

Review to Frédéric Durieu

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The Body in Cyberspace: Invented, Morphed, Generated, Dismissed

In the course of the last two decades, the body has received increasing attention in everyday life and cultural theory. The body interprets an individual's or group's place in society and signals its distinction from other bodies either by personal decision or by cultural and social construction. It is of no surprise that the discussion of the representation of the body and of representation through the body has perpetuated itself within the discourse of political thought, feminist theory, postcolonial theory, as well as within gay and subculture movements.

One significant term in this discussion is the *grotesque body*. The attribute of »grotesque« is generally defined as "departing markedly from the natural, the expected, or the typical" (Webster Dictionary) or as "strangely or fantastically distorted" (Collins English Dictionary). Since Mikhail Bakhtin's discussion of the grotesque body in carnival¹ as the open, Dionysian body in contrast to the closed, Apollonian body, the term has evolved into an icon of rebellion and resistance. In more recent theory the grotesque body signifies the opposition to the classical, idealized, bourgeois body rather than to the 'normal' body, which is revealed as the product of social and cultural construction: "The images of the grotesque body are precisely those which are abjected from the bodily canons of classical aesthetics." (Russo, 8; see Conboy) In light of this function of dissent the grotesque body is intentionally created in art and reality (clothing, hair, bodybuilding) or confirmed (obesity).

With cyberspace as a new means of forming cultural patterns, the subject of the body has created new impulses. The body's disappearance, reinvention, and reshaping online raises new questions about the relation between body and mind, about the body as a visual metaphor of personal identity and about the "bodylessness" as a doorway to identity tourism. Cyberspace, it is argued, makes it easier than real life to rebel against so called normalized, accepted or "usual" body concepts. Within Cyberspace, it can be argued that it is much easier to consume and colonize the other body. The grotesque body is part of this situation as an ambivalent icon. In this article I will map out the ongoing discussion and talk about

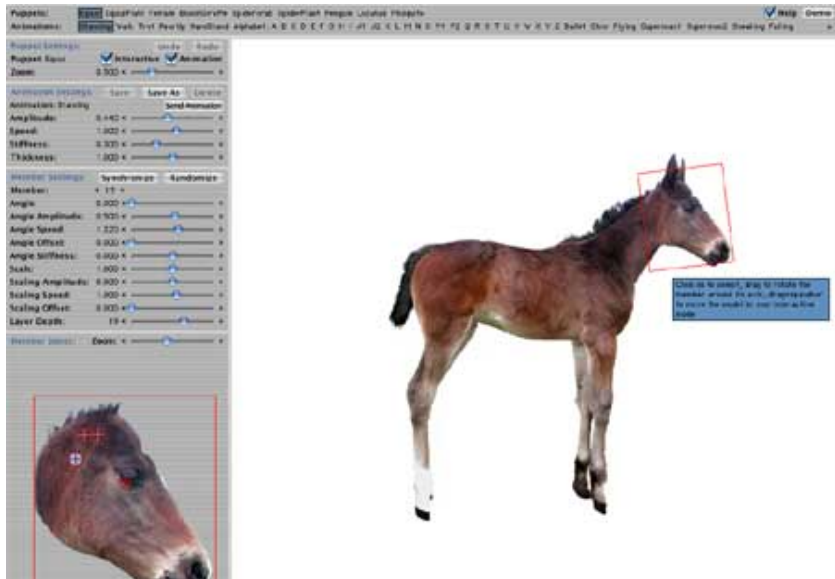
the ways to monitor, map, and modify the body in cyberspace. I am starting with body reshaping in three examples by Frédéric Durieu (a representative of the 'Paris Connection') and come back to Durieu after having laid out the social and medial context of the virtual body and discussed some examples of body-art on the Internet.

1. Grotesque Bodies

Frédéric Durieu seems to be obsessed with the grotesque body. Whether it be *Oeil Complex*, *Autoportrait* or *Puppettool*, he always offers bodies or parts of human or animal bodies, which are or can be shaped in a strange way. In *Oeil Complex* it is an eye implemented in an environment, which reshapes itself as we move the mouse. The eye multiplies, opens and closes, dependent on the mouse movement, but still beyond the user's control.



In *Autoportrait* the user can grab and drag Durieu's face and toss it until his eyebrows, ears, and nose have left their position and shift into a grotesque place. However, if one leaves the mouse, all pieces will fall into their place again, turning Durieu's face back to "normal".



Puppetool is a “tool for creating user-generated animated states,” as the splash page announces. The user is invited to create animations to send them to the online exhibition. One can choose which animal one wants to generate (the horse pops up by default, among other options are a giraffe, penguin, and mosquito) and how this should be done. The first transition into the grotesque takes place by altering the thickness of the body’s elements. In the case of a very low thickness, the horse is torn apart, reminiscent of the work of Damian Hirsch and his infamous severed animal corpses, and whose images are also referenced to in the film *The Cell* (2000) by Tarsem Singh where a horse is depicted whole and alive, and then is suddenly sliced crosswise into many sections.



By mouse click each body element can be separated for manipulation in terms of its angle, angle amplitude and angle speed or scale, scaling amplitude, and scaling speed thereby not only creating a grotesque body but having it moving in a grotesque, unorthodox way. As a result, the exhibition of user-generated creatures entails an example called *Ballet* showing a horse that dances with unnatural acrobatics, or an example called *Chicken* showing the horse walking like a chicken. Other examples are entitled Superman, Flying or Falling.



Superman

Durieu's grotesque bodies may be irritating for the first moment of encounter but soon serve as an invitation for fearless play. Helen Thorington states in her introduction to *Paris Connection*: "I felt something (delight) for the wobbly-legged animals in Durieu's and Birgé's *Zoo* as my actions caused them to trip over themselves, get tied in knots, only to right themselves and regain their composure as independent semi-autonomous creatures when finally I left them alone." This playfully approach may be typical for the *Zoo* as well as for *Puppettool*, where the user-generated creatures do not regain their original composure when left alone. In October 2002 the *Zoo* had 400 000 visitors, which proves its popularity. What is behind this popularity? Why do people like to produce these grotesque bodies? The simple answer may be sheer amusement. However, we may want to further investigate the relationship of the self and the body in digital media. We shall start with a general discussion.

2. Virtual Body

The Internet frees its users from their body similar to previous media such as the letter and the book. 'You are what you type' spells the promising slogan and indeed all body inscriptions are negligible when going online. The physical body is of no consequence - communication is reduced to the word as body-free representation of the Self. This opportunity to leave the body behind may be felt as liberation since body inscriptions such as age, gender, race and social class can no longer rule communication, though the relation and interdependency between body and Self is certainly not eliminated. However, this disembodiment did not cause people to forget the body. In contrast to the letter and the book, in digital media one can observe the desire to reconnect the Self with its body. Or perhaps it could be suggested that there is a *desire* for bodyness in digital media, a desire for a digital substitution, a need for a virtual body. The re-embodiment takes on basically three forms:

1. Flesh becomes words. The most popular form of re-embodiment in cyberspace is the invention of a virtual body by language. In chatrooms and MUDs users are prompted to describe themselves (age, sex, race, outfit). The design of a digital Self or personal avatar is more or less the design of one's alter ego. As scholars point out the digital realm or virtual reality (VR) offers the opportunity to experiment with other identities, to act alternatively, and differently from the way one does in real life (RL) and without the risk of consequences. As Sherry Turkle argues, such experiments of constructing and reconstructing identity serve as a 'second chance' for users to overcome conflicts with the self and the real body and as a means to understand the self more as a "work in process" (Turkle, 190). This identity tourism

has caused disappointment and mistrust by users who took online projected personalities as guaranteed.² Meanwhile users are more aware of the specifics of the Internet and the traps it has ready for them; and this very aspect is part of the thrill the Internet gives to enjoy. With respect to identity tourism and digital crossdressing, more recent scholarly writings stress the symbolic colonization of the Other by playfully taking on their ethnicity without having to deal with the usual consequences such ethnicity causes in real life.³

2. The visualization of the virtual body. With the progress of soft- and hardware the virtual body can be visually represented. Some Chats and MUDs do not only ask the users to describe their body but also offer options of visual presentation such as sex, body color, hair style, and hair color.⁴ This visual representation happens in addition to the representation by language description. In some computer games users can even upload their own picture in order to visually personalize their avatar in computer games.⁵ Such personalization occurs in order to increase self-referentiality in such games, which usually address the user as "you": "you are the angel who has to rescue the world".

3. Taking your own body into Cyberspace. This form aims to connect the real body with the digital world by means such as data gloves, data suits, eye tracking systems, electromagnetic sensors attached to the head, torso and extremities. Further requirement is a computer fast enough to compute the incoming data of these devices into an appropriate virtual reality the user sees in their monitor-glasses and feels in their data-gloves. This form does not separate our natural body from our experience in the digital realm but expands it into this realm. This technological augmentation seen in movies like *The Lawnmowerman* (1992) by Brett Leonard or *Total Recall* (1990) by Paul Verhoeven is already possible though the technical equipment is still very expensive.⁶ An extreme version of this form is the rather utopian Cartesian approach of subculture groups such as the *Extropians* who "seek to become post-human," to 'jack in' to cyberspace by uploading their consciousness and permanently leave their natural body behind (Terranova, 273).⁷

A reverse version of embodiment and cyberspace is the cyborg that permanently implements the technical world into the body rather than to send the body temporarily into the technical world or to create a substitutional body in the technical world. Such hybridisation of machine and organism can be seen in movies such as *The Terminator* (1984) by James Cameron or *Johnny Mnemonic* (1995) by Robert Longo. As Donna Haraway argues, "we all are cyborgs" (Haraway, 292) for the coupling between organism and machine can be traced back to the implementation of artificial organs and limbs, heart pacemakers and lenses.⁸ But even applications like glasses and hearing aids can be seen in this light and finally even as an "extension of man" (McLuhan) such as the automobile as an extension of mobility and load-carrying capacity and the axe as an extension of arm power.⁹ However, in the future the extension of man will be pursued by neuronal implants

incorporating the computer into the body.¹⁰ It should also be taken into account that medicine and, more current, biogenetics is a track of applied technology to enhance human capabilities. The manipulation of the (human) DNA is actually prosthetics as coding, cyborg technology morphed into flesh. We will return to this aspect.

The process of dis- and re-embodiment in cyberspace is not only a process of de-naturalizing the body. To a certain extent it is equally a process of de-socializing the body. As Anthony Synnott states, the body "with all its organs, attributes, functions, states and senses, is not as much a biological given as a social creation..." (Synnott, 3f.)¹¹ Judith Butler asserts that this holds true for gender as well. Even the usual technologies of reshaping or re-semanticizing the body by dieting, exercise, cosmetic surgery, tattooing and piercing follow certain social patterns. Is the shaping and semantization of the virtual body free from such patterns?

It has to be acknowledged that the virtual body is mostly modeled after real life patterns. When Chats and MUDs prompt users to choose a certain gender and ethnicity they leave it to the users to choose but by urging them to make a choice the pattern of gender dualism and distinct ethnic representation is accumulated. As Nakamura demonstrates even when the virtual body can be described unrestrictedly stereotypes about gender and ethnicity appear repeatedly.¹² In these cases the virtual body remains to be a surface for social patterns, which has been successfully inscribed into the mind, which designs the virtual body. Discourses operate through the visual performance of the flesh, yet they are stored mentally. The body finally cannot be considered without the mind.

This is not to say there would not be any room to undermine such body concepts. In many cases users do give themselves a fantastic, crossbred body design and large communication platforms such as *LambdaMOO* meanwhile do not offer only the usual two genders: male, feminine, and neuter, egotistical, royal, 2nd, either and plural.¹³ Therefore technology and cyberspace present ways to get beyond both physical limitations as well as social constructions. Don Ihde states about the utopian imaginations driven by technology: "In this mode of technofantasy, our technologies become our idols and overcome our finitude." (Ihde, XIII) Ihde pays attention to make clear that he does not want to sound like a dystopian. If one looks at other scholars such technofantasies are positively applied in a broad serious discussion about politics, identity, and representation. Haraway, for example, considers the cyborg "a creator in a post-gender world" and –for its boundary-blurring status as both human and machine– even expects the cyborg imagery to be "a way out of the maze of dualism," as a symbol of hybridity, which can serve as a model for political work (Haraway, 292, 316, 295).¹⁴ Following this perspective Javier Tirado sees the cyborg as the epitome of deconstruction and calls for an "everyday existence populated by becoming cyborg." (Tirado, 215)

It has to be seen whether the cyborg and the virtual body really meet these expectations. In many cases technophiliacs do not show such awareness of or interest in the social and political components and consequences and rather seem to think they act in a value-free vacuum. An example is the Australian performance artist Stelarc, the most important exponent of cybernetic, cyberpunk body art. Stelarc promotes his cyborgian fantasies without any reflection of the underlying assumptions or the political and economical circumstances and consequences. When he develops and performs concepts of the remote control of the body he does not ask who actually controls the remote. When he states that evolution –as a collective, cohesive process– ends with the individual determination of DNA destiny and of the invasion of technology into the body he does not discuss who will finally have access to technology and hence evolution, let alone whether such individual evolution will ensure survival in/of a human society (Stelarc, 561-63).¹⁵ As Mark Dery notes, “Stelarc seems unaware that his discourse is caught in the cross fire of the culture wars.” (Dery, 583)¹⁶

However, as a matter of fact cyberspace does dismiss the real body in one way or another and requires coming to terms with this dismissal and with the desire for a virtual body. The *there-body* does give the freedom of alternative description and deconstruction of the usual personal and social body patterns. Cyberspace is liberation from the body's name as it appears in the passport and from the body itself as it appears in the mirror. By re-giving the name and re-configuring the body (gender, race, shape, age) users step into the position of their parents. It can even be said, the creator takes the position of God, but it is not the word, which becomes flesh but the flesh, which becomes word (and remains to be word/code even when it is visualized).

3. Body Art, Survival, Death, and Transformation

To some extent this liberation repeats the liberation of the body from its 'real' shape in abstract painting. After the arrival of the photograph, painting gave up mimicking nature and rather suggested new ways to see the body. The human body was reshaped in an expressionistic way and finally turned into cubistic forms. *The Dance* (1910) by Matisse is equally part of this development as Picasso's *Three Dancers* (1925), Picasso's *Woman with Mandoline* (1910) as well as *The Knife Sharpener* (1912) by Malevitch. Raoul Hausmann's readymade-collage *Mechanical Head* from 1919/20 seems to be the consequence of such deconstruction of the natural body towards geometrical and technical forms. Jennifer Gonzáles even discovers in this piece a “particularly appropriate example of a cyborg mind.” (Gonzáles, 544)

But even the so-called realistic media such as photography and film experimented with reshaping the human body. An example for photography are the montages by Inez van Lamsweerde, *Books of Change: Meditations on Metamorphosis* (1993) showing young female children wearing the mouth of a twenty-four-year-old man. In film, as a medium of time, it is intriguing to show the process of reshaping itself especially when the double status of a body has been the subject of a movie as in *Jeckyll and Hyde* or in any *Dracula* film. With technological progress such morphing became the main attraction in the instance of the morphing face in *The Mask* (1994) by Charles Russell or the morphing terminator in *Terminator II* (1991) by James Cameron. Even avantgarde filmmaker Michael Snow adopted this new means in *Corpus Callosum* (2002), where people are twisted, squeezed and stretched into grotesque bodies and then returned to normal. More than *Terminator II* and *The Mask* Snow shifted the morphing effect into the center of this feature-length but non-narrative film. Such a focus on technology prevents from its fetishization and actually points out – as the hidden story – the ongoing transformation of human actors into cartoon characters and the replacement of dramatic art by the fascination for technology.¹⁷ What is remarkable is that at the end of Snow's film the audience sees the film's characters sitting in a movie theater to see a three minute animation by Snow from 1956. This animation – a cartoon of an elasticized person with a twisty foot kick – is not about morphing but about the grotesque body. As the main film has shown, by digital morphing the grotesque can easily be applied today to images of a real person. Before following this path into cyberspace we should have a look at a version of body reshaping in the real world.



Sindy Sherman: *Untitled #187*, 1989

While reshaping in painting is performed by an artist onto an image of the body in film reshaping pretends to be happening to the monitored "real" person. Cindy Sherman's photographs of the abject female body –her body temporally reshaped by mechanical devices unveiling the self as an opposed force to the ideal body– may present a version that lets the process of reshaping really happen to the body of the photograph/er, though without real consequences for the body. Body artists such as Günther Brus, a founding member of the artistic group for Viennese Actionism (*Wiener Aktionismus*) in the 1960s went much further. Brus not only made self portraits where he covered his head with white paste and marked it with a brush as if it had been opened and then sewed up again. Brus practiced self-mutilation in a series of public performances in the 60s. Another example is Stelarc who spent three days with a stitched mouth and eyelids three days squeezed in between two planks in his *Event for Support Structure* in Tokyo's Tamura Gallery in 1979. A third example may be the Brazilian Eduardo Kac who cyborgized his body by implementing a microship into his feet in 1997.

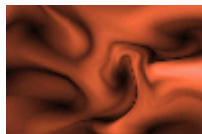
Besides all of these body manipulations initiated and performed by painters, photographers, performance artists or filmmakers, there has always been trend towards body manipulation. The body has been the first canvas and it remains to be so even in contemporary times. Whether by temporary decorations of 'soft body art' such as makeup, clothing, and hairstyles or by permanent marks of piercing and tattooing, people have used and continue to use specific means to reinvent themselves, though it always has to be asked to what extent such reinvention is the result of new social patterns of construction.¹⁸ Now with cyberspace, both versions have merged into a hybridized approach to the body. The *users* become artists and deal with an imagination of their *own* body. The separation of mind and body in cyberspace and the end of the separation between artists and audience has created interesting activities. I mentioned above the desire for a virtual body and laid out some ways for the re-embodiment in chat-rooms, newsgroups, and games in digital media. I will now introduce some projects, which expressively deal with disembodiment and re-embodiment in digital media.



Metabody No. 39

Metabody. In 1997 video art pioneer Douglas Davis, who initiated *The World's First Collaborative Sentence* in 1994,¹⁹ launched the web project *Metabody*, the "World's First Collaborative Visions of the Beautiful," a pool of images (about two thousand by March 2003) to which users all over the world can add their own contribution. Interestingly enough, the opening image mirrors Matisse's *The Dance*, politically correct slightly alternated by colored bodies including a red leg. An alternative image is a close up to a female breast, whose nipples –upon mouseover of the sentence "If you want to take a chance, slide your mouse here"– give way to an eye moving around, watching back.

Apart from such visual gimmicks, with his introductory essay "Bodybodybody. High Art, Photography, and Media in the Age of Digital Corporeality" Davis situates the project into the contemporary discussion sketched above. He refers to Donna Haraway and other writer's statements about the ongoing and coming reconstruction of the body and notes: "we now find two bodies of thought, and emotion opposing each other with fury as the Virtual Century begins. ... What is clearly needed in the face of this crisis-spliced-with-desire is a theoretical re-mapping of the BodyBodyBody."²⁰ Despite all the references to the cyborgian or virtual body and despite the invitation "to join in creating the 'bodies' of our theoretical 'souls,'" the project strikes as a quite traditional photo gallery praising the real body rather than introducing the crossed, reshaped, virtual body. The project is actually meant to be more of a rebellion against the monopoly of visual representation driven by censorship and commerce. It is supposed to be a "plebiscite" "to define the Beauty of Diversity", an assemblage of the body's beauty as defined by the beholder: "We seek to show that beauty has many shapes, colors, textures, and homes." Thus, one finds many conventional though sometimes erotic, obscene, and very often aesthetically intriguing images. Only a few contributions such as the bodyless *Number 11* and *Number 30* bring in the idea of a different, cyborgian body.



Metabody No. 11



Metabody No. 30

In this light, *Metabody* does not appear as a project devoted to the virtual body, but rather to the survival of the real body in the virtual world. Instead of experimenting with a virtual body users are eager to upload –and thus to offer copying and downloading– images of their real body. It is a visual colonization of the cyberspace by images from the real world, though the seen bodies remain nameless and the extreme misuse of the body remains unseen.²¹

Overall, *Metabody* represents many websites uploading the real body into cyberspace. Each self-portrait on a personal website is an example and actually each personal website as such intends the embodiment of the self.²² Some use the new technology such as webcams to display their body with an intensity other media do not allow. What is particularly intriguing is that in the cases the webcam monitors the bedroom, the audience can observe the body in situations the exposed person has no awareness of.²³ Webcam-exhibitionism is sometimes used to intentionally question common perceptions of (women's) bodies,²⁴ or on the contrary to use these perceptions and the usual patterns of desire for economic

reasons.²⁵ The new medium and all its new technologies are also and first of all used to offer the sexualized body. As even users know who apply a filter program for their emails, the Internet is a medium that literally attacks users with unwanted, undressed bodies. In most cases this display of the body does not add new aspects to the current discourse on the body, perhaps with the exception of the ambivalent panoptism of webcams. More interesting are such artistic responses as Alexey Shulgin's *FuckU-FuckMe*, an ironic promise of remote sex via the installation of a genital drive device in the slot of the computer, and the transformation of the foreign body in Thomas Ruff's photograph series *Nudes*, a conversion of pornographic online readymades into artifacts exhibited in offline galleries.²⁶



Masculine head in glass, infantile torso in lava, arms in concrete and none texture, masculine legs in wood Body is turned

Bodies@ INCorporated. A very different approach illustrates the next examples where the user is not encouraged to virtually upload his body into cyberspace but to create his virtual body in cyberspace. Imagine a company offering virtual bodies – a digital embodiment of yourself. The company would talk about politics of identity, satisfaction guarantees, copyright restrictions, and limits of liability. *Bodies@ INCorporated* introduces itself as quite such a company. In this webproject 1996 launched by the California artist Victoria Vesna in collaboration with artists, musicians, companies, and programmers users are able to acquire shares in a mock corporate structure with which they can order digital bodies of their choice out of pre-defined body-parts. The user has to give the body name and age, assign a sex (the bottom “other” gives the option for a fantasy sex) and a sexual preference, and choose for each part of the body (head, torso, left arm, right arm, left leg, right leg) the type (masculine, feminine, infantile, none), size (small, medium, large) and texture (from black rubber and blue plastic to water and wood). After having assigned sound (from auditory and bifurcation to nuclear and voice) to the body, answering “What This Body Is To You” (alter ego, significant other, desired sexual partner, other) and entering special handling instructions as well as other comments, one can order the body, which will be presented right afterwards in a three-dimensional form.

The description underlines that the body becomes one's own personal property, which one is free to download into the private hard drive. Once the users have ordered the body, it is said as well, they can become an active member of the “Bodies@ INCorporated online community”. However, while *Bodies@ INCorporated* in contrast to *Metabody* allows the users to archive a virtual body it does not allow the interaction between them and their virtual bodies respectively. As Eduard Kac reports: “While many participants emailed Vesna and asked her to create an area with live avatar-based chat rooms, to enable these bodies to be displayed in an active social environment, the author explained that this is not her intention. She is exploring what she refers to as “database aesthetics”, enabling Web users to create, access and modify a complex database that critiques the conversion of the Internet from a social space to a marketplace.” (Kac, *Beyond the Screen*) Thus, the users own a body, which they cannot use in interaction with other people. The virtual body is as virtual as the share capital. The virtual body is actually dead right from its inception. This lack of interaction makes it understandable that beside the “SHOWPLACE!!!@ INCorporated”-section where members can view star bodies of the week and participate in bodyless discussion forums, the project offers two other sections: “LIMBO@INCorporated” with information about inert bodies abandoned or neglected by their owners and “NECROPOLIS@ INCorporated”, “where owners can either look at or choose how they wish their bodies to die”.

Jennifer Gonzáles stresses that “Bodies@ INCorporated” “reconstructs the bureaucracy that inspired its inception, drawing attention to bodies threaded

through the paperwork of birth and death certificates, census forms, and medical records, and simultaneously emphasizing the necessity and ludicrous limits of creating selfhood through the apparati of checked boxes and a narrow range of multiple choices ... The process of constructing a body in 'Bodies© INC' is something like a narrative list that sensitizes the user to the categories of identity and identification already standardized in the culture at large." Besides this emerged awareness about (constructing) body-identity, Gonzales sees another rather problematic outcome of the project in the "underlying notion of easily transformed gender and skin color" as fantasy inherent in the project. (González: Appended Subjects). In a similar way Eduard Kac resumes "that a culture obsessed with fitness and shapely bodies finds an acute reflection of itself in the detached and calculated digital incorporations" this project provides. However, the project is not only about gender and race swapping, the "projected idealized 'significant others'," as Kac notes (Kac, *Beyond the Screen*), or the "members' desire about his or her physical shape", as Christopher Newfield comments. The project does not only intensify the idea of the perfect body but also invites the creation of a grotesque body: hybrid figures "composed of different elements, perhaps even a schizophrenic set of surfaces that may implicate the body in a set of conflicting power relations." (Gonzales, Appended Subjects) Such creation of the grotesque body as a virtually owned body does not only question the idealized body but the real body as well. Kac himself has carried out a couple of projects, which drive the body towards its grotesque status. Before we turn to Kac I will discuss a project, which puts the grotesque body into conflicting power relations not online but via Internet.

Ping Body. In the course of time Stelarc evolved his body art towards an aesthetic of prosthesis, which finally combines the real life cyborg with cyberspace. Thus, in 1996 he converted his stomach into a gallery to house a sculpture by swallowing a 50x14mm capsule, which expanded in the stomach (inflated with air by an endoscope) to a size of 80x50mm (*Stomach Sculpture*). As Stelarc comments, in this case "technology invades and functions within the body not as a prosthetic replacement, but as an aesthetic adornment." (Stelarc, 565) The project and Stelarc's statement demonstrate an aestheticism, which is as problematic as aestheticism always is. The passion for technology revealed in the *Stomach Sculpture* reveal could be understood as a warning, a demand to rethink our relationship to technology similarly to Kac's biogenetically transformed rabbit which will be discussed below. However, Stelarc's own writing does not give reason to see his work this way, as noticed above, he displays a simplistic and enthusiastic approach to technology.

In the same year Stelarc created *Ping Body* as part of a Digital Aesthetics Conference in Sydney (<http://www.stelarc.va.com.au/pingbody>). This performance takes up Stelarc's idea of a physically split body by a third hand (stainless steel) attached to an acrylic sleeve on the right arm and moved by voltage-in-actions

received from a remote voltage-out source. The voltage is applied to the flexor and bicep muscles, bending the wrist, curling the fingers and jerking the arm up and down involuntarily. In *Ping Body* the remote agency is multiplied by hooking up the body to the Internet. The higher the traffic on a special website the more intense are the *pings* Stelarc receives and the more intense his body's response is.²⁷

Stelarc advocates the remotely controlled body as a "transmission and condition of a skill" and downplays the inherent dilemmas of decision making and justification: "This would be a more complex and interesting body – not simply a single entity with one agency but one that would be a host for a multiplicity of remote and alien agents. Of different physiologies and in varying locations. ... A body capable of incorporating movement that from moment to moment would be a pure machinic motion performed with neither memory nor desire." (Stelarc, 567f.) Such acting without will and self-control is reminiscent of of hypnosis, which in Thomas Mann's novella *Mario und der Zauberer* from 1930 not without reason is inherently referenced to the upcoming national socialism.²⁸ The difference from a hypnotized person seems to be that Stelarc's body of unintended action can successfully struggle itself. The rescue in the case of *Ping Body* may lie in the fact that the setting of multiplied and therefore dispersed remote agents does not allow them to deliberately cause a specific action of the controlled body. The invaded body randomly responded to the sum of voltage-in-signals to which each user's signal was neutralized. The body was part of the Internet and the Internet was part of the body, though, at the end both sides were acting involuntarily. The action of the grotesque body was the result of a random input transmission, thus expressing the absence of will and control in general. This situation was celebrated rather than addressed for Stelarc's *Ping Body* lacked the condemnation Eduard Kac's similar Internet based installation *Genesis* one day will reveal.



GFP-Bunny

Genesis. The first cyborg was, as Donna Haraway reminds us, a white rat in a US laboratory, implanted with an osmotic pump (Bell, 149). Kac has created such an animal-cyborg and turned himself into a cyborg as well. In 1997 he implemented a microchip into his bones, in 2000 he generated a green fluorescent rabbit (Alba) by implementing a special gen taken from the naturally fluorescent jellyfish *Aequorea Victoria*. The cyborgian aspect here was the prosthetics as coding, technology morphed into flesh rather than the coupling between organism and machine. Such implementation is not unusual in biogenetic research and even the quality of fluorescence is welcomed for the check whether genetic manipulation (for example the implementation of the cancer gen combined with the fluorescent gen) has been successful. In Kac's setting, though, such quality is absolutely unnecessary and driven by aesthetical reason – not because it looks nice but in order to alienate and draw attention to the fact of biogenetic transformation as such. Therefore a logical part of the rabbit-project entitled *GFP-Bunny* (GFP stands for Green Fluorescent Protein) has been the immense press and PR action, which Kac started once the French laboratory Inra where rabbit Alba was bred declined to hand it out. The grotesque body of Alba –a result of human manipulation– was not confirmed for the life in public space. However, although the readymade of biogenetic work was withheld from the public eyes the green rabbit became an artifact. In fact, it was this withholding that gave Kac reason to turn to the public and start a massive PR-action.

Kac calls his productions of hybrids of the living and technology *transgenetic art* (Kac, *Transgenetic Art*). While *GFP-Bunny* does not use digital media (with the exception of websites used to inform and activate people), *Genesis* (1999) uses the Internet to involve the audience into the process of manipulation. However, the project only partly takes place on the Internet. It starts from a book, proceeds to an exhibition setting in a gallery, which is connected to and influenced by the Internet, and finally will end on paper again. This transmediality in terms of technologies of presentation is doubled by the transmediality in terms of the used semiotic systems: the shift from words into a living being and back into words.

The initial element of *Genesis* is a sentence from the Biblical *Genesis*: "Let man have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moves upon the earth." Kac translated this significant sentence into the dots and dashes of Morse Code and then replaced the dots by the letter C (for the genetic base Cytosin), the dashes by T (for Thymine), word spaces by A (for Adenine) and letter spaces by G (for Guanine). The resulting string of AGCTs constitutes a gene that does not exist in nature and that Kac (after combining it with a fluorescent protein) inserted into a species of *E. coli*, bacteria which can only exist in the medium in a petri dish. As Steve Tomasula states: "Art and science are thus collapsed into one another through two characteristics of *E. coli*: its ability to carry DNA from unrelated organisms, and its facility for self-replication." These *E. coli* – which is used as a living factory for genetically engineered products such as

insulin– are placed into a petri dish displayed in a specific exhibition setting. At this point the translation from alphabetic language into Morse Code into DNA becomes a collaborative writing project. Through the (either from home or networked computers in the gallery) mouse click visitors were able to control an ultraviolet light set up on the petri dish over the Internet. The energy impact of the UV light on the bacteria disrupts their DNA sequence and accelerates the mutation rate. Thus visitors have contributed their part when eventually in 2004 the DNA will be transformed back into Morse Code and into a sentence in alphabetic language.



Eduard Kac: *Genesis*. The left and right walls contain large-scale texts applied directly on the wall: the sentence extracted from the book of Genesis and the Genesis gene

Tomasula emphasizes the conflict in which this project situates the audience. The mouse click triggers a fascinating play with colors –the bacteria glow and give off cyan and yellow light– and at the same time it further activates the mutation of the bacteria, “the viewer realizes how impossible it is to walk in the Garden without altering it.” Tomasula also indicates the inherent conflict of responsibility: “Looking down upon this microcosm, finger on the button, it’s hard to not want to alter the bacterial garden if for no other reason than to see what will happen. Understanding that changing the bodies of the bacteria also changes the message they carry, we realize that the seduction of Genesis is also the seduction of science–word and body, art and world–all intimately linked.” This is precisely the point: Man, whom *Genesis* assures domination over “every living thing that moves upon the earth”, are inclined to ‘click’ without knowing the consequences of such action, just for the sake of curiosity. The writing of the future body is not deliberate and thus does not occur

in the logic of creation but irresponsibility. In this light one even cannot say the word becomes flesh since there is no clear word in the sense of a concept. It is rather that our unconsciousness becomes flesh: the seduction by and surrender to curiosity. It can be foreseen that as a result, as a kind of penalty the mutated, morphed version of the sentence will not repeat such authorization of man. The sentence is, so to speak, the revocation of this sentence's message.

Although *Genesis* works with bacteria it invites us to contemplate consequences of interfering with evolution in general: "Standing in the box formed by the walls of Genesis, it's easy for viewers to reverse the scale and think of themselves in the position of the bacteria with ultraviolet light streaming down. ... In Kac's Genesis, though, we see an icon for our new-found ability to rewrite ourselves--instantly, and in ways whose ramifications might not become apparent for generations." (Tomasula) *Genesis* is driven by the same intention as sculptures such as *Zygotic Acceleration* or *Tragic Anatomies* by Jake and Dinos Chapman, visualizations of biogenetic manipulation in fibreglass. The difference to this offline-work is that in Kac's project the users write collectively on a (metaphoric) version of the future body; which also distinguishes *Genesis* from *Metabody* where users present their real body online and *Bodies@ INCorporated* where users write their own virtual body. In Kac's project user participation in the manipulation and the significance of this manipulation comes together.



Jake and Dinos Chapman: *Zygotic acceleration*, biogenetic, desublimated libidinal model, 1995

4. Gimmick as Escapism

The transmediality of *Genesis* is complex, as its message is conceptually demanding. The users' participation on morphing the (bacteria's) body is a rather abstract, unspectacular process, which eventually will result in an illegible sentence. This illustration of Kac's "transgenic art" is a transmedial, processional example of conceptual art whose playful aspect of user participation does not overwrite the demand of contemplating the ongoing (inter)action. This cannot be said about such a body-morphing project like Stelarc's *Ping Body* with its martial setting and breath taking action. What after all is there to say about Durieu's *Puppettool* to which we finally want to return?

The playful creation of grotesque bodies in *Puppettool* may be seen as a mixture of all examples discussed above. It displays the image of a real body (as in *Metabody*), which can be modified (as in *Bodies@ INCorporated*) in collaboration with other Internet users (as in *Ping Body* and *Genesis*). The project is both more personal and less urgent than those four. On the one hand users see immediately the result of their deliberate actions, are able to save and expose it on the Internet and can work with the body other users have created and saved. On the other hand the subject of manipulation does not embody the user as a human being but an animal, which seems to draw the attention away from the topic of the cyborg and genetically manipulated mankind.

As Tomasula stresses above, the modified bacteria is an icon for our ability to rewrite ourselves. Human genetics starts with the transgenetic of plants and animals. In order to create more resistant, more productive animals and plants these species of life are subject to DNA-re-arrangements for a long time. As Tomasula reminds us: "Chickens carry the genes of the salmon while sheep receive tobacco genes". Kac can use bacteria and still speak about morphing humans. Complaint about the insufficiency of the human body and demands for help by appropriated engineering can be heard more and more. Human genetic is one step in this direction. Another step is technical engineering practiced since the invention of glasses and meanwhile advocated in a much more radical way by artists such as Stelarc.

However, more important than the used body-icons (bacteria, real live cyborg, digital images of animals) are the different aesthetic settings. If *Ping Body* is spectacular out of Stelarc's martial appearance, *Puppettool* is spectacular due to its sophisticated programming. A horse ballet dancing or walking like a chicken just looks funny and makes the users wish to create their own grotesque version. The effects of morphing experienced in real time cause and absorb much more surprise and attention than in the abstract, complex settings of *Genesis* or *Bodies@ INCorporated*. The body setting in *Bodies@ INCorporated* with its rather humdrum bodies is not captivating enough, the body morphing in *Genesis* with its many

translations is not obvious enough that the effect itself could break in the center and drive out the reflection of the concept as such. In *Genesis* users will think of the incomprehensibility of the final result, in *Bodies@INCORPORATED* they will remember LIMBO and NECROPOLIS as the sections for abandoned or dead bodies. *Ping Body* and *Puppettool* are too entertaining for a contemplating approach. On different levels they are both the amusing version of *Genesis*. There seems to be the danger that the more the technical effect is admirable the less the user feels urged to look for the underlying message.

This is not to blame Durieu. The problem seems to lie in the technology used. It reminds of the *Frog Blender* a Shockwave-installation in which a digital frog in a blender calls for the user to push the speed-buttons up to 10. Of course, the frog stops to joke around and to provoke the users the more they proceed through the speed-buttons. And of course, the users do proceed. Not only because it is not a real animal they are going to kill, but also because they wonder how the program renders the killing (the frog jumps up, falls piece for piece on the bottom, his eyes at the very last, the water in the blender turns red). In this setting the technical curiosity removes any seriousness of the situation, which in comparison to Marco Ivaristti's installation with a real blender and real goldfishes in the Trapholt Museum for Modern Art in January 2000 contained.²⁹ The only weightiness technical effects (and gimmicks) allow is a kind of sublimity (Erhabenheit) towards the programming, which is mostly as much beyond the users' understanding as a magnificent mountain panorama or a monumental cathedral.

Thus, we are dealing with the question raised in my *introduction* to *Paris Connection* regarding Lev Manovich's essay *Generation Flash* and Andrew Darley's note on a tendency of contemporary visual culture towards surface spectacles. Comparing the matter of grotesque body in *Genesis* and *Puppettool* the latter is doubtlessly more visually spectacular whereas the earlier surely is reflexively more spectacular, though this formulation is somewhat of an oxymoron. The difference between *Genesis* and *Puppettool* seems to embody the shift Darley notes in his book on *Visual Digital Culture*: "a shift away from prior modes of spectator experience based on symbolic concerns (and 'interpretative models') towards recipients who are seeking intensities of direct sensual stimulation." (3)

As I state in my review on pieces by *Nicolas Claus* and as I discussed in greater detail in my article *Concrete Poetry in Analog and Digital Media* Darley's notion and all artifacts, which seem to prove this notion, demand a general debate about aesthetics. The critique of *Puppettool* in favor of *Genesis* for the more conceptual quality of the latter displays a meaning-centered approach to aesthetics, which can be questioned in the light of formal aesthetics in the beginning of the 20th century. The pure technical effect may substitute the "pure visual" which the formal aesthetic was trying to achieve as a liberalization of the sign from its traditional meaning-bearing role, from its duty to represent something else other than itself. Maybe the

“culture of the depthless image,” the aesthetic of the “surface play and sensation,” as Darley coins it, is appropriate to the character of our time and of this technology. On the other hand, in an age of spectacle, visual overload and progressing semi-analphabetism one may object such a tendency in art whether it be in film, literature, or digital media. I do not want to get deeper into this question here.³⁰ I want to show that the grotesque body in Durieu’s work is not just something to play around with and to feel delight for, as Helen Thorington announced.

In my discussion of Clauss’s Mechanical Brushes and Massacre and of Schmitt’s avec détermination I tried to show that sophisticatedly programmed projects can be both fascinating and even funny as well as cognitively demanding. Durieu himself delivers some examples in this respect. When in *Oeil Complex* an eye is implemented in an environment, which reshapes as we move the mouse, it is fascinating and irritating at the same time. The eye in such an environment is not only grotesque but also abject for it seems to be removed from the body and to look (back) at the body the user presents in front of the screen.

Durieu’s *Autoportrait* carries out such abjection on the actor’s face. When shaken with the mouse eyes, ears, and lips leave their places and take grotesque positions. However, that all pieces fall into their place again once the user stops shaking implicitly reaffirms the original shape. This promise of return suggests a security, which may be understood as encouragement to dare the reshaping, the step towards the grotesque. One may even see the face as a rendition of the carnival: after a time of disorder law and behavior is ensured again.



In another piece of Durieu the grotesque body is unrevealed and rather present by sound and a specific intertextual reference. In *Week End* users only see blue sky, which they can navigate (as if from the position of a plane), zoom in and out. One cannot turn around to see the ground, where –as the titles’ reference to Godard’s

film *Week End* requires and as one can hear – cars repeatedly crash into each other. One hears the siren of ambulances and imagines the grotesque bodies being recovered out of the wrecks. *Week End* is a result of Godard's anti-bourgeois critique. The film addresses the consequences of capitalism in an apocalyptic way: the bourgeois weekend traveler becoming involved in a car crash eventually resorts to cannibalism. Durieu's *Week End* seems to quote this apocalyptic situation and to offer the sky to escape accompanied by the birds, which are in the sky and which may be on their way away. However, the movement in the sky does not make the noise of car crashes disappear. The message of this technical setting seems to be that no real escape is possible and no return down to earth.

To a certain extent the grotesque body and even the eaten body in *Week End* represents the same threat to the normal, bourgeois body/life as the grotesque body in carnival and in pieces of art such as those mentioned above. It is the annihilation of the bourgeois setting, though it is the result of it. In this light the impossibility of escape equals the permanence of carnival. The grotesque is alienation, a cut into the normal procedure: it renders the rebellion, as discussed in many examples of academic writing. However, what works with respect to *Week End* becomes problematic with respect to *Oeil Complex*, *Autoportrait*, and *Puppettool*. Because the grotesque is no longer the grotesque as it was some decades or centuries ago.

1. From the perspective of the grotesque as an expression of disapproval, as rebellion against the constructed body it only would be natural that the grotesque appears as spectacle and fun like it once did in carnival. The fact that in *Puppettool* users can exhibit and share their grotesque bodies' only fits in the carnivalesque condition of a 'collective body'. One may object that the manipulated body should be human to better serve such analogy; on the next level of sophisticated programming users should even be able to upload their own image into the project. But yet this naturalistic rendition would probably not really prevent the project from being easily integrated into the logic of entertainment in contemporary mass culture. The grotesque may be the antithesis to 'nice' but not to fun, this is actually why the grotesque always was a thrilling part of entertainment. The spectacular play with one's own body may perfectly update the experience of thrill – as long as it happens just with the body's image. The interactive annihilation of one's own body's image will neither be the liberation from culture industry nor a rebellion (or its grounding) against social construction in real life. It will be just the contemporary way of entertainment. With respect to the carnival in Rabelais' world – whose window of disorder was a real physical experience – it is an outbreak absolutely beyond the meat: 'Appolonian Dionysianism'.

2. However the impact of the grotesque body in media onto the user's body may be, there is another aspect to be taken account of. Today the grotesque body does not simply and in general serve as a sign for rebellion against social construction. Since

biogenetics and in light of cyborgian fantasies the grotesque body itself is a sign of social construction, be it an intended result (as in Stelarc's projects) or an accident (as in Jake and Dinos Chapman's *Tragic Anatomies*).³¹ The purpose to augment and enhance the insufficient human body by biomorphic or micromechanic engineering is equally based in a concept of the idealized, classical (future) body as the banning of the grotesque body (which includes the female body builder and the overweight body). Over time the metaphorical value of the grotesque body has changed. Playing with the grotesque can also mean getting used to the manipulated, reshaped body rather than rebel against it. The virtual body does not simply serve as the substitution of the real body but actually as its forecast.

Thus, we realize that Durieu's work inhibits a range of questions one can only answer within the broader context in which this work implicitly is situated. The way one sees pieces such as *Oeil Complex*, *Autoportrait*, *Week End*, and *Puppettool* depends from how one positions oneself within the underlying debate. Of course, all these pieces also can be understood without any consideration of the debate of the grotesque body – as one can look at grotesque bodies in literature and visual art with complete innocence. Whether Durieu intends his pieces to be looked at with such innocence, whether they are supposed to just be played with fearlessly by enjoying the user's influence and the bodies' strange actions remains a secret. It would be a strong statement in itself.

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Notes

1. Symbolized by an extreme, fantastic character, the fool's scepter or jester's shoes, and the focus on outgrowths of the body such as phallus, bowels, and donkey ears.
2. A famous example is the case of the middle-aged male psychiatrist who in the middle 80s pretended in an online newsgroup to be a disabled woman in her 50s, Julie, and created close relationships to other women who shared their innermost feelings with her/him.
3. See Nakamura, who refers to bell hooks' discussion of *eating the other* by de-contextualized, commodified consumption.
4. For an example see the representation of the users' body (respectively their virtual body) by a visual avatar in the chat *Habbahotel* (www.habbohotel.ch).
5. Digimask builds a completely animated three-dimensional model of the user's face out of two pictures the user uploaded into the program.
6. For an early description of such 'real' body feeling in cyberspace see: Stewart Brand, *The Media Lab*, 1987. The equipment is not only the assuring attachment that involves oneself with virtual reality but can also be seen as a *legitimizing* element like the mask in carnival, which justifies explicit or lewd behavior.
7. All prior versions do finally not dismiss the natural body, which either reaches into the cyberspace via special equipment or stresses its existence in front of the cyberspace by hunger, stiff neck or aching hands.
8. For more about cyborgs see Gray.
9. In this regard Lupton sees car driving as an instance of cyborgization.
10. For a lengthy, frightening discussion on this prospect see Kurzweil.

11. Don Ihde explains the social and cultural construction of the body with the differences in what is conceived as an erotic zone: the female breast in western traditions is much more important than the nape of the neck, the important erotic zone in Asian tradition (Ihde, XI).
12. For an in depth discussion of gender on the Internet see: Green/Adam.
13. Of course, in many MOOs and MUDs the fairytale environment supports the fantastic body.
14. On the relation of Haraway's cyborgology to US Third World feminism see Sand-oval.
15. An example for Stelarc's simplistic approach is the following statement: "In this age of information overloads, what is significant is no longer freedom of ideas but rather freedom of form – freedom to modify and mutate the body. The question is not whether society will allow people freedom of expression but whether the human species will allow the individual to construct alternate genetic coding." (561) Stelarc does not take into account that his demand of freedom to modify and mutate the body *is* already an idea, an expression, that may be and already is confronted with ideas and expression, which such freedoms to modify and mutate deny.
16. The professor of neurology Richard Restak looks upon Stelarc's fantasies as "distorted Cartesianism", "science fiction" and "pathological" (quoted in: Dery, 582).
17. The rather weak film *Simone* (2002) by Andrew Niccol with Al Pacino addresses this danger of artificial actors. The computer-animated feature film *Toy Story* (1995) shows that the three-dimensional detailed scan of an actor can star this actor without his or her presence. For a discussion of the replacement of a story by technical effects see Darley.
18. See the exhibition "Body Art: Marks of Identity" in the American Museum of Natural History November 1999 until May 2000.
19. This project – in which everyone can continue the sentence written by prior visitors – is one of the first art works on the WWW and still active. Eugen M. Schwartz bought it within half a year being online, whose widow later bequeathed it to the Whitney Museum. (www.ps1.org/body).
20. "How can our 'natural' bodies be re-imagined--and relived--in ways that transform the relations of same and different, self and other, inner and outer...?", Donna Haraway: *Simians, Cyborgs, and Women*, 1991; Davis welcomes the cybernetic organism und writes: "Certainly it's no accident that social theorists like Donna Haraway, awakened by feminist revisionism, moved aggressively to proclaim the priority of nurture over nature: by vesting authority in mind and will

rather than in passive acceptance, we welcome militant cyborgearism." Davis then refers to Michael Feher's *Fragments for a History of the Human Body* stating that our body will become arbitrary, a matter of choice, not necessity. Further references to Allucquere Rosanne Stone's famous article "Will the Real Body Please Stand Up?" from 1992 and to Elizabeth Reid, *Text-Based Virtual Realities: Identity and the Cyborg Bodies* from 1996.

21. The images do not show the names of their sender or figures. As Davis admits in the preface, for law and moral reason he discards unwanted contributions: "In this inevitably personal selection I will be driven by my own ideas of the beautiful, which excludes violence and the abuse of women and children (and men)." (www.ps1.org/body/opener.html) As the end of Davis' essay "Bodybodybody" shows he applies a quite vague concept of the Cyborg and: "Let the post-post-modern author/artist (who defines himself by interaction with other authors/artists, becoming a creative Cyborgean) hear YOU, loud, clear, in total license. It is time for us all to fly, like the distinctly human gods we are." (www.ps1.org/body/Text/index.html)
22. Charles Cheung: A Home on the Web: Presentations of Self on Personal Homepages, in: David Gauntlett (Ed.): *web.studies. Rewiring Media Studies for the Digital Age*, Arnold: London 2000, pp. 43-51
23. One of the most famous examples is Jennifer, who not only monitors herself on the Web but creates herself as an underground artist by presenting her poetic writing, her poetic screenshots and her own talk show in real player format (www.jennicam.org). For a discussion see: Krissi M. Jimroglou: A camera with a view: JenniCAM, visual representation and cyborg subjectivity, in: Eileen Green and Alison Adam (Ed.): *Virtual Gender. Technology, Consumption and Identity Matters*, London and New York: Routledge 2001, pp. 286-301.
24. An example is Ana Voog (www.anacam.com) who introduces herself as a performance artist and "commonly manipulates the female body with digital imaging or paint in a way that attempts to resist or manipulate sexist notions present in society and on the internet." (Snyder, 70).
25. An example, discussed in Donald Snyder's article, is Carlota (www.collegecutie.com).
26. See my review in: *dichtung-digital.org* 1/2002 (<http://www.dichtung-digital.org/2002/01-30-Simanowski.htm>).
27. Stelarc describes the setting as follows: "Random pinging to over 30 global Internet domains produce values from 0-2000 milliseconds that are mapped to the deltoid, biceps, flexors, hamstring and calf muscles – 0-60 volts initiating involuntary movements. The movements of the body are amplified, with a midi interface measuring position, proximity and bending angle of limbs. Activated

by Internet data the body is uploaded as info and images to a website to be viewed by other people elsewhere. The body is *telematically scaled-up, stimulated and stretched by reverberating signals* of an inflated spatial and electrical system." (ibid. 571)

28. It is remarkable and worth a special discussion that Mann depicts the hypnotiseur Cipolla as hunchbacked thereby relating the danger to the grotesque body.
29. For both projects see my review in dichtung-digital.org 4/2000
30. For a detailed, contextualized discussion see the mentioned article *Concrete Poetry in Analog and Digital Media* chapter 3: "Decoration and Message".
31. Accidents in beauty surgery or victims of anorexia nervosa and bulimia are already examples for the grotesque body not as an icon of rebellion but of obedience.