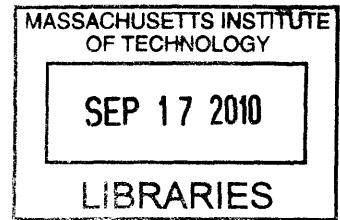NETWORKOUT:

By Lauren McCarthy

Submitted to the Department of Architecture
In Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Art and Design

At the Massachusetts Institute of Technology
June 2008

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NETWORKOUT:
ARTISTIC EXPLORATION OF INTERACTIONS IN PHYSICAL AND VIRTUAL SPACE

by

Lauren McCarthy

Submitted to the Department of Architecture
in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Art and Design

Abstract

As technology continues to advance, the boundary between virtual and physical living becomes less clear. This thesis aims to explore this boundary by examining it through the lenses of online social networking culture and gym culture.

These two trends, one virtual and one physical, have several correlations. Both are user focused and provide the opportunity to create a representation of oneself. Each also has elements of voyeurism and surveillance, isolation and connection, and a sense of the collective. Through a series of interventions that address both cultures, I question our interaction with each, and the mediation of the two.

The art work I have produced over the course of the semester is comprised of a series of projects that blend elements of online and gym culture, and question the motivations, behaviors, effects, and structures within each. The development of this work occurs from two directions – some are based in the gym and bring in ideas of online culture, while others are web-based and incorporate elements of gym culture.

The series of projects is based on an experimental production process based on specific research. This process is comprised of my participation and observations within each culture, research investigating the various discourses relating to each, study of related artists and work, and iterative design, testing and critique of my own work. This series of short experiments culminate in two large scale public installations, which take place May 12, 2008 and May 15, 2008.

Thesis Supervisor: Ute Meta Bauer
Title: Director and Associative Professor, Visual Arts Program, Department of Architecture

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This work would not have been possible without the cooperation and support of the MIT Department of Athletics, Physical Education and Recreation.

Contents

I. Introduction

As technology continues to advance, the boundary between virtual and physical living becomes less clear. This thesis aims to explore this boundary by examining it through the lenses of online social networking culture and gym culture. The online networking sites that this research addresses are those sites that allow users to create a personal space or page to represent themselves, such as MySpace or Facebook, sites that allow for virtual social interaction, like Second Life, and sites that facilitate the exchange of media or information for social purposes, such as YouTube and Twitter. This thesis looks at the culture that exists surrounding places that individuals congregate for the maintainence of their physical bodies. The gym fully embraces physical activities, free from most distractions of our network technology based lives.

myspace.com
facebook.com
secondlife.com
youtube.com
twitter.com

Several experimental artworks presented in this thesis will emphasize the contrast between the physical experience the gym provides and the non-physical experience that online social networking sites provide. These two trends, one virtual and one physical, have several correlations. Both are user focused and provide the opportunity to create a representation of oneself. Each also has elements of voyeurism and surveillance, isolation and connection, and a sense of the collective. Through a series of interventions that address both cultures, I question our interaction with each, and the mediation of the two.

Structure

This thesis is structured as follows. Section II provides a brief overview of the history and current landscape of online social networking and gym culture. In Section III, the structure and methodology of the art production and documentation are described. Section IV contains documentation. Section V provides analysis of the major themes and tactics that develop throughout the thesis. Section VI contains the conclusion. Finally, Section VII contains appendices, the index, and supplemental documentation.

II. Background

Online Social Networking Culture

Since the introduction of the Internet into mainstream culture in the mid-1990s, a large number of social networking sites and online communities have been created. Social networking sites offer a means by which people can connect with others online.

A recent survey conducted on behalf of Fuser.com found that 87% of Internet users in the United States spend seven or more hours per week managing their email and social networking accounts. In the same study, 79% of users reported having at least two email accounts and at least one social networking account. (Duncan) Another study conducted by Nielson/NetRatings found that social networking sites grew by over 47% in 2006." ("Social Networking Sites")

On sites like Facebook and MySpace, users can create a personal profile, browse the profiles, pictures, interests, and files of classmates, coworkers, relatives, acquaintances and strangers, and network with those with whom they would like to maintain contact. Other sites, such as Second Life or MTV's Virtual Worlds, provide a complete simulated virtual environment in which users can live, interact, and replicate elements of the physical world. Other social networking sites like Twitter and Flickr and YouTube provide the opportunity to share small pieces of content, such as lines of text, photos, or short videos.

facebook.com
myspace.com

secondlife.com
vmtv.com

twitter.com
flickr.com
youtube.com

This new network-based society allows people to represent themselves in new ways and to connect with others, regardless of physical location. With the continuing increase of social connectivity online, one might wonder what the implications are of this shift away from physical living.

Gym Culture

Simultaneous to the growing online social culture in the 1990s, a physical gym culture has been developing as gym participation enters mainstream American culture. Curator Bill Arning recognized this trend in his catalog introduction for Achieving Failure: Gym Culture 2000. He wrote, "compulsory physical culture is for everyone. If you don't go you better have a good excuse. Today in polite society when asked 'what gym do you belong to?' the response can longer be 'I don't,' but rather 'I don't but I do Yoga' or 'I walk a lot' or 'I ride my bike to work.'" (Arning, 3).

The trend continues to grow as the United States gym, health, and fitness club industry increases by about 3% each year. A study published in 2006 counted over 51,000 gyms in the United States in 2006, predicting over 53,000 by the end of 2008. The industry was

estimated to be worth $20.99 billion in 2006, up from $17.88 billion in 2002, and predicted to reach $22.48 billion by the end of 2008. (IBISWorld, 2007)

Modern gyms generally contain a variety of facilities, including aerobic exercise machines such as treadmills, ellipticals, and stationary bikes, free weights, weight machines, stretching areas, locker rooms, and sometimes saunas and spa facilities.

Most gyms or athletic clubs require membership fees, ranging from lower-priced community centers, such as YMCAs and Boys and Girls Clubs, to more expensive upscale clubs and spas. Often workplaces will provide discounted memberships for employees at specific gyms. It is now also common for colleges and universities to have their own gyms for student and faculty use.

III. Methodology

Art Production Process

The art work I have produced over the course of the semester is comprised of a series of projects that blend elements of online and gym culture, and question the motivations, behaviors, effects, and structures within each. The development of this work occurs from two directions – some are based in the gym and bring in ideas of online culture, while others are web-based and incorporate elements of gym culture.

The series of projects is based on an experimental production process based on specific research. This process is comprised of my participation and observations within each culture, research investigating the various discourses relating to each, study of related artists and work, and iterative design, testing and critique of my own work. This series of short experiments culminate in two large scale public installations, which take place May 12, 2008 and May 15, 2008.

Documentation Structure

Section IV contains the documentation of the art production process, in the form of a dated log book. An entry was made each time an experiment or project was presented for critique. Each entry is loosely divided into five parts – the initial motivation or idea that inspired the experiment, background about the space or medium the experiment is situated in, a description of the experiment, discussion of the concepts explored through the experiment and related work by other artists, and feedback and analysis.

A number of concepts or themes are repeated throughout the experiments, evolving and changing as each experiment reveals new ideas. To allow the reader to follow these different threads, the right hand margin contains page numbers or "links" that point to other instances where the concept or idea is referenced throughout the thesis. Also included in the right hand margin are links to website references.

It is important to note that the online form of this thesis is an interactive piece, where the page number references in the margin are replaced by hypertext links within the body of the text. Much like a blog, the log entries can be filtered by various tags representing main concepts or ideas.

Cultural Context

There are undoubtedly many varied motivations, behaviors, and themes associated with online social networking and gym culture, and this thesis does not attempt to discuss all of

them. Instead, this document focuses on the major themes that occur in both online social networking and gym culture. Additionally, these cultures are analyzed only within the context of the United States, as other regions of the world may have different experiences.

02.07.08 Concept Composition 1: Digital Video Collage

Online social networking culture and gym culture seemed at first to be completely unrelated. However, upon further reflection, I found several interesting correlations between them. To begin to brainstorm and explore the main themes shared by these spaces, I decided to make a digital video collage composition.

The finished composition was three minutes in length, and combined footage shot in the gym with short screen capture clips. Overlaying of audio and video from both spaces highlighted recurring themes and elements.

Video still images from Concept Composition 1: Digital Video Collage

I noticed several things in making these videos. The first idea came in the process of shooting footage in the gym and computer lab. I observed rows of people all lined up on treadmills, ellipticals and bikes, working out in an solitary way. The gym seemed to serve as a place of simultaneous isolation and connection; individuals come together to partici- 16 20 41 44
pate in a common activity, yet there is often little interaction between them. Perhaps their isolated efforts in the space enabled them to interact more easily with the world outside the gym. This theme seemed to repeat itself in the context of the computer lab. Rows of people were lined up at individual computer workstations, disconnected from each other and simultaneously plugged into a different community online.

The second observation I made came when I edited the video. The sounds of the different activities were very distinctive; the loud typing on the keyboard, the mechanical grind of the elliptical and treadmills, and the clanging of the weights combined to create a new rhythm. The blending of the sounds made me think about the potential results of blending elements of the two spaces.

This blending already occurs to some degree, as elements of the virtual realm are present within the existing gym environment. Joel Sanders comments on this in his essay "A Site for Sore Eyes",

> "As the hum of headphones mixes with the din of clanging metal plates, and the glow of the TV and video screens compete with stolen glimpses of reflected bodies, the

increasing incorporation of media within gyms makes even more unstable the already tenuous boundaries between virtual and physical space, further heightening the experience of negotiating between the realms of mind an body." (Sanders, 16)

This composition served as an initial investigation of both spaces. However, it was clear that the work needed to go beyond an illustrative representation of the similarities between the two cultures.

02.14.08 Concept Composition 2: Physical Collage

After making the <u>video collage composition</u>, I decided to create a physical collage composi- [11]
tion to further elaborate my ideas and sort out some of the research I had been doing.

I organized my thoughts regarding the two themes of gym culture and online social net-
working culture, weaving them together by central concepts that pertained to both. The
finished composition loosely followed the form of a Venn diagram. The main concepts,
which ran down the middle of the poster, were "creation of self/narcissism", "voyeurism/
surveillance", "isolating, yet connecting", and "the collective touch". Quotes from books
and essays, images clipped from magazines, sketches, and related artists filled the area
around the central words, elaborating on the themes identified.
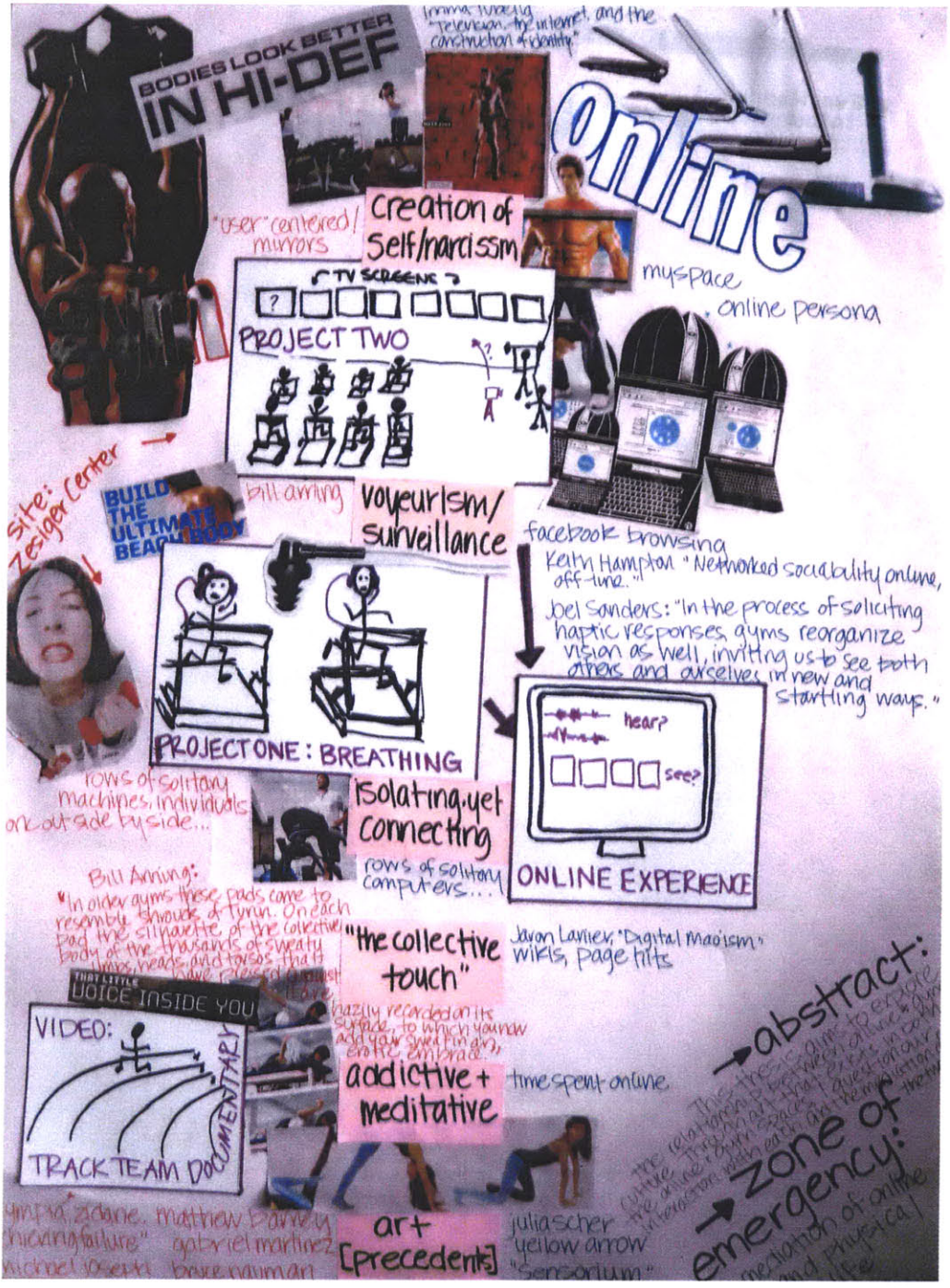
Concept Composition 2: Physical Collage

The following is a summary of my initial thoughts surrounding the main themes identified in the concept collage.

Creation of Self/Narcissism

Both online social networking culture and gym culture are focused on the creation of a representation of self. In the gym, one can participate in processes that attempt to sculpt the body into a desired physical representation. This self focused culture is embedded in the physical gym environment; nearly every wall is lined with floor to ceiling mirrors.

This focus seems somewhat narcissistic, yet within the context of the gym it is not considered inappropriate. It is common for gym goers to utilize the mirrors for constant and intense self observation while performing the processes of physical self creation.

The direction of one's view toward the mirror makes the gym experience user centered. As Arning states in Achieving Failure, "As opposed to most social space in which one faces toward the center of the room and other people, at the gym the orientation is almost always toward the mirrored wall. This fact means that for most of one's time there one sees other people constantly, but usually with one's own representation foregrounded." (Arning, 6)

Alternatively, virtual space provides the opportunity to create a non-physical representation of self. This representation is often less concrete and easier to change than the physical one. It can be formed by the articulation of interests, activities, and preferences to others within an online social network. The virtual self can also be created by sharing creative content in the form of web pages, videos, photographs, or text that represents a point of view or personality. The creation and control of avatars offers another means to form a representation of oneself online.

Similar to gym culture, the narcissistic aspect of the online social networking culture becomes evident in the amount of time we spend creating and updating our own profiles and pages. Also like the gym, the online space provides a user centered experience. The places, people, and information encountered is driven by the user's interests and goals. On social networking sites, new content is typically reached through links or connections from one's own content.

Voyeurism/Surveillance

Both online social networking culture and gym culture present elements of voyeurism and surveillance. The exposure of oneself in an intimate way to a mass audience is a common theme in both spaces.

When using social networking sites, it is not uncommon to browse the profiles and pictures

of relative strangers. People appear to feel much more comfortable online than in physical space sharing personal information such as age, sexual preference, physical location, and interests. There seems to be a willingness to expose oneself to a greater degree on the Internet. This could be due to a feeling of anonymity, or to an understanding of a social contract. People may feel compelled to share information about themselves in order to participate in a culture where everyone is constantly observing everyone else.

These themes of exposure and voyeurism exist in the gym environment as well. In order to engage in the activity of working out, one must publicly contort the body into positions of exposure, grunt and sweat, struggle and fail, while wearing minimal clothing.

> "This scopic wonderland leads us to that unreachable forever as well as to the here-and-now world of sex, flesh, desire, exhibitionism and voyeurism. The only place the eye can possibly rest is on the flesh or skimpy costume of a fellow gym-goer or on the flesh-surrogate of those fetishized, much-sweated-upon vinyl pads that protect you from the hard metal and mechanics of the machines." (Sanders, 3).

This marked shift from normal behavior outside the gym is not just accepted, but embraced by gym goers. While most tend to work out alone, the unacknowledged interaction between those in the gym is undeniable. The close proximity of machines and the floor to ceiling mirrors make it impossible for people in the gym to avoid the sight of others exposed. It is through the study and comparison of others bodies that we develop the images of our own ideal bodies.

While the model of the ideal body is partially formed by the observation of others in the gym, the images disseminated by the media also play a role. In this way, the online and gym cultures again interact to produce the physical body. "The human body is always treated as an image of society and ... there can be no natural way of considering the body that does not involve at the same time a social dimension." (Douglas, 78)

Isolating, Yet Connecting   11 20 41 44

Both online social networking culture and gym culture provide experiences that simultaneously isolate and connect.

The effect of the Internet on social interaction is a controversial topic. Perhaps the large scale participation in social networking sites and the formation of online relationships is replacing real face to face communication. Seattle Times columnist Leonceo Angsioco states, "The Internet permits us to hide behind a screen rather than interact face to face with other humans. It is isolating individuals who forget what real community is ... online communities are increasing the fragmentation of society" (Angsioco, 2003).

Keith Hampton presents an argument against this view, identifying the potential that social networking sites provide to interact with others beyond one's immediate physical community.

> "A reduction in the friction of space, combined with access to a large, heterogeneous population, facilitates the ability of individuals to form relationships that were previously inaccessible. No longer limited to those who are closest at hand, it is increasingly possible to seek out social ties based on shared interest and mutual identification, but not necessarily shared place." (Hampton, 218).

A study conducted by Hampton and Barry Wellman found that the impact of computer-mediated communication on community was actually positive. They concluded, "contrary to dystopian predictions, new communication technologies do not disconnect people from communities. Computer-mediated communication reinforces existing communities, establishing contact and encouraging support where none may have existed before." (Hampton, Wellman, 268).

The tension between isolation and connection is present in the gym environment as well. People join gyms, instead of buying equipment for their own homes, to work out in the presence of others. For some, the gym serves as a social place where they can meet others that share a common goal or interest. For others, just the presence of other people participating in the same activities can be motivating or inspiring.

At the same time, there is not a large degree of physical contact within the gym space. Equipment and machines are positioned to allow each individual to workout without the interruption of others. Mirrors direct attention out toward the image of oneself on the walls rather than in towards others in the space. People wear headphones further limiting the possibility for interaction. The rows of people lined up on aerobic machines, each participating in their own workout, bore resemblance to the people I saw in the computer lab, each at their computer station.

"The Collective Touch"
40 44

In both spaces, the idea of the collective touch is present. One is always aware of using the space and having an experience many have had there before.

Social networking sites contain aggregations of content supplied by people that have previously visited the site. On a site like Facebook, for example, people create their own profiles and upload photographs, videos, and other pieces of content to their own page. Browsing through the large collection of personal pages makes one aware of the size of the community that visits the site. In addition to adding content to their own pages, people can also comment and post on the pages of others. This second layer of content further reinforces the idea of a large collective viewing and altering the space.

In the gym, the equipment and machines become objects that are used again and again. Spray bottles and towels are provided with the intention that each person will wipe down their equipment after use, in preparation for the next person. Whether this happens or not, it is generally understood that each piece of equipment bears the sweat and memory of many previous users. Arning describes the cushioned pads of weight machines in similar terms,

> "In older gyms these pads come to resemble Shrouds of Turin. On each pad the silhouette of the collective body of the thousands of sweaty limbs, heads and torsos that have pressed against it are hazily recorded on its surface, to which you now add your sweat in an erotic embrace." (Arning, 6)

The composition served as a good tool for elaborating on my ideas and presenting them for discussion. Bringing the two cultures together creates an atypical space for experimentation. I realized it was important that while I experimented, I needed to stay focused on the way viewers would interact with the pieces and receive the ideas presented, so that the initial concept for the work did not get lost.

02.21.08 Second Life Workout

After an exploration of the ideas, an exploration of the space and media I would be working with seemed necessary. I aimed to do a performance in Second Life.

21 31 42

Second Life is a 3D online virtual world developed by Linden Research, Inc. in 2003. Second Life users interact with each other through avatars, whose appearance, actions, speech, and movement they can customize and control. The Second Life world looks much like a replication of the physical world, containing virtual representations of landmarks, events, stores, and gathering spaces. Membership is free, although obtaining objects, land, and services often requires "Linden Dollars" which can be purchased with real money.

secondlife.com

To understand the context for the performance piece I was working on, I researched other artists that had used Second Life as a performance space. One of the main groups working in this space is Second Front, who describe themselves as "a pioneering avatar performance art group in Second Life." The group, founded in 2006, is made up of eight members that work together to create performances of the absurd that "challenge notions of virtual embodiment, online performance and the formation of virtual narrative." For example, in a piece called "The Absolutely Last (And Final) Supper" the eight avatars sit at a long table, continuously eating food and throwing up red clouds to the sound of vomiting for a minute and a half.

slfront.blogspot.
com

Another common trend in Second Life is the reenactment of pieces by physically-based performance artists. Eva and Franco Mattes, also known as 0100101110101101.ORG, have done several performances in which they virtually reenact pieces by artists such as Marina Abramovic and Ulay, Valie Export, and Gilbert & George.

0100101110101.
org

Drawing on these ideas of absurdity and reproduction, I attempted to bring the gym and online elements together in the piece. I found a gym in Second Life, complete with aerobic machines, weights, and mats, and I performed my daily gym routine here.

The actions of the avatar during the performance were based on a common, everyday activity, unlike the outrageous spectacles of the Second Front group. However, they did play on the notion of the absurd because one can easily change the appearance of his avatar instantaneously with the click of a button; there is no need to go to a gym to do this.

This fact seemed to be reflected in the emptiness of the gym. The lack of avatars struck me as unexpected because I thought that the gym space would still function as a social gathering space, even if it did not serve a physical function. Perhaps the fact that this was

not happening indicates that most people consider working out to be an <u>isolating</u> activity.   11 16 41 44
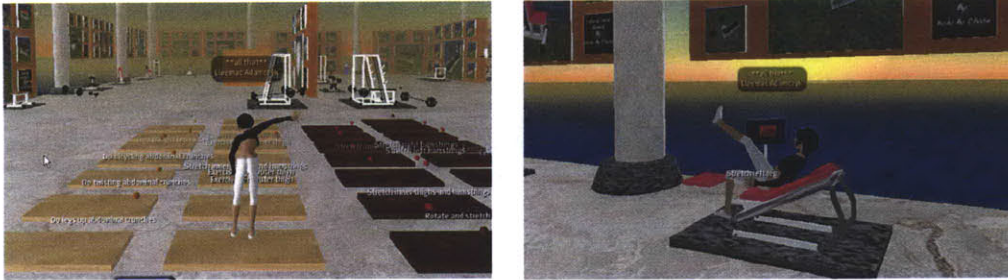

Screen shots from Second Life Workout

While the avatar working out in Second Life stands out as obviously unnecessary, the motivation for a person to work out in a physical gym is also somewhat questionable. People spend hours in the gym trying to increase the amount of weight they can lift or the speed or distance they can run. However, few that can afford the time and money to frequent a gym encounter situations outside the gym that require them to lift heavy weights or move great distances.

As technology reduces the amount of physical exertion required for daily activities, new gym technologies are created to reproduce these sources of physical exertion in the gym. After spending the day riding escalators, elevators, and cars, people go to the gym to use the stair climbing machines and stationary bikes. The lack of physical labor in daily life drives the need for self imposed labor in the gym.

03.05.08 Gym Space Video Intervention

Looking at the gym environment, I was attracted to the row of eight television screens that stretched across the front of the aerobic machine area in the Zesiger Center. It seemed like the perfect place for a video intervention; the audience was already lined up and attentive, ready to become a part of the piece while they worked out on their respective machines.
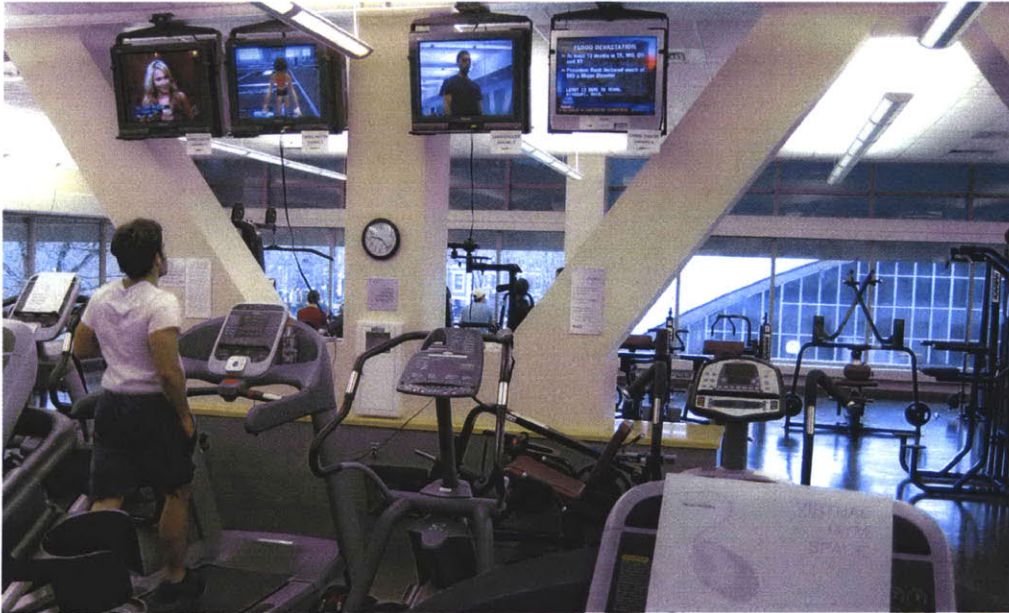
**Gym Space Video Intervention at the Zesiger Center on March 8, 2008**

I made two videos that were played over two of the televisions screens on March 5, 2008. The first video utilized the avatar character I had created for the previous Second Life 19 31 42 performance. In this video, the character rode a stationary bike and ran on a treadmill, mimicking the actions of the audience.

Video still images from avatar video in Gym Space Video Intervention

In the second video, I filmed two people while they performed their lifting routine in the Zesiger Center. Instead of shooting them directly, I shot their reflections in in the mirrored wall.
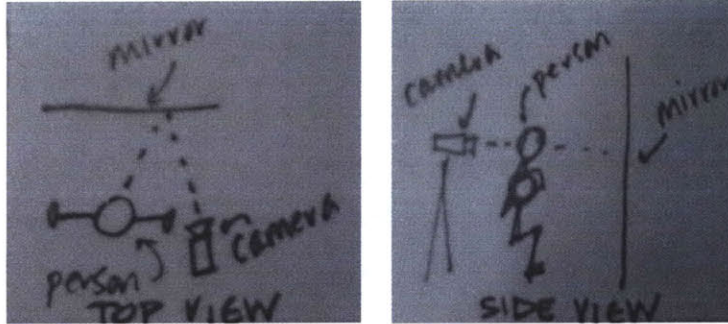
Sketch diagram showing position of camera for shooting of lifting video

Video still images from lifting video in Gym Space Video Intervention

The overwhelming presence of mirrors is an element that is unique to the gym space. Regardless of the activity one partakes in, attention is nearly always directed outward toward the walls lined with mirrors. This is different than most group gathering spaces, where attention is directed inward to facilitate social situations. With attention directed away from others, the focus turns toward one's own image in the mirror.

I was interested in putting this private activity of self scrutiny and underline creation on public display. The facial expressions and self directed gaze that were normally reserved for one's individual space in the mirror were instead broadcast for everyone in the gym to see. Additionally, because the video was shot in the same area it was being shown in, it appeared at first glance to be a live feed. The piece referenced the idea of surveillance, although a glance toward the free weights would confirm that it was not a live feed. Using the television screen to control or direct the gaze of those in the gym further broke down the boundary between the images on the screen and physical space.

15 28 35 37 40 44

15 25 33 35 37 43 44

The videos were successful in their disruption of the gym environment. I realized that people come to the gym with set routines, and that they go through the motions with infrequent deviations. Any small disturbance in the routine, such as the interruption of avatars in the normal news broadcast, is magnified by the unexpectedness of it.

However, these videos needed to be pushed further. The mundanity of the actions of the performers in the videos disengaged viewers. It was also difficult to tell that the lifting video captured the reflection rather than the actual image of the lifters. The lifters and the avatars needed to be doing activities that deviated more from the normal gym routine.

03.20.08 Breathing Experiment

Thinking back to the discoveries about sound I made during the video collage, I began to think about how I could use sound to bring elements of online social networking culture into the gym environment. I chose as my site the Zesiger Athletic Center located on MIT campus.

Most of the people in the gym had headphones on and were plugged into mp3 players or some other kind of sound device. Every aerobic machine had a small box attached into which headphones could be plugged. Depending on the channel chosen on the box, the person using the machine could listen to the audio that accompanies one of the television screens at the front of the area, or one of several satellite radio stations.

Audiobox attached to aerobic machine used in Breathing Experiment

I decided to take over several of the stations played through these boxes to deliver the sound of individuals breathing from machine to machine. Each machine in the gym was accompanied by a set of headphones with a built in microphone. The microphones picked up the breathing of the people on the machines, and broadcast each person over a different audio channel.

The technical aspects of this project provided immediate difficulties. Working with the existing sound system at the Zesiger Center was hard because it had been installed by an outside company and the employees were unsure how it worked and were unwilling to let me tinker with it much. Capturing the sound of breathing in the loud gym environment was also harder than anticipated. Even with the headphone microphone close to the mouth, it was hard to distinguish the sound of breathing from the drone of the machines. I tried a number of different strategies to overcome these obstacles, however, I came to the realiza-

tion that these technical factors would make the live feed nearly impossible.

Next I explored the idea of prerecorded sound as an alternative to the live feed. Because the breathing from the different machines was to remain anonymous, I thought prerecorded breathing might sound just as convincing and serve the same purpose. If people on many machines were wearing the microphone headphone apparatuses, the ambiguity of whether the feed was live could play in my favor.

This project worked with the concepts of voyeurism and surveillance translated from a visual to an audio experience. There was also a sense of anonymity because there was no indication as to which machine corresponded to each audio channel. The act of breathing is one of the most basic indications of life. Nevertheless, in testing, several participants still felt self-conscious about others hearing them breathe. 15 22 33 35 37 43 44

The headphones with attached microphone apparatus offered users a choice. Like choosing to create an account on a social networking site, putting on the headphones involves the acceptance of a social contract. Users can choose to allow others to listen to them breathe in order to connect and hear others. Interestingly, most kept the headphones on despite feeling self-conscious.

Like the Gym Space Video Intervention, the audio intervention was a disruption of the normal gym routine. Most people plug headphones into the audio boxes to tune out the sound of their own breathing and to take their mind off their current activity. This project confronted participants with that which they were seeking to avoid, by taking control of the technology they were using to avoid it. 21

This project called to mind the work of Julia Scher, who also explores subjects of surveillance and the Internet. Scher often uses existing technologies and systems to expose the dangers and structures within them. I was interested in the way that she used various surveillant technologies to create immersive environments and installations that increased viewers' awareness of their place in the system. adaweb.com/ project/secure/ corridor/sec1. htm

Unfortunately, this project did not work out as well as I had hoped. This could have been due to the fact that my audience had prior knowledge that the system was prerecorded and not a live feed. It also could have been because only two machines were tested at once. When it is clear exactly who is on the other machine, one can easily tell whether the breathing sound matches. With many machines and no indication of which channel is which machine, I think that the prerecorded sound would become more convincing. Regardless, the technical difficulties as well as the questionable success of this direction drove me to put the idea on hold and experiment with something different.

04.09.08 Online Gym Buff

In order to approach my area of research from both the physical and virtual domains, I decided to situate my next project on the web instead of in the physical gym environment. I chose to use Facebook, a popular social networking website.

Facebook is a social networking site that was launched on February 4, 2004 by Mark Zuckerberg. It is now owned and run by Facebook, Inc. The site allows users to create a personal profile, post photos and content about themselves, and network with friends, classmates, and coworkers. The site currently has over 70 million active users. There is also an associated Facebook Platform on which developers can create Facebook applications using provided methods for accessing and adding Facebook content.

facebook.com

developers.
facebook.com/
documentation.
php

Online Gym Buff involved the creation of an application called Gym Buff that can be added by any Facebook user. The description of the application in the Facebook application directory reads, "Make all your friends think you are a huge gym buff. Fill their newsfeeds with updates of your supposed gym progress. This app is great for meeting your virtual soulmate!"

Description of Gym Buff in Facebook application directory

The simple interface is comprised of a text box, labeled with the words "I want:", and a button that says "Click here for an insta-workout!"

Interface for Gym Buff Facebook application

Upon clicking the button, the user is redirected to his or her profile page, where the Facebook status has been set to one of several different statuses, such as "_____ is at the gym", "_____ is pumping iron", "_____ is exhausted from a hard workout at the gym", "_____ is working out".
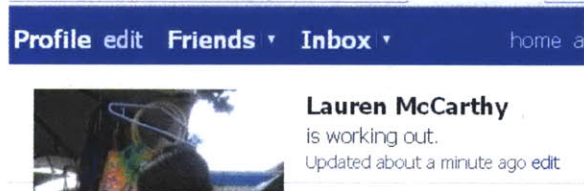
Facebook status updated by Gym Buff application

The Facebook mini-feed reflects this status update, as well as other updates that the application pushes into the feed, such as "_____ has just benched her body weight", "_____ did 10 pull-ups", "_____ ran 8 miles at 8.5 pace", "_____ increased her max squat by 10 pounds". The application also updates the Gym Buff profile box, giving stats in the form "Since adding the application, _____ has been to the gym 6 times. _____ has run 45 miles. _____ has lifted 320 pounds."

Facebook mini-feed updated by Gym Buff application

The information in the mini-feed shows up on the newsfeeds of the user's friends.

News Feed   Preferences

👤 Lauren McCarthy just ran 8 miles at 8.5 pace.   👍 | ✕

📅 Sanjay Divakaran is attending Power and Poison: Dow Chemical and the   👍 | ✕
    youngest Bhopal survivor.

👥 Christina Soyeon Kang joined the group InternBar 07 in NYC.   👍 | ✕

👤 Updated: George Yau it is what it is yall....   👍 | ✕

✏️ Lauren McCarthy added "lifting weights" to her interests.   👍 | ✕

👥 Shiv K. Gulati and Rikhil Kochhar joined the group Diversity Dialogue   👍 | ✕
    Project.

🖼️ **Michael Scocca added new photos.**   👍 | ✕

Newsfeed updated by Gym Buff application

When I tested the application myself, I immediately began to receive feedback from Facebook friends that had learned of my "gym progress" via their newsfeeds.

mightymike107

Conversation   Options   Send To

    mightymike107   ✕   GrayPP7   ✕

  ● mightymike107

(7:33:23 PM) **mightymike107:** lol, did you really bench your own
body weight?

(7:33:26 PM) **mightymike107:** that's pretty cool

(7:33:38 PM) **mightymike107:** although i think 8 miles at 8.5 is
ultimately more impressive

[A] Font   😊 Insert
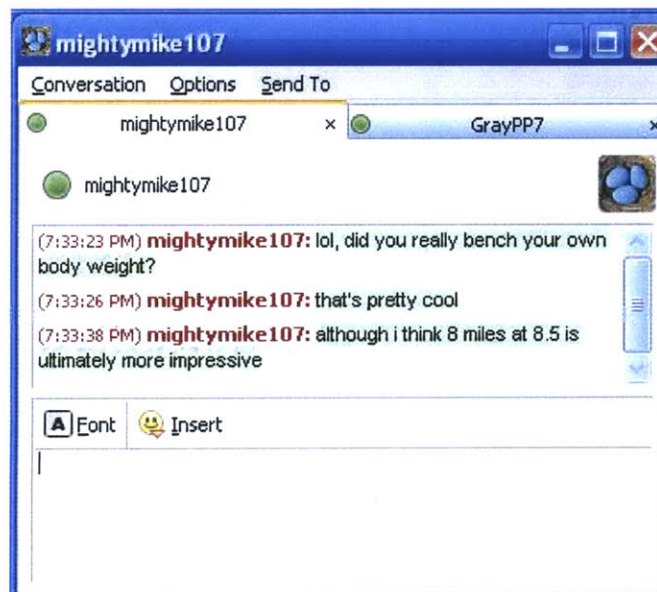
An instant message received from a friend

Online social networking culture provides a means to create a representation of self. Online Gym Buff questions the authenticity of these self representations, exploring a situation where the representation is a complete fabrication. How necessary is it for virtual representations to correspond to physical representations? If they differ, is one representation more "real" or accurate than the other?   15 22 35 37 40 44

As one engages in online social culture, it becomes clear that while it may mimic or mirror

physical social culture in some aspects, it is not simply a virtual representation of the physical reality. Online social culture is a different type of reality in itself. Julian Dibbell supports this idea as he describes his experience within a multi-user dimension (MUD) in "A Rape in Cyberspace."

> "A newbie's first taste of MUD sex is often also the first time she or he surrenders wholly to the slippery terms of MUDish ontology, recognizing in a full-bodied way that what happens inside a MUD-made world is neither exactly real nor exactly make-believe, but profoundly, compellingly, and emotionally meaningful." (Dibbell, "A Rape in Cyberspace")

Online Gym Buff is also critical of the social structures surrounding gym culture. Does the gym provide a means for the creation of a physical representation of oneself, offering one the freedom to change their bodies to meet one's desires? Alternatively, perhaps the gym reveals imperfections and pushes one to strive for unattainable ideals perpetuated by media and society. As Sanders says, "Here we harness energy, motivated by the often unachievable goal of making over our recalcitrant flesh into a facsimile of the ephemeral airbrushed images of perfect bodies disseminated by the media." (Sanders, 15)

Going to the gym is now deeply ingrained in our culture. Gym going is a common topic of conversation, gym membership is included with many employee benefit plans, and the exclusivity and cost of the gym one frequents has become a sign of social status. Gym attendance seems to have become somewhat of a mandatory activity. Online Gym Buff offers an alternative to those that feel pressured to comply but lack the time or interest to physically visit the gym.

The use of subversion was crucial to the success of this project. Online Gym Buff critiqued [45] the system from the inside out, enabling it to effectively reach the intended audience of online social network users. I also found that incorporating an element of humor or satire [31 45] allowed users to engage with the work in a way they would not have otherwise.

The strategies I used in Online Gym Buff are similar to those of artist Andrea Fraser. Fraser uses performance, video, and photography to question the relationship between art and its audience. In a number of pieces, she uses tactics of subversion and satire to engage viewers in a situation that is not obviously identifiable as an art piece. For example, in her 1989 performance Museum Highlights, Fraser posed as a tour guide in the Philadelphia Museum of Art. Leading a group of museum visitors on an overly dramatic tour, she questioned the system that is the modern-day art museum and the art enterprise in general. In "Little Frank and His Carp" in 2001, Fraser tours the Guggenheim listening to an audio guide. She acts out the directions in a very exaggerated manner, caressing and stroking the walls, and humorously critiquing the fetishization of art, architecture, and the museum institution. In both cases, participants and onlookers were not immediately aware that they were witnessing a performance. Similiarly, the deception of Gym Buff is not obvious to

those that view the profiles of Gym Buff users but do not have Gym Buff themselves.

An unexpected result was the psychological effect that Online Gym Buff had on users. When using the application, many reported feeling a sense of accomplishment, as though they had actually worked out as their Facebook profile suggested. Others felt a stronger desire or motivation to work out, as the Facebook message I received from a friend suggests.

> Hi Lauren,
> I added gym buff the other day and now I was working on my thesis (by evaluating facebook's design) in a room in my dorm with a bowflex. It's all I can do not to work out on it instead of work on my thesis. I just wanted to let you know that if my profile didn't say I was working out, the desire to work out on it wouldn't be so strong....I don't think at least.
> Ashley

In fact, studies have shown that sports related psychological stimulation can induce physiological responses, such as increased heart rate, without any physical activity. (Cumming, 629).

04.10.08 The Avatar Monologues

The response from the midterm to my <u>avatar video</u> was that it was not engaging enough.   21
The avatar needed to be doing something more interesting than mimicking the workout of
those watching from the machines. I decided to push the concept of these videos some
more by adding audio.

For two different avatar characters, I scripted 1-2 minute monologues that questioned the
motivations and behavior of gym goers in a <u>humorous</u> way. The monologues briefly inter-   29 45
rupted prerecorded normal television broadcast. I used a "text to speech" program I found
online to generate speech that sounded like a computerized person. An exerpt from one
of the monologues is as follows:

> "Hey. You're looking good. Better than that guy on the machine next to you, at
> least. Do you come here often? You must, to have that body. I don't even know
> why I come here. Why do you? I try and come once a day if I can. At first, it was
> a hassle. And I was self-conscious. But then I got a load of some of the other
> sorry asses in here. I mean, look at that woman over there. She's pretty rough
> on the eyes. That guy by the weights is looking good though. He knows it, too.
> Look at him check himself out in the mirror. So, how long are you going to be
> here? You look pretty tired. Understandably. I'm feeling pretty good. I feel like
> I could keep at this all day. It is nice to have company."

appendix-dvd:
The Avatar
Monologues

Video still images from The Avatar Monologues

This development was partly inspired by the work created in 2002 by Uri Tzaig and Avi
Shaham called "Master Lucas". In this piece, the video image of a large gorilla is played
over 16 panels. Along the bottom panels, subtitles that comment on the human condition
appear intermittently. I liked the use of the gorilla as a vehicle for asking questions and
facilitating reflection and dialog around the themes of the piece.

The gorilla seemed to be a character that people could partly identify with while still aware
of the distinct difference between them. I hoped my avatar character would function in a
similar way. However, I did not use subtitles for the avatar speech. When played on the
Zesiger Center television, the words will only be heard if one tunes the audio to the spe-

cific television channel that the avatar is being played on. The image of the avatar on the screen may seem out of place and raise a few questions for all gym goers, but stumbling upon the sound element will reveal a new layer of information that I hope will feel more private and directed at the individual listening.

The response to this work was much better than the previous avatar video. The addition of the sound allowed viewers to engage more. The speech of the character was humorous because it made fun of the absurdity of the situation but also contained ideas that many could identify with. The avatar's nonspecific references to others in the gym directed the attention of viewers around the space, allowing for further integration into the gym space.

04.15.08 Gym Machine 1

Thinking about the idea of <u>surveillance and exposure</u> while using the complex machinery in the gym, I wanted to explore the possibility of relating to the video camera, a tool of surveil-lance, in a more intimate or physical way.

15 22 25 35 37
43 44

I attached a video camera to different parts of the weight machines, generally the stack of weights or another part of the machine that moved. The camera was aimed at my own body. I then performed my normal lifting routine with the camera running.
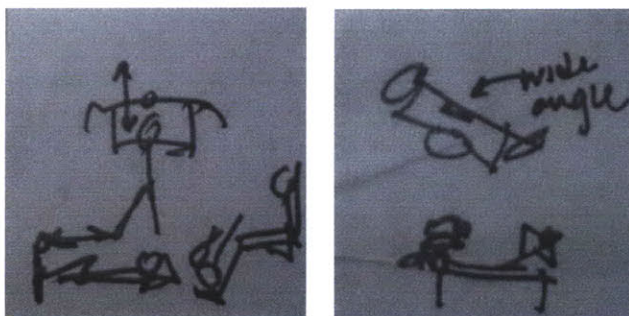
Sketch diagram showing position of camera for shooting of Gym Machine 1 video

Video still images from Gym Machine 1

The positioning of the camera gave a different view of the body than that normally viewed in the gym. The video captured the movements, sounds, and efforts of my body while performing my routine. One of the most interesting sequences occurred when I set the camera behind the pull-up bar. As my face rose and fell out of the frame, I begin to look and sound more tired until I finally failed on the last one. In other sequences, the placement of the camera on the moving parts of machines caused the view to shift in rhythm with my movements.

One main element of this video was the idea of exposure. Erving Goffman describes the tendency to maintain a certain composure and appearance in public. "In American society, It appears that the individual is expected to exert a kind of discipline or tension in regard to his body, show that he has his faculties in readiness for any face-to-face interaction that might come his way in the situation." (Goffman, 84). The suppression of certain facial expressions, the concealment of sexual body parts, and the restraint of emotion is expected.

Goffman claims that the failure to conform to these expectations represents a "laxity of control over the self – evidence of an insufficient harnessing of the self for the gathering." (Goffman, 85). Perhaps the online and gym spaces offer an escape from the strict expectations of normal society, giving participants the freedom to express and expose themselves.

However, public expression and exposure invites the view of others. The positions attained by using the gym machines, the minimal clothing expected, and the physical struggle required in the gym space all contribute to the atmosphere of increased exposure and observation. The large number of mirrors in the space facilitate the observation.

<div style="float:right">15 22 25 33 37 43 44</div>

The second element of the video was the idea of the gym as a factory or machine for self production. Sanders describes the interaction between the equipment of the gym and the body.

<div style="float:right">15 22 28 37 40 44</div>

"Black cables and pulleys literally link muscles with weights, reflecting both modernism's general fetishization of the mechanical and its particular conflation of body, building and machine. As human literally occupy the machine's metallic framework, the biological and the manufactured become one..." (Sanders, 13)

The work of Cindy Sherman seemed particularly relevant to this project. A New York based photographer, she uses herself as a vehicle to explore issues of the role and representation of women in media and society, and the creation of art. In her "Untitled Film Stills" series, her photographs of herself dressed up in wigs and costumes are not self portraits, but instead represent anonymous fictional archetypes of women.

<div style="float:right">cindysherman. com</div>

She also experiments with vomit, mold, vile substances, and indistinguishable lighting and settings to create somewhat grotesque or disturbing images. The use of doll parts and prosthetic body parts to represent her own is also common in her work, as in her 1992 series, often referred to as the "Sex Pictures."

Though she works in a different medium, the subject matter of Sherman relates to the ideas of creation of self. She focuses on the stereotypes of women perpetuated by the media and society, as well as issues of body images, self representation, and identity – themes that are explored in Gym Machine 1. The use of her own body as the subject and the vehicle for exploration of her ideas, is a strategy that I also employ. In my video, I situate the camera and myself within the gym machines and aim the gaze of the camera at my body.

Showing this video in class, the suggestion was offered to play several instances of it side by side. I tried this out, shifting the two instances slightly out of sync with each other. The result was unexpected; the duality seemed to really emphasize the movement of my body with the machines. I decided to play this set of videos on the row of eight television screens

in front of the aerobic machines in the Zesiger Center.

04.16.08 Gym Machine 2

The pull up sequence in the Gym Machine 1 video was one of the most interesting because   33
it provided an up close and personal view of my face while I struggled and became more
fatigued. Also thinking about the idea of the gym as a giant self production machine, I
aimed to make another video that expanded on the pull up sequence.

To make this video, I attached the camera behind the pull-up bar at track practice, so that it
recorded each athlete doing pull-ups in the same way as in the Gym Machine sequence. I
recorded about 15-20 athletes doing sets of pull-ups until they reached exhaustion. I then
broke up the video over four frames placed side by side. This series will also be played
across the Zesiger Center televisions.

appendix-dvd:
Gym Machine 2

Video still images from Gym Machine 2

Like Gym Machine 1, this second video sequence again worked with the ideas of surveil-   15 22 25 33 35
lance and the gym as a factory. The tension between isolation and connection was also   43 44
                                                                                            15 22 28 35
present in this piece. The athletes were lined up side by side on the pull up bar, each ab-   40 44
sorbed in his or her own struggle to reach the common goal of physical strength.

05.13.08 Public Exhibition 1: Zones of Emergency Show

The first of two public exhibitions of my work was the Zones of Emergency show on May 12, 2008, put on by students in the Online Participatory Media classes at MIT and RISD. Each of the projects in this show identified a different zone of emergency, and addressed the zone through a participatory art work. The site of the show was 620 Putnam Ave in Cambridge, MA, a poorly maintained property that housed a small warehouse. The site required the transformation of online work into projects that could be experienced in physical space. Students presented their work, opening a discussion and critique, and left the work on display for the remainder of the show.

To familiarize the audience with the physical basis for my work, two small TV monitors played a running loop of the Gym Machine 1 video. 33

Gym Machine 1 installation at Public Exhibition 1: Zones of Emergency Show

I opened my presentation with an introduction of the Online Gym Buff project with a short 26 promotional video. The video begins by appealing to non-gym goers. "Have the words of your gym going friends and colleagues got you down? Are you feeling a need to flex your muscles but you just can't seem to make it to the gym due to lack of time? Or motivation? Or...?" The promo then describes the functionality of the Gym Buff application and offers testimony from Gym Buff users.

Video still images from Gym Buff Promo

The Online Gym Buff video was followed by my proposal for a related project, Net Motion. Net Motion involved the creation of a wearable object or piece of clothing, that could sense the body position of the wearer. The clothing could communicate wirelessly with others of its type. When two or more people wearing the device were in roughly the same body position, the clothing would begin to glow. The degree of brightness of the glow would be proportional to the number of people that were in the same position. Participants could try to adjust their position to find a network or group of people that would all glow. Alternatively, they could try to find completely unique positions that would be indicated by a lack of light.

I introduced this idea with a short flash video. Moving stick figures illustrated how the clothing would glow when two or more of the figures attained the same position.
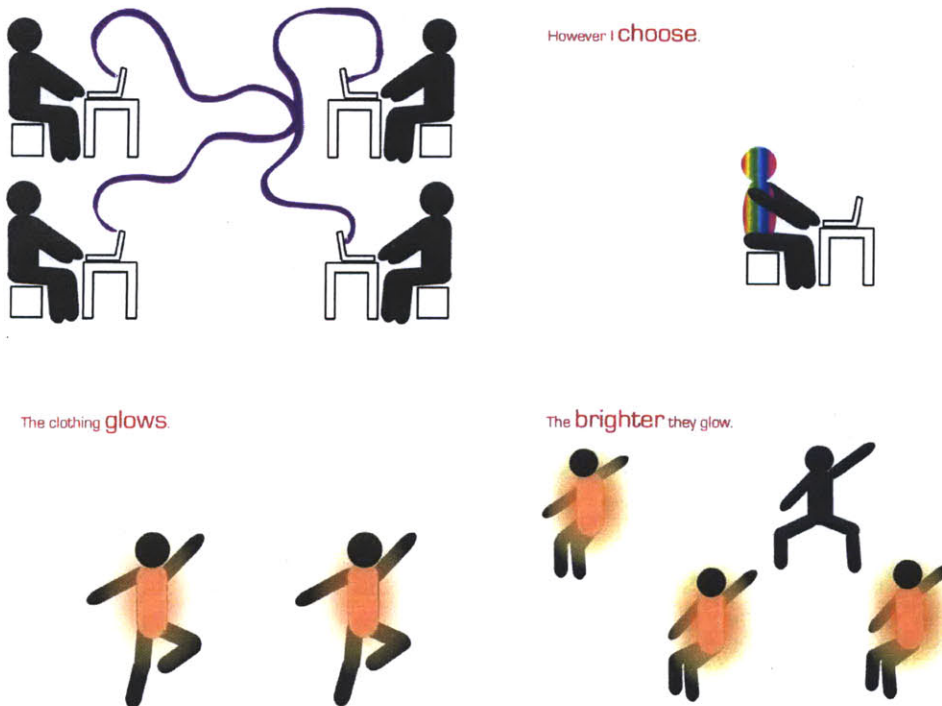
Video still images from Net Motion

Next I led the group in a participatory experiment to test out the proposed concept. Six of us represented people wearing the clothing, moving around freely. The rest of the group represented the system, standing in a circle around the moving people, each holding a flashlight. When two or more of the moving people came to be in roughly the same position, each member of the flashlight group would shine their light on one of them, simulating the glowing clothing.

The experiment lasted for several minutes. Members of the moving group were instructed to move, but were not given specific motions or goals. They alternated between trying to align their body position with others and inventing their own positions. The flashlight group had some trouble reacting fast enough to the moving group, but the general idea was conveyed.
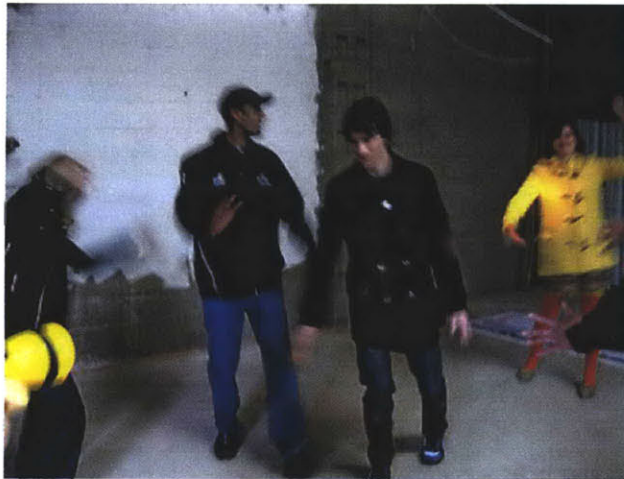
Testing Net Motion at Public Exhibition 1: Zones of Emergency Show

Online Gym Buff functions as a critique of the situation in which one's body image is completely separated from the physical body and dependent only on online social networking. Net Motion offered an alternative to this critique, based on the reverse situation, in which one's social identity is separated from the online element, and dependent instead on the physical aspect. While Online Gym Buff allowed participants to generate a physical identity while existing in virtual space, Net Motion allowed participants to generate a virtual identity while existing in physical space. 15 22 28 35 37 44

The idea of a "collective identity" or a feeling of connection to a larger network is an important element of online social networking culture. In "Television, the Internet, and the construction of identity," Imma Tubella defines the collective identity as, "the sense of oneself as a member of a social group or collectivity. It is a sense of belonging, a sense of being part, an action system, a mode of praxis that makes sense of the world and one's 15 44

place within it." (Tubella, 397) She emphasizes the role that the Internet in building one's collective identity. "..it is very important to remember that collective identity is collective consensus, a symbolic project, and shared interests, and that the media in general and the Internet in particular are powerful tools to actively build it." (Tubella, 398).

Similar to online social networking sites, Net Motion also created a sense of connection to a larger network and provided the freedom of self expression, but required participants to achieve this by engaging with their bodies instead of using a computer. It was essentially a physical interface to an online social network.

11 16 20 44

While the piece inspired movement, it did not simply reinforce the preconditioned routines of gym culture. Instead, participants were able to create their own motions outside the gym space.

05.15.08 Public Exhibition 2: Zesiger Athletic Center

The second public exhibition was on May 15, 2008 in the MIT Zesiger Athletic Center. I had tested previous experiments and projects in this space, but this exhibition was the first   21
time that my work was up for an extended period of time for Zesiger patrons to experience. Using five of the eight TV monitors in front of the aerobic machines, I played three different video sequences from 9am-5pm. On four of the monitors, the Gym Machine 1 and Gym   33
Machine 2 sequences alternated every 8 minutes.   37

**Video still images from Gym Machine 1 and Gym Machine 2 in Public Exhibition 2:
Zesiger Athletic Center**

The videos could be seen by everyone in the space, but the audio could only be heard by those on the aerobic machines. In order to hear the sound, one had to listen to head-phones plugged into the audio box and have the machine in motion.

On the other set of four TVs, three ran cable television programming as normal. The fourth TV played Avatar Interruption, which included a prerecorded episode of a program called Top Chef. Every 5-10 minutes, the program was interrupted by one of the Avatar Mono-   31
logues clips. The clip would play for a minute, then the program would resume as normal. The total video ran for 30 minutes and looped continuously.

Video still images from Avatar Interruption

Installation for Public Exhibition 2: Zesiger Athletic Center

The reaction to the installation was more intense than expected. Not recognizing that I was the subject of the Gym Machine 1 video, many people in the gym asked me whether the girl in the video knew she was being filmed. After assuring one man that I was the girl in the video, he commented, "well you know these days you never know whether you're being taped or watched...I just had to check."

The placement of the videos in the Zesiger Center felt very different than when they were shown in the Zones of Emergency exhibition. This may have been due to the site. In the 38 Zones of Emergency exhibition, the videos were part of the presentation of several works, which together were viewed and critiqued within the context of an art review. In the Zesiger Center exhibition, the videos caused much more of a disruption because the audience was Zesiger patrons, expecting to experience a workout, not art work.

The change of scale also affected the reception of the work. In the Zones of Emergency exhibition, the videos were played on small TV monitors on the floor. To view the work, one had to physically get close to the monitors. This gave the viewer the feeling that they were observing something private in a voyeuristic way. This fit well within the context of the 15 22 25 33 35 Facebook and the Online Gym Buff project. In the Zesiger Center, the videos were broad- 37 44 cast over large TV monitors to the entire gym. Because the videos were being broadcast publicly, the feeling that the exposure of the subject was violating was more prevalent.

V. Analysis

This section discusses the major themes and tactics that developed throughout my work.

Themes

My experimental and iterative process of production provided a space for continuous development of the major themes that I initially identified in Concept Composition 2: Physical 13
Collage. These themes included the creation of self, voyeurism and surveillance, isolation and connection, and the collective touch. What began as observations of the themes within each culture evolved into an in-depth understanding and the basis for critique and the proposal of alternative methods of interaction.

Both gym culture and online social networking culture provide a means of creating a rep- 15 22 28 35
resentation of oneself. While the two representations, one physical and one virtual, are   37 40
related, they are not the same, nor is one necessarily more "real" or a representation of
the other.

The elements of voyeurism and surveillance are present in both cultures. Many willingly 15 22 25 33 35
sacrifice privacy to participate in the familiar system of exchange of personal information. 37 43
However, encountering this same behavior in an unfamiliar context seemed to be much
harder for most to accept.

While both cultures have conflicting emphasis on isolation and connection, there seems to 11 16 20 41
be a general understanding of when each should occur. Disrupting these set routines can
cause significant reaction and reconsideration.

The sense of the collective exists in both spaces, and is powerful in fostering a feeling of 17 40
connectedness among large networks of people.

Tactics

Simultaneous to the development of themes throughout the production process was the
identification and refinement of specific tactics or strategies that I employed in my work.

The first tactic that proved to be successful was the incorporation of viewer participation.
Many of the projects required viewers to actively participate, either physically or virtually. In
order to experience and understand Online Gym Buff, viewers had to log on to Facebook, 26 38
add the application to their own profiles, and test out its functionality on their own Facebook
friends. With Net Motion, participants had to move their bodies to test out the concept. The 39
video installations in the Zesiger Center required viewers to operate the aerobic machines

in order to obtain the optimal viewpoint and hear the audio component of the videos.

Participation was necessary because the subject matter of my work dealt with phenomena that arose from interaction within gym culture and online social networking culture. Only by moving one's body or logging on, could one fully experience and understand the issues involved with each.

The participatory aspect of the projects opened a space for the use of subversion. Because participants had to engage with gym and online culture to experience the projects, I was able to reach the audience while working within the system itself. Each space had a distinct language and code of behavior that I was able to use to communicate my ideas to viewers.   29

In Online Gym Buff, I used the existing Facebook platform and social information dissemination mechanism for my own purposes. With the Zesiger Athletic Center installation, I used the medium of the television and audioboxes to reach my audience who were watching from the aerobic machines. In the case of the Avatar Interruption piece, the monologue segments were inserted directly into normal programming. In each case, the use of subversion allowed me to reach my target audience and interact with them through mechanisms that they already understood.   26   42

Finally, I found humor to be a powerful way to engage viewers. The use of satire or sarcasm in several of my projects transformed them from simply illustrative to more challenging or provocative. The avatar experiments contained humorous references to typical stereotypes, combined with the aburdity of the idea of an avatar working out. The humor held the attention of viewers, giving them a moment to pause and reflect. The play on traditional work out plans and tools in Online Gym Buff and the Gym Buff Promo had a similar effect.   29 31   26 38

Together, the use of participation, subversion, and humor provided a set of tools that engaged viewers and created a space for reflecting and questioning.

VI. Conclusion

This work was site specific, focusing on the gym space and online social networking sites. I chose these lenses prior to beginning in order to narrow and focus the scope of my work. Understanding these sites fully, and conducting my experimentation within them proved to be crucial to the success of the work.

In addition to understanding site, several other elements of my methodology were very important. First, the iterative and experimental process was necessary to achieve a body of work that was coherent and engaging. Trying many different ideas quickly and keeping myself open to failure as well as success, allowed for progress to be made. By testing my projects in a variety of contexts and with different audiences, I came to understand the interactions that took place and the effectiveness of different strategies. I began with initial ideas around specific themes that evolved with each project, developing over the course of the semester into a much deeper understanding of each.

With each iteration or experiment, it was important to test not only the conceptual aspects, but also the technical ones. Often the functioning of technology was less predictable than the reactions of viewers. However, it was necessary that the technical aspects of the projects were executed seamlessly, so that the focus of viewers would not be distracted from the intended subject.

Finally, I found it very productive to work with a variety of mediums – video, installation, web, and performance, and from different angles – in the gym, on the web, and outside of both. This required me to constantly reevaluate the relevance and effectiveness of my work, and kept me from getting stuck on one particular idea or solution. Instead, I was able to work on several different projects simultaneously, with each building on and informing the others.

The next step would be to remove the lenses and broaden the scope of this work to my original interest, the boundary between physical and virtual space. What I am particularly interested in, and what I have begun to explore through my work already, are the interactions that take place within and between the two spaces, and the potential that exists for new types of interaction. Through these different forms of interaction, I want to explore new ways of understanding participation in community. This is an area that I hope to pursue in future work at the graduate level.

VII. Appendix - DVD

The Avatar Monologues

Online Gym Buff Promo

Net Motion

Gym Machine 1

Gym Machine 2

Avatar Interruption

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YouTube: www.youtube.com

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