

# ILLUSIONISTIC ENVIRONMENTS – DIGITAL SPACES

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## **ABSTRACT**

Contemporary designs create new performance structures in terms of directing and acting on the stage with the assistance of the technology. We have moved far from physical props and furniture in order to create the environment. “Soft sets” [Aronson 2008: 27], digital pictures, virtual spaces and human’s bodies create the main illusionistic environment, which absorbs the performer and his audience. We have moved away from Giacomo Balla’s designs, where lights replaced performers’ bodies. Scenography has become a setting that can be created by a bodysuit or an exoskeleton controlled by the spectator via a computer interface. Digital scenography builds new worlds, strongly influenced and affected by the technological advancement. Telematic sets, Robotic and Cyborg Theatres create a new era in the performance art.

In this paper we argue that a contemporary scenography has the power to create a unique narrative journey in space and time with the assistance of technology. We claim that moving images, digital spaces and mixed media environments may be used to create illusions and construct unpredictable worlds distant from any realistic representation of life. A digital environment becomes a medium, which can set new rules for the performance art. Recent technologies have encouraged strongly the fusion of direction and scenography by creating not only a new visual notion in the theatre, but also unique experiences for the spectator and the performer as well.

## **KEYWORDS**

Scenography, digital environments, digital scenography, virtual spaces, digital technologies, Josef Svoboda, Paul Sermon, Marcel-Li Antunez Roca

## INTRODUCTION

### **The moving image as an organic part of the scenography**

Screen projections have become the organic parts of performances since the beginning of the 20<sup>th</sup> century. Artists like Erwin Piscator and Emil Burian were the first ones to use extensively still and cinematic projections combined with complex set mechanisms, creating a mnemonic documentary theatre; quite advanced for its times, necessary for the social-political situation of those years. The fusion between the live action and the film projection became a powerful element of the scenography on stage, which has brought reality into drama by creating a montage of real and recorded images in the same space. It seems that the film was a medium, which was missing from the theatre stage. Moving pictures have brought the outside world into closed spaces, expressed the public voice in terms of documentary and in many cases replaced the chorus of the Greek tragedy in terms of drama. The dynamic of this medium created an environment that could reflect the thoughts of the individual character on a stage, the internal world of a personality, able to illustrate feelings that were impossible to be expressed before unless they were spoken.

Josef Svoboda, as a pioneer of the multimedia theatre, was one of the first artists to project the characters of a play from external locations, e.g. "*The Eleventh Commandment*" in 1950 and "*Laterna Magika*" in 1958, creating interaction between filmed performers and the real ones. He managed to create a unique cross-disciplinary art form by conjoining film and theatre. This fact would expand dramaturgic possibilities; create new meanings and artistic aspects (Dixon, 2007:83). In "*Intolleranza*" (1965) "instead of showing the chorus live on stage as a group of strikers, a more dynamic effect was created by having images of strikers projected onto dozens of placards carried about the stage" (Gieseckam, 2007:57). The public voice came into a closed space by using the moving picture as a main medium of expression. Soon after, he projected a live relay on the stage with the assistance of a local television channel, connecting the real life people on the streets, who were demonstrating outside of the theatre, with the action on stage. These people, turned by the artist into performers, were racist demonstrators marching outside of the theatre accusing communists and Jews, claiming that mixed schools should close and black people should be sent back to Africa.

The interaction between the inside and the outside worlds became not only a socio-political statement, but also created a third illusionistic space ready to accept the unpredictable script that the outside scenography and action would develop. A new dynamic landscape was formed in few square meters of the theatre space building up an erratic environment whose evolution no one could predict. A new, involuntary direction line was about to be drawn from the outside world, while the subject of *intolerance* was confronted inside the performance space. In addition to all these, Svoboda projected negative images fed from live cameras placed inside the theatre. In this way the figure of a white singer transformed into a black person and similarly spectators appeared to be black people projected on large screens. This effect caused the indignation of some people in the audience whose reaction was also projected on stage. The converse between the medium, the performance and the spectators evolved in an extraordinary way, creating a visual text that the script would be most likely unable to achieve. It appeared like the performers, the audience and the demonstrators became a part of the same story while each of them experienced the event from a different point of view.

The moving image became a new narrative apparatus on stage. The projection screen, which was a main scenographic instrument, created possibilities to produce new environments in the performance space. It was a space in which the actor, the audience and the outside world could meet in order to create a unique narrative and a rare experience. The basis of the theater performance was no longer a dramatic text, “but the scenario, the evidence of the fusion between direction and scenography, and their aiming toward a common goal” (Burian, 1977:31). The camera and the projection screen transformed into a great scenographic apparatus creating a theatre that is built “on the principle of synthesis ...between scenography, direction, acting, and dramatic text” (Burian, 1977:32). It appears that the extensive use of moving images in scenography may not only remove the need for physical sets, but is also able to create environments with narrative dynamics. At this point it is very interesting to notice that compared to directors, play writers and others, the scenography appears not to be an underrated artistic skill anymore. This can be observed before the introduction of the digital means on the stage design.

## **Telematic Art - Virtual Environments**

By the mid 20<sup>th</sup> century, the idea of the Telepresence and the concept of the Telematic Art have already been born. Very soon, the so called “*soft sets*”,

virtual spaces and digital images became the main illusionistic environments. The development of digital technologies created new scenographies where the merger of the virtual and real spaces strengthened the relation between artists and audiences by eliminating distances in terms of time and space. It looks like the theatre, the performance and the installation art appeared to transform in consciousness and styles, which are strongly affected not only by the technological evolution, but also by the social need for progress and more contact among the participants. The need to invite the audience inside the art seemed to be a necessary component in order for the art to happen.

The technological evolution, with the assistance of the Internet, the networking in all its flavours, produced the attractive communication environment for artists. Digital scenography reclaimed the new means of creating worlds that were connected and separated at the same time. Mixed media sets, augmented reality environments and virtual surroundings created a global community, which was able to share the same experiences simultaneously from different locations (e.g. Station House Opera: *“Live from Paradise”* in 2004-2005, *“Play on Earth”* in 2006, etc).

Paul Sermon’s experiments in Telematics have produced numerous installation projects, such as : *“Telematic Dreaming”* (1992), *“Telematic Encounter”* (1997), *“A Body of Water”* (1999), *“Picnic on the Screen”* (2009) and many others. A big part of his work was based on the coexistence of people who lived apart in their own realities and they could meet in a third virtual place. In his projects the scenography of the space appears to be a leading agent into a visual script, which in many cases creates unique experiences for the spectator. *“Telematic Dreaming”* installation, facilitated by the ISDN network, connected two separate locations operated as a customised video-conferencing system. The main idea of the project was extracted from the concept of *home*, the term whose meaning was valued by Jean Baudrillard in his essay "The Ecstasy of Communication" where he writes about a subject in a “universe of communication” seeing “our own body and the whole surrounding universe become a control screen” (Baudrillard 1983:127).



Figure 1: "Telematic Dreaming"

In "*Telematic Dreaming*" shown in Figure 1, a similar double bed was placed in two separate locations. The room in one location was blacked out whilst the other one was illuminated. In the lighted room a camera was placed directly above the bed, sending a streamed video of the bed and the person lying on it to a projector placed over the bed of the blacked out room (chrome key was applied). The second camera was placed next to the projector (in the darkened room), which was sending a video of the two persons from different locations lying next to each other to monitors located in the lighted space. Both participants were able to interact with each other. The result of the whole setting was to enable a visual communication between the users who were apart, offering at the same time a virtual pleasure of touching each other by replacing the touch with the vision. From the spectator's point of view, all these seemed to happen in a different space, in a third illusionistic environment. On the other hand the external observer could see two people interacting with each other (monitor fed by the blacked out room). Even though when looking at the images on the monitor we could realise the flatness of the one person, it seemed like the main purpose of the project was achieved: the two people were apart and together at the same time.

The scenography created by this telematic space enhanced users visual perception, boosted their senses and imagination, at the same time offering a pleasurable spectacle to the spectators outside of the installation space. The telematic scenography of this particular piece of work extended the participant's body into another location, while at the same time he could see the effects of his actions in a different place and on somebody else. The whole scenery appeared to create a scopophilic environment by referring "to pleasure in looking, and exhibitionism in the pleasure of being looked at" (Sturken and Cartwright 2005:76). The intelligent use of the communication system evoked the spectator's imagination even if there was not a clear scenario or narration. In his essay "Movable worlds/Digital scenographies" Johannes Birringer argued that "The digital scenography extends this space into the virtual on and off stage spaces that are visual diegetic (narrative) spaces dialectically enhancing the imaginary world of the performance as a whole" (Birringer 2010:92).

Even though we could probably think like this about the "*Telematic Dreaming*", it is worth to note that the environment created by Paul Sermon offered the privacy of the users who inhabited the installation space. This kind of privacy does not remind us the notion of home? At this point we should remember the title and the theme of the "*Telematic Dreaming*" developed from Baudrillard's idea of *home*. The digital scenography of the installation allowed not only a "virtual inhabitation" of the space by the user, but also a secret intrusion "as a peculiar, foreboding feeling when the safe and familiar (as epitomized by the home) suddenly becomes strange, alien or sinister: 'the unheimlich is what was once heimisch, home-like, familiar; the prefix 'un' is the token of repression' (1985: 366)" (Dixon 2010:10). Without analyzing Dixon's words further, we should note that the visual narration and the scenery of the "*Telematic Dreaming*" could remind us "a smoke language... we can walk around it and see it evaporating and re-emerging" (Birringer 2010:99). Even though the narration in the "*Telematic Dreaming*" was a hidden scenario, difficult to realize, very easy not to notice, the truth is that the spectator found himself immersed in a "playful world", which allowed him to free his feelings of excitement and pleasure by observing his body and its extension interacting with a different person, inside a different space.

If we could discuss this subject years ago, before the evolution of the digital means, we would probably ask if it was possible for material objects to tell us a story. Can scenography create narrative spaces? On that hypothetical occasion we would have to refer to Giacomo Balla's lights, Adolph Appia and Gordon Craig's designs and to talk about symbolic values of the object in space before we would introduce more contemporary theatre designers like

Ralph Koltai [Figure 2 and Figure 3] and others.



Figure 2: "Les Soldats" by Ralph Koltai, scale model, Lyon, 1983

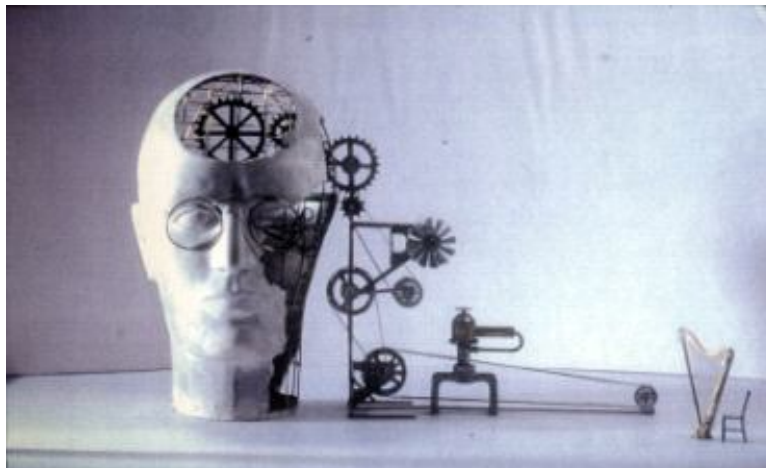


Figure 3: "Tales of Hoffmann" by Ralph Koltai, scale model, America, 1994

On the other hand Johannes Birringer's query regarding digital scenographies might have sounded more like an assumption rather than a question:

*"Has interactivity brought about new conventions of digital mise en scène? Has the increasingly commonplace use of video projections in contemporary stagings replaced the need for material sets and objects?"*

(Birringer 2010:92).

In his paper *“Movable words/Digital Scenographies”* Birringer argues that *“the arrangement of theatre, where spectators are seated to be ‘stilled’ in their sensing perception of movement, is an unnatural one”* (Birringer 2010:90). Maybe we should take in account that artists need to communicate their worlds and to interact emotionally with the others. It is very difficult for a painter to “absorb” the viewer into his paintings, even if he is a very talented artist. The best he could achieve would be to thrill the viewer and to “take him inside his worlds” metaphorically, but never physically. It seems that a scenographer, the artist who “writes” on the scene (in direct translation from the Greek language), or draws three dimensional worlds in space, has more chances to “absorb” his audience into his imaginary artwork. Certainly, the sensory perception of the still spectators seated in the auditorium seems unnatural.

For many years artists have tried to find different ways of breaking the distance between them and their audience. Digital scenographies have moved away from the static scenic painting and created new worlds, which could evolve in time and space, at the same time drifting the spectators on imaginary journeys and sharing experiences with them that were impossible to be shared before. *“One may wonder what is the point of trying to re-create ‘virtual’ imagery on an actual, three dimensional stage?”* (Aronson, 2008:76). In digital and/or virtual spaces the observer is able to exist physically and/or virtually in the environment. Sometimes he is able to interfere and to become the co creator of the scenario, which surrounds him. He can draw his own lines in a visual text, which might be simultaneously a part of the artist’s mind and a part of his imagination. It appears that digital scenography turned to be a meeting point for the creator and his creation, for the spectator and his spectacle. We may observe that in many cases the digital environment predominates an artwork in terms of narration, while the installation art continues to obtain more and more dramatic ingredients (i.e. Paul Sermon’s *“A Body of Water”*). Alternatively we may notice that performance and installation art approach each other, creating a fusion of each other, which sometimes may result in a theatrical piece of work. Maybe it is not an exaggeration to say that digital worlds are about to unite visual arts in a single, very powerful means of communication.

George Coates brought the virtual world on stage by using the “soft sets” in most of his projects. In the “Invisible Site”, shown at the International Conference and Exhibition on Computer Graphics and Interactive Techniques (SIGGRAPH'91), he created a stereographic scenography by using three



dimensional (3D) computer-generated environments that required the spectators to wear polarized glasses. The 3D animations were projected on a thirty-foot by sixty-foot perforated aluminium screen (this is what he calls “soft set”). When actors were lit, the spectators could see both the projections and the actors who appeared to be in a 3D environment. Using two SGI/VGX computers and proprietary software, the 3D animations could follow the actor wherever he/she was going, controlled by the back-stage operator by using a joystick, like he was performing together with the actors. Actually, this was a real-time 3D animation, synchronised with the performers. With these multimedia technologies the spectator could see the birds following the actor when he was moving around the set or an enormous eye, which was staring at the character who in turn was trying to avoid its gaze (Aronson, 2008). *“While 3-D projections had been used before in movies, this way have been the first time that interacting live actors and 3-D computer images were used in a theater production (it preceded Monsters of Grace (1998), by Robert Wilson and Philip Glass, which used such projections)”* (Shank, 2005:273). Coates also used performers from different places around the world to take part in his performance as they were broadcasted in real time via Internet.

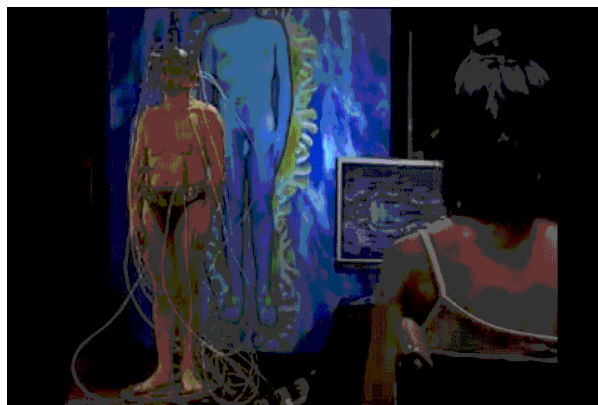
The audience were immersed in an absolutely illusionistic mixed reality environment, while the polarized glasses have become the necessary equipment for the spectator in order to experience the spectacle. The viewer, by wearing glasses, travels from the real world into a fantastic one. His gaze concentrates on the direction where the attraction takes place, while the contact with the reality weakens in a converse way with the virtual imagery. Spectator’s eyes are guided in a stronger way than in the cinema, as the mixed reality images create the illusion of absorbing the viewer inside the projected world, perceived like invading or occupying the auditorium. The false impression of being able to touch the untouchable, this excitement of senses, places the spectator more inside his spectacle than in the audience, where he physically belongs. The observer follows the character on stage whose behaviour looks like a journey between “soft sets”; an interaction with images that depend on his movements, while he also depends on their existence. This merger of the Cinema and the Theatre, which can be accomplished by the digital scenography, might result in the birth of a new artistic form, which would fulfil everything that theatre was missing and everything that cinema could not achieve.

In his project *“The Crazy Wisdom”* (2001), George Coates placed WEB-enabled teleprompters on the stage. The actors could be controlled by on-line viewers who at certain moments would submit their opinion or their “crazy wisdom” to the teleprompters via the show website. If we could combine both

Coate's performances together, the virtual environment on a theatre stage with actors controlled by the spectators inside the auditorium (something which is not very difficult to be achieved), we could possibly talk about a second life theatre performance; a second life experience, which would be shared inside a theatre space with other spectators, and with real actors-avatars.

### **The body as a part of the digital space – an avatar in real flesh**

Marcel-li Antunez Roca prefers to use his body instead of virtually manipulated characters on stage. He has found a different way to approach his audience by turning them into users and directors of the performance. In the project "*Epizoo*" (1995), shown in Figure 4, the artist invites the spectators to manipulate his body in a similar way that a computer user would operate his character or his avatar in a video game. The important issue is that the character in this case is not a virtual person. Instead, he exists in a flesh inside the performance space, he becomes a vivid part of the scenography and every command from his user affects his body by creating pain or feelings of pleasure. The set-up of "*Epizoo*" reminds more an interactive installation than a performance art or possibly a combination of both art forms.



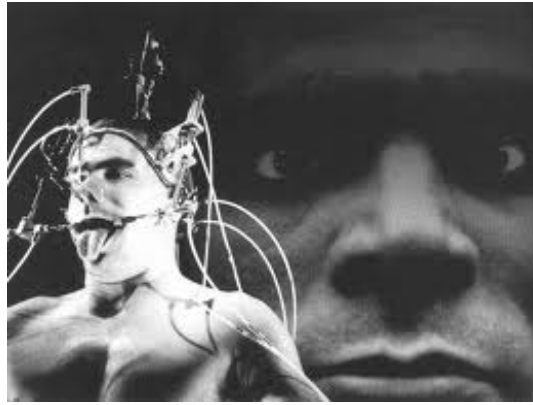


Figure 4: Marcel Roca's "*Epizoo*" project

The performer was dressed in a pneumatic exoskeleton which was connected to a computer system, including a mechanical body control device. The rest of the set design consisted of a projection screen, which was placed in the background of the stage, two vertical lighting rigs and sound equipments. The orthopaedic robot mechanism was supported on his body by two metal moulds. There was a helmet and a belt, to which the pneumatic mechanisms were attached. These mechanisms could move parts of Marcel-li's body, like mouth, nose, ears, pectorals and buttocks, whilst he was standing on a rotating round platform during the performance. The pneumatic mechanisms were connected to a computer system for controlling electro valves and relays. Special software, which had been designed for the project, had an interface similar to a videogame. There were eleven interactive scenes combined with a number of computer generated animated sequences that reproduced the figure of the artist and signified the position and the movement of the devices. The spectator, who was transformed into a computer user, was able to manipulate the performer's body by clicking with his mouse here or there on Roca's graphic representation, which was depicted on the monitor. The spectator could control the images, lighting, sound and the artist's body using a mouse.

The "Epizo" allow us to observe the way that technology can be used in order to control not only the performance space, but also the human body, having obtained here the characteristics similar to a material scenic object. This show was probably the first attempt, which enabled spectators to remotely control the action on stage, integrating the performer's body as a part of the scenery. We could argue that in "Epizo" we witness an event, in which basic performance principles have been reversed. Even though we know all the pre-programmed settings of the work, we cannot disregard the fact that the audience obtains a unique power over the show. By the time that the

spectator accepts to become a user, he turns into the director, scenographer, lighting and sound designer of what happens in front of him. He accepts to be not only the creator, but also the accessory of his spectacle; the torturer and the seducer of his sadomasochistic character on stage - a character (Roca) who, as we all know, conceived the staging of this adventure.

This specific artwork offers us the chance to realize the possibly negative effects of creating digital worlds. It is somehow difficult to disregard that there is a human body mistreated on the stage in front of an audience by another human/user. It is interesting to ascertain that theories from the previous century find their completion in our days or it is disappointing that human needs remain the same over the centuries; to rule and to be ruled. We should remember at this point Gordon Craig's theories about the total artist and the Über-Marionette. The importance of the One creator of the theatre performance, preferably the director, who should control the entire show. Craig wanted the actor to be a marionette and Roca becomes a human doll or an avatar in flesh, asking to be animated by its user, to feel pain or pleasure by its operator. Social scenarios and sexual games find their completion in few square meters of stage. The spectator assaults a human body in public, the audience enjoys a unique spectacle and the artist accomplishes his artistic vision.

We can clearly see that *"the theatre or exhibition space were merely pretexts to gather the audience around the artist. It is also worth noticing that his performances do not use traditional stage design"* (Fargas, 2009:10). The reason is that the scenography of the space is the narrative itself: the human body and its mistreatment.

## **Conclusions**

The merger of art and technology creates not only new possibilities of expression and communication, but also new conditions and norms, which influence the theatre and mark the evolution of the performance and installation art. It seems that it is necessary to redefine the scenography. Virtual environments and augmented reality sets generate new conditions for the audience and the artists. In many cases the digital scenography, three dimensional or not, sets the rules of the performance. We have moved very far from the script and its dramatic interpretation. The narration of a play is possible to be replaced by moving images, immersed and/or virtual worlds. As Goebbels says:

*...I use texts that are not dramatic, which are not written for the stage,*

*because those tend to concentrate on relationships and emotions rather than on the thoughts behind the words. . . . I'm looking for words or images or music that open up perspectives, not narrow them.*

(Dixon 2010: 15)

The fusion of scenography and directing becomes a new reality in performance. Scenography is not an underrated craft anymore. The scenic design with the assistance of the digital technology becomes a world without geographical or emotional boundaries, which the artist, the character and the audience co-inhabit and in which they interact with each other. Digital scenographies have moved away from the static scenic painting and created new and global worlds, which can evolve in time and space, drifting at the same time the spectators on the imaginary journeys and sharing experiences with them that were impossible to be shared before. *"This is perhaps a basic definition of what we mean by digital scenography: the live performance architecture incorporates analogue, digital and networked dimensions; performers and audiences are inside and outside the digital worlds simultaneously; and the screen canvases co-animate the localized movement narratives, as much as the movement characters of the performers and the costume designs animate the images from the past and present, and even forecast the meanings that might be read into the dancing language of the avatars, their bodies, sexualities, identities"* (Birringer 2010:98-99). It seems that a merger of the Cinema and the Theatre is about to happen. Such a fusion, which can be accomplished by the digital environments, might result in the birth of a new artistic form, which fulfils everything that theatre was missing and everything that cinema could not achieve: to touch the untouchable and to sense the invisible.

## References

Aronson, Arnold (2008), *Looking into the abyss, Essays on Scenography*, The University of Michigan Press, USA

Baudrillard, Jean (1983), "The Ecstasy of Communication", In *The Anti-Aesthetic: Essays in Postmodern Culture*, Hal Foster, ed., Bay Press, Seattle

Birringer, Johannes (2010), "Movable worlds/Digital scenographies", *International Journal of Performance Arts and Digital Media*, Volume 6 Number 1

Burian, Jarka (1977), *The Scenography of Josef Svoboda*, Wesleyan University Press, USA

Dixon, Steve (2007), *DIGITAL PERFORMANCE, A History of New Media in Theater, Dance, Performance Art, and Installation*, The MIT Press,

Cambridge, Massachusetts, London, England

--- . (2010), "The philosophy and psychology of the scenographic house in multimedia theatre", *International Journal of Performance Arts and Digital Media*, Volume 6 Number 1

Fargas, Pep, Roberta Bosco and Stephano Caldana, (2009) "Metamembrana: A Project by Marcelli Antunez Roca", *Actar*, mul edition

Gieseckam, Greg (2007), *Staging the Screen, the use of film and video in theatre*, Palgrave Macmillan, Boston NY

Shank, Theodore (2005), *Beyond the Boundaries*, University of Michigan Press, USA

Sturken, Marita and Lisa Cartwright (2005), *Practises of looking, an introduction to visual culture*, Oxford University Press, Oxford, New York

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