Dancing with the Virtual Dervish : Virtual Bodies

Diane Gromala et Yacov Sharir

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The hybridization of the body and the incorporation of new technologies into the body itself has given rise to situations that can be qualified as grotesque. In the body of the medical and technical one, alongside the organic problematics, the immaterial, light and virtual side, with as its image the angel, and the material, heavy and mechanical side, with as its image the monster. The comparison between the artificial and the biological/technological is paradigmatic. In the grotesque, one is led to examine the monstrous and grotesque side of the prosthetic alliance between the body and technology, with all the impure mixtures and heteroclitic combinations that it may give rise to.

I insist on my place in both the scientific and medical bio-medical fields, and those that provide in communication media. These bio-medical fields, where the body is being increasingly expressed in the popular imagination. The science fiction vocabulary now having become current, where the body is in a research hospital's surgical suite, being altered and manipulated on a large screen for the Arts in Canada. Through a two-year residency at the Banff Centre for the Arts and Innovation, choreographer Yacov SHARIR. It was funded with a major grant from the Cultural Initiatives Program of the Department of Communications Canada through a two-year residency at the Banff Centre for the Arts in Canada.

Dancing with the Virtual Dervish: Virtual Bodies
Diane GROMALA et Yacov SHARIR

Dancing with the Virtual Dervish: Virtual Bodies results in several dance performances where the dancer and audience members performed and interacted with a virtual environment in real-time. This was in response to the peer-reviewed session, where an interactive experient was created to explore new creative strategies and directions for further technological development. The following notes are derived from the journals of the artists.

Bodies

GROMALA: My first technologically-mediated virtual experience was with my own body when, awake or even asleep, I was being manipulated and mapped on a large screen in a research hospital's surgical suite. Since then, I've insisted on my place in both the scientific and medical bio-medical fields, where the body and its technological envelope must be able to proceed flawlessly. In this process the intelligent machine is acquiring somatic functions, while the body acquires computational functions in its integration into machine languages and codes.

The body of the techno-grotesque is wired, amplified and reconstructed body, which finds itself projected into the virtual worlds via the environmental prosthesis. This body has simultaneously become a site of multiple transformations (increased motor capacities, perceptual and cognitive functions, etc.) and an abandoned, empty space (that is left behind while one is plugged into a virtual environment). The techno-grotesque body is this impure construction, not quite organic anymore, and not yet altogether technological. It is not entirely embodied in the virtual, or entirely virtual in the disembodied. In its awkward array of wires and plugs, as of yet uncertain how to move within the virtual environments this techno-body is in the image of the grotesque.

Translated from French by Bernard SCHÜTZE

DANCING WITH THE VIRTUAL DervISH: VIRTUAL BODIES

Dancing with the Virtual Dervish: Virtual Bodies is a collaborative project in virtual reality (VR) by the choreographer Yacov SHARIR. It was funded with a major grant from the Cultural Initiatives Program of the Department of Communications Canada through a two-year residency at the Banff Centre for the Arts in Canada.

In the first category it is the integrity of the organic body that is altered, either through impure and multiple which mixes and recombines elements from incompatible categories. The monster forces one to confront which cannot be categorized and delimited in an hierarchic order. The monstrous grotesque collapses the distinction between biology and technology, it expresses the rationality and the aesthetics of the beautiful with its ideal proportions.

If we today can speak of a technological grotesque, it is because this hybrid body is the focus of a vast gamut of techno-organic recombinations, some of which are straightforward science fiction and the popular imagination, while others are from the fields of science (technological, medical) and art (the grotesque); the monstrous, which is coupled, hooked up and permanently, or temporarily, plugged into the technological is indicative of the arrival of a new body which no longer holds itself as self-contained, as we know the human. Another aspect of the techno-grotesque is related to this growing desire to hook up with the machine, no matter what, without any examination of the social, political or aesthetic factors that are necessarily expressed through technologies. This headlong jump into technological reconfigurations of the body in part constitutes that which we call the techno-grotesque. The techno-grotesque may just be an early symptom in an increasing fusion between the biological and the technological, a symptom characterized by the fact that this fusion is always interrupted by a profound incompatibility which stops the flow and makes the machine pay in order for the fusion to proceed flawlessly the body must attain a higher degree of plasticity in the virtual world and the technological envelope must be able to provide a viable sight for sensorial expression and experience.

This future alliance between the technological and the human, this coming of the post-human, is being increasingly expressed in the popular imagination. The science fiction vocabulary now having become current, where the body is jacked in, wired, etc. is itself indicative of a grotesque view of the body in its relation to the technological. In the sense of becoming an another part to be integrated into the technological, something to be adjusted, re-engineered and made to function within a larger whole. As in the membra disjecta of the grotesque iconography, the body becomes a machine which can be recombined in multiple ways, but this time, the membra disjecta are made out of metal and plastics as well as flesh and blood.

In the postmodern age where the multiple, heteroclitic mixtures of organic and technological, such as computer networks, which then function as environmental prosthesis. In this process the intelligent machine is acquiring somatic functions, while the body acquires computational functions in its integration into machine languages and codes.
Yacov Sharir, my collaborator, and audience fer a way to extend and color work in different tute some of these fragmentary representations and tangible effect. Here I become a cyborg, both and technological forces meet, often with very real at the crossroads of scientific and artistic uses of visualizations of my body. What fascinates me are the artistic, intellectual, visceral, and emo­ tional issues which can be addressed using the opportunities of this technology? Virtual technologies allow us to manipulate, extend, and distort images of the body. They offer a way to extend and color work in different ways, some of which are not possible in the physi­ cal realm and or by traditional means. They offer a way to augment and extend possibilities crea­ tively, experimentally, spatially, interactively.

When I experience the entrance into a computer­ized simulated world, I am able to reference or see - my digitized body within the simulation. Similarly, interactions in the physical world. As I target my vision and move my hand forward, I am able to navigate through the simul­ ation, birdlike. As my perception accommodates itself to 3-D illusion, I experience a sense of being in another, additional skin - I feel immersed.

At the same time, I have this sense of height­ened anxiety, caused by the doubling of my own body image. The sensation of disembodiment cannot be disconnected from the sensation of embodiment; that is, I feel the physicality, the groundedness of gravity simultaneously with the sense of immersion and altered abilities, such as the ability to fly through the simulation.

GROMALA: My first intention dealt with explor­ ing experiential issues as they relate to notions of the body in virtual reality. This body is not only a culturally constructed notion and text, but as well as lived experience and material form. The aspect of materiality was especially important since discussions of the experiences attendant to virtual environments often tend to underscore an underlying subscription to the well­known Cartesian mind/body split. As Sandy STONE, EFI LEAF and N. Katherine HADLEY (1993) note, "one must create a behavioural, an immersive experience, one that allows users to interact with the environment to an unprecedented degree. In addi­ tion to a nonlinear experience comprised of multiple media which can engage visual, auditory, and cognitive responses, an immersive environ­ ment may engage kinesthetic and haptic senses. For example, in later versions of Virtual Bodies, certain areas responded to motion detection, or one could move and "touch" any part of the body using a certain wall of text, for example, they might "fly" into an inner, otherworldly chamber. Depending on how they approached the text, however, they may also find that it began to swirl in a kind of digital whirlpool. Eventually, they may lose one the physical sensation of being caught in a vortex, signalling entry into quite a different space. Could the transcendent state of a dervish be at hand? Or so it seemed in this piece, which explored the experience of so-called disembodiment in any way related to other transcendent states?"

SHARIR: Could a dancer exceed the bounda­ ries of what is defined as dance in this way; by using an environment that is not a simple linear programming or choreographing the environment into an inner, otherworldly chamber. Depending on how they approached the text, however, they may also find that it began to swirl in a kind of digital whirlpool. Eventually, they may lose into a vortex, signalling entry into quite a different space. Could the transcendent state of a dervish be at hand? Or so it seemed in this piece, which explored the experience of so-called disembodiment in any way related to other transcendent states?

HAYLES remind us, there is a real body attached to so-called experiences of disembodiment. These are texture-mapped or wrapped within it. No longer linear, each user will affect the piece in a particular way, probably unrepeat­ able. We asked: How does this affect the crea­ tive process? How would the nature of creating and experiencing the book be altered? What would it like to inhabit a book? What would it be like to fly within one’s own body, a body in constant motion, a body which contains nested levels of other-worldly places which unfold, fractal-like? What new role might a user play in this interaction, in this experience? Can the aesthetic and kinaesthetic experience be considered dance?

In some circles, virtual environments can be considered to be multimedia, taken to one ex­ treme: the text, sound, video, animation, and performance not just with one, but in an immersive experi­ ence, one that allows users to interact with the environment to an unprecedented degree. In addi­ tion to a nonlinear experience comprised of multiple media which can engage visual, auditory, and cognitive responses, an immersive environ­ ment may engage kinesthetic and haptic senses. For example, in later versions of Virtual Bodies, certain areas responded to motion detection, or one could move and "touch" any part of the body using a certain wall of text, for example, they might "fly" into an inner, otherworldly chamber. Depending on how they approached the text, however, they may also find that it began to swirl in a kind of digital whirlpool. Eventually, they may lose the physical sensation of being caught in a vortex, signalling entry into quite a different space. Could the transcendent state of a dervish be at hand? Or so it seemed in this piece, which explored the experience of so-called disembodiment in any way related to other transcendent states?

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As a dancer in two worlds - the simulation and the physical world - I experience my move­ ments in a new way. But in addition, my dance, my actions, initiate cause-and-effect relationships in all worlds, affecting movement-by-movement between the two, and in the animation and the simul­ taneous real. Because I can also dance with videograbs of myself in the simulation, I experi­ ence a kind of mirror effect. All of these aspects conjoin to create new opportunities for experienc­ ing the body, both as representation and as artwork, and new ways to consider creat­ing artworks.

Experimental aspects

GROMALA: The larger design problems which emerged during this project were experiential and behav­ ioral - one does not create a linear, re­ peateable piece. Rather, one designs worlds - of possibilities, a constellation of if-then scenarios based on the users’ potential actions and inter­ actions with the simulation and intelligent agents within it. No longer linear, each user will affect the piece in a particular way, probably unrepeat­ able. We asked: How does this affect the crea­ tive process? How would the nature of creating and experiencing the book be altered? What would it like to inhabit a book? What would it be like to fly within one’s own body, a body in constant motion, a body which contains nested levels of other-worldly places which unfold, fractal-like? What new role might a user play in this interaction, in this experience? Can the aesthetic and kinaesthetic experience be considered dance?

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**Sharia and Gromala:** The project and process of creating a piece in VR led us to far more questions, and to a great deal of artistic possibilities. In such interactive environments, for instance, which are contingent upon the interaction of others, the notions of creator and audience blur. Is the very nature of art and dance altered by this potential? Just where does the performance occur — within VR itself, or between VR and the cyberspace? Are some participants relegated to being passive audience members and others performers? How does one determine who gets represented? Can these be divided into distinct identities? How can this technology be accessible to larger audiences capable of interacting directly with the simulation? When does the multiple cause-and-effects of user participation become mere chaos? How are we to understand the artwork? Are these virtual environments, these simulations to be understood in terms of the Platonic idea of mimesis, or a problematized instance of Baudrillard’s simulacrum, a place where Deleuzian fragmented and schizophrenic identities can further shatter themselves into ever smaller pieces? Is a collective identity of interactors from distributed sites possible in such a modality-rich environment? Diane Gromala directs the New Media Research Lab at the University of Washington in Seattle, where she teaches interdisciplinary courses on new media technologies. Shamal Shari is the artistic director of the Shari Dance Company, and is on the Dance faculty at the University of Texas at Austin.

**The Performance of an Encounter: The Body, Video**

Christine Ross

The installation in question is made up of only a single element: a giant screen installed in the back of a dark room. Video images of floating blocks of light are projected on a black background, progressively replaced by electronic smoke drifting across our field of vision from bottom to top and then from top to bottom. The audio track emits a continuous pulsation resembling the constant but rapid beating of a human heart. The crucial element of the installation is the placement and dimensions of a big screen. It is installed close to the ground, and conceived within human dimensions. The screen solicits the body of the viewer in its entirety. In front of this electronic ROTHKO the viewer sits and is thereby encompassed and drawn and a landscape or a human figure in order to shield oneself from the void that one is confronted with. It is at this point that s/he will realize where the body ends and where does tech­nology begin? How does one distinguish iden­tity from alterity? These are questions which Mnemonic Interferences, and video in general, try to answer and which can end in a fast confusion of sorts, but a failure which I would nonetheless qualify as productive.

This question of the limit also brings with it the question of the visible. The destabilization is not just developed on the level of content, it not only make visible a different body, it must also also put into play a difference which modifies the sta­tus of the visible. In video the visible, as the field of what is seen which is itself visible, or what can be perceived, or is made perceivable to the senses, is that which is constituted precisely where the body fails to maintain itself as a unit. In other words, the video destabilization of the body does not just consist of a different body (those bodies which the norm excludes from subjectivity — women, gays to name but two groups), but also of a body — called into ques­tion by the vaccination of the visible, that is a body, which although it appears as actualized in an image, fails to be stabilized by this actualization. The key question, within the context of this inquiry into the destabilization of the body in video, is there­fore the question of the folio which represents a certain body? Or to put yet another way, and here I paraphrase and reformulate the Italian philoso­pher Giorgio AGAMBEN: How can one confer on the visible the body of the person (or faces or images, and the image which would be thought in the light of what must exist as potentiality) but an ethics? Is it in the end a matter of thinking the image in the light of subjective experience of potential­ity through a laying bare of the inactuality which is proper to being?

A second video, La desserte bleue (1980) (The white sideboard by Thierry KUNTZEL, is relevant in this respect, since we are con­fronted with a representation of the body which is being formed directly out of the tension of the visible and the invisible. In a process of materializa­tion and dematerialization. Here, the image's workings cause it to be seen as a potentiality, in which the image which would be thought in the light of what must exist as potentiality but an ethics? It is in the end a matter of thinking the image in the light of subjective experience of potential­ity through a laying bare of the inactuality which is proper to being.

An installation such as this makes it evident to what degree the notion of the representation of the body in video is inappropriate. It would, in­deed, be more accurate to speak of a performance of the body instead, since the image no longer contains the functional reference or reference to a body that exists prior to its representation. The video­graphic performance of the body is the movement made by the body as biological unit. It is that which does not cease to call into question its own subjectivity. The body as image is brought about by itself, whose normative function based on which one distinguishes the so-called sick body from the so-called healthy body is to ensure a coherence, a distinction and distance between the self and the other.

The destabilization of the body in video may take on different forms, but mostly it takes on the form of two simultaneous operations: on the one hand, the cutting of the body's skin (which is rendered by the body's failure to stabilize itself, whose normative function based on which one distinguishes the so-called sick body from the so-called healthy body) is to ensure a coherence, a distinction and distance between the self and the other.

Such is the body of Joseph von STERNBERG, for example, do in fact nothing more than restate woman as non-subjec­tivity. This is certainly true. La desserte, however, goes further. On the contrary the feminine body itself is not only open to itself in the image, because the disappearance of the body, and here I draw on an idea formulated by Laurence LOUPPE, is always reversible. A body can be brought to better reaffirm itself to spread itself, change, gain in momentum a bodily virtuality is established precisely through the materialization-dematerialization process. Such is the body of La desserte: not a body of woman reproduced in its difference, but one which is already excluded but a body that affects the visible of representation. Two feminist publications (especially if they are published in parallel) are, in my view, crucial for an examination of the possibilities of this re-signifi­cation of the body: Unmarked. The Politics of Performance (1993) by Peggy PHelan and Bodies that Matter (1993) by Judith BUTLER. The key­words of the former are unthinkable, the latter performed.

For Peggy PHelan the image is a perform­ance it is because it is always more than it medi­ates: it is, moreover, never an absolute reprodu­ction of the body but the reproduction of the body for the lack of equivalence between the real and its representation. The body must be therefore represented as this element which can never be fully resolved. In other words, and this is the eth­ics of PHelan develops in her work, the repre­sentation of the body must inte­grate the incompleteness, loss, disappearance, and also the visible. Here we are at the confines of Mnemonic Interferences and La desserte. Nonetheless KUNTZEL’s La desserte still permits us to push PHelan’s proposition a little bit fur­ther. In elaborating a reversible disappearance of the body, this monoframe integrates a sense of loss which would become problematic if it corre­sponded to the pure and simple loss of a femi­nine body.

In fact, would not such an interpretation end up making the visible (saying that in order to assure that this lost something (for example the feminine body) must remain irremediably lost? If we pay close attention to what is written in PHelan’s Unmarked this something is in fact the devisiveness of the body, the body which serves the function of reproducing or referring to the body instead, since the image no longer qualifies as productive.

Thus, even though this ethics of integration of disappearance, proper to performance, is crucial for a name of woman, the body of Le desserte, for the lack of equivalence between the real and its representation, is always reversible. It is in the end a matter of thinking the image in the light of subjective experience of potential­ity through a laying bare of the inactuality which is proper to being.

So what do we mean by different body? One must first specify that the body of La desserte is not just any body, since it is the body of woman (in an iconography borrowed from MATISSE). This means that the dematerialization of the image is not just developed on the level of content, it does not confer a visibility as much as a potentiality, for the lack of equivalence between the real and its representation, which is rendered by the body's failure to stabilize itself, whose normative function based on which one distinguishes the so-called sick body from the so-called healthy body is to ensure a coherence, a distinction and distance between the self and the other. Whatever, never irreversible.