. Baimova. Educators: Prof. E.I. Ruzova and prof. E.A. Zaeva-Burdonskaya, 2009)

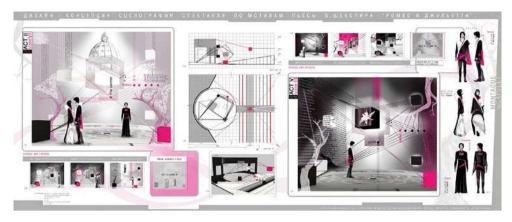


Fig. 5. Design concept of scenography for a performance based on Romeo and Juliette by W. Shakespeare (Design project, 5th year of education, specialist programme. Author: O. Simatova. Educators: Prof. E.A. Zaeva-Burdonskaya, prof. E.I. Ruzova, 2006)

lowing quote is given in the *Light* journal "...there are stories which embody the capability to expand the horizons of customary approaches to stage production and not just to present a familiar story to the audience but to create a startling unity of music and decorations. In Hamlet-machine opera by W. Rihm, Shakespeare's well-known play turns into grotesque, the drama breaks into fragments, which provides actors with a large space for interpretations." [9]. In the Zurich Opera House's performance de-

scribed by the journal, high-definition *Christie Box-er 4K30* projectors were used.

In the interpretation of the Romeo and Juliette project (Fig. 5), the love theme sounds like a super-temporal model of the great human drama expressed by the theatre designer by means of high technologies.

The projections not only build separate pictures providing the whole space of the stage for actors by enhance emotional space of the performance. The

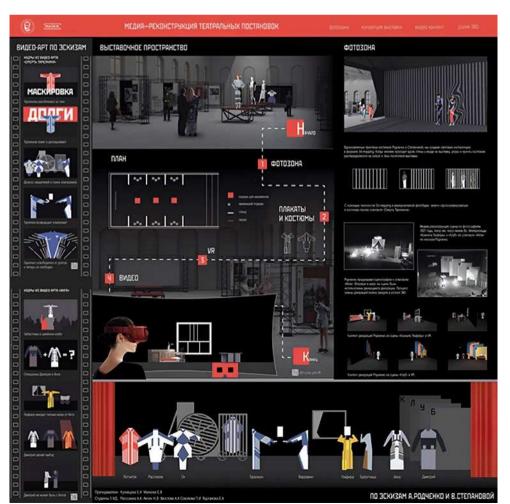


Fig. 6. Project of media reconstruction of costumes for Inga and The Death of Tarelkin based on sketches by Rodchenko and Stepanova (Design project, 3rd year of education, bachelor's programme. Authors: N.E. Akgyun, A.A. Rassokhina, E.I. Burganova P.A. Sokolova. A.A. Khvostova. Educators: senior lecturer E.A. Kuznetsova, E.V. Malkova, 2019)



Fig. 7. Photo-script of the video reconstruction of plots for The Death of Tarelkin and Inga performances (Project of media reconstruction of costumes for Inga and The Death of Tarelkin based on sketches by Rodchenko and Stepanova design project, 3rd year of education, bachelor's programme. Authors: N.E. Akgyun, A.A. Rassokhina, E.I. Burganova P.A. Sokolova, A.A. Khvostova. Educators: senior lecturer E.A. Kuznetsova, E.V. Malkova, 2019)

magic of light illusions introduces the events of the Italian Renaissance time into the new value system formed by the era of mass media, the Internet and social media. Visualisation of the project is the mix of advertising materials of the performance taken from the website of the theatre. Such approach makes the nature of the work with the subject itself completely different. A new approach to scenography appears – through the lens of a screen, with a system of information provision, by means of infographics, etc.

3.3. Media Reconstruction of a Performance

The new Multimedia profile of the Environment Design sub-department has expanded the boundaries of innovations in stage space dismissive of traditional plastic form-making techniques. The format of an experiment tightly related to avant-garde art is constantly present in creative searches of the "Stroganovka" students in the 21st century. All of this was available for visitors of the AVANT-GARDE-THEATRE-FASHION2019 exhibition commemorating the 100th anniversary of constructivism which had been held in the Moscow Maly Manezh Exhibition Hall in October, 2019 (the project curator is the president of the Fashion Magic foundation N.B. Kozlova). The exhibition included archive materials from personal collections of the family of A. Rodchenko¹: costume sketches for Inga and the

Death of Tarelkin performances made by A. Rodchenko and V. Stepanova.

Looking for the ways of revolutionary renewal of theatre, the innovator directors of the early 20th century addressed futurist artists. Nowadays, the digital revolution has modified famous works by great designers of the past and presented them in a "filmed" multimedia format. The project reconstruction of the performance is made in the video art format. Brief content of the play is told by performance of "actors", the original thinking process of authors in the course of the drafting work is reproduced through the aesthetics of theatre costumes. The video sequence enters the wider space of media exhibition: with an interactive photo zone in the form of 3D mapping textures from the scene of the performance (the prison bars on the stage stylised in elements of Tarelkin's costume); in the form of the hall with posters and mannequins in original theatrical costumes; with fragments of performance decorations in virtual reality (VR) in 360° format ("Artist's Dreams"), Figs. 6 and 7.

The format of media reconstruction has discovered the new method of work with theatrical subjects. The interactive script is based on versions of forms familiar from sketches of historical exhibits. A modern spectator who is rather distant from the intrigue our compatriots were concerned with in the 1920's gradually indulges in the environment of unfamiliar collisions by means of familiar technical devices. This technique allows people to accept and feel the unique tension of artistic passion which originated the great Constructivism era which has become the starting point of the world's design and still defines the creative search of the students of today's "Stroganovka" to a large extent.

¹ The original materials, namely the sketches of costume for Inga and Death of Tarelkin, were kindly procured by A. Rodchenko's grand-son, professor, Doctor of Art Studies, A.N. Lavrentiev, Pro-Rector for Research with S.G. Stroganov MGHPA.

4. DISCUSSION AND CONCLUSIONS

Light and digital technologies have become the basis for revolutionary changes in theatre since the late 20th century. The widest range of capabilities which came with the era of media art embodied in the search for new scenography forms sometimes strikes the principles of theatre replacing them with surrogate shows. K.S. Stanislavski said: "If theatre had been just an entertaining show, it would probably not have been worth making such efforts. But theatre is the art of reflecting life." [18].

Design training is becoming a field for experiments and development of new expressive means of scenography. Unlimited students' ideas find solutions of traditional subjects in inversive and sometimes paradox design solutions. Dramaturgical material itself leads a designer who sometimes does not even have special knowledge of theories and practices of scenography. "There are frequent cases when light, image, or performance are created either intuitively or contrary to all canons. That is where the paradox of art lies within... One can accidentally... direct a great performance not even being a director." [4].

In the wide area of technologies originated from the digital revolution, light design entered theatre scenography with confidence. The new model of theatre lighting forms its own concept, its system of visual values where actors and audience perceiving the performance remain the initial parameters stabilizing multimedia innovations on stage. A director's or theatre designer's vision takes the visual capabilities of new technologies into account from the beginning. Artists begin to think with light forms. The term *lighting thinking* is used to identify design using human as a starting point of a problem. Light is created around him and he is the centre of gravity [19].

The experience of scenography training as exemplified by the Environment Design sub-department of S.G. Stroganov MGHPA has shown that application of multimedia has been increasing in project methodology selection and has led the further deviation from property system of space arrangement. This is witnessed by scenography works created in the Environment Design sub-department over the recent years, which do not comprise volumetric-and-spatial modelling but save the genre uniqueness of performance. Natural background and design culture acquired during training are kept

and developed thanks to comprehensive academic art training.

To a large extent, light designers are swift learners, and such specialty remains at the stage of establishment due to unilateralism of professional training methodology. Still dominant, canonical guild system of learning and sharing of experience from master to apprentice will be probably enriched by methods elaborated in the course of training of environment designers and multimedia. Use of new design techniques of 3D visualisation, building of work models of images and scenes of a performance, creation of digital photo-scripts, etc. may become an important stage of work with dramatic art by theatre designers and light designers. Relevant design models will allow us to "play" the technological effects in advance and to determine their necessity and possibility to be embodied cost-effectively.

REFERENCES

- 1. URL: https://www.krugosvet.ru/enc/kultura_i_obrazovanie/teatr_i_kino/SVET_TEATRALNI.hml (date of reference: 01.08.2019).
- 2. Social and Psycological Problems of Scientific and Technological Progress [Sotsyalno-psikhologicheskiye problemy nauchno-tekhnicheskogo progressa] / Eds. B.D. Parygin. Leningrad: Nauka, 1982, 169 p.
- 3. Bayer P., Waller M. The Art of René Lalique// London: Eagle, 2002,186 p.
- 4. Melnik, A.V. Theatrical and Concert Lighting. Performance Video [Teatralno-knotsertnoye postanovochnoye osveshcheniye. Postanovochnoye video]. (2018 edition). URL: https://lightsoundnews.ru/a-melnik-teatralno-kontsertnoe-postanovochnoe-osveshhenie-osnovy-postanovochnogo-video/ (date of reference: 01.08.2019).
- 5. Cuttle C. Towards the third stage of the lighting profession// Lighting Research and Technology, March 2010, Vol. 42, #1, pp.73–93. DOI: 10.1177/1477153509104013.
- 6. Zakharov, M. Light is Ideology. On Scenography and Oleg Sheyntsis [Svet eto mirovozzreniye. O Stsenografii i Olege Sheyntsise]. URL: http://www.l-teatr.ru/directors/oleg-sheyntsis/47/ (date of reference: 01.08.2019).
- 7. URL: https://antrio.ru/iogann-fridrih-shiller-citaty/ (date of reference: 01.08.2019).
- 8. Beryozkin, V. Aleksandr Borovsky. Theatre Matters [Aleksandr Borovsky. Voprosy teatra] / PROSCAENIUM. Moscow, 2010, pp. 69–92.

9. Music Becomes Visible in Zurich Opera House [V Tsyurikhskom opernom teatre muzyka stanovitsya zrimoy]. Light. Sound. News. 2018, Vol. 3, #56, pp. 24–25.

- 10. Kanatenko, M.A., Mikhailov, O.M. The Light Engineering Discipline in State Universities and Educational Standard [Distsyplina "Svetotekhnika" v gosudarstvennykh universitetakh i obrazovatelnom standarte]. Saint Petersburg. URL: http://lightonline.ru/svet/articles/discipline_svetotehnika_v_obrazovanii.html (date of reference: 01.08.2019).
- 11. URL: http://ptj.spb.ru/archive/29/face-to-face-29/svet-eto-dyxanie-sceny/ (date of reference: 01.08.2019).
- 12. Mikhailova, A. Borovsky in Opera [Borovskiy v opere], 2007. URL: http://timetable.theatre.ru/theatre-653/perf-22866/ (date of reference: 01.08.2019).
- 13. Fraser N. The light fantastic. The Lessons of Stage Lighting. Part 1. Introduction. URL: sistema-stage.ru / brand_news/neil-fraser-light-lessons-01 (date of reference: 01.08.2019).
- 14. URL: https://www.subjectart.ru/universities/parsons school of design/ (date of reference: 01.08.2019).
- 15. Stanislavski, K.S. An Actor Prepares [Rabota aktyora nad soboy]. URL: https://www.psyoffice.ru/9/stank01/txt17.html (date of reference: 01.08.2019).
- 16. Kuznetsova, G.N. Principles of Interaction of Structural Form-making and Visual Ecology in Environ-

ment Design [Printsipy vzaimodeystviya strukturnogo formoobrazovaniya i vizualnoy ekologii v sredovom dizaine] / Abstract of thesis of Candidate of Art Studies. Moscow: 2011².

- 17. Yung, I.S. Implementation of the Method of Script Modelling of Urban Public Environment: Problems of Theory and History of Ukrainian Architecture [Realizatsiya metoda stsenarnogo modelirovaniya gorodskogo prostranstva: Problemy teorii i istorii arkhitektury Ukrainy], 2013, # 13, pp. 241–247.
- 18. URL: https://www.kritika24.ru/page.php?id=43880 (date of reference: 01.08.2019).
- 19. Skarlatou A.-Z. Light Effects in the Design Process. Bartlett Faculty of the Built Environment, University College London, in candidacy for the Degree of Doctorate of Philosophy, Department of Architecture. London July 2010, 270. URL: http://discovery.ucl.ac.uk/1211391/1/1211391.pdf (date of reference 01.08.2019).



Elena A. Zaeva-Burdonskaya,

Prof., Ph.D. of Arts. In 1987, she graduated from Moscow Higher College of Art and Industry (former Stroganov College). At present, she is an Acting Head of the Environment Design sub-department of S.G. Stroganov MGHPA, Member of the Designers Union and the Artists Union of Russia, and Winner of the Moscow Award



Yuri Vladimirovich Nazarov.

Prof., Dr. of Arts. In 1972, he graduated from Moscow Higher College of Art and Industry (former Stroganov College). At present, he is a Rector of the National Design Institute, Corresponding member of the Russian Academy of Arts. Honorary President of the Union of Designers of Russia

² The method of script modelling is detailed in the article "Concept of Script Modelling", see collection: "Theoretical and Methodological Problems of Artistic Constructing of Complex Objects" [Teoreticheskiye i metodicheskiye problemy khudozhestvennogo konstruirovaniya kompleksnykh obyektov]. Moscow, 1979. (Transactions of VNIITE. Ser. Technical Aesthetics: issue 22, pp. 137–148.)