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Preface

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Maria Shchelokova

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1. Introduction

My interests lie professionally in art and modern theatre performances. The last years this field experienced transformation connected with new era of digital devices: interactive whiteboard, laser beam projector, touch screen computers, three-dimensional sets, and robot projects. Modern art uses widely digital tools for realization of different ideas. Computer technologies played a dynamic and increasingly important role in live theatre performance. Nowadays we can see increasing interest to such phenomenon as digital theatre- hybrid art form, which is primarily identified by the coexistence of “live” performers and digital media in the same space. This field of performance is insufficiently studied by reason of its newness, but it is getting more popular with the development of computer technologies. These are the main reasons why it will be interesting to explore and analyze digital theater performance. This topic is important for understanding the condition of the theater today in terms of the impact of new, always changing and improving digital tools and instruments, as well as the future prospects of their use.

Digital media in theater is a relatively new field, which is a rapidly growing, changing and expanding. It includes not only how modern digital technologies are incorporated into the artistic world but also how they influence modern play and if they change the meaning of performance. The decision to focus on digital performances derives from the fact that computer technologies create new possibilities for expressing ideas. Digital theater design and performance communicates to a contemporary audience in unusual way. Interactivity, the main feature of contemporary art formed due to the influence of computer technology, gives the possibility for the viewer to come into contact with the artist, and even participate in the creation of works. Robert Simanowski writes that “Digital Art and Meaning is driven by the belief that bodily experience within an interactive work is the more or less intentional result of creative expression and that it thus requires interpretation on the part of the spectator or interactor” (Simanovski, 2011:5).

The interactive capabilities opened up by computer networks allow for shared creativity, from textual or telematics real-time improvisations to globally constituted group projects with distance no barrier to collaboration. Computer industry adopted performative paradigms while its own influence looped back significantly into digital performance practice. The application of new media to performance art is extremely diverse and the internet has proved particularly

significant in its development not only as an immense interactive database, but also as a performance collaboration and distribution medium.

This thesis seeks to explore how digital media / digital artefacts are being used and implemented in theater performance art, based on analysis of one modern play. The aim of this thesis is also to see how digital performances affects and changes the traditional notion of theater as an art form.

This thesis aims to answer the following research question:

What impact do new digital devices have on such art as theater?

Contemporary digital theater should strive for a harmonious union of the different branches of digital technologies with the classical theater basis. The problem of finding harmony makes the topic of this work relevant and interesting. The subject is relevant not only in the context of the analysis of the most interesting digital solutions used in new theater, but also in the context of the fact that our computer-based society creates all prerequisites for further development of organic synthesis of tradition and innovation trends.

2. Theory, method and research materials.

The theoretical background of the thesis will cover two parts.

The theoretical framework of the first part will describe the historical aspect of digital performance. Theatre has always used the cutting edge technology of the time to enhance the “spectacle” of productions. From the first experiment with the stage in the use of *Deus ex machina*, to the guild-produced Medieval pageant wagons, to the innovation of perspective painting and mechanical devices on Italian 16th Century stage sets, to the introduction of gas, and later electric, lighting effects, to the modern use of computer to control lighting, sound and set changes, technology has been used in ways that have created incredible visual and auditory effects. (Dixon, 2007: 40) For examination, I will take the genealogy of digital performance from the Greek art to digital performance since 1960 year. I will focus attention on the early-twentieth-century Avant-guard, closely linking today’s digital performance with the theories and practices of futurism. In doing so, I argue the absolute centrality of futurist aesthetics and philosophies to current performance work utilizing computer technologies, because the modernist avant-garde period between 1915 and 1928 represents the most important historical period relevant to new media. My final part will be devoted to digital performances from 1960 year to our days. I will try to find out what changes happened in this field for the last years. The main theoretical source in this part will be book “Digital Performance: A History of New Media in Theater, Dance, Performance Art, and Installation” by Steve Dixon. The reason why I chose the work of Steve Dixon is because of the fact that he was the first who executed a deep analysis of digital performance. According to Dixon digital performance is “a generic performance but with an extra element of incorporating and integrating computer technologies and techniques into the production” (Dixon, 2007:6). In every historical period I will detect the common traits for all digital performances and new particularities brought by different epochs.

The second part will seek to describe what digital theater is, try to reveal classification of such theater. Relying on the classification of digital play, I would single out several criteria inherent to digital performance. These criteria will be fundamental in analysis of chosen digital performance. In this part, I will examine how such notions as intermediality, transparency and hypermediacy (Bolter and Grusin, 2000) are presented in digital theater and how it transforms and extends spatial perceptions and creates immersive and kinetic theater scenography. In this part, the thesis will highlight three companies working with different technical and artistic approaches in digital performance. I will speak about such concepts as immersion and interactivity, hot and cold media, video mapping, main themes and problems

in realization of digital performances. These approaches are widely used in digital art. They will be taken in consideration in analysis of research material.

With the help of this theory, it will be possible later to provide a deep and versatile analysis of selected digital performance. For analysis, I chose the digital performance “Super Vision” of an award-winning intermedia performance company The Builders Association. I will analyze methods and techniques in this play of “new generation”, relying on criteria offered by Steve Dixon. The thesis will illustrate how different artistic approaches are applied in this digital play. I will provide analysis applying not at the aspect of live performance (on stage), but on the recorded video, because I do not have such chance to watch the performance in real life, that is why I chose such option as YouTube channel. It is a different way of perception a performance via video than on the stage. By its nature, video directs the viewer’s focus. It tells you what to watch and when. It allows you to see moments that you may have missed at a live performance, giving you a different emotional impact. I will discover the interaction of theater performance and digital technology and show how the use of digital media has changed contemporary theater art. This topic is important for understanding the condition of the theater today in terms of the impact of new, always changing and perfecting multimedia tools and instruments, as well as the future prospects of their using. Modern digital technologies are already an essential part of our life, it concerns also the artistic field. Learning digital performance, I would like to understand how to use them with benefits not destroying at the same time strong classic background of theatrical play.

This thesis will use the information in practical part found on the book written by the directors and creators of the Builders Associations, devoted to this theater company and relate to this study. The observation of the performance will be conducted through internet channel.

2.2. Methods

The practical part of this thesis will employ video analysis method. “Video is increasingly the data collection tool of choice for researchers interested in the multimodal character of social interaction.” (Jewitt, 2012: 2) The use of existing videos as data raises many issues that are key for video-based and visual research. As I mentioned before this thesis will use video of digital performance “Super Vision” which is available in internet. To detect the main features of digital performance and to see how it changes the classical concept of theatrical play the thesis will analyze the video as the principal visual data resource. Video records have

particular qualities and features that mean it differs significantly from other kinds of data such as audio recordings or field notes. Digital performance requires visual analysis of data that is the main reason why such analysis is the most appropriate in this thesis. Visual analysis is directly associated with observation. A general feature of the observation as a method of collecting primary data is the ability to analyze particular: the behavior, gestures, facial expressions, expression of emotions of individuals and groups. This process is underpinned by systematic observation, which provides valid, reliable and detailed information relating to performance. Observing the procedure of performance on video I can examine all necessary characteristics from external part of view. It is essential for analysis of digital performance. I will observe the particular moments in digital performance through watching video. In video analysis, the research material will be studied from criteria offered by Steve Dixon in theoretical part and such approaches as intermediality, transparency and hypermediacy, immersion and interactivity, hot and cold media, video mapping, main themes and problems described in the chapter “Digital theater”. Choice is an essential part of video analysis and it is important to make clear what choices are made, using what criteria, and for what purpose/rationale. Making choice in video analysis the researcher conducting at the same time segmentation – detection of changes and selection of relevant changes for further analysis and evaluation. Sampling of video clips, episodes or fragments enables a move from the stage of reviewing whole events to increasingly shorter segments. In practical part of thesis, it will be chosen appropriate fragments of the video which reflect clearly how modern technologies change the perception of modern play.

3. Theoretical framework.

3.1. History of digital performance

Theater-based performances that incorporate digital media and computer generated projections have a long historical lineage stretching back around a hundred years. In my work I will attempt to question and discern what is genuinely new in the ontology of new media technologies and their application within the performance arts. What kinds of new digital devices are used nowadays and how they change the perception of audience. As I argue later, the computer does give rise to unique artistic modes of expression and new generic forms of networked and interactive performance, and we dispute the contentions of writers such as Matthew Causey, who declares, “There is nothing in cyberspace and the screened technologies of the virtual that has not been already performed on the stage.”¹ But equally, it is acknowledged that in digital performance the computer is commonly employed as an agent for the remediation of old and established artistic forms and strategies rather than as a means of originating authentically new performance processes and phenomena.

Theater, dance, and performance art have always been interdisciplinary, or “multimedia,” forms.² For centuries, dance has been an intimate marriage with music and has included the visual elements of sets, props, costume, and lighting to enhance the body in space. Theater, from its ritual roots through classical manifestations to contemporary experimental forms, has similarly incorporated all of the above, while additionally foregrounding the human voice and spoken text. Throughout the centuries, theater has been quick to recognize and utilize the dramatic and aesthetic potentials of new technologies. It is possible to observe first application of simple variants of not digital, but technical devices in early antique period. I will start my historical review with antique Greek period.

Mentioning Greek period of performances I should tell about what is Deus ex Machina and how it is connected with digital performances of our days. Deus ex Machina is probably the first try to use supplementary elements in expressing the plot of the performance. Deus ex machina is a Latin calque from Greek meaning "god from the machine". The term has evolved to mean a plot device whereby a seemingly unsolvable problem is suddenly and abruptly resolved by the contrived and unexpected intervention of some new event, character, ability or object. The term was coined from the conventions of Greek tragedy, where a machine is used to bring actors playing gods onto the stage. Euripides is considered the first

¹ Beuys, interviewed in Filliou, *Teaching and Learning as Performance Arts*, 169, quoted in Ulmer, *Applied Grammatology*, 241.

² Bürger, *Theory of the Avant-Garde*, 49, quoted in Rutsy, *High Techne: Art and Technology from the Machine Aesthetic to the Posthuman*, 76.

playwright of that time created the idea of using *deus ex machina* on the stage. The effect of the device on Greek audiences was a direct and immediate emotional response. Audiences would have a feeling of wonder and astonishment at the appearance of the gods, which would often add to the moral effect of the drama. As we can notice it was first step to use artificial devices for creating special atmosphere.

Next example of first primitive digital performance is medieval theater with its pageant wagons. Such wagons represented a movable stage used to accommodate the mystery and miracle play cycles of the 10th through the 16th century. Usually, the wagons remained stationary and the audience moved from one to another. During the guild cycles the pageants would move; the performers would give their plays at several locales so that many people could see them.

According to medieval descriptions, drawings, and reconstructions, a pageant wagon could also be simply a flat surface drawn on wheels that had a wagon next to it; these structures touched on their long side. In some cases a figure could descend from an upper area as if from the clouds, or actors could descend from the pageants onto the audience's level to enact a descent into an underworld. The stage was, then, a raised platform visible to the audience below. (Lee A. Jacobus, 2005, p. 148). Pageant wagon is the first models of modern moving scene in the theater. I can admit that such wagons were the great grandfathers of modern digital moving platforms of the scene. It was first step to the way of changing audience's perception and escape from clichés.

During period of Renaissance performance experienced some transformation connected with the idea of presenting the play. At that time the stage was a "presentational theater" in that there was no attempt to persuade the audience that they were not in a theater and no attempt was made to create any dramatic illusions because there was very little scenery. As we can notice in analyzing plays of renaissance time it was no attempt to create version of digital performance, even we can see the neglect of using different tools and constructions together with playing of actors.

From historical point of view Ninetieth century presents a particular interest for me as it was time of new ideas about performance and theater in general. Winsor McKay, who was considered, according to many, the "father of animation" has influenced countless generations of illustrators and animators, including Walt Disney. In 1914, McKay toured with the presentation "Gertie the Dinosaur". McKay decided to revive the dinosaur, proving that his drawings can move. He created from Gertie the personality and gave it emotions. During the performance McKay waving the wipe was on the stage to the right from movie screen. Then

Gertie appeared on the screen and like alive person performed the orders of McKay. During the last part McKay joined his character on the screen. (Dixon 2007:42) In fact, this performance was a theatrical multimedia performance ahead of its time the use of modern digital techniques in nowadays performance at the theater.

One of the most remarkable art expert of nineteenth century was German famous composer-Richard Wagner. Ninetieth century was marked by his concept "Gesamtkunstwerk"³. "Gesamtkunstwerk" (Total Artwork) or "Art of future" is Wagner's vision of the creative unification of multiple art forms: theater, music, singing, dance, dramatic poetry, design, lighting, and visual art. Wagner considered the entire history of art as the preparatory stage of the future synthesis at which own autonomous art would not exist anymore. The mutual penetration and fusion of all the arts lead us to the "artwork of the future". Wagner's conception is central to the lineage of digital performance both in its advocacy for grand theatrical spectacle and in the paradigm of "convergence" that unites the Gesamtkunstwerk with contemporary understandings of the modern computer as a "meta-medium" that unifies all media (text, image, sound, video, and so on) within a single interface.⁴ Wagner tried to immerse the audience in the performance on the stage using different technical and artistic strategies. He was the first theater producer to design and construct a sophisticated (and today still unique and powerful) audio "mixing" system. He experienced with a variety of technical and artistic strategies, from hiding orchestra out of view trying to avoid "alienation effect". Wagner's idea of emergence of different aspects in one composition made a lasting and significant impact on the theory and practice of the subsequent performance of the 20th century.

3.2. Futurism and the early twentieth century avant-garde.

New Media Researches, came to the territory of the performative arts (theater, dance, performance), show that the dramatic changes and active experimentation with computer technology happened in the last ten years. But theorists and critics still trace the roots in the experiments of the Dadaists and Futurists of the early 20th century

Futurism as avant-garde movement was born in 1910 in Italy. The name "Futurism " refers to the cult of the future and the discrimination of the past with the present. Such cult is inseparably linked with the notion of digital performance "look into the future". Technological advances and progress is a favorite topic for followers of this movement. In the

³ Wagner R. Art and Revolution. <http://users.belgacom.net/wagnerlibrary/prose/wagartrev.htm#d0e1202>

⁴ Bürger, Theory of the Avant-Garde, 49, in Rutsky, High Techne: Art and Technology from the Machine Aesthetic to the Posthuman, 75.

early twentieth century, the futurists worked toward a new synthesizing and technological performance form, just as performance practitioners using computer technologies are attempting today. Exalting the new technologies of their day, the futurists were trying to come to the merge of multimedia art with technology. Futurist innovations in the use of simultaneous, parallel action on stage (which borrowed cinematic techniques) can equally be related to interactive theater forms and performance CD-ROMs which present the user with options on what to choose to focus on and follow. (Dixon, 2007, p. 49). In 1915 Enrico Prampolini, Futurist Scenography, created a manifest describing luminous stages and virtual bodies in exactly the forms that we now see them, almost a century later: "The stage will no longer be a colored backdrop but a colorless electromechanical architecture, powerfully vitalized by chromatic emanations from a luminous source. . . . From these will arise vacant abandonments, exultant, luminous corporeality... Instead of the illuminated stage, let's create the illuminating stage: luminous expression that will irradiate the colors demanded by the theatrical action with all its emotional power..." (Wilson, 2005, p.25)

Central philosophical and stylistic elements of futurist performance, such as plastic dynamism, compression, simultaneity and the involvement of the audience correspond with digital performance practice. The concept of the alogical, which is the most important aspect of futurist performance, has clear correspondences with nonlinear computer paradigms and hypermedia structures. One of the first theater directors of futurism using innovative methods of performing was Erwin Piscator. He utilized film to create scenic verity of place that created new type of visual setting and stage action. Already in 1920 Piscator used modern techniques such as moving text messages projected onto the front curtain or video with the image of the sky. He was the first who used screen on the stage showing floods, sea or crowd scenes. Piscator also implemented treadmills to achieve the desired effect of motion in "Good Soldier Schweik". The treadmills with the combination of moving background expressed the ideas of futility of human efforts. (Willett, 1979:60) Three performances of Piscator "Hurra, We live", "Rasputin" and "Good Soldier Schweik" demonstrated pioneering work with multimedia technologies in the space of the theater, determined its creative aesthetics and demonstrated a broad array of opportunities in the media projection in theater.

Modern representatives of digital performance of 21 century took for base principle postulates of futurism and reflected them from the point of using modern computer technologies. Enrico Prampolini, Italian futurist painter and theater designer, created the manifest "Futuristic Scenography" in which he described the role of light and luminous forms at the performance. Prampolini's description of the replacement of living actors by luminous forms is a

commonplace in digital performance, through digitally manipulated human forms, as well as computer-generated figures and avatars. One of the brightest example of futurist principle in new era is the Jeremiah project realized in 2001. Susan Broadhurst, British performance practioneer, writes in her article “The Jeremiah Project” how she realized this unusual project and how Prampolini’s description helped in perception of performance. Jeremiah is an artificial intelligence avatar designed by Richard Bowden, a systems engineer from the University of Surrey,for Susan Broadhurst’s Blue Bloodshot Flowers. The performances consist of physical/virtual interaction utilizing motion capture, artificial intelligence and 3D animation. Jeremiah, a luminous, computer-generated animated head based upon Geoface technology, appears on a rear screen and interacts autonomously and in real time with a live performer, Elodie Berland. Jeremiah’s vision system, AI, and emotion engine software enable him to be a wholly spontaneous and independent “actor,” a true “futurist” creation. The idea of this combination of real acting with unreal computer character Susan Broadhurst explains in following way: “My main argument is that in the digital, the physical and virtual are accentuated and, hence, current theory needs to be adjusted to allow for this technical interface and accompanying corporeal prominence. Conventional ways of interpretation have been dominated by the transference of linguistic interpretation to the nonlinguistic. This makes the body a secondary phenomenon. However, in many art forms, the body is primary and yet transient. Unless the immediacy of the body (both physical and virtual), including corporeal readings, is made the focus of interpretation, such performances as Blue Bloodshot Flowers cannot be fully appreciated. Therefore, I am arguing for an “intersemiotic” mode of analysis, that is, one that includes but also goes beyond language.” (Broadhurst, 2001, p. 48) The tensions in the performance exist within the spaces created by the interface of body and technology. We can suppose that virtual interface give rise to a new aesthetics. The cooperative work of real artist and computer “body” expands the scope of perception of performances. It expands also the possibility for actors to interact with non-existing reality. Such interaction is fascinating as for audience so for performers.

Surrealism, expressionism and dada made one of the most significant impact on the modern digital performance at the beginning of twentieth century. Digital performance usually explores representations of the subconscious, dreams, and fantasy worlds, as well as other central themes of early twentieth century surrealist art, film, and theater. Collages of French Dadaism and Surrealism are moved into virtual reality with the use of the computer which became an excellent tool for manipulating of images. Great sources of theatrical revitalization of twentieth century emerged from the interest that experimental artist showed in

performances. Audience can see “the theatre’s intrinsic connection to physical reality and social existence” (Harding J., 2013, p. 29). Participation of spectator during the performance became one of key factor in constructing of performance.

At the beginning of the twentieth century Wassily Kandinsky, influential Russian painter and art theorist, observed in his essay “Über die abstrakte Bühnensynthese” the decline of the theater in its old form. He declared that theater needed a new form in which the individual art be brought together. “The theater has a hidden magnet, which has the power to attract all these languages, all means of the arts, which together offers the highest possibility of monumental abstract art.” (Chapple, Kattenbelt, 2006: 31) For Wassily Kandinsky new form of theater should contain the compilation of music, dance, elements of colours and sounds. It was first steps to the way of modern understanding digital theater appealing to change the attitude toward the concept of performance in theater. Following the words of Wassily Kandinsky we can claim that theater is the paradigm of all arts and thus a hypermedia that is able to incorporate all other arts and medium.

The beginning of twentieth century in the world of theatrical performances is connected with the name of eminent person- Bertolt Brecht. I would like to pay your attention to his essential work "Epic Theater" and his concept of "Alienation". Bertolt Brecht was against naturalistic theater. To his point of view epic theater should turn to the audience analytical skills, awake doubts, curiosity, pushing to the realization of events. Alienation effect of Brecht has the same meaning and sense as "defamiliarization" of Victor Shklovsky: represent a familiar event from unexpected way, overcoming the automatism and stereotyping of perception. Brecht's alienation we can observe partly in modern digital plays in which the use of computer technologies represent the act of performance from unusual and unexpected position.

In 1925, the Director of Surrealist Investigations was the French theater theorist and visionary Antonin Artaud, a figure whose influence has been central to much experimental performance practice since the 1960s, and continues undiminished in the digital performance arena. First experience in surrealistic performance was play “Methuselah” represented combination of cinema and theater. Antoin Artaud tried to go from classic understanding of performance using innovative method of representation. Virtual Reality technology and techniques such as black-effect “Clean Video” projections offer possibilities for the realization of Artaudian ideals of “an ‘immense space’ from which images and actors materialize as if emanating from the psychic space of pure archetype.

Expressionistic styles and particular techniques of exaggeration have been adopted by a number of artists and companies, and expressionist plays from the 1920s have been reconceived for digital theater productions, notably Elmer Rice's *The Adding Machine* and Sophie Treadwell's *Machinal* by The Institute for the Exploration of Virtual Realities. Many performance artists have also used the ludic and hallucinatory design capabilities of new technologies to explore expressionist theater's primary thrust "to express something in outward form which is essentially interior, to project a soul-state. (Dixon, 2007, p. 71)

3.3. Multimedia Theater 1911-1960.

The pioneering experiments conjoining film and theater between 1900 and 1915 provide the starting point and inspiration for *Opera* (2000) by one of the leading digital theater companies in the United States, the Builders Association. The company describe the performance as reinterpreting the early-twentieth-century experiments "using the current explosion of club-oriented ambient and 'drum and bass' music and video. *Opera* combines these two elements 'sampling' fragments of theatrical history through the language of contemporary DJ and VJ culture." The performance uses a system of MIDI triggers that are activated by the onstage performers and offstage technicians to prompt video samples and sound loops in real time. In drawing parallels between the film-theater experiments of the early 1900s and recent techno and club culture events, the Builders Association explicitly links past and present technologically driven enhancements of performance spectacle. In doing so, it also implicitly places contemporary digital performance developments in relation to an equivalent stage of highly embryonic experimentation; both periods of performance history share the same opportunities and struggles inherent in adopting and adapting "new" technologies to reconfigure and advance established theatrical forms. In Russia, especially after the revolution of 1917, the great influence was exerted by Italian Futurism which established such Russian futuristic group performance as the Factory of Eccentric Actor. Their controversial theater production of "The Marriage" by Gogol (1922) used a video projection in the performance. One of the most remarkable person of this period was Austrian-American architect, theater designer- Fredrick John Kiesler. The combination of engineering and art education has created a theatrical genius. The fame came to Kiesler after staging of the play "R.U.R" by Karel Capek in 1923 in Berlin. Sceneries for Capek's performance revolutionized theatrical aesthetics. Rejecting the traditional illusory theater Kiesler came up with electromechanical sets, they became full participants in the action. Using dynamic elements - moving panels and

aperture of 2.5 meter, opening and closing to dazzle the audience with light, Kiesler believed that "from the beginning to the end the whole performance must be in motion ... This theater concept creates tension". (Goldberg, 2001: 120) The monumental scenery was spectacular and elaborate mixture of graphic design, cubism and constructivism. It consisted of flickering neon lights, circular video screen and rectangular screen, personified the monitor cable television. Kiesler designed a trough with water above the screen. Thus, the video was projected on a waterfall, creating a beautiful translucent effect. This performance was the first in the history of multimedia theater combining media projection and flowing water. Kiesler's main contribution lay in the fact that he placed at the forefront not the subject or group of subjects, but the interaction of various components with each other and with the changing reality.

40-50s was marked by the ideas of American scene designer- Robert Edmond Jones. He travelled all around the USA with his lecture about "the theater of the future". In his concept Jones gives the key idea to mix of theater and cinema. The simultaneous use of a live actor and speaking image is a completely new theater, which ability is as endless as the possibility of the speech. (Dixon, 2007, p. 85) In his "Theatre of the Future" a live actor will represent the external manifestations of the hero, and the image on the screen- the inner world of the imagination, the subconscious and dreams. These two worlds together make up the world in which we live. Largely forgotten lecture of Jones make up the first major theory of multimedia theater remaining important for understanding many works of digital performance. It defines basic principles and differences between theater and video, including the contrast in visual perception, affecting the sensory and psychological experience of public. The main followers of Jones' concept was Czech artistic group "Laterna Magica". In 1958 when Josef Svoboda and Alfred Radok founded "Laterna Magica" in Czechoslovakia, a multimedia theater started to develop again significantly. This artistic group used video projections on multiple screens and special effects to create the illusion and entertainment. Their visual technique was to create a sense of hybrid cinematic place which incorporates scenic movement and relates directly to stage action. They have developed sophisticated "multiscreen" system, combining them with the moving conveyor belt and the effects of scattered and direct light, in order to achieve the synthesis of projected images with synchronized actors play. For this group combining video with theater presents a unique cross-disciplinary art form, which will expand the dramatic possibilities and create new values and artistic dimension.

As we can see 1911-1960 are marked with the wide spread of video using in performances.

3.4. Multimedia performance from 60s until our days.

Like political and social history, the history of performance has involved gradual and incremental evolutions punctuated by intense periods of more sudden or revolutionary change. We would characterize three such periods in the history of multimedia performance, each roughly corresponding to a decade: Futurism during the 1910s, mixed-media performance in the 1960s, and experiments linking performance and the computer during the 1990s. The 1960s turned out to be a particularly important decade for the history of digital technologies- a time when the groundwork for much of today's technology and its artistic exploration was laid. From 1960 to the end of the twentieth century there was a proliferation of the use of media projections in theater, dance, and performance art, using both screens and video monitors. The relative cheapness and ease of use of video technologies have led many artists to study possibilities for the integration of visual media in their live performances, as well as to create independent works of video art. The greatest potential of live video in live performance is to instill an awareness of the liveness of theatre in the audience, and that live video in the live performance can remind us of the fact that "this is live," "this is now." The use of media technologies has become the hallmark of experimental theater. This period of multimedia performances marked by many significant names in the world of digital art: Richard Foreman, Robert Wilson, Peter Brook, The Wooster Group, Laurie Anderson and others. I would like to pay attention to one remarkable English group- Forced Entertainment. Forced Entertainment is an experimental theatre company based in Sheffield, England, founded by Tim Etchells in 1984. They experiment with digital devices and visual effects in their performances. "The work we make tries to explore what theatre and performance can mean in contemporary life and is always a kind of conversation or negotiation, something that needs to be live. We're interested in making performances that excite, challenge, question and entertain other people. We're interested in confusion as well as laughter."⁵ For me the big interest represents their performance "Void Story" using many digital tools. "Void story" tells the audience about a couple of protagonists navigating one terrible cityscape after another, mugged, shot at and bitten by insects, pursued through subterranean tunnel systems, stowed away in refrigerated transport, shackled up in haunted hotels and lost in wildernesses, backstreets and bewildering funfairs. Forced Entertainment perform the bleak and comical contemporary fable of Void Story as if it were a radio play, sitting at tables, turning the pages of the script, 'doing' the requisite voices and adding in sound effects for gunshots, rain and bad phone-lines. Simultaneously the otherwise empty stage is dominated by a series of

⁵ <http://www.forcedentertainment.com/about/>

projected images, a storyboard for an impossible movie-version of Tim Etchells' uniquely unsettling text. Somewhere between the live dialogue, the recorded sound effects and the collaged images attempting to visualize the narrative, is where Void Story actually takes place⁶. In the interview to "the Guardian" Tim Etchell gives the explanation of how he came up with such an unusual form for those time performance. According to him "Void story" "lies somewhere between live radio play and film dubbing, in which hundreds of roughly assembled and heavily pixelated still images are projected on to a large screen, while the actors provide live voices and sound effects to move the action forward."⁷ The most unusual part of the play is represented in the way how the producer replaced the acting by showing the play on the screen through the series of always changing photos. Two performers have been photographed in costume in different situations and then the producer selected suitable shots and combined them into landscapes and locations. The main task of actors in this play was recording voices attending changing pictures on the screen. During the performance the performers are sitting at the table adding voices through microphones, triggering and creating sounds. This play was the most extraordinary and the first innovative in the group's history. Perhaps what really makes the piece work is how it affects and involves the audience. Watching the performers add dialogue, cue sound effects and operate the digital controls produces something unexpectedly involving – a movie where there is no movie, only a succession of stills; a show in which paradoxically there is little show. It's the gaps that make it, hopefully – gaps between images, or in the images themselves, gaps between the performers and the text. They are voids that the spectators fill for themselves from the clues that flash by.

Speaking about development of multimedia performance I should give particular attention to the 1990s which witnessed a technological development of unprecedented speed for the digital medium – "digital revolution". The advent of the World Wide Web created global connectivity. By the end of the century digital art had become an established term and museums all around the world had started to collect exhibitions of digital work.

The terminology for technological art forms has always been extremely fluid and what is now known as digital art has undergone several name changes since it first emerged: once referred to as "computer art" (since the 1970s) and then "multimedia art" digital art now takes its place under the umbrella term "new media art" which at the end of the twentieth century was used mostly for film, video as well as sound art and other hybrid forms. (Paul, 1999: 7). By the 1990s,

⁶ <http://www.forcedentertainment.com/project/void-story/>

⁷ <http://www.theguardian.com/stage/2011/oct/20/tim-etchells-performance-void-story>

new technologies became a constituent part of information and communication processes, business practices, manufacturing, commercial retailing, and everyday life in the industrialized world. Their influence on the arts, aesthetics, creativity, and culture has been no less revolutionary, significantly affecting processes and products from film and television production to creative writing and the visual and performance arts. If we consider that theater is the art of human being in space, the use of projected media offered more spatial possibilities than three-dimensional theater space. Digital theater performances sometimes utilize the screen space to highlight a marked separation between the relative times and spaces of stage and screen, and at others attempt to combine them to create an integrated time and space. One of the most important practitioners of 90s was George Coates, American founder of the experimental theater company "George Coates Performance Works". Coates was the most extraordinary producer who made a lot of experiments with multimedia live performance. Coates is an innovator, using whatever materials and resources are at hand, through improvisation exploring their interaction and creating scenarios from the discovery he makes. For example, through the use of slide and film projectors - and eventually digital and stereoscopic projectors - Coates could turn the Cathedrals interiors into completely different settings. Coates referred to these projected settings as "'soft-sets', or software-generated sets", and they became the cornerstone of his works. I would like to pay attention on his digital play "Invisible Site: A Virtual Sho", marked a high point in the use of projected settings. This performance traces fragmented episodes telling the story of a woman who adopts the persona of The Tempest's Prospero in a sadomasochistic virtual reality relationship with a man who takes on the character of Caliban. A computer hacker called Rimbaud disrupts their fantasies and "disorders their senses," enmeshing them in a series of hallucinatory adventures drawing on diverse themes and literary references including Euripides' Medea. For the first time Coates in his performance used three-dimensional computer-generated environment that required the spectators to wear polarized glasses. Images were projected on a thirty-foot by sixty-foot aluminum screen, and when the actors behind it were lighted, the spectators saw both the projection and the actors who appeared to be in the 3-D environment. Another new element, made possible by the high-speed multimedia computer, was the interaction of live actors and computer-generated imagery. The 3-D computer images used in "Invisible Site" could respond to the actions of performers. (Shank, 2002: 273) Drawing from the life of poet Arthur Rimbaud and mixing in the plays "Medea" and "The Tempest," "Invisible Site" was the first stage production to explore "virtual reality" (a term that had just recently been

introduced into popular culture). Coates Performance Works was utterly unique and groundbreaking, both in its exploration of technology and the scale of its productions.

4. Digital Theater.

The world of theater is special. Since ancient times, it combines different art forms and different artists-directors, actors, artists, composers, writers, designers. Using advanced facilities of its time, theater has always tried to make a story more fairytale and magic more magical. Recently it found faithful ally- digital technologies.

In this part I would like to narrow my topic about digital performances and devote this part to digital theater as a new concept of art. I will give the definition of digital theater and look on it through such concept as intermediality, transparency, hypermediacy, immersion and interactivity.

Digital theater is not just combination of digital technologies with traditional concept of theater. Primarily it is a concept of new esthetic which is peculiar to modern performance. Modern theater art aspires to unite different digital tools with classic theater methods. The problem of seeking of the harmony between different media makes the topic of this thesis currently important and interesting.

Speaking about digital performance I would like first to give my understanding of performance at the theater in general. For realization of any theater performance actors and spectators should meet in a certain place for a certain period of time to carry out joint actions. Digital performance fits this description with the addition of digital tools. Digital theatre does not exist in a vacuum but in relation to other terminology. It is possible to hear and meet such terms as “VR Theatre” and “Computer Theatre” in the discourse of digital performance. Any terminology implies computer media, “live” performers, story/words, and limited levels of interactivity for characterizing theater as digital. I incline more to the term “digital theater” because it does not limit digital existence to computer or VR and imply all range of digital tools.

Digital Theatre, a type of performance which utilizes both “live” actors and co-present audiences along with digital media to create a hybrid art form revitalizing theatre for contemporary audiences. (Masura, 2007, p.3) The particularity of digital performance consists in the relationship between audience and actors. In usual theater performance spectators are perceived as a detached observer of the events taking place on the stage. In digital performance it is not a question of the relationship of subject and object, because the viewer does not refer to the actors as objects of observation, as well as the actors do not treat the audience as a passive viewer of their actions. Their relationship in digital theater means interrelation of equal subjects. Spectators are seen as partners in the game, whose physical presence, reaction, perception form the performance along with actions of the actors. In that

way, the digital performance occurs as a result of the integration between the performers and the audience.

If I take a close look to all performances described before, we can notice that almost all of them have certain common traits. First of all, it can be live performance with a few artists in the same shape. Secondly, such performance should contain any digital devices (video-conferencing, media projection, MIDI control, motion capture, VR animation and others). Finally, the performance's content may contain either spoken language or text which might constitute a narrative or story, differentiating it from other events which are distinctly dance, art, or music. All these conclusions appeared not accidentally. I noticed these traits reading theoretical work of Steve Dixon and watching different digital performances online. These characteristics were detected through analyzing different digital performances and finding common traits. My observations coincide with notices of some researchers in this topic. As for example Nadja Linnine Masura in her project about "live and mediated art" gives following statements about characteristics of digital play:

1. **"Liveness" of digital play:** The significance of the terms "live" or "liveness" as they occur in theatre cannot be over-emphasized, as it is set in opposition to digital in order to indicate the presence of both types of communication, human and computer created. Liveness consists in the interactions of people (audience and actors) sharing the same physical space. It is essential that a sharing of public space occurs at the site of the primary artistic event.

Liveness of digital performance derives from its existence only in the moment. It is happening right now. Liveness can be also explained by wide using of television's methods (online broadcast of performance, 3D reality) because such methods have ability to transmit events as they occur.

2. **Digitally Enabled:** as I told before the necessary condition for creating digital theater is the presence of digital media in the performance. The performance must use digital technology as an essential part of the primary artistic event. Such performance should have the ability to change not only sound and light, but also images, video, animation, and other content into triggered, manipulated, and reconstituted data which is relayed or transmitted in relationship to other impulses which defines the essential nature of the digital format. Digital information has the quality of pure computational potential, which can be seen as parallel to the potential of human imagination.

Digital basis is essential part of digital theater. Without the presence of any computer-based technologies performance cannot be considered as digital. As theater has synthetical character

in general, its combination with digital technologies created digital theater. The space of scenography in digital theater includes video, computer projection and a three-dimensional computer graphics. All this make up one united structure. With the application of digital resources the viewer has the chance to interact with the performance, to become an actor and create his/her own performance. Digital theater through its digital enabled task aims to involve the best of both theatrical (human) and digital (computer) communication.

3. **Spoken or Language Content:** text or spoken content is the necessary attribute of any play, including digital performance. Any performance staged on the scene is supposed to have plot, narrative story accompanying with words, texts. Digital aspect only should help in realizing the main idea of performance. Without language content performance turns into musical performance and dance. (Masura, 2007, p. 5).

Nowadays in modern performances spoken and language content often gives way to visual content. Less words, text and more digital effects. Everything, that actor want to express in classic theater, happens with the help of words, in digital theater it happens by means of modern computer technologies (video clips, pictures projecting on the screen, digital texts on the screen).

If to speak about this classification of concepts in digital theater I can agree with all of them, but at the same time I should notice that the presence of all three characteristics is not the indicator of digital theater. In digital play it can be mix of all three traits or only two, but in every case digital performance should be “digital enabled” to be considered digital play. For example, as I mentioned before, in some performance the viewer does not find language content. Only the use of digital devices tells the audience that it is digital play. To my point of view this trait is the essential for digital theater. Anyway, in my future analysis I will take the classification of Masura as the essential one because I think it reflects in full measure the main characteristics of digital theater.

Peter M. Boenisch suggests that digital theatre can perform media: “This trace of theatrical mediation is produced in the observers’ perception alone: the actor on stage is no longer the actor, but the actor exposed on stage. That photo becomes a photo placed on stage and strangely different from the very same photo hanging stored back-stage before the show, not to mention my screensaver version of it. That video projected on stage is no longer the same as the very same tape I watched at home. As opposed to the digital transcoding into bits and bytes, digital theatre leaves the thing itself intact, yet the actor, picture, and tape, at the same time, are theatrically reproduced into something beyond their mere (even less: pure) original presence. They become signs representing a character, or any fictional world and, at the same

time, they are always also something presented on stage, something presented to someone, and that is — far more essential than any represented meaning — the quintessential function of a sign” (Boenisch, 2006: 103). Digital theater provides film, television and digital video a stage, that is to say a performative situation. As components of a live performance film, television and video recordings are not only screened, but also at the same time staged. Digital tools in digital theater represent the particular idea. They do not leave separately from the performance. The viewer does not perceive any more monitors, projectors, computer devices as separate electronical subjects. They are elements and even participants of performance which contain special “signs”. Following the words of Peter Boenisch about using digital devices as signs I should pay attention on the visual perception of information. We live in a world of things that can be seen in the visual world, and much of our physical and emotional energy is spent on the visual process. We live in a world of images and signs, and these signs help us to shape the perception of the surrounding world. Digital tools in modern performances play a part of signs that may be used to create, manipulate or influence content. They participate in visual communication (communication with the help of images) that represent means of mastering by the subjects of cultural codes: key ideas and hidden meaning. Computerized objects are not any more just separate digital devices, but the objects of art that help to introduce the sense into performance. Speaking about perception of digital tools in theater the question may come up: relying on what facts I made conclusion about how the viewers perceive digital devices in theater. First of all, I watched several digital performances and made my own opinion. Secondly, I studied comments of people in internet who had such experience of watching performance in digital theater. Examining different opinions I came to the general conclusion about digital devices as part of “signs”.

Today, new visual technologies studied by theater and innovative practices are used in combination with other traditional theatrical elements, including sound, light and performances. Synthesis of new technologies and experiments with space opened the door to the further integration of multimedia in the space of digital theater. To identify and to analyze differentiation of borders in the digital theater space into categories is an impossible task. Use of digital tools may expand the space of the stage, creating an imaginary game space, destroying the boundaries of usual theater space or creating multitasking space. Moreover, digital performances and media projections may be located in any place of the digital theater stage and even outside it. It creates new artificial spaces in which virtual characters and created performances can be projected to multimedia portals, travel through theater space and take place in several places at once. All these effects bring new aesthetic possibilities and

open up broad prospects for improvisation. Playwrights who are aware of the spatial possibility of digital performances can use these new effects changing the structure of the play, as well as attracting new means of expression using sound and thematic digital displays to enhance the impact on the audience. New functions of digital space transform passive space of theater into active one.

4.1. Problematic of “liveness” in the digital performance.

The notion of liveness has been an essential theoretical problem since it divided critics and theatergoers almost a century ago following the incorporation of film footage into live theater. I will concentrate on drawing out some key concepts about problematic nature of liveness. There are two main protagonist of the current liveness debate within performance studies- Peggy Phelan and Philip Auslander. Peggy Phelan goes on to define an ontology of performance in following way: “Performance’s only life is in the present. Performance cannot be saved, recorded, documented, or otherwise participate in the circulation of representations of representations: once it does so, it becomes something other than performance. To the degree that performance attempts to enter the economy of reproduction, it betrays and lessens the promise of its own ontology.” (Peggy, 1993: 10) Digital performance has possibility to be saved, recorded and even documented. It fell outside the limits of usual performance.

The idea of liveness and mediatized space was observed by the American theater theorist Robert Edmond Jones in 1941. He declared “in the simultaneous use of the living actor and the talking pictures in the theater there lies a wholly new theatrical art, whose possibilities are as infinite as those of speech itself”. Whereas films or video are the perfect medium for expressing the unconscious, live actors express conscious reality. Therefore, the combination of two media will reveal simultaneously the two worlds of the Conscious and the Unconscious, the objective world of actuality and the subjective world of motive. (Jones, 1941:18). It means that live and media representation can be combined as complimentary and compelling components. Theater and digital base can work together as equal partners in a mixed-media production.

Auslander in his famous book “Liveness: Performance in a Mediatized Culture” (1999) challenges traditional notions of liveness that view the live event as “real” and mediatized events as “secondary” and “artificial reproductions of the real.” (Brook, 1995: 31) His arguments against the binary opposition of the live and the mediatized include exploration of how live theater and performance has become increasingly mediatized, and the proposition that there may be no “clear-cut ontological distinctions between live forms and mediatized ones.” (Auslander, 1999: 50) I absolutely agree with the reflection of Auslander and think that

nowadays digital performances represent a single whole of liveness and media space. It is impossible to separate one from another. In my opinion, the dominant aesthetic force in new era performances is the digital, into which the live is incorporated. At the era of technical and computer reproduction live performance cannot escape from digital domination. In live multimedia theater film, video, or digital projections are used in conjunction with live performers in theatrical contexts. Mix of live performers and digitized space help the audience to switch their attention from live acting into digital picture. In such way the spectators' perception can "relax". The changes of "liveness" and mediatized reality correspond to Brecht's idea in his essay "epic theater" about perfect combination at the theater, when an audience is relaxed and follows the action without strain.

In conclusion, I can say that the problem to see the boredom between "liveness" and digitized media is quite difficult in the condition of digital performance. This boredom becomes more indistinct in condition of collaboration between real actors and digital devices.

4.2. Intermediality, transparency, hypermediacy

Modern art and media should not be studied in their own historical developments but rather in their correlation to each other. Contemporary art practices mix of interdisciplinary concepts. Artists who worked in different domains before are working together now, especially in theater field. Digital theatre provides a space in which different art forms can affect each other quite profoundly. In modern digital theater media and art represent special relationship where different concepts collaborate with each other. Digital performance relates to such notion as intermediality, transparency and hypermediacy. I mentioned before the idea about "Liveness" of digital theater correlated with these three concepts. Liveness is aimed to create existing representation as if it was live performance. Intermediality, transparency and hypermediacy-three concepts are working together and are juxtaposed in digital performance, setting the idea of liveness into play. I will start my reflections about it with intermediality.

4.2.1. Intermediality

Intermediality is a trend in the arts and media of twentieth and twenty-first centuries. It refers to the incorporation of digital technologies into theater practice and the presence of other media within theater production. The existence of the concept of intermediality in different disciplines and scientific discourses conditions on the variety of its determinations. On the one hand, it complicates the task for the researchers, on the other hand it opens the possibility for the development of an integrated approach to the definition of the phenomenon of

intermediality. According to Chiel Kattenbelt “intermediality refers to the co-relation of media in the sense of mutual influences between media.” (Kattenbelt, 2008:20) Idea about “mutual” nature of media is a new in the concept of intermediality. Actually, the first philosophical reflections and theorizations on this topic grew out of the idea of non-mutuality. Gotthold Lessing, author of famous treatise “Laokoon. On the boundaries between Painting and Poetry” discoursed on the primordial difference between textual and visual. The author does not deny that all kinds of art are similar to its purpose. Nevertheless it exists significant differences between art forms, which do not allow to replace one form of art to others. This idea correlates to thoughts about non-mutuality of intermediality. According to them different components of media cannot be juxtaposed. I incline to the opinion of mutual influences between media. In digital theater all components of media combine and represent one finished structure not separable from each other. Chiel Kattenbelt uses the concept intermediality with respect to its ability to synthesize media and as a result to get the unity in the performance. In other words the synthesis of different media (video, music, text) creates the final product. This collaboration is important in realizing digital performance. For Irina O. Rajewski intermediality in its broad sense has two approaches. “The first concentrates on intermediality as a fundamental condition or category while the second approaches intermediality as a critical category for the concrete analysis of specific individual media products or configurations”. (Rajewski, 2005: 47) Irina Rajewski in her reflections emphasis the idea of origin of intermediality from intertextuality. This approach is useful for literary prospective, but for theater field I would rather use the idea of Claus Clüver about “the interaction of art” as the main principle of intermediality. (Clüver, 2007: 19) Intermediality should be regarded as a universal phenomenon, which includes all relationships, themes and issues traditionally considered in the context of the problem of interaction of arts. Different arts mutually affect each other, reform creative techniques of each other and provide an unexpected boost to the further development and growth of each of the independent art.

Intermediality is about changes in theater practice and about change of perception from performance which become visible through the process of staging. From these reflections one might conclude that intermediality in the context of digital performance and art is understood as a process of synthesis of different media and transmission of information at the process of multi or intermedial communication. The use of media technologies and the resulting intermediality of the production highlight the theatre’s processes of representation and mediation, working to objectify otherwise invisible barriers that mediate the

performer/spectator relationship (Copland 1990: 28). The intermediality of the staging works to remind audiences that they are watching a performance, rather than real story.

I would like to pay attention on Schröter's explanations on the concept of intermediality. Schröter classifies and divides intermediality into four groups. To understand better how these groups work in the performance I will take for examination already mentioned before digital theater "Forced Entertainment" and their play "Void Story". The first category offered by Schröter is *synthetic intermediality* which refers to the fusion of different art and media into new art and media forms. Synthetic intermediality in digital play is represented in way how different arts like (music, dance, and painting) and different media (film, computer graphic) create new form of performance. Void Story represents the mix of picture, sound and text. It is a kind of storyboard radio show where the performance consists of projected slideshow of cut-out images. All the performance is voiced by four actors who sit at the table and deliver text into microphone, producing necessary sound effect. Fusion of different media as picture, narrative outline and sound effect create unusual perception of this play for the audience. The second category based on the assumption that methods and modes of representation work in several media is formal or *trans-medial intermediality*. Trans-medial intermediality is a concept based on formal structures not "specific" to one medium but found in different media. To understand the plot and the main idea in the performance many directors fall back on using at the same time audio and slide shows or audio and video channels of television. It helps to get a new angle on the information in performance. Representation of Void Story work in sound media, image media and voice media. The third category is *transformational intermediality* which refers to the representation of one medium in another medium. Such representation suppose the passage from one sign system to another. For example, painting represented in the movie or building on the photo are not any more a painting or a building. They are an integral part of representing medium. In a performance transformational intermediality is a move from verbal presentation of play into visual presentation of ideas. Slide show of pictures in the performance "Void Story" is accompanied by sound and text. Without this accompaniment pictures would be just set of images not telling any specific plot. Text and music brought to the performance complete sense. Medium of narrative joined to the medium of sound and visual objects. The final category is *ontological intermediality* where a medium defines its own ontology through relating itself to another medium. This category raises the problem to define the specificity of a medium in isolation except through comparison with another medium. (Chapple, Kattenbelt, 2006: 13) Ontological intermediality presupposes the existence of similarities and differences in various media, for example melodiousness of

poesy and theatricality of prose. That is the main reason why digital performances are sometimes mix of literature, music and video projections. Ontological intermediality in the performance “Void Story” consists in interaction between acting, sound and video accompaniment and narrative background. Every component develops itself through another one. The audience understand the narrative background better with specific music collaboration. And choice of music depends on text. In turn visual media depends on sound and text together.

All four groups are representative for digital performance in theater. As a rule, the selection of one type of intermediality in its pure form is difficult because the distinction between them is very conditional. On my point of view multimediality is closely related to the concept of synthetic intermediality. I decided to mention the concept of multimediality because I think that these two concepts (multimediality and intermediality) are not always explicitly distinguished from each other and what is more they are connected to each other in certain way. Multimediality is often mentioned as a feature of digital media, which in interaction with the features of virtuality, interactivity and connectivity constitute the specificity of digital media. (Rajewski, 2005: 6) Digital theater is inseparably linked with interactivity and virtuality that is why I can speak about this concept in the context of digital performance.

Multimediality is used at two different levels. On the one hand at the level of sign systems (word, image, sound) and on the other hand at the level of different disciplines as distinguished as different (institutionalized) cultural action domains or practices (literature, visual arts, music, theatre, film, television, video, internet etc). In the practical part of this work I will analyze the performance also through the concept of multimediality and try to see how these two levels are represented in the performance.

Multimediality the same as intermediality is usually restricted to audio-visuality. It means that the audience at the digital theater perceive information through eyes and ears. I can admit that digital theater can be described as multimedial because it can incorporate all other media without damaging the specificity of these media and its own specificity. Cinema, video, music are presented in digital performance do not lose its nature and do not dissolve in the context of theater performance, but help to expand the meaning and the message of the performance. This particularity of not losing its nature is connected with the ability of theater to “incorporate all other media without damaging the specificity of these media and its own specificity”. (Kandinsky, 1912: 49) In contemporary theatre, digital technology functions in the exchanges between theaters as an interface. On this stage, the performer is the player of the different media who acts in the empty spaces between the media.

Intermediality theory uses three basic values. Firstly, the media is a communicative channel, way of transmission of information; secondly, it is a means of mass media in their relation to man-caused processes in modern communication. Finally, it is a sign system code. (Rajewski, 2005: 40) Relevance and viability of various areas in performances nowadays essentially depends on their communication capabilities - the ability to establish contact with the audience. From this perspective, the interaction of the digital devices in performance with the audience represents the subject of communication that occurs in a specific process of creative artistic act in a certain way organized in space and time. The main participants in this act are communicator - the sender of the message (performers), seeking to cause a certain reaction of the recipient with the help of modern computer technologies, and the recipient – those who receive the message (viewers). Any performances is designed for perception and assessment of recipients. In theater communicative channel is the most important aspect. In an effort to strengthen ties in the communicative space "auditorium- scene" artists are looking for new ways and forms of influence on the public which correlate with the contemporary socio-cultural situation. Development of Internet technologies has led to activation of visual perception. Any information is able to be visually expressed that, taking into account the particularities of human perception, promotes its most rapid and successful assimilation. This, in turn, forms the habit of "image", illustration, need for a visual "tip" which facilitate the absorption of the message's meaning. The director of any digital performance incorporating in poetic text visual signs with the help of digital devices is interested in increasing materiality of its components. It creates value for verbal and visual principles, which leads to the birth of multiple meanings and options for reading of performance. In these circumstances, performances with digital background is precisely the form of performance that is most adequate to the needs and capabilities of the recipient. In conclusion we can say that modern art nowadays seek to overcome the barrier between the product (in our case performance) and the audience carrying out their direct communication using principles of intermediality. In the context of understating intermediality in digital theater the trend begins to dominate, according to which intermedia relations are found not only in one context (acting of play), but in the interrelation of different types of art, when final product is artistic integrity of different media.

4.2.2. Transparency of digital theater.

Transparency is defined in general as phenomena, used in science, engineering, business, and the humanities and in other social contexts, implies openness. Twenty-first century gave enormous opportunities for transparency in media and art with the help of computer technologies. (Bolter, 2006:109) The theatrical performance is transparent, opened, involving interaction of audience.

The concept of transparency in regards to media is defined by Jay David Bolter as: “to place the viewer in an apparently unmediated relationship with the objects or events represented” (Bolter, 2006, p. 110). In his reflections Bolter oppose to notions-hybridity and transparency. “Hybridity is not only a feature of contemporary digital art but also an accepted strategy in the production and consumption of popular media forms and technologies. For example, the World Wide Web—through its remediations of practically every earlier medium from print to film and television—has produced new genres and forms that continue to mutate and diversify.” (Bolter, 2006:109) Modern culture has special interest in hybridity because it opened new possibilities for realization of art projects.

The opposite of hybridity is transparency. “Those practices that strive for seamless, transparent representation of the real within a single medium or media form. The goal of transparent representation is to efface the technologies and techniques of representation.” (Bolter, 2006, p. 110) In other words, it is when, in the viewer’s experience, it is hard to reveal the presence of medium and digital technologies, because the image on the scene is very realistic. There is no place any more in digital performance artificial and unnatural sceneries as in classic theater. In digital theater modern digital tools let to introduce the atmosphere and the background as natural and close to reality as modern computer technologies allow to do. According to Jay Bolter and Richard Grusin, ‘immediacy’ is a common feature of digital media, whereby digital technology is made ‘transparent’ so that the viewer is no longer aware of confronting a medium but instead stands in an immediate relationship to the material being viewed. (Bolter,Grusin, 1999:24). In some cases creators do not seek to create transparent representation and on the contrary seek to make viewers aware of the medium being used. Such tendency depends on the aim which a creator purposes. If the plot of a performance is built around modern computer society as in case with the performance which I chose for practical part a creator will make the audience aware of existence of medium. If the idea is to use digital devices only to create special effects as special sound background, light and video projections a creator will try to make the realization as transparent as possible and reduce effect of the presence of digital interference.

Contemporary digital technology can be used in the service of transparency. For examples, at the movies computer-based technologies aim to be transparent by creating a look that is indistinguishable from live-action film. In the field which I analyze computer technologies also help to create realistic picture. If a director needs to immerse the audience at the atmosphere of wild nature, for example, he/she can use the projector with the waterfalls. Special light and sound will create the atmosphere of the wooden. New computer technologies are often used to make the technology disappear. The goal is to give the audience the impression that they exist in this world created by a director and not just sit at the theater.

I should say that reflections about theatrical transparency represent real dilemma among critics. On the one hand theater can be considered as transparent because it foregrounds the corporeality of the performer and the materiality of the live as an actual event, taking place in the absolute presence of here and now. On the other hand in the field of theater it exists the term “The Fourth Wall” which means the imaginary “wall” that exists between actors on stage and the audience. Obviously, no such wall really exists, but to keep up the illusion of theatre, the actors pretend that they cannot hear or see the audience and the audience gets to enjoy the wonderful sensation of being a fly on the wall. The same effect often occurs in movies, only the fourth wall in that instance is a camera lens. On my point of view digital theater in some parts decides this problem of forth wall. Digital space in the performance aims to break the boundaries between spectators and the audience. Visual effects help the viewer to be so close to the performer as it is possible. In live performance, the use of media technologies is not to provide effects of immersion and illusion. On the contrary, very frequently the use of media technologies is to extend the lyrical and epical modes of representation, for the sake of the intensity of experience and the reflexivity of thought. (Chapple, Kattenbelt, 2006: 37) “Lyrical and epical modes of representations” mean that implication of media helps to express the plot of the performance and reinforce the perception of acting at the audience. As I mentioned before many directors using digital background make the audience immerse into the performance and make all actions more real.

With the medium of digital video at the performance the image can be “live”. It means that digital video gives the sensation of events are going on right now, at this moment. This adds a whole new degree of transparency to the moving image. It makes the viewers feel not only they are there, but that they are there at the present time. For example, set of video images on the screens projecting as background during acting on the stage make us, viewers, believe that everything is going on right now, at the existing moment.

Our mediatized culture has become a hyper-reality that is to say a world of signs that are more real than the objects to which they seem to refer. Today a person has to deal not only with natural and artificial cultural environment, but also with the virtual environment, which determines the appearance of qualitatively new relations with the surrounding reality, particularly the problem of the relation of reality and its symbolic representation. This issue was explored by philosopher and culture expert Jean Baudrillard. He developed an approach about a society of simulations, implosions and hyper-reality, where it is difficult to distinguish image from reality and where signs and simulations have become society. According to Baudrillard we live at the time of total simulation. In his interpretation simulation means acquisition of a self-sufficient reality by signs, images and symbols. (Baudrillard, 1981:56). For example, modern recording equipment allows to make impossible before manipulation of sound. Classic works of Mozart, Beethoven, Shostakovich can acquire a completely different sound, which can attract many listeners. This final product is not the embodiment of what was originally conceived by the authors of works. This is a copy of a copy. It is obviously a disparity between new form and original version. The same situation is in the theatrical field. Classic performances with the use of modern technologies acquire new life and new way of perception. But at the same time modernized version is far from original idea. It became hyper-realistic product. Hyper reality characterizes the situation, when the phenomenon of truth, adequacy, and reality is no longer perceived as ontologically fundamental, but is perceived as a phenomenon of the symbolic order. Modern society is a society of total entertainment. (Грицанов, Кацук, 2008:190) Symbols became more important than reality. The conception of virtual coincides with the hyper reality. This digital world which is unreal by its definition can substitute everything real. Effect of “reality” became more attractive for people (in my case for audience) than reality itself.

Effect of “real life” at performance is closely connected with the idea of “transparent immediacy”. Transparent immediacy – one that erases itself so that the user (in our case the viewer or the audience) is no longer aware of confronting a medium, but stands in an immediate relationship to the contents of that medium. Example: virtual reality, whereas the presence of the mediator (the computer) is denied: “an interfaceless interface”. However, transparent immediacy does not commit the viewer to a naive or magical conviction that the representation is the same thing as what it represents.⁸ All directors and practitioners of digital performances seek to create such virtual space which can be as natural as possible. The

⁸ <https://themediastudy.wordpress.com/tag/hypermediacy/>

viewer should not see this passage from computer effects to acting on the stage. All elements should be one component not separable from each other. To create the natural picture it is important to use in right way a performative space. Performative space in usual theater and in digital one is a space where the play (performance) takes place and can be considered as geometric space which changes the vision of performance. Any movement of an actor or object, the oscillation light, any sound can change performative space. It is unstable and dynamic. Performative space forms a space of play and determine the conditions of its perception. Transparency in such space in case with digital performance is created using following effects: unusual geometric shape of stage, projectors creating impression of limitless space, light decision that let the audience see the performance from different perspectives. I can also determine three strategies that enhance the transparency of the performance in performative space: 1) use of almost empty space which let actors and spectators move in improvised manner 2) creation of specific spatial compositions opening up new possibilities for the organization of relations between the actors and the audience 3) use of space having the function not related to classic theater area and study the specifics of these spaces and their opportunities.

4.2.3. Hypermediacy and contemporary theater.

In the last decade of the twentieth century we are in unusual position to appreciate remediation because of the rapid development of new digital media. But what is actually new in new digital media? The boundaries between old and new media have been intensely discussed in media studies. Are the old and the new media completely separate entities or are new media old media delivered with new technologies? Bolter and Grusin's theory of remediation shows another way of thinking about new media and answering these questions. For Bolter and Grusin the specificity of new media, their "newness," lies in the way they remediate older media. Remediation builds on two oppositional concepts: immediacy and hypermediacy. For my project it is interesting to observe some reflections of these researchers about hypermediacy.

In the book "Remediation. Understanding New Media." (1999) Jay David Bolter and Richard Grusin discuss the relationship between immediacy and hypermediacy in visual culture. They give a cogent definition of the two terms as they apply in a digital environment: "In digital technologies hypermediacy expresses itself as multiplicity. Where immediacy suggests a

unified digital visual space, contemporary hypermediacy offers a heterogeneous space, in which representation is conceived of not as a window on to the world, but rather as “windowed” itself- with window that open on to the other representations of other media. The logic of hypermediacy multiplies the signs of mediation and in this way tries to reproduce the rich sensorium of human experience.” (Bolter and Grusin, 1999:33, 34) In other words we can say that immediacy is the desire for the media user to experience a medium without realizing that the medium is present. For example, during digital performances the viewer can observe moving art elements, light and laser projects creating amazing pictures, but they cannot see machines or computers creating this effects. In hypermediacy the central argument is about to give as much as possible information to the viewer. From the producer's view, hypermediacy expresses multiplicity, which offers multiple acts of representation and makes them visible. The audience in theater can see how actors acting on the stage (it is communicative aspect) and at the same time watch changing scenery, backgrounds light and music (it is visual aspect). In combination with digital device the perception of performance takes shape in one clear puzzle of images and signs that give to viewer the possibility to build one whole picture. Hypermediacy is not simply a question of the multiplicity of sources, images or image system. It is expressed through simultaneity: two or more sources, images, systems and effects in play in the same time in a shared ecosystem. Simultaneity is a key characteristic of digital performance nowadays. Virtual theater allows viewer to be present in both real and virtual world. Simultaneity is a defining mode of digital theater and a structural characteristic of hypermediacy. In modern digital culture hypermediacy and immediacy do their work simultaneously. Immediacy depends on hypermediacy: two contradictory logics coexist but are mutually dependent.

Digital media in the performance is characterized by ‘hypermediacy’, which seeks to make viewers aware of the medium being used, and which works to remind viewers of their desire for immediacy (Bolter and Grusin 1999: 34). The simultaneous coexistence of distinct media in intermedial performance can produce effects of hypermediacy that are deeply involving and more deeply pleasurable for spectators. It is in the very interface between the actual and the virtual, the corporeal and the mediatized, that spectators often find themselves enjoying or being drawn into intermedial performance. (Lavender, 2006:55)

I should mention that hypermediacy is related to such concept as remediation created by Jay David Bolter and Richard Grusin. Remediation for them was “the representation of one medium in another” (Bolter and Grusin, 1999: 45). In their concept they divided two approach of remediation in digital theater. One is tribute and second is rivalry. In the case of tribute, the

new medium imitates the old medium by putting itself aside. In the case of rivalry, the new medium places the old medium in a new context or absorbs the old medium almost completely. (Kattenbelt, 2008:25) By other words it means that in first approach the audience do not notice the presence of digital devices as I mentioned before. Second approach aims to show that digital tools exist. Using new computer technologies in the performance tell about “rivalry”, but the desire to make it as natural as possible tells about “tribute”. These two motives correspond with the «double logic» of remediation: transparent immediacy and hypermediacy.

I should pay our attention to the digital image. The visual symbolism is important to its deeper meaning as the specific effect the code or user interaction has on the surface. Almost all digital performances apply textual or visual metaphor that influence the meaning of the performance. To see clearly the influence of visual metaphor we will take for consideration the art work of “George Coates Performance Works” which we analyzed before. This group is one of the brightest representative of digital art that is why they represent special interest for me. In their digital performance “Twisted Pairs” the visual symbolism was at its pitch. “Twisted Pairs” found Coates diving headlong into the World Wide Web as subject. An innocent Amish farm girl starts out trolling the Internet for boiled-oats recipes and ends up helping a “para-media militia” replace a missing Panchen Lama with a Zoloft-popping software programmer. The play serves up techno pop music, projections of online contributions from audience members in cyberspace and eye-popping stage sets that come alive with the aid of 3-D glasses. Visual symbolism in this performance is concentrated in computer projections and representation of internet reality which depict artificial “online” life. It would be impossible to describe problems of modern digital life in the performance not using modern digital devices. Even using of 3 D glasses during the play is a symbol of new era of relationship between human and computer. Visual effects in such performances aim to change the common understanding of perceiving reality. Imagination is one of the most important attribute of digital hypermediacy. The viewers live the life of actors in unreal “imagined” world and with the use of digital tools they do not need any more to create themselves this imagined world. They are already immersed into it thanks to computer technologies.

Such notions as intermediality, transparency and hypermediacy will help to answer the main question formulated at the beginning of this project: what impact do new digital devices have on such art as theater. I will analyze digital performance in the practical part through such

components as intermediality, transparency and hypermediacy because I consider that they are components of one big concept-digital performance.

4.3. Immersion and Interactivity

New vision of digital performance is connected with such notions as immersion and interactivity. Many creators desire to come up with an invention of a play where level of immersion of spectators achieves the highest point and at the same time viewers have possibility to interact with performers and performance in general through different digital devices. To my point of view digital tools creating virtual reality on the stage of the digital theater immerse the audience and make them interact with this reality. Immersive theater is a new trend in the field of digital performances. I can add that immersive theater lead to such notion as interactive theater. Interactive theater - a new phenomenon in the modern world and even in the countries who practice a lot digital performances (as USA or Great Britain) this type of theater is still at the periphery. In this chapter I will examine the relationship between immersive theater and interactivity and speak about new born “brother” of digital theater-interactive theater. I will examine at what level interactivity is presented in this type of theater and how it can be useful for the field of digital performances.

Steve Dixon defines interactivity using four stages: *navigation, participation, conversation and collaboration*. (Dixon, 2007: 563) The first stage consists in reactive interaction- choose option offered to participants. The navigation model is nowadays increasingly at play within television, where audiences use their remote controls, telephones, or computers to steer the direction of programs that rely on voting to decide winners (Pop Idol) or losers (Big Brother). In the scope of digital theater Dixon gives an example of navigation in the performance of Dana Atchley “Next Exit”. It is a narrative digital performance that draws on more than 60 stories from author’s life. Atchley sits next to a video-projected campfire and creates a unique performance for every audience by selecting from seventy stories in his “digital suitcase.” Opportunity to choose among different stories represents navigation stage in the digital performance. Next stage is consisted in a random selection between various alternatives.

A charming digital remediation of theatrical audience participation is presented in Bruno Cohen’s interactive installation Camera Virtuoso (1996). It uses a miniature theater complete with stage lighting and dressing room in conjunction with infrared transmitters, movement sensors, video technology, three laserdisc players, and a CD-ROM. The audience had possibility to interact with the acting through different prerecorded sequences and change the

course of the performance. Cohen's work examines the level of participation of spectators in media-based interaction and explores different domains of presence that can become relevant in within a media-based interactive scenario.

In the third stage, conversation, the participants strive to start the "communication" with the actors. Communication is realized on the selective level. Viewers choose themselves in what part of the performance they will start to communicate with performers. Interactive theater is an example which has the main aim to involve the audience in the act of performance and realize "conversation" between actors and viewers. I would like to mention one Belorussian interactive theater-"Moustache" which represents high level of communication in their plays.



The particularity of this theater is realization of performance in the streets of different cities. This choice of performative platform already breaks down barriers between actors and audience. The principle of this interactive theater and all interactive theater in general is to involve people in the dialogues with performers. Through dialogues we are witnessing a conversational work in which the content as well as the context is shaped by participants. The artists usually have lexical control of the performance, but the content is directly shaped by the communication and reaction of participants (viewers) whose responses form the work. In the performances of theater "Moustache" the performers select an audience member, they take them off and talk with them. Each time the work is contingent and made up of the responses of the participants.

The fourth and final stage involves such interactive collaboration which comes about when the interactor becomes a major author or coauthor of the artwork, experience, performance or narrative. The collaboration may be between a single user and the computer/virtual environment, but more usually occurs when users work together with others to create new work by means of computer technologies or within a virtual environment." (Dixon, 2007: 595) In this stage the participants produce something new through creating a new story. The

last stage allows the participants the opportunity to change the direction of the performance by going pre-established limits. All collaborations on this stage are conducted via Internet. For example, one of the most extraordinary project “Bytes of Bryant Park” happened in 1997 in New York. It is a collaborative performance created due to ideas of visitors who were able to share their ideas on the web site of the performance group. Visitors to the site were invited to participate in five simple tasks. One of these was to provide some poetry or comments in response to pictures of the park, another to supply a sixty-second soap-box text on the subject of life in New York. A third section required the participation to submit text for a play based on Faust. The fifth task involved fifteen images of a dancer in different poses, from which the participant could choose five images to be strung together. The Web site then animated those images for the participant to see what he or she had made. This unusual project demonstrated how collaborative work can create new project involving as actors so viewers.

Different stages of interactivity which depend on the degree of influence the user's input has on the way in which the fictional world is narrated can be useful in my practical analysis. I will show what stages of interactivity offered by Steve Dixon is presented in the digital performance “Super Vision”.

Now I would like to discuss the notion of immersion and how it is relevant in discourse of interactivity. Immersion is a concept which can be very relative. No matter how immersive a performance may aim to be, it will always be possible to maintain one's critical distance, thereby negating the immersion. Immersion very often depends not on particular performances but rather on immersive strategies which are employed and which can be encountered in a variety of works. Dramatic immersion distinguishes itself from literary immersion by the tangibility of the world into which the individual is plunged, as opposed to the world of literature into which the reader is absorbed. (Bouko, 2014:260) It means that in theater all actions are acting on the stage, not in the head of the viewer. You can see them and feel its existence. Critical thought on immersive theatres is centered on explorations of audience/performer interaction and the unique relationship these theatres create. Immersive theater places the participant at the heart of a work. Such theater searches for a physical and mental transportation of a viewer in the world of the performance. In immersive theatres the audience is able to move within a three-dimensional multi-sensory environment. In this way, immersive theatres represent a particular response of audience to space and participation. In digital theater the audience is ware of the artificial nature of the world into which they are plunged, but they accept this virtual reality and moreover such reality help to immerse the audience. When viewers is absorbed into immersion of the performance the medium appears

transparent and the created world seems to be offered without any intermediary. That is the main reason why I can say that digital theater is immersive. Interactivity of digital performance let the theater be immersive. As I showed in my theoretical part before many digital performances aim to break down frontality to create immersive, physical integration. Creators want to ruin barriers between spectators and the stage. The first step is to change the border of the stage itself. Some performances are organized in the buildings which do not imply stage at all. Old factories, churches, shops- all these areas erase the boundaries between audience and actors. The closer actor and acting to the viewer, the more immersive effect it produces on the public. In interactive theater described before participants or viewers become part of the space. They are no longer an external observer, their presence is incorporated into the action. The audience of performances of theater “Moustache” achieves the highest level of immersion because they always interact with actors and create themselves the plot of the acting.

In many performances body and its identity is the main topic. The place of body in the performance is connected with the first principle of interactivity- navigation. In this case, navigation gives bodily perception its rightful place. Work on immersion generally underlines the central role of corporal appeal in creating an acute sense of being. In Virtual Reality, placing the body at the center of a performance allows for a combination of immersion and interactivity as immersion depends on bodily perception rather than language: In VR, the sense of immersion is given by image, sound and tactile sensations. Interactivity is added to the experience by coordinating the display with the movements of the user’s body. The physical presence of the body in the virtual environment reinforces the sense of the physical presence of the virtual world. (Ryan 1999: 133). In some modern immersive performances the participants are plunged into a modified perception of character via a head-mounted display. The feeling of immersion essentially comes from the 360 degree vision which the display allows (for example performance of Cirque du soleil). To my point of view the viewer will be more immersed into the play if he or she is able to move around the virtual space and to apprehend it under various points of view. Maybe it will be next step in the digital performances of near future.

As we can see interactivity is closely related to immersion in the digital theater. It is possible to find out several steps of interactivity represented by Steve Dixon in the works of immersive theater. Future work and analysis in this direction will help to immerse more the audience into the digital performance. In my practical part of the work I will try to detect traits of immersion and interactivity in the digital performance “Super Vision”.

4.4. Projection Mapping in Digital Theater.

Digital technology has revolutionized the way we make and experience art today. Lately new media artists create an illusion of being mapped on the surface of objects, structures, buildings and displayed in public spaces. A new trend of video mapping technology allows for interactive projection mapping. Video Mapping is one of the newest video projection techniques that are used to turn almost any surface into a dynamic video display. The aim of video mapping is to create a physical illusion of images by combining audio-visual elements. One of the bright examples of successful projection mapping is a miniature theatre show “The Ice Book”. It is an exquisite experience of fragile paper cutouts and video projections that immerse the audience into the heart of a fantasy world. The Ice Book is the world’s first projection mapped pop-up book. When the lights go out and a projection is beamed onto the paper stage, a dark, atmospheric story unfolds about a man on a journey through the wilderness. The piece itself features an innovative mixture of theater, video projections and paper craft and produces a truly beautiful and enchanting piece of art.



The Icebook is designed for an audience of up to 10 people. Each show lasts 17 min and can be performed at 30 min intervals for a maximum of 5 hours. The Icebook is suitable for ages 10 and above. The creators of “Ice Book”, Davy & Kristin McGuire are an award winning director/designer duo whose projects range from music videos, commercials, animation films and installations to live theatre shows, dance performances, video projections and everything in between. When I was watching their performance on YouTube I was absolutely admired of brilliant work and idea of these creative designers. Mix of video projection with live actors creates immersive feeling. Projection mapping let the directors produce effect of old pre-cinematic optical illusions. It is hard to distinguish paper cut-outs from real theater decorations. All details look very natural and due to light from video mapping the viewer feel

magic atmosphere if it is a fairytale. Video mapping is often applied in digital performances, but such collaboration with paper cut-outs were used first time. I think performances like “The Ice Book” will give birth to new era of digital theater plays, for example, for puppet show. Unusual digital decision with projections and miracle light well be especially interesting for children.

In digital performance with video mapping level of immersion is very high. Small details of objects are represented so natural that audience do believe that this is real object. It is hard to believe that all this magic world is created via digital tools. Immersive effect of video mapping can be useful for digital performance directors.

To conclude, I would like to say that a new trend of the video mapping technology help artists generates the advanced art works which are able to more directly communicate with the users. In my analysis I will detect projection mapping and show what impact this principle make on the performance in general.

4.5. The range of problems connected with digital theater.

Digital performance is a fast developing sector, picking up speed the last decades. Escape from classic understanding of performance into computerized reality provoke many discussions. Famous Russian theater designer Katya Bochavar says that “theater viewer who is not able to read the codes of modern digital performances speaks with the creator in different languages and lose a lot from the main concept of authors or understand nothing at all”.⁹ The main problem nowadays for the audience is to learn how to “read” these special “codes”. Exploring topic of digital performance, reading essays of different theorists I found out many critical reviews about this type of modern art. One of the main critic of digital art was Jean Baudrillard. According to him “digital part in the art and digital reality is able to make negative impact on the spiritual and the psychic world of a person, on the whole complex of human culture. Result of the excessive use of digital devices can lead to a change .of consciousness of individuals both in terms of private influence on intuition, imagination, creativity and at the same time influence on the life of the whole society through programmable change of social mentality.”¹⁰ Digitized world has strong impact on our daily life and our way of thinking and perception of reality. I share fear of Baudrillard that computer technologies soon will dictate us how to perceive information because our

⁹ Translation from Russian. Retrieved from http://www.kultpro.ru/item_136/

¹⁰ Translation from Russian. Закирова Т.В., Кашин В.В. КОНЦЕПЦИЯ ВИРТУАЛЬНОЙ РЕАЛЬНОСТИ ЖАНА БОДРИЙЯРА

consciousness got used to see everything through the prism of hyper reality where reality becomes one entire phantasm. We are aimed to perceive information only through bright images, but not through the content.

The big issue in the digital performances is the excessive existence of digital devices. I have some misgivings when it concerns certain digital plays with the excessive use of computer technology. To my point of view it interferes with our perception of performance. But some practitioners will not agree with this idea. For example, in one article devoted to modern art-tech performances Bob Riley, media arts curator at SFMOMA (first annual Society for the Encouragement of Contemporary Art Award in Electronic Media), declares: «People have to understand that with new media arts they engage several sense perceptors simultaneously. And that entails different senses of time and flow and punctuation. They need to know that somehow they are in conversation directly with thought processes and the way that images work, the way image and object work together.» (Galkin, 2008:50) Indeed, our perception of classic play does not touch all our preceptors. We can see the acting on the stage, hear voices of actors and music, but not perceive the performance in volumetric measurement. New technologies allow us to see the events as it happens in real life or in our dreams not with static image. Exploring of 3-D space led to appearance of new type of performances opening the borders of “impossibility” in perception of reality. Nowadays we are able to get information in total scope. In my view this possibility has more positive effect than negative.

In many modern digital performances there is a problematic relationship between the creation of play and the use of technical tools. Computer scientists and desktop publishers are two cultures that do not understand each other. Scientists work to replicate, rebuild, and remodel aspects of nature via computer, but when it concerns entertainment field many scientific (computer) developments are lost during the realization of performance. Not in every performance the presence of digital devices is appropriate. Creations of IT scientists not always reflect the ideas of theater director and vice versa. In this point I cannot agree with critics because to my mind digital developments in this sector to the contrary help in realization of project and open new possibilities for viewers. The audience is not anymore the separate part of performance but essential part of it. Viewers can feel their participation and presence through digital devices such as 3D glasses for example. But even with new possibilities for audience I should speak about such problem as digital excessiveness. Currently uneasy relationship of technology and theater field took the form in which the technological foundation often completely predetermines aesthetics. Looking through latest digital performances I noticed such tendency as abuse of computer technologies at the

theatrical play. Excessive use of digital tools in some parts interfere with perception of play. Viewers are often overdriven with modern devices and it is getting more complicated to understand the clue of performance. I can add that viewer of modern digital performance suffer (if we can say like this) from digital information fatigue syndrome. It means that the deep immersion into cyberspace draws away audience's attention from the plot. Computers technologies can create challenges in expressing ideas of play's author. Actors in such situation pale into insignificance in front of modern digital tools. Here i can speak about such problem as theatrical liveness' erosion. Philip Auslander contends that «traditional notions of theatrical liveness have been eroded so much that there now seems little difference between live and recorded dramatic forms. Digital has become culturally dominant over the live so that, for example, when watching a theater performance combining live actors and screen-projected actors, audience will play more attention to the screen. (Auslander, 1999: 50) All attention of person in the auditorium now at the computer screen or digital manipulation. The theater starts to lose its predestination of temple of culture turning into platform of computer experiments. Acting of the stage of real actors also lose its initial value- provoke certain emotion through brilliant acting. Now digital analogues have such mission. I can suppose that not all practioneers of digital performance will agree with previous statements. As for example director of “George Coates Performance Works” George Coates answered in his interview on the question why he applied computer technologies in his performances: “I would like to help people in any way I can how they perceive reality...to give audience the opportunity how they respond and react to reordered world. They are not sure what is going on, but they like it. In such situation I would like to be myself as the viewer.”¹¹ New feeling, new experiences is the main aim of digital performance. In digital theater the understanding of the plot and idea of director is not any more key factor, more important to provoke contradictory emotions. To my point of view the problem of liveness' erosion can exist only in case with excessive use of digital devices. The director of digital performance should find golden mean between the presence in a play digital tools and the participation of real actors. In me practical analysis I will observe if the director managed to save his golden mean in the performance.

Many creator of digital art forms declare that such kind of performances develop imagination and let all not yet realized ideas come out. To my point of view excessive use of computer technologies at the performance lead in most case to simplification of information's

¹¹ <http://yandex.ru/video/search?text=George+Coates+Performance+Works+Twisted+Pairs>

perception. Creating digital story some directors (as George Coates Performance Works) abuse different digital devices at one space. Spectators are involved in the collaboration of digital mapping, laser projection, robotics and light manipulation. All these tools help to create the finished image on the stage, but at the same time they do not leave an audience the possibility to turn on their own imagination. In classic theater the audience do not get finished idea of plot, it should think over itself. When the scene is set, for example, in hot tropics or rainy forest spectators of usual performance do not have such option as to watch drops of rain on the screen of projection. Everything they have is decoration. All the rest of the ambiance a spectator should think out him/herself. It demand some work from imagination. Obviousness does not lie on the surface. The viewer turns on more imagination in classic performance than in digital one because in usual theater performance computer technologies are not applied and the audience has only one opportunity to replace itself in the imaginary world-using imagination. In digital world we do not have any more such necessity. All imaginary world is presented through computer technologies. We should make less efforts to create it in our heads. It exists on the stage of the theater. All these manipulations simplify our approach to performance. My statements can sound contradictory because it is almost impossible not to participate or not to make efforts in watching performance, but my ideas make sense in reflections of McLuhan about media. He placed media into two categories: hot and cold. McLuhan determined a mediums temperature based on the involvement or participation from the masses and the amount of information presented. "Hot" media possesses high level of certainty to the viewer as it represents a direct image, drawing, photography, and therefore on the level of visual perception it has materiality (for example radio and cinema). The cold media are characterized by a low degree of certainty and include speech, text, and work. They form only a partial image in the viewer's mind. (cinema and telephone) (McLuhan, 2001: 28) Thus, the synthesis of these two types of media leads to such principles as "excluding" information in hot media and "including" by cold one. As a result a medium begins to use the means and techniques of representation of information of other media. It is accompanied by a kind of "remediation" (term offered by Bolter and Grusin). Following reflections of McLuhan I can admit that digital theater has traits of hot media because it provides a lot of visual information from one side. From the other textual and verbal background of digital performance cannot exclude presence of cold medium here. Hot media are low in participation, and cool media are high in participation or completion by the audience. It means that in the level of participation in digital theater aims to cold medium. The main issue in two different medium is that in case of excessive use of digital devices in

the performance hot medium gets dominant as the result it fills all channels of viewer's perception with its own content. It does not give the audience a chance to turn on imagination. In case of balance of digital data and classic theater performance hot media dominate which demand from the audience high involvement in the process, participation, completion of the ideas in imagination.

I should bring into focus here that I see simplification of information's perception only in case of excessive use of digitized media. In case of the balance between digital tools and classic acting this method has more advantages than disadvantages.

The world of modern digital devices is an amazing world that offers a wide variants of computer effects in realizing of performance. Combination of digital technologies with scenic images creates new forms of interactivity. Virtualization and dematerialization change traditional artistic processes, creating a new aesthetic. This aesthetic has its adherents and adversaries. Any new forms provoke in society lively discussions. Not everyone can consider digital theater as art form. I share the ideas of both sides, but at the same time should admit that art as our life is inseparable nowadays from computer technologies. It is hard to foretell whether the expected departure of the theater will happen under the influence of the computer expansions to an interactive performative representations and to the global network of cyberspace. Whether this means the death of the classical forms of theater. Near future will show. To my point of view it is more important for us is to learn how to collaborate with new technologies not to the detriment of quality. The possibility to express the idea in theater field is unlimited for this moment. The problem is to recognize when this possibility can spoil classic theater vision. Computer devices should supplement but not replace real acting.

4.6. Themes in digital theater.

A number of themes in digital art are specific to the digital medium. It does not mean that digital media do not address issues that have been explored by artists throughout the centuries. Among the more medium-specific subjects are artificial life and intelligence, telepresence, database aesthetic and data visualization. The topics of body and identity, which obviously have been issues in art throughout the centuries and before, also figure prominently in digital art due to the changes that networked environments and a distributed presence have brought about. (Paul, 1999: 139) I will pay attention in this chapter on how body interacts with its virtual counterpart during digital performance.

4.6.1. Artificial Life.

I start my reflections about this topic from such theme as “*artificial life*” in digital performance. Appearance of digital computer has raised the question of the relationship between the human and the machine. Explores of this topic already in 1940s asked themselves a question about computation and interaction with human. In 1940 American mathematician and philosopher Norber Wiener defined three central concepts which he maintained were crucial in any organism or system-communication, control, and feedback- and postulated that the guiding principle behind life and organization is information, the information contained in messages. It means that the main aims of such symbiosis are to let computers facilitate formulative thinking and to enable man and computers to cooperate in making decisions and controlling complex situations. (Paul, 1999: 140) Artificial life is the main theme in many digital performances and it is obvious. Interaction with computer creates artificial space. Such space we can observe in the performance “Elsinore” of Canadian playwright Robert Lepage.



Robert Lepage is famous for his experiments with space, dimension and “artificial life”. “Elsinore” is the vision and thoughts about how Shakespeare would have written Hamlet if modern technology had been available. He would probably not have used the same narrative and dramatic techniques. In Elsinore (1995), Lepage achieves spatially disorientating effects,

using a virtual doppelgänger (shadow-selves). Live camera projections relay simultaneous views of Lepage (who plays all the characters) from multiple angles, and sometimes overlays them together. In “Elsinore” theatrical space represents a special world of virtuality. 3D space constantly rotates and transforms in the stage. Heroes fall in, disappear and look out from unexpected place. Artificial life of the stage itself gives new possibility for expressing ideas of the author. Modern technology is used partly to throw a new light on the text and the idea of Shakespeare’s characters. Computer technologies allow us to think over what if all the characters are simply reflections of Hamlet himself – that they are part of his paranoia. These artificial characters underline new reading of Shakespeare’s plays. Infra-red and thermal cameras, sonar, slides, all make it possible to see details which would not normally be able to see without use of modern devices. Stage-properties change their role- the real thing is real especially against the backdrop of always-changing scenery videos. For example, dumped suit from the shoulders of main hero hypnotizes the viewer's attention as if it can explain the problematic issue. All these tools focus audience’s attention on small items image or virtual reality characters. I can conclude that “Elsinore” is a contemporary reading of Shakespeare backed up by modern technology. Modern computer decisions here open for an actor endless possibility to show her/his skills as performer in the condition of difficult technical realization and tough psychological interaction with digital doppelgänger. Artificial life makes modern theater lively and many-sided.

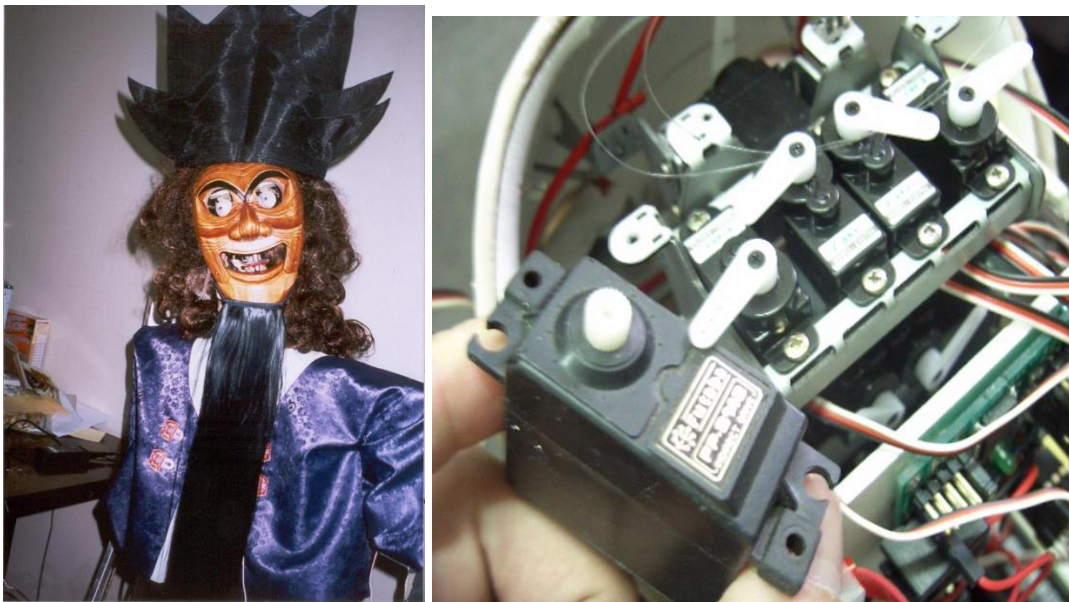
4.6.2. Artificial intelligence.

Next most popular topic in digital theater is *artificial intelligence*. “Behind much art extending through the Western tradition exists a yearning to break down the psychic and physical barriers between art and living reality-not only to make an art form that is believably real, but to go beyond and furnish images capable of intelligent intercourse with their creators.” (Paul, 1999: 146) Many digital performances contains elements of interaction with “artificial intelligence”. If we take for example digital play “Blue Bloodshot Flowers” of Susan Broadhurst mentioned before in this work, we can see the bright example of using computer character- Jeremiah.



Jeremiah is a computer-generated animated head based upon Geoface technology (DECface) consisting of a simple mesh representing the face with an underlying bone structure that allows the mesh to be deformed.⁷ He (It) has a simple bone structure that allows him to express himself and emotions, such as anger, sadness, or happiness. He was developed from surveillance technology— therefore, his eyes can see. During the performance a video camera fitted with a wide-angle lens was used to capture movement, which was relayed to Jeremiah’s “emotion” engine. The camera was located above the backdrop. Although we could have used more than one camera, one proved sufficient. (Broadhurst, 2001, p. 50). Artificial intelligent becomes one of the crucial character at the play and the interaction of the physical and virtual also creates inclusive metaphors. The interface between the physical and virtual bodies within contemporary performance practice give rise to a new aesthetics. Mix of visual and real leads to the enhancement and reconfiguration of an aesthetic creative potential which consists of interacting with artificial intelligent and reacting to a physical body. To my point of view in nearest future we will be witnesses of new theater concept where live actor will interact with visual computer-based “actors”. This concept is already developing very fast. Nowadays the interest to application of such high intelligence as robots into performance. Recently, the robots are being used in the various fields including education, entertainment, medical treatment, and live performance. The improved motion and cost reduction of the robots are drawing attention. In the field of live performance, the humanoid robots are being used as actors or dancers. The motion of the robot has been steadily improved since its origin. Recent robots can act like a human choreographer and they even can strike a pose which cannot be done by a human actor. A lot of studies on the robot based performing art were

conducted by many researchers. I would like to pay attention to one very unusual project-Portland Cyber Theatre. This theater is specialized in stationary and mobile robots that are humanoid and that improvise during their interactions with humans. Their most successful project is the performance “*KAIST Hahoe*”. Hahoe is a mask from Korean culture symbolizes miraculous power. Engineers from Portland Cyber Theater created humanoid robots-masks with human-like behaviors, gestures and reactions. The ultimate goal of the Portland Cyber Theatre was to develop the artistic concept of robot puppetry based on sound human-robot interaction principles and thus help to develop a general theory of human-robot interaction for future digital performances. (Perkowski, 2005: 19-21)



Portland Cyber Theater is probably the first theater for this moment using not live actors, but robots. The principle of their work is collaboration with people who can share and contribute the ideas about Cyber Theater through internet. Everyone is welcome with interesting offers about this field. To my point of view, Cyber Theater will develop increasingly and maybe in the near future we will be witnesses of brilliant interaction between robotic actors and real ones.

4.6.3. Body and identity.

Making artificial object is the main character the author tried to make a body (live performer) a secondary phenomenon, because in many art forms body is still dominant and primary. It reveals one more theme in digital theater- *body and identity*.

The body and identity have become prominent themes in the digital realm, centering on questions how we define ourselves in virtual as well as networked physical space. While our physical bodies are still individual, physical objects, they have also become increasingly

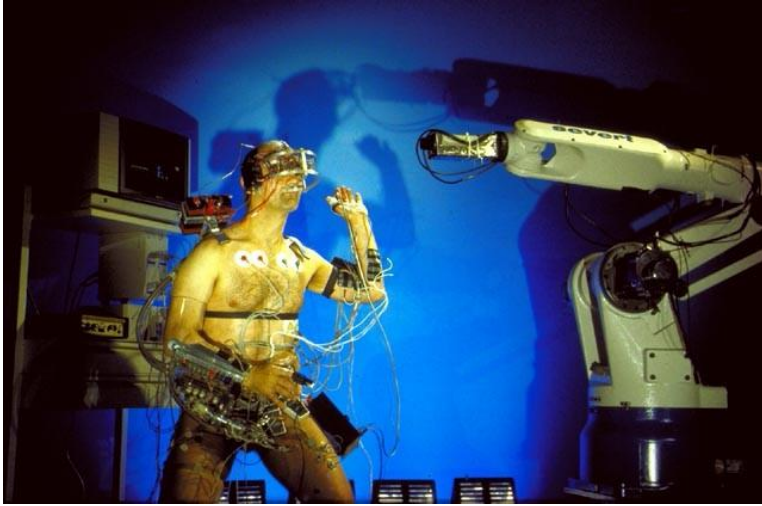
transparent: exact surveillance and identification seem to threaten the idea of individual autonomy. (Paul, 1999: 165)

Many performers in digital play explore the topic of human body which is strange how is not lost in the era of the permanent virtual digital innovations. But on the contrary, the artists say that the human body as an interface to transfer data becomes more and more important today. According to Elisabeth Grosz, the human body must be seen as a series of processes of becoming rather than as a fixed state of being (1994, 11-12). Human bodies are the centers of perspective, insight, reflection, desire and agency. All these ideas can be represented through digital tools. The emphasis on the body and media theory in theater and performance is perhaps the fastest growing area of performance scholarship.

In digital performance a director has the target to make from actor's body semiotic meaning which can be material sign, a carrier of meaning of the performance. To use such body for appropriate purposes, it is necessary, first, in certain sense to "kill" it. It means that everything pointing to body's organic character, its physical being must be removed and transformed into "semiotic body". Only such body is capable to express the meanings inherent in the text of the performance on the sensory level without distorting them. "Killing" the body realizes due to modern digital devices which let the viewer to perceive not physical body but the image, the sign.

The Australian performance artist Stelarc, for example, has created numerous works that construct human-machine interfaces- incorporating robotics, prosthetics and the Internet (Paul, 1999: 167). All his works devote to idea about interaction between human body and new technologies. For this performer the body of future is a system in which organs are connected and coordinated at the electronic level.¹² Performances of Stelarc, involved the Internet, have one goal - the alienation of the body from itself. In his performance "Ping Body" (1996) Stelarc implemented system that allowed to stimulate muscles not by its internal nervous system, but by Internet traffic. Ping values from 0-2000 milliseconds are used to activate a multiple muscle stimulator directing 0-60 volts to the body. This way, Ping Body established a connection between human body and Internet activity. "Allowing the body to be controlled by the machine, Stelarc's work operates on the threshold between embodiment and disembodiment, a central aspect of discussions about the changes that digital technologies have brought for our sense of self" (Paul, 1999: 167).

¹² <http://svpressa.ru/culture/article/5850/>



Interaction between body and digital technologies is essential topic in many dance performances. I would pay attention to some works because I consider dance performance is one component of digital theater. The same principles can be used at digital performances. One of the brightest representatives is Dublin team “MIDASpace”. They work with video mapping and interactive digitized space. 3d-projection, visualizing sounds show different variants of relationship between man and technology. Chanky Moves is Australian performance team to work with site-specific installations. They implemented special computer programs which allow to apply the projection and the camera in the living space following the movements of artists. One of the aims of the project was to explore and analyze the effect that computer technologies have on the physical body in performance.



All these performers are united with one idea- to show how body and identity is presented in the scope of digital technologies. I should admit that this interaction does not take a back seat to human body, but on the contrary gives that body more possibilities to express her/himself. Topic of body and identity in the technological sphere arrive me at the idea to discuss such modern tendency as use of head-mounted display or more actual glasses of virtual reality (oculus rift, Samsung Gear VR) in the performance. New computer technologies are

developing every day and virtual reality is closer to us than we think. Glasses of virtual reality were developed originally for gamers to fully immerse them in the world of game. Their particularity to approach the participant to the actions was noticed by some artists. The first performers who offered such glasses for the audience was French famous "Cirque du Soleil". In collaboration with Gear VR this circus offered to its With virtual reality glasses and new filming techniques, Cirque du Soleil Media is helping fans and its own performers to see a new perspective of the legendary circus by capturing the performance for people who can't attend the show or who want to view a slice of it again. Application of virtual reality helped the audience to be participants of the act. It breaks down the barrier between actors and viewers. In such condition virtual glasses give to the person impression of presence. A high degree of user immersion is achieved by filling the field of view with the synthesized system of images. The strangeness of watching this virtual-reality show is that it feels like it is live. You feel like you're sitting in the middle of the stage surrounded by performers. Virtual glasses actually puts viewer directly on stage where he/she is the focal point of the entire cast of this spectacular performance "Liveness" of virtual reality will open enormous possibilities for people in coming future to watch any performances even not being on it. It will not exist soon such necessity as to spend a lot of money trying to get tickets for the first row. Virtual glasses will let people to see the performance as clear as if we are there (on the stage of theater or circus). I think theater field will follow the example of Cirque du Soleil and will apply modern digital developments as virtual glasses at the performances. It will give new possibilities for perception of information not only for performers but also for the audience.

To sum up, I would like to admit that there are three most popular theme in digital theater: artificial life, artificial intelligence, body and identity. "Artificial" is a key word in most performances because with the era of new technologies artificial intellect became part of our daily life. Such tendency as use of modern digital devices reflected in the main topics of digital theater.

5. Data presentation and analysis

This chapter gives a detailed presentation of the material used for analysis and covers the main stages of the performance analysis process.

When I started to choose a material for my practical part I was confronted with such difficulty as the problem of choice. Nowadays there are a great number of digital performances all over the world. In my country the field is developing very fast and I think soon we will be able to speak about independent kind of art in Russian theatrical practice- digital theater. Nevertheless I chose for analysis digital performance of American group and I explain why. American school of digital performance can be considered as pioneers who started the first using in large scale combination of classical theater with modern computer technologies. American performers are more experienced in this field than their colleagues from other countries. That is the reason why I ended up with American theater- The Builders Association.

The first part of the analysis description is devoted to one of the most famous performance of the Builders Association-Super Vision. I will conduct detailed analysis of the performance through the categories presented in the theoretical part of my work. I will start with finding out characteristics offered by researcher Nadja Masura because they highlight common traits of digital performance. I will prove that digital performance “Super Vision” has at least one essential part: “digital enabled content”. Next point in my analysis will be devoted to liveness of the performance. The problematic of liveness in digital performances connected with presence of media space and real actors at the same area. I will examine if liveness correlates with media and if it correlates I will explore how indistinct boredom between liveness and digitized media. To my point of view digital performances should be examined though such concepts as intermediality, transparency and hypermediacy. These three approaches represent the idea how media collaborates with art in digital performance. The level and way of interaction can help or otherwise destroy “liveness” of the performance. That is the reason why I decided to include this part in my analytical work.

Intermediality, transparency and hypermediacy are the essential parts on which immersion and interactivity based. More transparent media on the stage, more immersive effect the performance will have. Level of interactivity between actors and spectators depends on level of mediatized space and its combination with different forms of art. I think that almost all modern digital performances strive for deep immersion and at least partly interactivity. In my analysis I will speak about how these two concepts are presented in the performances and through what tools the performance achieves immersion.

In my next point I will speak about presence of hot or cold media (according to classification of McLuhan) in the performance. McLuhan determined a medium's temperature based on the involvement or participation from the masses and the amount of information presented in the play. I will try to explore what type of media is presented in the performance and how it influences on the perception.

In my theoretical part I highlighted several main themes in digital performances: artificial life, artificial intelligence, body and identity. Based on criteria described in the paragraph "main themes in digital performance" I will determine main theme of the performance "Super Vision".

All aspects as intermediality, transparency, hypermediacy, immersion and interactivity are realized due to digital tools in the performance. That is the reason why I decided to pay attention in this part on technological bases of "Super Vision". I will show the specificity of using certain technological approach to create different effect on the audience (from immersion to interactivity).

Realization of digital performance implies decision of many questions and range of problems. Through problems connected with "Super Vision" it will be possible to see what problems can be found in realization of future digital projects.

5.1. The Builders Association.

The Builders Association, an award-winning intermedia performance company founded in 1994 in New York, develops its work in extended collaborations with artists and designers, working through performance, video, architecture, sound, and text to integrate live performance with other media. Its work is not only cross-media but cross-genre - fiction and nonfiction, unorthodox retellings of classic tales and multimedia staging of contemporary events. The Builders Association is a bright example of a successful combination between old media and the last computer devices. The company uses media and computer technologies to "reanimate" theater for a contemporary audience, to create a world onstage which reflects the contemporary culture which surrounds us. The investigation of old media practice ended up creating the basis for their new media aesthetic. Technology in that innovative theater plays a central character. It is an essential part of the performance. The Builders Association makes its technological dependence visible, putting backstage technologies center stage and presenting architectural assemblies of screens and bodies. The Builders Association's work is interesting not only because of its crossing of media forms but also for how that formal

crossing simultaneously addresses different kinds of content. Its production adapt and rework textual materials to reflect on the impact of new media in contemporary culture. We witness a genuine example of politico-technological theatre, continuously played within exceptionally self-evident and visually effective theatrical scenography.

The Builders Association have different interesting projects, but I would like to pay attention to one of them- Super Vision. In this project the Builders refer to such topic as large-scale social trends. They turn to relevant technological forms: video diary, radio logs, geo-mobile telecommunications, internet calling, figuring these thematically and theatricality as resources for multimedia performance. According to the director Marianne Weems, in this play they had an attempt to “enmesh the performers in the media by collapsing the video space into the stage space. So there wasn’t the feeling that you had in our other performances where the viewer is tracking back and forth between the real live performer and the mediated image. It was really about trying to combine these as intimately as possible.” (Kaye 2005: 561). Super Vision is a big project united the usual play of actors and the use of new digital technologies.

Super Vision explores the changing nature of our relationship to living in a post-private society, where personal electronic information is constantly collected and distributed. Marianne Weems chose the topic of “surveillance” inspired by the book of John McGrath “Loving Big Brother: Surveillance Culture and Performance Space” in which McGrath mentioned “the idea that we are shadowed by an electronic doppelganger”. (McGrath, 2004: 120) The idea about “doppelganger” or in other words “person’s double” is connected with the specificity of computer world. The possibility of digital technologies to create a person’s double through different scenes in the performance. This specificity will be reflected at the further analysis.

Super Vision is a triptych of stories about the loss of self in a world where prying eyes are only a few computer clicks away from credit card numbers, e-mail messages and medical records - entire lives reduced to streams of data. This performance is a collaboration between live performance and media ensemble which explores the intersection of visual arts and architecture through 3D digital media. The performance is divided into three stories: 1) dataveillance of young man 2) A young woman digitally archives her failing grandmother's past 3) A father covertly exploits his young son's data until the ploy escalates beyond the father's control. All three topics are united with one big issue: influence of computer’s dependence on person’s daily life, human experience in the 21st century, century of computerized society.

5.2. Methodology in performance of Builders Association.

A growing number of cultural productions oscillate nowadays between virtual reality effects and bodily presence. We can notice such tendency in digital theater as to move along the continuum from live (bodily) presence to the percussive reality effects of electronic, screen-based images.

Since the mid-1990 computer and their software have become central to research processes across all academic disciplines. In theater and performance studies the use of new technologies has not only significantly transformed research methods and methodologies, but it also led to an extension and evolution of theater practice itself.

The primary methodological aim of the Builders Association is to « reanimate theater for a contemporary audience, using new tools to interpret old forms... to create a world onstage which reflects the contemporary culture which surrounds us». (Builders Association 1997) Reinterpretation of old media forms is the main methodology in the works of this group. In this case we can speak about term “remediation” in theater offered by Jay Bolter and Richard Grusin. “What is new about new media comes from the particular way in which they refashion older media and the ways in which older media refashion themselves to answer the challenges of new media”. (Bolter, Grusin, 1999:15) Such old media as television and cinema coexist together with new one: internet space, 3D projections and video installation. Video mapping with traits of cinema has new understating from the spectators. In this performance video not just broadcasting of events, but essential element of the acting.

Research methods for design and technological aspects of the production involved collaboration with dbox (special chairs created by a unique patented technology, synchronizing the movement on the screen with the movement of the chair, which provides total immersion in what is happening on the screen), an innovative 3D design and media company. Its primary task was to design a virtual architecture for the production that would collapse the live into the virtual. (Kershaw Nicholson, 2011: 52) Through analysis I will try to examine how successful research method helps in realization of collaboration of real acting and virtual reality.

As we can see the main methodology of "Super Vision" is reinterpretation of old media forms.

6. Analysis

The tension between live performance and electronic (screen-based) representation is also a recurrent theme in contemporary theater. As Marianne Weems of the Builders Association put it: “what happens when you have the palpable presence, the live bodies of the actors, and the ability to stage the network of technology that surrounds those bodies? For me theater today not only stages the impact of technology on human presence, but it also extends our reach into the virtual. Our tele-prosthetic relationship between the physical world and the virtual world is now part and parcel of the reality in which we live. (Weems, Jackson, 2015: 10)

For my analysis I divided the performance into three parts (three different stories with three different characters) and analyze each of them through several classifications which were described previously in my work. I will start my analysis with the arguments demonstrating that Super vision is a digital performance.

6.1. Super Vision as digital performance.

In the chapter “Digital Theater” I gave examples of criteria of digital performance offered by Nadja Linnine Masura. She offered three aspects of digital play: liveness, digitally enabled content and language content. I will start from the first aspect.

“Super Vision” has traits of *liveness* because in the performance we can observe interaction of people (audience and actors) sharing the same space. Even with the arrival of mediatized background the performance still stay “live” with real actors acting on the stage. The performance is acting at the certain moment in real life. All these traits speak about liveness of the performance.

Necessary condition for creating digital theater is the presence of digital media. *Digitally enabled content* is presented very clear in Super Vision. The audience can understand it even from the beginning of the play. Video projections, set of computers, huge screen on the stage tell about digital nature of the performance. Digital enabled content is the main attribute in the performance “Super Vision” because its topic concerns modern computer society.

Language content is a necessary attribute of any performance. In Super Vision language content is built around three different stories with different characters united by one common idea- life person in data-based and data-controlled century. Every part of performance has the exposition, conflict, complication, crisis and finally denouement. These aspects are key for any performance that is why I can affirm that this performance has language content.

Super Vision has all three aspect of digital play and it means that Super Vision is digital performance.

To prove that Super Vision has all characteristics described at the chapter “Practical part” I will conduct analysis of three different parts of the performance. The presence of offered criteria even in one part will prove that the whole performance has this trait.

6.2. Analysis of the first part of the performance.

At the beginning of Super Vision one woman takes the stage, apparently without technology. There are no screens, no digitized voices and no live feeds. She (performer Tanya Selvaratnam) starts very unusual speech: “Good evening and welcome to Super Vision. As we begin tonight’s performance we want to ask a few questions about what we are doing here. We start by asking “who is here?” All of you have answered with your credit cards which can tell us more about you than your neighbor can. The consumer-profiling company Claritas whose clients include everyone from Coca-Cola to the US government maintains an extensive array of consumer data. Claritas tracks what you buy, where you go and what you watch. And so you’re watching Super Vision.” (Jackson, Weems 2015: 244) This opening catches audience’s attention and establishes the dataveillance theme in ironic way. The performer from the beginning leads to the main topic of the whole performance- the uses of personal data in our daily life. Super Vision pushed question of digital identity in different direction. The producer of the performance studied a lot of articles about data networks and process of surveillance and manipulation in this filed. A data-driven world has encouraged access and transparency but also created new forms of corruption, abuse and opacity. The great good of transparency has brought new questions about what kind of information is rightfully public.

The first scenario focused on an upper-middle-class family Fletchers with three members in it: mother-Carol, father-John Sr. and their son-John Jr. What is interesting about this part is that only two live actors representing mother and father on the stage. They interact with their child represented by a video-projected virtual boy. One side on the stage live mother plays with her virtual child in the virtual living room, while on the other side of stage the live father sits at his computer in his virtual reality. Fletcher family scenes were set in the architectural interior of a designer kitchen created on the computer with the help of dbox and projected to the screen. The video designers of this scene focused on calibrating movements of performers in relation to the digital space so they could create the effect of naturally triggered interaction.

With the development of events the father created a portfolio of financial transactions that were based on his nine-year-old son’s identity and Social Security number. He steals the son’s identity in order to run up half a million dollars in credit-card debt to pay for family’s lifestyle. New paradigm of this play consists in concept of not existing in real life actor-son. I

think it is first time in digital performance when man-like actor (not android) is created on the computer. The idea of the director in this part was to enmesh the performers in the media and this boy ended up being the most enmeshed of all. Computer created boy is able to go through doors, run outside and talk to his parents. The boy's capacity to seem real depended on actor's ability to interact with this child like he was alive. In this part digital theater create for real actors more challenges that in usual theater. They should demonstrate all their artistic skills in communication with non-existing actor. From their talent to include data-based performer into acting it will depend the audience's perception of the performance. Multidisciplinary nature of this action represents cooperation between acting of real actors with virtual reality. "As the factions of the father get out of control, the den space expands to invade and crush the on/screen living set room. This method used to create a sense of the character's immersion within the virtual world visually was a small downstage mobile screen in front of the actors, on which the child's image was projected" (Kershaw, Nicholson, 2011:52/53). The boy in this play becomes a fully posthuman being through a relational process that required the mediation of technology and the mediation of acting. The main idea of this part centers of father who place his hope for the future in the data sphere speculating financially in elaborate investment schemes.



Figure 1. The scene from the first part of the performance.

Liveness of this part interconnects with mediatized space. The audience can see real actors on the stage, which interact with each other. At the same time digital created son reminds us about virtual reality in this part of performance. In my theoretical part I mentioned problematic issues connected with liveness. Some theorists admit the existence only a pure liveness of the performance, others speak about impossibility of division liveness from media

space. In my case clear-cut ontological distinction between live forms and mediatized ones is impossible. It represents a single whole, where digital aesthetic is dominant and live aesthetic is incorporated in first one. Digital devices are dominant through the whole first part of Super Vision. At the same time without acting of live actors this performance would be just set of different digital devices without deep theatrical meaning.

Now I would like to analyze this part of performance through following concepts: intermediality, transparency and hypermediacy. As I mentioned before intermediality concerns the ability to synthesize media and as a result to get the unity in the performance. In first story of the performance intermediality will become apparent in the way how main actors communicate with their video-based child. Huge screen projector helps to express the idea of unreal illusory world. Intermediality has different groups which I mentioned before and now I would like to examine these types of intermediality through the first part of performance.

Type of Intermediality	Characteristics
Synthetic intermediality	Video projections, 3D devices, music and sound effect, computer-based actor
trans-medial intermediality	The similar target of different media
transformational intermediality	Verbal text
ontological intermediality	Visual and aural perception of the performance

Synthetic intermediality consists in the fusion of different art and media into new art and media forms. In the first part the director used such media as video projection, 3D technologies, music and sound effects. Collaboration of actors with digitized space created on the screen gives birth to new art and media. Marianne Weems prefers to win the interest of spectators with media-based scenography. Innovative technological decision in light, sound and digital sceneries not only provide spectacularity of the performance, but also help to create and maintain emotional background of the performance. This background exists in harmony as among spectators so among actors. Trans-medial intermediality is represented through different digital devices on one stage expressing the same idea. All different media as video, sound, narrative story has the similar aim-to show how computed world influences our daily life. Audio and video channels used in first part get a new angle of understanding the problematic issues in the acting. When the mother has some hard periods in relationship with

her husband she tries to imagine that she is in the forest and all problems are going away. To show spectators imaginative world of the mother the creators decided to broadcast video of flying birds and using as background sound of their signing. Both audio effect and video broadcasting has the same target: they express idea of calm and peaceful world. Transformational intermediality occur in the way how verbal presentation of the text turned into visual presentation. Verbal text of son was realized through video broadcast and recorded voice. To my point of view such presentation of text stay in memory of spectators longer and highlight the most important moments in the speech. The first part of the performance has a plenty of photos showed via projection. Such photos have a certain artistic value. They represent part of performative sceneries and spectators perceive them as a part of important information. The last category-ontological intermediality where a medium defines its own ontology through relating itself to another medium. The use of data-based character helps to explain the idea of illusionary world with its problems. Video projection is responsible for spectators' visual perception while acting of performers and pronounced text is responsible for the aural perception. Two different perceptions from the two different media create the whole picture in the head of the audience and reveal the meaning of the performance in general.

Intermediality is connected with multimediality in the way how they incorporate virtuality, interactivity and connectivity. That is the reason why I would like to analyze this part of performance through such concept as miltimediality. Audio-visual components of scenes of the Fletcher's daily life have dominant influence. From this point I can speak about multimedia component of the first part in the performance. Incorporation of music, video projection and textual dialogues between actors does not damage the specificity of these media. Textual dialogues do not dissolve in the context of computer existence on the stage. Digital background helps to expand the meaning and the message of the performance.

Transparency of this episode is represented in the acting or real actors which remind the audience that events passing on the stage not imagined, but they happen right now, in the auditorium. At the same time digital reality with computer-based living room and screen existing son put the audience in the space far from transparent one. Marianne Weems make the audience aware of existence of medium that is why I cannot talk about pure transparency of this episode. Transparency strives for seamless, transparent representation of the real within a single medium or media form. In this part creators use several media form that tell us about hybridity of performative act. This fact can be explained by the idea of the performance.

To show what is virtual world and how it incorporates in our daily life. I cannot declare also about unmediated relationship of objects in first part.

Hypermediacy in this part is connected with digital image. The visual symbolism here is behind the video projection on the stage. The ideal apartment as from an advertisement was created in computer on purpose. This ideal picture is impossible in real life. Digital tool helps to show that main characters try to escape real routine life and live in their computer-based reality. Son, created also in unreal computer world, symbolize the problem of relationship between parents and children. The director who presented this character on the screen, maybe, had intention to show the impossibility of parents do decide problems of their child in real life. Hypermediacy expresses itself as multiplicity and offers a heterogeneous space. In the first part of the performance the heterogeneous space represents combination of real actors (Fletcher family) and virtual reality (computers and computer-based character). Video projection of virtual son, music and light backup, virtual parts of apartment witness presence of simultaneity which is one of the concept of hypermediacy.

The first part of the performance represents combination of different media that is why it will be fruitful for the whole analysis to find out what type of media (hot or cold) is more frequent in this part. McLuhan's division of media into cold and hot reflects how this or that media influence on the audience. As I mentioned before in the theoretical part of the work, digital performance is able to contain traits as hot media as well as cold one. In case of excessive use of digital devices in the performance hot medium gets dominant as the result it fills all channels of viewer's perception with its own content. It does not give the audience a chance to turn on imagination. In case of balance of digital data and classic theater performance hot media dominate which demand from the audience high involvement in the process, participation, completion of the ideas in imagination. In this part of the performance media has hot and cold level at the same time. Visual presentation of information remind us about presence of hot media. Different dialogues of main characters, verbal presentation of information tell about cold media. Synthesis of cold and hot media give the audience possibility to build up their own thoughts about the performance and at the same time give full perception of actions due to digital incorporation. Lack of words is compensated by the inclusion of the hot medium in the text area (set of visual images on the screen). Hybridization and the implication of media is a moment of new form of performance.

To analyze this part of the performance through such categories as interaction and immersion, I would like to start with answer on the question-how interaction in this part helps to immerse the audience into the performance? If I look at the scene where actor playing mother

communicates with her son created on computer and projected on the screen I can speak about navigation and participation of actor, the two first stages offered by Steve Dixon. Actor navigates in the virtual world through communication and acting as if this boy were a real actor. In his part I can find out three components of immersion mentioned by Steve Dixon: navigation, participation, conversation. (Dixon, 2007:563) The conversation stage sends us back to selective interaction, through which the participant strives to meet an aim. During communication performers are able to express and share with the audiences their thoughts.

The artificial sceneries in the house of Fletchers family created by computer look so natural that audience is immersed in the atmosphere of daily life of ordinary family. The main target of computer created son is to make atmosphere of the performance close to virtual reality, where main characters not real people, but digital bodies. Change of virtual picture on real actor might not have let to feel the atmosphere of digital reality and problems connected with this topic. To immerse spectators in the problematic issue of computer world creators in purpose highlight the presence of different digital devices. Father of the family spend a lot of time in front of the computer. Without this artifact on the stage it would be impossible to express all problems connected with virtual world. More digital tools on the stage more immersive will be effect on the audience in this case when topic concerns virtual reality.

In the theoretical part I spoke about video mapping and how it influences on the immersion of the performance. With video mapping level of immersion is very high. Small details of objects are represented so natural that audience do believe that this is real object. Artificial elements of kitchen look very natural and virtual son fit in acting of real performers. Video mapping helps to immerse audience in the performance.



Figure 2. The scene from interaction with digital son.

In this part of performance I can speak about two main topics. First is credit and data fraud at the development of digital data networks. Second is computerization of our daily life leads to the reduction of communication between members of the family. The second topic is more important theme in this part of performance for me. Computerization of daily life can be correlated to the topic “Artificial life” described in my theoretical part of work. Interaction with computer creates artificial space. This space is an essential attribute of virtual reality. To my point of view even the creation of data-based son shows the virtual relationship between people in his family. Data-body discourse that is both fascinated and horrified by an immaterial figure of son that seemed to have many material implications. Virtual son on the stage opens for an actor endless possibility to show her/his skills as performer in the condition of difficult technical realization and tough psychological interaction with digital actor. Presence of virtual son on the stage can be also correlated to such theme as “artificial intelligence” in frames of modern performance. The interface between the physical (mother father Fletchers) and virtual bodies (son) within contemporary performance practice give rise to a new aesthetics. Mix of visual and real leads to the enhancement and reconfiguration of an aesthetic creative potential which consists of interacting with artificial intelligent and reacting to a physical body.

The family’s story search for new paradigm of relationship at the era of computer controlled base. Husband has a massive secret that was both his obsession and a source of anxiety. On every questions of his wife he answered in short and rude way:

-I never see you on Saturdays any more. It seems like this is taking so much time. What is going on?

- It would take me twenty minutes to explain this to you and I don't have time.

Computer on the stage of the theater and actors existence in the computer world shows the spectators the problematic base of the relationship in this family. It is hard to imagine that such performance as Super Vision revealing the challenges of modern digital society would be performed only with the help of performers' staging. Digital devices here play the key role and help actors to express themselves better.

The structure of this part represents the continuous flow of events which are achieved through the synchronicity of sound and image.

Technological basis of this part of performance is constructed on the basis of AUTO/CAD graphic 3D design and dbox system and big projector on the theater's wall. The photorealistic lightning effects were accomplished using the Brazil rendering plug-in for 3D Max, which used advanced ray-tracing capabilities to portray how light propagates in a space (Jackson, Weems, 2015: 266). In this part dbox digital videoscape was incorporated in the play. Fletcher family scenes were set in the architectural interior of a designer kitchen. Cabinet and kitchen slid into position to surround the husband and the wife who stood inside it. On the screen of the projector we can see digitized exterior of not only apartment, but also of nature. Actors focused on calibrating their movements in relation to the digital pace so they could create the effect of interaction with the digitized space. Projections on the stage in this part of the performance are distinctly framed and separated from the actors, and although there is live mixing to conjoin the screen-videoed actors with computer effects, there is no attempt to merge the live and the mediatized into an illusionistic visual composite. Real and not real actors exist in one space not interfering each other and not breaking integrity of the performance. The complicated technical work implies the common efforts of designers, operators and IT technologists. In the world of digital performances there two types of visual artist who work with digital scenes: media-art artist or computer programmer artist. (Астафьева, 2011: 129) In this part of performance I can say about influence of media-art artists because their primary task is to "reflect not real world, but its image created by means of media, media world itself." (Астафьева, 2011: 130) The idea of virtual world in the life of family shown in computer created sceneries, in virtual actor. Projection screens, interactive sceneries help to create the integrity of the spatial environment. Technology matching virtual and real world (computer world against real life of usual family) aims to visual accent as new form of aesthetic feeling oriented on the changes in new virtual world on new era. Work of

visual artists, technologists represent simultaneous collaboration in a shared systemic field. As we can see digital component of the performance has very strong impact and it takes the biggest part of the play.

In realization of first part creators confronted with the range of challenges. Concept data body is a key concept in the first part of performance “Super Vision”. The Builders had such challenge at the beginning as how to represent data body onstage. In collaboration with dbox program they managed to create outlined figures whose shadow was filled with data text and long figures that was overwhelmed by a grid environment of personalized data. To provide these data bodies with an organic, living presence, animation parts were realized in 3d Max, a software application that was used to create motion graphics and three-dimensional models. Actors in this performance had chance to work with motion-capture nodes affixed to their joints and limbs. All their movements were reflected on the screen. The goal of motion-capture was refuse either utopic or dystopic imaginings that polarized the digital from the real. It was like a visual metaphor for a data-driven human. . Modulations with data-based actors not existing in real life (as in case with the first scene when family interacts with data-based son) can have different response from performers. I wonder if such collaboration is helpful in theatrical experience. My doubts were exploded by comments which actors of this performance gave in the book of directors of Builders Association: “I feel that I am inside that technology and being delivered through that technology. And this sensation I don’t want to lose, because I treasure it.” (Jackson, Weems, 2015: 275) Actors did not feel that their autonomy as an actor was corrupted by technology but felt themselves to be enabled by it.

The main actress played mother shared her experience from the work with digital actor: “To be honestly it is hard to call acting with digital actor “interaction” because all movements and dialogues of this actor are recorded in advance. The main issue in collaboration with digital heroes is to follow the look of computer hero. The audience is able to see his look and I do not see it. I should interact with myself, but at the same time to make feeling that digital actor does unpredicted actions as real actor”. (Jackson, Weems, 2015: 277) In this case is it possible to speak about opportunity to express real actors through communication with virtual characters? I think it is possible. Actors in such situation have the chance to show their level of mastership and due to their acting make virtual actors perform as real ones. This unusual relationship between real and virtual shows interaction of people and multimedia tools built on the inner logic relationship. Data relations bring new questions about the nature of the human and the nature of theatrical performance.

The main issue in this part for creators was to show that nowadays virtual and material worlds represent interdependence even if it has many negative moments (as alienation of members of family in real life). The rise of new technologies provides deep interdependence between real and virtual worlds. The human body in new discourse is seen as part of computer system. The Builders Association used the metaphor of the interdependent data body to structure aesthetic of this part, even as it also tested capacity of actors, designers and audience members to take responsibility for the interdependence.

6.3. Analysis of the second part of the performance.

Second part of the performance tells about a Ugandan-born traveler, Mr. Shah. The action takes place in passport control. Each scene has the same set-up: an exchange between the businessman and a Transportation Security officer. An actor plays a role of officer performs to a camera directly facing him, with his image located in a passport control booth that appears on a screen onstage. Baz Kershaw describes this scene in following way: «As Mr. Shah is interrogated by passport control officers he becomes increasingly beleaguered and dehumanized upstage of the mobile screen, onto which many digital imaging data streams are projected. Their volume and density is increased progressively throughout the performance: thumbprints, signatures, retinal scans, credit card transactions, names of his family members. The downstage-screen technique appears to place Mr. Shah inside a bureaucratic data environment where his body is dissected and his identity becomes transparent, cleverly evoking the company's aim that the character should become less of a physical presence and more of a presence defined in the body of data that accumulates around him". (Kershaw, 2011: 53) In this part of the performance creators tried to show bureaucratic world where decisions are made without adequate accountability. Spectators feel how scary our world have become.

Liveness of this part of the performance represents a single whole with media space like in the first part. The main aesthetic of virtual reality integrates in the space of real actors on the stage. This mix gives the audience the effect of full immersion into the performance. Like in the first part I cannot speak about pure liveness here because the performance represents collaboration of media space with real actors.

From the point of Intermediality this part of performance represents special interest. Here we can observe the brightest example of unity between media and performance. Each time when traveler Mr. Shah communicates with the Agent illuminated screens if his intimate data-credit card statements, travel expenses, bank account- appeared above him as the agent's interrogation proceeded. The scene was graphically represented by different colored veins originating from the actor and spreading across the stage.

Type of Intermediality	Characteristics
Synthetic intermediality	Video projections, 3D devices
trans-medial intermediality	The similar target of different media
transformational intermediality	Verbal text

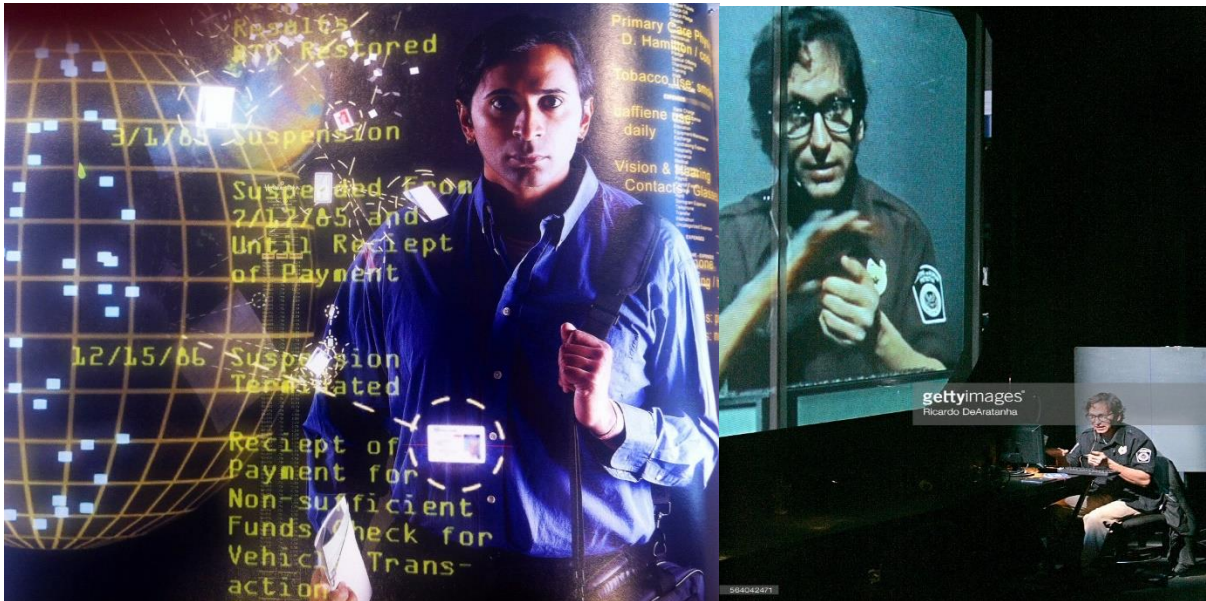


Figure 3. The scene from the second part of the performance.

Synthetic intermediality in this part is represented as in the first part with the diversity of media. In this part the directors used video mapping on the screen, recorded voices. This part sets in motion works of architects, software designers, video makers, musicians, lighting and sound designers and, of course, actors. All this diversity of media tools help to immerse the audience in the atmosphere of data-based reality. Trans-medial intermediality is a concept that can be found in different media. This type of intermediality is represented through video projection. Picture as a symbol is very important here. The audience is able to observe all changes on the face of an actor and all spectrum of emotions through broadcasting video translation of actor on the screen at the stage of the theater. The component of picture is the main attribute of this scene. In transformational intermediality one medium is transformed into another one. In our case verbal presentation of the text is reflected in numbers and dates on the screen on the projection. Verbal background is transformed into visual one. This transformation help to pay attention to details that can be missed during verbal presentation of facts. Final intermediality according to Schröter is ontological, a model suggesting that media always already exist in relation to other media. For example, video media has a great impact on the audience because of its visual power. The use of video mapping in this part is aimed to create a physical illusion of images by combining audio-visual elements.

Multimediality incorporates virtuality in the context of the performance. At this part of the performance virtuality is realized not through artificial sceneries and heroes as in the first

part, but through way of communication between policeman and Mr.Shah. All reactions of Mr.Shah spectators can observe on the projection screen. Virtual part consists in realization of communication between two actors.

Transparency of this part is not as obvious as in the first part. Even if the performance in this part strives for transparent presentation of events, the audience do reveal multiple media and digital technologies. Hybridity of computer and media tools on the stage do not make the atmosphere as natural as possible but this step was made on purpose. All performance is about computer influence on our daily life and this computer component has already unnatural, virtual basis. It is hard to present computer reality in transparent way that is why I can speak about hybridity as opposite element of transparency in this part.

Hypermediacy here is represented through possibility to give the audience full information and representation. As I mentioned before multiplicity of media in this part of the performance as video projection, sound effects, changes of picture on the screen immerse the viewers into hypermediated space, where everyone has chance to follow acting of actors and changing of media. Simultaneity of computer-based resources in this part lets create the unique atmosphere of computer reality. Hypermediacy is related to such concept as remediation. According to Bolter and Grusin remediation has two approaches: tribute and rivalry. (Kattenbelt, 2008:25) In this part of the performance I can speak about rivalry because in this concept the new medium places the old medium in a new context or absorbs the old medium. Digital broadcasting of face of Mr. Shah on the screen absorbs usual theater visual perception from spectators. In ordinary theater performance viewers perceive visual information through acting of performers on the stage. In my case spectators perceive information through digital devices placed on the stage. Such perception gives more possibility for detailed observation of emotional condition of Mr. Shah. Face of policeman is also projected on the screen through video mapping. Spectators are able to observe an emotional tension between policeman and Mr. Shah comparing two video projection of main heroes. Rivalry approach aims to show that digital tools exist. The second part of the performance as the first one does not have intention to make space natural as possible. On the contrary the second part highlights existence of different digital devices to enhance emotional opposition between two actors.

Immersion is on high level in this part as at the first one. Due to video broadcasting of events onto the stage the audience have feeling that they are at the passport control where officer scan all your face movements and feelings. This technique helps to advance the menace and alienation of the surveillance theme to make the representation more immersive for viewers.

The Traveler is confronting someone who does not really see him. The real face of traveler is represented through data information which spectators can see on the screen. The production's scenography highlighted the tensions and pleasure principles at play as between computer representations/experiences that seek to immerse the user by making the interface disappear (transparency and immediacy) and other techniques which positively foreground the medium and interface (opacity and hypermediacy). Such effects, according to Bolter and Grusin, create a spectator perception that 'the excess of media becomes an authentic experience' (Bolter, Grusin, 1999: 54). It is important to understand that is not enough just to break the frontal division between the stage and the audience in order to achieve immersion. It is more important to effect on sense making of audience and give them illusion that reality is so natural and just possibly within reach. In this part of the performance video mapping has special attitude. Detailed presentation of face of Mr. Shah is very important for understanding emotional pressure on the hero. Face of main hero expresses from angry to fear during conversation with policemen. Video mapping allows spectators see all emotional changes and feel deep compassion.

Interactivity in this part is in direct proportion to the level of immersion of the performance. As I mentioned before that immersion is on high level it means that interactivity is also in high level. Two main stages are presented here-navigation and conversation. Actor playing inspector has possibility to navigate through different options offered by computer. He is able to check all details of traveler's life. Conversation as in the first part shows tension in relationship between two characters. In Virtual Reality placing the body at the center of a performance allows for a combination of immersion and interactivity (which are incompatible in literature), as immersion depends on bodily perception rather than language. In VR, the sense of immersion is given by image, sound and tactile sensations. Interactivity is added to the experience by coordinating the display with the movements of the user's body. The physical presence of the body in the virtual environment reinforces the sense of the physical presence of the virtual world. (Ryan 1999: 133) In this part of the performance virtual world create new paradigm which is about in what way creators managed to bring up such issue as transparency of personal data at the time of computer spying. All computer actions projected on the screen on the stage immerse the audience in the nature of this problem. Multidisciplinary nature of digital performance represent mix of video devices, sound background, verbal and visual presentation of the text.

This part of the performance has more traits of hot media, than cold one. It represents a lot of pictures, video broadcast and photographs in the scenes when officer ask question to the

traveler. At the level of perception it has materiality and it represents certainty for audience. Ideas and thoughts reflected at the screen of projector do not let viewers turn on imagination; all information is presented through visual set. That is the main reason why I can admit that this part of the performance strives for hot media, then to cold one.

The main theme in this part is surveillance discourse in the time of digital data expansion. Among themes described in the theoretical part I would rather correlate the second part of the performance to the topic “artificial intelligence”. Nowadays life is controlled by computer intelligence in almost all fields. Marianne Weems raises such problem as data expansion in modern world. Artificial intelligence in this part does not have the same aesthetic meaning as in the first part. Here this topic is presented through point of excessive use of such intelligence in our life.

The technical effect of picturing the Traveler’s “suspicious” data body meant that the actors playing the Traveler and the Agent were not in standard proximity to each other. Rather, they were each positioned in direct address to the audience while surrounded by the data screens. None of the performers look at each other. What is being staged is the network. All performers were isolated physically, but they were mediated electronically so what the audience sees is the network that is joining them all. In this principle the authors of the performance tried to show that our computer life makes us isolated from each other. We do not exist anymore in real life though we can be in touch via electronical and computer way. Isolation of the person in the data-based society is one of the key idea in *Super Vision*. An essential part of the second part of performance was the compressed space between the large front and rear projections screens. It consisted of a small alley that the actors occupied for most of the show. The front screens were created from Textaline, a relatively new material at the time that allowed video to be projected while obscuring the actors. The same apparatus allowed the screen to be made transparent by lightning the actors behind it, thereby creating a changeable surface on which information appeared and disappeared around the bodies of the actors. (Jackson, Weems, 2015:267) Technical directors of the performance installed five projection screens along three separate tracks. Screens were moved via a custom/made multidirection controller. On the stage spectators see theatrical performance and the backdrop of the stage represents the screen on which acting is projected in real time (picture is captured by camera not visible for spectators). Real video imposes on the three-dimensional projection of virtual environment. All these modern concepts in realization of the performance help to grab spectators’ attention and intensify emotional perception of information.

The main issue for Marianne Weems in this part was the choice of way to demonstrate surveillance and digital data expansion in modern society. (Jackson, Weems, 2015:269) She managed to realize in brilliant way the conflict between personal data and computer interference. Confrontation was realized through two video projections on the screen installed on the stage. Simultaneous broadcasting opens endless possibility for expressing emotions for actors. This method of visual demonstration of information can be useful in digital performance in case of intensification of visualization.

6.4. Analysis of the third part of the performance

The third part of the performance tells about young woman Jen engaged in regular video chats with her aging grandmother Angelo living in Sri Lanka. The pair converse by webchat. Jen is located at a workstation (with a camera) onstage, so that when she faces upstage to look at her computer monitor her own face is projected, as if on webcam, onto a screen onstage. Angelo sits at the desk on the forestage, also facing a camera, her image similarly projected. Jen wants to create a digital archive of her grandmother's life. She tried to pick up some memories of her grandmother during the conversation, but sometimes grandmother is unable to concentrate on the words and reproduce all parts of her stories. Here we can find out the key idea of this part. For many young people technological communication looks like great way to keep in touch with the old generation, but when it comes to real life, real contact life is too busy for young people. Jen's preoccupation with her Grandmother's archive couldn't overcome other kind of distance or substitute for a different kind of care.



Figure 4. The scene from the last part of the performance.

“Did you take your pills today, Grandma?”

“Is there someone there who can give you a glass of water?”

In fact, the plaintive exchange between Jen and grandmother thematized the paradoxes of digital data and drawbacks of digital connection.

This part of the performance has traits of liveness like first and second parts. According to Robert Jones real actors here express conscious reality while projected pictures express unconscious one. Different form represent different aspects, but they exist in complementary relationship. The audience have possibility to unite real live actions with computer reality.

Intermediality in this part is represented in all levels as in first and second part.

Type of Intermediality	Characteristics
Synthetic intermediality	Video projections
trans-medial intermediality	Common traits of different media
transformational intermediality	Role of visual information for verbal presentation
ontological intermediality	similarities and differences in various media

Synthetic intermediality in this part does not have any specialties differing from first and second ones. The same diversity of media is presented here. I can say that the moment of the meeting of different media is a moment which break up of ordinary forms of perception. What is interesting is that viewers in digital performance perceive this mix of media not as separated elements, but as the one elements which consists of small different parts (sound effect, video projection, light). Through the point of transmedial intermediality all media in this part is target more not on visual presentation of information, but on sound and verbal. During conversation via webchat the most important thing is not that characters are separated by data reality, but the fact what ideas and thoughts they pronounce during this conversation. Visual background helps to express verbal text. In transmedial intermediality certain forms of media can dominantly effect other forms of media. In first two part video had strong dominance. In this final part narrative base is more significant than others. Transformational intermediality is introduced in a move from visual presentation of information to verbal. If in the second part of the performance all important information in numbers and names was presented through pictures on the screen, here all important details presented through verbal text of actors on the stage. Ontological intermediality in this part as in the second is represented through video mapping which is aimed to create a physical illusion of images by combining audio-visual elements. Two projections of face of main heroes on the screen show in the best way the process of communication via skype and common digital programs in our society. To present alienation of young generation from old one Marianne Weems used video media with textual background for close presentation of daily situation in communication of different generations leaving far from each other.

Multimediality of this part incorporates virtuality through context of digital communication, but this context differs from the first part of the performance where virtuality was realized between real actors and digital character. In this part virtuality represents way of communication and representation of textual information.

This part of the performance as the first and the second ones strives for hybridity, not for transparency. I can explain it from the point of chosen topic of the performance. Digital media as the theme of the performance cannot be shown with traits of hybridity. Presence of computer and digital projection on the stage highlight virtual and unnatural space. To understand the issue of digital world spectators should watch and realize the existence of virtual reality on the stage.

Multiplicity of hypermediacy represents in this part through combination of different media: video mapping, photo and numbers projections on the screen, music background. This multiplicity as in the first and in the second part helps to perceive the performance from different points of vision. The audience in theater can see how actors acting on the stage and at the same time watch changing scenery and digital performance (changing images of projection during development of events of the third part). The simulation of spatial situations is the only type of illusion that can be created using digital devices. From the point of remediation in this part as in the second one concept of rivalry is dominant. It is no point to try to hide the presence of digital devices because authors of the performance had intention to clue the topic of digital communication in our days and how it influences on the relationship of usual people in the time of lack of live communication. This intention was mentioned in the book "Builders Association" written by creators of the performance "Super Vision" which I used for analyzing this play. This intention is easy to read watching the performance and I read during watching it online in the internet.

Immersion of the last part of the performance is on the same level as at the previous parts. The way of demonstrating skype communication on the stage immerse spectators in the situation of virtual talks. In the moment when Angelo tries to pick up some memories from her past viewers have possibility to see all her thoughts demonstrated in pictures on the screen through video projection. This method of simultaneous speech of main hero and video set of pictures help to see the line of thoughts of actress and immerse auditorium in the inner world of main character.

Virtual reality is usually defined as a computer-generated environment which the recipient feels part of surrounded by and which opens up possibilities of interaction. (Kwastek, 2013: 156) Actors interact in this part in two aspects- navigation and communication. Jen interacts

with information of her grandmother via computer on the stage of the theater. Communicative approach is realized in the parts when actors reproduce dialogues through digital tools.

This part of the performance strives for hot media as all three parts, but at the same time has traits of cold media. At the level of perception it has materiality and it represents certainty for audience. Visual presentation of information remind us about presence of hot media. Different dialogues of main characters, verbal presentation of information tell about cold media. This balance allow spectators to follow the idea of creators and build up their own opinions that is very important in the scope of the theater.

The main theme of this part is a risk to lose normal live communicative connection between people in the time of artificial life in digital world. Artificial life in the first part of the performance and in the last one has main characteristics and consequences. Main heroes live in the virtual world and make all manipulations on their live via digital content. As in the first part in this story virtual reality destroys real life because of its impossibility to replace all attributes of real life: live communication, ability to touch your collocutor, feel the presence of the moment in real time. Computer content in this case maybe helps in facilitation of life (possibility to speak with Granny locating in another part of the world), but facilitation of communication influences on its quality.

From technological background I can say that in this part spectators can observe the same amount of digital devices as in previous parts: the basis of AUTO/CAD graphic 3D design and dbox system and big projector on the theater's wall. In debates about the relation between performance and new technologies critics and artists worry about effects on the autonomous domain of body and identity. In the scenes between grandmother and granddaughter, the performers connect by way of live mediation rather than direct eye-contact, in a staging that performs both corporeal presence and virtuality, separation and conjunction. The relation is always to the mediating apparatus (the camera, the screen, the microphone) as much as to the fellow actor.

At each Super Vision story came to a close, audience witnessed central characters altering their relation to the data sphere. John Fletcher tried to escape his audit by removing to the arctic part of the world and found out that the imaged background of his new environ was built on the same digital grid as his living room. The Grandmother and granddaughter's long distance relationship was under risk by memory loss. In the end, technological and personal disintegration was symbolized by the diffusion of the Grandmother's image into a random

fuzz of pixels. The Traveller, Mr Shah, allowed himself finally to be enveloped in his data. In the final scene he walked across the stage with his data falling and dispersing his body.

Conclusion.

The way of development of digital technologies in theater began relatively not long ago, but already right now I can say about its scale and diversity. In the framework of this research I considered the key moments of this way. Digital creativity in the scope of theater is developing with great speed. Every year new technological devices are elaborated which are able to realize any ideas of playwrights.

In the course of this work I spoke about historical milestones of development of digital performance. Every historical time has its particularities in the field of digital performance. The greatest success in this sphere we can witness in the 90s and our days.

In the course of my work I managed to answer the question: what is digital theater. Any digital theater should be first of all digital enabled. Without digital devices in the performance I cannot consider such performance as digital. Secondly, digital performance should possess liveness. It means that without live actors and events passing in the moment it would be hard to speak about performance even with the presence of digital background. Thirdly, digital performance should have spoken or language content. Without language content performance turns into musical performance and dance.

To answer the main question of this thesis “what impact do new digital devices have on such art as theater” I took for analysis the performance “Super Vision” of American group the Builders Association. Through such concepts as intermediality, transparency, hypermediacy, immersion and interaction I tried to show the in what way digital devices influences on the performance in the theater. I can declare that all these concepts in a digital performance help to immerse spectators more in the events on the stage. It helps also to extend possibility of actors in interaction with digital space and the vision and perception of spectators. The use of multimedia technologies gave possibility to create on the stage such unusual method as interaction of real actors with virtual ones. This method we could observe in the first part of the performance. The most important in realization of any digital performance is to save balance between virtual reality and live actors. The excessive use of digital devices can lead to the simplification of information through point of visual perception.

Super Vision draws a complex portrait of modern technology, exposing both its strengths and weaknesses and the strengths and weaknesses of its users. Technology can be manipulated by individuals or by commercial businesses and the government, who can identify and target individuals as desirable or threatening. And, although technology can open lines of communications, it can only bring us so close to loved ones.

In what way will modern digital theater develop in future? A large variety of digital devices represents great possibilities for explorers of this field. Certainly, digital theater as a new trend in modern performance will develop and expand its abilities. I think that it will be logic to create internet-theater with internet as essential media platform. Theater will exist in real and virtual realities. In this case spectators will interact with the screen and theater will be in the same line with other objects of screen culture. In such theater the use of Gear VR can get a new breath and open endless possibilities for spectators.

To my point of view implementation of digital technologies does not distort idea and spirit of theater. It is still remarkable, live performance happening here and now. New technologies just became harmonically complement of the author's idea. Purpose of digital theater has the same aim as usual theater: educate, give sense of happiness, learn to think and empathize, save from spiritual emptiness. New technologies help to make this process more outstanding and expressive.

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