DESIRING MACHINATIONS OF MATERTEKNOLOGI

KELLY JACLYNN ANDRES
B.MGT/B.A. University of Lethbridge, 2005

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Abstract

Desiring Machinations of Materteknologi is an Individualized Multidisciplinary thesis that synthesizes feminist frameworks with new media art to investigate the mediated body in relation to communications technology. The thesis illustrates contemporary, twenty-first century artists working with feminist strategies, the body, performance and technological media. Theoretical discussions are developed that imagine or suggest new forms of subjectivity that could be experienced through artistic appropriation of communicative, networked and technological media. These discussions include my studio investigations and unfold around the following themes: corporeal feminism, body-based philosophy, a subversion or manipulation of consumer technologies through intervention, appropriation and performance, the politics of space and location through networked interaction, and the mediated body in relation to communication technologies through a valorization of embodiment and the senses.
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Introduction

*Desiring Machinations of Matertekhnologi,*¹ is an Individualized Multidisciplinary Master of Arts thesis completed through the Department of Art, Faculty of Fine Arts, and the Department of Women’s Studies, Faculty of Arts and Science. For this degree, I have completed eight art works² and conceptualized and designed six works, currently in progress.³ These artworks use different communication technologies as vehicles for constructing artistic investigations of the mediated body through performance and networked art—subfields of new media art.⁴ My research has produced two outcomes:

1. A studio practice that has yielded a number of artworks, exhibitions,⁵ and artist residencies;⁶ and

2. A written thesis that provides the theoretical and contextual framework for the artworks I have produced over the course of the degree.

The written thesis consists of three overlapping chapters and each chapter illustrates contemporary, twenty-first century artists working with feminist strategies and

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¹ Tekhnologi (Greek), systematic treatment of an art or craft.
² Artworks include: *Re: Materfamilias,* 2006; *Cuckoo Cam,* 2006; *Web Diocamera,* 2006; *35 Things You Can Do With a Stranger On a Webcam,* 2007; *Souvenir Puppet Theatre,* 2006; *Cut-out,* 2006; *The Fudgery,* 2006; *The Happy Wanderer,* 2006; *Bell Piano,* 2007.
³ Artworks in Progress Include: *Songbike,* 2006-; *Finally We Hear One Another,* 2007-; *The Urban Habitat Lab,* 2007-; *Analogue Avatar,* 2007-; *A Novella, Dot,* 2007-.
⁴ Mark Tribe and Jana Reena, *New Media Art* (Köln, GER.: Taschen, 2006), 6. New Media art as defined by Tribe and Reena: “To describe projects that make use of emerging media technologies and are concerned with the cultural, political and aesthetic possibilities of these tools.” 6.
⁵ Exhibitions include: *Euro-Lineage Tour,* McCleave Gallery of Fine Art, This Neck of the Woods, NL, The Invisible Inc. reading room, Sydney, Next Wave Festival, AUS, Khyber Centre for the Arts, Eyelevel Gallery, The Foreman Gallery of the University of Bishops in Lennoxville, QC, 2006; *Cuckoo Cam,* Gender Symposium Exhibition, University of Lethbridge, 2006; *Nocturne,* SAAG, Lethbridge, AB, 2006; *You Are Here,* The Other Gallery, Banff, 2006; *Cut-Out,* Trianon Gallery, Lethbridge, 2006; Art’s Birthday, Studio XX, Montreal, 2007; Signal & Noise Festival of Sound Art, Vancouver, 2007; CONFLUX 2007, Brooklyn, 2007.
technological media. In each of the three chapters, theoretical discussions are developed that imagine or suggest the formation of new subjectivities that could be experienced through artistic appropriation of communicative and networked media. These discussions include my studio investigations and unfold around the following themes: corporeal feminism, body-based philosophy, a subversion or manipulation of consumer technologies through intervention, appropriation and performance, the politics of space and location through networked interaction, and the mediated body in relation to communication technologies through a valorization of embodiment and the senses.

The first chapter, *Performativities*, considers the role of fiction and narratology as a feminist strategy for questioning women’s marginalized role in the history of science, technology and art, within a Western context, given the patriarchal foundation of these disciplines. Referencing the writing of feminist scholars Jyanni Steffensen, Wendy Brown, Donna Haraway, Dianne Elam, and Anne Balsamo, I illustrate works by contemporary artists Suzanne Treister in relation to the production of fictional characters, and Natalie Jeremijenko whose work questions and challenges dominant paradigms of science and technology. My project, *Re: Materfamilias* (2006) is also discussed. Completed in 2006, it consists of a series of photographic, celluloid slides for a portable viewing and listening device that portrays a fictional narrative based on lineage, gender and failed invention.

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7 Lisa Gitelman and Geoffrey Pingee, *New Media: 1740-1915* (Cambridge, MA: MIT, 2003), xi. This publication is a series of essays that “challenge the notion that to study “new media” is to study today’s media. All media were once new media.” In my thesis I try to avoid categorizing contemporary and obsolete media separately. In my practice I attempt to combine different forms of electronic technologies, for example Internet web streaming with a typewriter or human power with digital recording or analog radio with digital sound.
The second chapter, *Subjectivities*, investigates strategies for sidestepping dichotomous categorization between cognition and embodiment, given the different locations, relationships and positions attributed to the body with respect to immersive technologies. This chapter explores socially constructed metaphorical bodies such as the cyborg and the posthuman as well as the dualistic categorization between “nature” and machines. Referencing literature by Elizabeth Grosz, Anne Balsamo, N. Katherine Hayles, Donna Haraway, Marie-Christiane Mathieu and Jeanne Randolph, I position media and performance works by Natascha Sadr Haghighian, Joanna Berzowska, Zoë Beloff, and Orlan in relation to and as examples of concepts of emergence, the reflexive epistemology, distributed cognition, embodiment, and the posthuman. These concepts are presented as potential alternatives to Westernized dichotomies of embodiment and gender. Such dichotomies perpetuate a continual segmentation of the senses, a division between gender in relation to access and production in science and technology, and the connection of emerging technologies to a state of disembodiment.

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9 Wikipedia, “Reflexivity,” http://en.wikipedia.org/wiki/Reflexivity, (accessed September 20, 2007). Reflexivity refers to circular relationships between cause and effect therefore a reflexive relationship is bidirectional; with both the cause and effect affecting each other in a situation that renders both functions causes and effects. Epistemology is a branch of philosophy that studies knowledge.

10 M. Perry, "Distributed Cognition," *HCI Models, Theories, and Frameworks: Toward an Interdisciplinary Science*, in J.M. Carroll, ed. (San Fransisco, CA: Morgan Kaufmann, 2003), 193-223. A branch of cognitive science that proposes human knowledge and cognition are not confined to the individual. Instead it is distributed by placing memories, facts or knowledge on the objects, individuals and tools in our environment.


12 Neil Badmington, ed., “Posthumanism,” *Readers in Cultural Criticism* (Palgrave: Macmillan, 2000). In critical theory the posthuman is a speculative being that represents or seeks to enact a re-writing of what is generally conceived of as human. The term refers to a state beyond humanism, a movement beyond the ideas and images of the world in terms of Renaissance humanism in order to correspond more closely to the 21st century and concepts of technoscientific knowledge.

The third chapter, *Sensitivities*, considers the mediated relationship between the body and communication technologies and focuses on strategies for engaging the under-privileged senses. Body and spatial terms such as public, active, expanded, mediated and surveyed are discussed in relation to new media art to look at projects that consider multilayered interaction, mobility and the proliferation of new sites for social engagement. The politics of gender and location come into focus in this chapter where I suggest that networked art, an activity that often takes place in an undefined or unclaimed area, can suggest or create alternative geographies, allowing individuals to challenge the division of boundaries that perpetuate hierarchies between public and private space. I discuss the production of different subjective realities due to ubiquitous technologies such as surveillance and web cameras. In this chapter, I reference work by theorists Sherry Turkle, Felix Guattari, Caroline Jones, and artists Jennifer Lacey and Nadia Lauro, and KC Adams. My own studio projects for this chapter utilize networked art to dissolve or expand the parameters of public and private space by focusing on aurality, reconfigured technological devices, and the extended body. In this chapter many of my projects are networked performances, a branch of new media art. These

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14 Sean Cubitt, “From Internationalism to Transnations: Networked Art and Activism,” *At a Distance: Precursors to Art and Activism on the Internet* (Cambridge, MA: MIT, 2005), 434. Cubitt states, “The network artist is not a person. A person authors, takes responsibility for their work. But in electronic networks, authorship is already far more profoundly shared with the medium than is the case even with the poet working in a language that antedates her, the painter working with colors and canvases someone else has manufactured, the cineaste working with cameras and film stock designed and built by strangers. The network is more than raw material: It is the stuff of the work. Network art is intrinsically of its medium, whereas postal art is only carried by the mails. And to the extent that network arts require the participation of users, it is the user who must take responsibility for the work that’s made.”

works attempt to examine how location and mobility affect the emergence of novel and shifting subjectivities.

**Multidisciplinary Methodology: Women’s Studies and Visual Art**

The impact of technological transformation has been especially prevalent this century. The expansion of network and communication channels through the Internet, the production of digital realities and the shifting of human corporeal subjectivity aided by rapid advancements in medical technologies are just a few applications that have had an enormous effect on the social, psychological and geographical realities of individuals. As both practitioners and subjects of technology, women have been historically profiled as peripheral or passive participants to emerging media. In order to acknowledge and challenge the gender division embedded in these dominant subjectivities reiterated by recent technologies, it is important to my study to examine the ways in which women’s new media art practices can challenge the hegemonic nature of such marginalization within a Western context.

The specific context and the individuals I am referring to throughout my thesis are predominantly women, and in most cases are a privileged demographic in that they have received a post secondary education and have had access to specialized technological training. These individuals use this point of access to work as cultural producers to question and subvert how their individual positions and the positions of other marginalized groups are defined and operate in a Western environment. These artists use their technical and theoretical training to address a broad spectrum of issues. A brief and incomplete list would include the following activities: Redefining social spaces, challenging exclusivity, questioning specific social and cultural norms within their
communities, collaborating and forming networks and media centers to promote one another and to provide opportunities to emerging artists, and adapting, subverting or appropriating existing technological objects to critique consumer driven society and globalization. In other words these women are making work and generating discourses that are political, mobile, remote, tactical, and technically savvy.

**Women’s Studies**

First recognized as a discipline in the early 1970s, Women’s Studies is a relatively new and emerging interdisciplinary academic field and my research converses with writing and research by others within the discipline. The feminist analysis of communications technology has offered significant critical reflections on how women’s subjectivity and bodies are shaped through representation. A majority of Women’s Studies research focusing on gender and technology examines areas such as gender in the workforce, gender and the design of technological devices (information technologies and household appliances), and the recruitment of women into technologically based fields such as engineering or computing. In Art History and Theory, feminist art and performance art are explored in terms of women’s productivity and content but there are still few resources that examine the two subjects, new media art and gender, in relation to

16 The first Women’s Studies program in Canada was at Concordia University in Montréal in 1976. Concordia University website, http://www.concordia.ca/info/futurestudents/undergraduate/programs/subjects/BA_WomensStudies.php
The first Women's Studies Program in the United States was established on May 21, 1970 at San Diego State College (now San Diego State University) after a year of intense organizing of women's consciousness raising groups, rallies, petition circulating, and operating unofficial or experimental classes and presentations before seven committees and assemblies. San Diego State University, “Women’s Studies,” Marie Doewner and Cathleen Brown, http://www-rohan.sdsu.edu/dept/wsweb, (accessed September 18, 2007).

one another.\textsuperscript{18} There is the field of cyberfeminism defined as “the scrutinizing of politics and the analysis of how gender, race and class informed technoculture,”\textsuperscript{19} which does examine feminist technological production; however, this specialized discourse focuses on high tech and very new technologies, whereas my interest is located midway, in the blending of old and new, or in high and low technologies.\textsuperscript{20}

As Margot Lovejoy points out, prior to the 1970s the absence of women in the development and participation of new media art related discourse is apparent. In \textit{Digital Currents: Art in the Electronic Age}, Lovejoy presents an in-depth survey of art and communications technologies from the early use of drawing and perspective apparatus in the 1600s, to artworks that use current technologies such as virtual reality and artificial intelligence. In her discussions she provides a survey of concepts and artistic practices relating to spatial configuration, browsing, telepresence, robotics, global relativism, hypertext, software, and interactive dialogue. The contemporary artists featured use the Internet, video, and other multimedia to explore issues of content/context, visual representation, digital media, and interactivity. In Lovejoy’s text, it becomes apparent that the development of the increasingly democratic media, such as video and the Internet along with political movements such as feminism, allowed women to gain a voice within the artistic arena: “Since 1994 Internet capability has transformed social and communication technologies and modes of social connectivity.”\textsuperscript{21} In recent anthologies

\begin{itemize}
\item[$\textsuperscript{19}$] Rachel Greene, \textit{Internet Art} (Singapore: Thames & Hudson, 2004), 62.
\item[$\textsuperscript{20}$] High often refers to very new technologies that use computers and digital processing such as HD Video, MP3 audio files or interactive computer programs like Max/Msp. Low refers to analog technologies, often considered obsolete – typewriters, radio, and record players.
\end{itemize}
or publications of technological and media related artwork women’s pieces are sprinkled throughout yet until the 1970s and 1980s, they are almost nonexistent. In 1997, for Documenta X, a prestigious art exhibition, the Hamburger Kunsthalle – Galerie der Gegenwart announced the first Net Art competition. Artist Cornelia Sollfrank created a software program, *Net Art Generator* to create over 200 faux artworks that she then entered into the competition under feminine names. The generator gathered existing images from the Internet and digitally collaged them, forming a unique piece for each fake entry – this was an aesthetic that was currently being explored by net artists so the phony entries would ideally stand well in the competition. The competition resulted in a total of 280 applications and all three winners were men. Sollfrank issued a press release announcing her work and the title of the piece *Female Extension*, where the title is a play on an electrical receptacle as well as the curator’s decision to name the Net Art project the “Extension,” as in an extension of the institution by location in a virtual wing. This was an important cyberfeminist artwork as it critiqued the dominance of men in the technological industry as well as in the online environment.

A specific category or an isolation and examination of women’s new media art may not be considered relevant or necessary as women’s participation and representation in this field is gaining on that of men’s; however, it is evident when investigating the content of women’s new media artworks that many of the subjects explored by solo women artists examine feminist issues such as access and participation, objectification,

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22 Virtual can be loosely defined as something that is *almost* something else.
23 Tribe and Reena, *New Media Art*, 88.
24 In the publication *New Media Art* (2006), 47 new media artist projects are highlighted where 19 men, 13 women, and 13 collectives (gender unspecified) were represented.
25 By solo women artists, I mean an artist working alone as opposed to collaborating with a partner or a group such as a collective.
representation, sexism, the domestic, collectivity and collaboration – subjects that have been explored by women artists with respect to social, political and economic marginalization for hundred of years.

The fact that women are producing contemporary new media artworks that reflect feminist issues in a social environment where it is often claimed that within a Western context equality is the norm, suggests an inequality between perceived or claimed gender equality and the reality experienced by these women artists. It is important to examine the work of new media artists from a feminist perspective to identify such issues and to clarify or isolate sites of problematic power relations.

Cyberfeminism is one example of a broader discourse that interweaves feminist theory with contemporary, technology-based art production. I will not be applying a strictly cyberfeminist approach in this thesis as my work stages both old and new technological mediums and is not seeking a position grounded in the synthesis of sexuality, cybertechnology and feminism. However, cyberfeminism is very useful for the examination of women’s projects that use recent technologies as a medium:

Cyberfeminism is concerned with the ways in which cybertechnologies affect women’s lives in particular. Women software developers, hackers, online chat enthusiasts, performance artists, cyberpunk writers, technosex participants, game designers, and digital artists create narratives that explore both the pleasures and pitfalls of digital culture for women, creating complex positions for themselves in a digital world that potentially allows for new types of relations among women, men, and machines.26

In Zero’s + Ones,27 Sadie Plant recreates a history that explores women’s involvement in technological innovation. Through an exploration of literature, archival

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27 Sadie Plant, Zeros + Ones: Digital Women and the New Technoculture (New York, NY:
research, and academic theory, accompanied by a distinctive cyberfeminist approach in the non-linearity of the text, Plant considers the social activities and norms that have contributed to the exclusion of women within scientific, mathematic and academic discourses and describes their struggles to resist such exclusion. Plant connects the mobilization of women to a mastery of “support” technologies such as weaving, telephony, computer coding and cryptography. Although positions in support technologies were viewed as peripheral to the positions held by men as inventors and disseminators of new technologies, these occupations facilitated women’s entry into the labour force, an important step towards an increasingly progressive society where gender equality in the workplace is considered an attainable norm.

In relation to a recent history of women and technology, feminist studies in the 1980s and 90s debunked social constructions around women’s use of technologies in the home and workplace. Texts such as “Women, Technology, and Innovation” (1982) and “The Technological Women: Interfacing with Tomorrow” (1983), demonstrate how household technologies do not remove gendered divisions in the home or improve women’s quality of life. Additionally, publications such as Mechanical Brides (1993) or Women and the Machine (2001) reveal how women have been represented as passive with respect to new technologies in popular media publications such as advertisements and television commercials. Even though much of this groundwork has been initiated, women are still objectified and represented as passive, intellectually inferior, abject,

Doubleday, 1997).
sexualized objects in contemporary mediums such as mainstream film, celebrity Internet sites, lifestyle or entertainment magazines and also in the production of new technologies such as robotics\textsuperscript{31} and cybernetic life forms.\textsuperscript{32} Feminist Faith Wilding, recognizes that, “New media exist within a social framework that is already established in its practices and embedded in economic, political and cultural environments which are deeply sexist, and racist.”\textsuperscript{33} It is important to examine specific environments such as new media art, as women are using complex technologies, yet it remains unclear how feminism has directly influenced women’s relationship with regards to the activity of using and subverting consumer technologies, specifically within an art discourse.

**Visual Art: New Media Art**

According to Mark Tribe and Reena Jana, new media art has a rather recent history. In the publication *New Media Art*,\textsuperscript{34} the authors state, “The conceptual and aesthetic roots of New Media art extend back to the second decade of the 20\textsuperscript{th} century, when the Dada movement emerged in several European cities.”\textsuperscript{35} The parallels between new media art and Dada can be viewed as conceptual or strategic alliances, in that Dada was a response to “the industrialization of warfare and the mechanical reproduction of texts and images,” where contemporary new media art responds to “the information

\textsuperscript{31} Robots at Expo 2005 in Japan display gender specific design. For example, robots designed for guiding and caring for children have curvy, round hourglass shaped bodies and soft colours such as yellow and pinks with feminine voices (Image 1). Robots designed for garbage collection and security were angular, deep voiced and had dark colors such as grey, green and blue (Image 2). The Official Expo 2005 Website, Aichi, “Robot Project,” http://www.expo2005.or.jp/en/robot/robot_project_01.html, (accessed August 10, 2007).

\textsuperscript{32} Japanese scientist, Hiroshi Ishiguro’s “female” android is named Repliee Q1 Expo. “She has flexible silicone for skin rather than hard plastic and a number of sensors and motors to allow her to turn and react in a human-like manner. She can flutter her eyelids and move her hands like a human. She even appears to breathe.” (Image 3)


\textsuperscript{33} Flanagan and Booth, *Reload*, 12.

\textsuperscript{34} Tribe and Jana, 2006.

\textsuperscript{35} Ibid, 7-8.
technology revolution and the digitization of cultural forms.”36 Dada could also be recognized as an early art movement that supported a small number of women who publicly performed politically and socially subversive content, for example the poet and cabaret performer Emmy Hennings (1885-1948).37 Prior to Dada, a group of Italian artists, the Futurists, to whom early performance art is attributed,38 and specifically Luigi Russolo (1885-1947) and his Intonarumori (or noise instruments) (1913), and his subsequent manifesto “The Art of Noises” written in 1913, were investigating the use of new forms of media or new ways of using media in an artistic practice (Image 4). Valentine de Saint-Point (1875-1953) was one of the few women Futurist performers and the only Futurist to perform in New York at the Metropolitan Opera House in 1917.39 The Futurists were also recognized as being very oppressive to women. Mina Loy (1882-1966), who was initially involved in the movement, wrote a feminist futurist manifesto and a number of important Futurist plays between 1913 and 1915. She later left the movement and produced a satirical play that attacked the misogyny that she had endured while involved with the group.40

Although there was some participation by women in these early avant-garde art movements, often their experiences were marked by the existing social norms; their work, therefore, was unnoticed or undocumented and in general marginalized as

36 Ibid.
37 Henning’s was a published poet and cabaret performer. With Hugo Ball she created the Cabaret Voltaire, where she also performed. Her performances included a role in Das Leben des Menschen (the Life of a Man). Hennings also performed in Krippenspiel, a piece written by Ball. Hennings sung, recited her own poetry, performed puppetry, and danced. In 1916, Hennings and Ball created Arabella, their own ensemble troupe, where Hennings performed under the name Dagny. Wikipedia, “Emmy Hennings,” www.wikipedia.com/wiki/Emmy_Hennings, (accessed February 20, 2008).
38 Roselee Goldberg, Performance Art: From Futurism to the Present (Singapore: Thames & Hudson, 2005).
39 Goldberg, Performance Art, 15.
compared to the work of men in the same artistic circles. Art movements such as Dada and Futurism aimed to disrupt the compliant bourgeois public and to challenge or subvert mechanization through performances that were often improvised and contained socially taboo subject matter. These are parallel concepts to those that are currently reflected in contemporary work by new media artists in response to globalization, the proliferation of sexism and racism in commercial media, capitalistic culture, and surveillance.

**New Media(s)**

The electric telegraph was the first widely used electronic communication device and was invented by the painter Samuel Morse (1791-1872) in 1839.\(^{41}\) Shortly after the telegraph was widely adopted, many optical devices for widespread consumer entertainment became available. Nineteenth-century optical devices such as the kaleidoscope, the phenakistiscope, the praxinoscope, and the zoetrope displayed the moving image through a sequence of inanimate illustrations or photographs. The praxinoscope and phenakistiscope are good examples of multimedia innovations as they combined the moving image with a light source and used projection techniques. Emile Reynaud (1844-1918) is cited as an important contributor to this new technology as he developed “the use of a continuous, flexible translucent band or strip on which individual images could lie in a sequence, a band that he then regularly perforated with a single hole to facilitate its controlled passage through a projection device.”\(^{42}\) These objects were the first digital devices as they “divided the continuous motion involved in an action into discrete elements.”\(^{43}\) Radio was invented in 1901, by Guglielmo Marconi (1874-1937)

\(^{43}\) Gere, *Digital Culture*, 33.
and was later documented in an art context by Italian and Russian Futurists in works such as Velimir Khlebnikov’s (1885-1922) *Radio of the Future* (1921), and F.T. Marinetti (1874-1944) and Pino Masnata’s (1901-1968) *La Radio* (1933). The invention of the first working digital computer is attributed to Konrad Zuse (1910-1995) in 1930. Early examples of computer art are documented in the 1960s, with computer-generated images exhibited in galleries by artists such as Béla Julesz (1928-2003) and Michael Noll. Video Art emerged in the 1960s with the introduction of the Sony Portapac in the United States. This was an important technology for North American artists as the availability of inexpensive video equipment arriving at the same time as the feminist movement created not only a medium exempt from a patriarchal history – as in painting, sculpture and photography, but also opened up an entirely new environment for women’s politics and artistic participation. In the 1970s Sherrie Rabinowitz and Kit Galloway created the first networked performance, a dance performance using satellites and television titled *Satellite Arts Project* (1977). They also produced the *Electronic Café* (1984) which “joined various areas of Los Angeles in ‘telecollaboration’ yoking together art, distribution and communication.” In the 1990s, cell phones, the Internet and email were beginning to be widely used in much of North America and Europe. Artists immediately adopted the Internet as a medium of expression and exploration. Net.art artists such as Heath Bunting, Olia Lialina, Alexei Shulgin and Vuk Cosic began working with lo-fi net production tools and the use of the network to make connections and to experiment with the Internet’s open structure, eventually combining Internet with public

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44 Annemarie Chandler and Norie Neumark, eds., *At a Distance: Precursors to Art and Activism on the Internet* (Cambridge, MA: MIT Press, 2005), 352.
46 Ibid., 23.
47 A neologism coined by Vuk Cosic conjoining artistic and Internet communication fields as a medium.
The increase in women’s participation in technological consumption and artistic production since the 1970s combined with the subversive attributes of artistic inquiry and the continued exploration of subject matter by women, thus provide compelling reasons to utilize the disciplines of Women’s Studies and Visual Arts to explore women’s use of new media art.

**Performance Art**

Because performance art is an active, progressive and often-subversive medium, it serves as an ideal platform for women to communicate, represent and critique social and institutional inequalities. Nonetheless, the visual and media representations of women as passive objects for the fulfillment of men’s desire infringes on their capacity for agency and causes a fracture; an instability with regard to the ability of women to become the subject empowered through performance or networked actions. This is a topic Jayne Wark addresses in her recent book, *Radical Gestures: Feminism and Performance Art in North America*, a work that spans the years between 1970 and 2000.

Wark describes the notion of agency, the ability of the artist to be active instead of passively acted upon, as an important function of performance art by women. Women, therefore, could become agents of social and political change through their artistic activity.

By making performance so conducive to their critical and political objectives, feminist artists were able to do what others had not – that is, to initiate a radically innovative practice that reengaged the aesthetics and the

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48 Ibid., 33.
49 Performance Art as discussed by Roselee Goldberg in *Performance Art*, “The history of performance art in the twentieth century is the history of a permissive, open-ended medium with endless variables, executed by artists impatient with the limitations of more established forms, and determined to take their art directly to the public. For this reason its base has always been anarchic. By its very nature, performance defies precise or easy definition beyond the simple declaration that it is live art by artists.” 9.
social after a long period of neo-Kantian autonomy and depoliticalization.\textsuperscript{50}

Additionally, by using autobiography and narrative in their performances, feminist artists were blurring distinctions between author and agent, subject and object, by intersecting the personal with the political. In exploring the relationship between women, feminism and performance, Wark references Lucy R. Lippard, a writer, curator, activist and feminist:

Its lack of prescriptive confines was certainly a factor, as was its potential for making the body the site for a newly politicized understanding of subjectivity, but the broad appeal of performance for female and male artists also had to do with how it was positioned, along with other anti-object art forms, as a countervailing force against the market-driven, commodity-oriented ethos that dominated the art world in the 1960s.\textsuperscript{51}

Through performance, a medium that dissolves conventional modes of prescribed or hegemonic social representation in the artists’ ability to decide where the subject is situated, my work considers the impact of gendered relationships and the ability of art production to provoke investigations in diverse areas such as: Social interactions in KC Adam’s networked performance work, \textit{Cyborg Living Space (2006)}, aesthetics and cyborgology in Orlan’s performative surgeries, and shifting subjectivities in the choreographed dances by Jennifer Lacey and Nadia Lauro.

\textbf{Studio Practice}

Within my studio practice, I consider evolving relationships between environments such as the Internet, interactive installation, machines, electronics and external media structures including the content, positioning or use of technology in social environments. My motivation for undertaking a two-part program of studio work and a

\textsuperscript{51} Wark, \textit{Radical Gestures}, 31.
written thesis is directly linked to the ways in which recent technologies provide rich and inclusive modes of information sharing thus this method becomes the framework for the structuring of my projects. Each section will provide questions and contextualizing discussions that I have identified as relevant to my studio practice while including various segments from my projects such as artist statements and performance manuscripts. Much of this document is modeled on a conventional thesis format, of attempting to anchor discussions within theoretical frameworks, while simultaneously integrating a creative or autobiographic writing style that is open or in an inconclusive form. One of my works in progress is a multimedia novella titled, *A Novella, Dot*. I have incorporated this work in progress throughout the body of the thesis in a segmented and arbitrary form to disrupt and engage the reader in a juxtaposed stream of thought. The insertion of this narrative is an attempt to provoke a tension, an opening, thus mixing theoretical premises and linear thinking to experiment with the notion of performance within text.

This Masters project has been challenging, because immediately aligning evolving artistic concepts with theoretical ideas in a short period of time can be an estranging process; yet the process provides another level of engagement in the narrative of the artwork. Connecting the artwork(s) with theoretical foundations provides a vocabulary or a way to initiate possibilities for further development. The studio projects emerged without predefinition and the project concepts and materials include a fictional historical narrative of women and technology, surveillance, analog and digital systems, web cameras and performance, subjectivity, online identity, networked communities,
mobile sound, and a concept for a networked, mobile bike office for the individual who wants to completely integrate the domestic with work.

**Conclusion**

The recent increase in women’s participation in technological research, development and artistic production combined with the criticality and experiential nature of art-based inquiry provide significant reasons to combine the disciplines of Women’s Studies and Visual Arts to explore women’s use of new media art. Throughout the next three chapters of this thesis I will explore theoretical and studio concepts that encourage an engagement in new media art concepts to produce experiences where alternative forms of subjectivity could emerge. Heuristic inquiries are presented in relation to the theoretical research that will be translated through appropriation of communicative, networked and technological media in the form of art projects or proposals. Throughout this thesis I build on a central argument that unfolds through a discussion of potential alternatives to Westernized dichotomies of embodiment and gender. Stemming from this central thesis are issues that negotiate alternatives to the continual segmentation of the senses and the constructs that have sustained a division between genders – especially in relation to women’s participation in the development of new technologies.

Another specific issue of debate is the connection of emerging technologies to a state of disembodiment. The mediated relationship between the body and communication technologies is the key determinant in this problematic association. It is here where new media art can focus on strategies for engaging the under-privileged senses (senses other

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than sight), and develop new ways to experience physicality through the use of ubiquitous technologies and networks. By examining the ways in which women’s new media art strategies challenge the historically embedded marginalization of women in relation to technology, it is possible to further understand how feminism has directly influenced women’s relationship to consumer technologies, specifically within an artistic framework.
Chapter One: Performativities

This is about the development of a character. This is also about the construction of a persona. This is about the gradual creation and maintenance of someone who emerges through an author within a geographic or psychological boundary. This is about psychogeography and social interaction. This is the consequence of environment, parallel chronologies, and experience. This is a disposition, it is alert, and it is brimming with naive motivations, needs and considerations. This is what she becomes when entering into conversation with you or with this place or when she considers something novel, an action she would not ordinarily attempt. This is about absorbing the external and in turn interpreting or placing or understanding through animated mimicry. This is imitation. This is a persona and part of it will stay here when she leaves and part of it will accompany her. It is impossible to know which part will remain in either course; transitory and permanent, mobile and constant. Sometimes you may be fond of her characters, other times detest them. Sometimes they are popular and admired; otherwise they are vile, boring, and narcissistic. Either way they are some kind of real attempt to exist in an environment that is volatile, ruthless and always in flux.

Let me explain.

Everyday is a performance; the degree to which this performance varies depends only on social exposure, effort and environment. This situation is akin to the mystery brown bag from the drugstore, the toy in the plastic dome from the vending machine, the card handed to you from the stack in the bingo hall, as unfortunately, the author has very limited control over the characters that emerge.

Speech which is not a simple medium of communication, the agent for the transmission of information, but which engenders being-there; speech interface between the cosmic in-itself and the subjective for-itself. Speech empties itself when it falls into the clutches of scriptural semiologies fixed in the order of law, the control of facts, gestures and feelings. The
computer voice – “You have not fastened your seatbelt” – does not leave much room for ambiguity. Ordinary speech tries by contrast to keep alive the presence of at least a minimum of so-called non-verbal semiotic components, where the substances of expression constituted from intonation, rhythm, facial traits and postures, reinforce and take over from each other, superimpose themselves, averting in advance the despotism of signifying circularity. But at the supermarket there is no more time to chat about the quality of a product or haggle for a good price. The necessary and sufficient information has evacuated the existential dimensions of expression. We are not here to exist but to accomplish our duty as consumers.  

This is a performance piece, and in its execution it is seeking an additional reading of the complex relationship between technologies and the self. This work will engage the body, contemporary communications technologies and the notion of alter ego connected to a human desire to represent oneself in multiplicity. She will engage in the performance of human communication, the gestures, sounds and networks in relation to the constructed tools to aid in this performance. Recently, with technologies such as ubiquitous computing, the Internet and the expansion of wireless networks into many developed or developing countries, for each unique context or electronic division of information, it is possible to present a customized self – a professional, personal, educational, or fantasy self – and then to display a variation, a novel performance through behavior, appearance, tone, signature, avatar, login name, electronic address, preferences, or data to represent these selves to the public.  

Gender, like the body, is a boundary concept.\textsuperscript{56} The production of fictional characters is commonplace within an online or networked community such as the Internet, where users can construct identities, histories and physical appearances as they wish others to experience them. Individuals can embody as many narratives as the imagination and leisure time allow. Yet as Jyanni Steffensen points out in \textit{Doing it Digitally: Rosalind Brodsky and the Art of Virtual Female Subjectivity}, “although cyberspace appears to represent a territory free from the burdens of history, it will, in effect, serve as another site for the gendered, racially marked body.”\textsuperscript{57} In this article Steffensen explores digital female subjects through the work of artist Suzanne Treister’s CD-ROM project \textit{...No Other Symptoms: Time Traveling with Rosalind Brodsky} (1999),\textsuperscript{58} using a cyberfeminist, queer, poststructural, and psychoanalytical perspective.\textsuperscript{59} Steffensen acknowledges that social scripts and behaviors do not change substantially through the use of a disembodied (cyber/digital/virtual) character and due to this transfer individuals may not use the increased channels of communication and information exchange in a new or better way. Quoting Anne Balsamo, Steffensen states that it is “just as likely that these new technologies will be primarily utilized to tell old stories – stories that reproduce, in high-tech guise, traditional narratives of the subject.”\textsuperscript{60} Steffensen positions the work of

\textsuperscript{59} Steffensen, “Doing it Digitally,” 209.
\textsuperscript{60} Ibid.
Treister and other cyberfeminists such as VNS Matrix,\(^{61}\) and offshoots of the group – the ALL NEW GEN and the DNA sluts as:

A concentrated effort on the part of cyberfeminist digital artists to transform the masculinist reproduction of female-sexed subjectivity. In these feminist-inspired virtual worlds, the female body is staged as active, intelligent, and polymorphously sexual. This constitutes a significant shift from the cyberpunk signification of female subjects as passive objects of male desire (the cyberbimbo), or as a metaphor for technology as “female,” threatening, and out of control (the fembot/vamp).\(^{62}\)

Steffensen argues that Treister, through this hypermedia text project, creates a cyberfeminist parody on the phallocentric signification of both masculinist cybertext and classic narratives of psychoanalytical theory. Treister’s main character is fictional, a virtual time traveler who also “is a successful technoscientist who carried out major historical research (and experimental interventions) in film, psychoanalysis, music, the Russian Revolution, the 1960s, and Eastern European history.”\(^{63}\) Treister’s character is active, subversive and defines her own subjectivity, therefore creating a new definition of cyberfiction and acting as an agent for women in the history of technologies while simultaneously confronting misogynist discourse such as Freudian psychoanalysis.

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\(^{61}\) The term cyberfeminism was coined by the Australian collective VNS Matrix in their 1991 cyberfeminist manifesto for the 21st century. In this manifesto VNS Matrix famously proclaimed, “The clitoris is a direct line to the matrix.” Julianne Pierce from VNS Matrix states:

*Four bored girls decided to have some fun with art and French feminist theory... with homage to Donna Haraway they began to play around with the idea of cyberfeminism... Beginning as if by spontaneous combustion, from a few hot nodes in Europe, America and Australia, cyberfeminism became a viral meme infecting theory, art and the academy. VNS Matrix, cyberfeminist manifesto for the 21st century. 1991: Adelaide.*


\(^{62}\) Steffensen, 217.

\(^{63}\) Ibid., 211.
Treister, through her female cybercharacter, ironically throws into stark relief the historical and cultural situatedness of psychoanalytic constructions of female subjectivity, of Freudian and Lacanian theoretical lack(s) in relation to time, space and the shifting landscape of modes of representational proliferation. Different cultural stories such as those told by Treister, present women with the powerful potential to rapidly undermine traditional Western masculinist reproductions of the female subject (actual or digital) and her position in the technocultural (including psychoanalytic) narratives of the twenty-first century. 64

My studio project, *Re: Materfamilias* (2006), uses a similar strategy as Treister’s in the creation of a fictional lineage based on women’s contribution to technological innovation (Image 5). *Re: Materfamilias* is a performance piece viewed in a reconfigured, portable, audio-visual 35mm slide viewer. It was commissioned for a traveling suitcase show curated by the McCleave Gallery of Fine Art (Images 6-7). 65

The theme of the exhibition was lineage, and the curators traveled with a suitcase filled with book projects by Canadian artists to Europe in search of the “McCleave” family – the name written on the found suitcase that inspired the traveling suitcase-gallery project. My work was based on the obsession to connect with or manipulate a mythical fantasy concerning an individual’s relationships to lineage. The piece would therefore mimic the very tropes of contemporary commercial identity formation and illustrate a relationship between the commodity object, the body and the culturally constructed notion of innovation.

*Re: Materfamilias* evolved from an interest in women’s participation in the

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64 Ibid., 230.

65 I participated in the gallery’s first exhibition which was a cross Canada tour where the curators, Michael McCormick and Adair Rounthwaite, traveled across Canada with the art works. The participating artists would host the gallery and an exhibition where they submitted their own suitcase art piece and displayed all of the other suitcases collected. At the end of the tour, there was a show at the ODD Gallery in Dawson City from September to October 2005 which displayed all of the suitcases accumulated during the trip concurrently (Images 8-9.) For more information about the McCleave Gallery visit the website at: http://www.mccleavegallery.com.
innovative stages of technology and science, specifically focusing on invention. The title *Re:Materfamilias*, was derived from, “re:” the abbreviation for regarding, often denoting the main content of an email message, one of the most widely used forms of electronic communication and “*Materfamilias,*” the Latin word for female head of household. This title connects the active participation of women in technological discourse, focusing on a privileged position; this neologism as a metaphor for reinvestigation, reinterpretation, return; the casualness of email messaging and the production of a pastiche of past events to represent cyclical critique.

According to many feminist scholars, modern science was developed on the basis of exclusion of groups other than the Caucasian middle to upper class male.\(^66\) Therefore, to focus solely on any form of *actual* invention would only perpetuate a patriarchal narrative.\(^67\) However, to create a hybrid, a combination of fictional and actual inventions, would humorously allude to a scientific façade while emphasizing a deconstructive model and still acknowledging the significance of technological and scientific achievements. In *Re:Materfamilias*, a history is invented, a narrative about a lineage of women inventors and their inventions, inventions that were obsolete upon arrival or rivaled at the moment of public witnessing. Each performance vignette within *Re:Materfamilias* connotes an important development in Western history relating to


\(^{67}\) Balsamo, 32. Balsamo quotes Alice Jardine, “Another possible solution is to reconstruct our reading practices – which is ultimately what Jardine advocates. She suggests that feminists begin to write new fictions, written through “the continual attention – historical, ideological, and affective – to place from which we speak (32). This, to me, perfectly describes Donna Haraway’s response to feminism’s “profound paradox,” and indeed, the founding imperative for her feminist manifesto; in elaborating a new fiction of feminist identity, her “ironic political myth” of cyborg citizenship, she enacts a new reading practice that takes the discursively constructed material body as a starting point and narrates a reconstructed fiction of gender identity.”
scientific and technological advancement such as the development of photography, the use of Electroconvulsive Shock Therapy, Morse code, radio transmission for mass communications, the Physiological Detection of Deception Examination and DNA testing.

*Re: Materfamilias* questions the selective nature of women’s unacknowledged or non-participation in early science and the fetishistic role of new technologies through the use of narratology, aural storytelling and performance. Yet the piece does not ask to rewrite history and include the exceptional, rather it is a satirical illustration of failed ideas, of flawed innovation, a parody. It is an exploration into the open and evocative quality of a concept defined as a mistake, ridiculous, or unlikely. The defective has no desire to critique in a didactic, patronizing way, it does not pose a parallel ideal of indifference or a method based in opposition, rather the absurd is used as an interlude, a fleeting, casual question that drifts in the atmosphere waiting but not asking to be grasped and propelled by the appropriate hands.

The performances are photographed and displayed on regular format slides, lit and magnified with a tabletop 35mm slide viewer. The slide viewer is fit with a custom-made case with a small peephole cutout, a miniature rendition of theatre spectacle, a small, private and individual viewing, similar to reading a book. There is a slot on the back of the viewer for slide insertion and a built in pocket area for slide storage. The six slides are accompanied by a “view along with the story” MP3 audio narration to be listened to with headphones. The piece examines lineage by recreating alternative narratives rather than re-tracing history. It is not in the least an undervaluation of family

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history but a means of coping with the homogeneous and often idealized stories that do emerge when one investigates paterfamilias-based genealogies. Within *Re: Materfamilias*, the body is always presented in relation to the technological apparatus or method. This relationship is important, as technological evolution has revolved around and mimicked corporeal manipulations; for example, the movement of tendons and muscles within the wrist led to the metal hinge, the study of avian flight led to the early flying machines (Image 10).⁶⁹ This connection will reemerge throughout my thesis as I explore the body’s relationship to technologies through my own work and also through the interpretations of different artists and theorists. I began my thesis with the project *Re: Materfamilias* because one of my initial objectives was to deliberate the relationship between gender and technology in a historical context.

There are a number of factors to consider in the examination of communication technologies in relation to performance art and gender. One particularly important issue is the emergence of machines such as the typewriter or computer, as tools to maintain societal control, oppress, automate, homogenize human production and enforce capitalistic principles.⁷⁰ The introduction of these communication technologies share common attributes within an economically driven environment; they were invented to support and improve the speed and accuracy of mass communications, thereby facilitating the transfer of messages related to politics, military defense or consumption. In *Digital Culture*, Charlie Gere states:

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⁶⁹ Leonardo da Vinci designed a multitude of mechanical devices, including parachutes, and studied the flight of birds as well as their structure. About 1485 he drew detailed plans for a human-powered ornithopter (a wing-flapping device intended to fly).

Invented in the late nineteenth century, as a response to the burgeoning information needs of business, the typewriter standardizes and mechanizes the production of language, reducing elements out of which it is composed to abstracted signs. In this is a paradigmatic product of the system in which it was developed. Like the typewriter and, by extension, Turing’s device, the operations of capitalism are fundamentally predicated on abstraction, standardization and mechanization, to ensure it can operate as a universal machine, capable of treating disparate phenomena as equal and interchangeable.\footnote{Gere, 19-20.} 

Thus the divisions between those who operate the machine, those who create the machine, or those who access the machine from an advantaged position require examination. Women have historically been exposed to relevant technologies in an operative role as opposed to active disseminators or inventors, and have not directly benefited from the economic profits of mass distributed technologies. Anne Balsamo discusses women’s relationship to new technologies in the chapter, “Feminism for the Incurably Informed,” where she states:

Women’s relationship to the technology of the workplace has been a troubled one. The expansion of clerical occupations after World War I resulted in the feminization of such occupations; women were preferentially hired over men because they were less expensive to employ.\footnote{Balsamo, 152.} 

The stratification of gender in the workplace in relation to machines such as typewriters and computers, has kept women in lower paying, less satisfying jobs. Balsamo argues that this is still the case as she references the work of Les Levidow who studies poorly paid immigrant women who make the tiny silicon chips for electronics and computerized devices.\footnote{Ibid., 153.} When women or individuals who are marginalized, interact with these technologies, (technologies that are positioned to operate as either powerful tools for advancement on the one hand while on the other hand, as oppressive, depending on
gender, race and class), using new media art strategies, they can in turn, create situations for critique and movement. Further, the production of public performances that use and subvert technologies will create environments or specific instances for women to participate as critical manipulators and innovators of existing and new technologies.

**History and Gender**

Diane Elam, in *Feminism and Deconstruction*, refers to Joan Scott’s analysis of feminist methods in regards to addressing history and gender. There are three models listed in this work for challenging traditional methods of writing and recording history. The first is a narrative that claims women’s essential likeness as historical subjects to men. The second strategy utilizes narratives that challenge received interpretations of progress and regress. Finally, there are those that offer a new narrative, different periodization, and different causes to discover the nature of both ordinary and notable women’s lives. These methods all rely on the recognition of gendered subjectivities, on a dualistic positioning that allows the separation of man, women, ordinary and notable. Elam states: “The writing of history should expose itself to the political question of what women will have been and thus destabilizing any claim to positive knowledge or restrictions on the non-category of women.”

Discovering accounts of the few women who overcame barriers to making intellectual contributions in the past, is one method that feminist scholars have used to study gender and technology. Another method is the study of particular social constructions that permitted this type of exclusion and marginalization. In understanding the constructs or conditions of a given location or

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75 Elam, *Feminism and Deconstruction*, 41.
period, researchers can locate power structures that are perpetuated and that exist in contemporary settings.

In Donna Haraway’s essay, “Modest_Witness@Second_Millennium,” the question is posed: “How did gender in the making relate to establishing what counted as objective and subjective, political and technical, abstract and concrete, credible and ridiculous?” This question is important to understanding the current political environment of technological discourse and fundamental to the development of gender roles within the carefully regulated “public” realm now and since the establishment of experimental scientific discourse in the late 1700s. Haraway states that: “It was the general absence, not the occasional presence, of women of whatever class or lineage/color – and the historically specific ways that semiotics and psychodynamics of sexual difference worked – that gendered the experimental way of life in a particular way.” Additionally, “Gender-in-the-making” suggests a social and political environment in which conditions that currently sustain implicit connotations of gender specific norms can be traced back to a precise historical period. According to Haraway, a number of factors contributed to “gender-in-the-making”; the development of the experimental way of science, the birth of the modest witness and the simultaneous exclusion of women and visible minorities from the development of an entire epistemological modal of “innovative” ideology. Due to the ability of a patriarchal society to maintain the metanarrative of the modest scientist and the ever present or perpetual witnessing of innovation within an exclusionary environment, contemporary

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77 Haraway, “Modest_Witness@Second_Millennium,” 229.
78 Ibid., 228
cybertechnical culture has maintained the structure formed in the initial period of technical reasoning from the 1700s.

Haraway uses an example by Elizabeth Potter to expand the concept of “gender-in the making” stating that it was “Men-in-the-making, not men, or women, already made. Gender was at stake in the experimental way of life, not predetermined.”

Further Haraway inquires:

How did some men become transparent, self-invisible, legitimate witnesses to matters of fact, while most men and women were made simply invisible, removed from the scene of action, either below stage working the bellows that evacuated the pump or offstage entirely? Women lost their security clearances very early in the stories of leading-edge science.

The historical inventor’s pose is easily recognized and instantly conveys authority to the inventor and the apparatus (Image 11). The proud, serious scientist propped beside the machine of their creation: this is the modest witness. The strong outward gaze confirms the status of the individual’s success and rank within the scientific or academic society. Women do not exist in the historical representation of technological innovation— and the woman inventor is still quite a novelty. Take for example the photograph of Natalie Jeremijenko available online (Image 12), an inventor, techno-artist and engineer photographed breastfeeding her young child. Jeremijenko integrates her professional career with care giving, bringing her children to lectures and meetings thus directly challenging the social norms that prevent women from participating in such roles simultaneously. Jeremijenko’s work:

explores the transformative potential of new information technologies and alternatives to dominant information technology design paradigms. Jeremijenko's mission is to salvage technology from the idealized,
intangible concept of 'cyberspace' and apply it to the disorderly complexities of the real world, often with disturbing outcomes.\footnote{31}

Jeremijenko seeks to reclaim the perception of technology as a form of perfection, its uncontested power within society, and also the gendered division of production that has up until recently maintained narratives that excluded the presence of women.

What are the current contributing forces in maintaining gendered and dualistic subjectivities? Wendy Brown states that: “Technical reason is currently one of the strongest contemporary forces erasing both standing and significance of the subject; it is far more potent than the subject-disintegrating effects of postmodern theory.” Brown defines technical reason as “the dominant and unchallengeable discourse framing and ultimately suffusing all social practices.” The hegemonic spread of technological discourse has indeed marked contemporary society. The movement of materials and information are coincident with the development of a globally networked and connected market to exchange every material or non-material item imaginable. This market depends on the exploitation of human labor and natural resources to remain profitable. A climate of doubt is barely audible and therefore the growth of technological ideologies given their strength, ability and speed facilitate the expansion and seepage of technical reasoning rapidly into new terrains. In fact, as Brown states:

Technical reason extends its hegemony when other legitimating discourses of a culture – political, religious, or scientific – are fractured or discredited, a process that is a defining feature of postmodernism. Technical reason conjoins with postmodern fragmentations of political and

\footnote{83} Brown, \textit{States of Injury}, 33-34.
social power to make critical articulation of domination extraordinarily difficult, especially if this articulation is attempted in a modernist idiom.84

It is here that the somewhat peripheral and undefined position of artistic production provides an entry point for women to use technologies as subversive and powerful implements to create critical discourse in relation to the unbalanced distribution of power that has circulated around the use of technology. When a projected capitalistic function is stripped from a specific technology, machine, or tool through appropriation into an art practice, new meaning and alternative discourse challenges the universal activity of adopting and sustaining technologies without question. Within a critical art practice it is possible to create work that encapsulates subtle reconfigurations of technologies to provide hybrid commentaries between social and political critique, ironic gestures of entropy and an awareness of women’s and other marginalized individuals recent history in relation to Western technology and science. The intention of the project Re: Materfamilias was to examine the mediation between the body and social technologies from a gendered perspective within a Western and historical context. Through parody and failure, this piece attempts to create a framework for questioning the prescribed use of technology and the segmentation of the senses due to modern technologies.

The relationship between gender and technology is challenging to disentangle as scientific and technological language is embedded with a very specific illusion of neutrality and the mask of the interface posing as opportunistic and fair. Yet one could query – if culture is a discourse of technological literacy and technology has become a prerequisite of culture, then what are the underlying hegemonic structures that sustain the

84 Brown, 33-34.
exclusion of many and support the perpetuation of limiting narratives? It is important to understand how a position that is simultaneously comforting, seductive and horrific can be negated to imagine the possibilities for a post-gendered identity to function in creating alternative narratives.

It is at this precise juncture that the reproduction meets the appropriation; where either a fissure or a spiral can occur, as this is the moment when the performance begins. The performance that is self-aware is allowed disillusion, is permitted to create an alternative narrative, if only even a slight gesture towards a reality. The performance of course is often a replica, fully aware, yet avoiding fraudulence in its ability to remain self-referential. The performance will enact a stolen gesture, removed from context yet recognizable to members of the shared realm from which it has been captured, both re-represented and functioning as a reality capable of exerting a full spectrum of critical consciousness. 

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**Studio Project**

**Text from Re: Materfamilias (2006)**

Narrator: Tracing and recording my family history is not a sensational type of activity. It comes nowhere close to the contributions, unique ideas and inventions created by my ancestors dating back thousands of years. In fact, I’m not even a competent genealogist as I could only locate six relatives, even though the family stories I have heard speak of each generation producing one brilliant materfamilias. That would mean at least every twenty-five to fifty years there was a genius born with the last name Andres. If I was to trace back to the 16th century I should discover approximately twenty-five materfamilias – that seems like a lot of work though. The surname name never

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85 Andres, *Dot, A Novella.*
changed, most find this questionable but it was a family tradition to always keep the name whether the woman married or not – changing the name was out of the question. As you will see by the last materfamilias it was not I that inherited the grand innovative gene. Enjoy the show.

**Eyewitness, Spectral Spectator: Image Upon Death, 1881**

Invented by Katerina Andralinja Andrés

This apparatus evolved from a series of complicated experiments and was dependent on the extraction of at least one unharmed post-mortem eyeball (Image 13). It was also essential that the eyeball had maintained a state of zero evaporation of both the aqueous and vitreous humor. The placement of the eye into the device transfuses the last live image witnessed before death. The experienced operator is then able to view this single image fleetingly, while conscious, similar to a waking dream. It would have been perfect for murder cases or other events where there is speculation upon the cause of death.

**Status:** Failed. Katerina also worked as forecaster in traveling circus therefore the results were attributed to hoaxery. The spectral spectator as many other early protoscientific discoveries was discarded as a falsifiable claim.

**Thought Inverse: +/- Processor, 1909**

Invented by Anna Jacqueline Andrés

The Thought Inverse +/- Processor implanted rapid sonar wavelengths upon the brain, which through an electrostatic charge could reverse existing thought patterns in a patient (Image 14). Anna had manipulated the triboelectric effect, a type of contact electrification in which certain materials become electrically charged when coming into contact with another different material and are then separated. Her method was similar to
electroconvulsive therapy but instead of erasing reoccurring brain activity it produced new thought formations in the exact opposition to those pre-existing. The process involved emerging the patient’s head in a salt water holding tank and then activating the sonar static generator. The generator contained the instructions to be transmitted to the patient through Morse code. Before the experiment would successfully invert the patient’s thought patterns, the patient had to learn to translate Morse code. It was tested on a number of different patients but most successful in cases where hypersensitivity produces chronic negative emotions, extreme pessimism or optimism, depression, shyness, and cruel thought patterns. It was tested on the criminally insane, those who experienced hysteria, post-partum depression, vagabonds, the introverted, chronic consumers, and additionally children between the ages of nine and thirteen for preventative measures.

**Status:** Failed. Electroconvulsive therapy, also known as electroshock or ECT, was invented in the 1930s and was a much quicker therapy especially due to the fact that many doctors were reluctant to teach their patients the Morse code language. The aim of ECT is to induce a bilateral grand mal seizure (with contractions and twitching of both sides of the body) which lasts at least 20 seconds. Before the discovery of muscle relaxants, ECT was given unmodified. The patients were rendered instantly unconscious by the electrical current but the strength of the muscle contractions from the electricity and the subsequent fit at times led to complications such as compression fractures of the spine or damage to the teeth.

**Fowl Voice Translator: Syrinx-O-Morph, 1929**

Invented by Ticha Dee-Dee Andrés
The Syrinx-O-Morph converted unintelligible tweets, melodies, and other audible sounds into geographically bound human language – GIBHUL (Image 15). GIBHUL is defined as the language used in the majority of the defined geographical area, usually 10km by 12.5km. The device was invented for usage by Government spies, hobby entourage, advertising executives, salespersons, homemakers, mathematicians, and unemployed individuals. Birds and other small urban dwellers have an inconspicuous position in which they can provide valuable information to those who require it. Appropriate bird specimens are hatched, or rodents are born, raised and dwell in urban cities. Most often their nests, hives, social grounds, breeding and feeding situations are located on telephone poles or in proximity to electrical transmitting stations.

**Status:** Failed. Invention of coated coaxial cables and other insulating plastic formulas reduced the amount of radio-transitive signals to bird and audible insects, further experiments produced unreliable translations, hormones used in commercial birdseed, or in some cases other chemicals or formulations introduced to specifically reduce populations, produced a populace of birds and insects who translated mixed messages which lead to mass doubt of the syrinx-o-morph’s translative integrity.

**Hyperhidrosis Conversion: Smolygraph, 1943**

Invented by Sybil Abigail Andrés

Hyperhidrosis or excessive sweating is caused when nerves controlling the sweat glands become hyperactive (Image 16). The underarm areas are breeding grounds for odor-causing bacteria, as the armpits are among the consistently warmest areas on the surface of the human body; the sweat glands provide water, and armpit hair contributes to perspiration odor because of the increase in surface area. Through chemical analysis of
underarm perspiration, otherwise known as body odor or sweat, this machine is used to analyze the quality of underarm secretion of a subject in relation to a series of questions. This invention could be used to solve judicial cases as it procured extremely successful readings when the subject is presenting fraudulent answers due to hormonally unstable pheromones.

**Status:** Failed, development of the polygraph in 1935 and commercially available personal deodorant formulas in 1952. A polygraph or lie detector is a device which measures and records several physiological variables such as blood pressure, heart rate, respiration and skin conductivity while a series of questions is being asked, in an attempt to detect lies. A polygraph test is also known as a psycho-physiological detection of deception (PDD) examination.

**Follicular-Rudiment Recovery and Identification Strips, 1986**

Invented by Ruby Judith Andrés

Similar to contemporary pregnancy test, this process provides an instant four-point analysis (Image 17). Through dipping the hairs of two individuals, the status of their subsequent human-to-human contact within up to a week could be determined and categorized. This was a color-coded litmus test, dipped once in the formula and the reactive cardboard card would read one of the following:

1. Red: positive, contact within hours
2. Orange: perhaps, slight trace of contact (days)
3. Yellow: doubtful, at least one week or more between contact
4. Green: negative, in slight contact with other humans or no contact at all
**Status**: Failed, due to popularization of genetic fingerprinting and DNA testing. DNA profiling are techniques used to distinguish between individuals of the same species using only samples of their DNA. Its invention by Sir Alec Jeffreys at the University of Leicester was announced in 1985. DNA fingerprinting begins by extracting DNA from the cells in a sample of blood, saliva, semen, or other appropriate fluid or tissue. A common method is a buccal swab.

**Bodtubular Transfixitive Symphony, 2006**

Invented by Olivia Anne Andrés

A composition elicited between the discomfort of bodily organs and retired or otherwise malfunctioning musical instruments (Image 18). The body lies flat, balanced upon synthesizer connected to the digital audio workstation. The sensory pads integrated into lung, heart and three other major muscle groups are connected to alto tuba, 12bass accordion and amputated toe trombone. The body in relation to specific brain patterns attempts to manipulate concrete instruments; in doing so, sends musical inquiries to the sequencer which interpreters and produces a symphony of ailment. Coughs, a breath, a shiver, all of these simple gestures allude to the electronic conductor, who with hyper-straight posture, formulates a melodic whism.

**Status**: Inconclusive. 86

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Chapter Two: Subjectivities

As Donna Haraway states, “Social reality is lived social relations, our most important political construction, a world changing fiction.”\(^87\) You are not autonomous from anyone or anything. Every time you transmit information it changes form from the moment it leaves your body—informatics exist in a spectrum between subtle and radical reconfigurations of meaning. This may not interest you as the implications of these alterations are not directly transparent and it is almost impossible to predict and conceptualize the flow of information and its permeability. However, as an individual dispersing data of all sorts continually, you are part of this social reality already, indefinitely.\(^88\)

Given the history of patriarchal influence in science, technology and art, how do women using technology, or technologically referential language and methods, begin to locate an active subjectivity through performance-based new media artwork?

Elizabeth Grosz’s book, *Volatile Bodies: Toward a Corporeal Feminism*,\(^89\) provides an enormous spectrum of possibilities in regards to changing the ways in which embodied subjectivity is positioned in much of Western philosophy and feminist theory. In this work, she explains how dualistic thinking prevents the formulation of new identities where the body can be reconfigured and different ways of viewing sexuality, difference and corporeality are possible: “Dichotomous thinking necessarily hierarchizes and ranks the two polarized terms so that one becomes the privileged term and the other its suppressed, subordinated, negative counterpart.”\(^90\)

\(^{87}\) Haraway, *The Haraway Reader*, 7.

\(^{88}\) Andres, *A Novella, Dot*.

\(^{89}\) Elizabeth Grosz, *Volatile Bodies: Toward a Corporeal Feminism* (Bloomington, IN: Indiana University Press, 1994).

\(^{90}\) Grosz, *Volatile Bodies*, 3.
Grosz states that: “Our conceptions of reality, knowledge, truth, politics, ethics, and aesthetics are all effects of sexually specific – and thus far in our history, usually male bodies, and are all thus implicated in the power structures which feminists have described as patriarchal, the structures which govern relations between sexes.” 91 In the first chapter of Volatile Bodies, Grosz discusses how dualistic thinking separates and hierarchizes two genders into binaries, male and female, and further, the division between the mind and body. For instance, given the mind and body, in many streams of body-based philosophical debate, the mind is privileged and the body is subordinated, and further the mind, soul or consciousness is linked with male and a state of disembodiment, where embodiment is linked to the negative counterpart, the female.

It’s only when new forms of subjectivity are conceptualized, that Grosz believes it will be possible to dissolve women’s social, sexual, and economic subordination to men. Grosz proceeds to examine and challenge a number of arguments by mainstream theorists and philosophers such as Foucault, Lacan, Merleau-Ponty, Deleuze and Guattari, in areas of their work where the discourse focuses on gender and sexuality. Yet according to Grosz, the discourse only presumes conceptions of corporeality. The main focus of Grosz’s investigation is to illustrate how the body can be moved from the borderlines of philosophical and theoretical and debate to the centre using a framework of corporeal analysis.

Anne Balsamo’s work on corporeal feminism, Technologies of the Gendered Body: Reading Cyborg Women, is aligned with the work of Grosz. Balsamo’s project is

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91 Grosz, ix.
“describing the ways in which gendered identities are technologically produced for material bodies.”

Balsamo defines corporeal feminism as a framework that:

draws its methods and interpretive practices from feminist cultural studies more broadly, to suggest that 1. The body is a central symbolic resource for cultural work 2. The discursive, symbolic body and the material body are mutually determining; and, 3. Gender is often a submerged discourse within many studies of the body and culture.

Balsamo illustrates how various technologies such as virtual reality, cosmetic surgery, medical imaging, and communications technologies read upon the body in relation to postmodern and feminist theory. Balsamo intends to “elaborate a model of analysis that ties subjectivity to “the specificities of sexed bodies” and that sees the subject “no longer as an entity – whether psychical or corporeal – but fundamentally an effect of pure difference that constitutes all modes of materiality.”

Through this project and investigation of the social and cultural effects of gender and technologies, Balsamo presents the notion of alterity in relation to body based feminism. A “notion of sexual difference as that which is at once originary and constantly displaced.” This term can be very useful for elaborating the technological production of gendered bodies in that: “Technologies of the body not only manipulate alterity, but also reproduce it. Sexual differences are both the input and output of the technological production of gendered bodies.”

Precisely. But it is also about my body, my reproduction, my sexuality, my mortality, and my humanity. It is about considering the importance of a state of embodiment that has been taken for granted or even trivialized in the texting, recording, replacing, deleting, sensing

92 Balsamo, 158.
93 Balsamo, 11.
94 Ibid., 158.
95 Ibid.
96 Ibid.
realm of communication technologies and the expectations we have of them- the responsibility we have passed to technologies to function in the same way each time we access them, the social we impose onto digital devices. If we think about Hayles’ work on the original Turing Test,\(^97\) which sought to differentiate between male, female and machine, and subsequently between *human* and machine, she asks her readers this question: “What do gendered bodies have to do with the erasure of embodiment and the subsequent merging of machine and human intelligence in the figure of the cyborg?”\(^98\) This question is potent as it unearths another one of those unspoken or unnoticed traits of advanced technology in relation to gender and the body. The fact that gender can be inherently viewed as analogous to a disembodiment, a devaluation of the embodied presence of half of humanity in the name of *intelligent* machines is a threatening and consequential notion for women and those who are not represented in the history of technologies. So perhaps women are already cyborgs or have always been the monstrous machine in the societal removal of their agency from their own bodies. Bodies that have never been autonomous but marked as Other? According to Hayles, “This construction necessarily makes the subject into a cyborg, for the enacted and represented bodies are brought into conjunction through the technology that connects them.” Hayle’s writes:\(^99\)

What the Turing test “proves” is that the overlay between the enacted and the represented bodies is no longer a natural inevitability but a contingent production, mediated by a technology that has become so entwined with

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\(^97\) Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics Literature, and Informatics* (Chicago, IL: University of Chicago Press, 1999), xi. Hayles describes the first rendition of the Turing Test: “You are alone in the room, except for two computer terminals flickering in the dim light. You use the terminals to communicate with two entities in another room, whom you cannot see. Relying solely on their responses to your questions you must decide which is man, which the woman.” This test was used by Turing to argue that if a human cannot tell the difference between a machine and a human, this failure proves that machines can think. Hayles explains how researchers and scientists referenced this experiment for over three decades while simultaneously valorizing a state of disembodiment through the development of intelligent machines and theories of artificial intelligence. xi in Prologue.

\(^98\) Hayles, *How We Became Posthuman*, xiii.

\(^99\) Andres, *A Novella, Dot*. 

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the production of identity that it can no longer be separated from the
human subject.\textsuperscript{100}

\textbf{Posthuman Body}

For the purpose of my study of gender and new media art, I have chosen to apply
a feminist framework of sexual difference.\textsuperscript{101} This perspective opposes a dualistic and
deterministic branch of philosophy in that the body, to those applying a framework of
sexual difference, becomes a site of social existence where the politics of history, biology
and culture constitute essential elements of understanding women’s experience. Grosz
proposes a series of criteria for developing a new understanding as well as the possibility
for a new language, wherein embodied subjectivity, a connection to the inside and
outside of the body and borders are reconfigured to view the body as a cultural product:

Given the coupling of mind with maleness and the body with femaleness
and given philosophy’s own self-understanding as a conceptual enterprise,
it follows that women and femininity are problematized as knowing
philosophical subjects and knowable epistemic objects.\textsuperscript{102}

How does this thinking or this language translate into a material form? What is
this body, this gender, this subjectivity and this reading of the body that can surpass the
contemporary, socially prescribed body to produce new meaning, insight and possibilities
in relation to our rigid attempts of seeing others and ourselves? Is this a different way of
being human, possibly a metaphorical or actual posthuman state? What is the posthuman
and does current philosophical debate connected to this “beyond human” condition
support a new subjectivity that can support and valorize the embodied subject? Can the
posthuman fit into a feminist debate as a possible direction for creating change either in

\textsuperscript{100} Hayles, xiii.
\textsuperscript{101} This group of feminist theorists includes Luce Irigaray, Helene Cixous, Jane Gallop, Judith Butler,
Monique Wittig, to name a few.
\textsuperscript{102} Grosz, 4.
actuality or as a metaphor? Finally, what are the narratives that must be recognized in order to overcome dualistic thinking where gender differences exist in hierarchies and embodiment is viewed as a negated location?

Hayles, a postmodern scholar who studies the relationship between literature and science, argues for the importance of preserving the human body in a seemingly posthuman environment. Hayles argues that it is important to decline the seduction of departing from the body by not embracing a disembodied existence that is now possible with ubiquitous communication technologies that are shaping the way we think, move and communicate with one another.\footnote{Hayles discusses notions of disembodiment as related to cybernetic and artificial intelligence research instigated by Manevich and Weiner in the first chapter of the book, \textit{How We Became Posthuman}, 1-24.} Hayles introduces the definition of a posthuman \textit{condition} as characterized by the following assumptions: “A posthuman view privileges informational pattern over material instantiation, so that embodiment as a biological substrate is seen as an accident of history rather than an inevitability of life.”\footnote{Grosz, 2-3.} This view allows a movement from a state of humanistic reasoning and the philosophical separation of mind and body to a nonreferential subjectivity.

Rather than consciousness serving as the centre of all existence, Hayles argues that consciousness is a result of an embodied existence:

The posthuman view considers consciousness, regarded as the seat of human identity in the Western tradition long before Descartes thought he was a mind thinking, as an epiphenomenon, as an evolutionary upstart trying to claim that it is the whole show when in actuality it is only a minor sideshow.\footnote{Ibid., 3.}

Additionally, “The posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses
becomes a continuation of a process that began before we were born.” 106 This assumption proposes a rejection of the body as a closed loop and that the biological aspects of the body share the mechanical attributes of a fabricated appendage or prosthesis. Instead of supporting the hierarchy of organic over synthetic, the posthumanist rejects the idea of an original bodily prototype and allows new borderless conversions to occur. The last assumption Hayles lists is that: “The posthuman view configures the human being so that it can be seamlessly articulated with intelligent machines. There are no essential differences or absolute demarcations between bodily existences and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals.” 107 Within the posthuman condition, a convergence between individual embodied experience and machinist evolution is perpetuated, gender potentially becomes obsolete with a complete avoidance of humanist nostalgia and technophobia.

Hayles focuses on the boundaries between bodies and the machine. The term disembodiment is discussed in depth in Hayles’ book How We Became Posthuman. In this work a discussion of Foucault’s analysis of the Panopticon is provided, where Hayles notes the occurrence of the movement from “the abstraction of power out of the bodies of disciplinarians into a universal, disembodied gaze.” 108 Hayles explains that, “when the bodies of the disciplinarians disappear into technology the limitations of corporeality are hidden, becoming a universalized body worked upon in a uniform way by surveillance techniques and practices.” 109 Hayles work is paramount to understanding the way in which the body functions in virtual spaces, an important concept when considering

106 Ibid.
107 Ibid.
108 Ibid.
109 Hayles, 192-195.
performance and the action of networking. Hayles analysis of Foucault continues as she points out that “Foucault fails to recognize the limitations of the Panopticon as an abstract concept, or as a metaphor, in doing so he simultaneously participates and deconstructs the panoptic mode of disembodiment.”\(^{110}\) Hayles also discusses Foucault’s tendency to universalize society by neglecting gender, age, race, and class within the power paradigm.

**Semiotic Body**

If, as Donna Haraway, Sandra Harding, Evelyn Fox Keller, Carolyn Merchant, and other feminist critics of science have argued, there is a relation among the desire for mastery, an objectivist account of science, and the imperialist project of subduing nature, then the posthuman offers resources for the construction of another kind of account. In this account, emergence replaces teleology; reflexive epistemology replaces objectivism; distributed cognition replaces autonomous will; embodiment replaces a body seen as a support system for the mind; and a dynamic partnership between humans and intelligent machines replaces the liberal humanist subject’s manifest destiny to dominate and control nature.\(^{111}\)

I want to consider the terms emergence, reflexive epistemology, distributive cognition and embodiment from the quote at the beginning of this section in relation to the body, technology and performance as a potential vehicle to engage these concepts. I will suggest that by aligning and combining a metaphorical posthuman with the embodied-body in performative practice, the artist will produce new relationships, discourse, positions and methods of locating the mediated body in a social context.

Emergence is the way in which complex systems and patterns arise out of a multiplicity of relatively simple interactions. How can modes of thinking or an active practice demonstrate emergent behaviors? Hayles defines emergence in relation to the

\(^{110}\) Hayles, 194-195.

\(^{111}\) Hayles, 288.
field of artificial intelligence as “properties of programs that appear on their own, often developing in ways not anticipated by the person who created the simulation.”

How can emergence replace teleology, which is defined as the attempt to explain the universe as having design and purpose and in terms of ends or final causes? By developing performance that incorporates cyclical structure, interaction and attention to site specificity the performer can set up the right variables to create situations where emergence within the performance is possible. The following is a segment from a script for a performance piece to illustrate an example of an emergent performance. The text reads:

There are five performers on a stage. There is a set with various objects and props but without any specific identifiable genre. Each performer starts in a specific position on stage and above this position is a sign with a number. This number is the mobile phone number of the performer, who is equipped with a headset and the instructions that they are to follow directions and negotiate with the audience through telephonic conversation. It is mentioned prior to this performance that the use of mobile cell phones during performances is welcome and encouraged. Please turn your cell phones on.

This excerpt from a manuscript for a performance piece, without excessive cues or directives, allows the audience to interact with the performers and one another. The audience and performers are now occupying a social space that collapses the parameters between authority, the stage and passive viewing. The communicative ability through a technological device can be utilized to create narrative, gesture or silence if the audience refrains from engaging the performers. This emergent performance model echoes early feminist performances such as Yoko Ono’s *Cut Piece* (1964), or works where the

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112 Ibid., 255.
113 Andres, *A Novella, Dot*.
audience or viewer completes or at least provides direction for the performance. Each time this performance is reenacted, in a different location, with a different audience the results will be unique and socially situated. The openness and emergent quality of performance work allows artists to explore complex ideas in direct contact with an audience therefore not compromising social relations for a fixed objective. The strategy of open-ended performance work lies in the agency of the performer to be both the subject and/or the object depending on the content of the piece and the inherent issues the work explores. Even if the performer must take on a passive role to enact the concept—this passivity is part of the question, and the audience, upon participation or refrain, will complete the piece, providing a reading that the artist or others involved in the act thereby witness and interpret.

Next, I will consider the term reflexive epistemology where reflexivity refers to circular relationships between cause and effect. Therefore a reflexive relationship is bidirectional; with both the cause and the effect acting upon each another in a situation that renders both functions causes and effects.\(^{115}\) In the third volume of the *Encyclopaedia of Philosophy*, epistemology is defined as a theory of knowledge and a branch of philosophy that studies the nature, methods, limitations, and validity of knowledge and belief.\(^{116}\) Reflexive epistemology must replace objectivism, the notion that there is a mind-independent reality; that individuals are in contact with this reality through sensory perception; that humans gain objective knowledge from perception. In


order to shift from objectivism to reflexive epistemology in relation to a performative art practice the artist must create layers of subversion within a work. By this I am referring to the ability of performance to present ideas through personas that are multidimensional and question numerous ontological stances through their enactments.

The artist Natascha Sadr Haghighian does this in her work where the investigation of information and systems of knowledge is her primary initiative. Her system for creating art involves the following three elements, “researching, maneuvering, and doubting.” In 2002, for the European Biennial in Frankfurt, Haghighian was invited to create a situation. She decided to examine the Frankfurt Zoo as her project because it was a significant social site in Frankfurt given its history as being the first zoo to be paradigmatically recreated by the activist and environmentalist Dr.Bernhard Grzimek in the 1940s. In Haghighian's performance piece she invited three curators to meet and discuss the history and display strategies of the zoo without mentioning the connection between curating and zoo keeping. This performance was not publicly performed and only a related piece is reproduced later in a video work. The performance, a subtle questioning and critique of institutional power, indeed provides an alternative method for a gesture that investigates through a reflexive epistemological model. Bill Arning, in an essay for the exhibition *Sensorium*, writes on Haghighian's work:

For the artist, the fact that there are always multiple unacknowledged agendas shaping the production of knowledge does not in itself make those who work in various systems de facto “suspect”. Rather, Haghiaghian has chosen to reveal those factors that influence research in

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order to produce better truths— not “value-free” truths, but truths suitable for a complex world. ¹¹⁸

Distributed cognition is defined as a branch of cognitive science that proposes human knowledge and cognition are not confined to the individual. Instead, it is distributed by placing memories, facts, or knowledge on the objects, individuals, and tools in our environment. Distributed cognition is a useful approach for (re)designing social aspects of cognition by putting emphasis on the individual and his/her environment. Distributed cognition views a system as a set of representations, and models the interchange of information between these representations. These representations can be either in the mental space of the participants or external representations available in the environment. ¹¹⁹ Distributed cognition replaces autonomous will, a Kantian concept where:

An autonomous will is entirely self-legislat ing: The moral obligations by which it is perfectly bound are those which it has imposed upon itself while simultaneously regarding them as binding upon everyone else by virtue of their common possession of the same rational faculties. All genuinely moral action, Kant supposed, flows from the freely chosen dictates of an autonomous will. ¹²⁰

Performance that attempts to reposition or redefine subjectivity can investigate social forms of connectivity especially through the use of technologically aided networking projects. Joanna Berzowska’s electronic fashion work uses smart fabrics that interact with the body and modify their appearance in response to the wearer or, in this example, the wearer-performer’s emotions. This work takes an object and repositions it as an extension of the individual’s cognition in response to internal psychical states and

external environmental stimuli. Marie-Christiane Mathieu writes about Berzowska’s work in her article on the concept of the aître:121 “These are smart clothes in which the body itself functions like architecture in a state of constant transformation, like a structure that is never fixed, which never becomes definite.”122 These garments transform the space between the individual’s subjectivity and the external social. Instead of clothing that conceals or shields the wearer from the external environment, another layer of information is performed. In this performance the individual is now connecting to others in a new way; When the wearer of a smart garment is aroused the hem of a skirt will lift slightly, when feeling shy, a specific colored light pattern is evoked, when touched the memory of this caress becomes visual and imprinted on the fabric.123

The last exchange to consider from Hayles’ quote at the beginning of this section is “embodiment replaces a body seen as a support system for the mind”124 where embodiment is defined as the way in which human or animal’s psychology arises from the brain’s and body’s physiology. Embodiment is specifically concerned with the way the adaptive function of categorization works and how things acquire names. Some methods of embracing a movement towards an embodied subjectivity is by rejecting dualistic patterns or symbols when constructing concepts or visual cues, by practicing interdisciplinary work thus merging disciplines to seek hybrid commentary, and by

124 Hayles, 288.
creating new languages or ways of relating. Mathieu presents an interesting concept for thinking about new possibilities between space, subjectivity, and communication technologies. Mathieu writes about the aître in an article discussing artificial intelligence, distributed thought, subjectivity, and the space in which knowledge is situated. Throughout the article Mathieu continually develops the idea of the aître and what it can consist of. Mathieu writes, “The aître is thus a molding space, an inhabited and habitable place, and a containing content, which is potentially limited to subjectivity or to the movement of subjectivity to something else.”\(^{125}\) The aître is thus an interval that acts in duration by viewing the individual as a centre of indeterminacy, which possesses an infinite number of solutions, and unpredictably influences the outcome of the project. She aligns this concept to the work of feminist scholars Elizabeth Grosz and Donna Haraway, as these writers oppose rigid structures and like the aître concept, their ideas focus on exchange, circulation, movement and transformation. Building on Grosz’s analysis of architecture in relation to the aître, Mathieu writes, “it is one those architectural components we see as fluid, transmittable, and liquid, and which makes use of such variable materials as subjectivity, emotivity, mobility, and action in their mutant sense.”\(^{126}\) This idea is also present in Donna Haraway’s work whereby connections are made between the human and the computer in order to heighten reality. In Haraway’s monumental text “A Manifesto for Cyborgs: Science, Technology, and Socialist-Feminism in the 1980s,”\(^{127}\) a relationship is established that draws a parallel between computers and humans, forcing us to reconsider the space of the body, of distributed knowledge, domesticity and subjectivity. Mathieu suggest that: “We must re-examine our

\(125\) Mathieu, 131.
\(126\) Mathieu, 133.
\(127\) Haraway, 7-45.
conceptions of the body, territory, and architecture, which underpin our living arrangements.”

Machine Body

Embodiment never coincides exactly with the body, however that normalized concept is understood. Whereas the body is an idealized form that gestures towards a Platonic reality, embodiment is the specific instantiation generated from the noise of difference. Relative to the body, embodiment is other and elsewhere, at once excessive and deficient in its infinite variations, particularities, and abnormalities.

A six year old boy asked me why the brain cannot exist in the feet or stomach and why it must be located in the skull. I told him that the brain must be at the top of the body, as it controls everything one does. To this answer he repeated “controls!?” with great excitement, possibly picturing an intricate system of levers, flashing lights, and dials in his head. As soon as I spoke, I regretted my choice of words as I was unprepared for his inquiry and not in the practice of articulating creative notions of embodied cognition. It is unfortunate that my impromptu response to such a question, given my impressionable audience, fell into such a Cartesian categorization. However, I did begin to question the reason for my response and the underpinnings of such an extemporized answer regarding the relationship between thinking and the body. According to Elizabeth Grosz, a Cartesian viewpoint states that:

The body is a self-moving machine, a mechanical device, functioning according to causal laws and the laws of nature. The mind, the thinking substance, the soul, or consciousness, has no place in the natural world. This exclusion of the soul from nature, this evacuation of consciousness from the world, is the prerequisite for founding a knowledge, or better a science, of the governing principals of nature, a science which excludes and is indifferent to considerations of the subject.

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128 Ibid., 148.
129 Hayles, 196.
130 Grosz, 6.
Grosz rejects a Cartesian philosophical position as a form of dualistic logic. She writes that it is important to “avoid the impasse posed by dichotomous accounts of the person which divide the subject into the mutually exclusive categories of mind and body.”

Human materiality is in continuity with organic and inorganic matter but also at odds with other forms of matter, which see animate materiality and the materiality of language in interaction, which make possible a materialism beyond physicalism, a materialism that questions physicalism, that reorients physics itself.

The modern period, beginning in the first quarter of the 1900s in Western European countries, was marked by an industrial revolution, mechanical reproduction and the initiation of mass consumption, aided by steam powered factories and newly developed transportation channels such as inter-continental steamships, automobiles and rail. Mass produced consumer media such as magazines, books and radio proliferated and were accessible to the general public for the first time. This period, in which automation and industrialization had completely transformed urban life, a young Slovakian psychoanalyst and neurologist Victor Tausk, identified a schizophrenic condition in patients that he named The Influencing Machine.

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131 Ibid., 21.
132 Ibid., 22.
133 The main effects of the influencing machine are the following: 1. It makes the patient see pictures. When this is the case, the machine is generally a magic lantern or cinematograph. The pictures are seen on a single plane, on walls or windowpanes, and unlike typical visual hallucinations are not three dimensional. 2. It produces, as well as removes, thoughts and feelings by means of waves or rays or mysterious forces which the patient's knowledge of physics is inadequate to explain. In such cases, the machine is often called a 'suggestion-apparatus.' Its construction cannot be explained, but its function consists in the transmission or 'draining off' of thoughts and feelings by one or several persecutors. 3. It produces motor phenomena in the body, erections and seminal emissions, that are intended to deprive the patient of his male potency and weaken him. This is accomplished either by means of suggestion or by air-currents, electricity, magnetism, or X-rays. 4. It creates sensations that in part cannot be described, because they are strange to the patient himself, and that in part are sensed as electrical, magnetic, or due to air-currents. 5. It is also responsible for other occurrences in the patient's body, such as cutaneous eruptions, abscesses, or other pathological
The schizophrenic influencing machine is a machine of mystical nature. The patients are able to give only vague hints of its construction. It consists of boxes, cranks, levers, wheels, buttons, wires, batteries, and the like. Patients endeavor to discover the construction of the apparatus by means of their technical knowledge, and it appears that with the progressive popularization of the sciences, all the forces known to technology are utilized to explain the functioning of the apparatus. All the discoveries of mankind, however, are regarded as inadequate to explain the marvelous powers of this machine, by which the patients feel themselves persecuted.134

The condition outlined in Tausk's article, “On the Origin of the ‘Influencing Machine’ in Schizophrenia,” illustrates an individuated personal fear, lack of power and autonomy accompanying the mental illness, perhaps connected to the environmental realities imposed by the introduction of high-speed, automated machinery, factories, pollution, mass production, noise, and other effects of the industrial period. The patient is convinced that the “machine” has moved into the body and taken full control of her conscious and unconscious thoughts and behaviors. She trusts no one, not even her doctor as she begins to believe that everyone around her is also under the effects of this “Influencing Machine.”

Jeanne Randolph references the Influencing Machine in an essay about the relationship between art and technology. Randolph outlines a number of important aspects within this relationship, namely that a “subjective and sociopolitical life can develop side by side, deepened by technology,” and further “these dangers are embedded in the very ideals that the technologically endowed society holds, especially in the ideals
of progress, reason and efficiency."\textsuperscript{135} Randolph illustrates the relationship between a culture’s philosophical positioning of the body through a comparative analysis of two devices; a paranoid symptom referred to as the Influencing Machine and the theory of the Roman machine. The Roman Machine exists in complete opposition to the Influencing Machine as it was invented by Romans only to increase leisurely pleasure. Randolph referencing Hanns Sachs states:

The Romans would not invent a machine that substituted for the human body. The Romans invented only machines that serviced their leisure. This Roman Machine, the opposite of the Influencing Machine, would remain entirely innocent, guiltless. It serves to delight and is operated by friends. The effect of the Roman Machine is to reassure that physical, intellectual and emotional pleasure belongs entirely to oneself.\textsuperscript{136}

The Romans engaged in humanistic based philosophy connecting consciousness and the body, which was quite different than the cultural situation the patient under the control of the Influencing Machine would experience. The Influencing machine was discovered in the midst of the rapid spread of technological discourse, industrialization and automation replacing previously human performed tasks.

The contemporary American artist Zoë Beloff, created an online Internet artwork and installation in response to Tausk’s writing on the Influencing Machine. She writes:

In my installation I wanted to make connections between the experience of hallucination, thought transference in psychoanalysis and the development of broadcasting technologies. Most importantly I wished to find a form to embody Natalija's subjective experience. I was particularly struck, reading the original case history, by how clearly she was able to describe her imaginary machine. The trunk had the shape of a lid, resembling the lid of a coffin. In the first interview she described the limbs as entirely natural parts of the body. A few weeks later, these limbs were not placed on the

\textsuperscript{135} Jeanne Randolph, \textit{Psychoanalysis and Synchronized Swimming: and Other Writings on Art} (Toronto, ON: YYZ Books, 1991), 44.
\textsuperscript{136} Randolph, \textit{Psychoanalysis and Synchronized Swimming}, 42-43.
coffin lid in their natural form, but were merely drawn in two dimensions. The inner parts of the body consisted of electric batteries. Those who handled the machine produced a slimy substance in her nose, disgusting smells, dreams, thoughts and feelings. At the same time I wanted to allude to the development of real influencing machines, in the form of radio and television in 1930's Germany, extending the definition of psychosis from the individual to society.137

Beloff’s artistic interpretation of Tausk’s work, conducted a hundred years after the thought of incorporating electronic technology into the body, could only be conceived by individuals suffering from mental illness, is a paradoxical reflection. Now technology has moved into the body marking a period in which individuals are fully automated by contemporary Influencing Machines yet still lacking a subjective standpoint to move from. These influences range from commercial media that provides determined ideals of aesthetics and identity to the corporations that manufacture processed food products. The Influencing Machines are present through invasive healthcare methods and over prescribed pharmaceuticals and also in the bureaucratic systems in which all people must enter and perform to be counted as humans. Such influences also include the jobs that require individuals to distort their bodies – arms at 90 degrees and eyes fixated on illuminated screens for eight or more hours a day. Modern cities are also under these controlling influences in they are designed for the efficient flow of humans and machines – where movement, volume and behavior are dictated. Last but not least, these influences are in the knowledge that we are being perpetually observed, recorded and analyzed to make these systems of control perpetually tighter and more efficient.

Late twentieth century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing

and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively and ourselves frighteningly inert.\textsuperscript{138}

\textbf{Natural Body}

For the sake of indifference, in compliance with an overt saturation, the moment when hands and circuits merged to seal the agreement with the electromagnetic halo thus initiated a celebration of mass consumption, over production and collective dilution. It was the moment when a particular history began its disjointed autobiographical recording.

They participate as yet another filament, a symptom of neglect in this history. A user of this synthetic product, compliant and dependent, natural and naturesque, a body that is learning to not see itself reflected as an object through a convivial monocle. This subset lacks specification and does not know how to define origin or destiny.

Placed without a synaptic connection to their own discourse, perhaps this void is more of a solution than they are aware. Sean Cubitt suggests that we think of accidental things: the contingent storms striking obliquely on the slime that knit the first molecule at the threshold of life.\textsuperscript{139} Imagine the volatile environment of these origins, this fluid, raging storm, the immensity of the charged air, more electric current in one cloudburst than all of the generators on earth. The greatest technology of all, forever held in awe and reverie, the bolt, the zap, the flare, the strike: “The electrical spark, the flash of an instant fecund with futurity, is our most powerful emblem of beginnings: not fear, but terror, reason’s complement,” and further, “wet electricity is the elementary human body, […] it is our bodies, at their conception and in their workings, that are dangerous, and whose delicate waterproofing is at risk and in question.”\textsuperscript{140}

\textsuperscript{138} Haraway, 11.
\textsuperscript{140} Cubitt, “Gardens and Grottos,” 90.
It has never been easy due to this uneasy, due to a violent conception, this relationship with that which we are, but that which we were created through an opposition of currents. An awkward tension thus makes life, this fissure of opposing forces. Is that why lately, everything must be either good or bad?

If technology can be accused of placing a medium between us and the world, still we must accept that experience, upon which all knowledge must be built, continues, and that experience must be an experience of the technological. There is a technology that has shaped the woods and fields as much as the roads and houses, each mired in deep with history – a quality of time of which nature was always by definition ignorant. Indeed, if anything, only ignorance is natural – and to be avoided as such.141

It is the contested relationship between foreground and background that can be esteemed. It is exactly the strength of such contrast, the separation, the good and the bad, the categories that are assumed to make understanding possible.

Yet this dichotomy never makes a happy ending, this creates a yearning, a grass-is-greener, thicker, lush, a thirst.

Sometimes I imagine growing moss on my surface; I imagine the amplified sensation of space felt through the movement of the soft hair-like leaves would allow me to navigate as a cat or an insect with whiskers or antennae. I would allow my spores to spread into the keyboard of this machine as an extension of my own body; As it is a device I frequently spend many hours connected to. I wonder which keys would tolerate germination, the ones I use more frequently or less? Which letter location would the first sprout emerge from, how many days before the green foliage would completely conceal the keypad? Could the strength of the roots eventually cause the plastic to split? Would roots and stems begin to emerge from the speakers or USB plugs as they often grow through denser materials such as cement or brick? I would like to smell a moist, chlorophyll scent continuously, even if the humidity was heavy and overbearing and I could not type for the enveloping foliage. To grow moss I would find a moss specimen that I like, put it in a

141 Ibid., 91.
blender with a can of cheap beer or buttermilk, blend it and then paint it onto the surface of where I would like it to grow. Violent. I think I will try my legs first.

**Cyborg Body**

The Cyborg is our ontology; it gives us our politics. The cyborg is a condensed image of both imagination and material reality, the two joined centers structuring any possibility of historical transformation. In the traditions of “Western” science and politics – the tradition of racist, male-dominant capitalism; the tradition of progress; the tradition of appropriation of nature as a resource for the productions of culture; the tradition of reproductions of self from the reflections of the other – the relation between organism and machine has been a border war.¹⁴²

Haraway's work that was originally written using the concept of the cyborg as a metaphor has materialized. Gender is becoming an open category where the reality of a subjectivity claimed in spite of geography, history and social position can occur, at the very least as a principle. But how does gender function with the proliferation of technological determinism? Where are the specific nodules of difference and how were these interruptions placed strategically or accidentally on the frame that supports current technological ideology? How do women and other visible minorities originally excluded from the fabrication of technological and scientific discourse occupy and decide which locations are suitable under a history of such restrained conditions? How do the relationships between the developers and users differ from the past and what are the points in which examples of clarity emerge? Also, how does a discourse that in many instances claims to have transcended gender encourage the erasure of oppressive gender roles and fully incorporate the broadening and democratization of citizenship?

The cyborg can be read in two ways: as a coupling between a human being and an electronic or mechanical apparatus, or as an identity of organisms embedded in a cybernetic information system. In the first sense, the

¹⁴² Haraway, 8.
coupling between human and machine is located within the body itself –
the boundary between the material body and the artificial machine is
surgically redrawn. In the second sense, however, the boundary between
the material body and the artificial machine is socially inscribed, at once
indistinct and arbitrary, but no less functional.\textsuperscript{143}

Anne Balsamo discusses the cyborg in her work on gendered bodies and
technology. She suggests that “the cyborg has the potential to not only disrupt persistent
dualisms that set the natural body in opposition to the technologically recrafted body, but
also to refashion our thinking about the theoretical construction of the body as both a
material entity and a discursive process.”\textsuperscript{144} The cyborg body therefore acts as a
compromise or a transformation. Women have been excluded from the technological
through a social ordering where their relationship to invention, machines and cybernetics
has been marked as foreign and positioned as opposite or in flux. The cyborg body
acknowledges this otherness and proposes alternatives and different frameworks for
gendered identities. Balsamo writes:

The female body is at the centre of this transformation of the social order.
As a cyborg, simultaneously discursive and material, the female body is
the site at which we can witness the struggle between systems of social
order. In the process, new forms of gendered embodiment emerge which
on one hand may display inherited signs of traditional dichotomous gender
identity, but which also reinvent gender identity in totally new ways.\textsuperscript{145}

Sometimes, you make me nervous, and then I lose that soft easy
humor, that giddy improvisation that can volley between friends. I
cannot say exactly what I am thinking as I sensor and clip the verbal
until only awkward utterances remain. Through text this is avoided yet
often personal or emotional statements are misread. Removed from a tonal
context words change, meanings are lost or a misreading is present. I
disappoint myself consistently and you are disappointed through sensing

\textsuperscript{143} Balsamo, 33.
\textsuperscript{144} Ibid.
\textsuperscript{145} Ibid.
a removal of ease. How then, can I speak to you? Through what medium should we select or can we channel for our interactions? Perhaps, it is not a medium but a location in an interpersonal relationship that is yet to be identified. It is a form of patience that has slipped into obsoletism by an attempt to apply the rate of informatics transmission to that of relational development.  

The French artist Orlan (Image 19) uses plastic surgery and networked performance to perform and broadcast her own physical transformation through medical intervention. Since 1990, she has conducted a series of choreographed “performances” during which her face is surgically altered through the use of plastic surgery and presented to the public through live Internet streaming and public broadcasting. Her objective is not to become beautiful – as in the projected message that the media connects to such activity, but rather to propose that objective beauty is unachievable and the process of trying to obtain it is absolutely horrific. Her work, which is deemed highly controversial, also consists of feminist and psychoanalytic theory, in relation to art history. Orlan defines her work as Carnal Art, which she describes as “a self-portrait in the classical sense, yet realized through the technology of our time.” In the book *The Cyborg Experiments*, editor Joanna Zylinska introduces the discipline of Cyborgology which she defines as “a performative discourse in an Austian speech-act sense: it constitutes itself only through articulation and reiteration, participating in the constant redrawing of discursive boundaries.” In this book the work of Orlan and the artist Stelarc is considered in terms of a futuristic unknowable human where multiple ideas for rethinking the body are illustrated. The purpose of this collection of essays on the two

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146 Andres, *Dot, A Novella.*

147 Orlan’s website is the official database for her work and can be accessed at: http://www.digibodies.org.

artists is, according to Zylinska, an analysis of “the interactions between human and machine and asks whether this opening of the sacrosanct space of the flesh can be seen as a ‘shift from the human to the post-human’.” 149

Julie Clark writes about the work of Orlan and Stelarc in relation to ideas of the posthuman, the uncanny and the liminal. She states that Orlan’s work “echoes the societal fear of technology as depriving us of our (imaginary) control over the world.” 150 Orlan's work operates by illustrating the controlled and modified body of women under the scrutiny of medical and media technologies. She then uses these technologies to continuously recreate her own self identity and her own subverted subjectivity as a critique of this implicit control. Clark writes: “Through her gory surgeries Orlan unmasks the tension that gender identities are fraught with in our culture and highlights the role that media and medical technologies play in their construction.” 151

The utopian or metaphorical cyborg Balsamo and Haraway reference is not a postmodern interpretation of the body disappearing or the transfer to a disembodied state through downloading the human consciousness into a machine. This cyborg is not about manipulating, implanting or imprisoning the body by computers or other electronics. Instead a feminist reading of the cyborg imagines heightened sensibilities and mutual collaboration between species, a rereading of the segmentation and control of bodies and a focus on the importance of embodiment and lived social relations.

149 Zylinska, “Extending McLuhan into the New Media Age,” 5.
Chapter Three: Sensitivities

I wish to communicate with you.
I would like to take this opportunity to tell you.
I am excited to show you something.
I can use speech, text, gestures, sounds and symbolic objects.
I can take you somewhere or I can take you nowhere.
I can abandon you.
I want to engage you in something that engages me.
I want to disrupt you and I want you to become my audience.
I want all of your attention.
I want you to take away my privacy, to tether myself to you, even though we have never met.
I want you to trust me before you are ready and listen to me and believe my words.
I want you to disengage and reengage with me continuously until you no longer feel timid.
I want you to love tools, to depend on them to satisfy your desires, to integrate with them and bend your body to their forms.
I want you to be public all the time for me and for everyone you know or want to know.
I want you to betray me and then trust me to forget.
I want this to become an endless loop, infinite and slow.\textsuperscript{152}

Where is the networked media artwork or performance located? How does new media art that is situated within networks utilize mobility, space and location as a political and artistic strategy? In this section, I discuss interaction, community, mobility and activism through studio concepts and new media art that operates in networks. Networks as intrinsically undefined and mutating allow emergent behaviors to develop through unforeseen interactions. These interactions or moments of interpolation between the artist and participant within the amorphous digital space provide an escape of definition or segmentation that would occur if, for instance, the work was only located in a institutional gallery. New media artworks that are conceptual and often situated in alternative spaces facilitate the widening and dissemination of critical discourse as such work operates in undefined or unclaimed locations. Through this mobility, opportunities to form new platforms and diverse situations are discovered. These moments of merging

\textsuperscript{152} Andres, \textit{A Novella, Dot}. 
art with the everyday or non-art specific communities, challenge definitions of authorship, social space and geographies, both physical and imagined.

Modern urban space is a highly contested location, from the controlled and planned movement of people to the continually redefined parameters of public and private. Space is not only physical, but also virtual and exceedingly political. Since the 1950s, cities have been designed to regulate and dampen the social aspect of the urban soundscape. Exterior building materials were exchanged from stone and masonry to noise absorbing insulating materials with interiors designed to create immersion into silence, isolation from the exterior and as a safeguard from a new category of dispute; noise. ¹⁵³

Noise, in terms of communication can mean a breakdown, an inability to transfer a message from sender to receiver and back again. Noise interferes, it interrupts, it is viewed as a negative, it is something to be controlled and reduced. Noise is the result of industrialization, urban density and increasingly technological communications. Noise can affect how well a mobile telephone conversation can be heard in a public space, or be equated to how many email spam messages fill up an account or pop-ups assault when browsing online. Noise has transferred from the sonic to the digital just as geographical space can now be thought of in different terms when one is creating and maintaining metaphorical spaces and relationships on the Internet.

¹⁵³ This idea is taken from a lengthy paper on the senses and segmentation in Caroline A. Jones essay, “The Mediated Sensorium,” Sensorium, 26-27.
From the control and departmentalization of the masses in public and private spaces through urban planning, transportation systems, borders, and architecture to the individual now separated and connected through networks of telecommunication devices, a new space for social interactions is expanding the ways in which everyday social interactions are performed. Consumer electronic devices for communication and entertainment have further mediated the senses. The iPod allows individuals to create their own personal soundscapes, simultaneously public yet isolated and immersed in a private music collection. The cell phone and the PDA have produced a population of tethered individuals, perpetually connected, a 24-7 social contract. Sherry Turkle writes about the notion of tethering in relation to communication technologies and our social selves. She defines tethering as “how we connect to always-on communications devices and to the people and things we reach through them, who/which in a certain sense now live through them, always ready-to-mind and hand.”

When observing individuals in public space, I notice novel gestures related to the use of technological devices that have been adopted in the past five to ten years. These gestures are ever increasing in number and variety depending on the preferred device; the perpetual hand to the ear while using a cell phone; finger plugged into the ear to silence the exterior; gaze far from present and located in a conversation or thought geographically bound to another time, place and individual; the head or foot moving in time to a private rhythm; multi-tasking appendages, typing, thinking and listening simultaneously. In this article Turkle mentions

the loss of “gestures of privacy,” where prior to the widespread use of communication devices, people talking to one another would create privacy by leaning closer, shielding with a hand or seeking a solitary space for intimate conservation. These gestures are falling out of practice as it seems more and more of our “connections” with the people we know are meditated by electronic devices. It is very common for individuals to conduct loud and/or personal one-sided conversations anywhere, anytime. Turkle writes: “Increasingly, what people want out of public spaces is a place to be private with technology.”

Personal devices for communication, work and entertainment create an enhanced mediation of embodied experience and they also potentially lend to an enriched understanding of the self and environment; the senses are engaged fully, one can experience total immersion, amplification, virtuality and instant feedback with more ease than ever before.

I told him he was polluting his brain by wearing headphones while walking outside. He thought I was an idiot. I don’t care, it’s my opinion. I tried it once, listening while walking down 5A Street. It was a Vancouver soundscape piece and I was entirely removed from my immediate environment. It was a virtual transport to another place, another season, another individual’s walk – an acoustic immersion. Maybe we should be able to hear each other’s walks as we walk our own walks? Maybe we should be connected to a different individual’s aural soundscape?

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155 Turkle, “Tethering,” 221.
156 Ibid., 221.
157 Andres, A Novella, Dot.
Let me walk in your shoes for a day, while you walk in mine. I can hear all of your conversations, intimate and banal; I hear your silences, while simultaneously, you listen to mine. I know where you travel; I listen to your friends, your family, and those who meet you for the first time. I know a little more about you. We exchange our lives aurally and experience each others’ realities while remaining fixed in our own physical existence. The ability to understand another’s location begins through direct immersion into a new environment. To create meaning, one must be able to experience empathy, an exchange or sensitivity that could be lost in this world of strangers and friends. A shared understanding created through holistic cues, through human senses that could become forgotten in this individualistic society of intelligent communication machines.158

Finally, We Hear One Another (2007), is a proposal for an audio exchange device for two people. The exchange devices are disguised as wearable garments, consisting of small speakers to be worn near the ear and a series of microphones to capture the sounds around each of the individuals’ bodies (Image 20). In the exhibition the participants will be able to choose from different head or neck garment styles in which the audio exchange device will be located. The device uses wireless technology allowing the two participants to hear the sound from each other’s immediate environment while mobile and in physically differing locations.

This subtle exchange of sonic signifiers allows participants to develop a relationship to another environment, a remote social reality and a locative immersion. To investigate another space through the interface of a mobile individual removes the prescriptive function from the communication technology that often mediates the relationship between bodies, space and technologies. This project is exploring the ability of media to create new meaning and location through sensory cues, yet it also dismantles the controlling nature of such technologies as they only serve as a channel for the

158 Kelly Andres, Proposal for Finally We Hear One Another, 2007.
participant to gain a sense of environment and subjective experience through experiential cues.

I plan to complete this work at the ISEA 2008 (International Symposium of Electronic Arts), Artist in Residency program in Singapore in late spring to early summer. The piece would then be exhibited at the Singapore National Museum at the end of July to August 4th, 2008.

**Active Bodies**

Each day this month, I watch the televisual recording of myself from the previous day. Prescribed movement, I attempt to reenact these activities, gestures, conversations, and situations. I am faithful to my surveyed-self; all interaction is kept at a salvageable distance. My mimicry of this person is improving. Elizabeth Grosz writes that: “Mimesis is particularly significant in outlining the ways in which the relations between an organism and its environment are blurred and confused - the way in which its environment is not distinct from the organism buts it is an active internal component of its ‘identity’.” And further that, “mimicry [for insects or psychosis for humans] is a consequence not of space but of the representation of and captivation by space.”¹⁵⁹ Slowly we can understand one another, this identity who performs and this autoscopist who observes as duty. The gardens hours are noon until 4pm. We can be observed indefinitely, the entrance is unlocked and yet I am not quite visible. My exterior is liquid, my interior is electric, and this is the best I can be at any given moment.¹⁶⁰

The evolution of corporeal gestures in relation to personal communication devices, leads me to think about my relationship to the larger space of the constructed,
built, regulated, fabricated, electronic and automatic environment. These are the locations my senses are continually engaged with; the interior of my house, a building, our transportation, and the social spaces individuals meet within. How do I become part of my surroundings and do I change within each environment given a unique set of sensory cues? Does my body and do the bodies of those around me perform differently within such constructed environments with the addition of social technological devices for communication? How does the production and proliferation of new geographies within virtual environments or socially networked spaces affect the ways in which we perform our social selves?

By choosing to perform, I am defining an acute consciousness of these constructed environments and all of the characters, props, tactile tools and appendages that accompany me while I navigate a particular location. Sherry Turkle notes how even though our multiple selves existed prior to communication technologies it is essentially these technologies that:

make it possible to *cycle through* our various roles and to do so in the presence of new social actors and audiences. So, in the past, I did not have to perform my role as mother in the presence of my professional colleagues. Now an important call from my fourteen-year-old daughter instantaneously produces me as mother.\(^{161}\)

Does an integration of the social and public self change the designation of public space into a series of private bubbles when devices are engaged or are we, the individuals who use the devices changing and seeing one another as increasingly complex? I would hope that it is both; a shifting of social norms within public space and an expansion and acceptance of new and multiple roles for individuals that have been oppressed by Westernized dictates of acceptable public performance. This would suggest the locations

\(^{161}\) Turkle, 222.
and roles that have been historically closed to women and visible minorities, such as public space or the integration of professional work and domestic work, are becoming accepted as valued sites and roles. Technologies further mediate the body and definitely change our social selves, our performances, both public and private. The technologies create spaces, environments and experiences:

I feel different when I spend the day attached to my keyboard, I think and move differently while I am aware of surveillance cameras, my body jerks when a cell phone rings, and I am simultaneously powerful and vulnerable when I ride my bicycle through traffic and in the street.  

**Studio Projects**

The next section describes three of my studio projects that were developed to engage strategies of mobility, thereby accessing networks for interaction and community activism. They are outlined in the following order:

1. *Songbike* (2006- ), this project has been enacted at two different new media venues.

2. *The Urban Habitat Laboratory* (working title) (2007-2008), this is a proposal for a project that has been commissioned for a performance festival in October 2008.

3. *Pirate Radio Bike Fleet* (2007- ), this is a project proposal.

**Songbike**

*Songbike*, (2006-ongoing) (Images 21-22), is a mobile sound lab than collects urban soundscape, individual and collective narratives. Leigh Landy refers to Barry Traux’s definition of soundscape as “an environment of sound or (or sonic environment) with emphasis on the way it is perceived and understood by the individual, or by a

162 Andres, *A Novella, Dot.*
society. It thus depends on the relationship between the individual and any such environment.\textsuperscript{163}

The collected audio pieces are available from a website and can also be broadcast from a moving bicycle or speaker (and/or set up near the outside of the gallery or other building) into the community. The website serves as a hub or visual map of the community; connecting the physicality of the rides to the oral narratives and soundscapes collected throughout the duration of the residency. Each day of the exhibition, \textit{Songbike} ventures into the community seeking diverse individuals to talk to about their community and to provide a number of perspectives on the development within the city, memories of places that once existed, people that have come and gone, or anything that someone wants to share. \textit{Songbike} also seeks invitations from individuals for guided tours of the community and will solicit various representatives from the community to ride and talk. \textit{Songbike} connects individuals through their shared interest in community and aurality, self-produced content and piracy, connectivity and interaction.

The \textit{Songbike} concept was developed as a do-it-yourself (DIY), get out of the gallery artwork with the intention of sharing and rediscovering the soundscapes within communities. This project merges many topics: hi/low tech, recycling, community, street performance, art and sustainability. This project is important as it connects communities and allows individuals to share their own definitions and experiences through narrative while moving through urban space on bicycles. Many new and emerging technologies have been criticized as they lend to virtual interaction – an interaction that is often realized through an interface thus leaving out the physicality of face-to-face

\textsuperscript{163} Leigh Landy, \textit{Understanding the Art of Sound Organization} (Cambridge, MA: MIT Press, 2007), 106.
communication. *Songbike* intends to bridge the physical and the virtual, allowing individuals to connect the physical community to an online or virtual community.

This project was conceived at the Interactive Screen 0.6 residency at the Banff New Media Institute in August 2006, and was awarded an additional co-production for development (which in the end was unavailable due to resources and scheduling conflicts). In April 2007, a version of the project was conducted at Signal and Noise Festival in Vancouver where the focus was on urban soundscape. I also took the piece to CONFLUX 2007 in Brooklyn, NY where I recorded sound and streamed moving video and audio to the website. I would like to develop another version of this project that is much more about interaction and collecting community narratives through constructing a visual and auditory mapping of a community and the changes it is experiencing. Instead of collecting primarily ambient soundscape, I want to engage in conversations with pedestrians, spontaneously and invitational. I would like to create a multidimensional document of how rapid urban development is perceived by the individuals who live and work in various communities.164

**Urban Habitat Laboratory (working title) (2007-2008)**

The *Urban Habitat Laboratory* (working title) (2007-2008) (UHL), is a concept for a mobile, self-sufficient, sustainable, compact dwelling with communication ability (Images 23-26). The UHL is a multifunctional, portable lab and activist centre for living, working and socializing. The UHL incorporates green consumer technologies such as prefab, the 3R’s (reduce, reuse, recycle), water collection, sustainable materials, green roof, hydroponics, compact urban farming, and human powered transportation. The lab’s

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164 Media Invite for *Songbike* in Appendix 1
main activity is the dissemination of information to community members as the lab moves around the city.

The lab is constructed from sustainable wood product such as plyboo (bamboo panels), FCS wood (renewable wood resource, locally grown and responsibly forested wood product), and reusing discarded building materials. The laboratory is mobile through the use of a human powered tricycle. A number of experimental technologies are utilized in the Urban Habitat Laboratory: a removable greenroof/livestock pasture, a unique water collection system, a soil-less garden, and solar energy. The unit is designed to be aesthetically attractive using warm colors and vibrant fabrics while also embracing design that attentively considers every inch of space for the purpose of working, living and engaging with visitors.

The Urban Habitat Laboratory has a mandate to exist in both the physical community as well as the virtual. In addition to a website specifically for the activities and projects of the UHL, the lab is fully equipped with web cam streaming capabilities thus transforming the office into a mobile broadcasting unit. When the lab is active in a community, the facilitator will be available for video or instant messaging sessions with individuals who have access to an Internet connection. The lab will relocate daily and the location will be based on finding a wireless Internet connection, much like early nomadic hunter and gatherers following herds of animals.

The lab is a resource and activist centre, acting on behalf of visitors (physical and virtual). The lab’s mission is to work with others in the community by responding to issues, concerns and ideas, thus using the lab to create change through demand.\footnote{I must recognize the influence of Nicholas Bourriaud’s work in the development of this proposal, specifically his writing on Relational Aesthetics. See: Nicolas Bourriaud, Relational Aesthetics, trans. by}
role as facilitator of the lab is to partner with visitors and act specifically to address their concerns regarding each unique community the UHL visits in the form of mediation such as aligning groups or individuals with political figures; subtle gestures such as planting a garden in a parking lot; aligning entities with similar interests; or providing planning or technological resources.

The *Urban Habitat Laboratory* is inspired by groups and artists such as N55, a Danish collective who creates manuals for utopist living and working solutions, Andrea Zittel and her series of living units, Rirkrit Tiravanija and his community based installations, and the Future Farmers for their inspirational community projects and sustainable sculpture concepts. The UHL seeks collaboration and guidance from community members, never expecting anything from our interactions yet providing a space for discussion and idea generation.

The *Urban Habitat Laboratory* is a mobile interventionist centre proposing a playful concept of self-sufficiency and an anti-apathetic model of living. The lab would like to situate itself throughout diverse communities as a relational site; socially engaging with community members, providing a virtual bridge from physical to online environment and demonstrating a conceptual model of utopist living. While the first UHL will be a prototype of sorts, all technologies and plans will be available on the website so that anyone can create their own *Urban Habitat Lab*. The first iteration of UHL will be built and performed for *Mountain Standard Time Performance Art Festival (M:ST)* in October 2008. This festival is located throughout various galleries in Calgary, Banff and Lethbridge. Alberta.

Simon Pleasance & Fronza Woods with the participation of Mathieu Copeland (Dijon, FR: Les Presses du rel, 2002).
Pirate Radio Bike Fleet (2007- )

In this proposal, a fleet of 10 reconditioned bikes, painted in a recognizable color like the EU rental bikes, are available for participant’s use throughout the city for the duration of the exhibition or festival (Images 27-28). Each bike has a radio receiver and speakers securely mounted to the frame; ideally it would be appropriate if the radio and speakers were human powered as well. From a central location the mobile broadcast micro-radio station, located on an adult tricycle, hosts programs where a series of invited speakers – political, activist, academic, musicians, curators and sound artists are creating the content that is broadcast into the public from each of the mobile bikes for the duration of the exhibition.

This concept emerged through a previous project called Songbike (2006- ), a mobile soundlab for bicycles. Where Songbike was a collector of urban soundscape, the Pirate Radio Fleet will act as a disseminator of collective and individual voices. For each presentation, the programming will be entirely unique depending on the festival, the event, the individuals who are produce the content, and the geographical location. The audience becomes mobile and active instead of passively viewing or partaking in the artwork. The participants who ride the bikes in the community are active broadcasters and the individuals who transmit are active as well, able to disperse critical information, new ideas, ways of thinking and listening to the public. This project would fit any new media venue or festival and it also succeeds on another level in regards to social responsibility as active transportation, community empowerment and public reengagement are serious issues in every city.
Expanded Bodies

It is increasingly apparent how the unconscious and unaware performances of our integrated private and public selves are continuously folding into one another due to the increased use of communication devices. The ability to integrate multiple aspects of various social personas through networking devices continuously redefines social space. Definitions of space are changing and new forms of social are emerging through the electronic and the body’s mediation by technologies. The networked space is both private and public, undefined, connected and yet yielding individualism. It is the location for a set of performative gestures that are constantly in flux, rapidly evolving and shifting thus allowing the artist to utilize the novelty of the network in order to suggest direction.

Where are the connections between such spaces? Where can physical meet virtual and what kind of works invoke fusions of such dualities: neither liminal nor awake, hi and lo-fi, neither visual nor tactile but located somewhere undefined?

In *Chaosmosis: An Ethico-aesthetic Paradigm*, Felix Guattari defines subjectivity as the product of individuals, groups and institutions and from the point of view of such production as being plural and polyphonic and recognizing no dominant or determinant instance guiding all other forms according to universal causality. In this work Guattari seeks to produce an understanding that enlarges simplistic definitions of subjectivity as the relationship between the individual and society by defining three problems that lead to the expansion of the term. Guattari defines these three issues as the interruption of subjective factors at the forefront of current events, the massive developments of

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machinic productions of subjectivity and finally, the recent prominence of ecological and ethological perspectives on human subjectivity.\(^{167}\)

As discussed previously in the work of Elizabeth Grosz, the expanded body image can be conceptualized, with the inclusion of Guattari’s definition of subjectivity, to integrate machinic appendages into the body image. The ability of the media to influence and form parts of a subjective self through its psychical grasp is an important factor when considering the body engaged with its surroundings, and not only physically in a three-dimensional environment but also digitally, virtually or through sensory space such as the aural. Guattari seeks to reconfigure definitions of cultural specificity based on the unification of semiotic productions in mass media, informatics, telematics and a psychological subjectivity. He writes:

Just as social machines can be grouped under the general title of Collective Equipment, technological machines of information and communication operate at the heart of human subjectivity, not only within its memory and intelligence, but within its sensibility, affects and unconscious fantasies. Recognition of these machinic dimensions of subjectivity leads us to insist, in our attempt at redefinition, on the heterogeneity of the components leading to the production of subjectivity.\(^{168}\)

Grosz devotes an entire chapter in her book *Volatile Bodies* to the French theorists Deleuze and Guattari; however she warns her readers that many feminist theorists find their work problematic and she has chosen only segments of their discourse that are useful for feminist reconfigurations of the body, particularly for rethinking materiality, subjectivity and retranscribing the mind/body opposition.\(^{169}\)

\(^{167}\) Guattari, *Chaosmosis*, 1.

\(^{168}\) Guattari, 4.

\(^{169}\) Grosz, 163-164.

Some issues Grosz has with D&G’s work are fourfold. First the metaphor “becoming woman” is a male appropriation of feminist struggles as it depoliticizes their radicality. Second, these metaphors neutralize...
The American choreographer, Jennifer Lacey, and French visual artist, Nadia Lauro, have created a number of performances for stage and video installation that critically examine the ways in which women’s bodies or specific subjectivities are constructed in social space and the media, as signifiers and in relation to space or architecture (Image 29). An article by Alexandra Baudelot examines three of their productions, *This is an Epic* (2003), *$Shot* (2000) and *Chateaux of France* (2001-2004), where the viewers “experience of reception”170 is discussed in relation to the artist’s intentions to alter the audiences passive relationship to the performers. By integrating dance with ordinary objects, electronic technologies and ambiguous spaces or sets, Lacey and Lauro “outline the features of a world in which form, although seemingly preponderant, steps aside in favor of its tangible and organic dimension. It is a reading for grasping the underside of the images which fill the everyday environment.”171 Lacey and Lauro’s work deconstructs popular genres that are propagated by the visual mediums that have worked to integrate through our senses to monopolize our conceptual landscapes. For instance in the work, *This is an Epic* (2003), the dancers wore XXL Anoraks that concealed their faces and bodies, costumes from popular horror films, and props such as an ax and various electronic equipment, that suggest some sort of drama is to commence. Yet nothing dramatic unfolds, allowing the expected psychological tension to dissolve and the viewer must then only focus on the performing bodies and the tensions created in

relation to one another and the space. In $Shot (2000), the title\textsuperscript{172} purposely suggests that an important moment is likely to occur within the performance – instead a constant and even tension is created between the two dancers as their crude movements repetitively suggest the gestures of pornography, yet not quite, through neutral poses and compartmentalized intertwining of the two bodies. Baudelot suggest that Lacey and Lauro “opt for continual deformation: bodies, objects and spaces are molded by reciprocal dissemination.”\textsuperscript{173} Lauro, who designs the costumes and sets for the performances “is interested in objects whose immediate functionality and everyday use hide their impact on bodies.”\textsuperscript{174} These typical and ordinary objects used in the performances change as the bodies of the dancers illustrate new movements and gestures in relation to one another. Baudelot notes: “These objects are disconnected from their primary function in order to graft onto the body like prostheses, which make it possible to explore new functions and sensations.”\textsuperscript{175} It is this element of the work that provides the connection between new subjectivities, communication, technological devices and performance as: “It is a performative object whose plasticity is constantly on view as a place of intersection and transformation, a place of (re)creation, bordering on spectacular appearance.”\textsuperscript{176} The body, through interaction with the object distorts itself, produces an experience or a \textit{lived social relation}.\textsuperscript{177} Baudelot explains: “For Lacey and Lauro, it is a question not only of putting the body to the test in these different environments, but also

\textsuperscript{172} In the porn industry a money shot is when the male actors are paid as the final ejaculation announces the end of the scene.
\textsuperscript{173} Baudelot, 92.
\textsuperscript{174} Ibid.
\textsuperscript{175} Ibid.
\textsuperscript{176} Ibid., 93.
\textsuperscript{177} The term “lived social relation,” is borrowed from Donna Haraway.
of testing the environments themselves by the body.”\textsuperscript{178} The artist’s “use real spaces, imprinting upon them, through the framing and the movements of the bodies, the relentless artificiality of various popular visual genres.”\textsuperscript{179}

**Mediated Bodies**

There was something so strange about our webcam interactions. They left me missing you more. And saying goodbye - closing the screen felt absolutely cruel. Together, we decided that the more virtual the communicative medium, the more distant and alienating the experience became. The telephone is warm, nearly intimate. Your voice, actually touching my ear, the soft static sliding though cables, currents, waves of warm tones. With the webcam, I could see you, hear you, but the screen held you, tight, flat, cold, disinterested, and ambiguous. We were disconnected through this screen, fragmented and distorted by a volatile wireless connection and the actual geographical reality of physical distance.\textsuperscript{180}

This section considers the mediated relationship between the body and communication technologies. Building on my previous arguments that performance provides the artist with the ability to reposition the active body into new gestures, narratives and relationships this section looks at the strategies for artistic investigations of technology and the tensions that arise during the encounter between the body and technological devices for communication and entertainment.

In Grosz’s analysis of the body image she brings forth the work of Paul F. Schilder (1846-1940), a neurologist who defined and studied body image beginning in the 1920s. His work focused on the psychology of the body image and many of Freud’s theories strongly influenced his work. For example, Schilder was interested in social and

\textsuperscript{178} Ibid., 96.
\textsuperscript{179} Ibid., 97.
\textsuperscript{180} Andres, *A Novella, Dot.*
interpersonal attachments and investments, the analysis of narcissism, and libidinal drives in the formation of self image. In Schilder’s model of the body image, a sociohistorical and cultural analysis was applied thus allowing the notion of the body image to be constructed through the subjects contact with the environment. In his work he suggests that the body image cannot be purely derived from corporeal sensations and that “the body image is as much a function of the subject’s psychology and sociohistorical context as anatomy.”\(^{181}\) His research also suggests that “the body image is extremely fluid and dynamic; its border, edges and contours are “osmotic”– they have the remarkable power of incorporating and expelling outside and inside in an ongoing interchange.”\(^{182}\) This research on body image provides insight to understanding how humans become attached to objects or view external entities as extensions of the body. In this stream of thought, objects that are used frequently by an individual become incorporated into the body image as psychical and libidinal attachments or extensions. Further, Grosz explains how an intermediate category of objects exists; objects or instruments that are part of the body image through the performances enacted between the body and the object. Through this collaborative performance, the body image expands out of the body to include discrete objects and an intermediate category is created “midway between the inanimate and the bodily.”\(^{183}\) Therefore, “the body image is the result of shared sociocultural conceptions of bodies in general and shared familial and interpersonal fantasy about particular bodies.”\(^{184}\) Grosz further states that:

The body image is not an isolated image of the body but necessarily involves the relations between the body, the surrounding space, other

\(^{181}\) Grosz, 79.  
\(^{182}\) Ibid.  
\(^{183}\) Ibid., 81.  
\(^{184}\) Ibid., 84
objects and bodies, and the coordinates or axes of vertical and horizontal. In short it is a postural schema of the body. The body image is the condition of the subject’s access to spatiality (including the spatiality of the built environment).185

Women performance artists frequently produce work that critically analyzes the perpetuation of hierarchies around the body, and since the 1970s much performance-oriented work has been produced regarding technological discourse. Many of these works use the performing body as a starting point and then incorporate social technologies as a discursive juncture, for example, the German performance artist, Rebecca Horn, uses a contrived set of bodily extensions for her performances. In her work, *Berlin Exercises in Nine Pieces: Exercise 1: Scratching Both Walls at Once, 1974-1975*, Horn attached spidery, cane like forms made from fabric and balsa wood to her hands (Image 30). With these prosthetic fingers she slowly touched the floor and walls of a narrow room as if tentatively judging the limits of the space around her. Horn used the appendages to measure the dimensions of an interior space. The scratching of the body extensions becomes audible, transforming touch into a sonic signifier.186

Technologies are often extensions of the body, a manipulation of a sense or appendage to make a physical activity easier or more pronounced. From early tools made of stone or bones to skin-based broadband networking technology, our technologies are often different variations or ways of enacting basic human activities. The question remains: How do we construct systems to understand exactly what it is that we create, and further, what are the implications of these inventions on the development of human bodies and social relations?

185 Grosz, 85.
But perhaps more significantly and less abstractly, the body image is capable of accommodating and incorporating an extremely wide range of objects. Anything that comes into contact with the surface of the body and remains there long enough will be incorporated into the body image — clothing, jewelry, other bodies, and objects. The body image is as much a function of the subject’s psychology and sociohistorical context as of autonomy — the body image is extremely fluid and dynamic.¹⁸⁷

In *Sensorium*, edited by Caroline Jones, the mediated relationship between the body and technology is the focus for a large art exhibition and a compilation of essays by contemporary artists, theorists and researchers. Jones writes the introductory essay where she explains how the human sensorium has always been mediated and further that embodied experience through the senses is actually how we think. She then proceeds to illustrate how society designs technologies to foster the fantasy that bodies are separate from the mind that “controls” them, therefore, the body must be understood as the locus of desire for new technologies and their necessary limit. In her analysis, Jones reviews the social history that produced individuals as subjects and trained them to adapt to increased levels of mediation. One particular period Jones focuses on is modernism where she argues that “modernism organized the body in particular ways to colonize various sensory and bodily functions — working bureaucratically to enhance aesthetic relations to those functions, and to give them a commodity address.”¹⁸⁸ Jones asks her reader whether new media artworks such as sound art, tangible media, installation and interaction, actually question mediation itself or just recreate it in another form. Jones suggests the possibility that no schema can capture the diversity of any present and can only aid in further aestheticsizing the fragmentation and colonialization of the body that was modernity’s signal achievement through the invention and adoption of color field

¹⁸⁷ Grosz, 80.
painting, hi-fi sound, and synthesized and commoditized fragrances and flavors. Jones states: “The sensorium is at any historical moment shifting, contingent, dynamic, and alive. It lives only in us and through us, enhanced by our technologies and extended prosthetically but always subject to our consciousness.”189

Where Grosz positions the extended body image in the performative relationship between bodies and objects, Jones sets up a convincing argument where bodies have historically experienced segmentation and bureaucratization through the adoption of specific technologies and prosthesis such as top hats, canes, monocles. These objects or prosthetics thereby changed the way the human senses have learned to perceive the environment. Thus, through the articulation of bodily extensions, technologies and tools, bodies experience acceleration, force, zero gravity, super human strength and perfect memory caches therefore setting up the body’s portals as separate aggregate functions, a dividing of senses, perhaps even an instable body image?

In Grosz’s analysis of phenomenology, she focuses on the work of the French theorist Maurice Merleau-Ponty (1908-1961), who defines this philosophical subject as the understanding of the relations between interiority and exteriority, and consciousness and nature. For Merleau-Ponty the mind is always embodied and based on corporeal or sensory relations.190 His work states that the body is not an object but a vehicle in which the individual has relations with objects. Living in the body is a “phenomenon experienced by me and thus provides the very horizon and perspective point which places me in the world and makes relations between me, other objects, and other subjects

189 Jones, 8.
190 Grosz, 86.
possible.”¹⁹¹ In relation to objects in the environment and how they are mediated between the body and the body schema, Grosz focuses on Merleau-Ponty’s writing on spatiality and temporality. In this analysis the embodied subject occupies a perspective on objects where space is understood through a bodily situation instead of through the individual senses. Grosz references Merleau-Ponty who states:

Our body is not in space like things; it inhabits or haunts space. It applies itself to space like a hand to an instrument, and when we wish to move about we do not move the body as we move an object. We transport it without instruments since it is ours and because, through it, we have access to space.”¹⁹²

To take the relationship of the performing body, object relations and the space of the network, I want to look at KC Adam’s work, Cyborg Living Space: Office (2006), where the body, networked performance art and interaction exist in a process of becoming (Image 31). The piece is described on Adam’s website:

Cyborg Living Space: Office is available for anyone in the world to view with access to the Internet but is closed off physically to the world. I will work my regular job in the Cyborg Living Space: Office but I can only communicate with others virtually. The Internet, my cell phone and chat programs will be the lifeline for myself. People who need to communicate with me can only do so through chat programs such as MSN, iChat & Yahoo Messenger. To prevent boredom and loneliness I will be entertained by interacting with robotic pets placed around the room. I have paintings that look like snow to remind me of the outdoors. The office furniture is designed to be ergonomic to my body so that my elbows and knees are at 90-degree angles to prevent carpal tunnel syndrome. Viewers can watch my progress via webcam.¹⁹³

¹⁹¹ Ibid.
¹⁹² Ibid., 90.
Similar to Jennifer Lacey’s and Nadia Lauro’s performances that recreate viewers expected experience, as previously discussed in this paper; Adam’s deconstructs and subverts another popular genre through the performative gesture, thus valorizing and segmenting technological space. In *Cyborg Living Series: Office* (2006), the metaphorical cyberspace is created while objects and the body are held inside of this constructed space to frame the simulation. This is an office – a public space. Access can be granted by requesting networked interaction with Adam’s. The public can be allowed into the office to watch and communicate with Adam’s, but only through the mediated surface of the screen. Inside this screen is the interface, which opens the three-dimensional space of the Cyborg Office into another three-dimensional space of the viewer’s location, converted from another interface. Through the screen within the screen relationship, Adam’s office becomes the enactment of a media *mise en abîme* or media enfolding upon itself into infinity. Adam’s installation and performance allows viewers access to her cyborg character; she is telematically connected and totally mediated, while auto-imprisoned in a void, sterile, human-built environment. This situation seems to simultaneously critique an isolated lifestyle dependent on digital communications as well as point out the possibilities for new forms of interaction.

She was so resistant; I really admired her still bringing her portable typewriter to work in the café. The striking of the keys was so distinguished amidst the cacophony of sounds; ceramic cups, glasses, forks and knives, grating, the squeals of metal on ceramic, shuffling and chatter. I was surprised when she brought a laptop one day. She was talking to it in no time at all.\(^{194}\)

\(^{194}\) Andres, *A Novella, Dot.*
**Studio Project**

In January 2007, I participated in an international celebration of Art by artists. My networked performance, titled *Bell Piano for Art’s Birthday* (2007) on Art’s Birthday,195 consisted of a live streamed Internet performance (Images 32-34). Completed during a virtual residency with Studio XX, a feminist centre in Montréal that supports new media projects by women, the piece consisted of a 45-minute live interactive streaming performance between Eastern and Western Canada; the gallery in Montréal and my residence in Lethbridge Alberta.

The concept was for viewers in Montréal to phone my mobile telephone with a message text or verbal message dedication for “Art”. The received message was then typed onto a manual typewriter, a *Remington Noiseless* model, which had been converted into the *Bell Piano*. This had been done by attaching a string to each key of the typewriter, which was then connected to a series of bells. Each letter or key had a different combination of bells attached to it, varying in size, shape, and location from one another on a length of fishing line – therefore, each letter was assigned a unique sound. As each typewriter key was engaged, it created a unique sequence of rings that were audible to the listener. The web broadcast was projected on a large outdoor public area in downtown Montréal in real time, streamed from 5:30-6:15pm MST on January 17th, 2007. For this piece I wanted to combine obsolete and new technologies, the typewriter, the computer, the sound of bells, the cell phone to create an interactive sound.

195 “Art’s Birthday” is an annual event that was proposed in 1963 by artist Robert Filliou (FR). He suggested that one million years ago, there was no art. But one day, on January 17th, Art was born. According to Filliou, it happened when someone dropped a dry sponge into a bucket of water. Filliou proposed a public holiday to celebrate the presence of art in our lives. In recent years, the idea has been adopted by a network of artists around the world. Artists have celebrated Art’s Birthday with parties, mailart, telematic networks using SloScan TV, Videophones, music composed for telephone lines, MIDI connections and the Internet. *Art’s Birthday Website*, http://www.artsbirthday.net, (accessed December 17, 2006).
The networked performance, and specifically the telematic performance, is located in many situations and environments as it allows the performer or artist to merge geographical locations with the non-locative network space. Steve Dixon writes: “Cyberspace should not be termed a space at all; to state the blindingly obvious, when supposedly in cyberspace we sit at our computer terminals.”196 This stated, the space that is created by conceptualizing a space, even a space that doesn’t physically exist becomes a location for ideas or discourse. Dixon acknowledges, “it must be conceded that the discussion of cyberspace as place(s) can be useful and highly appropriate, even though the notion is largely metaphoric and conceptual, and indeed romantic.”197

**Surveyed Bodies**

In *Digital Performance*, Steve Dixon provides a thorough overview of the use of webcams for both artistic and social investigations. Dixon emphasizes the underlying factors that contribute to the self-surveillant quality introduced by webcam, or as he terms it – the *surveillance society*. Although broadcast mediums have been critiqued for an implicit social coercion, a new level of oppression has been attributed to contemporary digital surveillance systems. Combining satellites and Global Positioning Systems (GPS), with computer technologies means that virtually every movement by any individual can be observed and catalogued. Privacy is negated and this is seemingly embraced by the public through a support measured in the consumption of reality television programs, and in public campaigns that propose the ideology that surveillance equals safety.

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Individuals who watch webcams are attracted to the documentary realism aesthetic, or the authenticity, the *liveness* and the belief that they are observing what someone is actually doing *now* in space. Dixon states “Liveness and actuality are the ontological co-joined twins of the webcam; and this inextricably links the new webcam media to the liveness and actuality of performance art.” However, “the webcam is a meditated experience; its transmission of the live is mediated, its particular form and documentary immediacy convey a unique sense of liveness, different from both theatrical and television experiences of the live.” 198

The liveness is definitely attractive – especially to individuals who feel disconnected from a sense of community or those who associate the notion of live or real-time broadcasting media with legitimacy. For example, there is currently a trend in which women are turning cameras onto themselves and into their most personal spaces. The intimate realm of the bedroom, the body, and electronic diary is released to the world visually, thus transforming private space into public. As Ana Voog (Image 35) claimed on her website (www.anacam.com): “i don't feel that my privacy is being invaded since I am in control of my cameras and i am choosing to do this. last but not least: i’ll do what I want when I want to. it is not a "show". who knows what will happen?” 199

The Internet has entered the home as television did fifty years ago. Laura Mulvey notes that the addition of the television to the domestic space challenged the previous, well-established separation between public and private by turning political events into spectacular drama acted out within the confines of the home. 200 The Internet provides a

198 Dixon, 444.
different experience than television as a user engages directly in the search for desired content. Felix Guattari reflects on the passivity of televisual consumption:

When I watch television, I exist at the intersection: 1. of a perceptual fascination provoked by the screen’s luminous animation which borders on the hypnotic 2. of a captive relation with the narrative content of the program, associated with lateral awareness of surrounding events (water boiling, telephone) 3. of a world of fantasms occupying my daydreams.\textsuperscript{201}

The Internet adds an additional layer of engagement because it is an interactive media and provides a somewhat democratic distribution of information. Anyone with access to a computer and an Internet Service Provider (ISP) can simultaneously become a producer and a consumer. The arrival of the Internet into many homes has eradicated the distance between public and private to the extent that many people are showcasing their entire private lives online paralleling the concept of reality television in broadcast media.

In the article \textit{Gesamtdatenwerk}, Roy Ascott states that a user should be challenged to see the interface not as a membrane separating out the computer as a discrete object from oneself, but instead viewed and designed as a doorway into data-space, a synaptic interval into human-computer symbiosis.\textsuperscript{202} This notion of conceptualizing the complete breakdown or deterioration between networked users creates a number of gaps in the hierarchies of power traditionally aligned with technological discourse. My brief investigation of online performance and differing modes of webcam surveillance was evoked by visiting Ana Voog's anacam.com website. Voog is an artist and musician who has taken her private life and made it accessible online with a webcam, digital photographs and an online diary. Once discovering the homecamming community I became aware of an entire network of sites consisting

\textsuperscript{201} Guattari, 16.
mainly of women who have decided to bring cameras into their homes and broadcast the activities of everyday life online. The first person to begin autobiographical homecamming was Jennifer Ringley, who in 1996, connected a webcam to her personal website in her college dormitory room thus allowing Internet users to watch her daily activities and interact with her through email (Image 36). The site was immensely popular; by its closure in 2001 the site was receiving over 100 million hits per week.\footnote{“R.I.P Jenni Cam,” BBC News, (January 2004), http://news.bbc.co.uk/1/hi/magazine/3360063.stm, (accessed March 4, 2006).}

Since Jennicam, thousands of webcams have emerged to create their own sites thus mirroring the Jennicam model.

Tina LaPorta is an artist who works with webcams and interactive website projects that perpetuate a breakdown of the private sphere through the use of technology. Her thoughts on this activity seem to suggest that the individual who establishes this type of viewing within their private domain maintains authorship within the parameters of a performance.

While the home represents a private space and the Web a public site, webcams become a window or an invitation to look, to gaze upon everydayness of the inhabitants of these sites. The distance between watcher and the watched is quite clear, and those who are being watched set the stage for their own exhibitionism, to be seen is to exist.\footnote{Lovejoy, “Art as Interactive Communications,” 264.}

What does it mean to survey surveillance, intentionally self-directed or unknown to the observed subject? What are the implications associated with the ease of appropriating an activity that has been critiqued as a direct removal of power, a control and monitoring technique used by dominating and suppressive institutions? How can an individual, one who is at some point situated in society at the disenfranchised side of the

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surveyed power spectrum, engage in a passive, conditioned mode of watching – a pedagogy of oppression?

Foucault, in his discussion of the Bentham's Panopticon speaks of the division of individuals: “Rather than the massive, binary division between one set of people and another, it called for multiple separations, individualizing distributions, an organization in depth of surveillance and control, an intensification and a ramification of power.”

This model is reflected through the individualistic nature of webcam surveillance. Each webcam monitors a defined subject, this subject is viewed in a constrained space, the website or the screen. Usually the subject is unaware of who is watching and the ways in which the surveillance material is used after publication. Is passive watching a sign of an individual’s desensitization to a systematic observance that has emerged out of the commoditization of networked and communication technologies? Can clicking, saving, viewing and purchasing digital momentums or moments in time reflect the conditions experienced by individuals through the acceptance of surveillance as a normative social occurrence?

**Studio Projects**

Early in my Masters program, I concentrated on performance and the formal setting of online viewing (Images 37-38). I wanted to examine the formal display of the body through online performance and video. The dominant form I have encountered thus far is that of the 2-dimensional square, the virtual diorama. This form presents a visual constraint, a box, paralleling the monitor, a window, and a frame:

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Each individual, in his place, is securely confined to a cell from which he is seen from the front by the supervisor; but the sidewalls prevent him from coming into contact with his companions. He is seen, but he does not see; he is the object of information, never a subject in communication. The arrangement of his room, opposite the central tower, imposes on him an axial visibility; but the divisions of the ring, those separated cells, imply a lateral invisibility. And this invisibility is a guarantee of order. 206

Web Diorcamera (2006) was the studio project I created to examine online performance and it had two main components: The first was the collection of performances that investigate online representation, the creation and maintenance of online persona, interactions, gestures or anything that an individual would choose to perform. These performances can take place anywhere, the home, in public, an unidentified or virtual space, but are documented with a webcam and were exhibited as a collection of active performances. The second was the creation of an online webpage or a virtual stage to showcase the performances. The concept was to explore the ways in which the interface supports or negotiates streaming video, to experiment with the space between performance and online presentation, between action and social meaning and between content and surface.

I put out an open call for performances and with each submission I met with and accompanied the individual to document the performance with a webcam and laptop. The performances were then transferred to a website.

Cuckoo Cam

The next studio project titled Cuckoo Cam (2006) was created as an investigation into institutional surveillance and video monitoring systems. The project is structured around a hyper facade, an excessive, decorative example of pseudo-watching instead of directly focusing on the subject who is often positioned as the passive component of the

206 Foucault, Discipline & Punish, 195-228.
surveillance paradigm. Ten *Cuckoo-Cams* are located in the gallery space. At the rear of the gallery a small screen, attached to the wall in front of a lounge chair displays a constantly shifting reproduction of the interior of the space as recorded by the *Cuckoo-Cams*. Each new 5-10 second image displays a perspective the viewer would see from each of the camera lenses. The video aesthetic is a simulation of a surveillance camera reproduction as it was recorded using a web camera. The *Cuckoo-Cams* are constructed from birdhouses and fit with a glass lens from 16mm, 8mm film projectors and Super-8 cameras.

The piece is quietly waiting for the subject to move into action, to question the machinations beyond the lens, to attack and dismember the object and its systematic gaze. This artist statement appeared on the gallery wall beside the video monitor:

> Poplar’s rumor, symptomatic of green saps resistance, 
> roots twined with apathetic white plastic.
> There are cameras in the trees, 
> shutters wide, blinking, apertures in flux with shifting light.
> Imagine the cuckoo clock on my grandfather’s wall; 
> a wooden bird replaced with the dilating glass iris of 
> the interconnected, 
> the 5’o’clock dinner; 
> sweet’n’sour meatballs, canned corn, iceberg lettuce, 
> exchanged with the glaze of the networked population, 
> how touching, that we see each other, 
> momentarily perched on a peeling birch bow, 
> wrapped in reflective foil, 
> scrawny legs protruding the fresh graft of a USB port.
> Please be aware, the birdhouses are recording.  

Reactions to the piece supported the passivity claim, no one doubted the fact that these structures, tiny churches and houses meant to safeguard small birds during their nesting season, are indeed recording. Assumptions instead deal with selectivity, as in

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which ones are recording, monetary capability, “How could they (the artist) afford to include so many cameras,” or regarding the institution, “It seems excessive of them (the University) to attempt to disguise the cameras this way.”

We look into our monitors; we peer through another square and are instantaneously presented with the inside of another individual’s space or the very public landscape of a city, highway or field (Images 39-41). Now with video conferencing and online chatting this relationship can be multi-directional. Have we become desensitized to the cameras in the trees? The webcam girls claim they no longer notice the cameras in their homes; they enact a typical day for their audience. Meanwhile, in the public realm, no one seems to be overly conscious of the observing lenses. To some degree, the camera and the eye have merged. In this project, I created a gesture or a conversation that questioned a networked existence, or it could even be read as a subtle reminder of the excessive utilization and consumption of consumer, institutional and government surveillance activity.

Jeanne Randolph studies the influence of technology on culture using psychoanalytical methods in *Psychoanalysis and Synchronized Swimming*. In the chapter “Technology as a Metaphor,” Randolph synthesizes the term, “The Third Area” coined through Freudian Object Relations Theory as a device to find similarities between this metaphorical space and the artist, theorist or scientist of the technological ethos. Freud defines The Third Area as:

> What belongs to the ego – and what is external – what emanates from the outer world. In this way one makes the first step towards the introduction of the reality principle which is to dominate future development. This differentiation, of course serves the practical purpose of enabling one to
defend oneself.”

Randolph states that the relationship between perception, technology and culture is entirely intertwined and similarly to Wendy Brown’s position regarding the technically reasoning society she states: “The problem now is that technology’s perception of culture is becoming our only perception of culture.” With Randolph’s notion of a culture that has become inseparable from the machinations of technical reasoning, how does art production then serve to critique this culture? How do artists critically distance themselves from the contradictory position of both using the materials, systems or discourses that one critiques to provide investigation that avoids both alienation from the audience and didactic representation?

Natalie Jeremijenko, who is a technoartist, an engineer and an inventor, has achieved this balance within her work. Jeremijenko’s tactic is to deconstruct the use of technological mediums to provide critique of culturally relevant issues. For example, she has created a computer program titled *Stump* (1999), that counts the amount of paper printed from a desktop printer and when this number is equal to the amount of paper that would be made out of one tree an image of a tree ring is produced. Another project, *One Tree* (2000), involved the cloning of 1000 trees to be planted in California. This project questions the ethics of cloning, who has the power to apply such methods of scientific research and how this knowledge should be utilized. The implications of cloning, power and access are represented by the culturally perfect symbolic form; the tree. Jeremijenko has produced an enormous body of work that is entwined in both culture and

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209 Randolph, 37.
technocriticism\textsuperscript{210} thus allowing important questions regarding the impact of technological advancement to emerge.\textsuperscript{211}

**Analogue Avatar (2007-)**

The studio project *Analogue Avatar (2007-*) (Images 42-44) is about social relationships and the screen. It is a research project in progress, a social experiment investigating the boundaries of relationships within the parameters of the screen, a moving image and a network. I want to understand how this form of social relations is transformed through the mediating device, the network or interface. What does this version, this latest incarnation of self-representation and interaction mean? Where is space for relations located in a seemingly ubiquitous community of aliases and avatars?

*Analogue Avatar* is an unfinished interactive web based artwork that emerged from a virtual artist residency with Studio XX in Montréal between January and April 2007. The website serves as an arena for convivial web camera interactions among potential strangers. Individuals can register, create a profile, access other community members through instant messaging (IM) addresses or interact with the original Analogue Avatar (AA) (the artist). Thus far, the main component of the site is 35 demonstration scenarios of possible interactions intended to provide softly defined parameters of possible interactions.

The Analogue Avatar is a little problematic as her or his behavior is programmed to be unpredictable and at times anti-social, unlike a typical service oriented or user-friendly interactive experience avatar. Individuals could potentially be disappointed with web cam interactions with an AA as there are no scripts, guidelines or standards for the sessions. The site also allows individuals to submit additional scenarios to be displayed in


\textsuperscript{211} To see more of Jeremijenko’s work visit: http://entity.eng.yale.edu/nat/.
the database.\textsuperscript{212}

The title \textit{Analogue Avatar} is referring to the words analogous, analog and avatar thus describing the Analogue Avatar as an individual who through networked personification is representing and receiving a human, for the most part, signal via digital transmission. Within the frame of the scenario settings, small and random fluctuations in behavior are meaningful to the interaction. The scenarios are typical communicative situations, they are \textit{like} being with another person or they are \textit{like} ignoring another person or they are \textit{like} being near or very far from another person or they are \textit{like} being alone. For an AA, it does not matter what category of experience an interaction corresponds to. Rather, an AA is interested in subtle variations of sameness.

Where are you right now? Where do you go when your eyes glaze over and your stare becomes vacant and hard. Your eyes, pearled exterior, glistening and piercing all objects and individuals in your presence. What are you thinking about or have you left us to visit another time, another memory, and another place? Maybe you move through space in your thoughts and this time away from here is how you sort through and translate your physical existence into your internal network of moist storage compartments. What has made you do this now, during our time together, in the middle of a sentence? What does space away from your here look like? Is it murky or dry? Does it smell or feel heavy? Is it a space for only you, alone?\textsuperscript{213}

After reading Sean Cubitt's, \textit{Digital Aesthetics}, I wrote the proposal for \textit{Analogue Avatar} (website named www.trust.betray.trust.com)\textsuperscript{214} as a way of confronting an interest in social experience, space and apparatus. How do specific tools inform interactions?

\textsuperscript{212} Kelly Andres, January 2007, \textit{www.trustbetraytrust.com}.

\textsuperscript{213} Andres, \textit{A Novella, Dot}.

\textsuperscript{214} This proposal is included in Appendix 1.
How does the social become physical and where or when can idealized standards of social interactions break apart? Communicative devices play an integral role in the transmission and formation of contemporary social interactions in a Western context. What are the extensions that we have grown into – the inorganic appendages that are sutured to the daily?

There seems to be an overall consensus in the need to reconstitute the notion of the commons. There seems to be a desire to design space to reconnect individuals and form communities. There seems to be a movement to set up situations where people will experience togetherness – where communities will thrive, where social interaction is unavoidable. It seems that there is a consensus where everyone has the right to be part of something, something social, and something interactive. Interactivity is an important term in new media art. How can we make work that engages? How can we make interaction easier, more user friendly? What is interactive and why is it important? If you are not interactive you are not user friendly – if you are not part of a community you are not social and if you are not social then no one likes you. Maybe you need some friends?215

In every website, net art or Internet project, design is a fundamental determinant for the experience and thus the interpretation of the work by the viewer. The text portion or the choice of language used for site navigation sets a particular tone. In Analogue Avatar the language is referring to the activity of recruitment, “become one”– join the site. A “community” signifying the individuals who have joined the site, and a place of information or data collection through the term “scenario database.” The language of a site is an important element to how individuals will perceive and participate in the project. I wanted to further emphasize the research and a laboratory environment for the

215 Andres, A Novella, Dot.
project through the language and to also include participant generated discourse to remove a one author, homogeneously scripted tone.

Another key element the of the website development was the demonstration performance videos in the scenario database. The creation of these visual documents signify through the positioning of the web camera, the location of the computer, the context of personal space in a bedroom styled set and domestic cues. The performer is in a home and the performances constitute activities one would enact in a close relationship with a partner or family member or while alone.\textsuperscript{216} The performance setting creates an intimacy and thus an invitation into a personal space. The prerelease of the project prevented a commentary on the actual experience of exchange in this type of interaction, however, I can imagine the intimacy of the scenarios could be mistaken for an invitation to engage in voyeuristic activity. The purpose of the project, of the research, is not to exchange visual information in any sort of sexually explicit manner, and one of the terms of participation is to keep interactions and scenarios “all ages,” a condition that may be hard to and perhaps even conceptually and ethically ridiculous to enforce. Throughout the 35 demonstration videos, a wide spectrum of communication structures such as power hierarchies, resistance and exclusion are represented either outwardly or implicitly. Another reason for the scenario definition was to avoid subject matter that becomes overly specialized – the purpose of many online community forums. By leaving the website as a place for webcam interactions without the scenarios would create sessions

\textsuperscript{216} 35 Things You Can Do With a Stranger on a Webcam: Camp in your bed, read to each other, eat together, mime one another, sleep, look out the window for birds, make bread, knit, bathe, balance objects on head, play cards dance, draw each other, listen to music, garden, water the plants, clean, staring competition, study, tour of our homes, meet each others pets, fix things, have tea, get dressed up in a fancy outfit, yoga, tell each other what to do, hum repeat words, write letters, compliment or criticize, count everything in your house, tell me about your day, cut our hair together, guess the sound, complain, talk on telephone to someone else.
focused on dialogue surrounding specific and previously experienced webcam interactions. Giving participants tasks or neutral themed scenarios could potentially lead to unexpected situations by providing individuals a shared common starting point to form the basis of the initial interaction.

I am attracted to entities that represent the unreal– ideas, theories, places, objects, sounds, and architecture. I like a well thought out façade, intelligent tricks; I like to be taken away and seduced by a story, a fiction in disguise. It doesn’t matter if I know it is fabricated, I’ll be ignorant and enjoy the ploy all the more. The problem is I am beginning to believe that everything is falling into this category. Physical space is the biggest problem. Physical space can be folded into itself and forget where it came from, dislocated. What kind of map or system or memory can be developed to track the spaces we visit when spaces become folded and flattened through digital transfer?

sTREEEming (2008)

This studio proposal is inspired by the film 2046 (2004) by Kar Wai Wong where an ancient story is told by the narrator that in turn, becomes a major motif for the film. The film is the last of a three-part chronology about love, loss and parallel worlds. In the story, which reappears throughout the film, a ritual is explained where an anguished individual climbs a mountain to find a tree. When the tree is located, the individual carves a hole and whispers her darkest secrets into the niche. The hole is then covered with mud and the individual returns to her life rejuvenated and weightless: Do you know what people did in the old days when they had a secret? They would climb a mountain and find a tree. They would carve a hole in the tree and whisper the secret into the hole, which they would pack with mud so no one would ever hear it.

217 Andres, A Novella, Dot.
sTREEming is a hollow flat-pack tree sculpture. This tree sculpture has a hole in which visitors can whisper their secrets or thoughts, yet instead of remaining locked in the core of the living organism, the secrets are streamed to a webpage by a webcam that is located inside the trunk of the sculpture directly behind the hole. Individuals can visit a website and watch the live stream. For an exhibition, the live stream could be projected in a remote location from the sculpture.
Conclusion

Computers are only an element in this process, but they are more than intensely symptomatic; they are our partners and, like any technology or lover, increasingly they are ourselves. Where they open up the necessary accommodation between us and the social at a new level, in which our media are intricately identifiable with our relationships, they introduce a new scale of instability, a new uncertainty as to how, and indeed if, we should relate to one another, not just with those we know and meet, but those faceless millions on whom we depend for our wealth and our oppression. 218

Cubitt posits the relationship between technology, the individual and the social as closely relating to a global relational insecurity. I want to allow questions relating to social relationships and socialized constructions with technology to emerge through this project and future work. Technology is ubiquitous. It is present as language, shelter, food, as aids and as companions, yet, like plants, animals and living organisms, technology seems to somehow exist in its own right as it grows, warps and evolves under certain conditions to different effects, often seemingly autonomous to human intervention. People who work closely with machines and intelligent technologies often anthropomorphize them or blame them for their own errors – referring to computers as individuals with personalities, automobiles as companions, dressing cell phones or iPods in miniaturized clothing and accessories. 219 Recently, individuals often customize their tools: Color coding, adding personal effects such as images and preferences, and naming them. In response, manufacturers and inventors of technological devices continually create objects that are increasingly mobile, smaller, closer to the body, and continue to animate technologies by incorporating human or living qualities like the voice or behaviors into the design – essentially, it seems that we have succeeded in making our

tools social.

A co-worker commented as we tested a data projector and computer for a presentation, “poor thing... she needs a cupboard with better ventilation. She gets so overheated in there.” We stood, for a moment together, staring with pity at a square plastic box, a computer tower contained in a wooden closet. Socialized technologies, and most recently communication technologies, mark or often describe and illuminate a realm of social relations. It is important to monitor these relationships to study the effects of human interactions with technologies or machines as they do provide a relational mirror. This monitoring is not derived from a cause and effect viewpoint where technologies are good or bad, simple or complex, taking over our lives, disconnecting us from one another, or making our lives easier, but more as a hermeneutic exploration; how do we understand our relationship and our histories with machines and emerging technologies in a social context? Why is there a desire to continually prostheticize and bring tools closer to resembling bodies and organic functions? Do any definite boundaries between human and machine exist and how are these divisions maintained? How do we look at such connections or disconnections and make insightful decisions for the future?

*Desiring Machinations of Matertechknologi* was written and performed as an exploration of gender, new media art and the academic discourses that surround technological production. Through this work I have engaged my art practice to explore bodily mediation through communications technologies and I offer my ideas and concepts as a contribution – and as a possible direction for future examination.

I am mobile and I carry my shelter everywhere. I enjoy producing offspring and then sending them to wander in this fertile garden. No one notices. I never worry. Everything is tangled here; nothing can be
separated or isolated. Not the vegetation, the ideas, sounds, cords, stones, scents, or bodies. They all merge, they have all forgotten their identities. Careless and haphazardly we mutate into one another and back again. Our forms are completely unstable. Nothing can be recalled and time is finally forgotten. We communicate through an exchange of gestures and movements, slow and precise; we exchange information through our surface temperatures, our plasticity, and textures. Language, the once dominant mode of communication for myself as a human, has been rejected for its ability to cause breakdowns in communication between organisms and entities of nonhuman species. Pathologies of stress abandoned somewhere inconsequential. Our interface communication systems are far too complex for verbal patterning; orality is wasteful, repetitive, disorganized, exhausting. Language was rejected – it had to be. I am the last one who can tell you this and you are the last one who will remember.

Suddenly, I want to seduce you. I remember how I could create a position of control or submission through my choice of words. Such nostalgia flows through the gardens tonight, the snails glossed tightly in their fossil caverns; millions of years pass in this eve of the phrodites.\textsuperscript{220}

\textsuperscript{220} Andres, \textit{A Novella, Dot}. 
Epilogue

1. She is given a number of objects and left alone under observation. The objects are a glass of water, a carrot, a computer mouse and a twig. She selects the glass and drinks the water. She selects the carrot and eats it. She selects the computer mouse; she slowly traces all of the contours, surfaces, and external lines on her body and in the room. Beginning with the face, interface, profile. She moves the sensing object over and thoroughly maps each part of herself as she would trace the skin half-consciously in a contemplative caress. After she has charted the body, the sensory object moves into the extended self-world, into the space of the object-not-body. How much information she needs to collect is unknown. She will trace and map, a cartographic representation that, unfolded into its digital resignation, will become a space in a non-space. Let us observe her movements now.

2. She is placed in a room with a cuckoo clock on the wall, a pot of water, a table, a chair, a plate, a fork, dry pasta, a hotplate and an electronic scale. On the wall without the clock is a diagram of how to cook the pasta, twirl the pasta into noodle nests and then place the nests on a scale. There is cassette player on the table with audio instructions as well. She presses PLAY and follows the instructions, boiling, cooking and then straining. She picks up the bowl and stands beside the cuckoo clock. She winds the pasta into a plateful of noodle nests and then places them on the scale, to the rhythm of ticking clock pendulum. The scale measures her ability to computate instructions and for each increase in weight a digital signal is sent to a processor and an audio clap track fills the room.

3. She is fitted with the sensory amplifier apparatus. This apparatus is a tight head cap that extends the human capabilities for hearing, sight, and smell. It looks like a rubber head cap with parabolic extensions coming from ears, nostrils, and eyeballs. She wears this device for a week and is observed in her environment (her bedroom,
the dining room and the outdoor garden). After the week is over she is observed for another week without the apparatus.

4. The device for this session consists of a tight cap to be worn on the head by the patient. The cap covers the eyes and in the centre of the forehead, between the two eyes is a small video camera. The patient wears the device for three, one-hour periods in three different situations a day, for three days. The video camera records the sessions and over three days the patient is set up in front of a monitor to observe the video recordings. She is given a remote control that allows her to rewind, fast-forward, pause and play the recording. Each time she rewinds and re-watches a section of the recordings her chair softly vibrates for 20 seconds.

5. We bring her to the breakfast table. She sits in a chair and the meal is placed in front of her. The breakfast consists of a loaf of bread in a basket, a fruit jam, honey, and whipped butter, each held by separate serving bowls. Additionally, a knife, a glass of orange juice, and a napkin are provided. We provide no instruction and she does not move. Minutes are passed and the clear, distinct ringing of a digital mobile cellular telephone can be heard. The patient hears the sound, is startled, agitated even, as it causes her to jerk her body. It is obvious as the sound continues, that the object in which the sound originates is located on the table. However, the objects on the table are clearly set forth and the sounding object in question is not visible. Now we instruct her to answer the telephone, this instruction set forth into the room from a speaker on the wall. It is repeated a number of times. She begins to slice the loaf, removing the cross sections and applying the spreads before placing them on the plate. Half way through the loaf she finds and removes the cellular telephone that was concealed in the loaf. She applies the spread to it and places it on the plate. She does not answer the phone. This is repeated at lunch with the telephone in a cake and at supper with the telephone in a roast chicken.
6. The next three sessions are based on synthetic sound and the patient’s immediate environment. For the first scenario, small speakers are distributed throughout the patient’s environment in inconspicuous locations. The audio from one location is played through the speaker in a removed location. For example, the garden soundscape is played in the bedroom, the sounds of the patient eating are played in the garden and the sounds of the patient sleeping and using the lavatory are played in the dining room. Also injected into these tracks are sounds that the patient would never hear such as automobile, popular music, animals and environmental sounds like wind and oceans. This experiment is conducted for a week and then all of the speakers are removed.

7. In the next session, the patient is given a dress with a shortwave radio that is sewn into the front of the outfit. The radio is set just near a station so that as the patient moves through her environment the radio comes into and out of tune. Over a week she is observed to see if her movements within the environment allow the radio to be more-in or more-out of tune with the station. We use a transmitter to change the frequency of the station daily.

8. She walks into the room wearing a large oversized camping backpack. She sets up a tent that was inside of the backpack and goes into the tent. When she reemerges she is wearing a brown fur bodysuit, a headset and antlers. She positions a large banner with a seven-digit number on the front of the tent. She has a camera and begins to snap photographs of us. We feel nervous and uneasy; perhaps we laugh or look away. Someone from the audience takes out a mobile phone and dials the number on the tent, which is her phone number. She answers and the person asks her to stop taking photographs and to go away. She obliges.
References


Hayles, Katherine. How We Became Posthuman: Virtual Bodies in Cybernetics Literature, and Informatics.


**Websites**
Images


2.


6. McCleave Gallery of Fine Art, *Cross Canada Tour*. Informal showing of the suitcases at the University of Lethbridge, Department of Art, Lethbridge, Alberta, 2005.


Participants choose a head or neck garment from the gallery to be worn for one day at home. Each participant and hear the private soundscape of the other and both soundscapes can be heard in the gallery or venue.


![Diagram 1](image1)


![Diagram 2](image2)


35. AnaCam, Ana Voog, anacam.com.


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open call for submissions

2 minute performances, actions, or gestures in relation to visual internet representation.

The web diorcamera projects exist as an online gallery theatre showcasing a series of 2 minute webcam performances that challenge, question or imitate the way in which persona(s) are created, maintained or deconstructed through online representation.

The project will be exhibited at the University of Lethbridge Gender Symposium on March 4th, 2006 but will continue to collect and display online, submitted performances for an extended period of time.

To participate, simply email diorcamera@hotmail.com by February 15th, 2006.

Please include the following:

1. Name & contact information
2. Title of performance
3. Brief description of performance
4. Required materials for performance
5. Availability between February 15th and 20th for webcam video recording

The web diorcamera production team, will to the best of our ability, assist in providing the materials required for your performance.

All technical support will be provided by the web diorcamera project team for performances in Lethbridge and the surrounding area.


Appendix 1
List of Exhibitions and Residencies 2005-2008

Exhibitions
2007
CONFLUX 2007, New York, NY, audio and web
Signal and Noise, Video In/Video Out, Vancouver, BC, audio and web
Art’s Birthday, Studio XX, Montréal, QC, streamed performance series
Her-Land Film Festival, Calgary, Alberta, video screening

2006
You Are Here, The Other Gallery, The Banff Centre, AB. Video and Digital Photographs

Cuckoo-Cam, The Students’ Union Art Gallery, Gender Symposium, University of Lethbridge, AB. Video/Sculpture Installation

2005
motion, Feminist Film & Video Festival, Lethbridge Public Library, The Red Room, Lethbridge, AB, Curator: The ( )ette Collective, Juried. Video

Residencies
2008
Lademoen Kunstnerverksteder, Trondheim-Norway
ISEA 2008, Singapore

2007
Studio XX, Montreal, QC

2006
The Future of Idea Art, The Banff Centre, Banff, AB
Interactive Screen 06, The Banff New Media Institute, Banff AB
Subtle Technologies, Parametric Workshop, Toronto, ON

Lectures and Presentations
2006
The Banff Centre, Artist Talk, The Future of Idea Art, Banff, AB
The Banff New Media Institute, Interactive Screen 0.6, Artist Talk and New Media Pitch Competition, Banff, AB.

Women & Progress in the Arts, University of Lethbridge Liberal Arts 3000 Section, Dr. Bruce McKay
ARTECHNENCE, University of Lethbridge Graduate Symposium
Re:Materfamilias, University of Alberta Feminisms in the Third Wave Symposium
The Virtual Stage, University of Lethbridge Gender Symposium

2005
International Women’s Day, University of Lethbridge, Mistress of Ceremonies

2004/05
On Feminist Collectives, Women’s Studies class, Dr. Carol Williams, University of Lethbridge, (with ( )ette Collective)
**Web Diorcamera (2006)**


**Cuckoo Cam (2006)**

Below: Screenshot of webpage for project
**Songbike (2006- )**

**Media and Participant Invite for Songbike**

In conjunction with *Signal and Noise 2007: A Celebration of Sonic and Media Inspirations*, at Video In an Artist-run Media Arts Access Centre, located at 1965 Main Street Vancouver, you are invited to become a tour guide and take artist Kelly Andres on a bicycle ride in west or east Vancouver. Andres will accompany you with her mobile sound lab, Songbike, and your ride together will be transformed into a unique soundscape composition and uploaded to the project website [www.songbike.com](http://www.songbike.com).

The Songbike is a mobile sound lab to record and upload aural compositions to a member based website. The website serves as a hub to host each member’s soundscape “station”. The site also provides members the ability to upload and download the recordings to share with others. Songbike connects individuals through a shared interest in community and aurality; self-produced content and piracy; connectivity and interaction. Songbike is inspired by the Vancouver Soundscape 1973 and 1996 projects, Luigi Russolo and the Intonarumori (acoustic noise generators) and a fondness for cycling. For Signal and Noise 2007, each ride with the artist will be named, mapped and added to the interactive website. Informational booklets on the project and how to participate further, will be available at Video In during the festival, April 19th to 21st. Songbike rides can take place between April 17th at 4pm and April 21st at noon. To schedule a ride with the artist and Songbike, please email Kelly.andres@uleth.ca by April 15th, 2007.¹

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¹ Above: Postcard for *Songbike*, 2007, Conflux

CONFLUX 2007 Website, artist page. www.confluxfestival.org
Analogue Avatar (2007-)

Concept Proposal as submitted to Studio XX (Similar to proposal to Banff Centre for the thematic residency):

Project Concept

TRUST.BETRAY.TRUST [Digital Communication as a Metaphor for my Social and Political Relationships]

This work will explore numerous realities faced by individuals who are incorporated into the age of technical ethos on a range of participatory levels, from the technophobe to the technophile. The project will engage with the “technology” and its social applications as one would a best friend in grade seven – trust-betray-trust… a continuous loop. Daily interactions will be conducted in collaboration with various machines; the laptop, webcam, radio, telephone, among others, and uploaded to the online site. The interactions will be based on mobility, observation and integration into the local environment and our examination will focus on the utilitarian, social and security needs of citizens; human, vegetation and animal. Throughout the residency the performances will be compiled on a website to eventually form a random non-linear visual and audio narrative.

Project will be located here: [www.kellyandres.com/trustbetray](http://www.kellyandres.com/trustbetray)

Biography

Kelly Jaclynn Andres

Utilizing the immediate environment as a stage for a majority of her investigations, Kelly Jaclynn Andres continually examines notions of inscription, such as the various social constructs ingrained in numerous apparatus relating to technologies, portability, and interiority. Andres incorporates a variety of mediums, including but not limited to video, performance, audio, photography and installation, typically with the intention of developing highly subjective theories through grayish humor and fiction. Her work has recently been toured across Canada and Europe with the McCleave Gallery of Fine Art, a distinguished gallery located in a suitcase. She has studied at the Banff Centre for the Arts and the University of Lethbridge; like others born in 1977, she adores birds.

Website: [www.kellyandres.com](http://www.kellyandres.com)
Contact: Kelly.andres@uleth.ca

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April 7, 2006
Letter of Intent

Dear Panel Members,

This letter outlines the details of my project proposal for the Studio XX residency. Currently my practice is focused on networked performance and the social and political issues that can be addressed by this medium. As the current techno-driven society moves rapidly towards a disembodied existence, the web performance serves as a reflection of this state yet also grounds the body in realities of the physical world. Performance is an ideal platform to communicate, represent and question cultural and institutional norms, as it is an active, progressive and often subversive medium. However, the history of the body represented visually as a passive object of desire infringes and causes a fracture; instability in regards to the ability of the individual to become the subject empowered through performance or networked actions. It is here where my work will question and interrogate this area, through literary analysis and applied performance practice. The resulting research will gesture towards an additional dimension, an activation of the participant researcher, who simultaneously engages in theoretical and applied conversations within the age of technological ethos.
The project I am submitting to be considered for Studio XX residency will be a web cam performance work inspired formally by Sol Lewitt's text piece titled Sentences on Conceptual Art published in Art-Language Journal in 1969.1 The general structure for the project will be as follows:

a. A project website platform will be created prior to the beginning of the residency and continuously developed through the residency. It will be complete by the end of the residency.

b. For the term of the residency, once per day a performance will be initiated by, directed by or arranged by myself. The performances/actions will be streamed live online daily at a specified time to the project website using a portable laptop and iSight camera, as well as a wireless Internet connection. After the live streaming, the recording would be transferred to the website. For the duration of the residency the website will be updated daily to give the viewers notice for the following performance time and information relating to the performance or process.

c. Each day I will contrive a new sentence in relation to the web cam performance.

d. The result would be numerous performances, statements and a website to display the work to viewers as well as a record of the processes surrounding the project. The goal of the project is to seek a vast array of collaborative, mobile, random and contrived actions that reflect both the spontaneous and rigid nature of conceptual-based art while evoking a continuation or conversation with language through the use of online text/hypertext.

e. The performances for the most part will be subtle gestures based on social, political, urban, and feminist issues and will be performed in various locations around the city. Examples of possible performances…

   i. Live tentcam girls! A pastiche of web cam pornography, nomadic living, recreation, and “tent art”.
   ii. USB to USB. Inside a local café a woman engages in a “jaunty” conversation with her web cam while a steaming low fat, soy, latte observes.
   iii. There are cameras in the trees... and balconies. Barely visible, occupying the upper limbs of a tree or other elevated space for an extended period of time; the performer can dangle a web cam downwards to communicate with pedestrians.

Knowledge in the field:
I have recently begun to use web cams for performance and have started to work with web design, Flash and Dreamweaver. I have all the equipment required for the project. While at the residency it would be useful to obtain some training in advanced website techniques. I am competent in video editing and digital image manipulation.

Thank you for considering my application.

Kelly Jaclynn Andres

Above: Analogue Avatar website (in progress), 2007


Kelly Andres

Calgary, Alberta

From hotel room to coffee shop to office to dining hall to hotel room to coffee shop to Banff Springs hotel to office to hotel room to coffee shop to office to downtown Banff to dining hall to office to hotel room to coffee shop to office to swimming pool to hotel room to coffee shop. This is coffee shop always follows a pattern or a chorus.

The Other Gallery  October 20–22th 2006

you are here

kelly andres
suzanne caines

Above: Invite for show at the Other Gallery, Banff, AB, 2006
Below: Installation image of the exhibition, You Are Here (2006), The Other Gallery, Banff, AB
Below: Stills from The *Happy Wanderer* (2006), video and digital photographs. Performed in various locations in and around the Banff Centre for the Arts. Photo and Video Credit: Suzanne Caines, Halifax.

Below: *Cut-Out* (2006), Exhibition poster

*a tableau vivant*

cut-out

IN COOPERATION WITH SAVILL GROUP ARCHITECTURE

TRIANON GALLERY
304-5th Street South Lethbridge
Open Monday-Friday 9am to 5pm
Telephone: 380.2767
November 27th - January 6th
Opening Reception November 25th at 9pm

Appendix 2
Thesis Exhibition
Fields: An Introduction to Passive Soundcycling

*Fields* is a series of four audio collection stations situated near hubs of social activity in the lounge/gallery. The collection stations work to gather audio input and environmental soundscape from the social groups who populate the space. Two of the collection stations have an interactive element as individuals can "plug-in" their MP3 players and listen to their own music in a speaker system that is located inside the stations. The stations are designed to enhance the social environment aesthetically and by improving indoor air quality through the addition of vegetation.

The piece will be designed for each unique social environment. For this particular installation, the stations are wooden growing beds or planters that feature live wheat grass above the speaker and receiver systems. This means that the audio output is located under a root system of introduced vegetation. This configuration works to gently "massage" the plants rhizomal network by audio vibration. This is also a way of introducing a subtle form of communication between organisms– plant and human, and also an investigation in audio-based plant perception.

The introduction of the *Fields* (planters) serve as a contribution to the student social space by increasing oxygen as the living organisms improve air quality and filter toxins in air. This relationship is symbiotic as the plants also benefit from the high volume of students emitting carbon dioxide (conversation) in the social space. For *Soundcycling* to occur, it is important that the system is fully integrated; therefore, input from humans contributes to the soundscape through talking or music introduction into the stations. The soundscapes travel to a transmitter and are distributed back into the environment through a radio receiver. Another element of the *Soundcycling* process is that the environmental sounds collected also travel past the physical boundaries of the walls through wireless transmission. This suggests architectural openness or a leakage that works to negotiate the physical boundaries of space and temporality.
Fields, day 1 after planting and installation.
Individuals can plug in MP3 audio devices.
*Fields*, day 6 after planting.
Courtney is listening to music at a *Fields* sound station.

Image is from the opening reception, April 7th, 2008, 4-6pm, Galileo’s Gallery, Student Union Building, University of Lethbridge.
Catherine listening to the soundscycling station at 97.7FM.

Image is from the opening reception.
Bell Piano installed at the thesis exhibition.

Madeleine playing the Bell Piano
Detail of *Bell Piano*

Wheatgrass juice extracted from *Fields.*