Dancing with the Virtual Dervish
Virtual Bodies

Diane Gromala and 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, the technological problematic, 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 body and organic body, their relationship, unlike the immaterial approach with its appeal to the disembodied virtual, is based on the materiality of the body in its prosthetic couplings with technologies. The proposition here is to examine the monstrous and grotesque side of the prosthesis, the alliance between the body and technology, and with all the impure mixtures and heterocline combinations that it may give rise to.

The grotesque resides in the relationship between the biological body and technology, in these combinations which blur any defining boundaries between the organic and the technological, the human and the machine. The term grotesque is not a propre word, but rather an aesthetic concept which best describes these multiple, excessive and anomalous characteristics that are the basis of monstrosity. The monster, by its very nature, represents the radically other, the other that is original in which cannot be categorized within an order of succession. With the grotesque, it is no longer the biological anomaly which creates the monstrous, but the introduction of the biological into the technological, into the material realm of the machine. The human and the machine merge, this undefined zone where prosthetic devices make the emergence of cyborgs possible. There where the machine becomes the machine amalgamated, equipped, endowed with new functions and another perception, and there where the machine is grafted onto the organic, to pull of flesh, the flow of blood and all the interior sensations of a living being, the transhuman space between the two brown, the body and the organic spaces of the body and technology, is coupled, hooked up and permanently, or temporarily, plugged into the technological. This is indicative of the arrival of a new body which no longer fits into the division between machine and 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 these technologies. 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 direction of attention. In order for 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 veritable sight for sensorial expression and experience.

This future alliance between the technological and the human, this coming of the posthuman, is being increasingly expressed in the virtual reality and in technologies that are necessarily expressed through these technologies. The science fiction vocabulary, now becoming current, where the body is jacked in, wired, etc. is itself indicative of a grotesque view of the body in its relation to technology. In the sense that the body is becoming 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 meme disjunct of the grotesque iconography, the body becomes a machine which can be recombined in multiple ways, but this time, the membra disjunct are made out of metal and plastics as well as flesh and blood.

In the postmodern age where the multiple, heteroclitic mixed and mixed bodies have become the rule, one can situate the techno-grotesque at the junction where the assemblies and juxtapositions of the body and technologies create monstrously new entities for creating a new kind of monstrous hybrid, a body wired to all sorts of machines with a relay of information between body and machine, whether it be in the increasingly sophisticated bio-medical application, in space exploration or in further technological experiments. The body is now common to all these meeting grounds of body and technology and the implementation of prosthetic devices which link and bind the two domains. In those spaces where the body and machine are merged, the body is plugged into these different spaces where the prosthetic devices bridge the organic and the inorganic is where the techno-grotesque is most apparent. The alliance between the biological and the technological in two major groups: those which are directly implanted into or onto the body, the neuronic prosthesis from the bio-medical fields, and those that provide increased perceptual capacities, interface devices, cybernetics, military, aerospacical, and communication fields. The neuroprosthesis include among others, auditory, visual and neuromuscular devices as well as bionic limb implants. The body receives and amplifies the body's functions. The interface prosthesis includes voice recognition, video conferences, virtual reality and telepresence to name but a few. They extend and amplify our perception through communication media.

In the first category it is the integrity of the organic body that is altered, either through implants to the inside or additions on the outside of the body: it is the order of the incorporation of the technological in the organic, the heavy material body, the techno-organic body. The second category is characterized by everything that allows one to extend and modify the immediate space of the body, it is the prosthetic envelope. In the first case something is added to the body, and in the second it is the body itself that is added to a larger entity. These two categories can of course be mixed or be combined in a single prosthesis, the gear of virtual reality is probably the closest approximation of a total prosthesis.

The cyborg is a being that integrates these two prosthetic categories, combining the amplification of physical functions with an extension of perceptual and cognitive functions through its technological integration into the socio-technological entities, such as computer networks, which then function as environmental prostheses. In this process the intelligent machine is acquiring somatic functions, while the body acquires computational functions by 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 prostheses. This body has simultaneously become a site of multiple transformations, increased motor capacities, perceptual and cognitive functions, etc.) and an abandoned, empty machine 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 organic, nor entirely virtual in the disembodied, in its awkward array of wires and plugs, as 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

Diane GROMALA et Yacov SHARIR

Dancing with the Virtual Dervish: Virtual Bodies is a collaborative project in virtual reality (VR) by the performing visual artist and 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 resulted in several dance performances where the dancer and audience members performed and interacted with a virtual environment in real-time. Two VR techniques were developed for creating VR worlds: the first, called the "Virtual Body," experienced a "real" world through the VR; the second, called the "Virtual Reality," experienced a VR environment through its VR system. The collaborations resulted in 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, after increasing surgery, I watched my own visceral being altered and manipulated on a large screen in a research hospital's surgical theater. Since then, I've insisted on my place in both the subject and object position of this medical discourse: a voyeur of the instrumentality of medical imaging, I collect and personally finance, with
Yacov Sharir, my collaborator, and audience for a way to extend and color work in different tute some of these fragmentary representations theoretically, and as the result of the way tech­
visualizations of my body. What fascinates me are forward, I am able to navigate through the simu­
a way to augment and extend possibilities crea­
tional issues which can be addressed using the SHARIR
reconfiguration was offered as a virtual environ­
iment or stage for both dancer/choreographer
are the artistic, intellectual, visceral, and emo­
ment or stage for both dancer/choreographer
GROMALA
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would 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 new immersive experience? Can the
GROMALA
If one allows users to interact with the environment to an unprecedented degree. In addi­
GROMALA
? 
Dance
SHARIR: Dancing with the Virtual Dervish: Vir­
tual Bodies explores experiences and concepts of
the body on many levels, visually, sonically, and
behaviorally, it was created to provoke reminis­
crances of the body, to call attention to physicality, growth, and decay. In the virtual — and cyberspaces, this metaphorical representation of an inner body houses all activities in the virtual space, engen­
dering emotions from the virtual content to the user, which directly and indirectly correlate to, and are triggered by, the issue of and interaction with each veil.
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 and bodily happenings in both virtual and physi­
cal realm. Because I can also dance with video­
grabs of myself in the simulation, I experi­
ence a kind of mirror effect. All of these aspects conjoin to create new opportunities for experienc­ing
new levels of other-worldly places which unfold, fractal-like — what new role might a user play in this interaction, in this new immersive experience? Can the
The VR technology tends to blur disciplinary boundaries by changing the nature of what and how art­work is created, realized, and performed. Because one must create a "world" — open to user inter­
actions, the piece necessitates a non-linear, open-ended, almost fragmented composition. In addi­tion, we collaborated for two years with a team of three computer scientists and a high­
computer-literate art assistant.

The nature and the beast
GROMALA: Like GUTENBERG’S invention of the print­ing press, virtual technologies enable us to extend our will and ability to act upon the world through textual means. What is different about the more recent technologies, however, is the reach and scope of these tools, their instrumentality — their ability to allow us to — see both inward into our own bodies and outward to the universe — to diffuse and consolidate power and distribute it from near to far, which enables us to construct a context that enables us to alter our relationship with ourselves and others to an un­
precedented degree. Or is it?
Creating Dancing with the Virtual Dervish: Virtual Bodies pointed toward the strange char­
nistic video projections, which enable the audience/participants to interact with the environments and in essence, become co-creators. Although the VDUV has been seen as distinct and direct, the coupling of dance and computer technology provides for rich exploration in the development of digitized dance in a virtual envi­
nvironment. As the dancer/choreographer both in the physical/performance space as well as in the
simulated virtual/cyberspace, I have experienced physically and spiritually intertwined senses of embodiment and disembodiment, senses that are simultaneously the nature of dance. Addi­tion­ally, the limitations of performance in restric­tive VR gear affected and became creative forces in my choreography, as did the very nature of the technology itself.
In dance, chance operation, as it is generally understood, originates in chance decisions, which ultimately are — frozen — into a linear se­
quence or performance which can be repeated. However, there is also a sense in which VR can be taken further, as the chance is dependent upon the dancers’ interaction with the computer simulation itself — resulting in not one but a number of possible actions and consequences, with significant degrees of unpredictability.

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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 symbols, which are then shot out of the image plane of the screen, from bottom to top and then from top to bottom. The audio track emulates a continuous pulsation resembling the constant but rapid beating of a human heart. The crucial element of the installation is the placement and disposition of the electronic symbols, which 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 canvas, a black and white sideboard, the body does not only consist of a passive and electronic scanning. It is as though it were no longer possible to fully and permanently ensure the impenetrability of the body, its impermeability, its distinctiveness, its difference. The destabilization is, therefore, and this is my hypothesis, that which triggers an uncertainty as to its limits; it is an image which raises these questions: Where does the body end 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 end in a confused sort, 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 image content. It is not only to make visible a different body, it must also put into play a difference which modifies the status of the visible. In video the visible, as the field of what is seen, is treated as what is to be seen, 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 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 there an ethical confrontation between the subject and the body? Or to put yet another way, and here I paraphrase and reformulate the Italian philosopher Giorgio AGAMBEN: How can one confer the visibility of the visible for a body that is not represented as this element which can never be made visible. For Peggy PHelan, if the image is a performance, it is because it is always more than it mediates: it is, moreover, never an absolute reproducibility. For PHELAN, the image in its entirety is always that which entails the possibility 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 ethicalubic (1990), the body in PHelan develops in its totality, the representation of the body must integrate the incompleteness, loss, disappearance, and also the invisible. 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 is accompanied by the irreversible aspect 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 assigning the feminine body to an absolute status of loss that would have the effect of provoking a measure, a female body? This is certainly true. La desserte, however, goes further. On the contrary the feminine body is here asserted as the body 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 (re-excluding that which is already excluded) but a body that affects the visible of representation.

Two feminist publications (especially if they are read 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 (1990) by Judith BUTLER. The key word in Unmarked is, “performance.”

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