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Sensory Spaces

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SENSORY SPACES

A Thesis
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Master of Fine Arts
Visual Art

by
Thomas Schram
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Accepted by:
David Detrich, Committee Chair
Dr. Andrea Feeser
Christina Hung
ABSTRACT

We are all products of our environments and simultaneously have the ability to shape and change those environments. Physical environments obviously influence how we perceive and understand ourselves in relation to our surroundings, but non-physical environments have an ever-increasing effect as well. Changing technologies and increased use of online networks pose new questions about how we understand and relate to the settings we inhabit. Inspired by the work of Sherry Turkle, my work examines the tension in the transition many people experience as they incorporate more internet-ready, globally connected technology into their daily lives. I examine the intersection between virtual and physical spaces. My work focuses on the advantages and disadvantages, specifically as seen through the lens of the other, looking for new perspectives concerning our roles as we occupy each simultaneously.

Materially, I draw from found objects and unscripted recorded observations to describe physical spaces I’ve encountered, as well as utilizing technological possibilities for describing virtual environments. The collision of the physical and non-physical made manifest in large-scale installations creates hybrid virtual/tangible environments. Viewers of these environments are made aware of their presence in relationship to the work through layers of sensory stimuli and are often offered interactive possibilities to explore. This experience creates new knowledge about our increasingly multilayered society.
DEDICATION

This thesis is dedicated to my parents, James and Cheryl Schram, who support me with a patience and love I didn’t believe humanly possible. They deserve more than I can ever give back.
ACKNOWLEDGMENTS

I would like to acknowledge all of those people who supported me during these difficult times. My family deserves all the thanks I can give them; they were my foundation that held me up. I would like to thank the faculty of the Clemson Department of Art, specifically my committee members, my advisor Dave Detrich, Dr. Andrea Feeser, and Christina Hung. You have all taught me so much in a short time.

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CHAPTER ONE

INTRODUCTION

My past experiences with anthropology and religious studies have led to a deep interest in humanity as a social animal, encouraging me to investigate the paradigms that define and redefine collectives. The elements surrounding our daily lives are charged with predetermined contexts and meanings, and my appropriation and manipulation of them demonstrate that all contents of our environment, whether physical, digital, emotional, or cultural, have tangential effects on who we are and how we see the world. I, therefore, investigate how a vast majority of people today simultaneously occupy physical and virtual environments.

My work explores connections and networks, specifically in terms of their effect on those occupying the spaces created by them. I view individuals as a group element within large overlapping systems, some of which are physical and incorporate nature while some are mediated by technology and are, thus, considered virtual. I believe in observing contemplatively one’s role in one’s environment. My work, therefore, manifests observations and understandings of my place in my environment as I construct installation spaces to examine networks based on personal experiences. These experiences then resonate and offer others the opportunity to contemplate their own relationships to these and similar systemic spaces.

Sherry Turkle writing in *Alone Together: Why We Expect More from Technology and Less from Each Other* has heavily influenced my questioning concerning our role within networks. Her book is an anthropological study of the effect of new technologies
on how we interact with human-simulating machines and with each other through connected networks. She explores the empathetic response that many people have with human-like machines as well as the ability of many people to partition their lives into separate personas online and in physical space. She explores the role of online gaming such as World of Warcraft and Second Life as conduits for a new interactive digital experience that allows for a complete and immersive break from physical life. In doing so, Turkle asserts that in an uncontrolled move towards an immersive digital life, something is lost that is present in the physical, something personal and valuable (Turkle). I agree, but am excited by the increased use of technology in everyday life and question how we can use it in conjunction with our physical lives to understand each more deeply. I try to overlap the two into a hybrid space where one can be seen set against the other, tearing back the veils that usually cloak these experiences. In these manipulated spaces, a new experience can be felt, one that attacks or seduces the senses, repositioning those environments we take for granted. My work produces a physical tension between what is lost and what is gained, creating a space for discussion concerning how we are affected by and shape these spaces.

I mine the environment. My work uses found materials as well as sound and video taken from direct observation. I then alter these materials to create simultaneously both a familiar and an innovative experience. Sensory experiences gained from physically exploring an environment as well as objects and processes derived from those explorations embed my work with a sense of the power of a space to affect its inhabitants and vice versa.
I use technology as a counterpoint to the physicality of found objects and construction materials, in particular my work employing the technologies associated with virtual and digital spaces that, in part, shape our contemporary world. The overwhelming inclusion of the Internet in everyday tasks and the recent explosion of online social networks allow for new relationships with online systems and new experiences in navigating non-physical spaces. Such emergent technologies as Facebook, real-time signal processing, and increasingly simplified technologies for capturing and displaying media offer users the ability to easily change and shape the virtual environment through user-created content. In this way the previous authored presentations of virtual spaces constructed by the traditional media are now in the hands of the viewers to modify as they see fit. The intersection of these experiences with those of traditional physical environments can afford both similarities and radical differences in the way individuals understand and appreciate their roles in both networks. For this reason my work uses these new virtual spaces as both subject matter and material along with physical objects to create new experiential settings.

I craft experiences that explore these two increasingly overlapping realities. Both physical and virtual spaces constitute networks that we become implicitly part of by inhabiting them. Although operating in different modalities, each offers new strategies for knowing the unique perspectives of the other. I use my own visual vocabulary to present each of these spaces through the lens of the other as an experiment to promote contemplation of our various roles in simultaneous settings. I take objects and unchoreographed experiences from the physical networks, embedded with a sense of the
spatial and historical context, and repurpose them in relation to less tactile virtual experiences. Old doors, construction materials, interactions with nature, and living room furniture, all carry with them a sense of the physical spaces they’ve been removed from or would be used to construct. The physicality of these materials alludes to the sensory experiences and common relationships that we all share when navigating real world settings.

The palpable banality of these elements contrasts with the often ephemeral or virtual nature of the situations and media technology used in my work. Objects and materials hold a physical presence in the installation space while projected media such as sound or video further shape their relationship to the viewer. These media elements act as a middle ground between the physical installations presented and the technologically modified non-physical spaces created. The ability of these sensory elements to change the environment occupied by the viewer as powerfully as the concrete objects sharing the space highlights the didactic nature of these two worlds while at the same time reinforcing their common impressions.

In these overlapping experiences, I foster a better understanding of my own relationship to these spaces; by folding them into each other, new perspectives are born and the attributes of each understood more fully. By bringing these seemingly disparate arenas together in an installation space that I physically build and technologically shape, I move my investigation out of the realm of a hypothetical thought experiment and into the realm of the experienced. I view myself as a maker, pushing past the cognitive speculation of the subject, molding them into a new, manipulated environment.
There is a precedent for this type of creation in the work of various artists who use technology to shape space and examine how we navigate our often interlaced relations with the virtual and the real. For example, Janet Cardiff and George Bures Miller craft spatial experiences wrought with sound that immerse the viewer. Writing about this pair of artists, Bartomeu Mari describes their work, saying “the Installations and ‘situations’ they present to us through the use of sound editing and recording technologies go so far as to make the audio event akin to sculpture” (Mari). I believe their work is sculptural practice because they modify and manipulate the space viewers inhabit through sound. Similarly, my use of recorded media impacts the physical understanding of exhibition space.

Tim Nohe mines the soundscape of environments, presenting these sensory objects in ways that challenge viewers to contemplate the relationship between sound, environment, inhabitants and performers (Nohe). I develop similar connections to sound both as elements of an environment that can create affect as well as manipulate and modify physical exhibition spaces.

The work of Rafael Lozano-Hemmer engages viewers through interactions that change the aesthetics of the piece, and the space it occupies. In his work, Sustained Coincidence (Subsculpture 8), created in 2007 for an exhibition entitled Phantasmagoria: Specters of Absence, he uses lights that react to viewers within the space, projecting their shadows onto a single central point on one wall, no matter where they move in the room (Roca). Interactive relationships between viewers and works as demonstrated by
Lozano-Hemmer are similar to the foundational tenets of my work, which examines the give and take of viewers and the space they occupy.

I create work that is informed by these artists’ modalities, crafting similar spaces that afford new insights through a sensory experience of the installation. My investigations use digital media or interactions that modify the viewers’ experiences of a specific space. Exploring how our ability to affect a space and its ability, in turn, to affect us is enhanced through theatrics, audio mining, and interactive installations. The works change the settings they occupy as well as the understanding of those that they use as subject matter. These networks coalesce into a sensory space to be seen, heard, felt and navigated, not just as a discourse on a mental exploration but also as a separate environment.
CHAPTER TWO

WORKS

Digital Hike

In the piece, *Digital Hike*, a hike through the North Carolina Mountains is redisplayed as a video shot from the first person perspective. It is shown through a standard television monitor positioned in front of a comfortable chair, with the entire work installed outside. This video was edited to include breaks in the progression occurring at short intervals. These breaks bring up menus, asking viewers if they would like to proceed or stop the DVD of this hike, with several randomly occurring menus also offering a chance to explore areas off the path. These side tracks do lengthen or shorten the total time it takes a viewer to reach the end of the hike, the only actual choice for the viewer being to keep “hiking” or to stop. The end of the video allows for the viewers to reach only one place, regardless of any of their choices except the one to quit.

The entire installation is set up outdoors in a natural area, adding an additional contextual layer of a living space transplanted to nature. This setting further emphasizes the juxtaposition of an outdoor activity being navigated through interior interactions. The subject of mediated experience is examined through the intentionally less fulfilling act of watching a hike on television while in a natural surrounding instead of actually experiencing nature. Viewers are faced with the decision to watch this video or not, to choose this mediated experience over having their own natural experience. One choice is programmed as an art piece, and the other calls for action, for them to decide to strike out on their own path in search of their own experience, unplanned and spontaneous.
Subway/Cab Ride

*Subway/Cab Ride* uses video taken while navigating urban environments and then shows them as layered, non-physical spaces simultaneously visible. These videos depict physical movement through physical spaces, displaying them through a digitally mediated experience that ensures the lack of any real physical space becomes apparent. This piece resides at the intersection of physically traversing spaces and the understanding of the infinite ability of visual technologies to capture, keep, and reproduce likenesses of those physical spaces. The flattening of the illusory space in the footage as well as the portrayal of the actual process of gaining it helps to reinforce the metaphoric nature of video concerning a traditional experience of physical space. These virtual spaces do not capture the entirety of physical experiences of space: they are mediated through a technology that affords new possibilities while discarding much of the sensory information associated with “being there.”

The physical monitors used to display the videos further hybridize the spaces as they use deconstructed televisions, exposing the antiquated physicality of an older technology. Thus, they make visible the often hidden components of technology, allowing a look into the path the video signal traverses in order to be understood as image output while remaining outside of the physical accessibility of the viewer.

Movement through the urban environment, even in a cab or train car, is an overdose of sensory stimuli, one that is inherently immersive precisely because of the physical location. The videos present this activity in a disconnected atmosphere of non-engagement. This inability to access the experience of the space depicted in the video to
the same extent as when actually taking the journey is represented by the partially inaccessible space containing the monitors that exposes the often completely hidden elements of media presentation. Both the physical elements and the media presented offer a visual understanding of deeper layers involved in these paths of travel but control the level of engagement the viewer is allowed. In the end, this lack of immersion and the intangibility of these particular digital voyages form the crux of their relationship to their physical counterparts. These dichotomies of the physical and the virtual, the exposed and the edited invite yet deny access to the totalities of these journeys, creating a tension between what we see and what we experience, prompting contemplation of visual navigation versus physically being there.

Digital Fish Pond

*Digital Fish Pond* is a multi-part projection piece that layers elements of interactive technology, images of nature, and concepts of voluntary and involuntary participation. This piece explores artificiality within the relationship between physical and digital spaces.

This installation involves a space that is separated from the rest of the gallery, one that is divided in half, one chamber containing video projection and two light boxes and the second housing several large window-filled doors arranged to create a trapezoid-shaped enclosure illuminated by projection. In the first room one light box acts as a platform from which the second taller box surrounded by a concrete shell can be easily accessed. A digitally manipulated unrecognizable video is seen on a flat-screen
television attached to the facing wall. While standing on the first light box, the viewers wave their hands over the taller light box, a silhouette of their hands appearing in the video, bringing into focus and clarifying the images of fish swimming in a hatchery concrete pond being shown on the tv.

In addition, while standing on this platform, the viewers inadvertently disrupt a light stream being projected in the trapezoid space in the second room. In this space, their shadow as projection is manipulated, modifying the space enclosed by the doors. By interacting with the projection of the fish, the viewer becomes the subject of a video projected in the second room. This piece layers virtual spaces and physical spaces in an interactive milieu that allows viewers control over their actions in manipulating the projection they can see in front of them but does not provide them the knowledge of the effect their actions have on the projection they cannot see in the second.

The video of the fish in the piece, which was taken at a venue that raises fish to be released into the wild, to produce natural experiences for fisherman. In the same way the piece promises the viewer an enjoyable game-like interaction, positioning them for an unknown involvement with a second video-stream. The viewer occupies layers of opposite spaces simultaneously: one physical versus digital, one as the agent and the object. Occupying both a physically predetermined space and a digitally projected virtual space, the viewer has becomes the manipulated as well as the manipulator. The role of the fish is manipulated object, not only physically because it is raised for sport but also digitally through the viewer’s clarification of its abstracted image.
This piece sets up relationships in which digital technologies give viewers agency over media while at the same time maintaining agency over them. The issue of hierarchies of manipulation related to both digital and physical spaces is played out here in a layered theater of position and appropriation.

Three Degrees

In the piece *Three Degrees*, I use sound as spatial projection to define space in dichotomy with an unobtainable physically constructed space. Mining the environment during a walk along a busy city street, I found myself in a tunnel where the sounds of passing vehicles ricocheted from various directions, creating a space defined by these audio elements. The sound element of *Three Degrees* is a digitally manipulated recording of these vehicles. Upon entering this soundscape, I was struck by its simultaneous claustrophobic and expansive qualities. I could hear the cars moving, understand them sonically to be approaching, passing by, and then departing from my position, alluding to some distance they were negotiating. At the same time, the sound grew and receded in volume, the tunnel amplifying and echoing sound in such a way as to make each vehicle feel as if it advanced and retreated from all directions. The normally banal sound of a car passing by was heightened, dissected, and replicated within the theatre of the tunnel.

This effect was the conceptual starting point for *Three Degrees*, which was designed to emulate the vast reach yet compressive nature of a sound defining the viewer’s space. This goal is achieved through an inverse physical effect to that of the tunnel experience, the sound emanating from a central constructed space and viewers
being aware of its progression towards them as well as its defining a larger oppressive non-visual perimeter.

The constructed space consists of a set of old wooden doors with large glass windows, positioned to create a phone booth like object encasing a large quantity of broken tempered glass. From within this space, the hidden equipment booms and projects the bass-filtered audio. The doors are found objects, with a domestic feel, that show obvious signs of wear and repeated resurfacing, adding to the droning time-extending nature of the sound. The windows of the doors shake and rattle and beg to be broken while the sound aggravates the interior tempered glass, pushing it against the panes. In this way the tempered glass is almost a physical manifestation of the sound pulsing against the restraints of the physical space. Whereas the sound escapes and redefines the larger gallery space, the walls of the materially weak glass planes tenuously contain the tempered glass.

The topmost windowpane on the thinnest side of the structure is left open, allowing viewers an experiential sensory relationship with the interior chamber. This portal entices as it promises an unfiltered glimpse of the relationship between the sound as outward force, the contained mass, and the aged doors of glass holding everything together.

The view is also repulsing. The only position from which an unobstructed interior perspective can be obtained aligns viewers directly underneath the angle of descent if the walls were to give way. They stand beneath an inclined facade of the not quite vertical structure. While intuitively compromising their safety to look into the inner space of the
physical piece, the viewers’ auditory experience works to repel them further from the nexus of the object. The work is at once attractive and beckoning and harsh and unobtainable.

The sound tangibly fills and defines the space it occupies in the gallery; it is omnipresent. After twelve minutes of noise, the recording loops, allowing for three seconds of silence. The sensory effect is dramatic, a brief respite of regular quiet gallery noise briefly offered, similar to taking a large breath of air between two very long durations underwater. Sound is a difficult sensory experience to block out, and while many do not appreciate or enjoy the way this sound changes the space, it cannot be denied that it does.

Viewers are presented with the push and pull of an evocative visual construction assaulted by the re-creation of a cacophony existing at once in both a virtual and physical space. As the genre types, the physical and the virtual, overlap, the sense of a struggle between our relationships to each of them is highlighted. While the two exist together in a single space, it is only in tenuous balance. One must be endured to enjoy the other, but their true nature is that of a single unit. Both must be experienced together. To take in only one side is to edit the experience significantly.

Social Network

In the piece Social Network, the overwhelming nature of expansive online social networks is addressed through the imagined visualization of their infrastructures and their incessant assault of information on the viewer. The overall shape of a social network is
visualized here as a biological structure. The nature of these networks to grow and multiply while creating connections between a series of nodes supports this aesthetic choice. The specific resemblance of the piece to that of a neural network offers help explaining how our use of these non-physical social spaces may be shaping how we think about our relationship with and our connections to all social networks.

Physically, electrical wiring is shaped and manipulated into an array resembling larger than life neurons. As the wires move to the end of the array, they separate and branch out, each to individual speakers mounted on the walls of the surrounding space. From the speakers can be heard the audio renderings of the visual information from Facebook, the speakers projecting a crowd of voices each describing their likes and interests as well as the messages they post online for their network of friends to see. Within the array of wire neurons are embedded light switches that allow or prevent a set of speakers from receiving the audio information.

The piece transfers an environment normally viewed through the veiled interface of a webpage onto the visible infrastructure of a network of nodes: the invisible has become visible. The busy, complicated, and organic lines drawn by the piece give it a visual sense of energy that is complemented by our understanding of the wires carrying electrical current. The resulting output of this energy is the speakers randomly positioned on the walls surrounding the network.

These speakers play audio files that act as surrogates for the textual data constantly being uploaded and posted on online social networks. The sound is layered and confusing, with the information bombarding the viewer easily digested but the
segments of thought being hard to place. The ability of the viewer to interact with the artwork network is limited to the physical ability to use light switches to turn speakers on or off, but the audio playing through the speakers is not specific to individual speakers. The cacophony persists; the viewer has only the limited ability to control from what direction it is projected.

In our use of social networks, it is convenient to edit those with whom we wish to interact. We make lists of people we want to talk to and ignore those we don’t feel connected to. This is natural: when the network contains millions and millions of people globally, some editing is required. This piece explores a physical manifestation of the relationship we have with these social networks involving the constant stream of information they present and our ability or inability to edit and organize that stream into useful knowledge. The viewer is given power to control which speakers are emitting sound, but the network controls the information being broadcast through the speakers. Do these networks themselves represent an identity with which we have put through a relationship, instead of maintaining the role of conduit for relationships with other users? If they do, how symbiotic is this relationship we may not know we are involved in?
CHAPTER THREE

CONCLUSION

I am an unashamed fan boy of science fiction, anime, and radical prophesies of future technologies. My mind swims with hopes of artificial intelligence, global virtual networks, biological improvements made possible through technology, and most of all affordable space travel. I want desperately to unquestionably embrace wherever technological process can take humanity, but in these grand daydreams, I recognize that that things can go terribly wrong. As we transition increasing numbers of virtual spaces and digital technologies into our daily lives, we have very real consequences to consider. A virtual world offers new opportunities but also leaves behind something from the physical. As Sherry Turkle concludes in talking about the internet, “We tend to see it as a technology in its maturity. But in fact, we are in early days. There is time to make corrections” (Turkle).

Turkle’s positions throughout her book are slightly more negative than my own attitude towards the way technology has reshaped our lives in recent history. At the same time I fully agree that simulation technology will set its own path into the future, taking us with it, if not examined and questioned. These are the examinations I hope to contribute to, not through scientific research as Sherry Turkle has masterfully done but through an experiential form of knowledge obtained through making and participation.

I make things; many times I am initially prompted to make things simply to see them exist. It’s in the making and the subsequent experience of the newly made that I feel new wisdom can be achieved. This, my mantra, has driven me to examine the
tension between my desire to see all of the promised technology of the future realized and my apprehension about how these new technologies may change us.

I focus on a sense of place and connection. These elements have always seemed powerful to me, and I see environments as having great power over those in them. By forcing together elements from physical and virtual environments, a new experiential knowledge of what might be gained and what might be lost invites contemplation and conversation. It is not my role to decide or proclaim which spaces are good or bad, dangerous or safe. It is my role to imagine, investigate, and manifest new ways of perceiving the possibilities of these spaces.
Fig. 1.1 *Digital Hike*, Installation View
Fig. 1.2 Digital Hike, Alternative Installation View
Fig. 2.1 *Digital Fish Pond*, Installation View
Fig 2.2 *Digital Fish Pond*, Alternative Installation View
Fig 3.1 *Three Degrees*, Installation View
Fig 4.1 *Social Network*, Installation View
APPENDICES
Appendix A

List of Artworks Appearing in Thesis Exhibition


REFERENCES


