



The cyberSM

A project by Stahl Stenslie

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.



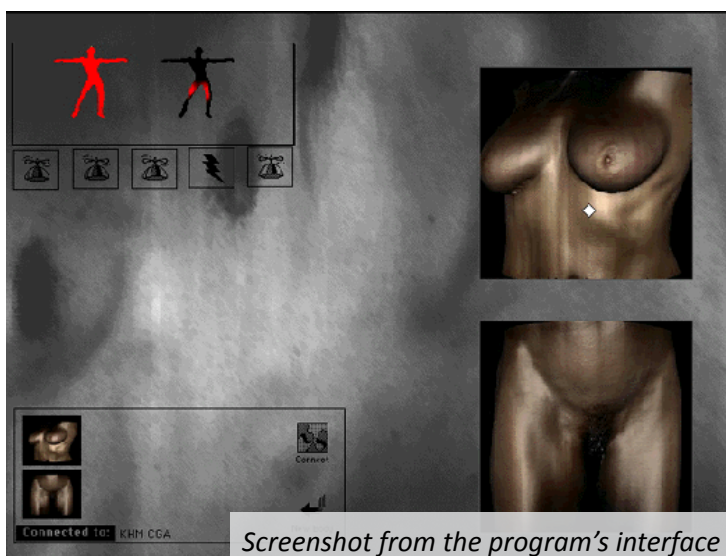
Before beginning the dialogue the participants build "virtual bodies" by choosing from a databank of pre-scanned bodies and models. They can rotate the bodies, zoom in or out, and mix pieces from any gender. Once the body is built, the participant can preview how they will appear to the participant at 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."

Historical remark: *cyberSM* premiered in 1993 connecting Paris and Cologne through the worlds first multisensory, full-body communication system.

The cyberSM system was realized in collaboration with Kirk Woolford.

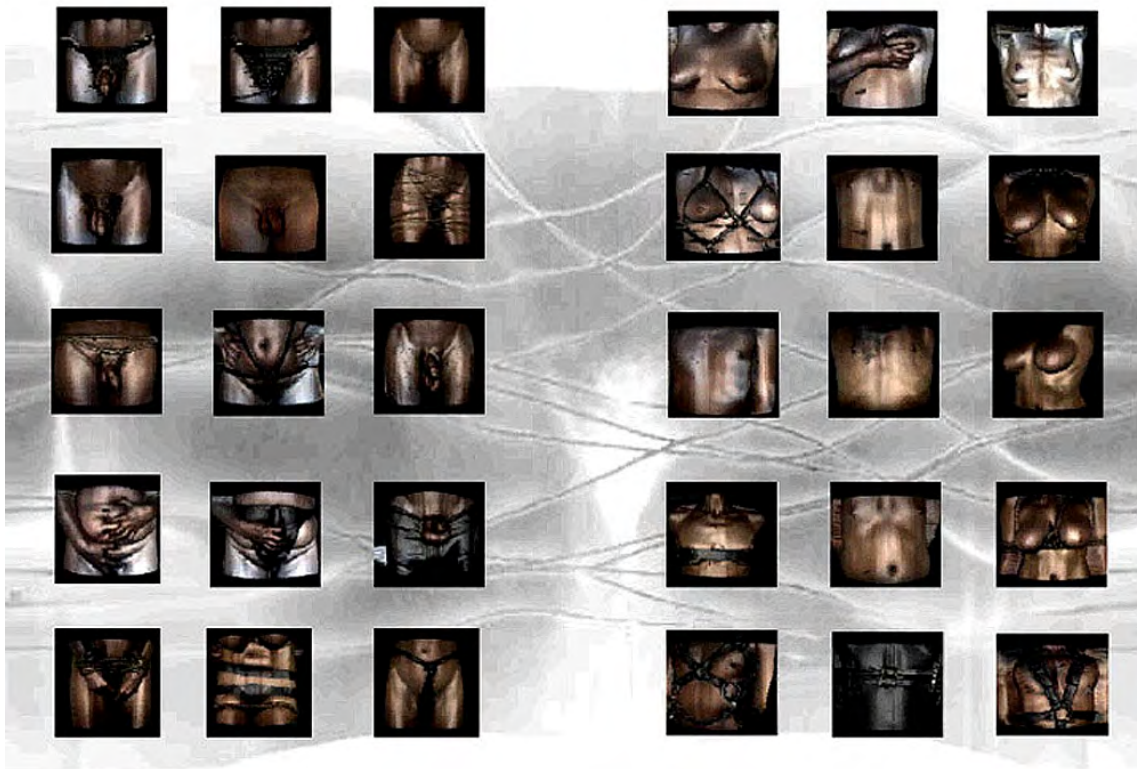
Link to the video: <http://youtu.be/pUN6FvObvSY>



Screenshot from the program's interface



The bodysuit



The bodybank of 3D scanned bodies



Screenshot from the program's interface