INTERSTANDING SURFACES; EMBODIMENT, MEDIA AND INTERDISCIPLINARY STUDY OF CURRICULUM AND PEDAGOGY

A Dissertation

by

MEI WU HOYT

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2008

Major Subject: Curriculum and Instruction

INTERSTANDING SURFACES: EMBODIMENT, MEDIA AND INTERDISCIPLINARY STUDY OF CURRICULUM AND PEDAGOGY

A Dissertation

by

MEI WU HOYT

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Chair of Committee,	G. Patrick Slattery, Jr.
Committee Members,	B.Stephen Carpenter, II.
	Chance Lewis
	M. Carolyn Clark
Head of Department,	Dennie Smith

December 2008

Major Subject: Curriculum and Instruction

ABSTRACT

Interstanding Surfaces: Embodiment, Media and Interdisciplinary Study of Curriculum and Pedagogy. (December 2008)

Mei Wu Hoyt, B.A., Qiqihar University, China;

M.A., Louisiana State University

Chair of Advisory Committee: Dr. G. Patrick Slattery

Embodiment grows out from deep concerns about the body and embodied knowledge across disciplines. As both subject and object, the body demands explorations that move beyond the dichotomy of body and mind, surface and depth, outside and inside. The interaction, intensity, and interstanding in the middle activate the body to move, to feel, and to be with other bodies.

In the information age, with the rapid change in digital, computerized, and networkable technology, coupled with our growing concerns about the environment, embodiment becomes more complex and shatters the boundaries between human and nonhuman. In a sense, embodiment becomes posthuman by extending itself to interactions and interstandings with other species. In this dissertation, I extend embodiment into aesthetics and media by thickening the notion of surface in all of its profundity, contentious forces, and intertextuality. I emphasize as well its significance in exploring what an embodied curriculum and pedagogy could become for schools and

society.

This dissertation points toward the interaction and interstanding between philosophy, art, and technology. It encourages a notion of experience that engages readers/viewers viscerally with a technically manipulated surface. The readers/viewers not only encounter the theoretical mapping of the content of this dissertation, but also imagine and investigate the metaphorical and metaphysical possibilities of curriculum and pedagogy.

DEDICATION

For Roger and our dogs and cats, Qiuqiu, Sandy, JJ and Tut.

ACKNOWLEDGEMENTS

In the rhizomic map of my academic and personal growth, being, and becoming, my professors, family, friends, and many whom I have not met have contributed and constituted my network of exploring embodiment, art, curriculum and pedagogy.

I am indebted to Dr. William Doll and Dr. William Pinar whose conversations either in Peabody 204 at LSU or in Dr. Pinar's beautiful Baton Rouge home transformed my experience of the study of philosophy and curriculum theory.

I am very fortunate to have Dr. Patrick Slattery as my chair. He has led me through both a journey of learning and teaching. His passion and advocacy in education, philosophy, and art, as well as in a larger democratic world, continue to inspire and encouraging me with regards to the years to come.

I am particularly grateful to have Dr. B. Stephen Carpenter, II as my committee member. With his warm heart and his critical and insightful eye, he has provoked me to renew myself in the process of engaging in art, technology, and philosophy. My thanks also to my other committee members, Dr. M. Carolyn Clark and Dr. Chance Lewis. Your encouragement and pedagogy helped shaped my research project and my vision of what it means to teach. I would like to thank Dr. Dennie Smith for his support in getting the technology that I need to conduct this research and in writing this dissertation.

My appreciation also goes out to my friend Hongyu Wang, whose advice and encouragement throughout the years have had a significant impact on me and my work. During the writing of this dissertation, my friends Yan Zhang, Juan Feng, Shujie Liu,

Lingqi, Meng, and Jennifer Milam's frequent warm greetings reminded me that my journey towards becoming a scholar should always be accompanied by friendship. I also wish to acknowledge my editor, Rebecca Stout's endeavor to meet my tight schedule, and her craftsmanship with editing. I will also take this chance to thank my mother, whose delicious Chinese food and her help with the house nurtured both my body and soul while I was writing.

I could not have done this research or completed my doctoral study without my husband's unfailing support and accommodations. I would not be who I am today without my dogs and cats, Qiuqiu, Sandy, JJ and Tut. You taught me how to live between stress and pleasure, finitude and love.

TABLE OF CONTENTS

Page

ABSTRACT iii

DEDICATION v

ACKNOWLEDGEMENTS vi

TABLE OF CONTENTS viii

LIST OF FIGURES x

CHAPTER

I INTRODUCTION 1

- Surface 1
- Openness and Accessibility 5
- Body 10
- The Importance of Research 12

II THE POWER OF SURFACE – ARCHITECTURE AND BEYOND 19

III BODY, EMBODIMENT AND PERFORMANCE ART 49

- Knowing Body – Fold, Flesh and Forces of Affect 49
- The Body's Critical Meaning Making: Performance Art 63
- Feminist Thoughts on the Knowing Body 75

IV POSTHUMAN EMBODIMENT, NEW MEDIA AND "COMPANION SPECIES" 96

- Posthuman Embodiment in the Era of Technoscience 96
- New Media: Public Creative Resistance 111
- Dogs' Legend 128
- Afterwords 136

V INTERDISCIPLINARY STUDY OF CURRICULUM AND PEDAGOGY IN THE POSTHUMAN TIME 138

CHAPTER Page

Educational Experiences as Emotional Responses through Film Viewing 144
Moving Bodies and Sensations 149
Virtual Bodies 152

VI CONCLUSION 158

REFERENCES 160

APPENDIX 171

VITA 173

LIST OF FIGURES

FIGURE		Page
2.1	The Frederick R. Weisman Art Museum, Minnesota (Aerial View)	20
2.2	Guggenheim Museum Bilbao, Spain	21
2.3	Condé Nast Cafeteria, New York	28
2.4	The Matter of Time	37
2.5	The Frederick R. Weisman Art Museum (Evening View)	43
2.6	The Frederick R. Weisman Art Museum (Night View)	44
3.1	Morning Exercise, Tai Chi Sword	92
4.1	A Street in Dalian, China	109
4.2	Wikipedia	118
4.3	Inside Hutong	120
4.4	Hutong's Outside	120
4.5	Yu's Gate Art	121
4.6	Nap Time	131

CHAPTER I

INTRODUCTION

> When depth gives way to surface, under-standing becomes inter-standing. To comprehend is no longer to grasp what lies **beneath** but to glimpse what lies **between**.
>
> (Mark Taylor & Esa Saarinen, 1994, *Interstanding, p. 1*)

> When you know that everything fragmented and seemingly unrelated around you can become the film, whose coherence–in discontinuity–is due to the fact that "I" constitutes a site where incongruous things can meet.
>
> (Trinh T. Minh-ha, 1999, p. 69)

> The outline of my body is a frontier which ordinary spatial relations do not cross. This is because parts are inter-related in a peculiar way: they are not spread out side by side, but enveloped in each other.
>
> (Merleau-Ponty, 1962, p. 98)

Surface

Recently, the New York Times disclosed, and other news media circulated, the news of an alleged romantic relationship between John McCain, then the Republican frontrunner for the presidential nomination, and the lobbyist Vicki Iseman. I first learned of this relationship one morning when I was watching MSNBC, a morning cable news show hosted by Joe Scarbrough. Mr. Scarbrough was discussing the story with another MSNBC anchor, Chris Matthews. During the conversation, Chris Matthews questioned why the media almost universally used a picture of Vicki Iseman in an evening gown,

---

This dissertation follows the style of *American Educational Research Journal*.

rather than in a business suit. He posited, and I believed, that there must be something meaningful in the selection. Pressing his question, Chris Matthews played "hardball" with regards to the media selection of images and forced his audience to grapple with a seemingly superficial question. The answer to his question might raise more questions than it can resolve.

The news media's selection of the gown picture over the suit picture may involve a gender issue for some, but its intended purpose of raising a national impression was also well served by the selection. This effect can be seen from both the McCain campaign's reaction to and handling of this episode, and the media's circulation of this affair all over the world. Media, used as a broad term, according to the *New Oxford American Dictionary*, is an "intervening substance through which impressions are conveyed to the senses or a force acts on objects at a distance." Thus, the news media or any media operates to intervene with data, information or materials, and in the visual culture of our times, such intervention becomes more theatrical and sensational when images are involved. Usually, the images are left to the viewers to assemble and interpret within certain historical and cultural contexts. Using intervening stories, information, events, and images, the media only functions when it communicates with the audience, viewers, and listeners, and to do so effectively it has to address them in effective and powerful ways.

The media's power over their communication of information to viewers is fleeting and ephemeral, and once it is out, it is out of the control. Mark Taylor and Esa Saarinen (1994) claim:

> In the media, one-liners are everything. Impressions are everything. Style, personality and timing are everything.... In the media, the autonomous cogito is torn to pieces. Attacked, disregarded, loved and envied, the subject finally has to live at the mercy of others. (*Media Philosophy,* p. 5)

The media wastes no time in its efforts to persuade, because it depends on the mercy of the viewers. It has to get its mode of address right the first time. In discussing film and media studies, Elizabeth Ellsworth (1989) pointed out that film scholars Often ask the question: "Who does this film think you are?" (p. 1). Obviously mass media in general, in treating the Iseman episode, used a similar approach: "Who does this broadcasting (of this romance) think you (the viewers) are? The sexy gown quickly became a useful surface upon which viewers' impressions could be enhanced. The clothes, which affected the audience's perception of this woman, acted as the platform that swallowed in the consumers. It provided the location for the stare, the fetishizing of all the sensational images and perceptions, and where all kinds of forces were at play. Under the national gaze, the appearance, the surface, certainly turned out to be something that heated up the projected and imagined image, what eventually became the national rumination and digestion of the affair, adding more romance and intrigue to this event. As a lobbyist whose clients were mostly broadcasters, Iseman herself could not escape from the backlash of the broadcasting forces and effects. She was "at the mercy of others" (Taylor and Saarinen, 1994)

The surface that becomes the power has its own profundity. The clothes that Vicki Iseman wore–in fact, the clothes that media chose for her to wear or wrapped her up in–made things more complex, far beyond the simple fact of her gown. Iseman was

objectified, made into a sexual object to be looked at, to be imagined, and to be put under the scrutiny of the national and international imagination. Certainly it is not the gown, the surface itself that arrested the viewer's gaze and drew it to this affair, but it is the gown and the surface that are constantly in flux.

Relationships such as these stimulate multiple forces that are constantly at play in the turmoil they create: the cultural and social values that the gown indicates such as, romance, people's antagonism towards lobbying, conflicts between men and women (it is dramatic in that we are still living in a heterosexually dominated world, or at least it seems to be so), young and old, married man and married woman, politics, and the self-proclaimed morality of the "honest person." All of these forces played, suspended, emerged over, at, and within the surface provided by the gown. The gown, the surface, when put into a certain context, provokes profundity, complexity, discontinuity, the clash and the flux of power, which in our times can not be avoided, skipped over or ignored. The surface that modern rationality disdains ceases to be simple, placid, still, and instead, surface works like fashion, being equally downgraded, both surface and fashion excite and invoke others, and one cannot live without them.

Fashion is loved and simultaneously despised by many who either follow it or resist it as a phenomenon which plays on surface. Fashion is trendy, short–lived, and momentary. Once fashion comes to the scene, it immediately becomes obsolete; thus, it leaves no place to resist its power. Fashion consumes. Theorizing about the process of designing, Mark Taylor (1997) elaborates and appropriates the architect Le Corbusier's architectural philosophy on surface to the notion of fashion:

> Rather than a parasite that feeds on the body of mass or mass of the body, surface consumes bodily mass, thereby rendering substance superficial. Far from insign-ificant clothing for essential structures, surfaces actually constitute the masses they appear to adorn. "*A mess,*" Le Corbusier maintains, "*is enveloped in its surface, a surface that is divided to the directing and generating lines of the mass; and this gives the mass its individuality*"
> (p. 186).

If surface is consuming and takes everything in, then surface also consumes the substance of the depth, turning the inside out and becoming part of it. Surface is full of the signs that can be designified and linked to other references that constitute the surface. Surface can be ornamented, but never stays superficial. An ornamentation tells and refers and opens to something else; the scene becomes complex and intriguing.

Openness and Accessibility

In *Who Will Rule the New Internet*? Josh Quittner (2008) explains the struggle for Web supremacy of three innovative companies–Apple, Google and Facebook. Both Google and Facebook envision the Web and the Internet as an open operating system, owned by no one but accessible to all (Quittner). Openness, aiming at connecting to others, becomes extremely important in an era of networking. Shortly after Facebook introduced its Facebook Connect project, which allows users add codes and transfer their contact lists, Google released a similar program–Friend Connect. Besides bringing along friends like Facebook Connect does, it also enriches the personal site with social features.

The top website with the widest reach, Google provides convenient access to documents, images, videos, music and the like. I use Google every day and even more than ten times a day when I do research or writing, or come across anything that I want to know more about. It has proved to be a very beneficial tool. According to Joe Kraus, one of Google's chief officers, "Google's core business, search, depends on openness" (quoted in Quittner, 2008, p. 49). Only if it remains open can the Web survive and thrive, regardless of viruses, hacks, and interruptions. All of these are part of, and even critically constitute, a living system such as a network. Different from its competitors, Apple focuses not so much on openness, but rather has turned its interest toward accessibility, which allows more users to experience and expand the old technology in new and playful ways. Steve Jobs's genius is that he repackages the cutting-edge technologies and makes them work in ways that delight the masses (Quittner). Jobs's philosophy does not take as a priority an openness to the masses (for example, Apple's products are well tuned to its own service providers, such as iTunes for iPod), but certainly he is still playing above ground, and not hiding. Steve Jobs does not dig deeper into each technology; he simply makes the fullest use of their individual powers and refashions them on an interactive platform, for example, the iPhone. The iPhone's wireless accessibility to maps, the internet, documents, and files enables people to enjoy the openness of the network anywhere, any time with one touch. Together, these different technologies offer an interactive experience that is unlike anything that has come before.

With 70 million active users on Facebook, over 605 million visitors each month on Google, and with iPhone as "the driver of the post-PC world" (Matt Murphy, a venture capitalist at Kleiner, Perkins, Caulfield & Byers) at Apple, these companies are the major

players and creators in what Mark Taylor and Esa Saarinen call *simcult*, or simulated culture. Simcult, for Taylor and Saarinen (1994), is a culture that is represented, reproduced, simulated, and renewed through technology:

> Simcult is a culture of instrumentality and nothing but instrumentality. Precisely the lack of any end-in-itself makes it all the more urgent to fabricate ends carefully. Instead of proclaiming the end of technology, we need to refashion the management of ends. End-production is not a terminal condition but is a creative beginning. (*Simcult,* p. 6)

Bearing no end, the simcult remains open to both inside and outside, far or near. Google and Facebook make open platforms available and bring along more and more surfers; Steve Jobs absolutely knows how to play games and be a leader in such a simcult. Jobs's end-product excites users and inspires them to start becoming creative, and to be a player and contributor in the simcult, in a simulated public domain. The communication in this simcult largely depends upon the sharing of images, graphics, sound and visual files, telewriting, and the ability to be mobile and instantaneously informed. Taylor and Saarinen (1994) describe telewriting: "Unlike print technology, telewriting discourages uniformity: letters, pages, columns, spacing can be changed and modified ad infinitum. Writing and design are no longer separate activities but become different moments in a single creative process" (*Telewriting*, p. 11). Circulating within simcult is brokenness, incompleteness, incongruousness, layered meanings or meaninglessness, and a plurality that seeks no unity. The network that simcult dwells in and fabricates, the internet, and the intertextuality of words, images, sounds, and the in-between spaces, emerge from and pass through a process of weaving, referencing, folding, and erasing one another. Unable

to secure a unified position and stability of what we can get, we are left with nothing more and nothing less than the flux of folds and spacings. The juxtaposition of texts, images, and sounds, as well as intertextuality, rises from and constantly empowers a seemingly static event that is both movable and active: for example, thinking. The thinking activity is never an isolated act, but is a movement out of textuality. Joseph Kronick nicely interprets the "monstrous writing" of Derrida as an act of creativity:

> The possibility of thinking an event outside the text, for we are speaking of what exceeds Derridean textuality, of an event that has no origin outside itself, is itself a product of textuality, of the fold, "the non-sense of spacing" or "a repetition-toward-itself of the text." (D[1], 257, 238)

Derrida is not the only one who interprets thinking as a movement, or an activity from the folds. Gilles Deleuze (1988) also argues: "Thinking is neither innate nor acquired. It is not the innate exercise of a faculty, but neither is it a learning process constituted in the external world...To think is to fold, to double the outside with a coextensive inside" (pp. 117-118).

The notion of folds not only has philosophical importance (which will be further explored in Chapters II and III), but it also brings us to encounter the rhizomic networking of the simcult. Gilles Deleuze and Félix Guattari (1987) in *A Thousand Plateaus* theorized rhizome as such:

> unlike trees or their roots, the rhizome connects any point to any other point, and its play very different regimes of signs, and even nonsign states. The rhizome becomes two or even directly three, four, five, etc. It is not a

[1] D: *Dissemination*. Trans. Barbara Johnson. Chicago: University of Chicago Press. 1981.

> multiple derived from the One, or to which One is added (n+1). It is composed not of units but of dimensions, or rather directions in motion. It has neither beginning nor end, but always a middle (milieu) from which it grows and which it overspills. (p. 23)

In rhizomes, roots are not deeper, or underneath; they horizontally grow above on the upper surfaces. Rhizomes replace roots and forms nodes, knots, and crossings, with one connecting to another, thriving. Mark Taylor (1995) reads Deleuze and Guattari's rhizome as a way to mimic the hypertexts of the simcult, in a way that complicates but without a hierarchical order:

> Rhizome grow by folding and refolding without ever unfolding. Endless complications create bulbs and tubers, which are something like invaginated pockets that cannot be p(r)icked. The rhizomic network does not grow from a common stem, root, or branch. To the contrary, rhizomes are spliced and grafted in such a way that connection is established without synthesizing or integrating the differences joined. Since nothing is integral to the network, connections can be cut without disrupting the opening system. (Retrieved March 12, 2008, from http://teknema.free.fr/2Taylor.htm)

A rhizomic network in a simcult proliferates surfaces, erasures, touches, and spacings. Hierarchy is displaced by multiplicity and diversity, linearity is interrupted by complexity, metanarrative becomes cacophony, and leadership is represented as collaborative teamwork.

Body

Though we still hear and see, people tend to take body and mind as two separable or even binary opposite entities. A mind and body dualism has long been refuted by philosophers, scholars, writers and artists from diverse standpoints, multiple disciplines, and for different reasons. Knowledge is reconfigured as not only conceptual, but also corporeal and embodied. The interconnectedness of mind and body in pursuing truth, knowledge, and understanding, or learning to live or to be, are all widely examined (Bergson, 1913; Dewey, 1934; James 1977; Merleau-Ponty, 1962; Grosz, 1994, 1995; Hayles, 1999a). In recent years, more and more literature, philosophical arguments, and artists' performances grapple with the body as a primary site/issue. The body's materiality, corporeality, identity, subjectivity, images, senses, feelings, emotions, performativity (Butler, 1999), forces, movement, and spatiality all have been rethought and re-engaged. Taken as an outside, exterior cover, appearance, mask or image, the body can be written on, inscribed, or shaped by social, political or cultural discourses, yet the body never remains static or passively waits for inscriptions and reproductions. It is continually in a struggle with these discourses and forces. It discloses, communicates, and performs feelings, emotions, affections, identities, and differences. Materialized and manifested by sound, smell, skin color, motions, size, tones, speech patterns or facial expressions, the body embodies social, political, and cultural affective impacts, especially when these elements complexly and incongruously encounter, rub against each other, or reposition themselves on the surface of a body. The body never separates itself from its inner space; it "constitutes the masses they appear to adorn" (Taylor, 1997, p. 186). For

Maurice Merleau-Ponty, mind is an embodied mind; mind does not exist alone without sensory, emotional, or affective relations with one's body. "To be consciousness or rather to be an experience is to hold inner communication with the world, the body and other people, to be with them instead of being beside them" (1962, p. 96), and "our body is not primarily in space: it is of it" (p. 148). Mikhail. M. Bakhtin believes that the inner and the outer relationships are not only conceivable, but fundamentally, they are experienceable and sensible. Architectonics, as an architectural term, originally was about buildings, and is used by Bakhtin to describe the dynamic relationship between entities. Buildings are never just inactive properties manifesting ownership. When appropriated creatively, they are passages and doorways and are able to direct, mediate, and actualize a body's movements and sensations. Projections of inner sensations converge with the outer body. Bakhtin (1990) states:

> My own exterior (that is, all of the expressive features of my body, without exception) is experienced by me from *within* myself. It is only in the form of scattered fragments, scraps, dangling on the string of my inner sensation of myself, that my own exterior enters the field of my outer senses, and, first of all, the sense of vision (pp. 27-28).

Buildings and architecture's regulation and restriction on a body's movement, sensations, sense of wonder, and thoughts would be on a par with its visual, physical, sensational inspirations, aesthetics, and tensions, and eventually to the embodied mind. When the simplicity, clarity, and Euclid geometric modern architecture gives way to a multi-layered, complex, incongruous, or ambiguous post-modern architecture, the body runs into immediacy, questions, and a matrix that unsettles both the body and the mind.

Artists with other specialties, like architects, take the body as a center to create aesthetic inquiries, and many of them take the body into extremes to evoke viewers' responses. One group of artists who take the body as a center piece in their work is performance artists. Performance artists at large use their bodies as an intense surface to speak, to subvert, to create meanings and to reconstruct gendered, raced, sexual, political, and spiritual identities and subjectivities. These artists take embodiment and the materiality of body as their creative landscape, and relate bodily experiences to make the social and cultural discourses explicit, thus enabling an experience that is swallowed and that only reveals itself later on.

The Importance of Research

Just as depth can lead to a hierarchy of order, disciplines, and blindness toward the complexity and profundity of surface, the mind epistemology reduces knowledge as consciousness, cognitions, conceptions, and ideas. An epistemology of knowing has not addressed the wisdom of being, to live with, in, and through our surroundings, experiencing an ontological existence through which we feel, sense, move, and think. Though the educational community in general still uses, advocates, and prioritizes a four century old epistemology and rationality of mind, philosophers, scholars, businessmen and women, artists, technologists, feminists, and technoscientists from other disciplines, as well as educators who embrace alternative ways of knowing, are pushing multiple ways of communication and engagements, and continue to push towards a world of becoming that is unknowable to no one. Such engagement requires us to think, to feel, and to live beyond the dichotomy of mind and body, to see and feel the aesthetics of our

complex life and world. The expansion and interplay of knowledges, epistemologies, the signification of ontology, and the possibility of becoming blur the boundaries between mind and body, human and machine, word and image, human and environment, surface and depth, the real and the virtual, and the inside and outside.

The rapid change in digital, electronic and computer technology makes such boundaries more fluid, porous, and transformative. The communication and engagement between different beings and things are less about lines with two ends, but are instead networks, webs that are filled with layers of intent, dots, nodes, folds, and knots. The interface and interplay of these networks become more than just juxtaposition side by side, and instead are being interactively navigated, convoluted, and de-signed. The challenge for now not only rests with what to know, but also moves to learning how to be. An epistemological question transforms to an ontological change. The revolution of the computer, new media, digital and network information technology echoes what architect Robert Venturi emphasized almost half a century ago the significance of the complexity of signs and images in our surroundings in *Learning from Las Vegas*: "It is not an order dominated by the expert and made easy for the eye. The moving eye in the moving body must work to pick out and interpret a variety of changing juxtaposed orders" (Venturi, 1962, quoted in Taylor, 2001, p. 37). The expert in education has to move; there is nothing easy for his eyes to pick up from learning bodies. In a world where the experts are not in control, when the signs are more diverse and complex, he has to move among the signs, images, bodies, senses, feelings, and so on, to de-sign their ambiguities, contradictories, meanings, and embodiment. This poses a question to educators: how could we connect with our students regarding the reality of their times?

This dissertation takes up the question of bodily pedagogy and marks as well as theorizes the body as the central importance of knowing. This includes the body's ways of knowing and embodiment, that is, the body's senses, touches, visibilities, movement, and mobility. I take the body's centrality into aesthetics in exploring the notion of surface, its profundity, contentious forces and intertextuality. Maxine Greene understands aesthetics as "reflections upon encounters with works of art" (Greene, 2001, p. 57), and my exploration of surface through aesthetics is based upon my intertextual readings, viewings, and meaning makings of one type of work of art - architecture, which viewers encounter in multiple ways within and across the contexts of place, history, culture, and materiality of surface. Body is a surface, but it is unwilling to be read as superficial. To look at surface as static, prescribed, flat, and simplistic leads to surface determinism, and thus falling into the trap of reductionism. Rather, surface is a surface of "forces" (Chow, 1995), a surface of "intensities" (Braidotti, 2002), a surface of "rhizomes" (Deleuze & Guattari, 1987), a surface of "interstanding" (Taylor & Saarinen, 1994), and a complex hypertext.

Chapter II takes up the issue of surface in examining the forces, complexities, motions, and power of one type surface–architecture, and particularly the architecture of Frank Gehry. Using his unique architectural language, Gehry creates architecture that evokes feelings, movement, and emotions beyond verbal description that can only be viscerally felt. In doing so, Gehry's architecture is both functional and evocative, and it serves as a force to impel others to make meaning for themselves, creating a space to allow the conversation to emerge and flow. Gerhy's architecture evades the flat, inert,

and the boxlike Euclidean geometries supported by computer-based technology. His architecture represents a fluid, chaotic, relational, and rhizomic postmodern complexity. Not only fascinated by shapes, Gerhy's buildings innovatively deploy material, color, light, and functionality, and at the same time respond to the local cultures. What the unconventional forms and spaces of Frank Gehry's architecture enables is the ongoing movement of the bodies entering into the space, a motion that flows on the map of Gilles Deleuze and Félix Guattari's plateaus. What the movement also breaks is the dichotomy of surface and depth.

In Chapter III, the dualism between surface and depth is further deconstructed. Beginning with Maurice Merleau-Ponty's statement "I am my body," I examine the problematic Cartesian dualism of mind and body, as well as its proliferators of thought and unthought, thought and body, inside and outside. Following Deleuze, I argue that thinking is not an innate brain stretch; it is always from the outside, from the body, and thinking is an activity which is made possible only through encountering the outside. There is a flow of movement between inside and outside which does not duplicate either side. However, there is always *flesh*, or *différance,* about which both Merleau-Ponty and Derrida theorize. Thinking is not innate, which also explains that there is always a community of thinkers in which originality of thought is impossible to trace, a point that both Michel Foucault and Roland Barthes made. Moreover, I draw upon feminist thought regarding not only the knowing body, but also embodiment, a critical centrality in knowing that has largely been overlooked in discussions of the body. To think embodiment is to make the body explicit in terms of its material traits: from Judith Butler,

Rosi Braidotti, Elizabeth Grosz, Alison Jaggar, and Katherine Hayles, the body's materiality, matter, movement, feelings, and emotions are made relevant and momentous to the knowing body. The specific examples of embodiment are represented through performance art. Performance artists Carolee Schneemann and Sigalit Landau use their bodies to probe embodiment and evoke embodied responses. Chapter IV explores the issue of embodiment that is not limited to humans, that is, the posthuman embodiment that Katherine Hayles discusses. In this chapter, in engaging with Katherine Hayles and Donna Haraway on the embodiment of nonhumans, machines, and "companion species," I argue that in the information and network technology era, embodiment is not decreased, but rather it has been increased and expanded in that technology and communication are always materialized. Technology is never automatic and is not immune to the cultures that speak through it. Taking on posthuman embodiment, I also turn the focus to public media and new media, which have made embodiment more widely felt, experienced, and engaged. In a certain sense, public media and new media enable public participation, contribution, interaction, remixing, and knowledge sharing and making, thus deconstructing and constituting the public discourse at the same time.

In Chapter V, I explore why the interdisciplinary study of surface, body, interstanding, and posthuman embodiment in our time are substantial in our daily curriculum and pedagogy. I make explicit in which ways my argument on the profundity of surface, body, and posthuman embodiment can be engaged in education, through curriculum and pedagogy. I discuss in which ways we could possibly envision and practice embodiment in time, space, and place, thus creating an educational environment

that makes meaningful and creative beginnings for our students.

This dissertation itself is a mediated surface that follows no linearity. The surface of this dissertation is where mixed visual, written, audio, motional, oppositional, confrontational, harmonious, and different texts rub against each other, reposition themselves, interplay, fold into each other and simultaneously erode and erase each other.

This dissertation also endeavors to appropriate itself as a hypertextual entanglement that conveys my best hope of provoking a complex reading, viewing, hearing, and touching of a simulated experience of thinking and doing the various possibilities and visions of a curriculum and pedagogy. In any network that fabricates intertextuality, the search for "under" become an engagement with the "inter." The inter, or the in-between or middle, is where our eyes follow the signs, with moving eyes and moving bodies, and the middle is not stable:

> The middle is by no means an average; on the contrary, it is where things pick up speed. *Between* things does not designate a localizable relation going from one thing to the other and back again, but a perpendicular direction, a transversal movement that sweeps one *and* the other away, a stream without beginning or end that undermines its banks and picks up speed in the middle. (Deleuze & Guattari, 1987, p. 28)

When body and mind convolute and the network that we dwell in simulates and folds, when depth is unhinged and only surface effervesces, which is anything but superficial, what we have left to do is not to dig deeper, but rather is to weave, interface, cross-reference, interplay, and interstand the in-between space (Taylor & Saarinen, 1994).

Interstanding invites the readers/viewers to enter into an interrelationship with the other and with the self; once one is in interstanding, one stops being an outsider, and becomes a participant in meaning making. Interstanding falls into the minds and bodies of the readers and viewers; it produces complex hypertexts that are simultaneously visual, spatial, and sensational. However, leaving any surface unquestioned or assuming any surface with profundity renders it a superficial profundity. Therefore, viewers and readers have to make an effort to define or decide if a surface is profound within a given context.

In 1994, Taylor and Saarinen envisioned our age as an "age of images and simulacra. Philosophy must be ready to operate within the realm of images because that is where the "real" is taking form" (Taylor & Essa, *Media Philosophy,* p. 17). The educational community does not live outside of this age or this simulacra; we are convoluted by it, and most importantly, our students are constituting and simultaneously constituted by it.

The time has arrived not only to envision such experiences, but to be part of it, constituting it.

An alternative version of this dissertation is submitted as a separate file, in which readers and viewers can find a more innovative format, which includes hypertext and multi-media representation of this dissertation. In order to view the videos and listen to the sound files, *Apple QuickTime* and *Adobe Acrobat* must be installed.

CHAPTER II

THE POWER OF SURFACE - ARCHITECTURE AND BEYOND

Maybe it is Frank Gehry who renders surface profundity through his design and construction of architecture that complicates our understanding of art and of aesthetics. Working on the surface of architecture, Gehry proves that the outside is as deep as the inside, the surface is as serious as the depth, the body that encounters works of art is also a knowing subject, which is just as critical as the conscious mind that appreciates art. Incorporating the latest available technology, playing with the materials, and folding in emotions, feelings, movements of bodies, Gehry brought everything which is inseparable in encountering to the boundaries of the various kinds of intensified affective forces at play: visual, audio, visceral, proprioceptive, and tactile. Mind and body when encountering Frank Gehry's architecture becomes one; the aesthetic experience is an encountering and involvement of both the body and the mind. It is an embodiment that extends beyond human-to-human interaction, toward interactions between humans and art, buildings, the environment, culture, and with surfaces that are actualized by technology.

Like many of his public architecture projects, the Frederick R. Weisman Art Museum at the University of Minnesota (Figure 2.1) is one of Frank Gehry's many remarkable examples of the use of curvilinear geometric forms and materials to evoke the visual, the spacial, the fluid, the sensational, and the profound. Located on the east bank of the Mississippi River in Minneapolis, Minnesota, this early work of Frank Gehry is

less exposed and less frequently discussed by the admirers or the critics. His other two more famous projects are the Walt Disney Concert Hall (Los Angeles, 1987) and the breathtaking and groundbreaking Guggenheim Museum in Bilbao (1991-1997; Figure 2.2). Yet the Weisman Art Museum project was launched much earlier than the

Figure 2.1 The Frederick R. Weisman Art Museum, Minnesota (Aerial View).

Guggenheim Museum in Bilbao, and was equally bold and innovative at that time. "The Weisman is special because it was the beginning of a new design direction for me," said Gehry (http://www.weisman.umn.edu/expansion/exp_project.html). Gehry's buildings always have been sensitive to the notion of place; they are well connected with the local

cultures, the surroundings, and the people. In Gehry's own words, his design is organic, with humanism at its heart, and the building belongs to the people who live in that place.

Figure 2.2 Guggenheim Museum Bilbao, Spain.

For example, he has embedded bricks in the exteriors of many of his buildings, especially in the museums. Gehry understands that many other public buildings are made of bricks, and the museums he designs are pieces of architecture that serve the public, even though his preferred material is metal. The Frederick R. Weisman Museum is such an example,

with red bricks used to join the museum with the color and texture of the other university buildings at the University of Minnesota, making this museum an extension of the campus culture.

The interaction between materials, contexts, surroundings, shapes, and local cultures has made this museum a dynamic flow of events, as exampled by a remark from one commentator made on the museum website: "Like a Duchamp painting made real, the design...exudes energy and dynamism as it descends the bluffs of the Minneapolis campus overlooking the Mississippi River. The museum's undulating forms forcefully mark the symbolic crossroads of the University's main campus" (http://www.weisman.umn.edu/architecture/arch.html). However, his favorite medium is metal, and many of his building's exteriors are clad or decorated with large panels of various metals, from stainless steel to titanium. Both stainless steel and titanium panels function to reflect the various lights, either the sun, moon, street lights, car head or tail lights; in the night, these reflective surfaces converse with the lights inside, adding another dimension to the architecture that attracts and tricks. When the sun gives way to the moon, the building echoes the glimmering beauty from the sunset, and the blue sky kindly shares its color with the metal. On a cloudy or rainy day, the stainless steel and titanium metal flows from the clouds, responding to the speed of the movement of nature, and the white titanium turns to golden when it gets rained on. These metal panels are arranged in a way that does not follow the conventional straight lines, rectangular or square shapes, repetitive or rigid geometries, but rather they were lain on each other, they support each other, squeeze in between each other, fold onto each other, spread out, and together they

create curved lines and three dimensional surfaces, sharp angles, rough edges, and fluid spaces, attracting and appealing. A moving eye that follows each panel only finds surprises.

The irregular shape of the building, its unusual mosaic of form, earned Gehry both fame and objections. Frank Gehry's extraordinary use of irregular shapes and his "architectural language" could sometimes be costly, upsetting people who look for efficiency, function, and usefulness. Gehry was criticized especially for "creating functionless forms" (http://en.wikipedia.org/wiki/Frank_Gehry). Critics said that the "buildings do not seem to belong in their surroundings 'organically,'" and "the spectacle of a building overwhelms its intended use" (http://en.wikipedia.org/wiki/Frank_Gehry), as well as that the buildings were "all spectacular surfaces with little substance" (http://djhuppatz.blogspot.com/2008/03/portrait-of-architect-as-artist-frank.html). Such criticism reflects the idea that in our era the antagonistic perspective toward decoration, the visual, the senses, and the sensational effects that our body experiences and engages with is still pervasive.

In an interview[2] with Charlie Rose, a PBS host and interviewer, Frank Gehry stated that architecture is a process of personal exploration, in form and surface. Making the surface attractive and comfortable is essential. He justifies his use of metal and

[2] A streaming video of this interview can be viewed at http://www.youtube.com/watch?v=cWkIV6FdOHU.

creates unconventional shapes in that these materials appeal to people to touch them. Theo van Doesburg believes:

> Man does not live within the construction, within the architectural skeleton, but only touches architecture essentially through its ultimate surface....The functional element becomes automatic, only the summarizing surface is of importance, for sensory perception as well as for psychological well-being" (quoted in Taylor, 1997, p. 186).

To touch is to have an intimate experience with something, the tactile sensibility toward materials as well as the knowing gleaned from them is usually silenced (Springgay, 2004). To take the lead in challenging the conventional and creating something that is not recognized by most people is usually perceived as threatening. It is stepping into the unknown, and unlearning what one has learned. Gehry admitted that he grew up as a modernist and used to learn that decoration was unnecessary and even bad, but later he began to believe that an architect needs to give feeling to a building.

Rose mentioned that Bilbao has a sense of folding, and Gehry agreed that the fold was certainly in his mind when he was designing this museum. Both of his two museums, the Guggenheim Museum in Bilbao and the Frederick Weisman Art Museum at the University of Minnesota represent and address such notions of fold, surfaces intentionally left unfinished, overlapping each other, and only doubled in other dimensions or interfaces. As much as they fold and unfold, these two museums themselves are as much artistic and aesthetic products as those artworks they hold and present to the world. Fold, for Gehry, is a human being's first response to primitive

experience, especially that of when we were babies in our mother's arms, touching the fabric of fold; therefore, the fold of buildings reminds us of the intimacy between us and those about which we care.

Thinking of the Baroque architectures, Gilles Deleuze writes: "The Baroque refers not to an essence but rather to an operative function, to a trait. It endlessly produces folds" (Deleuze, 1988, p. 3). As it was popularized by the Roman Catholic Church in the early 17th century, Baroque style architecture was deeply rooted in religion. The church believes that art and architecture are meant to encourage a human's direct, sensitive, physical, and emotional engagement with religious absolutism (http://www.baroquelife.org/baroque-art/baroque-rococo-art.php?link=5). The Baroque itself, as Deleuze argues, is not the essence, is not what the church intended to address; rather, it is its aesthetic effect, the waves of ripples sensed through humans' emotional and physical attachment to the messages that the architecture delivers. Baroque as a mode of address, a medium, no doubt becomes inseparable in people's religious encounters and adventures. The folds of the Baroque manifest themselves through the Baroque's material traits, its matter and mass. It was Gian Lorenzo Bernini who famously wrapped architecture and sculpture within the folds of clothing, with the force of flow, triggering emotional and psychological responses to the Baroque. Drawing upon Heinrich Wölfflin, Deleuze describes Baroque aesthetics which is worth quoting at length:

> horizontal widening of the lower floor, flattening of the pediment, low and curved stairs that push into space; matter handled in masses or aggregates, with the rounding of angles and avoidance of perpendiculars; the circular

> acanthus replacing the jagged acanthus, use of limestone to produce spongy, cavernous shapes, or to constitute a vortical form always put in motion by renewed turbulence, which ends only in the manner of a horse's mane or the foam of a wave; matter tends to spill over in space, to be reconciled with fluidity at the same time fluids themselves are divided into masses. (p. 4)

These material traits, that is, the artistic treatment of form, shape, space, color, and matter, fabricate the skin of a piece of architecture. Since matter is "infinitely porous, spongy, or cavernous texture without emptiness, caverns endlessly contained in other caverns" (Deleuze, 1993, p. 5), matter leaves enough space for the architecture's skin to operate. Skin rubs against skin, stretches, twists, turns, and overflows upon each other, creating infinite mass, space, and movement that cease to be one, but instead is folds upon folds....Baroque language and its aesthetic effects define and redefine religious purposes, since viewers were not given words from the religious texts. Instead, these Baroque architectures themselves are the texts that press viewers to interpret. Architecture does not provide written words to answer the viewers' religious quests, and thus their searches become personal, felt, and primitive. A religious adventure for some can be mysterious, a labyrinth of Leibniz, and such a labyrinth, as Deleuze pointed out, cannot be broken into parts or dissolved into isolated points. Instead it "resembles a sheet of paper divided into infinite folds or separated into bending movements, each one determined by the consistent or conspiring surroundings" (p. 6). The folds become infinite.

How did Frank Gehry interpret the notion of fold in his architecture? What are the

folds that the Guggenheim Museum in Bilbao and the Frederick R. Weisman Museum produce? And what are their "operative functions"?

Frank Gehry believed that architecture has a language. The language of architecture, for him, was a means to enable his personal exploration, in form and surface. It is a language interested in making something that has, say, feeling, and it is a language that connects and communicates with people through touch and movement. For him, buildings are not just hermetic, abstract containers, to be looked at from a distance; rather, except for function, a building has a persona. It evokes feelings, makes for joy, surprise, or anger, and sometimes, it can produce tears. This is because extraordinary architecture exhausts words; there are moments when encountering a building or piece of architecture is beyond description. You only experience the effects of it when you go through it. In 1998, Frank Gehry, along with another renowned and legendary architect, Philip Johnson, and Charlie Rose visited the Guggenheim Museum at Bilbao. It was Philip Johnson's first trip to this museum. When Charlie Rose humorously asked Johnson, "without embarrassing Frank, tell me what do you think of the building?" The man paused and answered in a trembling voice: "architecture is not about words, it is about tears. Look at that...." He was 92 years old, and Johnson was in tears.

Frank Gehry strongly believes that architecture can direct people to enter into a space and take certain positions, through their exertion and the ease of their movement, and movement is a way to evoke feelings. Gehry looks beyond the dualism between motion and stasis; he makes movement possible by inserting vigor into inert materials that translate his architectural language. He did so with the Guggenheim Museum at Bilbao; he

did it even better with the Condé Nast Cafeteria (New York, 1996–2000; Figure 2.3). As one of the leading American magazine publication organizations, whose publications include *Vogue* and *Vanity Fair*, Condé Nast at Times Square headquarters invited Gehry to create a cafeteria that could serve the purpose of providing a place for people to convene, mainly its editors. It appeared that Condé Nast had trouble getting editors

Figure 2.3 Condé Nast Cafeteria, New York.

together; they told Gehry that if these editors could be brought together, then they would win. Condé Nast surely saw the power of a place to transform a culture, human to human relationships, because for a mass media company that depends upon communication, the conversation within is as important as the messages they deliver to the public. Gehry designed 50 power tables that do not follow hierarchical relationships, with laminated curving and billowing glass that winds through the cafeteria. He added dazzling lights and blue titanium panels that both separate, connect and respond to the similarly curvilinear glasses and seats, bringing a sense of flow and enabling a culture that is both social and immersive. A place to "see and to be seen," a two-way spectacular context, the cafeteria attracts people and invites them to enter and mingle without sacrificing privacy. The cafeteria was transformed from a dull place into a powerful surface that animates conversations and delights even more artistic spirits. As art critic Harold Rosenberg remarked regarding Jackson Pollock's "drip" painting: "what was to go onto the canvas was not a picture but an event" (Rosenberg, 1959, p. 40, quoted in Kaye, 2000, p. 107). Frank Gehry's canvas, the cafeteria, is where events go on all the time. A cafeteria, a space that holds moving bodies, was made fluid, dynamic and energetic.

When the torqued, curvilinear, and sensual glass unfurls in unexpected ways, reflecting, corresponding, and rejoining the blue titanium panels which are equally in a flux of passages, when there is no rule of where to sit at the power table and the seating is democratic, the activation of movement is mutual, a mobile body and a fluid space, and the flow becomes possible and joyful. If such activation of movement becomes possible in a museum, such as the one in the Guggenheim Museum at Bibao, the movement turns

three dimensional. Architecture has a long history of representing inactivity and fixity; it has been about stability. It is usually frozen, and it is such static aspects that Bernard Tschumi referenced in an interview with Isozaki Arata. However, the moving bodies within a piece of architecture inspire him: "architecture simultaneously was always challenged by the movement of bodies going through architecture, by various activities in it...You had always movement of bodies in space. Space was constantly activated by movement" (quoted in Taylor, 1997, pp. 241-242). All of Frank Gehry's buildings yield a sense of flow, of movement, and of act. Why is movement so critical in architecture? What can movement bring us or how can it enable us as human beings to make meanings from/with our surroundings, with art works being exhibited or performed, or with ourselves as learners?

The aesthetic experience that we seek from art or architecture most apparently and quite often is about its impact on our vision and tactility; however, beyond vision and tactility, what is growing out of such aesthetic experience is also our body's active interoceptive and proprioceptive engagement which is less observed, addressed, and honored. As the *New Oxford American Dictionary* explains, interoceptive relates "to stimuli produced within an organism, esp. in the gut and other internal organs; and proprioceptive - relating to stimuli that are produced and perceived within an organism, esp. those connected with the position and movement of the body." Thus, the interoceptive is about visceral sensibility and proprioception is sensibility about positions, movement, and the orientation of the body. Proprioception is our ability to make our movement possible and keep us balanced; it helps us to position and reposition

ourselves when there is a disturbance or motion. Brian Massumi (2002) explores the meaning of proprioception and the interoceptive (viscerality):

> Proprioception translates the exertions and ease of the body's encounters with objects into a muscular memory of relationality. This is the cumulative memory of skill, habit, posture. At the same time as proprioception folds tactility in, it draws out the subject's reactions to the qualities of the objects it perceives through all five senses, brining them into the motor realm of externalizable response. (p. 59)
>
> and
>
> Viscerality is the perception of suspense. Its elementary units...are *degrees of intensity*. (p. 61)

Our proprioceptive sensibility orients us and keeps us from falling when we go up or down stairs, even without looking. Howard Gardner describes such a proprioceptive sensibility as "bodily kinesthetic intelligence," which is the interplay of both mind and body, a conscious awareness achieved through bodily knowledge (Gardner, 1993, p. 19). When "proprioception folds the tactility in," for example, the coldness of the hard wood floor in the winter will stop us from walking barefoot, but in summer proprioception turns out to be encouraging. Sometimes our sense of proprioception evolves into habits and adaptation; we are too familiar with it and not conscious about it, and thus we are desensitized. Viscerality refers to our internal organs' reactions to outside stimuli, when each stimulus appears in a particular context such as intensity. These intensities can increase, as an example from Massumi demonstrates: "Walking down a dark street at

night in a dangerous part of town, your lungs throw a spasm before you consciously see and can recognize as human the shadow thrown across your path" (p. 60). Thus, beyond sight, hearing, smell, taste and touch, proprioception and viscerality could be our sixth and seventh senses, and are of the affective domain through which we learn, know, and alternatively, make us knowable. What is more intriguing about proprioception and viscerality is that when combined with the other five senses, they form a "biogram" rather than a diagram, which does not take human reactions and embodiment into the horizon. A biogram is human intimacy crossing the boundaries of inside and outside, a synesthesia that is only activated by movement and enabled and empowered by architecture. The biogram that Massumi envisions:

> is the mode of being of the intersensory hinge-dimension. Its strange one-sided topology is the general plane of cross-reference not only for sights, sounds, touches, tastes, smells, and proprioceptions, but also for numbers, letters, words, even units of grammar. (pp. 188-189)

A biogram needs the surroundings, especially the buildings and architecture that are supposed to involve humans, to be moveable, sensible, felt, phenomenological, and to bring eventful engagement. Brian Massumi has a request for architects:

> What if topological architecture could find ways of extending the "diagrams" it designs into "biograms" inhabiting the finished product? What if it could find ways of embedding in the materiality of buildings open invitations for portentous events of individuating deja vu? Might this be a way of continuing its topological process in its product? (p. 191)

As said, proprioception is crucial to our knowing and our daily activities, but this can be both empowering and dangerous. If we are used to our proprioceptions, our movement becomes routine, repetitious, and we become desensitized. When we lose our nerve to sensitize, to react, we risk ourselves losing joy, sadness, happiness, wonder, and even sympathy towards others. Thus, once architecture turns to be fixed, it loses its motion to interrupt the habitual proprioceptions,, it will offer hardly any potential for movement or surprise. The "open invitations for portentous events of individuating deja vu" have to send out signifiers which appeal, intrigue, surprise, and connect with those being invited. Such invitations do not hide excitement and seriousness, but rather they are on the outside and on the surface through the architecture's material traits. This is what Baroque architectures addresses, and this point has been addressed previously. When architecture is not fixed, it becomes playful and liberating. A liberated surface is essential in architecture for Le Corbusier:

> Architecture, being the masterly, correct and magnificent play of masses brought together in light, the task of architecture is to vitalize the surfaces which clothe these masses but in such a way that these surfaces do not become parasitical, eating up the mass and absorbing it to their own advantage" (quoted in Taylor, 1997, p. 188).

Mark Taylor has expanded the philosophy of architecture to encompass the fashion industry, and argues that surface is also consuming, in fact--all consuming. Surface and consumption are inseparable. For him the fashion industry, like architecture, also works on/at the surface; surface is as profound as depth, subverting the hierarchical order and

structure of surface and depth relations. Taylor's argument regarding the consuming surface offers insights into the interchange between body and body image. Such a process involves a virtualization of the body and the disappearance of the real. The disappearance, as well as the virtualization of the real, actually "consumes the foundation that had appeared to secure truth and ground meaning. In the absence of any real referent, signs constantly represent other signs. The proliferation of signs eventually subverts the very architecture of signification" (p. 207). Taylor's statement reminds us of what Foucault has said, that is, everything is not necessarily good or bad, but everything is dangerous. Likewise, as an art form, architecture per se displays its own beauty through its complicated surfaces, just like the arts it holds inside. This is the "transubstantiation" of which Taylor remarks. However, the point is: surface and depth, are equally important. We need to see the mass from the ripples of the surface, and consider that the surface and depth are a folded whole rather than separate or even opposite entities. Deleuze puts it this way: "The outside is not a fixed limit but a moving matter animated by peristaltic movements, folds and foldings that together make up an inside: they are not something other than the outside, but precisely the inside *of* the outside" (Deleuze, 1986, pp. 96-97). Gehry's buildings have such inside-outside phenomena; its interior structure and form continue its exterior's flow and pattern, as if the inside was the extension of its outside network, a network that expands and connects the building's own materiality in dramatic ways, leading to a spectacular and visceral complex that does not mark any beginning or end. What is left to follow is the flow of motion.

Taking the Guggenheim Museum at Bilbao as an example, Mark Taylor describes:

> The shimmering surfaces of Bilbao are folded inward and tinted blue to form the ceiling and walls. The result is a simulated sea of river, which is certainly not natural but not quite artificial. When transposed from outside to inside, opaque forms become transparent and translucent. Rippled surfaces of undulated glass shapes reflect the reflections of the titanium panels. Along a mirrored corridor, reflections of reflections of reflections create figures that flow, torque, morph, and liquefy only to reform and return to circulation. (Taylor, 2001, p. 46)

The movement and transposition between outside and inside are not limited to the building's own exterior and interior; this construction also enables the art projects it holds to enter into a motion. For a curator who is used to set paintings or other forms of art on straight walls, in rectangular or square shaped rooms, with halogen light highlighting the pictures, Gehry's slanting and curved walls, irregularly shaped rooms, glass roofs allowing the skylights to bathe the pictures can be both challenge and innovative. As the director Jan Hoet of MARTa at Herford, another Frank Gehry Museum in Europe recalled his thoughts when he saw the design: "how to hang pictures on the slanting walls? What the effect would be? I was used to straight walls and closed white cubes" (http://www.youtube.com/watch?v=8LHkou_mr28). The effects of Gehry's architecture, may not be predetermined or even expected before the moving body comes in. But the curator sees Gehry's white cubes full of dynamism accompanied by flight, due to the light through the roof, and as a result a puzzle becomes an inspiration. A

museum usually has white walls, and in a sense, these white walls try to stay unobtrusive and neutral so as to ensure that the art works get the visitor's full attention. However, not left with only curved and slanting walls, MARTa also has colorful walls and skylights, and all of these elements together shake the stability and neutrality that most museums try to objectify; they become an essential partner with the art and the viewer, giving the exhibited art works more site-specific tones. As a result, the exhibited works are activated and set in motion.

Such is the case with the site-specific and distinctive material traits of Bilbao; the texture of this site creates a situation, and the site is crucial for many artists who seek to set their works within the museum's meanings. Artist Richard Serra designed his installation with gallery 104 in the Guggenheim Museum at Bilbao in mind. This 2005 installation is called *The Matter of Time*, and it found its permanent home in Bilbao.

The locus of the juxtaposition of the different shapes, colossal metals, narrow or long and round or open sensational passageways between and along the objects, is where the viewers pick up or drop the speed of time. For Serra, viewers' experiences of moving through and around his project are critical to the meaning of his art. Such experiences, first of all, are accessed through our senses and are activated by motion. What the movement does is bring us closer to what we feel about time, rather than what we think about time. Serra's installation *The Matter of Time* (Figure 2.4) in the Guggenheim Museum in Bilbao joined his early work *Snake* (1996-1997), which is also housed in gallery 104 (the "Fish" gallery) (http://www.guggenheim.org/press_releases/release_86.html). In 1999, Serra also presented his *Torqued Ellipses* in the same gallery.

Bringing his new work into the same museum and the same room, Serra has extended his artistic exploration and articulation of movement and space. Thus, within the context and through time, Richard Serra has

Figure 2.4 The Matter of Time. Installation by Richard Serra.

brought his pieces together for viewers to make meaning from the movement of time and form, "from the basic form, an ellipse, to the most complex, a spiral" (http://www.guggenheim.org/press_releases/release_86.html). How does Richard Serra see his site-specific work? The Guggenheim Museum documents explain to us the significant connection between the Frank Gehry-designed museum and Serra's work:

> Mr. Serra has placed each work in accordance with the architecture that houses it, paying special attention to the possibility of viewing the interior of some of the works from the balcony on the second floor. The works respond to the architectural details of the gallery, such as the sweeping arches and skylight overhead, integrating Mr. Gehry's vision into the flow of force and movement. As Mr. Serra says, the Guggenheim Museum Bilbao is 'the only place in the world where I could do an installation like this.'" (http://www.guggenheim.org/press_releases/release_86.html)

Gehry's architecture and Serra's sculpture triumph along side each other. In art critic Hal Foster's words: " they [museums] use its great scale, which was first posed to challenge the modern museum, as a pretext to inflate the contemporary museum into a gigantic spectacle-space that can swallow any art, let alone any viewer, whole" (2002, p. 37). It appears that Foster may not appreciate such a win-win situation. Denying a modernist position toward architecture, Foster clarified: "I am simply opposed to a computer-driven version of a Potemkin architecture of conjured surfaces" (p. 38). Foster struggles with several issues, as is apparent in his remarks: he doubts the function of computer-based technology in architecture; he is antagonistic toward the surface's potential, especially the being-manipulated surface; and he distrusts simulation as well as its "deceptive" power to overwhelm the individual. While Jean Baudrillard would argue that "we are no longer in the society of spectacle...nor in the specific kinds of alienation and repression that it implied" (Baudrillard, 1994, p. 30). The medium which transfers the message itself becomes the process of simulacrum; in the simulacrum, the boundary

between medium, substance, content, and viewer grows indistinguishable. Baudrillard continues: "There is no longer a medium in the literal sense: it is now intangible, diffused, and diffracted in the real, and one can no longer even say that the medium is altered by it" (p. 30). Color, shape, form, and matter, these visual elements cover a substance that is supposed to be deep; however when the subject complexly emerges, these elements make depth as light as surface, creating tensional relations and motions. The use of computer-based technology and the play of surfaces in designing Bilbao were criticized by Foster as "Potemkin" and "swallowing," yet for Frank Gehry and many others who explore what a building could become, these are considered engagements between art and technology, pushing boundaries both technologically and aesthetically. Gehry told Charlie Rose in the same 2001 interview:

> I was looking for the ways fitting into my time, to use the technology now, to the best I can, to push it as I could. I know the edges, I found many edges, and try to make a building have some passion in it.

The edges that Gehry found and the language of his architecture are newer expressions which could not be true without the technology that goes hand in hand with the time in which Gehry lives.

A software program for military aircrafts, CATIA (Computer Aided Three Dimensional Interactive Application) has made Gehry's designs possible in practice. Currently, CATIA is widely used in aerospace, for example by Boeing and Airbus, in the automotive industry by BMW, Porsche, Toyota, and Ford, just name a few, as well as in shipbuilding and other consumer goods. CATIA enables multiple stages of product

development, from conceptualization, stimulation, and manufacturing to analysis. With digital and computer aided technologies, traditional 2-D paper design and documenting is replaced by 3-D innovative and interactive design, which allows for fabrication while pursuing constructibility. In 2002, Gehry and collaborators established *Gehry Technologies,* a company promoting technology-innovated design and construction to its customers. Their website claims: "We engage directly with clients to increase creativity and control; reduce project risks, costs, and completion times; and improve processes and decisions through collaboration, project visibility, and information access" (http://www.gehrytechnologies.com/index.php option=com_content&task=view&id =7&Itemid=212). A recently finished public project in Beijing, China for the 2008 Olympic Games, Beijing National Stadium, also known as the Bird's Nest, is one of *Gehry Technologies* aided projects. As Hal Foster and others who resist "computer-driven" architectures demonstrate, the use of computers and digital technology, even in our days, still has much to do to convince its users to engage with these innovative instruments. The Director of the European Gehry Technologies Inc, Edoardo Luzzatto-Giuliani, recalled:

> We faced many challenges in the past as we applied, to the architecture and construction industry, technology that had been traditionally developed and reserved for the automotive, aerospace and consumer goods industries. We were seen, back then, as the 'new kid on the block' with powerful technology that even though is proven today, was not culturally accepted or understood by this industry back in 2002. (Retrieved July 20,

2008, from http://www.3ds.com/fileadmin/your_strategy/customer_stories/flyers/CM7_Europe_p1011_Gehry_Technologies_CATIA_EN_FINAL.pdf)

The computer-based technology and craftsmanship not only enables the leap from a two-dimensional working platform to a three-dimensional interactive application, but it also turns Modernistic geometry into a Postmodern complexity of lines, dots, surfaces, forms, and digits. The whole of a design is beyond the sum of the parts, as system thinking would argue (Capra, 1996), that is, the good contents do need aesthetic visions to put them together in extraordinary ways, which are more complex than linearity. Taking architecture as something other than concrete containers is to look at architecture beyond the rigid grids and to imagine it in the logic of networking. Mark Taylor argues, when theorizing Frank Gehry's architectures as a complex network:

> In probing new frontiers of complexity, as I have noted, Gehry does not simply negate modernism and the world it represents. Instead of repeating modernism's gesture by destroying its grids, Gehry subtly folds the mechanical logic of industrialism into his work in ways that paradoxically negate and preserve its traces. (Taylor, 2001, p. 41)

The complexity of space in the Guggenheim Museum in Bilbao can be seen from both the inside and the outside, in that the forms, shapes, and materials are interconnected but are encountered in unexpected ways. Galleries are located around the central Atrium, connected by curved walkways, glass elevators and stairs, evoking an experience at the Guggenheim Museum in Bilbao that is full of surprise and wonder. This museum finds

its home at a bend in the Nervión River at the former industrial site of Bilbao, Spain. A sketch of Bilbao from an aerial view looks much like a ship ready to sail. The museum involves the elements that represent the city, the metal, the steel, water, fire and fountains (designed by artist Yves Klein). All of these elements are closely connected with the city's past as an industry center of mining, steel, and shipbuilding, creating a structure or network that is not dull or static, but rather is a complex order that is, as Mark Taylor described, "emergent and transient." "It is as if the flow of the space follows the swirling eddies and turbulent whirlpools of the Nervion rushing nearby" (p. 44). The complex nodes and threads of this building animate the interaction between people, place, building, and the art the museum hosts.

The complexity of Gehry's buildings is not limited to its immediacy of physical, emotional, and intellectual appeal and engagement. The complexity also spreads its shoots and roots toward visuality. More than images, a visible self is woven into "a creative beginning" (Taylor and Saarinen, 1994) through skillful photography as well as the photographer's post-editing. A beginning only comes true because of a well fabricated "end-product."

With photographic skills, sensitivity, and aesthetics, creative photographers transform Gehry's Frederick R. Weisman Museum (Figure 2.5 and Figure 2.6) into a feast and kaleidoscope of pixels, light, digital technology, and photographic craftsmanship that both energizes and surprises viewers, and rewards and encourages players.

Figure 2.5 The Frederick R. Weisman Art Museum, Minnesota (Evening View). Photo by Nattapol Pornsalnuwat.

A blue and gold sunset illuminates the stainless steel walls. The different shapes and angles of the panels form multi-layered and multi-colored textures, both imaginative and active spaces. The street and car lights also add another layer of dynamism of speed and motion, as well as the reflection of sound waves. Dazzling blue blends in with the sky behind and above, and the waving gold and orange lights from the sunset. The car head and tail lights configure multi-colored dancing flames, as if they are celebrating the speed, the motion, the place, the life, and themselves. The "event" on the canvas of the building makes people wonder, think, and be in awe. When asked how he made the image by one online viewer, jpnuwat replied: "The blue resulted from sky color, about 1 hour after

sunset. The building facade is made from reflective metal. So it has reflection of the sky color. I also adjust color saturation and curve a bit though." Great buildings make people talk.

Here is another photograph of this same building by jpnuwat, as well as the conversation around this picture.

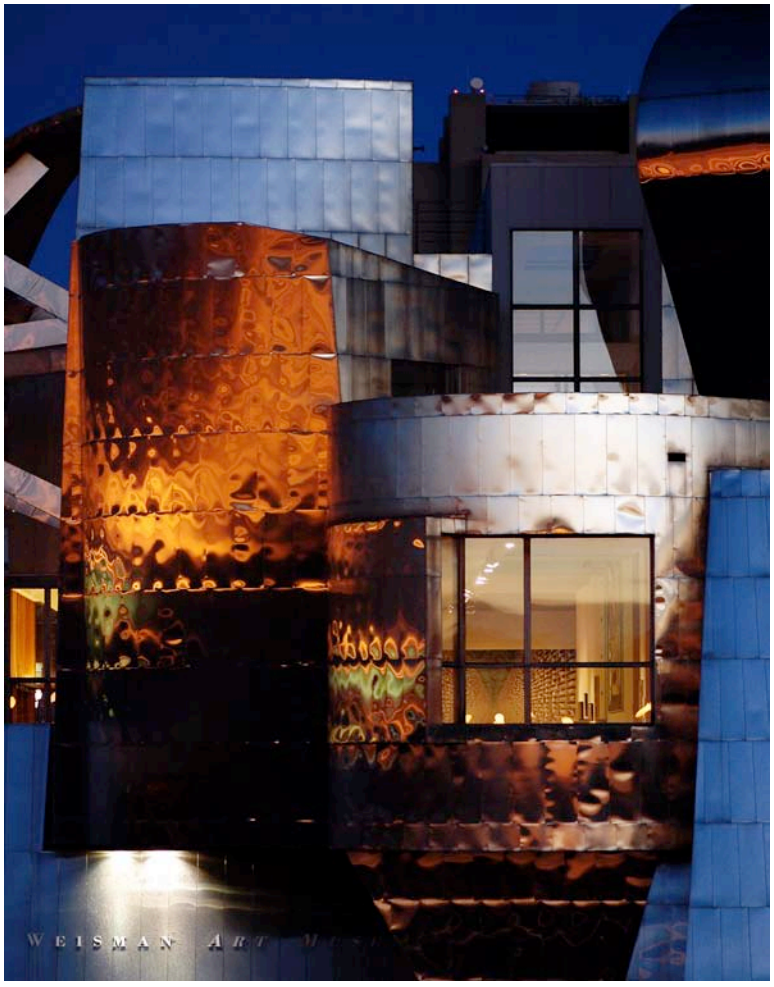


Figure 2.6 The Frederick R. Weisman Art Museum (Night View).

Photo by Nattapol Pornsalnuwat.

Wenslex[3] says: “Isn't amazing that a building can take on so many different appearances depending upon the light?” Jpnuwat replies: “That is exactly why I like this building very much. It is a clever design with great use of natural factors. Thanks for your thoughts. :)”

If not for Frank Gehry’s “conjured surface” and supportive computer technology, his buildings would leave no space for people to engage with each other, with media, and with the materiality of the surroundings in unexpected ways. From buildings, to photography, online conversation on the building, architecture, photography, art, digital editing, computer technology, light, aesthetics, and even philosophy, this ongoing process is activated through a complex assemblage that does not go under, nor does it have origins or destinations. Instead it represents a process that is horizontally folded, doubled, aggregated, loosened, unfolded, twisted, or woven along its lateral textures. The complexity of fold becomes a rhizomic structure, as Mark Taylor argues:

> As folds in-crease, the stem begins to split and the root starts to wither until it is no longer clear whether the web of language is grounded in anything beyond the creases and wrinkles of the threads from which it is woven. And yet, the network of ‘fold’ is not merely fragmentary. Its logic is neither inductive nor deductive, linear nor circular, rather, the logics of folds are rhizomic. (Taylor, 1995. http://tekhnema.free.fr/2Taylor.htm)

A rhizome, a philosophical notion theorized by Gilles Deleuze and Félix Guattari, is not

[3] Another flickr user.

built upon points or linear lines, but rather upon lines with latitude and longitude, on a map dimensions, magnitudes and planes. Deleuze and Guattari are more interested in the geographical, the horizontal, the extensive characters of events or social phenomena than the vertical, the structural, and the hierarchical order of them. Rhizome for them means a "map," and not a "tracing." "The map is open and connectable in all of its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation" (pp. 13-14). The map is about connection, vision, orientation, an open system of fields and plateaus, and "We are writing this book as a rhizome. It is composed of plateaus" (p. 24). A plateau does not have an end or a beginning, nor roots, and consists of relatively horizontal terrain: "a region of little or no change in a graphic representation" (Merriam-Webster's Collegiate Dictionary, tenth edition). A book that is written in a rhizomic way and "composed of plateaus" does not need to be read from the beginning to the end, but rather a reader can pick any chapter to read but does not lose the logic he/she tries to find, because there will always be a convergence where plateau meets plateau. Deleuze and Guattari explain Gregory Bateson's special use of plateau as a powerful and motional realm: "a continuous, self-vibrating region of intensities whose development avoids any orientation toward a culmination point or external end" (p. 24). Bateson uses plateaus to break the dualistic thinking of expressions and actions, which have been taken as two separate terminations. Deleuze and Guattari further explain his argument: "It is a regrettable characteristic of the Western mind to relate expressions and actions to exterior or transcendent ends, instead of evaluating them on a plane of

consistency on the basis of their intrinsic value" (p. 24). The lines become blurred, the seeming difference of even opposed relations between what we usually take as binary have put us in a position to choose, to select, to compare, to deny one or the other, and to value one at the price of spending the other.

Elizabeth Ellsworth, in her book *Places of Learning: Media, Architecture, Pedagogy* (2005), argues that museums are one of the "anomalous places of learning." Ellsworth believes that museums are public places, and a museum is "a form of knowledge," as she quotes Herbert Muschamp (p. 102). The power of the address of such knowledge, that is, the pedagogical force, "lies in its indeterminacy" (p. 100). She gives the examples of the US Holocaust Memorial Museum and the Vietnam Veterans' Memorial, both located in Washington D. C, to illustrate the pedagogical meanings of movement, sensation, and indeterminacy for a learning body. Ellsworth further explains that in education, educators have been thinking about pedagogical practices as scaffolding, in which "pedagogy functions as a ladder for moving students' cognitions up a hierarchical grid of scripted schemas and concepts" (p. 120). Instead, she argues that "the very possibility for learning depends upon the existence of selves in motion, it is paramount for educators and educational media producers to consider learning selves as being in motion" (p. 121). Ellsworth's mind and body pedagogy is the mode of address with which Frank Gehry's architecture has been engaging, and Gehry's architecture actualizes the pedagogical meanings that Ellsworth advances; the motion, sensation, and indeterminacy constitute our experience of learning, of knowing self and other, place and pedagogy, and mind and body.

From architecture, art, fashion, and photography, to design, technology, and philosophy, an intensified surface is everywhere. When the intention is to peel off the surface to reveal the real, the essence, the surface does not simply disappear, but reflecting, relating, and resurfacing only makes the deep, the hiding into something as ornamental as surface...another surface...a multiplicity of surfaces. And,

"A multiplicity has neither subject nor object, only determinations, magnitudes, and dimensions that cannot increase in number without the multiplicity changing in nature" (Deleuze & Guattari, 1987, p. 9).

What about mind and body?

CHAPTER III

BODY, EMBODIMENT AND PERFORMANCE ART

Knowing Body - Fold, Flesh and Forces of Affect

> The body catches itself from the outside engaged in a cognitive process; it tries to touch itself while being touched, and initiates 'a kind of reflection'[4] which is sufficient to distinguish it from objects, of which I can indeed say that they 'touch' my body, but only when it is inert, and therefore without ever catching it unawares in its exploratory function. (Merleau-Ponty, 1962, p. 93)

Oprah Winfrey knows for sure: "You're not your body, and for sure you're not your body image" (*The Oprah Magazine*, 2008, June). After spending ten weeks with Echkart Tolle and studying his book *A New Earth*, Oprah learned that she is *not* her body, and was enlightened. "I feel more connected to consciousness, or soul, or inner spirit - whatever you choose to name the formless being that is the *essence* of who we are" (p. 244, emphasis mine). Such comments seem to encourage women not to worry about their bodies and body images. No doubt for a celebrity who promotes women's rights, such remarks send positive messages for those women who choose not to control their bodies and not to live up to social expectations, and thus to relieve themselves from the self-censorship produced by intense social expectations. However, the various advertisements

---

[4] Edmund Husserl, Cartesian Mediations.

that her magazine advances, from cosmetics one wears that offer "advanced coverage,[5]" or that one might "look 40 at 50 and 55," to weight control diets promising that "losing weight can be 50% more rewarding with alli®," all come together to act as whispers within her magazine to betray her overt message that women should not care about their body images. Thumbing through the magazine, readers receive one whisper after another, all coming to a single message: we do care. From Oprah's own appearance, either in the magazine or on her show, we see flawless make-up, nice looking and well-fitting clothes, and well-attended hair. Therefore, on the one hand, Oprah works hard to be perceived as "proper," "normal," "fit," and "not out of date," but on the other hand, she feels guilty for achieving these with effort.

It seems to her that attending to one's body and body image is shallow, and the body and body image is not her "essence," at least when compared to her inner spirit and soul. One spiritual teacher, Marianne Williamson, once told Oprah: "In order to lose weight on a permanent basis, you want a shift in your belief about who and what you are. This is the miracle you seek." Sixteen years later, after spending ten weeks with Echhart Tolle, Oprah realized "the magnitude of your function" that Williamson informed her was right. "It is indeed a miracle when you realize the *fullness* of who you are. You're not your body, and for sure you're not your body image" (emphasis mine). Such a perspective reinforces the Cartesian *Cogito* - I think therefor I am - and *Cogito*, as Maurice Merleau-Ponty (1962) critiques, "defined *me* as the thought which I have of

[5] The examples here are all from the June 2008 issue.

myself, and which clearly I am alone in having, at least in this ultimate sense" (p. xii). The thought must initiate from me, the "formless being," the sole owner of the ideas. The search for the inner, the thought, the "formless being," takes both body and knowledge, body and soul, body and mind, inner and outer, as separate, contrasted, even antagonistic relations which usually leads to a position that elevates one of either side at the price of spending the other. Surely subjectivity and identity cannot be reduced to body and body image, but denying one's body and body image not only reinforces the *Cogito* mind and body dualism, but also does much harm to the knowing body that equally activates thoughts, a point we shall return to later.

Although Oprah can actualize her "fullness" without bothering to attend to her body and body image (though her magazine and her show suggest otherwise), Merleau-Ponty unequivocally emphasizes the concept "I am my body" when he says: "But I am not in front of my body, I am in it, or rather I am it. Neither its variations nor their constant can, therefore, be expressly posited" (Merleau-Ponty, 1962, p. 150). As a philosopher who believes in experiences, phenomena, and existential beings, Merleau-Ponty does not deny the significance of thinking, consciousness, or inner spirit, but he does not consider these to be the "essence" of life. What he rejects is the Cartesian dichotomy of mind and body, inside and outside. For him, to think is to recognize that it is me who is in the world and of the world and is thinking, and "my" experience and existence in the world matter. "The primary truth is indeed 'I think', but only provided

that we understand thereby 'I belong to myself'[6] while belonging to the world" and "Inside and outside are inseparable. The world is wholly inside and I am wholly outside myself" (p. 407).

Taking thinking as an innate mental activity and disconnecting thinking from outer spaces, the act of encountering, or engagement, taking body as a blockage that prevents thoughts and thinking and thus has to be restricted, such orientation regards thinking as a thing that is intact with the outer world. Thus, the body and the thoughts are two rivals that cannot co-exist. The belief that the body is inessential in our search for identity and subjectivity is not different from taking our bodies as objects that are dispensable, uncritical, and unwise. Merleau-Ponty disputes body as object, because an object means:

> it is standing in front of us, only because it is observable: situated, that is to say, directly under our hand or gaze, indivisibly overthrown and re-integrated with every movement they make. Otherwise it would be true like an idea and not present like a thing. (p. 90)

However, body does not fall into such categories:

> What prevents its [body] ever being an object, ever being 'completely constituted'[7] is that it is that by which there are objects. It is neither tangible nor visible in so far as it is that which sees and touches. The body therefore is not the nondescript one among external objects and simply

---

[6] Heidegger, *Sein und Zeit.*

[7] Merleau-Ponty draws upon Edmund Husserl.

having the peculiarity of always being there. (p. 92)

Merleau-Ponty also gives examples of one hand touching the other, where either hand can take the role of touching or being touched. Such double sensations represent "the body's capacity to occupy the position of both perceiving [the]object and subject of perception" (Reynolds, 2004, p. 11). Therefore, if the body is not "completely constituted," because the body's capacity to see, and touch, as well as use its double sensations, then a body can be constitutive and make sense for itself, a subjective move. A body can know.

Oprah refers to the inner as the "formless being." This conceptualization of inner is brought out in contrast to the body. Here, it indicates that the body is a form. It is unsound to say that the body is an object, and neither is it proper to say that the body is a form. Such expression and understanding deny the body's subjective and dynamic engagement with itself, and with the world in particular contexts and situations, through its distinctive sensorimotor awareness. Although Merleau-Ponty titled his book *Phenomenology of Perception* and devoted much of his effort to theorizing about perception, the perception for him is never a steadfast and non-participative speculation. Perception always unfolds its vision through a mobile and spatial course. Two chapters in his book address the notion of spatiality and space in a discussion of the body and perception. He points out: "Every perceptual habit is still a motor habit and here equally the process of grasping a meaning is performed by the body" (p. 153). The perceptual and motor habits of the body subvert the argument of the body as object. Merleau-Ponty further explains the problem of *Cogito*, which prioritizes mind over body for its trivialization of the body as a form and as an object. "Whether a system of motor or

perceptual powers, our body is not an object for an 'I think.' It is a grouping of lived-through meanings which moves towards its equilibrium" (p. 153). A body is always a body in a situation; it exerts a power and a force to respond to the possibilities in that situation, and appropriates itself to the circumstances.

Even the act of thinking, which is taken as an innate mental power by *Cogito*, ceases to be an idea or thought inherently belonging to the thinking person. The thoughts, the result of thinking, are never generated from the innate, but rather are formulated through some encountering with the outside, as through a movement. In analyzing Michel Foucault's works, especially some important themes in Foucault's writing such as the relationship between knowledge, power and the self, Gilles Deleuze explains Foucault's approach to investigating the history of multiple disciplines. His history is a history of thought and a problematization of thought. Thinking, for Deleuze(1988), is carried out between seeing and speaking, and functions as a dice-throw:

> What the dice-throw represents is that thinking always comes from the outside (that outside which was already engulfed in the interstice or which constituted the common limit). Thinking is neither innate nor acquired. It is not the innate exercise of a faculty, but neither is it a learning process constituted in the external world (p. 117).

By saying "thinking is neither innate nor acquired," Deleuze reminds us that thinking is not an isolated mental activity free from the stimulation of outer forces, nor is it being able to not be affected by their impacts; thoughts are not out there waiting for us to find out. Thinking is an activity. It must involve some kind of active interaction that equally

does not reside in or out, but in between the inside and the outside, between the mind and the body. It does not belong to any entity. It is a movement that arrives at and departs from all the limits. Such understanding of thinking also troubles the notion of any forever/permanent inside or outside, as well as a dissociated mind and body dichotomy. For example: "There is no need of a spectator who would be on each side" (Working Notes, Merleau-Ponty, 1968, p. 263). If thinking involves both the inside and outside in animation, then thought ceases to be a noun. What is the movement like? In what ways do inside and outside engage? How could the relation between thought and body become?

Thinking "always comes from the outside," and this outside is already an "engulfed" one. Then thinking is not produced from the "formless being" of the inner, but rather from the outside, which itself is part of something else's inside. Outside wraps the inside and vice versa, bringing inside out and outside in. The limits of thought and body are dancing into a dynamic flow of moves, crushes, and creases, making it hard to tell which is outside and which is inside. The outside of thought, the unthought (which is not the external of thought, a point we shall return to), is life, argues Deleuze:

> The body is no longer the obstacle that separates thought from itself, that which it has to overcome to reach thinking. It is on the contrary that which it plunges into or must plunge into, in order to reach the unthought, this is life. Life will no longer be made to appear before the categories of thought; thought will be thrown into the categories of life. The categories of life are precisely the attitudes of the body, its postures. 'We do not even know what a body can do': in its sleep, in its drunkenness, in its efforts and

> resistance. To think is to learn what a non-thinking body is capable of, its capacity, its postures. (Deleuze, 1989b, p. 189)

Elizabeth Grosz analyzes Deleuze's statement well: "Deleuze wants to link the unthought to the body, which can no longer be conceived in terms of being a medium of thought or a blockage to it: rather the body is the *motive* of thought, its source or well" (Grosz, 1995, p. 240). Life is much larger than thought, either in level, size, content, extent, scale, or in intensity. Life wraps, takes in, enfolds, covers, and troubles thought; the vitality, vigor and energy of life are all what a living body touches, enters into, responds to, or struggles with at first hand. It is the body into which thought immerses just to get in touch with and understand life. To live and to be lived, the body expresses and orients "me" through its feelings, emotions, and actions even beyond "my" consciousness. Since body and life are the sources of thought, by saying the unthought is life, Deleuze points out that the unthought is the materiality and force of thought, even the center piece of thought. They are intertwined, folded, bound, and wound, and the thought is the double of the unthought. However, the unthought is not external to thought. Rather, the unthought "lies at its [the thought's] very heart, as that impossibility of thinking which doubles or hollows out the outside" (p. 97). Deleuze differentiates the outside from the exterior. The external, for him, the Outside, is "more distant than any exterior, is 'twisted,' 'folded' and 'doubled' by an Inside that is deeper than any interior, and alone creates the possibility of the derived relation between the interior and the exterior" (p. 110). Similarly, Jacques Derrida (1976) also problematizes the inside and outside relationship. For him, the outside becomes more than exteriority

when he undoes the writing and speech dichotomy:

> Writing, sensible matter and artificial exteriority: a 'clothing.' . . . One already suspects that if writing is 'image' and exterior 'figuration,' this 'representation' is not innocent. The outside bears with the inside a relationship that is, as usual, anything but simple exteriority. The meaning of the outside was always present within the inside, imprisoned outside the outside, and vice versa" (p. 35).

And for Deleuze, the outside is the "ultimate fold of Subjectivation" (Deleuze, 1988, p. 104). Therefore, the outside is multiple-layered, remote, thick, fluid, active, and is a complex exterior that is also in motion, in flux, and in folds.

The outside complicates through its operational function. As Deleuze argues: "The Baroque refers not to an essence but rather to an operative function, to a trait" (1988, p. 3). That is to say, the outside, the material trait of a Baroque architecture, generates its operative functions from the outside, from the materiality of the outside, which is never a static display or juxtaposition of forms, shapes, and materials; rather, these material traits are set in tension, exerting forces that penetrate into the inside. The thought has to be the result of these forces. Moreover, the thought becomes new forces, force and thought intertwine and become inseparable. Because these forces function as operative power always from the outside, as Deleuze explains, "forces always come from the outside, from an outside that is farther away than any form of exteriority" (p. 122). Forces can change the terrain of the emerging relations. Forces are also in the middle of other forces, affecting and being affected by other forces. Thought is always an active act,

by way of the forces from the outside. Thought is the doubling of the outside, or the folds of the outside, and thought is the operation of the outside. The relation between thought and body is doubled by the relation with thought itself; "the relation with others must be doubled by a relation with oneself" (p. 101). Deleuze uses the examples of ancient Greek free men to explain the self and other relations. By no means could Greek free men dominate others if they could not dominate themselves. The relation with the being dominated would not come into being if a self-to-self relation was not first examined or worked out. Therefore, in order to achieve subjectivity in the struggle for power and to be in the dominate position, the self who is also subject to such domination has to grow out of or transcend such domination. A rule that Deleuze links to what Foucault historicizes about power, knowledge, and the self is "a dimension of subjectivity derived from power and knowledge without being dependent on them" (p. 101).

This suggests that although the inside is constituted by the folding or the doubling of the outside, likewise the unthought and the thought, body and thought, relations do not work out to make the two sides identical. There is still a gap, *a fissure of the lines* that Deleuze honors, or the *flesh* that Merleau-Ponty theorizes, or *différance* that Derrida asserts. A differentiation needs to be made.

On the rhizomic map of Deleuze and Guattari, the lines of longitude and latitude which form different strata are the major elements that constitute the plateaus. To know is to struggle, and move around, across, above or below, and between the fissures that these lines create during their own activities; on the one hand, we want to go deeper, to explore the inside, and on the other hand we want to climb above to reach the outside.

Such struggles themselves become the forces that are strongly affected by both sides. For Deleuze, it is the fissure that the lines create which is where we pick up speed, like "a pineal gland that is constantly reconstituting itself by changing directions, tracing an inside space but coextensive with the whole line of the outside." It is also where one becomes "a master of one's speed" (p. 123).

Elsewhere, Merleau-Ponty (1964) uses words such as hiatus (p. 148), dehiscence and fission (p. 146), "imminent reversibility" (p. 147), "the zero pressure between two solids" (p. 148) to trouble "the self-contained entity," or "the subject that faults self-consciousness," as Mark Taylor pointed out (Taylor, 1987, p. 69). Merleau-Ponty disapproves of the self-contained mind or body, let alone their dichotomy. He uses the notion of flesh to rethink and deconstruct the Cartesian dualism. In doing so, he does not suggest a conventional understanding of flesh as an incarnated human body. Rather, flesh "is not matter, is not mind, is not substance." He uses an ambiguous term "element" to describe it (1968, p. 139). Flesh is something that is between the sensible mind and the sentient body, but not in the union of the two. Flesh is:

> the coiling over of the visible upon the seeing body, of the tangible upon the touching body, which is attested in particular when the body sees itself, touches itself seeing and touching the things, such that, simultaneously, *as* tangible it descends among them, *as* touching it dominates them all and draws this relationship and even this double relationship from itself, by dehiscence or fission of its own mass. (p. 146).

In other words, flesh is the ongoing activity that folds, doubles, twists, splits, pauses,

pushes, divides, and merges the mass at the in-between space of the mind and body, even within the mind or body themselves. Such processes of doubling and folding, as Deleuze argues, is not self-copying, because: "It is not a doubling of the One, but a redoubling of the Other. It is not a reproduction of the Same, but a repetition of the Different" (p. 98). As the one (re)doubles the other, the different, the self differs from itself (Derrida, 1973). Jacques Derrida makes a turn to the other side of difference by reviewing the language itself, the indications of the word "differ," and recommends *différance* to rethink any form of dualistic opposition.

Besides the common understanding of the verb "differ" as something that is other, unlike or dissimilar, or not identical to the self, it also "expresses the interposition of delay, the interval of a *spacing* and *temporalizing* that puts off until 'later' what is presently denied, the possible that is presently impossible" (Derrida, 1973, p. 129). Such delay nurtures a musing stage that suspends any hasty decisions or actions of rushing to the next level or stage. It is not a question of yes or no, but of an undecided fulfillment. "Differ" enables an interval that is "temporalizing," which struggles against closure and is always in flow, speeds up or slows down, moves on or takes a rest. It is a movement that keeps relations in temporal positions. It is a movement that Derrida emphasizes enough so that using differance to replace difference in thinking of difference, of other, of any form of dualism that has become common.

Difference, for Jacques Derrida, is *différance,* which "differed from itself, signifying of itself spontaneously, and about itself, that it was itself and its other, active and passive, transitive and intransitive" (1988, p.84). The letter "e" in difference is replaced

with the letter "a," and such a change, according to Derrida, is "in the sense of 'activity,' of 'movement'"; and "*différance* is the 'productive' movement of differences, the 'history,' if that still can be said, of constituted differences, of constituted langue, of (al)ready made langue" (p. 85). Such an explanation of difference does not take difference as a static, inalterable, and inflexible enclosure that forever separates self and other; that is, difference does not essentially or fundamentally belong to a thing or a person or an entity. Difference is not a permanent barrier that deters the engagement between self and other, inside and outside, mind and body; rather, difference can be a force which "productively" responds to and enlivens the other. *Differance* can be used to think of self and other, mind and body, thought and body, speech and writing, the advocation of an interval, a delay that encourages spacing and temporalizing between the two sides. Derrida believes that differance is a middle voice, a sound that bounces between passivity and activity, between stasis and vigor, between thought and unthought. A sound always echoes, breaking the silence of musing. An echoing sound only can be heard when there is an empty space. The movement of this middle voice has the potential to fold the impossible into the possible at the right moment. Then, the *differance*, the middle voice between the mind and the body, the thought and the unthought, the inside and the outside announces the death of the origin, of the beginning, and of the finitude.

The belief that ideas and thoughts come from our inner "formless being" or even our existence and subjectivity is nothing but this "formless being," as well as taking the thoughts and ideas of philosophers or any thinker as individualistic intellectual activities, both fail to understand that thinking is not immune to outside influence. Such ideology

makes it "justifiable" to say that philosophers and intellectuals who work in academia just preach inside the "ivory tower," and are out of touch and do not know the "real" world. From Deleuze and Merleau-Ponty to Derrida and maybe many more who problematize the Cartesian mind and body dualism, the inside and the outside hierarchy, the self and the other coupling oppositions, we can see that there is always the reference between each other, between shared positions, but sometimes the reference differs. The fissure, fission or differance, together are the energy and forces for/from the community of thinkers. On the one hand, these notions deconstruct the perspective that thinking is innate or static, that it isolates itself from the outside. The folding and doubling activity of thinking has invalidated such ideology. On the other hand, recognizing the gap, the fissure and the differentiation of the two sides help us to integrate, but keep differentiated. Merleau-Ponty doesn't believe in the innate pure thought:

> My clear and distinct thought always uses thoughts already formulated by myself or others, and relies on my memory, that is, on the *nature of my mind*, or else on the memory of the community of thinkers, that is, upon the *objective mind*. To take for granted that we *have* a true idea is to believe in uncritical perception. (p. 40)

In *What is an Author?* Michel Foucault (1975) explains that the disappearance of the author opens up the possibility for readers to read the work of an author as a "certain discursive practice" (p. 603), and thus, an author is situated in a cultural discourse which regulates the rules of how things/words are put together. The "ethical" principle of writing is "a sort of immanent rule, which is endlessly repeated yet never completely

applied, a principle which does not characterize writing as a product, but which dominates it as a practice" (p. 604). Hence, a text does not exist outside of social and cultural practices, and it is never finished. Roland Barthes (1977) discusses the co-existence of multiple cultures which influence a text:

> A text is not a line of words releasing a single 'theological' meaning (the 'message' of the Author-God) but a multi-dimensional space in which a variety of writings, none of them original, blend and clash. The text is a tissue of quotations drawn from the innumerable centres of culture. (p. 146)

Such shared community and the "death" of the author are more prevalent in the time of Simcult, which will be further explored in Chapter IV.

Yet, if the body is a knowing-subject, then how does the body know and in what ways do we recognize or fail to recognize the body's potential and capability of knowing and meaning making? If we are a community of thinkers, how do we engage each other by way of thoughts and the body? Feminist scholars have long been investigating such questions.

The Body's Critical Meaning Making: Performance Art

In the Western art world, performance art is usually traced back to the early 20th century cultural movement. Dada, as Marc Lowenthal (2007) comments:

> is the groundwork to abstract art and sound poetry, a starting point for performance art, a prelude to postmodernism, an influence on pop art, a

> celebration of antiart to be later embraced for anarcho-political uses in the 1960s and the movement that lay the foundation for Surrealism. (p. 1)

When a group of German and French artists fled to Switzerland during World War I, they began to use their work to show their resentment of the war, to jar the complacent conservatism of the bourgeoisie, and to outrage their staid audience (Hapgood, 1994). Their rebellious art-making process and means not only articulated their anti-war political positions, but were also conceptually and visually subversive to the conventional art rules. Of those who were well-known Dadaists, Marcel Duchamp has been most highly regarded by many later artists. He shaped the understanding of what art could be in the Western world. His famous piece, "*Fountain*," a standard urinal signed by him, was one of his appropriations of the readymade materials in art-making. Giving new meaning to the ready-made, and making them abstract expressions, he set up the cornerstone for later artists who follow the track of conceptual art. Duchamp's art stresses the artist, the art, and the viewer's relationship, and intentionally invites the viewers to participate in the meaning-making of the art they see: "The spectator brings the work in contact with the external world by deciphering and interpreting its inner qualifications and thus adds his contribution to the creative act" (Duchamp, 1975, pp. 138-139, quoted in Berger, 1994, p. 68). The creative act that Duchamp envisions discontinues the spectatorship. A viewer is drawn into a psychological and emotional participatory action, to see, to feel, and to respond to the art. Beginning in the 1950s, more and more artists created art works that were associated with Dadaism. They were designated Neo-Dadaists, such as Jasper Johns, Robert Rauschenberg, Ono Yoko, John Cage, Allan Kaprow, and Claes Oldenburg.

At the time, it was an art movement that had much involvement with fluxes and happenings. Though some Neo-Dada artists still use the readymade in their art making, many others began to employ their own bodies as the ground for unsettling or even threatening performances (Berger, 1994).

Performance artists continue the legacy of Dada movement in their own way, to challenge audiences to rethink the notion of art, as well as other ideologies that they intend to subvert, to re-create and invite the audience to reassess their assumptions. Unlike performing art, which uses musical instruments, brushes, or other tools to perform and make art, performance art's primary instrument is the artist's own body, though some other types of instruments might be involved. It is important to understand that performance does not privilege the theatre and stage dramas; it pays more attention to everyday life, stories and actions. The embodiment of performance engages deeply lived human experiences and brings them to the surface, to be seen, troubling the taken-for-granted social norms and regulations that reiterate a raced, gendered or sexed person. In addition, performance is not only about the performer, but more importantly about the reactions and reflections of the spectator or the viewer, of their repression and unconsciousness of otherness, and of the self. In performance art, the spectators become the participants, and are compelled to take part in the ongoing performance. As such, the primary concern of performance art is the interaction between the performer and the audience, members of which also become performers, consciously or unconsciously, in the performance. Performance artists use their bodies and appropriate them in ways that are not conventional, challenging the spectators to enter into, to respond, and to think

about the events that the performance artists bring to the scene in new and unanticipated ways. To a certain extent, performance artists undo the *"stylized repetition of acts*" that Judith Butler critiques. Thus, to engage with spectators is to disengage with and subvert the prescribed identities and assumptions, and to create new meanings and reconstruct gendered, raced, sexual, political and spiritual identities.

In education, scholars and artists have begun to engage performance art in pedagogy. Charles Garoian (1999) believes that performance art is a critical pedagogy which empowers students to express and articulate subjectivities and thus to be emancipated from hegemonic discourse and practices. As a result, they become their own agencies. Also, performance art "served as a liminal space, a virtual laboratory, where the body's preexisting modes of art production were challenged with the dynamic ideas, images, and processes of modern industrial culture" (p. 9). Alexander, Anderson and Gallegos (2005) understand performance as:

> it relates to cultural practice and the materiality of bodies– hence a displayed enactment of ideology and enfleshed knowledge –influenced and motivated by the politics of race, gender, power, and class in the forms of folklore, ritual, spectacle, resistance, and protest. (p. 2)

Performance art as a field of study has much to contribute to education, and it has raised more concerns about the body's capacity, multiplicity, complexity, fluidity and resistance. For performance artist Carolee Schneemann (1979), learning happens when we think that something is overwhelming or striking:

> I have the sense that in learning, our best developments grow from works

> which initially strike us as "too much;" those which are intriguing, demanding, that lead us to experiences which we feel we cannot encompass, but which simultaneously provoke and encourage our efforts. (p. 9)

Also, performance "is not a predictable, predetermined process ... and "'chance becomes one aspect of a process" (p. 11).

The body is where the performance artist works from, making it explicit, intense, and evocative, which cannot be made possible without synthesizing the embodiment and the affects of embodiment. Embodiment is performative. It destabilizes the given identities of the body. It is personal and ephemeral, as Katherine Hayles (1999a) points out: "Embodiment is akin to articulations in that it is inherently performative, subject to individual enactments" (p. 197). Moreover, Hayles describes embodiment as incorporative practices, which are "always performative and instantiated, they necessarily contain improvisational elements that are context-specific" (p. 200). Thus, performance and embodiment are closely connected. Performers have to engage with embodiment in both signifying and enacting. Embodiment has to exercise through performance. Performance artist Guillermo Gómez-Peña (2006) affirms the relation between embodiment and performance: "In fact, performance always begins in my skin and muscles, projects itself onto the social sphere, and returns via my psyche, back to my body and into my bloodstream, only to be refracted back into the social world via documentation" (p. 31).

Feminist artist Carolee Schneemann's work centers on the issue of body, eroticism

(especially female eroticism), sexuality, and gender. One her website, it says: "The history of her work is characterized by research into archaic visual traditions, pleasure wrested from suppressive taboos, the body of the artist in dynamic relationship with the social body" (http://www.caroleeschneemann.com/bio.html). Because she had close contact with Claes Oldenberg, Allan Kaprow, who coined the notion of happenings, and Robert Rauschenberg, it is not difficult to see that her early works have traces of Neo-Dadaism. However, as an artist who always create things anew, Schneemann grew out of and transformed the boundaries of Dadaism, moving toward a more concrete expression, through materials, which is "concretized in that material's gesture: gesticulation, gestation - source of compression (measure of tension and expansion), resistance–a developing force of visual action (Schneemann, 1979, p. 9). In her famous performance–Meat Joy[8], Schneemann makes such "concretion" flesh: the flesh of human bodies, raw fish, chicken, and sausage, as well as the flesh's smell. Other materials used in this performance include wet paint, transparent plastic, rope, brushes, and paper scraps. Schneemann recorded a street vendor's shouts selling daily groceries, Paris street sounds (since this performance was enacted in Paris) and a popular song of that time. She put all these piece together and, ecstatic, she notes:

> Shifting and turning between tenderness, wildness, precision, abandon: qualities which could at any moment be sensual, comic, joyous, repellent. Physical equivalences are enacted as a psychic and imagistic stream in

[8] See the video clip of this performance in the attached video files.

> which the layered elements mesh and gain intensity by the energy complement of the audience. (p. 63)

Schneemann and her team intensified the senses that the audience encountered during the performance: body upon bodies, dead bodies, painted bodies, bodies moving, touching, and holding, reminding us of "the physical equivalence" between human bodies and the raw meat of fish and chicken. The desire of that raw meat, including the human beings' own bodies, the individual body, articulates its own right to be joyful, a joy that subverts the social discourse prescribed on the social body. The clash between the living and the dead, the human body and the inhuman body, the tenderness of flesh and the roughness of the materials, the touch in between, suspends the audience. The audience was drawn into the ongoing performance, with no way to escape but only to respond: "Schneemann's powerful capacity added a delicate, sensual horror: rooms grew thick with activity/reaction, the proscenium arch vanished, no way to escape from the art being presented" (Berge, 1979, in Schneemann, 1979, p. 274). Thus, Schneemann brought back our senses, our willingness to touch, to feel, to see, to smell, and to hear. She unequivocally articulated her female desire of joy. Such performance in the early 1960s was no doubt adventurous.

Schneemann's performances are unquestionably sensational and motional. While *Meat Joy* had its audience sitting in circles, another artist, Sigalit Landau's, triptych of performative videos, installations in the Museum of Modern Art, New York, USA in the Spring of 2008, forced her viewers to move.

Walking into a dark room in MoMA that was dedicated to Sigalit Landau's art[9], viewers' eyes immediately were attracted to the big, wall-sized screen playing a video of Landau's DeadSee (2005), in which five hundred watermelons were wired together, forming a nautilus-like configuration floating on the Dead Sea. Sigalit Landau's naked body was circled by the wired watermelons and floated on the water. She stretched out one arm touching one of those "wounded" fruits. The redness of the fruits is blood-like, reminding us of the flesh of the human body, fragile, fresh, and lively. Facing the big screen to the left was a constellation of sculpture-like and circular shaped objects hanging from the ceiling, which were said to be made of barbed wires that were submerged in the Dead Sea and dried in the desert sun. The surface of these circular-shaped objects were crystallized and formed as self-illuminating images. On the other side of the big screen was Day Done (2007), which showed a person painting the outside wall around a window in a circular motion. According to the interpretation at MoMA, this video "reinterprets an ancient Jewish custom in which an isolated area of a newly built house is intentionally left unpainted or unfinished to symbolize the remembrance of destruction." The painting process alternated between the black paint during the day and the white paint during the night. Opposite to the video of DeadSee was a TV showing Landau's *Barbed Hula* (2000), in which Landau spun a barbed-wire Hula-loop around her naked body. Following the rhythm of the centrifugal force, the barbed wire cut into Landau's body, and left marks and scars on her skin. The pace of the moving barbed loop echoed

[9] See Sigalit Landau's exhibition slideshow in the attached video files.

the rhythm of the waves of the Mediterranean Sea. All of Landau's works in this exhibition involve and were constructed through the notion of centrifugal movement. The circular motion is not only showed on the screen, through the installation, but also was performed by the viewers, through their bodies and eyes. Similarly in a circular motion, the viewing process is like the work. It does not find a starting point to view or an end point to leave. Viewers had to walk closer, step further, turning around, looking away, so as to get a close look, a better view, or a grasp of all the images going on simultaneously around her/him. Juxtaposing these videos and installations within one space in which viewers can walk, talk, see, listen to, and feel the reverberation of these videos and installations created in the middle, Landau created an event that is not composed by one single thread, but rather an entanglement of doing, watching, seeing, feeling, undoing, and moving within the works and with the audience. The barbered wire grazed Landau's body and left fresh scars, which not only stayed on the artist's body but also battered the viewers' psyches and made their way into the viewers' body. Some people avoided watching. Some people watched with uncomfortable facial expressions. The pain that was felt enticed one to interrupt that repetitive motion, that centrifugal movement. Walking away from the inscribing process may be an example of such an interruption. In front of the big screen, many people were holding their breath while watching the wired watermelons' coil slowly unfurl, leaving the artist's body with such a speed that the body seemed to quickly lose its circles of protection or, maybe, its restrictions; the watermelon ring that the artist's body stayed with seemed would drift away shortly. More and more people walked in, staring at the screen and waiting for that moment. When the viewers

saw that the artist's body was floating along with the connected watermelons moving out of the screen, instead of falling into the sea, everybody was relieved. The moment that the artist's body broke with the circular formation symbolizes the interruption of rituals, which can be both breathtaking and frightening. Through these performance videos and installations, Landau's performative interpretation of ritual and formation unfolds while the centrifugal power inscribes, marks, and comes undone. In a way, Landau interprets what Judith Butler questioned in the formation of gender, of subjectivity. We are all inevitably constituted by the rituals in our lives, our cultures, and the traditions of our communities. Over time, these rituals have left significant marks on our bodies, actualized and repeated through our circular motions, crystallized like the Dead Sea salt, ingrained like the hanging objects that were submerged in the salted water. However, like the scar on the body and the crystal salt on the hanging objects, the markings of the ritual are always with us, part of us. They may leave wounds on us, but either totally free from or synchronized with them are equally impossible.

From Schneemann to Landau, performance artists take embodiment and the materiality of the body as their essence, and they engage the bodily experiences in challenging the larger social and cultural discourses, to erase their restrictions. Works, as such, help us to understand our somatic and embodied knowledge and knowledge construction, pointing out the reductionism of understanding the surface, the body, or the form as superficial. Thus, it is reasonable and rational to say that the body is substance and essence. When the body leaves its prints and trace on the stage, it performs through touch, movement, and sensations. When the body itself becomes the essential substance

of an art, the performance is ultimately embodied.

During the 2008 Beijing Olympic Opening Ceremony, Zhang Yimou, China's most famous film director and the executive director of the ceremony, translated the Chinese culture and development's legend to the world, on the surface of a giant, lively and kinetic unfurling scroll, which itself was an electronic screen. Working with many other artists and technology experts, Zhang Yimou innovatively synthesized art, technology, color, light, sound, fireworks, and performance into a breathtaking event of spectacle and experience. The whole ceremony was just as sophisticated as the design and construction of the stadium, the Bird's Nest, which held the ceremony. At the center of the unfurling scroll was a 20 meters long, 11 meters wide, and 2 millimeters thick special white paper, serving as the centerpiece of the whole ceremony. On this paper, "the people of the world collectively finished a performance" (Zhang, Yimou, quoted in Zhang, 2008, http://2008.hexun.com/2008-08-10/108019035.html). A group of black-suited dancers ushered in the first performance on the white paper[10]. Wrapped with an ink-dipped cotton brush, their hands painted on the paper while following the flow and circular motion of their bodies, dancing together. Their bodies and their hands created an ink and wash art, filled with the images of mountains, rivers, clouds, and the sun. The elegant and kinetic movement left their own traces on the paper, and it is impossible to separate the dancers' bodies and their brushes. Their bodies became their "brushes." There was no observable distance between the painter and the painting, no observable distance between

[10] See the video clip of this performance in the attached video files.

the body and the canvas. The body flowed with the ongoing painting, and they became one. The body entered its own transition, its own movement and rest. The claim that Massumi made materialized and was actualized. When Jackson Pollock announced that "I am nature," "the canvas, nature, life, and self all merge in a phenomenological encounter, a 'visceral rather than a visual experience of art" (Slattery, 2001, p. 375).

The second performance on the same paper was done by a group of elementary school students, who represented the future of China. They added color and highlighted the clouds, and at last, they were able to bring back the smiling face of the sun to the earth, which was devastated by human aggressions toward nature. The disappearance of the "clouds of promise," which were painted by the early dancers, signified such environmental deterioration.

When the Opening Ceremony drew closer to the end, the athletes of the participating countries and regions entered the stadium. Thousands of footsteps left their marks on the previously painted paper. Thus, this became the last performance on this paper, which was incredibly done. As Zhang Yimou commented: "It is impossible to have the most excellent young people of the 204 countries to do this performance, even just to leave their footprints, [if not through the Olympics]" （http://www.cs.com.cn/sctz/01/200808/t20080811_1552195.htm). The extreme success of the Opening Ceremony could not have been achieved without the integration between art and technology, humanity and science, including the spectacular fireworks, which were designed and executed by artist Cai Guoqiang, an artist well-known for his extraordinary use of gunpowders in his art making. The automatic furling and unfurling of the "China

Scroll" was powered by storage batteries, and China's Great Four Inventions, the art of ceramics, porcelain, and rock paintings, as well as other fine arts, were beamed upon this gigantic scroll. This Opening Ceremony has signaled the China's exploration into the new media milieu, which is usually identified as an integration among the electronic, digital technology networks, and art.

The humanities are both achieved and advanced by science, as well as intellectual, aesthetic, and technology innovation. The success of this ceremony predicts the approaching and advancing of the unstoppable era of embodied simulated culture and new media.

Feminist Thoughts on the Knowing Body

In this dissertation, I use "feminism" in its broader sense. To me, feminism is not equivalent to philosophy or practices by women, and it is difficult and maybe impossible to draw a line between feminist thoughts and the broader philosophy or school of thought that is also contributed to and advanced by men. Following the suggestions of Foucault's argument of "the death of the author" and Barthes' warning of "innumerable centers of culture," as well as the growth and the proliferation of feminist literature, philosophy, and movement which emerge from, are built upon, or transformed from men's thoughts and philosophies, such as the influence of post-structuralism and Marxism on feminist philosophies and movement, it is much clearer that the pure, original, and perfect feminism that only belongs to or is constituted by women is unlikely to be the reality. Even the term "women," for some, is a problematic category (Lacan, 1998). Given the fact that more and more men claim feminist positions, using the gender line to distinguish

feminist thought is increasingly impracticable. I agree that there is sexual difference, and a phallocentric paradigm is still active. However, an argument for a gendered uniqueness, subjectivity, and particularity of women is not what this dissertation endeavors to accomplish. Moreover, such a position will not center around the issues associated with the body that all school girls and boys face, and which in this dissertation I try to explore and engage.

To think of feminism broadly is also to confirm that all men and women can advance women's rights. The *New Oxford American Dictionary* explains "feminism" as: "the advocacy of women's rights on the grounds of political, social, and economic equality to men." Hence, anybody or any theory that supports women's rights is considered part of taking a feminist position. Such a position of advancing women's rights indicates that women's political, social, and economical statuses are not synchronized to what they should deserve. Similarly, advocating a body's knowing and a body's capacity and potential also engages in a long time marginalized epistemology and methodology that needs to be affirmed and encouraged. A body knows through feelings, emotions, senses, and movements. Since feelings, emotions, and senses of the body still today, have long been considered weak, vulnerable, unreasonable, and illogical by a tradition that prioritizes mind, reason, and logic, the body's senses and feelings have been wrongly associated only with women. Thus, it has become a struggle that feminists fight, to a great extent. For these reasons, I explore and address in what ways the body becomes a center stage for feminists at large, including both men and women, to express and articulate the body's unquestionable capability for knowing and doing.

Elizabeth Grosz (1995) identifies two categories of feminist theories: one is committed to adding feminist thoughts to the conventional knowledge pool, taking women or femininity as "knowable objects;" this category takes a defensive position in arguing for the legitimacy of those ignored women's contributions to the construction of knowledge and society. The other group, Grosz explains, takes women as "the subject of knowledge" (p. 39), and this category of feminist theories "reject existing models of knowing without attempting a 'correction' or 'supplementation.' They critique the prevailing norm and "develop altogether different forms and methods of knowing and positions of epistemological enunciation" (p. 41). Thus, this group of feminists move more aggressively and articulate and affirm alternative paradigms, making and understanding the representation of knowledge, and even power. Although categorizing itself can be dualistic and problematic, as both groups could overlap, be inter-related, and mutually supportive, and the first category is by no means an easy, convenient, or insignificant one, it is the focus of the latter that my analysis and engagement find its place to stretch and fold. The embodiment, bodily epistemology, methodology, and performativity are themselves the operative powers which produce "traits" that demand responses, actions, and interactions.

When feminists declare the body's capacity of knowing and doing, it is not only a theoretical paradigm change, but simultaneously it announces a statement for power and agency made possible through the body and embodiment. "Knowledge is power," Francis Bacon asserted in the sixteenth century. However, without questioning how we know and what we know, knowledge is just as oppressive as ignorance, especially when there is

only one way to know, to find truth, and that knowledge becomes. When a tradition equates a body's feelings and emotions to the weak, unreasonable, and illogical, it is not feelings and emotions themselves that are unjustified knowledge, but it is one paradigm that desires to dominate that unfairly trivializes feelings and emotions. As Elizabeth Grosz understands Luce Irigaray: "The fact that a single contested paradigm (or a limited number) governs current forms of knowledge demonstrates the role that power, rather than reason, has played in developing knowledges" (Grosz, 1995, p. 43).

As an embodied paradigm of knowing and doing, a bodily epistemology is experienced through the affects of a feeling and moving body's enfolds, as it unfurls and performs. Affects many times are associated with emotion, and in current educational practice, affective education is defined and treated as managing one's emotions (see Martin & Reigeluth, 1999; Stone-McCown & McCormick, 1999). However, affects offer us more than just emotion. Affects involve all human senses, movements, and sensations as well as their effects, such as feelings and emotions, and make the interconnections and transformations among the senses, movements, and sensations that are possible. Brian Massumi (2002) describes affects as: "synesthetic, implying a participation of the senses in each other: the measure of a living thing's mode into those of another" (p. 35). A person can see a picture, taste a bread, smell a flower, touch a cat, or hear a bird. However, without the transformation from objective and mechanic encountering to subjective and visceral experience that are manifested by moods, feelings and emotions, seeing, tasting, smelling, touching, and hearing might mean nothing to a living human being. Affects are the turning points in such encountering, from which the emergence of feelings

and emotions begin. For Massumi, both affect and emotion are intensities, but affect is the two-sidedness of the virtual and actual, of perception and cognition, of passivity and activity, and is their emerging and vanishing point.

Most feminist theories pay close attention to the notion of embodiment, without which we lose our vision and touch of the "affects" of the body. Body has become an essential center for feminists across disciplines to work through, with, and from in rethinking, refiguring, reconstructing, remaking, and re-appropriating complex interactions of/among knowledge, identity, subjectivity, epistemology, philosophy, culture, and politics. (Benbabib, 1999; Bordo, 1987, 1995; Braidotti, 2002; Brown, 1991, Butler, 1990a, 1990b, 1993, 2004; Diprose, 1994; hooks, 1997; Grosz, 1994; 1995; Irigaray, 1985; Jaggar, 1992; Lorde, 1984; Mackinon, 1989; Rubin, 1975; Snowber, 1999; Spelman, 1988; and Warren, 1989). Yet the notion of embodiment is not clearly or fully examined, even though the aforementioned works deal with interdisciplinary studies on the body, which is not quite equal to embodiment, as Judith Butler (1992) observed. To think about embodiment we need to ask: What do we mean by embodiment? What are the "modes of embodiment?" (Weiss, 1999). How does embodiment represent the body's knowing and doing in our lived experiences? I found several briefs regarding embodiment that might be helpful in thinking through the relationship between embodiment and the body. Gail Weiss describes embodiment as "intercorporeality," which emphasizes the continual interactions with other human (across the lines of sex, gender, race, class, age, and ethnicity) and nonhuman bodies. Katherine Hayles (2003) explains that embodied experience represents "experiences from the inside, from the feelings, emotions, and

sensations that constitute the vibrant living textures of our lives" (Hayles, 2003, p. 297). For Hayles, the body is a general term of form, while embodiment is more specific and particular, and "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" (Hayles, 1999a, pp. 196-197). Embodiment, for Algis Mickunas (2004), is also "immediacy of expression" through body movements, gestures, postures and shapes, which are signs and serve communicative purposes. Moreover, Elizabeth Grosze (1995) argues that these signs are materialities of the body which refuse to be read as presumed qualities. Rather, they are specific and concrete materialities that demand to be read "alternatively," which is the foundation of embodiment. The "alterity" of embodiment is in that:

> Bodies themselves, in their materialities, are never self-present, given things, immediate, certain self-evidences because embodiment, corporeality, insist on alterity, both that alterity they carry within themselves (the heart of the psyche lies in the body; the body's principles of functioning are psychological and cultural) and that alterity that gives them their own concreteness and specificity (the alterities constituting race, sex, sexualities, ethnic and cultural specificities). Alterity is the very possibility and process of embodiment: it conditions but is also a product of the pliability or plasticity of bodies which makes them other than themselves, other than their "nature," their functions and identities. (p. 209)

It is the materiality of the body, such as skin color, skin tonality, body size, hair style or texture, sex, voice, gestures and postures, etc., that refuses to be read with any given meaning, and simultaneously rejects efforts to be made insignificant.

The Materiality of the Body

The materiality of the body cannot be reduced to a passive site to be inscribed. It has to be treated as motional, dynamic, and powerful. "Bodily contours and morphology are not merely implicated in an irreducible tension between the psychic and the material, but are that tension" (Butler, 1993, p. 66). Butler uses matter in more ways than just a pun. A body's matter is critical and the materialization of the body is related to the performativity of gender. On the one hand, matter represents substance, materiality, physical experiences, and the embodiment of the body, and it is what many feminists are concerned about, question, and work with. On the other hand, the body has infinite meaning to feminists and as such it is critical and crucial for women to understand gender, sex, and sexual differences, as well as bodily knowledge. Nevertheless, the use of matter is to "materialize" and to "mean" (p. 32). Thus the matter of the body is forever set in a constant change of activities, doings, and representations. "The body is not a self-identical or merely factic materiality; it is a materiality that bears meaning" (Butler, 1990, p. 272). In a discussion of the body's materiality, Butler does not hold any position, neither presuming or negating the materiality. What she does, rather, is to problematize and temporalize it. She believes that materiality is the effect of a discursive power. This can be seen from her understanding of "matter" and theorizing on the notion of "performativity." The notion of matter is "*as a process of materialization that stabilizes*

over time to produce the effect of boundary, fixity, and surface we call matter" (Butler, 1993, p. 9). From such a perspective, matter is perceived beyond the physical substance that is given, named, inert, or made permanent through attributions. Matter is an ongoing sedimentation, production, establishment, and constitution that over time constructs the gender identity that Butler discusses, and such identity is presumed, posited, and sanctioned as the identity one follows. Such matter, for Butler, is manifested as accumulated and repetitive bodily acts. She makes Simone de Beauvoir's claim that "one is not born, but, rather, becomes a woman" more clearly and elaborately due to the notion of "becoming" as "*a stylized repetition of acts*" which are mundane bodily gestures, movements, and enactments of a gendered self (Butler, 1990b, p. 270). Because of the materialization and repetition of acts, behaviors, and expressions, gender identity does not pre-exist, but is what one does. It is in the making. As such, there is no movement that is correct or wrong, true or false, with regards to gender identities.

Gender identity is constructed through performative acts and is "a performative accomplishment compelled by social sanction and taboo" (p. 271). Thus, what an individual does and repeats is considerably regulated by social norms. Performativity, for Butler, is not something that the performer, the gendered self, intentionally does, but rather performativity is accumulated habits and learned behaviors made without question or examination. Gendered performativity is citational, as in identifying the social norm or set of social norms (1993). That is, seemingly personal, individual, and "natural' behaviors actually provide the other side of social regulation and operation. Butler emphasizes that "performativity must be understood not as a singular or deliberate 'act,'

but, rather, as the reiterative and citational practice by which discourse produces the effects that it names" (p. 2). As a social being, the formation of one's subjective identity/identities is/are not determined beforehand; instead, it/they is/are constructed, produced, and reinforced through performative acts.

For Butler, the body is always in the making. The body is not and should not be "posited or signified as prior" (p. 30). The materialization of the body decides that "the body is a historical situation" (Butler, 1990b, p. 272) and thus is temporal, changing, and in the process of re-making. The matter of the body is produced by the regulation of a discursive power which reiterates some and excludes and objects to other practices and acts of the body. However, Butler believes such discourse or power would not be in complete control without any interruptions or disruptions. For Butler, working against such power, one has to start from where it dominates, that is, from the body itself. For feminists to look beyond such mighty and constituting power, Butler argues for interventions and interruptions to undo and subvert such citationality and reiteration. As Butler does not suggest or deny all performativity or materialization altogether, it is the materiality that we need to rework. She sees the discontinuity, temporalization, and contingency of the construction of gender identity. She believes that the transformation of gender identity is within performativity per se. One's daily acts of rupture and revolt trouble and undo ascribed gender identity. "The possibilities of gender transformation are to be found precisely in the arbitrary relation between such acts, in the possibility of a different sort of repeating, in the breaking or subversive repetition of that style" (p. 271). The repetition and materialization of the body is never complete or seamless, and matter

does not always follow the rules. This is where Butler finds the arbitrariness of materialization, and as an alternative proposed the notion rematerialization. The speaking subject who comes into being for herself only does so through an ongoing construction and performativity of a gendered self, in its differentiating from and identifying with the accumulated materialized acts.

Rosi Braidotti (2002) believes that "the embodiedness of the subject is a form of bodily materiality" (pp 20-21) and takes the materiality of the body as the "tension," a point that Butler has argued. Braidotti does not deny that the body can be a surface, but not an inert surface that has fixed meanings. Rather, it must be a surface that is fluid, tensional, and powerful. She points out the materiality of the body that the social and the symbolic forces play onto. "It [the body] is not an essence, let alone a biological substance, but a play of forces, a surface of intensities, pure simulacra without originals. This 'intensive' redefinition of the body situates it within a complex interplay of social and affective forces" (p. 21).

Braidotti connects the material to the maternal in advocating a corporeal materiality, when theorizing about sexual difference. For her, this is the embodied materialism of women, and such "embodied materialism lays the grounds for a radical critique of power and for the dissolution of [the] humanist subject" (p. 20). The maternal and the material for Braidotti become the political resources that can be used to explore subjectivity.

Braidotti's reappraisal of material as maternal suggests that we need to move beyond the common understanding of a sexed body as a passive receiver of social signification in order to recognize that a sexed body can be a signifier which demands a

reworking of the signs. The surface is not necessarily equal to simplicity, shallowness or easiness; rather, it is a surface full of intensities, struggles, controversies, and forces. It requests a fundamentally epistemological recognition and affirmation of these intensities, and the body is constantly in a dynamic interplay between restrictive and resisting powers.

In her argument regarding the materiality of the body, Butler brings Gayatri Spivak's understanding of deconstruction to deconstruct the body's materiality and matter, a materiality "as something that is extremely useful, something without which we cannot do anything" (quoted in Butler, 1993, p. 27). The materiality of the body needs to be reworked, rethought, re-performed, and:

> Indeed, it is the instabilities, the possibilities for rematerialization, opened up by this process that mark one domain in which the force of the regulatory law can be turned against itself to spawn rearticulations that call into question the hegemonic force of that very regulatory law. (Butler, 1993, p. 2)

The materiality and the tensional surface of the body, the processes of rematerialization and resignification, have been extensively explored and engaged in performance art (for example, Gómez-Peña, Annie Sprinkle, Carolee Schneemann, and Sigalit Landau) . Without materiality, it is impossible to address embodiment. In a Simcult, such embodiment requests an engaging of both the materiality of the body and the materiality of the technology. Only through an embodiment across boundaries can we make the human/machine, human technology relationship both possible and meaningful.

For now, we need to look at another important issue of embodiment, emotion.

A Feeling Body

Misconstrued as weak and problematic, emotions and feelings are portrayed as essentially associated with women, as Alison Jaggar (1992) pointed out. "Women in our [western] society form the main group allowed or even expected to feel emotion. A woman may cry in the face of disaster, and a man of color may gesticulate, but a white man merely sets his jaw" (p. 142). Jaggar exposed the fear of feelings, of emotions, and of movements from a white masculine culture. In a culture disdaining and denying the embodiment of our beings, a body's ways of knowing and a bodily intelligence are unattended, largely unexplored and, most of the time, silenced.

Emotions are not directly produced by our body's knowing power. Feelings are. Feelings and emotions usually cannot be separated. Emotions come from feelings that the body knows when encountering a situation. Emotions are different from feelings. Emotions are widely discussed/argued notions across the disciplines. Alison Jaggar (1992) reminds us that "'feeling' is often used colloquially as a synonym for emotion, even though the more central meaning of 'feeling' is physiological sensation" (pp. 132-133). Besides, for Jaggar, emotions are about something else; for example, being angry is being angry at something or somebody. Feeling, instead, may not be about something. It is what one feels -- for example, the feeling of pain. Dupont (1994) argues that "our feelings precede the development of our emotions" (p. 6) and "feelings provide the link between our system of values and our emotions" (p. 5). What is expressed through emotions can hardly be separated from what a body feels at the beginning. Emotion,

actually, is "an instinctive state of mind," as the *New Oxford American Dictionary* explains. Human emotions are totally a mind-body engagement, situations in which a mind is embodied.

Alison Jaggar (1992) comprehensively examines why we should understand emotions as an epistemological approach that needs to be advanced and legitimatized. She points out that in a positivist or neo-positivist paradigm, emotions have been considered "distorting or impeding observation[s] or knowledge" (p. 139). For Jaggar, such emotions of women are totally "outlaw" emotions that subordinate the individuals who experience them. For subordinated individuals--here, women--to change the status quo, Jaggar propose ways that women could subvert the "emotional hegemony" which rejects "outlaw" emotions:

> Only when we reflect on our initially puzzling irritability, revulsion, anger, or fear, may we bring to consciousness our "gut-level" awareness that we are in a situation of coercion, cruelty, injustice, or danger. Thus, conventionally inexplicable emotions, particularly, though not exclusively, those experienced by women, may lead us to make subversive observations that challenge dominant conceptions of the status quo. (p. 145)

Emotion is understood by Megan Boler (1999) as "feeling power," and she argues: "Emotions are in part sensational, or physiological: consisting of the actual feeling–increased heartbeat, adrenaline, etc. Emotions are also 'cognitive,' or 'conceptual': shaped by our beliefs and perceptions" (p. xix). Though Boler uses emotions and feelings

interchangeably, as argued, emotions and feelings always come together. Our society does not allow all kinds of emotions. Some emotions are repressed, for certain people in certain contexts. It is also not rare for educators to see emotions in the classroom, playground, or stadium, and emotions in some contexts are allowed while in others, repressed. Those repressed emotions deserve more investigation, exploration, and engagement. If educators fail to recognize the feelings beneath emotions, they may lose connection with the child, and emotion could become "a site of resistance to oppression" (Boler, p. xv). Emotions might be disorienting at times, and they are usually described as being outside of oneself, as Brian Massumi (2002) explains. However, without a temporary disorienting, differentiating, or turning, we are stuck. Massumi continues: "If there were no escape, no excess or remainder, no fade-out to infinity, the universe would be without potential, pure entropy, death" (p. 35). As we live, we feel, every day. "A feeling power" cannot be downgraded to something that needs to be controlled, but instead to something we can learn from.

A Moving Body

A living body is always in motion and moving. The significance of the body's movement is not its ability to move from a beginning point to an end position, as a moveable entity, but rather it is its dynamism, potential, and motional continuity. The position is the outcome of the movement, as Massumi claims. "Movement is no longer indexed to position. Rather, position emerges from movement, from a relation of movement to itself" (p. 180). In and of the motion, a body adjusts and varies itself from situation to situation, responding to the changes and variations of itself and its

surroundings.

Movement is a passage though. The path is full of suspensions, stops, and halts, where the past, present, and future are inseparable. Henri Bergson (1913) says: "Every movement, inasmuch as it is a passage from rest to rest, is absolutely indivisible." Further, Bergson points out that "movement is indivisible; it is only the trajectory of a moving body that is divisible" (p. 246). Bergson's emphasis on process and passage of movement represents the continuity of movement. Even rest itself is a kind of movement. It is indivisible because infinity points along the path which Brian Massumi explains well when he talks about Zeno's paradoxes of movement:

> between one point on a line and the next, there is an infinity of intervening points. If the arrow occupies a first point along its path, it will never reach the next - unless it occupies each of the infinity of points between. (p. 6)

Similarly, a moving body holds no position when it moves. The position is suspended until the body stops, reaching an end it will not move away from. Thus, movement is vital for a living and moving body existing in a world with others. The other can be human, animal, machine, or environment. Movement is extremely important in rethinking the self, as well as other relationships where in the process we learn how to know and to be with each other. For many feminist scholars who follow or reflect Deluzian notions of "becoming," either becoming woman, becoming machines, becoming animals, becoming minoritarians, or becoming prosthetic extensions (an example of this is Australian performance artist Stelarc), cyborgs, or companion species (Braidotti, 2002; Haraway, 2003), such becomings represent an embodiment that is not limited to humans,

rather a post-human embodiment (Braidotti, 2002, p. 245) in which movements are obligated to create interfaces between self and other. Elizabeth Ellsworth (2005) re-emphasizes Massumi's position on a moving body's embodiment, as well as its potential to connect: "Our embodiment puts us into a moving relation with forces, processes, and connections to others in ways that are unforeseen by consciousness and unconnected to identity (p. 121).

Movement is inseparable from becoming, both for the self and for the relations between self and other. A Chinese movement art, Tai Chi, gives us an example of how movement is crucial to the self and to other relations. Tai Chi is conventionally considered to be a type of martial art, but fundamentally it is a movement art that embodies Tao philosophy. According to Lao Zi, *Tao* illustrates that a moving self must: "yield and overcome; bend and be straight" (Ch. 22), and the "reversing is the movement of the *Tao*; yielding is the way of the *Tao*" (Ch. 40). In Tai Chi, yielding is moving, though not forward. Yielding and overcoming are the intertwined sides of a single movement. Neither side is more important than the other. The interaction of yielding and overcoming is critical for the equilibrium of the moving body, an equilibrium that involves "equilibrium-disequilibrium-reequilibrium" as Doll (1993) understands from Piaget's equilibration.

The process of "equilibrium-disequilibrium-reequilibrium" requires something that is fluid, vigorous, and resilient that itself is in a flux of forces, in order to make this process ongoing. In *Tao*, "*Chi Yun,"* or energy is viewed as something that is formless, but always moves, and one can feel or sense its dynamism. *Chi Yun* resembles Zeno's

paradoxes of movement in that "a thing is when it isn't doing . . . Concrete is as concrete doesn't" (Massumi, 2002, p. 6)[11]. An arrow only finds its position when it is immobilized. That point defines the arrow that has accomplished its mission. Otherwise, the arrow is still becoming itself. A body is as it doesn't move, unless the body is moving. A body is in a process of becoming. Without "*Chi Yun*," the *Yin* and *Yang* equilibrium would stay stagnant. Quite often, people credit *Yang* as being active, warm, dynamic, giving, and usually associated with the male, the sun, and things positive. They believe the *Yin* to be passive, cold, quiet, receiving, and associated with woman, the moon, and the negative. *Yin* and *Yang* have been taken as two separable oppositions, such as male and female, sun and moon, water and fire, black and white, etc. However, *Yin* and *Yang* are not divisible, and cannot be broken into parts, for they are the dynamic interwoven whole of the continuity of movement. From Lao Zi' s philosophy, *Tao*, as Fung Yu-Lan (1948) documents:

> The Supreme Ultimate through Movement produces *Yang*. This Movement, having reached its limit, is followed by Quiescence, and by this Quiescence, it produces the *Yin*. When Quiescence has reached its limit, there is a return to Movement. Thus, Movement and Quiescence, in alternation, become each the source of the other. (pp. 269-270)

---

[11] Massumi quotes from the Sheryl Crow song "Solidify," which Massumi thinks "a rare instance of a Bergsonian pop lyric" (Massumi, 2002, p. 257). An excerpt of this song is located in the Appendix.

The alternation of *Yin* and *Yang,* as well as their powerful movement, explain the changes of the four seasons, and even the cosmology. Both the *Book of Changes* and Shao Yung's (1011-77) cosmology interpret the waxing and waning of *Yin* and *Yang*'s dynamism throughout the year. The essence of the *Yin* and *Yang* movement and relationship, as well as their constitution of a unity, signifies their harmonious dance. The yielding and the overcoming are both critical movements.

Figure 3.1 Morning Exercise, Tai Chi Sword. Shanghai, 2007.

The body movement art *Tai Chi* (Figure 3.1) embodies such *Yin* and *Yang* harmonious flux, and the muscles' contraction and relaxation are considered the interpretation of the essence of *Yin* and *Yang* in/through the body. Through slow, gentle, smooth and nonlinear movements, the art of *Tai Chi* activates every part of the body and makes it a whole body exercise and involvement. Mind follows body, and vice versa. In practicing *Tai Chi*, meaningful learning does not come from one form to another, but rather is the path between forms. The path is a flowing movement. It involves the weight shift between the legs. The chronic movement of the arms synchronizes with the legs, the smoothly circulated breath, and an embodied mind enjoys the harmony within the self and with others.

When the self is in motion and the position is not fixed, one allows the self to change, to vary, to alternate, and to grow. It is the continuity and dynamism of movement that makes "becomings" possible.

The continuity of movement does not stop the sensation from falling into a halt. For Bergson, our senses are divisible: "There are intervals of silence between sounds, for the sense of hearing is not always occupied; between odours, between tastes, there are gaps, as though the senses of smell and taste only functioned accidentally" (p. 259). When senses are divisible, there must be a space that enables sense to halt and to continue, and to transition. Sensation is a bodily feeling or perception that senses and realizes itself when the body is or might be in contact with something. In addition, "sensation is never simple. It is always doubled by the feeling of having a feeling. It is self-referential" (Massumi, 2002, p. 13). As doubled senses, sensation is a halt, a

suspense and immediate experience of one feeling which is felt only at the coming of the other feeling. Massumi refers the doubling of sensation to the resonation, or interference pattern between two surfaces, giving the example of an echo. He explains:

> An echo, for example, cannot occur without a distance between surfaces for the sounds to bounce from. But the resonation is not on the walls. It is in the emptiness between them. It fills the emptiness with its complex patterning. That patterning is not at a distance from itself. It is immediately its own event. (p. 14)

The emptiness in-between is the moving body's own event, an emptiness that is not barren. With the sound, it is complicated, multiplicated, immediately felt, layered, and enhanced. Such a space, a gap, a distance or an extension is where the materiality of the body intensifies, while the movement still continues. Both movement and sensation, a moving body does both. On Deleuze and Guattari's rhizomic plateaus there are only "relations of movement and rest." Relations are not dichotomous, even non-directional, and instead are a body's potential to zigzag within or through continuous and tensional spaces, which eventually becomes involutionary. "When a body is in motion, it does not coincide with itself. It coincides with its own transition: its own variation" (p. 4). By this, Massumi connects the "relations between movement and rest" to "transition." That is, when the body enters into its own transition of variation, it signifies the body's own becoming. A body's "*capacity* to enter into relations of movement and rest" is what Massumi understands Spinoza's definition of the body to be. In this "relation of movement and rest," and in such capacity, is a *power* (potential) to affect or to be

affected.

The body's capacity and potential to vary is the key to this "entering" into the empty space that resonates, intensifies, and affects. The rests are the motivations or inspirations for the ongoing mobility. As such, movement and rest unavoidably produce gaps, spacings, and an in-betweenness that are felt, are immediately experienced through the sensations. The spacing is necessary for the "alterity of embodiment" (Grosz, 1995), and it is "what allows one to face alterity in its omni-presence and absence" (Trinh, 2005, p. 201). The movement is critical if one is to move beyond a position that is only looking at the center.

Becoming is "involution," said Deleuze and Guattari (1987). Becoming is involutionary, and involution is creative. To regress is to move in the direction of something less differentiated. But to involve is to form a block that runs its own line "between" the terms in play and beneath assignable relations.

It is "alliance" (Massumi, 2002, p. 263).

CHAPTER IV

POSTHUMAN EMBODIMENT, NEW MEDIA AND "COMPANION SPECIES"

Posthuman Embodiment in the Era of Technoscience

When Dana Haraway (1991) declared that "though both are bound in the spiral dance, I would rather be a cyborg rather than a goddess" (p. 181), her socialist feminism cyborg manifesto did more to diversify feminist identities than to unify a category called "women." Although the cyborg is a fictional and imaginary figure, its fissured, incongruous, and heterogeneous formation of female embodiment does not exclude the materiality of its existence. Speaking in the early 1990s, Haraway saw that female embodiment had been made into something that "seemed to be given, organic, necessary, and female embodiment seemed to mean skill in mothering and its metaphoric extensions" (p. 180). The cohesive, unquestioned, and pure biological female embodiment and its extension cannot possibly describe the lived experiences of women across the boundaries of race, gender, ethnicity, class, or other constitutive matters. Using the cyborg trope, Haraway troubles the dualistic debate regarding whether woman is of nature or is of culture. For Haraway, rather, a cyborg is an "interface." A cyborg as human-machine composition is an interface that transgresses boundaries, which can be a double-edged sword. Haraway acknowledges both the perspective of cyborgs, which might be "the final imposition of a grid of control on the planet" that could appropriate women's bodies, and the argument that "a cyborg world might be about lived social and bodily

realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints" (p. 154). Thus, for Haraway, a cyborg identity or subjectivity might be both a contested power and the pleasure that women could engage with in technologically mediated societies. The embodiment of a cyborg, with its ad infinitum interaction between humans and non-humans, is what Katherine Hayles (1999a) anticipates - the "posthuman embodiment:"

> My dream is a version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being, and that understand human life is embedded in a material world of great complexity, one on which we depend for our continued survival.
>
> (p. 5)

"Recognizes and celebrates finitude" suggests that the potential of the cyborg does not render human the power to feed the endless desire to control, to dominate, or to exploit others. There must be a limit for the posthuman. A posthuman embodiment has to understand the vulnerability of others, be it other humans, animals, or other life forms, must understand their existential well-being. Of those whose life is an extension of technologies, the posthuman embodiment should be guided by the co-existence ideal. Such cautions remind us that technology is never an objective tool, but always has its situated materiality.

Technology is commonly used as a convenient and advanced tool to craft the human

and machine relationship. As a medium, it has been made "transparent" and is assumed that it can be deprived of its cultural, local, economical, and political meanings when it is used across contexts. Technology works on the surface of things, making interfaces playful, engaging and explorative; it also can be dangerous if it becomes an oppressive tool (Feenberg, 1999). Andrew Feenberg's *Questioning Technology* records that in the last century there were factories that used child labor and tailored the machines to the children's height or weight, in order to facilitate the factory's massive production. Analyzing Feenberg's observation, Robb Eason (p. 2003) points out the political ends, economical interests and cultural values and norms that meet with technology, and that "technology is the material and practical matrix in which all these things are bound up together" (p. 172). The subjective, material, and contextual attributes of technology have to be contextualized when it is in application.

After historicizing and examining the early 20th century's technology, such as the telephone, audio machines, and the tape-recorder, as well as the steel or magnetic tapes, Hayles makes clear that the materiality of technology transforms our bodies and subjectivities. Embodiment in the era of technology that is updated exponentially is no longer only limited to humans, but has been extended to machines and other organisms. As posthuman embodiment, it has incorporative connections with technologies and new technologies, which "affect how people use their bodies and experience space and time" (Hayles, 1999a, p. 205). In our contemporary society, the circulation of information and knowledge through technology, especially through digital, computerized and networkable technology, serves as the foundation of our basic needs, without which our life is

unimaginable. The informatics is commonly understood to be information science, but for Hayles, and maybe also for Haraway, it means more: "the technologies of information as well as the biological, social, linguistic, and cultural changes that initiate, accompany, and complicate their development" (Hayles, p. 29). Therefore, information exchange or communication is made through their particular conditions, either social, cultural, linguistic, or biological knowledge that is situated within one or a few frameworks. The indivisibility between technology and the culture that fabricates it has another meaning. Culture speaks through technology, and technology is quite often being unconsciously consumed, leaving its cultural marking unquestioned.

The social and cultural context of technology is what technoscience intends to address. Technoscience is a concept that refers to the interdisciplinary study of science and technology, as well as the critical deconstruction of the social context of technology. Like the cyborg, technoscience is regarded as a hybrid which: "extravagantly exceeds the distinction between science and technology as well as that between nature and society, subjects and objects, and the natural and the artificial that structured that imaginary time called modernity" (Haraway, 1997, p. 3, quoted in Eason, 2003, p. 172). Although in our time, science and technology have been unconsciously used as a modern tool to take control over nature or other nations, or to improve human living conditions, technoscience does not follow the modernist track; rather, technoscience locates itself within the contexts, being both illuminating and mindful of its own limitations, its own materiality that is situated within contexts that impact those bodies who use them. Its philosophy is to be sensitive to "the *concrete,* to *materiality*" (Ihde, 2003).

What technoscience takes into consideration is the messier, complicated, and interactive space between technology and the social and cultural signifiers. The signifiers are always material, and will signify only "to the extent that it is impure, contaminated by the ideality of differentiating relations" (Butler, 1993, p. 68). Haraway intends to deal with this messier and contaminated area: "I want to use the technologies to increase the opacity, to thicken, to make it impossible to think of thinking technologies transparently" (Haraway, 2004, p. 333). The opacity itself is where we find the matter of technology. When she explains the difference between the randomness and pattern of digital textuality and print texts, Hayles makes a similar point: "The pattern/randomness dialectic does not erase the material world; information in fact derives its efficacy from the matter infrastructures it appears to obscure" (p. 28). To ponder and appropriate the opacity of technology is not to accept technology as objective, transparent, or even innocent, and knowledge associated with technology is always "situated knowledge" (p. 233). Taking technology as nontransparent and working toward its thickness indicates the need to recognize the material structures, textures, and social and political discourses embedded in the technology, as well as the environment that makes technology and human interaction thinkable, possible, and doable. Embodiment is not preexisting or proscribed; it is always in a process of becoming. It is not an exclusive representation or expression that is detached from other organisms, from nature or culture; it is fabricated within and engages with them through the in-between space of presence or absence. Katherine Hayles (2003) argues that our embodied experience not only comes from the interplay between brain and viscera, but also from "the constant engagement of our embodied interactions with the

environment" (p. 298). Though Descartes and many others believe that one's existence and significance in the world is nothing but an enlightened mind, free from outside forces, scholars who acknowledge the body and embodiment believe that body and mind are fundamentally lived through developing relationships and caring about interactions with others and with the environment. This engagement involves materiality of various kinds; it depends upon the symbiosis of all. The environment is critical for mind and body interplay; for example: "Modern humans are capable of more sophisticated cognition than cavemen not because moderns are smarter, Hutchins concludes, but because they have constructed smarter environments in which to work" (Hayles, 1999a, p. 289).

From artificial body parts, transplant and implant surgery, and plastic surgery, to iodine lamp tanning, technological parts and mediums are inseparable from a constructed human body that defines who one is and what one does. The extension of technology into human lives dramatically changes how we interact with the world and how we become. Except for the visual, fantasized, practical purposes that are pleased, these prostheses are also the representation of an appropriated identity and subjectivity. Unless being done otherwise, such identities and subjectivities are marked, inscribed, and reinscribed by social, cultural, and political discourses, since all these surgeries or reconstructions of the body through technology serve some purpose. Rosi Braidotti (2002) explains: "It would be a mistake, however, to think that the cyber-imaginary of technobodies is merely a symptom of fear, or cultural trend, a literary or utopian figuration lacking substantial social, economic and political implications" (p. 222). Technology becomes the medium that humans use to define and redefine themselves

either following and reinforcing the cultural norms, or strengthening one's capacity in daily lives. No doubt the technological medium has enabled a posthuman embodiment. Perhaps it is performance artist Stelarc who has pushed the boundary between body and technology to the ultimate. From Suspension (1980), Handswriting: Evolution (extended arm) (1982), Stomach Sculpture (1993), to Blender (2005, with Nina Sellars) Suspension (1980), Handswriting: Evolution (extended arm) (1982), Stomach Sculpture (1993), to Blender (2005, with Nina Sellars), he had suspended, penetrated, extended, hollowed out, and extracted from his body in these performances. Through his performances, he uses his body to experience sculpturally dimensioned, architecturally mapped "redesigns" of the body with the aid of technology. His "redesign" is on the surface of the body: "The solution to modifying the body is not to be found in its internal structure, but lies simply on its surface. The solution is no more than skin deep" (Stelarc, http://www.stelarc.va. com.au/shedskin/shedskin.html). His performances are seen by some as testing one's body, a hardship performance, or by some as the augmentation of the body with technical prostheses. In his other performance, *Ping Body*, Stelarc expresses the perspective that it is not technology that has to cope with human bodies. Rather, it is the other way around; the human body's movement has to follow "the external ebb and flow of data" (http://www.stelarc.va.com.au/pingbody/index.html). This performance reiterates Stelarc's intent to "redesign" the body. The body's movement is not decided and activated by the moving subject, but by the computer. With their product *Wii Fit,* Nintendo, a video game company, might be one of only a few companies that has brought to a broad audience of consumers, a moving body that interacts with "the external ebb and

flow of data." The intent of Nintendo in designing the product *Wii Fit* is to entertain people while they exercise. What they accomplished maybe more than just entertainment or profit. It is also an innovative human and machine experience through activating proprioception. As competitive as the video games industry is, video game companies have actively sought out the new and different. After introducing many video games for Walt Disney, Nintendo turned their creative and artistic designs to bringing consumers the "ability to adjust the action for your weight and equilibrium-something no other game does" (Hamilton, 2008, June 2). *Wii Fit* is a video exercise game that uses a Wii Balance Board equipped with motion sensors as a platform to stimulate body activities including yoga, strength training, balance games, and aerobics. The moving body adjusts itself according to the signals that are shown on the screen. A few months ago I enjoyed the intense experience that comes from this moving to respond to stimulations flickering from signs on the screen. I felt that I was recollecting and reconnecting to myself through such activities. It is these movements that engage the body's proprioception, a notion that was elaborated upon in Chapter II. Both Stelarc's *Ping Body* and the *Wii Fit* represent that it is through proprioception that our bodily subjects react and reposition the self through all of our senses, responding to the simulated environment that engages our audiovisual sensory, sight, and tactile realms.

Human and computer interaction, as well as the extended human subjectivity experienced through technology, once again stress the status of the cyborg. Stelarc has taken the cyborg to be a framework for him to produce his performance art. In Stelarc's cyborg world, again and again, what he presented to us is the notion that human bodies

are "biologically inadequate;" this inadequateness leads him to find ways that could not only redesign human bodies, but also argue that such redesigning is to recognize, be empowered, and live with nonhumans. In his case, the nonhuman is the technology, but for some, it could be animals, plants, or the environment. To realize the co-existence, interdependence, and symbiosis that is all-embracing, many combinations should be imagined. Another notion that Stelarc focuses upon is that of being "anaesthetized," which for some may be a problem. For some, it might be necessary to actualize co-existence, interdependence, and symbiosis between human and machine, or human and animals. As B. Stephen Carpenter, II, explained to me in an e-mail:

> Maybe he is really talking about how the body is not necessary for aestheticized purposes anymore, in a post-human condition. In a symbiotic relationship, while both parties gain from the addition of the other they also sacrifice something because of the very same addition. Perhaps the anaesthetized body is the result of part of this loss, a necessary loss, in order to gain what Stelarc believes should be gained through a symbiotic relationship. (B. Stephen Carpenter, II, personal communication, September 12, 2008)

If the embodiment in posthuman symbiosis is that of the hybrid, cyborgs, and the intersubjective, "an anaesthetised body" is perhaps a necessary state that makes the presence and existence of the other possible in this mutual relationship of becoming. The human is not in control, but is willing to lose.

The materiality of technology extends our exploration with nature, with the self,

and with others. Thus, the embodiment in the post-industrial era is not only seen from the flesh, but also the technology-appropriated surface of subjectivity. The technological medium and the "real" human being becomes inseparable, and symbiosis is unpreventable.

In the virtual world, the prosthetic is the net, the embodiment is the disappearance of matter, and the materiality of technology does not decrease.

Accelerated by digital, computer, and network technology, the communication of our time does not solely depend upon verbal signs, the language that we speak or the words we print, but instead is increasingly sped up by the visual and audio images that are digitalized, electronically transferred, wired, and simulated. The texts have become complex, and the weaving of texts bears no end. It becomes where words, images, motions, and sounds intermingle and interchange. The environment has gone to the virtual.

Virtual reality is made possible through computer-based technology which simulates an environment that enables users to interact with it. A virtual environment is enriched by audiovisual, sensory, and sometimes, tactile experiences. The technology in a virtual environment involves both computer technology and communication technology. Working together, these two technologies are usually referred to as information technology. Enabling a virtual environment, the materiality of information technology does not simply disappear. It may be overshadowed by the speed of the fast-processed or exchanged data. However, the materiality of information technology severs, as it acts as the foundation of such processing and exchange. Rather than an abstract, free-floating, and decontextualized base, Katherine Hayles (1999b) explains that information

technology is always materially based. “The efficacy of information depends on a highly articulated material base. Without such a base, from rapid transportation systems to fiber-optic cables, information becomes much more marginal in its ability to affect outcomes in the material world” (p. 72).

In the virtual environment that is actualized by the Internet, except for the fact that the medium itself is materially based, the access to this medium is not possible without material stability or non-censored regulations from the government or any group whose interest is undermined by the open accessibility to the net. As Nicolas Mirzoeff reminds us: “Despite the much-vaunted claims of its radical equality, it is given shape by race, gender and class” (p. 104). Without recognizing the inequality and inaccessibility, what a virtual environment could enable is only fantasized. Acknowledging such impossibility is to keep possibility unfixed and contextualized. It also brings the absent bodies to presence. The presence and absence are not opposite; the presence is the leftover of the absence. When Roland Barthes (1981) was seeking the memory of his mother after her death, his looking act only later turned out to be otherwise. Instead of seeking for the concrete, Barthes found and felt his mom in the disappearance and in the loss. “I wanted to explore it not as a question (a theme) but as a wound: I see, I feel, hence I notice, I observe, and I think” (p. 21). The materiality of the work one engages with lies not only at its presence; equally important is the subjective feeling in the loss of such materiality. The task is humble, but heartfelt. Thus, accepting the impossibility does not stop one from acting; it is what Donna Haraway has called the “thickening” of technology. It permanently sets one on a journey to move. The relation between technology and

materiality would not be between the haves and the have-nots, but intertwined, interrelated, and interacted. Such relationships is also what Hayles describes as a dialectic rather than a dichotomy (p. 76), or maybe a relationship of inside and outside, with the two never opposite.

The materiality within the virtual environment is visualized. Virtual reality is a simulated reality. Then the culture within the virtual reality is a simcult (Taylor and Saarinen, 1994). The player in a simcult is anyone who signs up as a user. In the popular virtual world *Second Life*, the island you buy, the clothes you want to wear, the money, everything is symbolized and visualized. Mark Taylor (1995) claims that: "In simcult, the currency of exchange is image, and what makes this currency flow is a current that is electronic" (http://tekhnema.free.fr/2Taylor.htm). In such a simcult, the image is reality. On the net, the matter disappears. The tangible and touchable is displaced by the visual and the virtual. The impossible in the real life world is made possible in the virtual world; and "In Second Life, the unusual is often the usual," and virtual world such as Second Life gives educators the leverage to "construct spaces that students normally couldn't visit, such as unusual classrooms or art galleries," B. Stephen Carpenter, II, (2007) emphasizes in an interview with Jenna Kujawski (http://tlac.tamu.edu/articleslearning_isn_t_second_notch_in_second_life). Things that cannot be done in real life are done in virtual life. Thus, materiality does not become less significant, but instead is augmented in extraordinary ways in the virtual world. The speed of electronic media accelerates exchanges and pushes them to a new level. As such, the notion of materiality needs to be rethought; embodiment does not only mean presence.

On the net, when the physical appearance of face-to-face is replaced by electronic flickers, the disappearance of the body does not simply take away embodiment, as Taylor and Saarinen speculate: "In virtual worlds, the body disappears or is displaced by a so-called artificial prosthesis. As the materiality of experience vanishes, the need to reaffirm it grows intense" (*Body Snatching*, p. 8). Embodiment through disappearance into the virtual environment probably can best be seen from the "*i*" generation. More and more people describe the people who were born in the early 1980s to today as the "*i*" generation. In China, people describe those born in the late 1970s and beyond as the "me" generation. Most people in this group, especially youngsters from the city, are the only child in their family because of China's one-child policy. There are assumptions such as that this generation did not go through the hard times their older peers did, since when they were born, everything was given to them without their asking. As a result, they focus too greatly upon themselves. This projection is not approved of by the *me* generation. People from this group argue that they have their own worries and frustrations that the older generation cannot imagine. For example, as the only child, one has to take care of both parents when they grow older, since nobody else will share the responsibility. Taking care of one's older parents is a tradition in China, and even the law has relevant terms that protect older parents' rights. For some, it may represent that it is the government who wants to shake off its own responsibility to take care of its citizens, yet it is a widely accepted belief that children have to take care of their older parents.

The *i* generation, from the symbol itself, can be understood as both me and the internet. There is not really a line that separates the *me* generation from the *i* generation.

The *i* generation is an extension of the *me* generation. Though the indication could change over years, for the time being, the *i* generation refers to the generation who is surrounded by and enjoys the proliferation of *i* products such as the internet, iPods, and iPhones, and who is living an iLife now. Shuangshuang, my sister's daughter who was born and grew up in this *me/i* generation, is independent, hard-working, and has been taking care of her divorced and cancerous mother in Dalian (Figure 4.1), China since Shuangshuang became

Figure 4.1 A street in Dalian, China.

an adult. Like many bloggers, her blog has become an important "room of one's own" (borrowing Virginia Woolf's famous phrase) for her to use to reflect upon the things going on in her life. It is a quiet place where she feels free to express her thoughts, frustrations, and feelings. She told me her blog address and I periodically use it to check on her. One day, I called her and asked her how she was doing, and I also wanted to know if she had worked out her problems at work. She was surprised that I knew about them, and she did not want to talk about them with me. What is interesting is that for her generation, it is no problem to express one's self through a blog, but it is not as easy to talk about feelings face-to-face. Thus, their embodiment is in a virtual personal space, but this space never has a closed door policy. Everyone can go in and can leave a comment. But not everyone is allowed to talk about the subject matter face-to-face. Even if I know about it, I'd better keep silent. This knowing as not-knowing strategy is quite dialectic. One of Mark Taylor's students admitted to him that she was more direct, honest, and forthright through electronic communications than face-to-face ones. His other students also seem to connect with him more on the net rather than while talking in the classroom. Thus, Taylor points out that the seeming distance created by technology actually connects and engages more with people.

Face-to-face communication does not guarantee that conversation will start; distance might serve as a bridge rather than a gap. Embodiment might be activated in its seeming disappearance. Katherine Hayles (2003) writes: "Refusing to grant embodiment a status prior to relation opens the possibility that changes in the environment (themselves emerging from systemic and organized changes in the flux) are deeply interrelated with

changes in embodiment" (p. 299). In other words, embodiment lies in one's responses to the outside forces, and to be embodied means to become, to become symbiotic with the other, with machine, with animal, with environment or with a virtual environment. Becoming is not "to imitate or identify with something or someone. Nor is it to proportion formal relations. Neither of these two figures of analogy is applicable to becoming: neither the imitation of a subject nor the proportionality of a form" (Deleuze & Guattari, 1987, p. 300).

New Media: Public Creative Resistance

Last April, I attended a discussion panel titled *Age Matters: A Conversation about Age and New Media* which was held by a non-profit organization called *DiverseWorks*, a Houston based art space which promotes new visual, performing, and literary art. The panel had invited two collaborative teams - Suzanne Bloom and Ed Hill, Mary Magsamen and Stephan Hillerbrand. The issue of the discussion was if age matters when making new media, and the artists' presentation of their cutting-edge artistic practices with new media answered the question. Both Suzanne Bloom and Ed Hill are over 65 years old; their creative minds and hands brought viewers to experience their works involving numerous media, drawing, painting, photography, video and computer-generated graphics. Mary Magsamen and Stephan Hillerbrand are in their 30s; they find inspiration from daily items such as coffee, milk, bubblegum, and cheese puffs, and use these elements to seek everyday interactions and relationships between people. Their artistic practices engage with photography, video and installations.

After the artists introduced themselves and their work, the audience had the opportunity to ask questions. The earlier questions went smoothly until one lady in the back whose question (or maybe more accurately her comments about the artistic practices and media the artists' used) caught both the artists and audience surprise, and almost brought the conversation to an impasse. She described herself as an immigrant who had arrived in the US not long ago. She was from a country where people used everything to make art. She gave an example where one of her acquaintances was put in jail for political reasons. When he was in jail, his passion for art did not die, and instead he made art from what he could find in jail-his urine. She concluded that she had been enjoying the freedom of speech in the United States, and was amazed by so many abundant materials and the wealth from which an artist could choose to make their art, but said that "American artists have been spoiled! Why American artists don't pick up the things they have, but always use 'new' things?" she questioned. Her questions won her some applause from the audience. The four artists at front all used smiles to smooth over this moment. Stephan Hillerbrand finally broke the silence: "I know, in America we like to upgrade things." Then he said that her remarks and critiques were valid. Her comments provoked the listeners to think about the notion of new media again, and ask whether new media is just another material in making art. If so, what are the important indications that we use media innovatively in our time? Certainly her acquaintance's art-making was very impressive. Intellectuals are often seen as trouble makers from time to time in certain countries. And maybe there are times when an impasse is necessary during conversation. What is new media? Why is it important?

New media emerged when technology became pervasive, and has been an integrated into a part of our lives. It would not have been possible for artists to use new media to create art several decades ago. Like Frank Gehry, who explained his use of the available technology of his time to bring new experiences and to push the boundaries of architecture, the becoming of his architecture was intertwined with the becoming of new experiences for the artist. In an era of interface, internet, and interaction, the surface becomes all-consuming; form and content run skin deep. The media of art-making turns out to be nothing more and nothing less than the form or the content. Baudriliard (1994) states: "It is useless to dream of revolution through content, useless to dream of a revelation through form, because the medium and the real are now in a single nebula whose truth is indecipherable" (p. 83). The artists at the *DiverseWorks* discussion panel certainly have not spared the opportunity to utilize new media in their art-making when the new media was available to them. What has been revolutionized is the media.

As a media that has emerged in a post-modern time, much like post-modernism, new media does not have a consensual definition. Lev Manovich, Professor of Visual Arts at UCSD and well-known in the interdisciplinary studies of arts, humanities, social science and digital technologies, understands new media to be computer-based artistic activities which support author-user symbiosis (the user can change the work through interactivity), dealing with cultural objects and paradigms enabled by all forms of computing and not just by networking. The new media updates the old media and is updated by the every-changing cultural and technological possibilities (Manovich, 2003). Though Manovich does not agree to simply equalizing new media with digital media, this

does not stop him from mainstreaming the digital data in analyzing the cultural phenomena that are created and renewed by new media. For others, such as the Canadian Radio-television and Telecommunications Commission, new media, regardless of whether it is either single or in combination, interactive or not, means the convergence of video, audio, graphics, and alphanumeric text. It involves, along with other, more traditional means of distribution, digital delivery over networks interconnected on a local or global scale (http://www.crtc.gc.ca/archive/ENG/Notices/1998/PB98-82.HTM). For the editors Noah Wardrip-Fruin and Nick Montfort of *The New Media Reader*, new media as a field has been developing for more than 50 years. In their anthology and exemplification of new media thoughts and works, new media is represented by Happenings in New York by Allan Kaprow, Cybernated Art by Nam June Paik, Computer Limb/Dream Machines by Theodor Nelson, Theatre of the Oppressed by Augusto Boal, The End of Books (hypertext) by Robert Coover, and The World Wide Web by Tim Berners-Lee and Henrik Frystyk Nielsen. All of these are considered to be in the vein and along the same trend of new media. To be interconnected with new media, which at the same time also complicates the consensual agreement between new media as the editors, means that: "the genealogy of new media is much more obscure than its ecstatic, fully-indexed, online present" (p. xiii). New media remains fragmented, open to being renewed and remade. The editor Peter Lunenfeld, of the book entitled *The Digital Dialectic: New Essays on New Media* envisions the intertwining relationship between digital and new media in the years to come, and points out that "The digital is linked to other terms: electronic, cyber, telematic. These terms are more than technological nomenclature. They are being tested to

serve as overarching descriptions of a moment" (Lunenfeld, 1999, p. xvi). Recognizing the ambiguity of new media, Lunenfeld suggests the taking of new media to be another "placeholder." Given this placeholder or the platform that is advanced by digital computer technology, we might want to focus on what new media enables us to do and helps us to become, rather than what it really is. Since new media not only involves technology, but essentially is technology-based cultural and artistic practice, an exploration on why and how new media could facilitate us to "become" in an era of co-existence and co-habitation is important, and an illustration of the possibilities that new media practices bring to us, particularly through new media art, are essential. Probably one of the most distinguishable features of new media art is what Manovich praises - the "author-user symbiosis." Manovich's interpretation of new media is crucial; such understanding has remade the art from a piece of art owned by one author into artistic practices that are made by multiple users. From the perspectives that grew out of this critical theory, Hans Enzensberger sees new media is a democratic practice registered with the subversive power that emancipates oppressed peoples. The property of new media, according to Enzensberger, is owned by on one, but everyone can take an active role:

> The new media are oriented towards action, not contemplation: towards the present, not tradition...The media produce no objects that can be hoarded and auctioned. They do away completely with "intellectual property" and liquidate the "heritage," that is to say, the class-specific handing-on of nonmaterial capital. (Enzensberger, 2003, p. 265)

Thus, unlike other media that use logic or rational "knowledge" to keep the hegemony of

the intellectual elite, the language of new media does not follow the rules of discursive practices. As a result, it becomes more accessible to the masses. *Ars Electronica*, an Australia-based media arts festival, made the theme for their 2008 festival "A New Culture Economy," which takes "imagined cultural and artistic exchange and remixing as a key indicator of the success of current and future generations" (Brucker-Cohen, 2008, September 10). This year's festival targeted the limitation of intellectual property and aging copyright laws which are no longer adequate and relevant in an increased international atmosphere of open systems of networks for information sharing (Brucker-Cohen). Artists around the world have growing concerns about the inadequate "intellectual property" that hinders and devalues various artistic or public practices. These laws remix the "readymade" materials, works, and products in an information era that depends upon electronic and digital technology. In spite of the fact that using "readymade" material in art-making has been a controversial issue, Dadaism and Neo-Dadaism's use of readymade collapsed the wall between the high culture and the low culture. Susan Hapgood notes: "Duchamp himself claimed that with the readymade he wanted to lower the status of the artist in society, to de-deify the artist, and even to eliminate art entirely" (Hapgood, 1994, p. 15). "To eliminate art entirely" challenges us to rethink what art could become. Thus, the readymade is also to "eliminate the 'aura' of the masterpiece, and in general, to foil commodification of art" (p. 15). In the new media world, things have gone to the digital, the electronic, are now the subject of rewriting and remixing; it has become difficult to tell originality or authorship. No rule is the new rule, and it has its own implications, as Taylor and Saarinen (1994) point out:

> Electronic telecommunications technology subverts authorial property rights by creating texts whose ownership remains obscure. In this way, the net displaces the notion of solitary creative genius that has governed our understanding of authorship for over two centuries. Letting go of the isolated author threatens the very foundation of individual identity. This threat must be embraced, for it provides remarkable opportunities for creative renewal. (*Pedagogies*, p. 7)

The overprotected copyright, on the one hand, has excluded the masses from access to information, and on the other hand, the copyright has become a firewall for the elite to keep the status quo of the knowledge-producing process. Breaking down the overly restricted copyright policy in electronic and digital art - making would make the media truly shared by its users and encourage creativity, a phenomenon already witnessed on You Tube. The culture of new media, or the philosophy of new media, follows what Taylor and Saarinen asserted: "Media philosophy is kitsch" (*Media Philosophy*, p. 18), which favors image over argument, prefers the performative to the logical, delights in the surface rather than in the depth, is interactive rather than an enforcer of one-way traffic. Also: "We must reinvent the art of persuasion. Argument, like print culture itself, is a privileged technology of persuasion whose authority western philosophy has taken for granted (p. 20). The new media ferments the situations that users can use to take an active role in recreating the information that is favorable to them, especially through imagery.

The products of "kitsch" have been discredited as unprofessional, inauthentic, and

disturbing. For example, Wikipedia (Figure 4.2), an online informative tool that allows its users' to engage in collective editing and input with regards to its content and structure, has been called "noise" by other "authoritative" encyclopedias (Brucker-Cohen, 2008). Seeking for definite and solitary answers, the only truth, encyclopedias do not appreciate other interpretations. Pondering over the notion of truth, Patrick Slattery (2006) asks us such questions as: "Can every person trust his or her own conscience, or must every personal belief be subject to affirmation by a higher authority? And who decides which higher authority is legitimate when various factions are in conflict?" (p. 127). Online

Figure 4.2 Wikipedia.

information is informative, but it is also endless and can be chaotic at times. Thus, it forces us to think about such questions as do we trust the information we get online? Actually, I find Wikipedia to be very helpful in my teaching, research, and writing. First

of all, the speed of circulating information on Wikipedia is far beyond that which any

encyclopedia could reach. Wikipedia is very timely and the information one can gets is developed from multiple-sided perspectives. I have found many stories either within Wikipedia or through the hyperlinks that Wikipedia directs me to. Thus, I get a sense of the historical, social, cultural, and political backgrounds that constitute the issues, persons, or phenomena that I try to understand. After reading dozens of articles and roaming through various websites, I have to evaluate their relevance and the value of their information, and then make a decision regarding what I want to quote, expand upon, or critique in my recreative act of learning and unlearning. Thus, the interpreter is me. My search through Wikipedia becomes a hermeneutic act. Such a hermeneutic act does not lead us to the nihilistic idea that nothing is relevant, but rather to a hermeneutic circle where interpreters, or teachers, engage each other. It is both corrective and collaborative for the responsible participants (Slattery, 2006).

It is also "kitsch" culture that makes the creative act possible across national borders. Recreating to images and juxtaposing them in different times and spaces are acts that are subversive in art making and based upon the readymade. One such example comes from Beijing resident Juping Yu. She creatively used materials she found and recreated them to make her own statement. Juping Yu's family has lived in one of Beijing's Hutongs (胡同; Figure 4.3 and Figure 4.4)) for more than six decades. Hutong is a typical old Beijing residence style with long and narrow ally leads into the

Figure 4.3 Inside Hutong.

Figure 4.4 Hutong's Outside.

residents' houses. It is usually one-story tall, residents share bathrooms with others, and most of the time, several neighbors share one courtyard that serves as the public activity space. Beijing local authorities decided to reconstruct the area in which Yu lives, and ordered Yu and her family to live. Yu and her family did not agree with the amount of compensation they received from the government. As Yu said: "The money they offered is even not enough to buy a bathroom in nowadays Beijing. I am not going to move out here, I will use my life to protect this house" (http://news.wenxuecity.com/messages/200807/news-gb2312-653087.html). Yu's house is not only where she lives, but also is from where her family works. Yu is a vendor who sells roast chestnuts, peanuts and other snacks. When the government pressed her family again, Yu decided to use her own form of protest (Figure 4.5). She put the Chinese president and premier's poster photos

Figure 4.5 Yu's Gate Art.

on her gate, and hung political slogans like the government bragging about how it serves

the people, as displayed other information about her house that she wanted others to know about her situation. Her colorful house decoration attracted many passers-by to stop, look, and know about her fight. Yu's story shows that the kitsch language is what the masses use when remixing, resisting, and reliving their interpretations of information and what information means to them. In her protest, Yu uses the products of technology to create her own aesthetic project: poster pictures of Chinese leaders, circulated political slogans of the party, etc. What she did was to mix them together to serve her own purpose, a purpose which has a subversive undertone. Electronic and digital technology helped her indirectly in her own critical art-making process. Instead of being marginalized by the government's policy, Yu utilized the power of visualization, and her resistance through visualizing her understanding of the government's policy and her critique of the inconsistency within that policy represented Nicholas Mirzoeff's (1999) argument that no one is an outsider in culture. "Art is culture both in the sense of high culture and in the anthropological sense of human artifact. There is no outside to culture" (p. 23). Yu's art making is extremely visual. The gate is open to everyone to look. Though it is a narrow Hutong, it never lacks visitors. Working with visuality, Yu successfully delivered her message, and she became her own agency as a social and cultural being in knowledge making, as Johanna Drucker argues: "Visuality is a primary mode of understanding, but also, of our production as social and cultural beings. Identity and authority are constituted through the systems of knowledge production embodied in visual forms" (Drucker, 2006). Yu's message was well received by the local Chinese officials. The time that Yu selected to send the message was critical; it was during the period that Beijing was trying its best

to evade criticism from international spheres, and thus to promote full support of the Olympics which would be held in Beijing soon. The official informed the journalist inquiring about this event that the government took the residents into consideration first. They would try their best to resolve it. Thus, Yu's art-making became interactive.

It was what Baudrillard called a "reciprocity" beyond the "reversibility" of media that makes communication at large something to which the public mutually responds (Baudrillard, 2003). When media is interactive and reciprocal, media becomes "social media" that facilitates complicated conversations. Lev Manovich (2008) expresses his hope that:

> social media means not only the media objects created by normal people and pro-ams, but also conversations between people around these objects. People discuss each other's photos on Flickr, leave comments on You Tube, write movie reviews, and so on. The size of this "conversation data" also continues to grow. (interview with Kevin Franklin and Karen Rodriguez'G, ICHASS)

The comments and the discussion that emerge through "social media" are not limited to one-to-one communication; it tends to be many-to-many, and at times it may seem chaotic. People feel free to express their thoughts and feelings, and vice versa, these thoughts and feelings begin other conversations that are only stopped by the users, and not by any other "authority." Some users also broadcast their own works and leave the hyperlinks available for others to click or enter, while making comments on others' products, a common phenomena on both Flickr and You Tube. There is no official

authority or expert on You Tube or Flickr to guide users with regards to what to read, where to look, or what to see. However, it is users who inform users; users' clicking and ratings become the signs attesting more or less to gazes and clicking. Only the user decides if he or she wants to get that information, rather than being fed information by the one-too-many traditional forms of media. Thus, the role of consumer is transformed into the role of participant.

I have used many images from Flickr and videos from You Tube in my teaching. The authors of these works could be the peers of my undergraduate students, or even younger than them. One of the works I used was from a middle school project. In this project, students used videos to make their own interpretation of the issue that the teacher asked them to address. This video project helped my students see that what curricula could become, and in what ways pedagogy could be practiced. Also, these videos or image products were not something that were outside of my students' lives because the students grew up in a culture where these products were normal for them. Thus, these products represent their daily lives, perhaps. What they see in my class is not only the simulacra of their daily activities, but also that a teacher who validates creative works from daily life can be successful in teaching and relating to students. In a wired and open environment, from the beginning, no one knows who can be the center of a movement or educational focus. Therefore, one needs to be careful to fabricate and fashion one's product. Once one takes responsibility seriously and makes it creatively, one's artistic work can attract more subscribers. The Future of Public Media Project, funded by the Ford Foundation, has endeavored to create a public space through vibrant

public media, serving their hope to enlarge public knowledge and action in a digital era. Their philosophy and action is based upon what John Dewey, Jurgen Habermas, and others envisioned as a democratic society, or "a mode of associated living, of conjoint communicated experience" (Dewey, 1916/1944). This is also what Jurgen Habermas called "public sphere." Thus, public media is an environment that is made possible for public access, and an experience of creation and participation which, according to the director of the Center for Social Media, Pat Aufderheide, and the director of the Future of Public Media Project, Jessica Clark, is:

> social spaces and practices in which people discover their public aspects and find political mechanisms to resolve them. The public sphere is a set of social relationships created in the course of communication; media platforms are tools for creating it, not the sphere itself. (http://www. centerforsocialmedia.org/resources/publications/ public_media_faq/)

Such media takes their endeavors and actions toward the "author-user symbiosis," and in such symbiosis, the role of the author and user is exchangeable.

In the digital and electronic era, our culture is unavoidably wired through networks. The concerns for many are that when the online experience becomes pervasive or primary, the physical communication between humans will be decreased, and thus, disembodied. I do have a worry about this, but I try to envision what other kinds of meaningful and investigable embodiment online or virtual environments can enable and activate. The story below gives us an example how computer-based technology brings human to human relationships closer together.

In the iPod Lecture Circuit, Michelle Quinn (2007, November, 24) reported on how technology, here the iPod culture and its extensions of iTunes and podcasting, "bring the ivory tower to big rigs and fishing boats, offering the chance to study existentialism or theoretical physics." In this story, 78 year old Professor Hubert Dreyfus at UC Berkeley dares to try new things in teaching. He had resisted extending his teaching to a larger group of listeners, questioning the effectiveness of distance learning and worrying about its "disembodied telepresence" in comparison to the face-to-face instruction he was used to. A well respected scholar and philosopher, Professor Dreyfus had extensively lectured and written on existential and other philosophies and philosophers, from Heidgger, Merleau-Ponty, Sartre and Kierkegaard, to Nietzsche. Baxter Wood is an 18-wheel truck driver. He downloaded Dreyfus' lectures from Apple's Itunes store, which are free to anyone who downloads them. He had spent his life working as a wood and stone turner and a truck driver, and the only thing from his one philosophy class he could remember was the name Kant. But in the spring of 2007, when Wood found Dreyfus' lecture on iTunes, he said he "felt like I discovered the Fountain of Youth." That is something that I can relate to. Not the "Fountain of Youth", but I felt the same excitement when I found out that there are thousands of people like me, listening to the philosophy of existentialism (or any other philosophy upon which Dreyfus lectures). I am one of his subscribers, as well. Between my home in Houston and the university that I attend in College Station, I commute twice to three times a week. It is a 150 mile round-trip journey. Dreyfus's lectures on existentialism and Descartes, his class discussions on the film Hiroshima and the Brothers Karamazov have been part of my academic growth – a

growth not achieved on campus, but online and on the road. Wood commented that "the sound of chalk on the chalkboard makes it so real." I can't agree more. When Dreyfus was writing on the board, for me it triggered an imagination moment so powerful that I was waiting for the next letter to come out, and that makes sense for what he tries to teach. In addition, periodically, some students would ask questions, or would answer the questions that Professor Dreyfus asked them. He also reminded his students of his office hours or any change that he would make on the syllabus or class schedule. Sometimes, he mentioned the people who were listening through iPod. It sounded like he was talking to me. The sounds flew in the air and their interaction made me feel like I was in the classroom.

The numerous downloads by the many subscribers made Dreyfus one of the top 20 on the podcast list. Subscribers' support also turned out to be financially beneficial. UC-Berkeley received money showing appreciation for Dreyfus and other podcasting professors.

Dreyfus has expanded his reach to thousands of listeners and subscribers who may not have had a chance to listen to the elite academic at an institution, especially if not for the iPod, iTunes, or any other technology made possible by communication platforms. Dreyfus not only teaches existential philosophies, he also makes existential connections through podcasting. The listeners and subscribers repeatedly send him e-mails. His reservations about the effectiveness of distance learning turned into his embodied expression of the change: "'you podcast people,' he calls them during class -- are touching" (Quinn, 2007).

Philosophy has gone kitsch?

Dogs' Legend

"I brushed off a lot of dog hair today, so many of them on the chair and on the carpet," my mother said to me when I came back from teaching at the college. I have two beagles and one cat. The colors of their hair range from brown, black, and white, to grey. They make the carpet colorful. "Yes, that's the condition we have to live with if we have them," I answered. From a person who had never had pets before, to now accepting them and taking good care of them, my mother has gone through a long journey. So have I.

I was living in my condo in Dalian, China, by myself. When things in my young life settled down, I had my mother come to live with me for a few years. I wanted to have a dog or a cat, but every time I tried, my mom stopped me. "Too much hair" or "too dirty," she told me. My dream to have a dog or a cat had to be postponed until I came to the Unities States. At the same time, my mother got her first dog as a pet just four months after I got my first dog. Her dog was a gift from her granddaughter, who worried that her grandmother would be too lonely at home when everybody was gone. She named that dog "Maomao." From the beginning, Maomao was a companion to my mom. Maomao, in Chinese, means hair. Maomao is a small shih tzu mix. My niece spent fifty RMB (about 6 dollars then) to buy her from a street vendor. Maomao watches everyone in the house with a thoughtful eye. She can tell who is in a bad mood and who is cheerful, and she will try to stay away from the troubled ones. When Maomao stayed with my sister, my sister had a seizure one night. She felt the pain but just could not wake up or say anything to

call for help from others in the house. Maomao realized something was happening, so she pawed my sister's hand continuously until she came back to consciousness.

Maomao has not shown any genetic or other biological problems, to this day. She is a happy and smart dog. For my purebred beagle dog, Qiuqiu, the story is quite different. Most puppies do fine until they grow into their adulthood. Qiuqiu did not have any problems when he was a puppy. Like many other beagle dogs he was curious, always digging, chewing, barking, and enthusiastically welcoming me home whenever I left the house, even for only ten minutes. When he was about two years old, Qiuqiu started to have some problems with his body: redness, itching, and licking. I have to bring him to the vet more and more as he grows older. He has itchy red spots and hot spots yearly, and they become worse in summer, both in frequency and intensity. Over a few years, our house has become a store room for various dog medicines and medicated shampoos that treat dogs from their ears to their toes.

Donna Haraway moved from the cyborg to the companion species because she sees "cyborgs as junior siblings in the much bigger, queer family of companion species" (Haraway, 2003a). In her book *The Companion Species Manifesto: Dogs, People, and Significant Otherness* (2003b), she records that the Canine Diversity Project has been making an effort to promote awareness of "the dangers of inbreeding and the overuse of popular sires." Instead, the project advocates genetic diversity, which Haraway finds critical to canine wellness and inter-subjective living. Qiuqiu was bought from a pet store in a mall. At that time, my knowledge about dogs and the pet business was not much different from what I know now about polar bears. However, I have learned since. I am

not sure if Qiuqiu's biological problems are related to inbreeding or popular sire, and a puppy mill's puppy very well could have been in that situation. To live with Qiuqiu is to live with the problems and the conditions from which he suffers. Haraway reminds us: "Knowing and living with these dogs means inheriting all of the conditions of their possibility, all of what makes relating with these beings actual, all of the prehensions that constitute companion species" (p. 81). Whatever he goes through and whatever I have to deal with, Qiuqiu is still my natural clown, and he always makes me laugh and enjoy the time I have with him.

My other dog, Sandy, is a beagle mix and was saved by the Houston Beagle Rescue from a shelter. Sandy's former owner abandoned her to the shelter because "she tends to have too many puppies." It seems that it was Sandy's fault for not being fixed. There have been no genetic problems with Sandy since we adopted her three years ago. She is a mixed breed of a beagle with some other kind of dog that we don't know. We cannot trace her genetic characteristics, but Sandy is absolutely an agile, alert, and responsive hunting dog. Sandy and Qiuqiu had no problems becoming comfortable with one another, even from the first day they met (Figure 4.6). Immediately they were hand in hand and went to sleep.

Figure 4.6 Nap Time.

My enthusiasm for and my developing relationships with dogs grows from a repressed memory.

A few decades ago, in China, dogs were not house pets. They were the gatekeepers for the house, and they were treated not much differently from chickens, pigs, or geese. When I was still a third grader, I overheard my parents and other neighbors' conversations about the dogs in our neighborhood. The government demanded that all the houses with dogs be dog-free. One way for them to "accomplish" this was to kill them, by a government organized force. One case of rabies could cause hundreds of dogs' lives. In

the face of such a massive institutional power, dog owners seemed powerless and there was no way to escape; protesting was not a choice, since you had to get permission to protest from the government. Some families who had relatives living in the more remote rural areas sent their dogs away and then picked them up when the situation improved. My family dog, Huihui, was only two or three years old when the dog slaughtering event fermented. One day I returned from school for lunch, and I found my father's friend, Uncle Song, in our house. Uncle Song was known for slaughtering animals. Huihui was frightened in one of the corners. Like many other neighbors, my parents decided to kill Huihui on their own before the government team came. I will never forget Huihui's begging eyes, looking for protection from my mother, my father, or me. I felt powerless; I was told that there was no solution and that Huihui had to go, because no one is bigger than the law. As a representative of a generation who went through numerous political events from the 1950s to the 1970s, and as a former political prisoner and "an ally" of a former political prisoner, my father and mother knew what a government order meant. I knew also - not the order, but the life that is impacted by the order. I felt a bottomless despair, and believed that there was no way out. I accepted fate. Afterwards, they put Huihui's meat and bones on the table. I could not remember who were at the table, but only remember that I was sick that afternoon. For years, I did not want to recall this memory. I blamed myself because I didn't do anything - anything.

Slaughtering dogs and cats in China has still not been banned. Although in China, today, more and more people take them as pets and treat them well, these pets owners, particularly dog owners, still worry that one day the government will issue another order

to kill their pets. Last year it happened again, because a few people were bitten by wild dogs. Quite a few cities decided to take away dogs from their owners under two conditions: the dog did not have a permission certificate issued by the government (a permission usually costs the owner 800-1000 RMB, which equals two weeks pay for many Chinese, and for some, one month's pay) or the dog's size was too big for the condos in the city. Dogs with good temperaments such as golden retrievers and labrador retrievers were on the list, just because of their size. Though behind such a cruel act there might be some politically valid reason, I still believe that it is human kind's ignorance, greed, and arrogance toward other species that makes killing dogs practicable. When humans cannot deal with their own problems or the problems they have helped create, they blame animals. In their interaction with others, humans' desires are always taken for granted as the priority.

I started to see, feel, and understand things differently after I adopted my dogs and cats. They helped me to grow out of my own ignorance towards animals. I have grown to realize that I have to accept who they are; I do not intend to change them, but both my dogs and I have to maintain a co-existence. As their companion, I feel both pleasure and responsibility. My dogs accept who I am. They usually go to bed late, accompanying me while I study until after midnight. They also know the signals from me that indicate they have been "bad" or naughty, or when it is the time to go to their kennel to stay out of from trouble. They have learned to leave my little cat alone. As my companion, my dogs mean to me more than I could realize. When a category 2 hurricane Ike hit Houston in the early morning on September 13, 2008; two trees fell on the house creating loud

thunderous crashing noises. Afraid of more sever wind and damage, my mom, my husband and I were huddled together in the downstair closet with the door open, so we were able to see Qiuqiu and Sandy's kennel in which both of them stayed. During the hours we were waiting for the wind to die down, suddenly, we started to hear Sandy's snoring, her smooth breath and the pace of her snoring had comforted our anxious and exhausted mind and body. Our bodies grew into to be more in tuned with Sandy's snoring than with the wind.

I rethink how the emerging relationships between me and my dogs have influenced my own becoming as a dog owner and their becoming as dogs. My stories with dogs and our co-habitation are the: "stories about relating in significant otherness, through which the partners come to be who we are in flesh and sign" (Haraway, 2003b, p. 25). Thus, our subjective formation through the bond and awareness of the otherness that is quite significant is relational, co-evolutive, and embodied in our own ontological existences. At a certain point, the dogs and I both learned that there is a limit that we cannot cross, but we do transform each other in numerous ways. I like the smell of my dogs. I don't mind my dog's hair. It is something with which I am familiar, and something that makes me feel at home. But my dogs do not share my bed with me. Haraway emphasizes:

> There are no pre-constituted subjects and objects, and no single sources, unitary actors, or final ends. In Judith Butler's terms, there are only 'contingent foundations;' bodies that matter are the result. A bestiary of agencies, kinds of relatings, and scores of time trump the imagining of even the most baroque cosmologists.For me, that is what companion species

signifies. (p. 6)

My activism against animal cruelty and in the advancement of human-animal co-existence grew out of my understanding of the human and animal relationship, and my own being with animals. I have joined organizations, assisted at shelters, posted on online discussion boards, and contributed time, strength, and resources in promoting animal wellness across national borders. My dogs have invented me.

From cyborg to companion species, the relationship between machines and humans, between dogs and humans, is a process of becoming for both. For Haraway, it is the human-nonhuman relationship that she promotes, but she has not addressed becoming dogs or machines. Deleuze and Guattari (1987) do theorize about becoming animals and becoming machines. Such becoming, for them, means:

> Do not imitate a dog, but make your organism enter into composition with *someth- ing else* in such a way that the particles emitted from the aggregate thus composed will be canine as a function of the relation of movement and rest, or of molecular proximity, into which they enter. (p. 302)

Yet, for both Haraway and Deleuze and Guattari, the notion of in-betweenness is stressed and prioritized. Co-habitation and co-existence do need to negotiate the space in-between, accepting the finitude beyond change or manipulation. Becoming animals, one needs to enter "the zone of intensity or proximity" that constantly moves, stops, and pauses between the self and other. "*Something else*" is recognizing "significant otherness." Becoming is not seeking for common ground. Becoming, rather, is to enter the space of the unknown and " anaesthetised" state in relating to something that is quite

different from the self.

"Qiuqiu, Sandy, come here for dinner.' My mom is calling the dogs again.

Afterwords

The advancement of technology in our time cannot and will not take away the central importance of the body in our knowing, being, and living. The materiality of and enabled by technology joins the materiality of human bodies. It demands alternative ways to envision, to live, and to act. Appropriated by technology, the culture we live in is not only created by humans, but also enables and is updated by machines. The culture is simulated, a *Simcult*, Mark Taylor and Esa Saarinen believe, in which authorities are taken lightly, and everyone is a player who writes over others but also is subject to being written over. The net is the extension of our subjectivity and embodiment, in which we become cyborgs. This has its great symbolic value on a net that endlessly connects across boundaries, as Taylor and Saarinen (1994) boldly imagine:

> Electronic media are supplements to the human organism. Computers becomes the brains, engines the legs, video cameras the eyes, telephones the ears, and wires the nerves, veins and arteries of the world organism. The lifeblood of this corporate body is electricity. When the blood flows, the globe becomes a cyborg. (*Cyborgs.* p. 5)

Yet, networking is not only limited to the net, the electronic web, it is also with our companion species, as Haraway argues. A cyborg is only a junior sibling of a larger family of companion species. We are all wired in an environment that we inhabit, and

symbiosis is imperative. Posthuman embodiment urges us to interstand the "significant otherness" of cyborgs, of companion species. The networking with different species requires that we co-exist, co-habitat toward co-evolution.

CHAPTER V

INTERDISCIPLINARY STUDY OF CURRICULUM AND PEDAGOGY IN THE POSTHUMAN TIME

> To resist electronic technology is as futile as trying to turn back the tides. It has already swept over us in ways we have yet to realize. It is not a question of whether to accept or reject this new world but of who is going to use it and how. To resist the possibilities opened by the mediatrix is to leave the extraordinary technology in the hands of others. (Taylor & Saarinen, 1994, *Net Effect*, p. 1)

In the modern American history of curriculum studies, the most dramatic change could be the Reconceptualization movement, which was initiated at the University of Rochester Conference in 1973. In spite of the various positions and perspectives that the curriculum theorists and scholars held, together they pushed for a new movement to rethink, historicize, and reexamine the curriculum as a field of study through political, racial, gendered, phenomenological, postmodern, autobiographical, aesthetic, theological and institutionalized texts; the concept of curriculum has been deconstructed, contextualized, and historicized. Curriculum has become *currere* (See Miller, 2005; Pinar, 2004; Pinar, Reynolds, Slattery & Taubman, 1995; Slattery, 2006). The contexts of curriculum have become endless. Recently, Pinar (2003) called for internationalization as the next phase of curriculum studies and research grounded in the inter-communication between nations to examine the changes and processes of curriculum. This

intercommunication later became the idea Pinar (2004) advances as "a complicated conversation." Thus, curriculum is never free from discursive practice; the "complicated conversation" recognizes the multiple discourses we speak through, teach with, and be with. When the only discourse is displaced by multiple discourses, the monologue becomes "polylogues" which can only be embodied and enacted in the postmodern era. The university becomes a postmodern university which will "more closely resemble the decentered, disseminated and non-hierarchical 'structure' of the net than the centered, segmented and hierarchical structure of the assembly line. In sum, the postmodern university is not a **uni**-versity but a **multi**-versity" (Taylor and Saarinen, 1994, *Pedagogies*, p. 3). Although Taylor and Saarinen were taking higher education as an example of decentering the fixed, universalized structure of universities, what they have called for is also a multiplicity of various educational practices and experiences that are significant for schools at all levels. The curriculum and pedagogy must be changed to enable their partners to join the polylogues.

The editors of the book *Curriculum and the Cultural Body*, Springgay and Freedman, as well as the various contributors, take their endeavor to contribute to the "complicated conversation" by introducing and rethinking the bodied curriculum of the field. "A bodied curriculum," Springgay and Freedman (2007) declare, "not only resists the very notion of standards, hegemonic power positions, and categories of sameness, it dislodges and destablizes 'the center' from which binaries and dualistic logic are produced and maintained" (p. xxvi). In an educational community in which the body has been pushed to the background in daily curriculum and pedagogical practices, such a call

requests educators to attend to and engage in complex understandings of the body: inter-embodiment, performing bodies, narrative bodies, bodies in public spaces, moving and virtual bodies, and maybe, those bodies that do not fall into any category – the excess.

When both texts and bodies have grown toward heterogeneity and have become "excessive," and when everything is going on simultaneously, what draws our attention is not laid underground, but on the top. The topology of excessive discourses are involved in a rhizomic entanglement.

To educate is no longer to deliver other people's messages; education has to engage with autobiographical *currere* and converse with others (Pinar, 2004). Education also means growth and the enrichment of educational experiences, as John Dewey urges. "Education is communication," Taylor and Saarinen asserted. Communication is a reciprocal performative act. In conversation and in communication, the texts we think with and teach have gone through multiple discourses and seem to have no ending; the texts we teach our students for their growth are not in a single format and do not develop linearly. An example of this can be seen from the increased use of multimedia in facilitating teaching. Thus all the texts become nonlinear and hypertextual. A hypertext does not have a fixed center; every text can be the center and at the periphery, and there are "no edges either, no ends or boundaries. The traditional narrative time line vanishes into a geographical landscape or exit-less maze, with beginnings, middles and ends being no longer part of the immediate display" (Coover, 2003).

Texts do not always congruously fit into each other. Between texts there are always gaps, "an interval of a *spacing* and *temporalizing"* (Derrida, 1973). The spacing

that a hypertext enables is spatial: the links it enables bridge to other texts that one does not need to go deeper to find. A link directs to another domain, and links connect with links becoming lines and lines become networks on the landscape. A landscape that is not flat has its surfaces fold into each other, creating spaces that are rhizomic. Everything is in the middle of something else.

In the information age, when no one can escape from the electronic and computer-based technology, when the machines already have become part of our subjectivities, to take them as irrelevant is to live in denial. To evade is not an option; to teach means to take the lead in the hypertexts and simcults that we encounter, live with, and engage in every day. In teaching, the message to be delivered needs to be rethought: Why these messages? Whose messages? What are the messages? When the medium itself also becomes the message, it becomes more complicate and intriguing, since "the personal and social consequences of any medium - that is, of any extension of ourselves - result from the new scale that is introduced into our affairs by each extension of ourselves, or by any new technology" (McLuhan, 1964). Messages upon messages, the texts an educator deals with go to the complex and rhizomic; they require one to be mindful and critical of both curriculum and pedagogy. In the rhizomic network of texts, the medium to interact is the "mediatrix" which Mark Taylor describes, a medium which includes "mediating structures ranging from television, radio, film, and video to telephones, faxes, computers, and, perhaps most important, the net" (1995). The mediatrix creates the realities of our lives. To ignore the mediatrix is to give away the possibilities of transforming our own and our students' experiences.

The mediatrix is used to interstand surfaces. Working on the surfaces, one needs to keep naive to get the message straight out, for everything in media is ephemeral, fleeting, and cannot be saved. Taylor and Saarinen allege: "Media philosophy is a philosophy for the children" which means:

> You must, therefore, dare to be naive and superficial by talking their language and not trying to impose your concepts on them. But to be for children is also to be willing to accept responsibility for creating and sustaining structures and networks to support life. (*Naivete*, p. 3)

To be naive at the right moment is to exhibit a sophisticated wisdom. Philosophy has to lower its status to deliver its message. If media philosophy is for children, then for whom has educational philosophy developed? What could education learn from the types of communications being enacted by the media? It is certainly not an easy task to be naive in our current educational environment. Rather, education is usually about sophistication in the process of acquiring knowledge. To be naive may cost a person their job. In education, educators are demanded and believed to be experts and authorities; to teach means a willingness to give. The opposite approach may not be appreciated. Moreover, sophistication is generally associated with the mind, but not the body, which in education has been taken as a supplement and secondary. To associate with the body usually means to be naive, personal, concrete, unsophisticated, or unprofessional. The senses that are associated with the body and embodiment are not quite as engaged in educational experiences. The direct, immediately felt, and interactive experience is missing in education. Thus, educational experiences have long been detached from naiveté.

The fear of working on the surface hides the anxiety of losing control; seeking a depth becomes the way to secure the authoritative position. However, the mediatrix that gradually establishes its terrains in education may upturn the depth that has been "secured" for ages. The use of film, video, and podcasting, as well as other forms of multimedia pedagogy makes the depth superfluous, thus rendering the surface a profundity. The surface that I envision is the surface of our body, our bodily experiences that have long been marginalized in our teaching and learning contexts and experiences. Multimedia engages with our bodily potentials of hearing, seeing, viewing, feeling, touching, and smelling, as well as their synesthetic affects. A bodied curriculum is no longer ignorable.

Educational experiences are not decontextualized; an experience is always situated with certain bodies. Questions should be asked such as: whose experiences? What kind of body experiences such experiences? And with whom? Thus, to be naive is to take the surface and embodiment seriously. What appears in front of our eyes and in front of our bodies are the surfaces with which we must deal. A text, an image, technology, a medium, a student's embodied identity and subjectivity, and our own identity and subjectivity all are the surfaces that we need to labor at/for. Working with/at the surface is to engage with it profoundly, to interstand the folds in the rhizomic network with other humans, machines, or animals. Through the folding and refolding, both surface and embodiment communicate. Missing folds end up losing crowds. What can we learn from the craftsmanship and innovation of architecture in terms of both technology and aesthetics? What does the communication proficiency of the mediatrix in thinking of fashioning and

refashioning of the "end products" inform us of?

When bodies exceed both in categories and intensities, what is at stake is not the body as an abstract entity, but rather its embodiment in the folds of net-working with other humans and non-humans. The following three examples serve as representations of various forms of embodiment in different contexts that can be engaged in educational practices.

Educational Experiences as Emotional Responses through Film Viewing

Recognizing embodiment in our pedagogical lives helps us to visualize and confront various notions of difference and different identities and subjectivities which might clash with our own, and embodied differences often evoke emotional responses. Acknowledging embodiment poses the question of how we can work with and engage in differences, rather than simply neglect or avoid them. In a sense, such embodiment enlarges one's capacity to work and re-work one's assumptions that frame how one sees the other, who is different from the self.

When teaching undergraduate students, I intentionally bring out the issues associated with embodiment. My class is a pre-service teacher education course in Social Foundations of Education. In this class, the issues of race, gender, sexuality, environment, and theology are addressed and deconstructed. Some of the films we choose, such as, *Wrestling with Manhood* (2003), *American History X* (1998)*, and Fast Food Nation* (2007), are graphic and might be disturbing to some. Because most of my students are from white, middle class families and grew up in small towns, many of them are

religiously conservative. Thus, when addressing these issues explicitly, we often encounter some emotional and cultural struggles. However, like Carolee Schneemann, we believe that learning comes from "too much." I and my colleagues use emotionally charged films, video clips, and sound files to inspire and relate to the feelings, senses, and emotions of our students. We believe that the message is better transferred with visceral knowledge. Guest speakers are invited in to give autobiographical stories that build connections between the issues and the lived experiences. In doing so, we have our students engaged in embodied interactions with diversity in terms of raced bodies, gendered bodies, disabled bodies, prosthetic bodies, gay bodies, and cyborg bodies, along with lectures on embodiment from multiple perspectives. Allowing such bodies to be visualized, discussed, engaged, and remade, for some, is quite challenging, because both the languages and the images associated with the body have been made invisible in their past educational experiences. However, for some students, at the right moment they start to feel comfortable enough to share their stories that connect with the body images, body intensities, and body materialities being shown in film. Such allowances and validations are important for my students, so that they may deconstruct and reconstruct their own and other's understandings of embodiment, as well as address its educational significance. For example, when we show the films *Vagina Monologues* (2002) and *Killing Us Softly 3* (2002), we always have female students, and sometimes, male students, tell their personal stories that relate to the episodes in the films, as well as how they felt then and what they believe now. Both films address the issues of women's subjectivities and identities. *Killing Us Softly 3*, a film by Jean Kilbourne, argues for its viewers to take advertising

seriously. It deals with the media's biased and unrealistic representations and advancements of an "ideal" female body image as slender, thin, and sexy in terms of larger than normal breasts. It also points out the dangerous relationship between men and women when such ideology is practiced in real life. *The Vagina Monolouges,* a film performed by Eve Ensler, tells the stories of women across different ages, races, ethnicities, professions, and sexualities. Through her retelling of those stories, viewers begin to relate to issues of rape, sex, love, birth and orgasm, all stemming from the silenced vagina. Thus, to deal with the issues that women face every day, a recognition and affirmation of the vagina, of women's sexual desires, is imperative. Many of my students have reflected that they enjoy listening to their peers' and the guests' stories, and they felt they were challenged by those experiences, making these eye-opening experiences.

Most often, I ask my students "what do you feel?" rather than "what do you think?" after each film. Moreover, I and my colleagues share honestly our observations of the students' bodily reactions during the films. Starting with a language of embodiment, of sense, and of feeling makes students feel affirmative and willing to talk about their experiences and reactions with these terms. Such learning through embodiment is mutual. I also learn through my own pedagogy and rethink the ways I could change after each class, through my visceral knowledge felt during the class.

Embodiment is not only talked about, but is also performed, and it is a "performativity" which deconstructs our language so as to reconstruct the ways that we know. Further, such embodied speaking, sharing, and interacting makes learning relevant

and engaging. The film viewing experience with discussion following helps my students relate to lived situations, even after they leave the classroom. One student wrote his thoughtful observations on the class online discussion board. They went something like this: "It is impossible not to look at female bodies as objects when you watch the Ads during the Super Bowl break." Therefore, using films in my teaching, along with engaged discussions, enables a subjective experience of embodiment, and the conversation and meaning-making usually extends beyond the classroom. In the words of Sobchack (2004), the body is essential when watching and experiencing a film:

> Even at the movies our vision and hearing are informed and given meaning by other modes of sensory access to the world: our capacity not only to see and to hear but also to touch, to smell, to taste, and always to proprioceptively feel our weight, dimension, gravity, and movement in the world. In sum, the film experience is meaningful not to the side of our bodies but because of our bodies. (p. 60, quoted in Weaver & Britt, 2007, p. 25)

It is impossible for a student not to be touched by the films they watch. We have students who like some films, and think they are witty representations of real life situations; we also have students who hate those same films, and think they are too graphic. Both cases indicate that films do connect with embodiment and students embody their joy, disgust, sorrow, sadness, and all kinds of other feelings and emotions in their learning process. As Alison Jaggar (1992) argues, emotions are the consequences of our feelings' responses to the outside force that being physiologically sensed. Experiencing

embodied knowing provides opportunities for educators to seek visceral connections in order to teach and be with students. Because of the collective denial of feelings and emotions in the professional world, both our students and educators have not been prepared to meet these challenging situations. However, as an important experience in our lives, losing and disengaging feelings and emotions does more harm than taking up this challenge and engaging them with heart-felt pedagogy.

My class was set up in a way where students could see each other's faces, as well as each other's reactions to the films. In doing so, we liked to create an environment to enable a whole class discussion and total student involvement. Students' contributions to class discussion are always meaningful for other students, helping them to connect film issues with real life situations. As Vivian Sobchack argues, "the viewer...shares cinematic space with the film but must also negotiate it, contribute to and perform the constitution of its experiential significance. Watching a film is both a direct and mediated experience of direct experience as mediation" (Sobchack, 1992, p. 10, quoted in Weaver & Britt, 2007, p. 22).

Through class discussion and engagement, students who contribute to the class discussion by giving their own lived experiences as examples bring the issues to the surface, and have them heard and dealt with. Thus, they interrogate the issues to accomplish new and complicated understandings. Also, film viewing and discussions challenge our capacity to bring our own embodiment to the ongoing constructive and reconstructive subjectivities and identities.

Through film viewing and the "complicated conversations" that follow, an

embodiment is in the making, in the becoming, for everyone. John Dewey (1934) envisions: "Experience is emotional but there are no separate things called emotions in it...emotions are attached to events and objets in their movement" (p. 42). That means we cannot detach emotions from who we are and what we will become.

Moving Bodies and Sensations

The film *Children in American Schools* (1996) addresses the financial issues that modern American schools face and the impact of lacking of resources on children who are learning in such schools. When schools or school districts do not have enough financial support and resources, the subject areas that suffer most are the arts, which have been downgraded by the administration at all levels. A phenomenon still pervasive to this day is the focus on standardized testing in subject areas such as math, science, and reading, considered more "important" for the growth of a child. The prominence of functional literacy through standardized testing has been overemphasized at the cost of critical and aesthetic literacy. When the arts are taken away from the curriculum, from pedagogy, and from students' lives, a learning experience is incomplete; the aesthetic experience and literacy that a student could imagine and explore to his or her great potential and engage in while learning, disappears. Most importantly, a student is desensitized, as one of the art teachers in the film expressed as a primary concern. If desensitization occurs throughout one's personal growth, then one will not feel another's pain and suffering, and violence and cruelty stops being a topic of concern.

This teacher's worry about desensitization has been addressed by Charlotte Selver,

following in the tradition of Elsa Gindler, whose work takes up the issue of sensory awareness. Selver pays special attention to the sensory awareness activated by the body's movement, and she interrupts the habitual sitting, walking, and standing by encouraging students to explore different ways to move and feel their muscles and bones, as well as their breathing. While students are moving, she asks questions that bridge the senses, the moving body, and the environment that the students are contacting. Such sensory awareness is directly felt through touching. Thus being touched, the materiality of the environment, serves to connect one to a larger world, a world everyone lives in, breathes in, and contacts. However, the most dramatic of Selver's pedagogies is her use of stories and articles to complicate the sensory awareness that her students experience. As Don Hanlon Johnson (2004) notes:

> She [Selver] will do experiments in which she might read an article from the newspaper on a massacre in Bosnia or AIDS in Africa, asking the students to pay careful attention to what happens to them as they listen. Or she will have them pay attention to the environment including faint sensations of air and sound pollution. (p. 109)

As a former refugee from Nazism, Selver knew both the concrete and embodied suffering that people went through. She believes that the human senses can become potential power for human activism. The senses are "How it is that they can discover that they really can see, and hear, and sense; and that this alone can be a very powerful agent in one's life" (Selver, interview with John Schick, p. 3, quoted in Johnson 2004, p. 110). Selver's work involves "complicated conversations" between movement, touching,

feeling, reading, texts, and sound; multiple texts respond to each other, affect each other, and together create a sense of immediacy - the closest touch to those who suffer. Such practice is the corporeal exchange that continually takes place in our everyday lives, and embodiment is never a private affair. It is always already mediated by our continual interaction with other human and nonhuman bodies (Weiss, 1999). An inter-corporative event is not only imagined, but immediately felt in different ways, urging for action.

One needs to be aware that such practices that Selver embodies is not just another "gymnastic skill" that exercises one's body capacities, serving the problematic practice of disciplining the body and taking the body and mind as separate domains to work with. The Sensory Awareness Foundation website records such a story of another Sensory Awareness teacher, Elfriede Hengstenberg. Hengstenberg, in which she shares her honest thoughts while observing the students she taught. She admitted that she noticed her students' positive change in their relationship to their bodies, but when she saw the same students outside of her classroom, there was no change. Later she realized that though her students were with their bodies in the classroom, they "lost" them when they were not under the teacher's supervision. Hengstenberg argues that the bodies' gestures and movements cannot be corrected from the outside, by a teacher, and instead must be activated by an inner attitude. Thus what Hengstenberg realized and what Selver has been practicing is the interplay of outside and inside. Lacking either, sensory awareness will not be truly achieved, and embodiment fails.

The story of sensory awareness relates to my earlier discussion of inside and outside, surface and depth, mind and body, and the interaction, intertwining relationship,

and the folds that are critical to our thinking and practicing of our curriculum and pedagogy. The practice of sensory awareness is inspirational for educators who teach those embodied minds or the "mindbody," a word that more and more scholars use in arguing for the wholeness of mind and body (Hansen, 2001; Hayles, 2003).

Virtual Bodies

Since its launch in 2003, the online 3D virtual world Second Life has drawn the attention of and registered millions of people. Of these, over 68, 000 are active users, as the Linden Lab CEO Mark Kingdon disclosed in a recent interview with Venture Beat (http://venturebeat.com/2008/09/18/qa-linden-lab-ceo-mark-kingdon-on-second-lifes-latest-evolution/). With the Second Life Grid and its promise of "increased productivity, effective collaboration, improved communication, enhanced engagement with your customers or audience, reduced business costs," this company has successfully enrolled various organizations, businesses, and communities into its powerful tool. One of these communities or organizations is the educational community, encompassing both higher education and k-12 schools. Educational communities and educators are exploring the educational potential and possibilities of virtual worlds. The effort to educate has become a more collaborative team effort, in which what they do depended upon the users, as the user-generated contents of Second Life describes. Second Life has brought together the communication of educators from all over the world to join the online discussion at any time, any place, and in a more personal way.

How is teaching used in Second Life? Peggy Sheehy, at Suffern Middle School in

New York, is one educator who is leading the way in virtual world education. Ramapo Islands is a project she and her school district are working on to bring educational practices and experiences to the virtual world. According to her, the online virtual world has been a very engaging tool for her students where they feel free to express themselves. The discussions that occur would not happen in a regular classroom, but they do happen in the virtual classroom, in a very engaging way. Another phenomenon with these students that she observed was that they become more creative and enthusiastic about the projects they do in Second Life. She emphasizes that the island is a secure place for her students to be, talk, and present themselves, because of certain security measures have been adopted. Like any online environment, inappropriate information and images sometimes also appear in Second Life. As a result, protection is necessary for a safe virtual experience for minors. Likewise, Second Life has its own regulations with age restrictions that are represented by the grid for adults, the main grid, and the grid for teens (anybody from 13-17). Applying security rules seems controversial for an online community which aims at enhancing communication, engagement, collaboration and openness. However, this is the responsibility that educators have to assume. The virtual world is still media, and any media will be subject to the ephemeral possibility that harm can be done at a speed beyond anticipation. Thus, Taylor and Saarinen's caution still reverberates. This means that someone must "be willing to accept responsibility for creating and sustaining structures and networks to support life (*Naivete*, p. 3).

What distinguishes Second Life from other online chatting is its use of a visualized body, the avatar in communication. The avatar can move, talk, or fly. It embodies the

person who is in front of the screen. The first time I entered Second Life felt very real. I was confused, and did not know where to go. I wore the clothes that I would not wear in reality, and none of the avatars that were available to choose from when I signed in interested me. When I began exploring how could I change my look, people talked about me. They said "she is here, but she does not talk. She can hear us." I felt embarrassed when I became aware that people were talking about me, although it was online, and it was virtual. The only thing I did, and the only thing I could do at that moment, was fly away. At least I knew how to fly, which I cannot do in real life. Second Life is not reality, but it is not a completely different world from real life, many times they merge together. Teachers still teach in Second Life. Who we are and what we want to become are connected with our real lives.

The virtual experiences enabled by Second Life that attract both adults and children are also entertaining, or at least such experiences are perceived as entertaining. When I was doing my research on Second Life, it was also at a time when we were switching internet providers. My husband glimpsed what I was doing and said: "If I knew you were playing I would not stay up to midnight just to keep the internet running." I understood that he needed to get up early and to go to work the next day. Being entertained and working, playing and researching, enjoying and learning are many times perceived as two separate experiences. Maybe we should do both. I believe students would like the idea.

The body images of the avatars have raised some concern for me. I am fully aware that avatars can be animal, plant, a chair, or any other form of object, and they are

modifiable any time there is a need, but here I only take the issue of avatars that are represented and visualized in human forms with human bodies. Almost all the avatars are very thin, tall, sexy (especially the female ones), young, and able-bodied. In spite of the fact that entering such a virtual world proves we still have a young heart, by no means should ages matter in the virtual world and beyond. If the "medium is the message" as McLuhan argued, what is the message that the avatar which represents us online sends to others, and what message do we want to send out if we choose a certain avatar? In a world where we still have thousands of women fight eating disorders, plan for plastic surgery, breast implants, etc., we must ask how the body images of avatars normalize and stereotype thin, tall, sexy, young and able-bodied women reinforcing the social norms and the "ideal" of identity representation. How do the body images of avatars limit who we can become? Paul Shilder maintains that "our own body images are constructed through constant communication with the body images of others." As Gail Weiss (1999) understands him, then, the construction of avatars in Second Life is a collective silent denouncement of short, fat, unsexy, old, and disabled bodies, although many of the players have such bodies.

The body images of avatars have also raised issues for Sheehy's middle school students. In an article, Sheehy reports that students watched a short video of the "evolution" of an ideal beauty designed by several beauty and hair stylists using Adobe PhotoShop. The video is available at (http://www.campaignforrealbeauty.com/flat4.asp?id=6909). The end message of this short video is "Every girls deserves to feel beautiful the way she is." Sheehy's students were asked to finish a group project. In

groups, they created an avatar they thought to be realistic and close to their real lives, and discussed how comfortable they were with those images in Second Life, as well as their perceptions of beauty that the media advances regarding different genders. In other words, they were asked to describe how the media's portrayal of beauty affected them personally. Sheehy herself is a Second Life education promoter, but at the same time she realizes the limitations of the avatars available in Second Life, and she managed to advance a self-acceptance message to her students despite the problematic constructions of avatars.

Second Life as a new medium that has been a powerful tool for education and instruction, and itself is a message that embodies and transform who we are and what we can do. Such a virtual world is not only a message, but itself also receives construction and reconstruction by user-generated contents. Reciprocity, as Jean Baudrillard points out, happens and cannot be avoided in the virtual environment. Except Second Life, there are also some newly launched virtual world products such as Vivaty, Google's Lively project, and Electric Sheep Co.'s WebFlock, and maybe a few more, the virtual world is getting heated and must renew itself continually. Empowered by new media, users are not only consumers, but more importantly, they are producers and creators. Second Life has to fashion and refashion its product carefully to delight users and provide better user experiences to keep its status in the competitive new virtual world. It is in the hands and minds of users to make or push the product to be more embracive, tolerant, diverse, and educational. A virtual world can easily become a creative beginning that constantly renews itself. In an interview with Erick Schonfeld of TechCrunch, Linden Lab founder

and Chairman Philip Rosedale envisioned a future product, which functions as a hyperlink when the user clicks on it. It would bring the user's body and identity on a journey to another world. This vision certainly highlights the key that the virtual world is about users and their embodiment in such a world. Thus, in the virtual world, the materiality of the body is seen and engaged with constantly, and is always embedded in our social, cultural and political understanding of self. "Virtuality is not about living in an immaterial realm of information, but about the cultural perception that material objects are interpenetrated with informational patterns" (Hayles, 1999b).

CHAPTER VI

CONCLUSION

Mind and body dualism needs to be constantly deconstructed and rethought in new ways. It is imperative to take body and mind as an inseparable whole. In knowing, the preconceived notions of body as obstacle, dispensable cover, and superficial entity are unsound and problematic, and such perspectives acknowledge the cognition as the only way that one can know about the world and about oneself. Body's profundity deserves and demands to be examined and remade anew through the course of learning, teaching, researching, and being.

Extraordinary architectures subvert the simplistic understandings of surface. Complicated by form, shape, material, color, light, space, and computer technology, the surface of well-fabricated architectures evoke human feelings and activates human movement. Such surfaces cease to be simple, placid, superficial, or fixed; instead, they become intensified surfaces of forces that engage with embodied experiences. Therefore, architectures become public pedagogies that address to and engage with various minds and bodies.

In information and network technology era, embodiment moves beyond the boundary between human and nonhumans. Embodiment is exemplified in the relationship with machines and other species through co-habitation, co-existence, and co-evolution.

When the medium is engaging and complicated through its modes of address, medium itself becomes the message, and the boundary between curriculum and pedagogy

is blurred; educators are demanded to answer the question of why we do what we do. The study of curriculum and pedagogy requests to be complexly explored in the rhizomic map of surface, body, mind, machines, animals and other "companion species."

REFERENCES

Alexander, B., Anderson, G., & Gallegos, B. (2005). Introduction: Performance in education. In B. Alexander, G. Anderson & B. Gallegos (Eds.), *Performance theories in education: Power, pedagogy, and the politics of identity* (pp. 1-11). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Aufderheide, P. & Clark, J. (2008). *The future of public media: Frequently asked questions.* Retrieved August 18, 2008, from http://www.centerforsocialmedia.org/resources/publications/public_media_faq/

Bakhtin, M. (1990) (1st ed.). *Art and answerability: Early philosophical essays by* M.M. Bakhtin. Edited by Michael Holquist and Vadim Liapunov ; translated and notes by Vadim Liapunov; supplement translated by Kenneth Brostrom. Austin: University of Texas Press.

Baroque. Lorenzo Bernini, Baroque architect. (n.d.). Retrieved August 8, 2008, from http://www.baroquelife.org/baroque-art/baroque-rococo-art.php?link=5

Barthes, R. (1977). *Image, music, text:* Essays selected and translated by Stephen Heath. New York: Hill and Wang.

Barthes, R. (1981). *Camera lucida: Reflections on photography.* Translated by Richard Howard. New York: Hill and Wang.

Baudrillard, J. (1994). *Simulacra and simulation*. Ann Arbor: The University of Michigan Press.

Benbabib, S. (1999). Sexual difference and collective identities: The new constellation. In M. O'Farrell & L. Vallone, (Eds.), *Virtual gender: Fantasies of subjectivity and embodiment* (pp. 217- 242). Ann Arbor: The University of Michigan Press.

Bergé, C. (1979). Energy visions. In *More than meat joy: Complete performance works & selected writings* (pp. 272-274). Edited by Bruce McPherson. 1st edition. New Paltz, NY: Documentext.

Berger, M. (1994). Forms of violence: Neo-Dada performance. In S. Hapgood, *Neo-Dada: redefining art, 1958-1962* (pp. 67-83). New York: The American

Federation of Arts in association with Universe Publishing.

Bergson, H. (1913). *Matter and memory*. Authorized translation by Nancy Margaret Paul and W. Scott Palmer. New York: Zone Books.

Boler, M. (1999). *Feeling power: Emotions and education*. New York; Routledge.

Bordo, S. (1987). *The flight to objectivity*. Albany, NY: SUNY Press.

Bordo, S. (1995). Reading the slender body. In N. Tuana & R. Tong (Eds.), *Feminism and philosophy: Essential readings in theory, reinterpretation, and application* (pp.467-489). Boulder, CO: Westview Press.

Braidotti, R. (2002). *Metamorphoses: Towards a materialist theory of becoming*. Malden, MA: Polity.

Brown, G. (1991). Anorexia, humanism, and feminism. *The Yale Journal of Criticism*. *5*(1). 189-215

Brucker-Cohen, J. (2008). *Report from Ars Electronica 2008: A new cultural economy*. Retrieved September 11, 2008, from http://rhizome.org/editorial/20#more

Butler, J. (1990a). *Gender trouble: Feminism and the subversion of identity*. New York: Routledge.

Butler, J. (1990b). Performative acts and gender constitution: An assay in phenomenology and feminist theory. In S. Case (Ed.), *Performing feminisms: Feminist critical theory and theatre*. Baltimore, MD: The Johns Hopkins University Press.

Butler, J. (1993). *Bodies that matter: On the discursive limits of "sex."* New York: Routledge.

Butler, J. (2004). *Undoing gender*. New York: Routledge.

Capra, F. (1996). *The web of life: A new scientific understanding of living systems*. New York: Anchor books.

Carolee Schneemann (Website). Retrieved from September 5, 2008 from http://www.caroleeschneemann.com/bio.html

Chow, R. (1995). *Primitive passions: Visuality, sexuality, ethnography, and contemporary Chinese cinema*. New York: Columbia University Press.

Coover, R. (1992). The end of books. In N. Wardrip-Fruin & N. Montfort. (Eds.). (2003). *The new media reader* (pp. 706-709). Cambridge, MA: The MIT Press.

《道德经》[*Dao De Jing*] (2001). Hefei: Anhui People's Press.

CRTC. [Canadian Radio-television and Telecommunications Commission]. *New Media - Call for Comments.* Retrieved September 12, 2008, from http://www.crtc.gc.ca/archive/ENG/Notices/1998/PB98-82.HTM).

Dassault Systemes' Customer Stories: Addressing the needs of the AEC industry with digital project. (n.d.). Retrieved July 20, 2008, from http://www.3ds.com/fileadmin/3ds.com/fyour_strategy/customer_stories/flyersCM7_Europe_p10-11_Gehry_Technologies_CATIA_EN_FINAL.pdf

Deleuze, G. (1988). *Foucault.* Minneapolis, MN: University of Minnesota Press.

Deleuze, G. (1993). *The fold: Leibniz and the baroque.* Minneapolis, MN: University of Minnesota Press.

Deleuze, G. & Guattari, F. (1987). *A Thousand plateaus: Capitalism and schizophrenia.* Minneapolis, MN: University of Minnesota Press.

Derrida, J. (1973). *Speech and phenomena: And other essays on Husserl's theory of signs*. Translated, with an introduction, by David B. Allison. Evanston, IL: Northwestern University Press.

Derrida, J. (1988). An interview with Derrida (with Catherine David of le nouvel observateur). Translated by David Allison et al. In D. Allison & R. Bernasconi (Eds.), *Derrida and différance* (pp. 71-82). Evanston, IL: Northwestern University Press.

Dewey, J. (1916/1944). *Democracy and education: An introduction to the philosophy of education*. New York: The Free Press.

Dewey, J. (1934). *Art as experience.* New York: Minton, Balch & Company.

Doll, W. (1993). *A post-modern perspective on curriculum.* New York: Teachers College Press.

Drucker, J. (2006). *Visual Studies*. Presentation at Texas A&M University. March, 2006.

Dupont, H. (1994). *Emotional development, theory and applications: A neo-Piagetian*

perspective. Westport, CT: Praeger.

Eason, R. (2003). Hypertext: Rortean links between Ihde and Haraway. In D. Ihde & E. Selinger, (Eds.), *Chasing technoscience: Matrix for materiality* (pp 167-181). Bloomington: Indiana University Press.

Ellsworth, E. (1989). *Teaching positions: Difference, pedagogy, and the power of address*. New York: Teachers College Press.

Ellsworth, E. (2005). *Places of learning: Media, architecture, pedagogy*. New York: RoutledgeFalmer

Enzensberger, H. (1970). Constituents of a theory of the media. In N. Wardrip-Fruin & N. Montfort (Eds.). (2003), *The new media reader* (pp. 261-275). Cambridge, MA: The MIT Press.

Feenberg, A. (1999). *Questioning technology*. New York: Routledge.

Foster, H. (2002). *Design and crime: And other diatribes.* London: Verso.

Foucault, M. (1975). What is an author? *Partisan Review*. *42* (4), 603-614.

Frank Gehry. (n.d.). Retrieved July 20, 2008 from (http://en.wikipedia.org/wiki/Frank_Gehry)

Franklin, K. & Rodriguez'G, K. (2008, July 29). The next big thing in humanities, arts and social science computing: Cultural analysis. *HPC Wire*. Retrieved August 10, 2008, from http://www.hpcwire.com/features

Fung, Y. L. (1948). *A short history of Chinese philosophy*. Albany, NY: The Free Press.

Gardner, H. (1993). *Multiple intelligences: The theory in practice.* 10th anniversary edition, with a new introduction by the author. New York: Basic Books.

Garoian, C. (1999). *Performing pedagogy: Towards an art of politics.* New York: State University of New York Press

Gehry Technology News. (n.d.). Retrieved July 20, 2008, from http://www.youtube.om/watch?v=8LHkou_mr28

Gómez-Peña, G. (2005*). Ethno-techno: Writings on performance, activism, and pedagogy*. Edited by Elaine Peña. New York: Routledge.

Greene, M. (2001). *Variations on a blue guitar: The Lincoln Center Institute lectures on*

aesthetic education. New York: Teachers College Press

Grosz, E. (1994). *Volatile bodies: Toward a corporeal feminism.* Bloomington: Indiana University Press.

Grosz, E. (1995). *Space, time, and perversion: Essays on the politics of bodies.* New York: Routledge.

Guggenheim Museum Bilbao Press Release. *Richard Serra Commissioned to Create Permanent, Site-Specific Installation for Guggenheim Museum Bilbao.* Retrieved October 6, 2008, from http://www.guggenheim.org/press_releases/release_86.html

Hamilton, A. (2008, June 2). The Wizard of Wii. *Time*, 171 (22). With reporting by Yuki Oda. 42.

Hansen, M. (2001). *From image to affect: Making sense of new media art,* presentation at UCLA, May 2001.

Hapgood. S. (1994). *Neo-Dada: redefining art, 1958-1962*. New York: The American Federation of Arts in association with Universe Publishing.

Haraway, D. (1991). A cyborg manifesto: Science, technology, and socialist-feminism in the late twentieth century. *Simians, cyborgs, women: The reinvention of nature* (pp 149-181). New York: Routledge

Haraway, D. (2003a). Cyborgs to companion species: Reconfiguring kinship in technoscience. In D. Ihde & E. Selinger, (Eds.), *Chasing technoscience: Matrix for materiality* (pp 58-82). Bloomington: Indiana University Press.

Haraway, D. (2003b). *The companion species manifesto: Dogs, people, and significant otherness*. Chicago: Prickly Paradigm Press.

Haraway, D. (2004). *The Haraway reader.* New York: Routledge.

Hayles, K. (1999a). *How we became posthuman: Virtual bodies in cybernetics, literature, and informatics.* Chicago: The University of Chicago Press.

Hayles, K. (1999b). The condition of virtuality. In P. Lunenfeld (Ed.), *The digital dialectic: New essays on new media* (pp. 69-94). Cambridge: MA: The MIT Press.

Hayles, K. (2003). Flesh and metal: Reconfiguring the mindbody in virtual environments.

Configurations, *10* (2), 297-320.

Hengstendberg, E. (1985). *Working with children*. From CSF Bulletin No. 12. Retrieved September 12, 2008 from http://www.sensoryawareness.org/pagesnews/98/spring98/workingwithchildren.htm

hooks, B. (1992). Selling hot pussy: Representations of black female sexuality in the cultural marketplace. In K. Conboy, N. Medina & S. Stanbury (Eds.). (1997), *Writing on the body* (pp.113-128). New York: Columbia University Press

Huppatz, D. J. (2008). *A portrait of the architect as artist: Frank Gehry in New York*. Retrieved July 20, 2008, from http://djhuppatz.blogspot.com/2008/03/portrait-of-architect-as-artist-frank.html

Irigaray, L. (1985). *The sex which is not one*. Translated by C. Porter and C. Burke. New York: Cornell University Press.

Jaggar, A. (1992). Love and knowledge: Emotion in feminist epistemology. In M. Garry and M. Pearsall (Eds.), *Women, knowledge, and reality: Explorations in feminist philosophy* (pp.129-155). New York: Routledge.

James, W. (1977). *The writings of William James*. Edited, with an introduction and new preface by John McDermott. Chicago: The University of Chicago Press.

Johnson, D. (2004). Body practices and human inquiry: Disciplined experiencing fresh thinking, vigorous language. In V. Berdayes, E. Luigi & J. Murphy (Eds.), *The body in human inquiry: Interdisciplinary explorations of embodiment* (pp.105-122). Cresskill, NJ: Hampton Press, Inc.

Kaye, N. (2000). *Site-specific art: Performance, place and documentation*. New York: Routledge.

Kronick, J. (1999). *Derrida and the future of literature*. Albany, NY: State University of New York Press.

Kujawski, J. (2007). *Learning isn't second notch in Second Life*. Retrieved September 5, 2008, from http://tlac.tamu.edu/articleslearning_isn_t_second_notch_in_second_life

Lacan, J. (1998). *The seminar of Jacques Lacan, Book XX: Encore, on feminine*

sexuality, the limits of love and knowledge 1972-1973. Edited by J.-A, Miller; translated by B. Fink, New York: Norton.

Lorde, A. (1984). Extracts from *Sister outsider* (Lorde, Audre, 1984). *Uses of the erotic: the erotic as power*. In K. Conboy, N. Medina & S. Stanbury (Eds.). (1997). *Writing on the body* (pp. 277-282). New York: Columbia University Press

Lowenthal, M. (2007). Translator's instruction. In Francis Picabia's *I am a beautiful monster: Poetry, prose, and provocation*. Cambridge, MA: The MIT Press.

Lunenfeld, P. (1999). Introduction. In P. Lunenfeld (Ed.), *The digital dialectic: New essays on new media* (pp. xiv-xxi). Cambridge: MA: The MIT Press.

Martin. B. & Reigeluth, C. (1999). Affective education and the affective domain: Implications for instructional-design theories and models. In C. Reigeluth (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory*, volume II. Mahwah, NJ: Lawrence Erlbaum Associates. Inc.

Mackinnon, C. (1989). Sexuality, pornography, and method: "Pleasure under patriarchy." In N. Tuana & R.Tong (Eds.), *Feminism and philosophy: Essential readings in theory, reinterpretation, and application* (pp. 134-161). Boulder, CO: Westview Press.

Manovich, L. (2003). New media from borges to html. In N. Wardrip-Fruin & N. Montfort (Eds.), *The new media reader* (pp. 13-25). Cambridge, MA: The MIT Press.

Massumi (2002): *Parables for the virtual: Movement, affect, sensation.* Durham, NC: Duke University Press.

McLuhan, M. (1964). The medium is the message. In N. Wardrip-Fruin & N. Montfort. (Eds.). (2003), *The new media reader* (pp. 193-209). Cambridge, MA: The MIT Press.

Merleau-Ponty, M (1962). *Phenomenology of perception.* Translated from the French by Colin Smith. New York: Humanities Press.

Merleau-Ponty, M. (1968). *The Visible and the invisible.* Translated by Alphonso Lingis. Evanston, IL: Northwestern University Press.

Mickunas, A. (2004). The primacy of expression. In V. Berdayes, L. Esposito & J. Murphy (Eds.), *The body in human inquiry: Interdisciplinary explorations of embodiment* (pp. 33-50). Cresskill, NJ: Hampton Press, Inc.

Miller, Janet (2005). *Sounds of silence breaking: Women, autobiography, and curriculum.* New York: Peter Lang.

Mirzoeff, Nicholas (1999). *An introduction to visual culture*. New York: Routedge.

Pinar, W. (Ed.). (2003a). *International handbook of curriculum research*. Mahwah, NJ: Lawrence Erlbaum Associates.

Pinar, W. (2004). *What is Curriculum Theory*? Mahwah, NJ: Lawrence Erlbaum Associates.

Quittner, J. (2008, June 16). Who will rule the new internet? *Time*, *171* (24). 46-50.

Reynolds, J. (2004). *Merleau-Ponty and Derrida: Intertwining embodiment and alterity.* Athens: Ohio University Press.

Rubin, G. (1975). The Traffic in women: Notes on the "political economy" of sex. In R. Reiter, (Ed.), *Toward an anthropology of women*. New York: Monthly Review Press.

Schneemann, C. (1979). *More than meat joy: Complete performance works & selected writings,* 1st edition. Edited by Bruce McPherson. New Paltz, NY: Documentext.

Schonfeld, E. (2008). *Philip Rosedale Doesn't See Browser-Based Virtual Worlds as a Threat to Second Life. Is He in Denial?* Retrieved September 14, 2008, from http://www.techcrunch.com/2008/07/31/philip-rosedale- doesnt-see-browser-based-virtual-worlds-as-a-threat-to-second-life-is-he-in-denial/

Sheehy, P. (2008) "*Exploring Body Image in Second Life*" Retrieved September 14, 2008, from http://www.rezed.org/forum/topic/show?id=2047896%3ATopic%3A7172

Slattery, P. (2001). The educational researcher as artist working within. *Qualitative Inquiry*, *7*(3), 370-398.

Slattery, P. (2006). *Curriculum development in the postmodern era*,(2nd ed.). New York: Routledge.

Snowber, C. (1999). The Eros of listening: Dancing into presence. *Journal of*

Curriculum Theorizing. (Fall 1999), 17-25.

Spelman, E.(1988). *Inessential woman: Problems of exclusion in feminist thought.* Boston: Beacon Books.

Springgay, S. (2004). *Inside the visible: Youth understanding of body knowledge through touch*. Doctoral dissertation retrieved April 18, 2008, from http://m1.cust.educ.ubc.ca:16080/Artography/phd.php

Springgay, S., & Freedman, D. (2007). Introduction: On touching and a bodied curriculum. In S. Springgay & D. Freedman (Eds.) *Curriculum and the cultural body* (xvii-xxvii). New York: Peter Lang.

Stelarc. *The shedding of skin.* Retrieved Sep. 10, 2008 from http://www.stelarc.va.com.au/shedskin/shedskin.html

Takahashi, D. (2008). *Q&A: Linden Lab CEO Mark Kingdon on Second Life's latest evolution.* Retrieved September 20, 2008, from http://venturebeat.com/2008/09/18/qa-linden-lab-ceo-mark-kingdon-on-second-lifes-latest-evolution/

Taylor, M. (1987). *Altarity*. Chicago: The University of Chicago Press.

Taylor, M. & Saarinen, E. (1994). *Imagologies: Media philosophy.* New York: Routledge.

Taylor, M. (1995). Rhizomic folds of interstanding. *Tekhnema 2 / "Technics and Finitude*. Spring, 1995. Retrieved March 12, 2008, from http://tekhnema.free.fr/2Taylor.htm

Taylor, M. (1997). *Hiding*. Chicago: University of Chicago Press.

Taylor, M. (2001). *The Moment of complexity*. Chicago: University of Chicago Press.

Trinh, T. Minh-ha (1999). *Cinema interval*. New York: Routledge.

Trinh, T. Minh-ha (2005). *The digital film event*. New York: Routledge.

Weaver, J. & Britt, T. (2007). Experiencing life through the body of film: The convergence of phenomenology and cultural curriculum studies. In S. Springgay & D. Freedman (Eds.) *Curriculum and the cultural body* (pp. 21-38). New York: Peter Lang.

Weiss, G. (1999). *Body images: Embodiment as intercorporeality*. New York: Routledge.

[Will not move to anywhere: The Beijing most impressive “dingzihu” refuses to follow the court order.] Retrieved July 16, 2008, from http://news.wenxuecity.com/messages/200807/news-gb2312-653087.html.

哪都不去!北京最牛″钉子户″拒绝执行法庭搬迁令(图)(n. d.).

Winfrey, O. (2008, June). What I know for sure: You are not your body, and for sure you’re not your body image. *The Oprah Magazine*, *9* (6). 244.

The Wizard of Forms. (n.d). Retrieved July 20, 2008, from http://www.youtube.com/watch?v=8LHkou_mr28Zhang, Zhiling. & Ying, Peng. (2008).

张艺谋给开幕式打100分 山水画卷想义卖(图) [Zhang Yimou scored the Opening Ceremony 100 and would sell the scroll painting for charity.] Retrieved Aug 20, 2008, from http://2008.hexun.com/2008-08-10/108019035_1.html

Image, Sound, and Video Credits
(Listed in the order in which these items appear)

The Frederick R. Weisman Art Museum. Retrieved July 15, 2008, from http://www.weisman.umn.edu/architecture/arch.html

Guggenheim Museum Bilbao. Retrieved July 15, 2008, from http://www.guggenheim-bilbao.es/secciones/el_museo/el_edificio.php?idioma=en

Condé Nast Cafeteria. http://www.guggenheim.org/exhibitions/past_exhibitions/gehry/

“The Matter of Time” by Richard Serra. Retrieved July 15, 2008, from http://mocoloco.com/art/archives/001166.php

The Frederick R. Weisman Art Museum. Photo by Nattapol Pornsalnuwat.

The Frederick R. Weisman Art Museum. Photo by Nattapol Pornsalnuwat.

Meat Joy. Video by Schneemann and associates. Retrieved August 25, 2008 from http://www.youtube.com/watch?v=ZDpCGKqTOJo

Installation and Video Performance of Sigalit Landau. Photo by Mei Wu Hoyt

Scroll Painting. The Beijing Olympic 2008 Opening Ceremony. Recorded from British Broadcasting Corporation (BBC).

Solidify. Music by Sheryl Crow.

Morning Exercies,Tai Chi Sword. Photo by Mei Wu Hoyt

Nap Time. Photo by Mei Wu Hoyt

Wikipedia. Retrieved September 15, 2008, from http://www.fareastgizmos.com/entry_images/1206/26/Wikipedia.jpg

Hutong. Retrieved October 3, 2008, from http://www.travelchinatour.com/beijing-china/beijing-hutong-tour.html

Hutong. Retrieved September 15, 2008, from http://www.chinadiscover.net/china-tour/beijingguide/beijing-hutong.htm

Yu and Her Art. Retrieved June 25, 2008, from http://news.wenxuecity.com/messages/200807/news-gb2312-653087.html

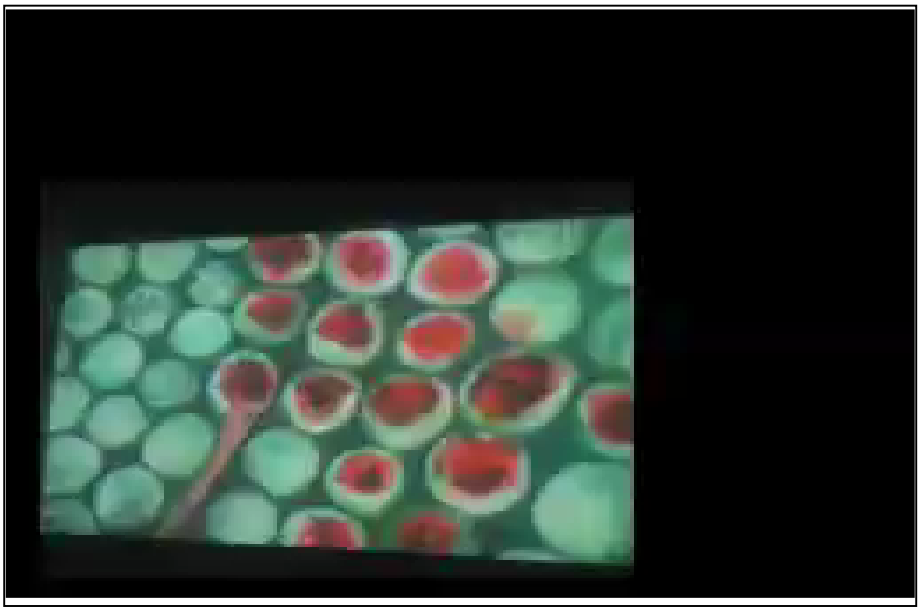
A Street in Dalian, China. Photo by Mei Wu Hoyt

APPENDIX

Videos

1.

2.



3.

Sound

1.

"Solidify"
Click to listen

VITA

Name: Mei Wu Hoyt

Address: 3919 Cypress Hill Drive
Spring, TX 77388

Email Address: may_wudl@yahoo.com

Education: B.A., English Education, Qiqihar University, China, 1994
M.A., Louisiana State University, 2003
Ph.D., Texas A&M University, 2008