

Augmented Simulacra: Conditioning the Post-Digital Body

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Abstract

This body of work explores the transformation of the human body, both physically and mentally as increased reliance upon electronic technology forces conditions of artificial that replace the “natural”. This Fundamental shift in stimuli becomes a tipping point in evolution.

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Post-Body

From the beginning of human existence there has been an innate desire to control and shape both our world and ourselves. The construction of primitive tools from bone has accelerated into a dramatic shift in the evolutionary process of the human species. As the tool making species increases its reliance upon its own constructs, many residual effects work to alter its progress. And thus the structure of Darwinian evolution transforms into a new construct. Throughout time there is, and arguably always will be a universal struggle for existence, but in today’s technological society the factors that dictate survival have shifted. Darwinian evolution exists of two distinct theories of development: Natural and Artificial selection. The basis for natural selection put forth by Charles Darwin, states that ‘through competition, generations of a species will transform or adapt itself with those qualities’¹. By the simplest of genetic distortion, the ‘fittest’ will survive longer, enabling them to reproduce more often and hence contribute more of their genetic character to the species as a whole. Today, however, due to the increased reliance upon electronic technology and biomechanical engineering, the gene pool itself is shifting. The traits once considered assets for survival are now obstacles. As technology further augments the ‘natural’ with the artificial, the more the ‘weaker’ traits of the species will prevail, further perpetuating the reliance upon the artificial for increased productivity. The tools the human species makes in turn make them. So the notion of a ‘natural selection’ process touted by Darwin and his followers seem to be increasingly transformed into an artificial process driven by a social collective, which seeks survival through technology.

The tools created to control the environment are now controlling us, both in how we individually function and collectively as a species. Genetic alterations are shaping us species by this very technology. Those who cannot exist or reproduce naturally are now, through the advent of technological means, living longer and reproducing more. The natural genes, which enabled their dependency upon technology is being passed through generations in an increasing abundance fostering a deeper reliance upon the artificial. While internally the mind is processing and absorbing the world not based upon natural stimuli, passing through the body, but understanding itself from the artificial.

Biomechanical technology seeks to alter the physical body through artificial selection. From the advent of external limbs through the recent development of genetic engineering, a progressive restructuring of the physical body is occurring. Almost all cultures, both past and present, practice some form of body modification. The oldest human remains found to date, the five thousand year old mummified body of a man frozen in the ice of what is now the Italian Alps, had tattoos. However palatable the current trends of body modifications are, the future offers more exaggerated displacements of the current body image, encouraging a deeper rift between the natural and the artificial.

Pro-Body

As an artist, I am concerned with the impact technology has over our collective development and how it further embeds itself inside of us. The notion of socially directed body modification dates back thousands of years, the Greek “super-anatomical” sculptures helped to invent the ideal form, the 19th century development of moving pictures illustrated the behavior and movement of that form, but it wasn’t until the technological development of “X-Rays” that the real notion of the body changed. Today, through physical examination and reliance upon machines, we can communicate directly with the body. What the patient know is untrustworthy; what the machine knows is reliable, and those machines are shifting.

Technology is not just a tool. It is information, in that it shapes how we think and in the absence of an alternative reality (i.e. nature) what we think about and know.

Black Lung, (figure 1) an interactive sculpture, responds directly to the technological restructuring of the body. This piece consists of a compressor and a motor driven valve system, which allows the artifice to simulate a working lung in the human body. Additionally, a motion detector is added to the compressor to emphasize the need for social approval in order for the machinery to successfully augment the body. This motion detector is hooked solely to the compressor so that without the reinforcement of an audience (the masses) the machinery continues to control the physical body but grinds away unproductively. The single lung expands and contracts inside a human rib cage, pointing to the simplification of the current biological system. The entire work is mounted to the exterior of a steel box, a sign of the industrial revolution. The body becomes the skin of the machine controlled unknowingly by a passive community.

Conversely, *Belay* (figure 2) consists of 21 handholds attached to a wall that is 24 feet in height. Positioned at the top corner of the wall is an organically suspended sculpture with a video viewer. There is a direct reference to the human anatomy through the abstraction of the esophagus form and the video loop with resembles the view of an endoscope inserted down the throat.

Using mechanical spring contacts that compress with weight the piece tracks the users progress and rate of ascent, which then sets the frame rate of the video once all holds, have been used. □ □ Conceptually this work examines the parallel structure of control placed on exploration. Whether it is the biological investigation of the human body or the human exploration of the natural world, both are limited by the constructs of the system.

In examining the physical and social aspect of interaction, this piece seeks to engage the audience through a direct and overt methodology. Simultaneously it seeks to look inside the body both physically and emotionally with a direct reference to physicality and biology.

As our collective culture and our physical bodies coalesce with technology there is an essential and traumatic remapping of our physical and psychological networks. These electronic works are concerned with the transformation of the human species, specifically its biological components and its behavioral characteristics. This transformation or evolution is an environmental reaction to the manifestations of science and technology. These works examine the need to address the physical body and how the action of users needs to be interconnected with the interface and content of an interactive piece. From the development of opaque sculptural input devices to the use of transparent technologies these interactive works seek to examine the process of conditioning users; their predetermined interaction and the physicality of computing.

No-Body

Electronic technology not only invades and alters the body but it fundamentally reforms the cognitive process of the mind. As the computer becomes more integrated with the developing mind, especially as an interface with knowledge, it shapes not only our understanding, but also ourselves. We are becoming a hybrid of the machines we use.

Michael Foucault, in his text *The Order of Things*, refers to these spaces that disrupt conventions of order as “heterotopia”. Heterotopic sites seem familiar, as they are subsumed within a society’s conventional ordering system that links them to other sites, yet they are unfamiliar in that they simultaneously contradict the premises by which these relationships are sustained.² Therefore the complexity of these visual devices destabilize the seemingly straightforward transcription of real space and create not only an inverted but parallel space.

Mirror imagery surfaces again in Foucault's discussion of *aemulatio*, the idea that patterns of resemblance can occur between things despite the spatial distance separating them: "There is something in emulation of the reflection of the mirror: it is the means whereby things scattered through the universe can answer one another." Of course, the problem is which is the reflection and which the reality? Foucault responds by stating that "emulation is a sort of natural kinship existing in things; it arises from a fold in being, two sides of which stand immediately opposite to one another."³ As a result, multiple 'realities' are juxtaposed. It is even more intriguing that Foucault explains the importance of the mirror in uniting these realities. In his essay "Of Other Spaces," Foucault expands upon the complex relationship between mirrors and space, describing mirrors as unique sites in which the fictive space of utopias and the real space of heterotopias converge. The mirror is a utopia in the sense that it projects a virtual space behind its surface, a space in which the observer is misperceived as being present.⁴ Conversely, the mirror is also heterotopic due to the oblique manner in which it affirms the observer's position in real space: "it makes this place that I occupy at the moment when I look at myself in the glass at once absolutely real, connected with all the space that surrounds it, and absolutely unreal, since in order to be perceived it has to pass through this virtual point which is over there."⁵

While Foucault challenges the reflection as an alternate structure that stand in binary opposition to the "real", Jacques Lacan finds the mirrored surface both external and affirming. In his theory of the mirror stage, a child encountering a mirror realizes that he or she has an external appearance. From a psychoanalytical perspective prior to this recognition the "I" of identity is a primordial form, but afterward it is objectified in the dialectic of identification with the other. From here language works to restore them into one universal subject. At this moment in a child's development, they recognize themselves as a unified image, as a whole self. Once this occurs the child will no longer see the reflection as projected other, but rather it projects consciousness into the image and transforms it into "self". Lacan argues this is one of the first independent actions of a child, while still nursing, unable to walk, and prior to language; they place consciousness into an external image that they control and see it as perfection. Later this ideal will add tension to the self as something that can never be matched, a fiction to be lived up to, while creating a desire to be whole with the other. Although we sometimes feel alienated from our "self" we see in the mirror a unified whole. Lacan goes further to say that after this mirror stage we see the entire world as individual whole objects that are uniquely and distinct.

Contemporary reflections of self and the other are mass-produced and distributed through various projected means along an electronic umbilical cord feeding our conscious and subconscious selves. The blending of this artifice within the make up of the self is wholly infused with identity and is pervasive. This integrated dialectic conflicts with traditional views of the simulated projections detached from and isolated in time and space.

As Émile Littré once stated "Whoever fakes an illness can simply stay in bed and make everyone believe he is ill. Whoever simulates an illness produces in himself some of the symptoms."⁶ Art of the new media can be seen in binary approaches with the human body; *robotic* in the sense of augmenting or replacing the action of the physical or *telepresent* in the sense of bypassing the physical receptors. In both they strive to construct symptoms though a simulation of something that can no longer be considered real.

In our contemporary post-industrial information society the machine is not only eliminating the human factor in the work environment but is affecting communicative behavior and interpersonal relationships. Virtual interaction is generating a nomadic citizen increasingly identified with abstract and distant symbols offered by electronic culture. *Nomadic Dominion* is a projected immersive interactive environment, with a mixture of photo-based panoramas and computer generated environments and objects. Users wearing red/blue stereo glyph glasses navigate through a hyper-real simulated world using didgeridoos to guide them.

Nomadic Dominion (figure 3) is using telepresence to allow a person to feel as if they were present, to give the appearance of being present. It is focusing on the environment as a metaphor for the artificial dependency, which is inherent in our species. We tend to force external changes rather than internal. The land is modified. As soon as we put down roots and begin agriculture we start the process of modification. This environment is the predecessor of virtual reality. We don't follow food; we manufacture it. We edge our lawns, plant crops in rows, reroute rivers, and use pesticides, all to reshape the natural into the artificial.

As Eduardo Kac states in his article on *Telepresence Art*, “at its best, interactive art implies less stress on form (composition) and more emphasis on behavior (choice, action), negotiation of meanings, and the foregrounding of the public who, now transformed into “participants,” acquire a prominent and active role in shaping their own field of experiences. The role of the artist in interactive art is not to encode messages unidirectionally but to define the parameters of the open-ended context in which experiences will unfold.”⁷

Similarly *The UnCultured Pearl* (figure 4) is an interactive video that has a direct one to one relationship with the viewer. Using a video-tracking camera mounted on the ceiling. The work tracks the users proximity to the video screen. As the user approaches the screen the figure treading water on the screen submerges. The closer the viewer comes to the screen the deeper the virtual figure descends.

Conversely, as the viewer moves away from the screen the virtual swimmer ascends to take another breath. Conceptually this work examines the parallel structure of control placed on exploration. Whether it is the biological investigation of the human body or the human exploration of the natural world, both are limited by the constructs of the system. Using the metaphor of a *Bow and Arrow*, the more one pulls inward, the further out they can thrust themselves. Here the audience is forcing the figure to submerge while at the same time they come closer to examine the details. Time slows to a stand still as the two are at the closest points.

Here the work is less about the developing the illusion of an open-ended experience, but to restore a Brechtian perspective in the audience and reconnect to the limitations of both simulation and the body. Building upon this physical interaction, the work explores the transcendental spectacle that is secondary improvisational theatre. The audience is both participant and performer creating a secondary performance for others. Similar to the early *flaneur*, who would stroll down avenues people watching or gazing at merchandise of a consumer dream world and seeing that world as a theatrical production.

References

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Figure 1: Black Lung, Interactive Installation, Bill Hill

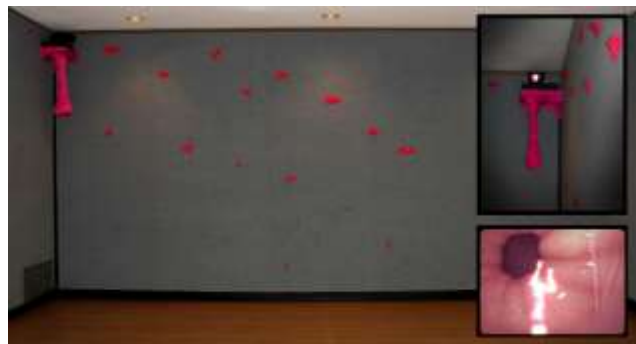


Figure 2: Belay, Interactive Installation, Bill Hill



Figure 3: Nomadic Dominion, Interactive Installation, Bill Hill



Figure 4: The UnCultured Pearl, Interactive Installation, Bill Hill