

From Text To Interface

Theatre And Digital Media

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ABSTRACT

The following text by the digital performing arts company res publica, confronts theatre from a practical perspective with an approach informed by theory of communication.

The first part of the article introduces res publica's point of view concerning performing art. This serves as a methodological framework for the analysis of the recent work "Enjeux" (Inplay), an interactive scenic device.

Keywords

Scenic device, semiotics, digital scenography, scenic interface, hypertext, interaction

General Terms

Documentation, dance, theatre, digital media, technology

1. INTRODUCTION

The company res publica is concerned with the stage as space of representation. Their performances precede neither from a body-oriented standpoint (dance) nor a dramatic narrative oriented one (theatre). Their investigations of stage question the construction and arrangement of space, the structure of representation and the relationship of stage and public. Their centres of interest are formalized in "scenic devices".

The term of the "scenic device" is defined in opposition to concepts of representation in terms of a metaphorical translation of reality. The creations of res publica are scenic devices where the theatre as place of performance as such, is analyzed by the transformation of its setting. The performance is understood here in the sense of a cultural practice and thus socially, historically and technologically determined. In this perspective, the devices both deconstruct and reconstruct representation. The scenic devices operate by the categories of space, interpretation, public, time, and action.

In an historical perspective the work of Oskar Schlemmer, the founder of the stage at the Bauhaus in Dessau, is an important reference for the work of res publica and in particular for the creation "Enjeux".

He was one of the first theatre artists who worked in a systematic and radical way on the human body as a code, and the relation of Man and Space. He proposed a perspective of body on stage as an abstract and symbolic representation as opposed to the psychological and expressive approaches of German Dance in the 1920th. He intended in his stage work to represent the exemplary, the universal instead of showing the individual or the typical. His theatre works did not want to be a copy of reality but an artificial (art) product in order to bring up the essential, and the (pure) idea. The term of "mobile Raumplastik" (mobile sculpture) illustrates his concept of human body representation.

He examined the gesture/ movement as a relation of Man and Space on an abstract level and not as a representation of human psychology. The result is the formalization of human motion to geometrical forms. He investigated the stage in his masterwork "Triadische Ballet" to study the relation of space and body; through the basic (triad) parameters of form-colour-space, height-depth-width, and the three basic forms of geometry: sphere-cone-cube.

He opposes the laws of the cubic space of stage to the laws of natural man. If the space is adapted to man, the stage becomes naturalistic or illusionist. If man is adapted to the cubic space the stage becomes abstract. From his viewpoint, the laws of the abstract stage are the invisible lines of planimetric and sterometric relationships. [3]

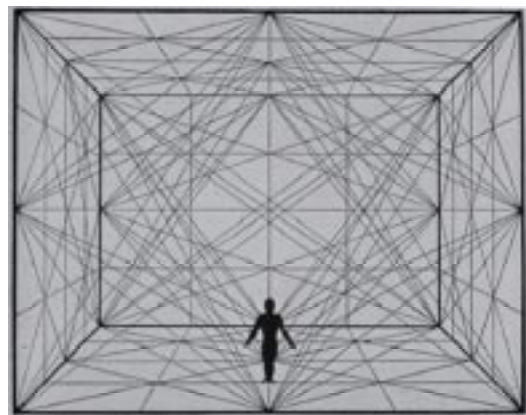


Figure 1. Oskar Schlemmer, "Figur und Raumlineatur" (Figure and spatial delineations), 1924

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Group

Even if Schlemmer didn't include technologies in his stage works, his work is an important source in the history of digital performance since he was studying the relation of different media in the context of stage, without any metaphorical approaches. [2]

The idea of the scenic device, as well as the question of the integrating digital media and the consequential re-organization of the semiotic situation in the performance process will be discussed here with examples from the performance "Enjeux". Furthermore, it would like to point out the value of both dance and theatre in the context of performance where digital media are integrated.

2. PAPER

The French company "res publica" developed the interactive scenic device "Enjeu3+4x3" between 2001-2003 in collaboration with the Belgian office for architecture and urbanism Lab[au]. At the centre of the scenic device is an interface, a multimedia front projection onto a screen at the back of the stage. The projection is at the same time the only source of light and the only scenography. In this way, the projection is not just a visual representation but also a complex device that plays on the space in the projection's light cone. The interface relates the screen projection to the space of stage. The public manipulates a trackball interface and consequently they also alter the space of representation.

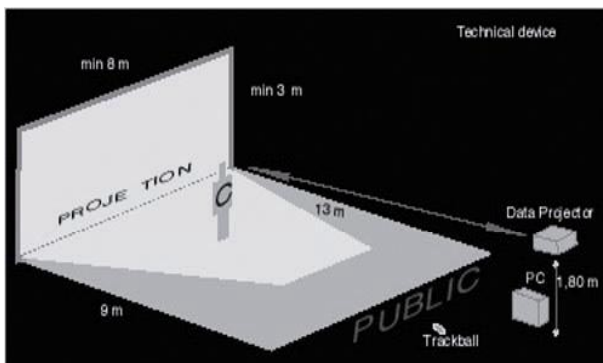


Figure 2. Scheme of the technical device.

From the beginning of the performance one trackball circulates in the audience. Since the trackball is lit up and the movement of the cursor is always visible on the screen, the public can easily interact and participate at the action at any moment. In the beginning of the performance, the public just choose a sequence by a menu and progressively manipulate the whole sequence.

The creation shifts the status of the public from a group of individuals to an assembly, integrated in the construction of the content and the construction of the representation.

In order to evaluate this idea and the idea of a hyper-textual dramaturgy of representation, a meta-text layer is integrated into the architecture of the interface. After each sequence the meta-text layer appears. Every title of the played sequences is written in horizontal from left to right on the screen. In this way, the public sees the choice they have made.

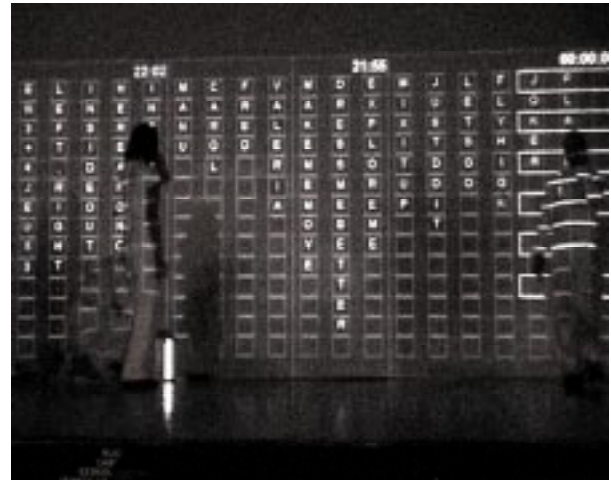


Figure 3. Meta-text layer at the end of the representation

From a theatre-oriented perspective the interface has the status of a text. The shift of a linear to a hypertext structure, the extension of a mono-semiotic vocabulary (alphabet) to a poly-semiotic vocabulary (alphabet, graphics, picture, sound etc.) and the autonomous presence of the text in the process of representation, that is independent from mediation of the dancer (as opposed to a dramatic text or a partition of dance or music) are the guiding principles in the theoretical approach of "Enjeux".

This scenic device questions the relation of two different systems of signs: the graphical interface and the performers representation. The iconographical language of the interface and its consideration as an architecture is necessary to establish an interaction between stage and public. The relevance of the overlay of the two systems (graphic and performance) depends on the ability of the signs to institute codifications. The interface refers to graphic, linguistic, iconographic signs and the second system refers to the expressive abilities of the human body. The purpose is to link these two systems in order to allow the public to intervene in the process of representation. This means that the question of 'textuality' in this performance is based on the creation of codes that are proper to this multimedia-light space and to assign them to codes of human expression.[1]

The dramaturgy is based of the stage-specific mediated situation, as a spatially and temporal limited action carried by performers. The categories of space (where), performer (who) and action (what) compose a three-part dramaturgy. Each part is composed by several sequences, which then develop into their own optional or hyper-textual dramaturgy.

In the following a short introduction to each of the three parts institute the general idea that are illustrated by two sequences.

2.1 Part A - WHERE

The sequences of part A, introduces elementary codes based on the light cone, the screen, the stage and the performer. A vocabulary is introduced, referring to lexical, graphical and iconographic codes, which create spatial situations in order to evoke imaginary narratives and physical settings. Thus, the interplay of these various code-languages within a sequence is used to

construct a situation, an interactive scenic space and introduces of our first narrative: WHERE.

The public has the option to choose four of six sequences by a menu on the interface. Each title of sequence refers to an idea of space questioning the complex relation between the representational and concrete situation of the stage. After the fourth sequence the interface skip to part B. The fourth sequence that is selected will define the vocabulary for Part C.

2.1.1 Part A example "In transit"

The projection of the word 'airport' introduces a place and a situation influencing the audience's reading of the stage. The sequence is based on a play of associations with the word 'airport'. When the dancer's bodies intercept the projected letters, the reading of the word changes, as does the place and situation it suggests. This inference continuously constructs and deconstructs the scenic space between the material space of projection and a suggested one.

Using a "spatial language" (choreography) the dancer writes new semantic connections to the "space of departure" by using his body as a medium. In this way the public reads one letter after the other of P-A-R-T-I-R (to leave in French), composed with the letters of A-I-R-P-O-R-T. The letters on the bodies travel from the ramp to the screen and translate the semantic content of the word into a choreographic language. Later, the dancers "write" the words "Rio" and "Porto". The sequence plays with the imaginary and material situation of the stage and sets it in relation to a linguistic and chorographical code.



Figure 4. Sequence In transit : "Rio" on the body of the dancers

2.1.2 Part A example "in front of"

The sequence "In front of" sets the space of the stage in relation to the performer using a graphic code. The spatial construct of the sequence is based on a projection of animation composed by RGB coloured rectangles and their synthesis (white). The interface projects rectangles at a regular frequency of 10 seconds in four different sizes and in the four colours (RGB and white). The bodies of the Performer intercept the rectangles. Each size of rectangle corresponds to a position in the space, and a sound of a 4-tone chord. The smallest rectangle is reflected directly at the

screen, the largest at the ramp and the two furthest at a distance in between, in order to reflect the same size of the rectangle. Because of the diagonal cone of projection the bodies intercept the light at different heights, depending on the distance to the projector (falling onto the head, shoulder, belly and hipbone). Each colour corresponds to a body position such as front on, back, profile left and right. From this codification that incorporates space, colour, form and parts of body, the stage becomes a choreographic play of 4x4x4x4 units, comparable to a Mondrian human-space composition.

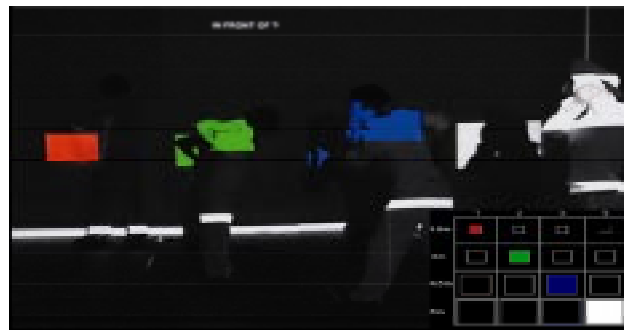


Figure 5. Sequence "In front of" with scheme of projection

2.2 Part B - WHO

The second part of the performance examines the status of the performer on scene – "WHO", in relation to their representation on stage and on the screen/interface. While in part A the four performers have been identified through denoted codes: numbers and positions (for example, Number 1 - Position 1 – Colour red), the second part constructs a specific association to the performers (a connoted code) through distinct actions and interactions, thus shifting the notion of figurant to the one of performer.

The relation between the performer, the stage and the action is realized according to visual communication codes (both connoted and denoted) and the visual language moves between icons, symbols and images - figurative or non-figurative codes.

The second part establishes specific relations between the public and the four performers. A direct interrelation is used to enlarge the interaction between the public and the stage, from choosing different sequences to interacting inside the sequences with the performers.

The overall concept of the second part: "WHO" allows the public to choose between four non-interactive solos, introducing a specific code of each performer. After the first solo, the public has the option to explore these specific codes by playing interactively with them. By choosing "No" the second solo of the performer is removed.

2.2.1 Part B example „Number 3“ (simple solo)

The sequence confronts a scenic representation with a textual one through the projection of the sentence 'JE JOUE MANU' (I play Manu) in white letters on black background. While moving backward in the projection's light cone, the actor intercepts the letters of the sentence on his body, inscribing on it "MANU" / "MAN" / "NU" (naked in French) whilst successively taking off an item of clothing. In this manner he transforms the sense of the

sentence from 'Je joue Manu' (I play Manu) to 'Je joue Man' (I play man) and - 'Je joue nu' (I play naked) and yet the performer stays, through his actions, coherent with the sentence written on the stage.



Figure 6. Sequence “Number 3”

Does the actor play Manu - does he play a man - does he play naked or is he a man whose name is Manu who is naked on the scene? By the use of this textual combination the status of play in scenic space as one of action and representation is formalized - a relation which according to the introduction of interactivity gets at once more open because of the direct relation established between the public and the action/representation of the actor.

2.2.2 Part B, example “Make me moving”(interactive solo)

The public interacts with the dancer through a schematic but articulated graphic of a skeleton, projected on the screen, where it's manipulation leads to a successive shift from a figurative to an abstract representation.

The dancer directly transposes the public's interaction into body movements but in addition the dancer transposes more abstract ideas such as flexibility, lightness, speed. The dancers movements always depend upon the graphic's distortion and the way the public is manipulating the skeleton. The dancer worked out during the rehearsals different approaches of translating the graphic distortion into a choreographical language. As there are infinite possibilities the way the public act, the action/representation is improvised.

The cartographic mapping of the manipulations / movements thus becomes the result of establishing a relation between the public and the dancer, introducing 'dance' not only as a body moving in space but also its relation to gesture (figurative - physical) and composition patterns (geometry - abstract). In this way, the sequence enlarges a textual and graphical vocabulary of interactivity to include gesture, expression and movement.



Figure 7. Sequence “Make me moving”

2.3 Part C - WHAT

The PART C examines the action on scene - “WHAT” - through the space of interaction and the interpretation. While intervening directly on the projection/ scenography, the audience determines the sequence, the duration of the sequences and the modalities of interpretation. Each sequence explores the space and interpretation, parameters introduced in PART A and the PART B. The interpretation of the sequences of PART C is coded, but their realization remains to the result of the public's intervention. The end of the PART C is conditioned by the duration of the performance. Once this time is passed, the public can decide to continue the performance, in which case, the sequences of part C are again proposed, until the spectator chooses the final “no”.

2.3.1 Part C example "Mix it up"

The sequence “Mix it up” is based on the same code as the sequence “In front of”. Four rectangles in the elementary colours and white establish a basic vocabulary of postures, the dancers arms forming a geometrical correlation to the projected rectangle. (Red = diagonals from left to right, green = horizontal, blue = diagonal = from right to left and white = vertical.) The size of the rectangles determines the distance to the screen.

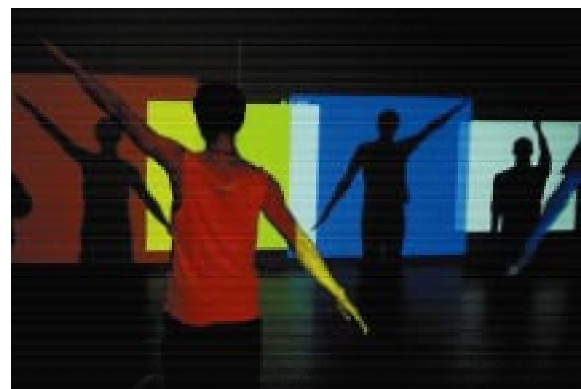


Figure 8. Sequence “Mixitup”

In contrast to the sequence from part A where the changes of the rectangle was a written-partition, the animation in part C depends on the position of the cursor on the axes x and y. Each

rectangle behaves differently concerning the changed position of the cursor. When the rectangles are overlapped, fields of its colour-synthesis appear and give the dancer the possibility to change the colour field. In this way the movements from left to right of stage depend more or less of the choice of the dancer, the movement from front to back depend on the public's manipulation. The codification of colour, space and body permits a real-time notation of choreography formalized by a dynamic light-scenography. The choreography is the common result of public and dancer over the codification of space and body by colour and form.

2.3.2 Part C example "Playball"

In the corresponding sequence of part A "left-right" a small white dot crosses the black screen from left to right giving the illusion of a tennis ball where the graphic layout refers to the one of the first video games "Pong". The same graphic sign is used in the sequence "Playball", whereby the ball movement is this time not programmed but is caused by the cursor movement manipulated by the public. Left or right movement of the mouse moves the light cone on the horizontal axe, the movement upward or down increased and/or makes the light cone smaller. The public is invited to play and this possibility is introduced by the title: Playball = play with the ball/ performer. In the sequence of A the light cone produced the illusion of a ball. In the sequence "Playball" the relation of material and illusionary space is reversed. The (play) ball becomes on its semantic level a light spot, which is what it is.

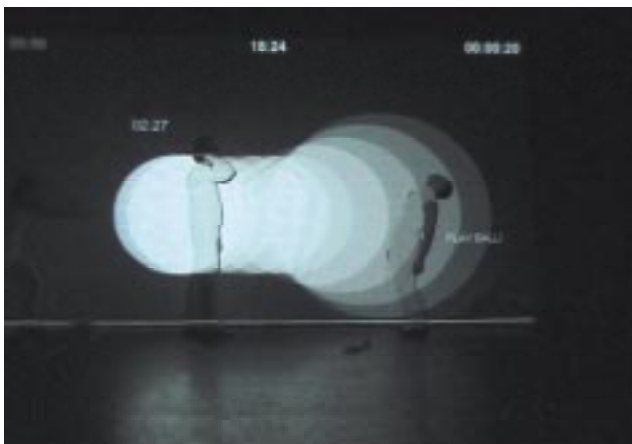


Figure 9. Sequence "Playball"

The play of the sequence consists of the performers moving in the dark stage and taking positions related to past sequences. As soon as the light cone lights them up, the performer freezes to a picture. The resulted "flash backs" re-contextualize past situations, positions, gestures, etc to new semantic associations which are proposed by the performers and selected and cut by the public.

3. CONCLUSION

The performance "Enjeux" and this theoretical reflection, aimed to contribute to the understanding of how technologies modify cultural practice by integrating an interface in a communicational situation within theatre representation. The analysis of "Enjeux" deconstructed a textual based representation and illustrated how the integration of digital media modifies the status of text, performer and public. It illustrated that the integration of new (or simply other) media provokes new plays or modalities of representation.

Furthermore, this perspective of theatre attempts to demonstrate that a semiotic approach to theatre in both its theoretical and practical dimension could be fruitful without literature based or narrative approaches. The text wants to propose a critical view in the field of theatre and media, by focusing on the space of representation as a category for theatre analysis. The text questions scenic representation not as a discipline of theatre or dance, and integrates body and text (and media) into a non-hierarchical relation.

The analyse of the scenic devices within "Enjeux" aims also to document that the "digital paradigm" could be a collective experience in a physical space instead of an individual experience in front of a computer screen. By integrating the public in the constitution of the representation, the work questions also the social dimension of digital media within the symbolic level of theatre. The shift from a public assisting a performance to a public that participates by manipulating the basic parameters of representation becomes especially crucial at the moment when members of the public have to decide to end of the representation. As it is only one person who takes the responsibility for the rest of the public to continue or to end the performance, there is often a moment of negotiation where the spectators starts to express their agreement or disagreement. By moving the cursor from yes to no and back to yes the person with the trackball plays with these reactions. In this moment the communicational situation alters to a play between the one with the trackball and the others, but without ever leaving the framework of negotiating the condition of theatre representation.



Figure 10. Interface "The end"

4. ACKNOWLEDGMENTS

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