Membrane

A Proposal for
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Sponge.org

Argument

If the crisis of political and linguistic representation stymies us, then can we sidestep the crisis by sidestepping representation?   Let's sidestep discrete symbols systems and rules (abstract machine) and schema by playing in open continuous material that responds to our continuous action. After all, if human experience is thick, dynamic and continuous, then let's play in fields of matter that are thick, dynamic and continuous.   What material fields do we mean: distributions of people in a collective space, the sound of their speech, the light incident on the space, or the sound in which they are immersed?

   Can we design technologies that feel rich but not complicated?   Yes of course: consider the ordinary technologies of food and of cloth. Sponge has built responsive play spaces based on fields of tangible media evolving according to folk physics that can shape and be shaped under folk knowledge.   We have built play spaces in which people can individually and collectively improvise meaningful gesture.   But people can construct things of joint concern by movement and gesture without first using an explicit language or even a conversational protocol.   In a responsive space, players escape the straightjacket of sequential discrete conversational speech acts.   In such a place, the air currents, shadows, pieces of words, fabric, or hair that you leave in your wake form the material conversations in a corona around explicit conversation. Ordinarily such detritus does not constitute matter of conscious concern but this is where the technologies of calligraphic responsive media come into play. The responsive media driven by sensors map movement and gesture into aural and visual dynamics and make the dynamical spaces between our bodies palpable, shareable, and infinitely open.   Membrane was built expressly to celebrate the indirect and unknown consequences of each other's action -- unknown but not unfelt (in Eugene

Gendlin's sense of felt meaning).   It is a material, embodied, continuous mode of making and unmaking things of common concern in open, collective spaces.

From Representation to Performance
Performance, Play and Poiesis
From Objects to Substrate

Exhibits

Membrane is a set of video projection sculptures that perturb people's views of each other and of their surroundings according to their movement. Using physical modeling techniques from the Topological Media Lab, the membranes turn live and remembered image into calligraphic light.

See calligraphic video section in the Topological Media Lab Projects page:
http://www.gvu.gatech.edu/people/sha.xinwei/topologicalmedia/projects.html,

Membranes

Harry Smoak, Yoichiro Serita, Sha Xin Wei, Chris Salter, Joel Ryan, Delphine Nain, Maria Cordell

Large sheets of translucent fine metal mesh are suspended in the air space of the exhibition hall and responsive video textures are projected over them. As you walk past the Membrane your image leaves a trail on the screen. The effects change depending on the activity of the people around it, and on the course of time over the hours and days. The Membrane invites the people on both sides of the screen to engage with each other because of how it transforms what each person sees through it.

Two video cameras facing out from the Membrane provide live video feed of passersby on both sides of the Membrane.   Approaching the Membrane, you see a video of people on the opposite side re-projected onto the translucent Membrane material. Your movement perturbs the video of the opposite side of the Membrane that is composited with the video of yourself. By sweeping your hand, you reshape what you see of the other person. The real-time calligraphic video effects vary and include dynamics of water, smoke, shockwaves or particles according to the gesture and movement of the passersby. (See cited videos for an idea of the live calligraphic effects.)

Whereas Apparent Motion is an enclosed space, the Membranes are inserted into the middle of the pedestrian thoroughfares of the exhibition space.   The Membranes are not mirrors or walls that divide people but are instead thickenings of light that join people.   The thing of social concern that these Membranes catalyze will be, for each spectator, his or her neighbors.
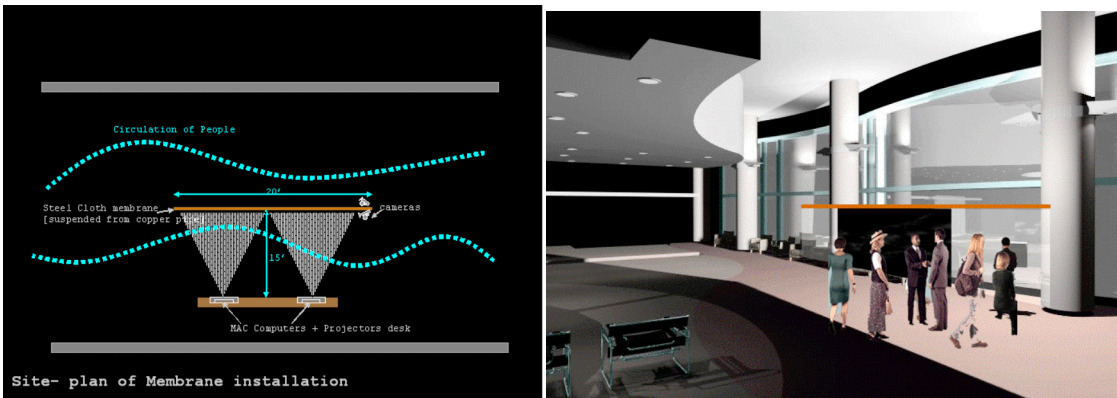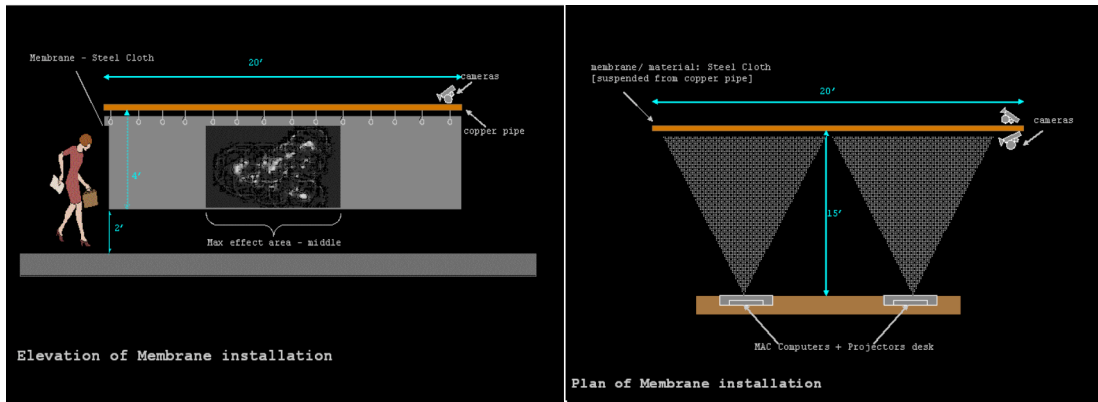
See Technical Rider for detailed specifications.

We propose to place a series of 3-6 Membranes radiating from the Apparent Motion installation into the exhibition space. (* Asterisk indicates item supplied by venue.)
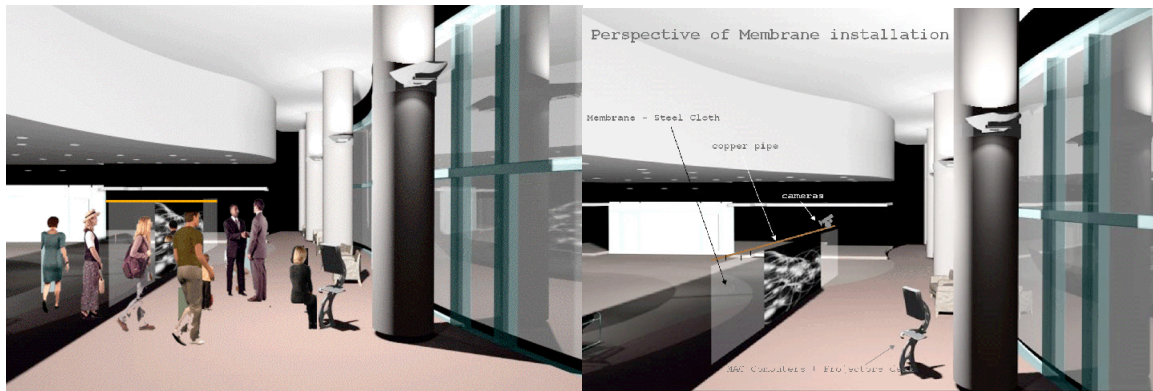
OLD Renderings by Pegah Zamani. ==*We will supply new renderings based on current calligraphic video and the 3D model of the Van Nelle space.*==

Calligraphic video studies: light into ripples, bodies playing against falling smoke-string.

Courtesy Yoichiro Serita.
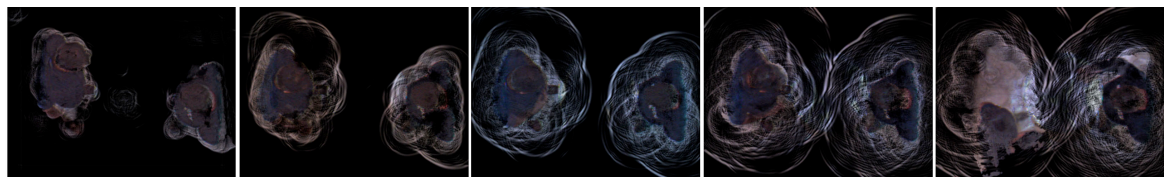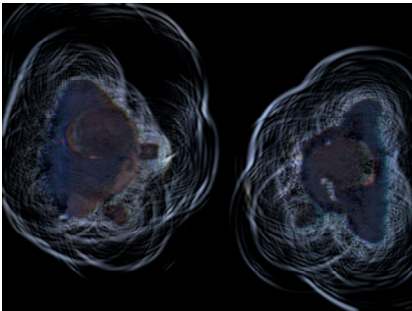
Calligraphic video from Thick/N installation. Courtesy Harry Smoak.

Creators

Harry Smoak, Altanta, USA, creative lead, sculpture.
Yoichiro Serita, Tokyo, Japan, lead visual design, flow design, graphics programming.
Sha Xin Wei, Atlanta, USA, argument, visual design.
Chris Salter, Berlin, Germany, flow design, sound design.
Joel Ryan, Amsterdam, The Netherlands, sound design and programming.
Delphine Nain, Atlanta, USA, visual effects programming.
Maria Cordell, Atlanta, USA, visual effects programming.

Sponge
http://sponge.org
Sponge is an art research group founded in San Francisco 1997 to build public experiments in performance. It was established by Sha Xin Wei, Chris Salter and Laura Farabough following a 3 year workshop at Stanford University on interaction and media.   Its founders have trained in experimental theater, electronic music, mathematics, and social studies of technology.

Topological Media Lab
The Topological Media Lab was established by Prof. Sha Xin Wei in 2001 at the Georgia Institute of Technology to study gesture and materials from phenomenological as well as computational perspectives.   It is structured along the lines of a studio-laboratory mindful of several practices: the science lab, the pre-industrial atelier, and the art studio.   The TML is housed in the Graphics, Visualization and Usability Center in the College of Computing at Georgia Institute of Technology and draws participants from architecture, fine arts, digital media, science studies, literature, computer science and electrical engineering.

References

Sha, X.W., "Resistance Is Fertile: Gesture and Agency in the Field of Responsive Media," in Makeover: Writing the Body into the Posthuman Technoscape, Two-Part Special Issue, Baltimore: Johns Hopkins University Press, Part 2: Configurations, Vol 10, Number 3, Summer 2002.

Sponge
    http://sponge.org

"Sponge, The Surface That Holds the Image is Unstable," éc/artsS:#2[00_01], Spécial: Textualités & Nouvelles Technologies, Fall 2000.
    http://sponge.org/pub_gallery/ecarts.pdf

TGarden Project
    http://sponge.org/projects/m3_tg_intro.html

Topological Media Lab, Georgia Tech, Atlanta USA
    http://topologicalmedia.net
    http://www.gvu.gatech.edu/people/sha.xinwei/topologicalmedia/projects.html

Videos of TML research 2001-2003
    http://www.gvu.gatech.edu/people/sha.xinwei/topologicalmedia/research_agenda/tml_webMPG4codec.mov
    http://www.gvu.gatech.edu/people/sha.xinwei/topologicalmedia/tgarden/video/gvu/fcp_ubicomp_for_web.mp4