Cyberotics

This text was prepared for the Blast “biocybernetics” edition in 1994.
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Cyberotics is about sensual communication in computer created space, so called Cyber-space. It is a fantastical form of communication, a new kind of sensuality with and within a new kind of body; the technologically enhanced telematic body. In my work I try to overcome the sensory limits of computer mediated communication within Virtual Realities by designing extreme and multisensory environments. The missing link to achieve a complex feeling of telepresence has been the body. Audiovisual communication is not the final thing, nor is Audio-Tactile-Vision, but it is a step further and it introduces a new kind of space for new kinds of interaction.

In the following parts I will present a few shortened comments on the virtual body and some of my projects.

Part I
the schizoid body

In cyberspace we are confronted with differently structured environments that challenge both our cognition and perception as we know it from the “real” world.

In the following I will make a couple of unrestrained comments on the virtual personality, the virtual identity that we assign to our selves in Cyberspace.

Many people are familiar with such virtual personalities from MUDs (Multi User Dungeons). There you can describe your personality in lines of text. I can become “a beautiful green-skinned lady, walking around naked” simply by typing it. It is a liquid description of a liquid self, a self that does not know any limitations or boundaries. Whenever I want to recombine myself into anything else, I just type it.

Virtual identities can have several functions; ranging from soon-to-be-destroyed targets to bodies of beauty. If you have played Dactyl Nightmare (a 3D VR computer game) you have been assigned a visual, 3D representation for others to shoot at. First of all our virtual persona is a handler which we associate our selected virtues to in virtual space. It becomes a second self, hinting at how easy it is to multiply and diversify our appearance, creating an indefinite number of different personalities, all with some kind of relation to our “real self”. When we play with our virtual identity, we are playing with the multiple personality disorder.

But, don’t worry, in cyberspace we are all patients and doctors at the same time. Therapy never ends.

What interest me in particular is how these Virtual Characters influence our behavior. What do I do, how do I act, and - in what kind of body?
How does my virtual body influence my perception?

And, how is my behavior related to my virtual representation?

My virtual body enables me quite other kinds of expressions, looks and qualities than in real life. It can make me into an Alice of Cyberland.

In the fantastical fabric of cyberspace, a fantastical kind of body is the cybernauts best companion.
Cyberspace is a hyperreal place. It is a non-linear, confusing soup of things and events. This space demands new kinds of bodies to inhabit it, certainly if you do not want to suffocate under the seduction of New Reality and become a slave to consumption.

Virtual bodies are bodies as we don’t know them.

My Virtual body is a mutating kind of object, it is a crash body, a trash body, a sacrificial body that travels at Kroker’s sub-suicidal speed, evaporates and then recreates, readopts itself to whatever the unit me + medium mutates into. Recombining myself, matching my virtual identity to my virtual body, I become something outside of my total control.

For what is “ME” anyway? except an infinite number of social relations and mental connections?

Therefore, I propose a schizoid body as the future body of Cyberspace. Schizoid because it is moody, a liquid expression of multiple ME’s, ever-changing, at least compared to the Cartesian model of reality.
In the schizoid reality of cyberspace we can all crossdress, be aliens, furry animals, strawberry cakes and other preferred things, and most mudders will know how fun that can be. Who hasn’t pretended to be the opposite gender in an on-line communication?

No one knows you’re a dog on Internet anyway.

So, your virtual representation turns communication not only into a play with words and visuals, but also into a play with identity, corporeality and sexuality.
In Cyberspace the body potentially becomes a fantastical, malleable, instable, fluctuating, - even inconsequent kind of object. It is also a multiple by its nature, infinitely reproducible, duplicable.

Sure, it’s an object in a virtual space, just like any virtual car, cake, UFO or stone, but the important thing about your relation to your virtual representation is how you relate to it, what you design yourselves to look like.

The body of the future, I think, will adopt to the strong schizophrenic-like fabric of cyberspace, and to an understanding of the “I” as a multiple self with multiple perceptive bodies.
The cyberSM™ project was an attempt to create a real time, visual, auditory, and tactile communication in the world of cyberspace. In the first cyberSM™ experiment, the user began to experience what others have only talked about for years: live, tactile communication through a computer environment. The CyberSM project expanded upon text based virtual environments, such as Minitel, MUDs, or most BBSs. It also takes the next logical step toward true telepresence by employing 3D graphics, live audio, and direct physical stimulation to allow participants to physically touch each other over distances.

The cyberSM™ project allows the establishment of trans*gender appearances, identities and entities by letting the participants choose their own visual appearance from a large databank of digitized human bodies. Once chosen, the participants send the image of their virtual self to the others on the network. The body thus becomes a visual fantasy.

Central to the cyberSM™ project is the ability to transmit physical stimuli from one participant to the other. This is made possible through the use of stimulator suits connected over (international) telephone lines, which allow the users to remotely stimulate one-another’s bodies. Not only does this physical element of communication allow the CyberSM project to more closely model inter-human communication, it creates a new form of interaction. Throughout the cyberSM connection, participants have a physical dialogue, but they remain anonymous the whole time.

Before beginning the dialogue the participants build their virtual bodies by choosing from a databank of pre-scanned bodies and models. They can rotate the bodies, zoom in or out, and mix pieces from any gender. Once the body is built, the participant can preview how they will appear to the participant at the remote site. They can test their suit and, when both sites are ready, connect to the remote site. The local participant’s virtual body is then sent to the remote participant’s computer, where it will be used as the interface for the local participants suit. Once connected, the participants can speak to each other over a custom built speaker phone, and control each other’s suits through interactions with the virtual bodies. The participants are presented with each other’s virtual bodies on the monitor or projector before them. By exploring and touching each other’s virtual bodies, they can physically touch one another through the network.

The cyberSM project makes communications technology transparent. It allows us to extend our physical perceptions over distances, through computer networks, and beyond virtual realities. The cyberSM connection allows humans interacting in a virtual space to actually feel each other with their bodies. It is a sensual communication link, challenging our concept of eroticism, adding a missing sense to electronic communication.

Historical data and remarks to the cyberSM project:

The first cyberSM connection was done between Paris and Cologne in early December 1993, and ran for two days. Since then it has been performed in various places and conferences. It runs on normal Macintosh platforms connected over regular ISDN or computer networks.
It was modeled after an original conception of Stahl, and built on his first VR project for networked cyberspace encounters, the "late night drive-in fetish club". The software for the first cyberSM experiment was mainly written by Kirk Woolford. The experiment has been a victim of much hype where many -journalist in particular- has projected rather limited personal opinions and wishes than objective views into their critique of it. It is important to judge this project as what it was, namely one of the very first functioning multisensory communication experiments over long distance and computer networks. It is a prototype showing that it is possible today to have cyberotic communication involving more than just the phone. It does not in any case try to duplicate sexual relations as they might have been with Marilyn Monroe or Humprey Bogart. CyberSM is much too extreme for that, and much to different. Cyberotics is an alternative form for intimate and sensual communication and relations, not a replacement for love and care.

Part 3
THE INTERSKIN PROJECT

- a sensual communication system design constituted by the transmission of touch and movement

Whereas the first cyberSM project used a visual interface to influence and control the remote environment, the functionality of the third generation suits shifts the emphasis away from the computer screen as mediator between the participants to the body itself. In THE INTERSKIN PROJECT the body becomes the interface for communication between the participants through the use of touch suits. It becomes an “INTERSKIN” to convey, exchange and receive information. This is a new way of rethinking communication and interface technology, taking the concentration away from the object oriented (screen) towards the subject oriented (body).

In the INTERSKIN system both participants wear a sensoric outfit that is capable of both transmitting and receiving different multi sensoric stimuli. The suits are connected over LAN (Local Area Network) or Wans (Wide Area Networks) and can run over TCP/IP (Internet protocol), ISDN or other computer network connections.

The main emphasis of INTERSKIN is put upon the transmission and receiving of touch. By touching my own body I simultaneously transmit a touch to my recipient. The strength of the transmitted touch is dependent upon the duration of the touch. The longer I impress myself, the stronger stimuli you will feel.

Some of the interesting phenomenons arising in THE INTERSKIN PROJECT are i) the autoerotic stimulation taking place and ii) the feeling of a third, shared virtual body.

i) The autoerotic stimulation
To communicate with my accomplice I can use voice and touch. Both these stimuli play an important role in THE INTERSKIN PROJECT, but it is the touch that literally brings sense into the communication play. Voice contact is extremely important for a) how I perceive the touch and b) as feedback for my actions.
The fact that I must touch my own body in order to send (tactile) information imply several significant factors for the communication. First of all I must do to myself what I want my accomplice to feel. This makes my own body to a self referential object for the communication. There is no way to forget myself or to hide out what actions I take. If I touch my genitals, you will feel that I touch them. In such a on-to-one channeling of the stimuli a very direct and instantaneous form of communication arises.

It is also possible to redirect the impulses recorded by the suits in such a way that a touch of the arm becomes a touch of the genitals. In the first connection, however, the sensoric wear was wired “one to one”, without redirection of the stimuli. The autoerotic, self-stimulating aspects of such a tactile system re-routs communication to take place not only between two (or more) participants, but also between me and my own body. My sensuous experience with my own skin becomes concurrently an interface for the communication both to you as well as to me.

ii) The shared, virtual body There is a third body emerging in the communication process of the INTERSKIN PROJECT; the shared body. Sharing sensations communicated through autoerotic touch creates a third abstract, virtual body hovering in a virtual space, it’s existence constituted through the sensual experience of the participants. Through the participants exchange of tactile experience it is as if “I” am to experience “your” body and vice versa. In an extreme case, with a more developed and intrusive system, this allows for a transmutation of the receiving accomplice into the body of the sending accomplice, i.e.. I sense through and with your body. It is also possible to record the sensations of a person and replay them at a later time. The INTERSKIN PROJECT is a two way communication system which product I see to be the creation of a third and shared tactile experiential body existing in a virtual space.