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Ubiquitous Libidinal Infrastructures Of Urbanism: The Fringing Benefits Of Rhetorics In Architecture

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UBIQUITOUS LIBIDINAL INFRASTRUCTURES OF URBANISM: THE
FRINGING BENEFITS OFRHETORICS IN ARCHITECTURE

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ABSTRACT

Big-box culture—generally thought of as sprawl—is often suppressed or

ignored within architectural design curricula. The overwhelming pervasiveness of

big-box culture threatens the foundation of our discipline. We turn away, though it

generates the context for many lives to happily unfold in this country. We remain

only partially engaged with big-box because we do not fully understand its

complexity. We argue with it, but at cross-purposes. This trans-disciplinary project

brings rhetorical scholarship to bear on big-box culture. Emphasizing pedagogy, it

offers architects and urbanists opportunities to design with more awareness about

the ubiquitous, what drives it, and why its there.

The project advances the concept *ubiquitous libidinal infrastructures*, defined

as the externalized (physical and/ or digital) manifestations of human desire-driven

energy flows. Myrtle Beach, South Carolina and Orlando, Florida are used as primary

subjects of investigation through which theories of Jean-François Lyotard and

Gregory Ulmer are introduced into the field of urbanism. In turn, this material and

spatial re-reading of Lyotard and Ulmer offers the field of rhetoric important and

timely access into the fields of urbanism and architecture, pushing both disciplines

toward more actionable research on urbanism in light of today's digital and

networked society.

The project also includes an account of a research venture involving two

designers who intervened within the animal rendering industry. The author's close

encounter with rendering serves as another subject matter by which the concept of

ubiquitous libidinal infrastructures gets developed. This chapter reveals a side of America's libidinal infrastructure that we are blissfully unaware of. Conversely, it importantly exposes the rendering industry as a vital infrastructure supporting the standards of living within American urbanism

This project argues that deeper investigations into big-box culture require disciplinary invention and expansion. It demonstrates that rhetoric can help designers and planners include a fuller spectrum of urbanism within their analysis. This design research project doesn't try to solve the problem of big-box. It seeks to tease out, by way of trans-disciplinary invention, what we do not yet fully understand about it in order to bear witness to new architectural idioms.

DEDICATION

I dedicate this work to those who have an interest in pursuing trans-disciplinary academic work. Do not compromise your visionary ideas in the pursuit of fitting into a discipline. I am encouraged by how much support I have had in completing this project, and believe disciplines will adjust in order to embrace thoughtful and well-intentioned trans-disciplinary research.

ACKNOWLEDGMENTS

TABLE OF CONTENTS

Table of Contents (Continued)

LIST OF FIGURES

List of Figures (Continued)

List of Figures (Continued)

CHAPTER ONE

UBIQUITOUS LIBIDINAL INFRASTRUCTURES OF URBANISM

Contextualization

"Is the *dance* true? One will always be able to say so. But that's not where its force [*puissance*] lies."[1]

"The demand for clarity must be strongly denounced; it requires the power of he who loves, or who speaks, over his intensities."[2]

In this chapter I will expand upon the terms, libidinal, urbanism, and ubiquitous. Alone, each term requires qualification and/or definition before becoming useful together as "Ubiquitous Libidinal Infrastructures of Urbanism," understood through the development of this dissertation as a significantly undervalued facet of inquiry within urban and architectural pedagogy.

Some have and will continue to question my place in the RCID program, having already developed a disciplinary space for myself in architecture. Thus, before I can begin to expand upon the above terms, I feel that I must first address such questions of "why?" and "to what end?" regarding the relationship between the disciplines of rhetoric and architecture. In building the definitions that will follow, a significant amount of un-building has had and must continue to occur in order to validate this trans-disciplinary project, and in turn, my beloved trans-disciplinary program, RCID[3].

Missing out on Disciplinary Opportunities

The 1978 publication of Rem Koolhaas' *Delirious New York: A Retroactive Manifesto for Manhattan* (*DNY*) could have been seized as a "spin-off" moment for the discipline of architecture. Had its methodologies been embraced, architecture might have realized the need for and significance of expanding its disciplinary borders. However, solidifying these borders more carefully, his pursuits in cultural analysis have made little impact on the field, relatively speaking.

Koolhaas is known primarily for the innovations he and his design practice Office for Metropolitan Architecture (OMA-AMO) have made materially—their buildings. Despite the presence of "cultural analysis" as a primary focus in their work, operating as a distinct entity alongside their architecture and urban design practices, the formal (technological and material) aspects of their buildings are most widely followed and acknowledged. The inventive cultural commentary, analysis, and scholarship produced during the design process—that which in large part results in their building forms—are often not critically discussed. This is the case particularly at the beginning design level where emphasis is placed primarily on the building of technical skill sets necessary for the beginning design student who faces a very steep learning curve. Unable to participate fully in the field until they learn how to communicate within it, it is easy to understand why precedent analysis would need to focus on the technical and formal aspects of the design processes seen from designers such as Koolhaas.

Koolhaas' *DNY* set the tone for his later work. In this "retroactive manifesto" he constructs a counter or altered history for the classic American city of Manhattan. He calls into question commonly held assumptions surrounding the rationally driven technological advances resulting in the city of Manhattan. Koolhaas suggests that the relentlessly efficient grid, bearing no regard to topographic realities and the cogent, unadorned skyscrapers actually acted to provide layer upon layer of "virgin" territory to play out human fantasies. In Koolhaas' version of history, a combination of each inhabitant's externalized, desire-directed, energy flow is responsible for the city's form. Inhabitants of this city, as a result of the emphatic repetition both horizontally and vertically, are able to move from one reality or realm to the next freely. Enabling and exaggerating new and strange combinations of programmatic mixtures, found first within this American context of high capitalism, becomes a repeating theme throughout Koolhaass' career. As opposed to other architectural theorists and historians of this time such as Robert Venturi and Manfredo Tafuri, Dutch born Koolhaass finds the hyper-reality of Manhattan even better than reality. That is, he finds inspiration for his architecture within this context of exaggerated focus on fantasies and desires.

Architectural educator, Frances Hsu, in her dissertation exploring the ends of modernism, structuralism, and surrealism in the work of Koolhaas, has remarked that his background in screenplay writing, and his experience both in journalistic writing (Dutch Weekly magazine) and archival research on Ivan Leonidov, contribute significantly to his ability to legitimize *DNY* as a new reality. Employing

poetic language, he unravels commonly held conceptions surrounding the impetus

behind the design (invention) and realization of Manhattan. He positions this view

of Manhattan as a model of reality in which endless networks of objects, both

physical concepts and verbal devices, operate in relationship with one another. In

this regard, *DNY* is an example of what theorist Gregory Ulmer would later come to

refer to as an "electrate" invention. Koolhaass examines hyperreality critically. From

this early work, and all the way to his more recent work, particularly the

publications *Contents*, and *Harvard Design School Guide to Shopping*, and *Mutations*,

he has been interested in the result of evolving digital processes and networks.

Electracy, a concept coined by Ulmer, can be thought of as a version of literacy that

is based upon image play and digital processes. For Ulmer, inventing new pedagogy

for an "electrate" epoch is a means to cope with the cultural complexities that we

witness as entertainment and digital processes increasingly come into cultural

prominence. Employing Ulmerian logics of conduction, rather than deduction or

induction, Koolhaass' *DNY* pushes on the boundaries of rhetorical theory as much as

it pushes on the boundaries of architectural theory. The question is, has this

variance, this relatively unique quality found as a priority throughout his career, the

cause of how successful his architectural projects have been? It is an important

question worth consideration and focus.

 DNY is rhetorical at its core though its artful rhetorical invention is not

understood as such. I would like to argue that inwardly focused disciplinary

preoccupations, within both the fields of rhetoric and architecture, are currently

limiting each field. Elizabeth Grosz' book *Architecture from the Outside: Essays on Virtual and Real Space*, and particularly her chapter, "The Future of Space, Toward an Architecture of Invention," along with MIT's "Writing Architecture" series, provides an opportune conversation within which I can insert this project. My answer to her call is that rhetorical invention and architectural invention must come together in a trans-disciplinary effort on the topic of invention/design. This trans-disciplinary expansion and unraveling of invention becomes exponentially more necessary as digital processes increasingly impact contemporary culture. Koolhaas and Ulmer were both hip to this evolution of language and culture 30+ years ago. I caution that we must now catch up to them. We must find ways to become capable of understanding an object's virtuality as it corresponds to its physicality simultaneously.

Marked by this early piece of writing, Koolhaas has continued to focus on the concept of cultural production by way of expanding "where" invention is traditionally thought to arise. That is, in order to invent for the culture he has spent some time analyzing, he recognizes that he must first (re)create a history or cultural ground for his inventions/designs. He constructs cultural context alongside the cultural constructs he designs. As a result of this process, it might be argued that his constructs aid in framing altered or new ways of seeing and thinking about culture.

Exploiting Opportunities

Stan Allen, American Architect, architectural theorist, and dean of the School of Architecture at Princeton University provides the focus for a very different tale.

5

The 1999 publication of his text *Points + Lines,* opposed to Koolhaas' *DNY*, does make a significant disciplinary impact. *Points + Lines* is not solely responsible for the relatively recent architectural outgrowth of Landscape Urbanism, however the book serves as an influential marker for this discussion. Offering revisionary strategies for "the contemporary city," Allen's primary objective in this text is the establishment of a new ground, a new disciplinary stasis point, from which the direction of the field can go.

I'm drawn specifically to Allen's language within the essay "Infrastructural Urbanism," in *Points + Lines*. Here, Allen stresses that architecture has the capacity, beyond that of art, film, and media studies, to "actually transform reality" as opposed to simply reading and critiquing it. Try to find me an impressionable architecture student who wouldn't love to hear that! With a sentiment that captures a definitive break from the many facets of "postmodern" architecture, Allen blames the country's decreased funding of urban infrastructure over the last few decades on architecture's decreased interest in urban infrastructure and increased interest in "signs" and "meaning" during the 70's and 80's. Thus, Allen sets himself up to easily encourage the need for a new set of tools. Building on both new and existing frameworks, he pushes to realign the discipline with its traditional/historic emphasis on large-scale infrastructure and functionality. His formulaic seven propositions at the end of his essay offer an accessible and clear path for the discipline to follow, and they do!

Allen continues with this impenetrable writing style in "Filed Conditions," in *Points + Lines*, also in a later version of "Object to Field," found first in *Architecture after Geometry*, as well as in "Matt Urbanism: The Thick 2D" in *CASE: Le Corbusier's Venice Hospital*. Architectural Historian and theorist Manfredo Tafuri would agree that Allen's positioning within these texts is as much a process of recreating history, as it is a creation of his own provocations for the future.

The point of this tale is really not to call into question the viability of Landscape Urbanism.[4] I don't wish to call into question any of the Urbanisms (New, Matt, Splintering, Ecological, Distributed, Networked et.) for that matter. Rather, I am interested in understanding more about the wild success of this disciplinary effort. Secondly, I am hopeful that the concept of infrastructure, those ubiquitous aspects of everyday environments, now acts as a foundational layer in urban-centric design. I will attempt to draw together Allen's notion of "Infrastructural Urbanism" and Koolhaas' use of Salvador Dalí's paranoid critical method in order to make sense of New York. Such a merger, I believe, just might provide a method for developing my pedagogical strategies to explore the ubiquitous libidinal infrastructures of urbanism as a new topic (*topoi*) of invention.

Casting Off toward Opportunities

The difference that I am interested in teasing out, between the approaches of Koolhaas in *DNY* and Allen in *Points + Lines,* can be found in the rhetorical agency of each text. Koolhaas stretches traditional and well-grounded language patterns to the degree that he risks undercutting the persuasiveness within his writing. Again, not

many jump on board with him in 1978 when the book is first published. Allen, on the other hand, trades into a writing practice—a rhetorical approach—that is supremely effective in generating change, though I caution he is not upfront about the costs of that change. Innovation and disciplinary change in architecture, more often than not, arise from thinkers like Allen who trade into cut and dry persuasive rhetoric, biased primarily on cultural, technological, or economic problem solving. In Koolhaass' project, most importantly for my project, there isn't a problem being solved. The objective, pedagogically speaking if we were to look at teaching his method, is to understand something in a new way, to learn something MORE about an existing condition, and to challenge predominant perceptions about the interworking of a society.

Why is the rhetorical project within Koolhaas' *DNY* too slippery a surface for the vast majority of architects who are uncomfortable, to borrow a metaphor from Cynthia Haynes, designing "offshore"? Haynes has articulated the complexity of the rhetorical difference I am trying to bring into focus through the use of Allen and Koolhaas. In an award winning article titled "Writing Offshore: The Disappearing Coastline of Composition Theory," published in *JAC*, she draws on rare architectural works that, in addition to employing sophisticated formal and material design intelligence, also operate rhetorically to "un-build" rigid language structures that might prevent design solutions from stepping outside of the status quo. For example, highlighting Lebbeus Woods' conceptual project "Borderlinea," designed for the town and harbor of Kraljevica, Croatia, Haynes points to a war like aspect in

Woods' project. He battles against the region's governmental rhetoric, which calls for architectural solutions that will aid in stimulating a failing tourism industry. Recognizing the tenuous nature of Kraljevica's ecology and economy, Woods concludes that such attempts, despite the persuasive rhetoric campaign claiming otherwise, will never actually work. Instead of trying Woods provides provocations that embody alterity. That is, Wood's proposals add a poetic layer that is uniquely capable of opening up and exploring the paradoxes buried deep within such stasis issues as pollution, sustainability, and urban decay.

Haynes points to a handful of rhetoric scholars, operating at the fringes of their own discipline, who are significant for this project. I would like to introduce these scholars to practitioners and educators of urbanism and architecture. Perhaps farthest from disciplinary center, Victor Vitanza's work in "Three Countertheses: A Critical In(ter)vention into Composition Theories and Pedagogies," provides a perfectly suited context of "praxis/pedagogy" for Koolhaas' *DNY,* a work that calls into question foundations as well as knowing subjects. Haynes also points to another fringing thinker, Gregory Ulmer. His *Heuretics*, and more recent *Electronic Monuments,* have both been particularly important touchstones for the goals of my project. Positing heuretics, as a logic of invention, Ulmer provides a way out of what he refers to as sterilizing hermeneutic chains. Heuretics works with theoretical, productive, and practical facets of knowledge toward an endgame of inventing *new* language tools for societies increasingly influenced by digital processes. Heuretics contrasts hermeneutics, which draws upon theory in order to interpret texts.

Reading urban conditions hermeneutically alone, I argue, prevents architecture from thinking outside of its already established principles and practices of urbanism. Principles, it should be noted, that predate the influence of digital processes such as market research data (the incessant tracking of our buying and spending habits) on urban growth.[5] Because programs like RCID exist, I am able to stand on the shoulders of Vitanza and Ulmer's scholarship, in attempts to do for architectural pedagogy a little of what they have done for composition and rhetoric pedagogy—find and/or invent new disciplinary avenues.

Haynes also points to Geoffrey Circ's publication of *English Composition as a happening*, specifying the previously published chapter, "Writing Classroom as A&P Parking Lot." In her article, a pattern and precedent of drawing upon avant-garde art and architecture emerges as a representative strategy for disciplinary expansion in rhetoric and composition. Haynes' cultivation of the phrase "rhetoric of the *unbuilt*" acts to interrupt composition and rhetoric pedagogies that are based too heavily on logos—what she refers to as "argumentation pedagogy." To this list, I wish to add Gregory Clark's *Rhetorical Landscapes In America* should. Clark focuses on American tourism as a means of opening up Kenneth Burke's rhetorical theory. In so doing, he argues that public landscapes in America, such as the scripted path along the Lincoln Highway acted, through tourism, to solidify a sense of common identity in this country. The American tourism industry, Clark illustrates, has contributed to developing a national community spirit within the United States. This industry, thus, has rhetorical agency. Clark's version of rhetoric involves an

examination of more than prose, narrative, and rhetorical analysis of history. Clark maps out Burke's thinking within a context of spatial, cultural, and physical practices. In this way, the work is significant in its ability to open Burkean rhetorical scholarship up to new scholarly conversations, such as American studies. But, it also brings Burke into more practically oriented, and everyday discussions about city planning, graphic design, marketing, and economics.

Craig Saper's *Artificial Mythologies: A Guide to Cultural Invention* should also be listed here as significant to my project. Saper, not unlike Koolhaas' approach within *DNY*, offers a (rhetorical) method of developing artificial myths in order to expose more intricate layers behind buzzword public issues such as "urban decay." Saper insightfully pinpoints some fundamental roadblocks within the field of Architecture. However he is, unfortunately for architecture, not speaking to them! In fact, all of these rhetoric scholars, interested and motivated by experimentation in architecture, cling so hard to the hope of altering their own field that they miss out on opportunities to insert themselves into new ones. Thus, my inextinguishable desire is that these works must begin to find ways of also reaching architects, but most specifically architectural educators. The majority of architectural educators, these rhetoric scholars don't seem to realize, are also biased toward a form of problem-solving pedagogy, the architectural equivalent to Haynes' "argumentation pedagogy."

In developing and defending this point I have also found it useful to draw upon Indra Kagis McEwen's *Socrates' Ancestors: An Essay on Architectural*

Beginnings. In this book, she argues that "the skillful hand" played a pivotal role in establishing western metaphysics. Conflating an "architectural event" and "theoretical event" in the same moment, McEwen draws upon the "made" objects of Anaximander to provide a model for rhetoric that is derived from architecture's specialized knowledge of physical environments, bodies, space, sensations, and ecologies of objects. McEwen argues in favor of returning the skill sets involved in making to the skill sets involved in thinking. In light of McEwen's argument, my dissertation seeks to retroactively place these above mentioned rhetoric scholars into conversation with educators in architecture and urbanism as well as the educators in rhetoric and composition that they already target. In so doing, I will argue that there is more at stake in inserting the goals of these thinkers into design studios where rich pedagogies of making, visualizing, and designing are already well established. This is particularly true in studios focusing on the larger urban and ethical topics typically addressed within rhetoric scholarship. My position is that to continue to draw upon art and architectural projects as vehicles for altered composition pedagogies alone, without also thinking through the inverse relationship of that endeavor, does not seem like the most well conceived strategy. I argue that only in looking at invention simultaneously within both rhetoric and architecture will "argumentation pedagogy" and/ or "problem solving pedagogy" begin to unravel enabling the possibility for many more pedagogical options.

Only now, as I begin to find my own way within the field of rhetoric—a field as ancient and complicated as architecture—do I recognize the enormity of the

12

project I have chosen to bite off. I have had to design my project carefully. I have gone about doing this, in part, by aligning myself strategically with many of the scholars mentioned here and in the remainder of this chapter.

In academia, we are not encouraged to bite off more than we can chew. Doing so is messy. As a result we rarely immerse ourselves in areas that are not comfortable and/ or already clearly outlined for us as disciplinary. This insularity prevents other disciplines and the public sphere from gaining access to potentially useful idea generation. Of course, there are also no structures in play to encourage one to bite off more than they can chew. As a result, those who do cast themselves "offshore" run huge risks of loosing their disciplinary homes for good. The quality of our lives, our shared public (both physical and virtual) spaces stand to gain a lot in the process of transitioning the filed of architecture toward a better understanding of rhetoric, and visa versa. Most scholars outside of architecture do not accept buildings or structures as viable mediums for persuasive assertions about culture. I'm not entirely sure that many architects would even see them in this way. In addition, architects and rhetoric scholars extend themselves relatively little into pursuits in developing pedagogical knowledge. Chapter two of this dissertation argues that it is here, specifically on the topic *invention* within both rhetoric and architecture that the two might find some form of mutually beneficial ground. Without balancing architectural emphasis on design as making form as well as making forms of knowledge, the field will progressively make less and less impact in public environments. Similarly, without finding ways to engage with fields that are

already rich practices of making, rhetoric scholars will continually miss out on productive bodily engagements capable of accelerating the expansion of the field.

Though the idea of blending the work of these rhetoric scholars into architectural pedagogy may seem strange, there is precedent for what I am after in doing so. For example, the work of The Center for Land Use Interpretation (CLUI) seeks to visualize, "the common ground in 'land use' debates. At the very least, the Center attempts to emphasize the multiplicity of points of view regarding the utilization of terrestrial and geographic resources."[6] CLUI believes that the manmade landscape can be read in order to better understand what we are doing and who we are as a culture. Where their works examine land use fairly broadly, I take cues from their mission in my attempt to do the same within the context of "Big-Box urbanism".[7] With this example, I feel more comfortable, justified, in moving onto the meat of this chapter.

Libidinal

Choosing the term *libidinal*, I purposefully reference theorist Jean-François Lyotard's text *Libidinal Economy* (*LE*). Taking on an architectural/urbanist perspective, I analyze and intervene within dominant shared (public) practices, thus within dominant shared (public) values. I will focus my attention primarily on territories of rapid capitalistic development, targeting the tourism industries of Myrtle Beach, South Carolina and Orlando, Florida, as well as exploring the rendering (animal co-products) industry. The current chapter helps to contextualize these more specifically focused architectural provocations within an existing

14

scholarly conversation found outside of architecture. I draw upon Lyotard and others toward the aim of generating a trans-disciplinary conversation as discussed through Haynes' article above. The larger dissertation helps to expand and further these existing conversations, bringing new perspectives and insights, which are visually and materially informed through architectural methods. In turn, I hope that the field of urban architecture will expand through my introduction of this work to architecture by way of this new breed of scholarship.

As does Lyotard in *LE*, I wish to render out actionable forces found within *desire*—to understand it from a perspective beyond Sigmund Freud's Oedipus. My version of this new perspective involves exploring desire in and through urban architectural practices and pedagogy.[8] The field of architecture has already received the work of Gilles Deleuze and Felix Guattari, who together in *Anti Oedipus*, work similarly toward the complication of commonly accepted approaches to human desire, capitalism, and the work of Freud. Deleuze's influence on architecture, however, has remained primarily derived out of his project on the fold.[9] Urban architectural design and theory would benefit from delving more deeply into the project on desire. This is specifically important for the field in relation to its current approaches and understanding of "Big-Box Urbanism." I am drawn to *LE*, in part because the work of Lyotard will largely be new to the field of architecture beyond a blanket reference to postmodernism. I also feel that this work is potentially more accessible on the topic of desire than *Anti Oedipus*, and thus has more potential of opening up the conversation I wish to develop.

My project seeks to render architectural projects that are more capable of operating—employing aesthetic and critical thinking skill sets—within the predominant urban spatial practices that are currently assumed to be governed by rapid capitalism such as gas stations, big-box stores and complexes, outlet malls, and of course the ubiquitous strip mall. Such assumptions result in resistance and criticism, and limit the possibility for a fuller spectrum of inventive design processes to occur there. Big-box stores, for example, are not seriously considered within the various academic and professional rubrics of urbanism, other than being "wrong." They are seen as a condition that "good" or "correct" architecture is capable of fixing and/ or resolving. As a result, the typical designer's most valuable skill set—the versatile design process capable of developing thoughtful space and materials that evoke expression and contemplation—are never employed in this condition. Such conditions, it should be noted comprise the vast majority of our construction in United States currently.[10] In addition, those who are impacted most by such skill sets are becoming an increasing minority in today's economic climate.[11]

Lyotard's materialist excavation of psychoanalysis and Marxism within *LE* offers an opportune point of departure for this dissertation, again seeking to further his discussion through architectural pedagogy and practice. *LE* helps us to see beyond the *political economy[12]* and thus, the rhetorics born from that predominantly conceptualized system. I feel that exploring this work will help urbanism to see outside the stasis point from which we collectively understand big-box as "bad." More generally, this approach will help one to understand another possible

16

economic layer or force driving society. The *libidinal economy*, for Lyotard, is always present alongside a political economy.

Design as Theatrical Fiction

As Ian Hamilton Grant states in the introduction of *LE*, "...Critique remains the privileged object of rejection, a hated, isolated, despicable colony of virulent negativity at the hot core of *Libidinal Economy*."[13] Lyotard's exaggerated attitude toward criticism helps to set up an undercurrent within this dissertation. I am *contrasting*[14] current approaches to architectural pedagogy that keep theory/criticism courses at a manageable distance from the design studio. This contrast necessitates placing a premium on design studio curricula that include theory as part of the invention process. My project provides examples of how we might cultivate cultural critique alongside more traditional curricular agendas such as site analysis and programming. Lyotard's work provides an example of how designers might begin, as did Koolhaas, to develop a context for new ways of conceiving of space. The development of and invention of discourse about urban practice, I argue, can be as significant to a body of architectural work as are the basic drawing and representational techniques studied and taught to architecture students. Change might happen quite a bit more quickly if students of architecture were provided opportunities to stress inventive cultural research methods as often as inventive spatial design and composition. That is, to design new ways of seeing a cultural context alongside designing the formal/visual design propositions.

Lyotard refers to *LE* as a "theatrical fiction."[15] It is an additional or alternative—alternative to what we might automatically assume or discern—description of how social structures and reality operate. Lyotard entices his readers, "libidinal economists," to consider seeing from this "dangerous" alternative perspective, and thus aid in "building a new morality… broadcasting that the libidinal band is *good*, that the circulation of affects is *joyful* (as apposed to controlled and exploited) that the anonymity and the incompossibility of figures *are great* and *free*…"[16] *Llibidinal intensities* and *affects* are two concepts that Lyotard uses to refer to unpredictable occurrences, or events exceeding in logical/rational interpretation and/or representation. The notion that more exists than can be clearly accounted for by a theory or model—an excess or slack—is also central to *LE*. We forget how much we abstract and omit in the process of "disciplining," of becoming and sustaining a discipline This is a significant thought experiment that I would like architecture take a larger part in as a strategy to balance our current bend toward problem solving pedagogy as discussed above.

Victor Vitanza, in his explorations on "what to do with the Sophists,"[17] found in *Negation Subjectivity and The History of Rhetoric* similarly suggests,

> "… I would have us move on, perpetually, to a *third place* outside this dispute (*paradoxa, dissoi logoi*), to that of a sub/versive paralogy (*dissoi paralogoi*). We will have eventually been there. (We will have perpetually returned to, ventured there to that wild place, that-which-has-been-repressed place, because of discipline, metadiscipline.) Let's cut and paste, blast and uproot.

18

Let's hereafter, dis/engage in anacouluthons and asyndetons. Our motto:

tmesis."[18]

Vitanza, like Lyotard, exaggerates and prioritizes the importance of holding

contradictory thoughts/emotions when "making" rhetoric.[19] This is undoubtedly a

critical skill for architects and urbanists to develop, however very little pedagogical

strategies are currently being developed to strengthen such a skill. Cities, too, have

complicated histories with complicated layers to remember and contend with.

There are multiplicities of perspectives that are continually not considered when

designing for urban spaces. I, like Vitanza and Lyotard, am heeding the call to ensure

at least some of us attempt to see more of these perspectives.

I am reminded here of a videogame that game theorist Ian Bogost shared

with the RCID community in 2010 when he and Greg Ulmer came to lecture in

celebration and in preparation for the *PreText* issue on Gaming. Designed by

Molleindustria,[20] the game explores the complexity involved in running a fast food

franchise, such as rainforest destruction, livelihood losses in third worlds etc. This

game, I would argue, provides a successful example of an inventive approach to

rhetoric/ writing/ composition that in line with Vitanza's hope for the field of

rhetoric expressed above. The game as composition, offers its players (readers) the

opportunity to negotiate various aspects involved in running a McDonnald's fast

food chain, " from the creation of pastures to the slaughter, from the restaurant

management to the branding."[21] In every case, the player will experience a difficult

or nearly impossible decision.[22]

Both Vitanza and Lyotard allow their writing to fold and zigzag. Vitanza suggests the importance of "making" rhetoric, and develops the notion of an "anarchitectonics of writing interruptions and spillovers."[23] There is an obvious pleasure involved in the act or process of both thinkers' writings. This is marked by shift away from the intention to inform (although a transaction of information does happen), toward an intention to inspire perpetually new realizations about commonly accepted doctrines.[24] That is, there is a shift away from a finite, or set amount of true information to be conveyed through neutral language, toward an understanding of writing as capable of uncovering unknowns or forgotten ideas. This shift can also be conceived as a process of discovery and design, again that I find similar to that of Koolhaass' approach to writing/ theory in *DNY*.

Spaces that Bear Witness to Desire

For a contemporary reading of the political economy, Bernard Stiegler's book, *For a New Critique of Political Economy*, published in 2009, considers libidinal economics in light of the 2008 financial crises. His "pharmacological" investigations into libidinal economics argue that human muscular and nervous systems are preyed upon within what has now, for Stiegler, evolved into "cognitive capitalism." Stiegler's book reinforces the dominant feature under attack within Marxism, that the "proletariat," or working class owns only the capacity to work—the capacity to sell his or her own labor (body). However, in Stiegler's evolution, this laborer has become even further removed from her body. She has lost her capacity for knowledge as a result of externalized memory storage devices. In addition, the

libidinal economy has evolved in such a way that a shift from proletarianization of producer to that of consumer. "In the twentieth century, the mobilization of libidinal energies took place through the capturing and harnessing of protentions (anticipations) via the channeling of attention,"[25] Stiegler concludes that we must begin "…to produce a vision and a political will capable of progressively *moving away* from the *economico-political complex* of consumption so as to *enter into the complex of a new type of investment*, which must be a social and political investment or, in other words, an **investment in a common desire**, that is, in what Aristotle called *philia*, and what would then form the basis of a new type of economic investment." [26]

This work has been useful in helping me to re-examine various approaches to the libidinal and desire, from Plato and Marx. It has also been useful as an introduction to new bodies of research, such as that from French archaeologist/ anthropologist André Leroi-Gourhan, and contemporary physicist Albert-Laszlo Barabasi. I am not, for the sake of this project however, interested in helping to develop a theory toward the aim of rescuing the devastated economic climate we are in. Rather, I am suggesting with my focus on Lyotard, and through my architectural provocations, that we visually "listen" to what our society is doing by examining the common desires and values. To do this, my suggestion is that we focus on materialized investments. In my third chapter, focusing on Myrtle Beach, South Carolina, I have designed/proposed a system of delicate interventions that will help us bear witness to new architectural idioms within big-box culture. They

help to propose a strategy for looking and for corresponding with current cultural practices. Importantly, this is not to critique them, not to fix them, but to observe them. It isn't in the reading, or rereading, of one theory that we will ever "fix" the problems of a society. Rather, in opening up of literal and figurative spaces, by which we might simply, "bear witness."[27] Though Stiegler writes his text in honor of Lyotard, his approach is far too polarized, he reinforces a "problem solving" pedagogy, in his attempt to "fight" for our culture, criticizing his philosophical peers for not directly addressing political and economic problems. Lyotard would have us bear witness rather than to seek, as we are all trained to do, a solution through the theory.

Though Stiegler argues that as a result of the besiege of all of our internal systems, knowledge has been externalized in technologies, and that none of us (even the engineers) really knows how everything works,[28] he still seems adamant on finding a singular theory to fix our problems. Thus, while Stiegler draws inspiration from Lyotard,[29] he fails to acknowledge a very important piece of *LE*. In writing *LE*, with all of his controversy as well as scholarly rigor, Lyotard is bearing witness to a *differend*.

Throughout the project, I will repeatedly reference a complex passage from Lyotard's chapter titled, "The Desire Named Marx," within both chapter 2 and 3 in order to develop an application for the *differend* within urban intellectual projects. Lyotard suggests:

Now, therefore, we must completely abandon critique, in the sense that we must **put a stop to the critique of capital, stop accusing it of libidinal coldness or pulsional malevolence**, stop accusing it of not being an organic body, of not being a natural immediate relation of the terms that it brings into play, we must take note of, examine, exalt the incredible, unspeakable pulsional possibilities that it sets rolling, and so understand that *there has never been an organic body*, an immediate relation, nor a nature in the sense of an *established site of affects*, and that the (in)organic body is a representation on the stage of the theater of capital itself. Let's replace the term critique by an attitude closer to what we effectively experience in our current relations with capital, in the office, in the street, in the cinema, on the roads, on holiday, in the museums, hospitals and libraries, that is to say a horrified fascination for the entire range of the *dispositifs* of *joissance*. It must be said: the Little Girl Marx invents critique (with her fat bearded prosecutor) *in order to defend herself* from this horrified fascination, which the disorder of the pulsions also provokes in us.[30]

In this section, Lyotard demands that we consider Marx's humanness—his potential madness—simultaneously while we are considering his writing. Vitanza has suggested on this topic that the text actually be conceived as Lyotard's madness even more than as a theory.[31] Lyotard portrays "fat bearded Marx" and "little girl Marx" as one conflicting figure, or body, simultaneously. As we are taken carefully through the desires of both of these aspects of Marx, it becomes impossible to think

about economics in quite the same way. Captured in this section, Marx's non-rational forces of sensation and conflicting emotions allow Lyotard to express that the world is actually moved in the ways that feelings move people.

Lyotard is even more controversial. He begins to compare a prostitute's body of work with the work of "intellectual sirs," we academics in our ceaseless efforts to produce "more and more words, more books, more articles." Lyotard suggests further, "These 'products' are not products, what counts here, in capital, is that they are endured and endured *in quantity*, it is the quantity, the imposed number that is itself already a motive for intensity, not the qualitative mutation of quantity, not at all, but as in Sade the frightening number of blows received, the number of postures and maneuvers required, the necessary number of victims, as in Mina Boumedine, the abominable quantity of penises which penetrate through many entrances into the woman who works lying on the oilcloth on a table in the back room of a bar."[32] He questions why we, "political intellectuals," tend to commiserate towards the proletariat, suggesting that a proletarian would hate us because we "dare not say what cannot be said which is that one can enjoy swallowing the shit of capital, its materials, its metal bars… you situate yourselves on the most despicable side, the moralistic side where you desire that our capitalized's desire be totally ignored, forbidden, brought to a standstill, you are like priests with sinners, our servile intensities frighten you… And of course we suffer, we the capitalized, but this does not mean that we do not enjoy, nor that what you think you can offer us as a

remedy…does mot disgust us, even more."[33] His hatred lies in knowledge, the knowledge we thought we had correct, carried on.

Thinking about composition and or design with the *differend* in mind as a possible conceptual starting place, will offer the field a chance to explore radically new directions. I wish to push architectural pedagogy such that architecture might be a vehicle through which we can bear witness to, rather than to habitually critique unsustainable building practices. We assume these practices are driven by capitalism and/ or the political economy. Lyotard's work can shed some light on what such assumptions prevent us from including.

Lyotard's Figures

Lyotard develops a set of figures within *LE* as a method of explaining how libidinal dispositions compete for energies of libidinal events. The figures within *LE* all aid in the development of his larger project on the *differend*. I will take some space below to unpack a few of these figures that have become important within my project before moving onto the next term, *Urbanism*. In some cases, I have simply provided a quote or two from the glossary in *LE*. Knowing generally about the following figures is important in understanding the following three chapters. Lyotard understands affects as concrete material entities. By looking more directly, specifically in chapters two, three, and four at how ubiquitous aspects of our environments proliferate and are repeated, I am attempting to take Lyotard's figures further. Like *DNY*, *LE* falls short in finding an audience. I hope to aid in expanding and inventing an audience for these two works.

As an example, I provide the system developed by Nielson, My Best Segments, as a visualized and "networked" example that captures all of these figures working intricately together. Within my own framework, it "visualizes" the libidinal infrastructures. The site touts:

> "Evaluate market segments by linking consumer behaviors for shopping, financial, media and much more, to gain powerful insights that allow you to create actionable strategies and tactically execute while benchmarking your performance."[34]

This software is but one example of existing, and materially realized manifestations of our desire driven energy flows. They are catalogued masterfully through statistical data of our desires (spending habits), made visible through this system, thus exploitable. I do not mean to suggest that the 66 segments provided by the system (figure 1.1) provide an "accurate" picture of the complexity of our reality. Lyotard himself helps us to understand within *LE*, that the libidinal skin, like a Mobius band, exceeds representation. Today urbanism is a moving target and demands to remain as such. Our analysis of these areas should be inventive in seeking to capture the fascinating complexity of this existence. I draw upon Greg Ulmer throughout the dissertation as an example and means to articulate this point.
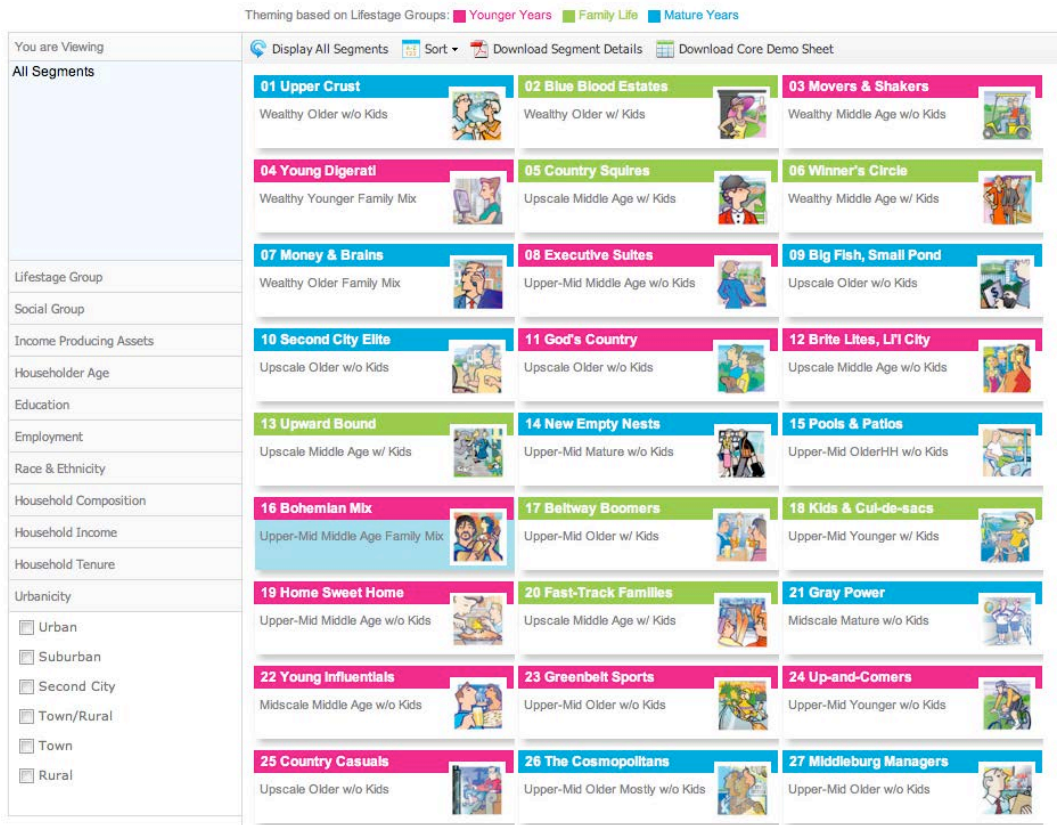
(Figure 1.1: Snapshot of Nielson's "My Best Segments" Interface)

The Libidinal Band/ Skin

The Libidinal Band, or Skin represents the "primary processes" of desire/ libidinal intensity. Lyotard describes this band with the visual/ formal metaphor of a Mobius strip and a Klein Jar because it has no outside. Libidinal energy circulates along the band in an aleatory (random) fashion with red-hot intensity, or potentiality.

The (Disjunctive) Bar

The Bar references stable structures that exploit libidinal intensity/desire. Lyotard suggests that in time, the red-hot band begins to slow and cool, forming bars. "It is through procedures of exclusion (notably negation and exteriorization) that the bar

27

gives birth to the conceptual process, twisting the band into what Lyotard calls the theatrical 'volume' ...it should be noted that, for Lyotard, the bar and the band are nevertheless one and the same. When the bar rotates in a furious aleatory fashion, we have something like the libidinal band; when the bar slows down, we have something like the theatrical volume. Why the bar slows down is a question peculiar to representational thinking, itself and effect of the cooling bar."[35]

The Great and The Concentratory Zeros

"The Great Zero is thus an empty centre which reduces the present complexity of what happens instantaneously on the band to a 'chamber of presence and absence'. In his cescritopn of the great Zero Lyotard wishes to show that all theories of signification are fundamentally 'nihilistic'."[36] "The two zeros dissimulate each other, they are not opposed, they are unclear and indistinct like the principal pulsions of Eros and Thanatos, life and death."[37]

The Dispositif

Lyotard develops the term dispositive, (set up or apparatus). His definition or treatment of this idea diverges even from that of Giorgio Agamben's. Agamben asserts:

> The term "apparatus" designates that in which, and through which, one realizes a pure activity of governance devoid of any foundation in being. This is the reason why apparatuses must always imply a process of subjectification, that is to say, they must produce their subject... What is

common to all these terms is that they refer back to this *oikonomia*, that is, to

a set of practices, bodies of knowledge, measures, and institutions that aim to

manage, govern, control, and orient—in a way that purports to be useful—

the behaviors, gestures, and thoughts of human beings... Further expanding

the already large class of Foucauldian apparatuses, I shall call an apparatus

literally anything that has in some way the capacity to capture, orient,

determine, intercept, model, control, or secure the gestures, behaviors,

opinions, or discoursed of living beings. Not only, therefore, prisons,

madhouses, the panopticon, schools, confession, factories, disciplines,

juridical measuers, and so forth (whose connection with power is in a certain

sense evident), but also the pen, writing, literature, philosophy, agriculture,

cigarettes, navigation, computers, cellular telephones and—why not—

language itself.[38]

Lyotard's reading complicates Agamben's careful analysis captured in the extended

passage above. Where Agamben would argue that there fight or struggle exists

between the organic living being and apparatuses, Lyotard offers that both libidinal

intensities and "apparatuses" are both essential elements of the libidinal economy.

He finds it important that we understand the complexity of both, as they mutually

construct one another. That is, for Lyotard, "the *positif* is also a positing, an

investment, the 'dispositif' a disposition to invest, a cathexis. As such, the 'dispositif'

is subject to economic movements and displacements"[39]

The Tensor

"Lyotard's wish to reintroduce into the sign a tension that prevents it from having either unitary designation, meaning or calculable series of such designations or meanings (polysemia) is an attempt to block this movement of referral and and remain as faithful as possible to the **incompossible intensities informing and exceeding the sign**. The tensor sign is a description of this attempt. The latter is not, therefore, a move 'beyond' representation, the creation of an elsewhere outside the sign. For the idea of the tensor would then simply repeat the rules of the dispositive which organizes the possibility of signs in the first place. Signs are also tensors, 'indissociably singular, vain intensities in flight': signs dissimulate tensors."[40]

Incompossibility

The simultaneous affirmation of the this and the not this, a "logical violation, but an expensive and metamorphic economics."[41]

Ubiquity

I use the term ubiquity to establish an urban/ architectural interest in that which is everywhere at the same time, constantly encountered, or widespread.[42] I argue, most specifically in chapter 3 that the ubiquity of aspects of our built environments renders them invisible. When teamed up or connected with infrastructure, ubiquity points toward aspects of our environments that are misunderstood, or neglected. Rhetorical scholarship often targets large, broad reaching thought experiments such as inequality, racism, feminism, or urban decay. By choosing to look closely at ubiquitous, "Big-Box Urban"[43] conditions, drawing

upon Lyotard and the others mentioned in the introduction, my project falls somewhere in-between the typical architectural project that zooms way into a singular situation, and traditional humanities scholarship.

Ubiquity is also important in relation to *invention* in a basic sense. In the final chapter of this dissertation, I examine the relationship between rhetorical invention and architectural design processes. In this application, the notion of ubiquity is seen through stasis theory, helping me to identify points to insert rhetoric and architecture into the other. Chapter five seeks to reemphasize the previous four chapters with a pedagogical approach.

Ubiquitous Libidinal Infrastructures (ULI's) are defined as externalized (physical and/ or digital) manifestations of human desire-driven energy flows. ULI's are found readily within capitalistically driven developments such as strip-malls and big-box franchises that reach broadly across the United States. This dissertation focuses on tourism industry in Orlando, Florida and Myrtle Beach, South Carolina, which will act as two examples of heightened zones where ubiquitous libidinal infrastructures of urbanism are exaggerated and more easily observable. Libidinal infrastructures are backed by statistical and numeric feedback loops acting upon constructed data and market research. Our desires are manipulated by this data. Franchises leverage this information toward our discretionary income while we are on vacation. As a hybrid rhetorician/ architect I choose to regard this observation as an opportune moment from which disciplinary invention might arise rather than to resist it. In subsequent chapters, I will work to identify ULI's within specified urban

31

conditions with the help of Lyotard's figures. I will demonstrate, for example, that we can harness the design potential imbedded within human desire by offering a visual and textual account of how market segmentation data intersects with the (often surreal) physical spaces in and around Orlando, Florida and Myrtle Beach, South Carolina.

The logics found in rapid capitalistically driven developments, while studied in marketing and packaging design, have outgrown most of the static and formally oriented conversations within the architectural design studio. Rhetorically speaking, architects and urbanists have a restricted set of topoi from which to pull, preventing them from fully understanding the reality of the virtual complexities at work on us and in these types of conditions. Operating virtually, behind the scenes, mechanisms like data driven market research actually aid in forming vast amounts of our shared public and private environments.[44] Bringing rhetorical scholarship to bear on this situation will allow architects and urbanists to design more thoughtfully with an understanding of ULI's and their impact on the built environment.

Urbanism

"Urbanism is capitalism's seizure of the natural and human environment; developing logically into absolute domination, capitalism can and must remake the totality of space into its own setting."[45]

Targeting the field of urbanism, my primary area of research within this dissertation, I argue for the inclusion of ubiquitous systems of production and digital publics within urban analyses. I insert rhetorical invention and chance into

urban and architectural practices in order to relinquish the power of codified and

dominant architectural strategies that may no longer be useful or that may have

become harmful. The project explores *trans*disciplinary invention via collaborative

and experimental methodologies that will use (and perhaps misuse) traditional

rhetoric in the establishment of MORE pliable and relevant design/planning agency.

Urbanism Without Organs

"Every reader of Spinoza knows that for him bodies and minds are not
substances or subjects, but modes. … if you define bodies and thoughts as capacities
for affecting and being affected, many things change. … if we are Spinozists we will
not define a thing by its form nor by its organs and its functions."[46]

In response to Deleuze's statement above, I wish to track possible

approaches to urbanism not predicated upon defining forms, organs, and

functions—a Spinozist approach to urbanism. Can urban explorations, be they

architectural, theoretical, or governmental, become unhinged from its most common

conceptual starting place?

The work of French "modernist," Le Corbusier does not fall into the category

of a Spinozist Urbanism according to Deleuze's analyses. This fact is clearly marked

by the canonical work, *The city of Tomorrow and its Planning*, titled in the French

version, *Urbansime*.[47] In it, Le Corbusier survey's "problems" of urban conditions,

and speculates about their origins. He generates powerful rhetoric through formal

proposals for a city in "despair." Expressed in the images of "Plan Voisin," an urban

renewal scheme for Paris, Le Corbusier posits urban analyses as that which

addresses or "fixes" problems via rearrangement and manipulation of form and

space. A similar approach can be traced through Baron Haussmann's re-shaping of
Paris in the 1860's, the 'garden city' plan by Ebenezer Howard, as well as through
the work of Daniel Burham, Tony Garnier, and all the way through to the large scale
"urban renewal" developments of the 1950's and 60's.[48]

Few would argue that Corbusier's furniture design or small scale building
projects such as La Tourette, Ronchamp, or Villa Savoye, have been some of the
most inspiring works of modernist architecture within the 20th century. However, I
argue that his urban proposals, such as the Voisin scheme and plan for Chandigarh,
India, are sterilizing, and even frightening in retrospect. For Guy Debord, and the
Situationists, as well as for Jane Jacobs, for example, Corbusier's urban utopian
rhetoric generated a lifelong motivational drive to expose his fallacies. Jacobs,
greatly influenced by Warren Weaver, Rockefeller Foundation Life Sciences Director
and pioneer of complexity science,[49] is known for bringing complexity theory from
the fields of science, seeming to address a lack of awareness within urban studies.
Peter Laurence suggests:

> Applying Weaver's concepts, Jacobs argued that the city was like other living
> things, a system of 'organized complexity', of interrelated and
> interdependent variables. In making this leap, Jacobs became one of the
> earliest promulgators of complexity science outside of scientific circles, and
> the first person to apply its relationship to urban dynamics. [50]

Jacobs' work is also perplexing. Her work has greatly impacted the way urbanism
has been conceived and appropriated as a discipline. Her work continues as a staple

for architecture, planning and landscape professors, and also has a wide general audience. It is hard to argue against Jacobs' activism. In a heavily male dominated field, during the 50's and 60's, she took hold of the direction of a developing discipline, mocking "the planning establishment's most revered historical traditions as 'the Radiant Garden City Beautiful'—an artful phrase that not only airily dismissed the contributions of Le Corbusier, Ebenezer Howard, and Daniel Burnham but lumped them together as well!"[51] However, Jacobs' work, as with the work of Kevin Lynch, Lewis Mumford, and other influential thinkers funded by the Rockefeller Foundation during this time period, remains grounded in conceptual starting places that are one-dimensional, and remains outside of a "Spinozist" orientation. Such an orientation demands architectural approaches that balance architecture as a problem-solving practice. So, where do we begin? How do we start? How do we break from that which was/has been our disciplinary stasis?

The city of Detroit, Michigan, has proven to be an ample subject to explore the possibility of a Spinozist urbanism as in the above quote by Deleuze. Detroit's close relationship with the automobile industry throughout the majority of the 20th century has rendered it a unique, yet contested area of focus for urbanists and architects. As the birthplace of America's dependency upon the automobile, most architects and urbanists lament Detroit's physical decline rather than to embrace it as indicative of an evolving cultural relationship to space.[52] To embrace the later would imply the need for the invention of new analytical strategies. Emerging not long before Rice began his research on the affects and effects of Detroit's

35

communication networks, Daskalaskis et al. in *Stalking Detroit* set out to produce

urban investigations that would take into consideration the various cultural

material realities that are produced by capitalistic influences on the city. Seeking

"multiple disciplinary frames of reference,"[53] the book offers various methodological

approaches such as photographs, essays, design research, and student design

projects. Of particular concern within the anthology was to expand one-dimensional,

empirically driven, approaches to planning. Hoping to find more inclusive

approaches to look at the city architecturally, the authors intentionally chose to

"resist the increasing annexation of the architectural discipline by sociologically

based models of research."[54]

To put this project into perspective, the collective vision behind *Stalking

Detroit* takes a cue from the International Situationniste (The Situationists), an

artistic, political, and urban alliance working from around 1950 to 1970. The

Situationists' main agenda was to expose the controlling nature of urban planners

and big business. The alliance's efforts focused on the invention of new urban

strategies designed to interfere with institutional divisions separating art from the

everyday—something they suggested was leading to a sterilization of the world.

They felt, for example, that urban works such as Le Corbusier's "Plan Voisin,"

eliminated the beauty and imaginative stimuli made possible within the

"unsterilized" city streets of Paris.[55]

The Situationists' are well known for inventive wordplay as much as for their

visual urban provocations. For example, their use of the notion Dérive, literally

translated as the drift, was conceived as a mode of inquiry used to generate maps of perceptible psychogeographies—territories of distinct feelings that were palpable while experiencing the city. The psychogeographical analyses made no hierarchical distinction between soft ambiance—light, sound, time, the association of ideas—and physical constructions. What is significant for the development of this dissertation project is that the Situationists' were flexible enough to conceive of representational and communicative ways to see beyond actualized static forms, and explored possible methods to understand the behavioral impacts urban spaces can have. Perhaps the most well-known psychogeographcial document is, "The Naket City," by Guy Debord and Asger Jorn. This inventive drawing documents the team's experience of the areas of Paris, France, that they felt had escaped bureaucratic development.

The Situationists valued perpetual invention of new forms of knowledge and knowing processes, illustrating their desire for architecture to remain self critical of its standard modes of operating. To illustrate, the Situationists' personal political aspirations and ethics were embedded in their unique practice, which Jason Young has noted, unified their process and the product simultaneously.[56] In their inventive practice the Situationists, as Young expresses collapsed the action (documentation), and the record of action (drawing) inventively in order to understand the emotional effects of a place on their being.[57] Drawing again upon Rice's *Digital Detroit*, I argue that architecture and urbanism currently seem incapable of inventing new modes of saying something about the cultural environments within which we intervene. I feel

this inability is the result of our culture's tendency to work hermeneutically and heuristically rather than heuretically in the way Gregory Ulmer has defined it, as a "logic of invention."[58]

Craig Saper addresses this issue within his text *Artificial Mythologies.* Saper's larger project, the exploration of the notion of artificial myth provides a (rhetorical) method to expose unseen contributing factors to public issues such as "urban decay." He is, in part, interested in the state of visualization/ representation within the field of architecture, what he refers to below generally as "aesthetics." Saper asserts:

> Little scholarly work has suggested how theories of representation might help to deal with large social problems facing our society… The aesthetic dimension of living conditions usually drops out of the social scientific approach even when the issue concerns urban aesthetics (that is, literally crumbling buildings, boarded up windows, graffiti, clumps of not-quite-dwellings, etc.) as it bleeds over into social upheaval. *In architecture, aesthetics or questions of representation continue to have a prominent position, except when planners consider urban contexts. Then, architects demur to the supposed wisdom of social scientists instead of continuing to consider aesthetic issues.* It seems that either architecture falls into an "art for art's sake" or, conversely, acts like a slave to efficiency. Architecture, torn between public construction and personal expression, seems tunable to ever adequately decide between artistic autonomy and social commitment.[59]

Saper's concern, specifically the portion I have italicized for emphasis, gets at one of

my primary agendas within this dissertation. I wish to argue that the visual

rhetorical invention found in architecture hold as much claim on the human project

as empirically driven research. Saper posits further:

> For example, if the situation of "urban decay" catches on in your community,
>
> it will depend on spreading activation, but it may not lead to an evolutionary
>
> progress, and it may have disparate effects. Instead of having an
>
> unidirectional (or evolutionary) development, the representation may
>
> spread out in numerous and unpredictable ways. A chart of this particular
>
> spreading activation would resemble the rhizomatic growth of weeds rather
>
> than the silhouette of a tree. To suggest the regressive potential, and
>
> annoying consequences, of this peculiar type of spreading activation, I have
>
> coined the term *allermeme*. The term combines Dawkin's *meme* (which
>
> denotes something copied) with the word *allergen* (the element that sets off
>
> an allergic reaction). The allermeme only appears retroactively when it sets
>
> off an allergic reaction. It does not exist apart from spectators, city dwellers,
>
> and so on. What is more important, it functions retroactively, in a way similar
>
> to prejudice.[60]

The important point here, for my project, is that we find ways of seeing beyond

problem solving pedagogy in urban studies. Saper's work is very useful in pointing

out that commonly held conceptions about the "actual" sequential order of certain

occurrences are often misguided. Thus, in order to find new pedagogical strategies

we might need to look elsewhere—to a discipline that has had longer and more intensive focus on narrativity such as literature or history. For example, take the famous novel by Virginia Woolf, *Orlando: A Biography*.[61] The book was, for Woolf, allegedly written as a "vacation" from her own writing. The "biographical" novel can be interpreted either as nonsense or as a delightful exposition on the internal dialogue of a woman who doesn't feel she fits the norm. The main character, Orlando, ages only from teenager to middle age throughout the story, which spans nearly 400 years. Orlando's gender also changes from male to female halfway through the book. The novel might, alternatively, be read as a form of invention, a "theatrical fiction," not at all unlike *DNY* and *LE*. These three pieces of creative research, each emerging out of three very different "fields," seek to articulate a very similar observation about being human. Rather than to assume we will find out deeper and deeper "truth" about urbanism based on scientific/empirical research methods alone, I argue that we must also value endeavors such as these three examples. Saper's exploration of artificial myth helps us to understand their significance.

To revisit a quote by Lyotard that we looked at earlier on page 22 of this chapter, "Let's replace the term critique by an attitude closer to what we effectively experience in our current relations with capital, in the office, in the street, in the cinema, on the roads, on holiday, in the museums, hospitals and libraries, that is to say a **horrified fascination** for the entire range of the *dispositifs* of *joissance*."[62] This dissertation will help to achieve Lyotard's wish here, again through my

architectural investigations on the tourism industries of Myrtle Beach, South

Carolina and Orlando, Florida, and the rendering (animal co-products) industry.

That is, when we are on vacation, we trade into the role of "tourist," we exist within

the libidinal economy. In fact, we pay exorbitant amounts in order to do so. When

we are at work, living our everyday lives, we exist more fully within the framework

of a political economy.

My project offers a break from the tendency toward criticism, with emphasis

on transdisciplinary pedagogy, as well as design that grows from theory and

rhetorical invention. I want to offer the field of rhetoric something else, another way

to react than criticism. Similarly, I would like to offer the field of urbanism

something else, another way that we might react to a city. Vitanza has suggested,

"Therefore, To judge, or to critique, JFL *as being derivative* is to judge/assess him

only in terms of Enlightenment regimens or an *economy of discourse*, when, in fact,

he makes very clear that he's working, or rather, unworking, out of a different

regimen or economy of *figures.* He cannot but do so! To judge him by the former,

therefore, is to create a *differend"[63]* In the development of this project, I bear witness

to this differend, offering new idiom which will hopefully be useful to architecture

and rhetoric scholars through future revisions of this work.

CHAPTER TWO

ORLANDO, FLORIDA'S LIBIDINAL BOXES

Opening Boxes

"We don't go to cities. Cities come to us, stream towards us. To occupy a city today is to surf in a dense array of overlapping media streams. The limit of the city is not the limit of some physical terrain but the limit of its packaging. To go to Manhattan is only to go to the hard copy, as it were, of all the images that you know so well, to swim in the source of the flow."[64]

Orlando, Florida is made up of packaged experiences. It is a relational web of physical and virtual spaces each with supporting spatial, material, visual, and textual rhetorics. It is a series of destination points—boxes, operating in support of a libidinal economy. Drawing from Mark Wigley's assertion above, to physically visit Orlando is "to swim in the source of the flow," it is to confirm the hardcopy. The institution of American tourism, embraced so heavily in Orlando, significantly facilitates in constructing a shared sense of what it means to be on vacation. [65]

I am intimately familiar with this flow. Orlando's boxes have always had a pull on me. I grew up 40 miles east of Orlando in Titusville, which is situated across the Indian River from Kennedy Space Center. Orlando provided my family access to franchised experiences that the city of Titusville, with all of its coastal beauty, could not. We drove 45 minutes west to Orlando nearly every weekend for dining and recreation experiences, and for a lot of boxes.

My car is still equipped with an E-pass, offered by Orlando's Expressway Authority for the comfort of smooth transit along the city's uncongested expressways free from the hassle and interruption of tolls. This drive to Orlando is

pleasurable. In contrast to the uncompromising flatness of the terrain, the expansive

sky is so frequently breathtaking that it goes unappreciated. The reflective surfaces

of the marshy waters, sand, and asphalt merge with the sky in a hypnotic haze

providing a contemplative mood for the duration of travel. I remember

anticipatively waiting to resume our transit as my mother stopped to take

photographs of herons and egrets wading in retention ponds behind the many

franchise restaurants and big-box stores populating this seemingly disorganized

urban condition along Orlando's eastern fringes.

(Figure 2.1: Big Box Recreation)

(Figure 2.2: More Big Box Recreation)

The delicate jewelry boxes on the dresser as well as the wilting cardboard boxes in the humid garage allured me. My attraction to boxes, the anticipation of their arrival, along with my fond and foundational memories of Orlando's pull help me to side step disciplinary *stasis* loops surrounding contested architectural and development practices of *big-box culture.*[66] This culture is prevalent within much of this country, yet wildly exaggerated and more observable, more despicable, within Orlando. The opening sequence for the first few seasons of the Showtime television series *WEEDS*, featuring and popularizing the 1962 song "Little Boxes" by Malvina Reynolds, captures well the ubiquitous nature of such development practices within this country.

In this chapter, I would like to offer an unlikely reading of this city's boxes—its mega-malls, strip-malls, big-box stores, hotel rooms, tollbooths, porta-potties, gas stations, timeshares, hotels, warehouses, tract houses, theme parks, etc. My reading steps outside of typical conversations about sustainable building and urban practices, by focusing instead on how human desire shapes Orlando. I argue, architects are unable to find (or invent) ways to begin designing within these conditions because they have a restricted set of conceptual starting places, known within the field of rhetoric as *topoi*, from which to pull. I invite other disciplines to this discussion, hoping for more actionable reception of this prevalent urban condition within the field of architecture. Placing more awareness on the libidinal complexities at work on us and in us in relation to box culture will open up new strategies for engagement.

Finding ways to look beyond the wastefulness in construction, and lack of architectural sensibility found in the fantastic fictional realities of Walt Disney World's Magic Kingdom, for example, reveals the "utilidor" (short for utilities corridor) infrastructure on which the Magic Kingdom is constructed. The tunnel's careful precision and architectural sophistication—its spatial material rhetoric—facilitates Disney's fantasy. Disney is a libidinal box; it is an experience driven by libidinal economics. Walt Disney provides this fantasy, an escape from our daily lives and economics, and we asked for it, if not directly then indirectly through our persistent participation.

There are roads and pedestrian walkways within utilidor marked clearly with a graphic color-coded system ensuring that characters from Frontierland don't disturb the experience by accidentally emerging through Fantasyland's entrance stair. Even the park's trash is fantastic. Collected within utilidor, an automated trash collection system (AVAC) sucks vast quantities of trash through the tunnels to a centralized collection area. One is aware of trash flying by their body when walking under the parks "stage" level. At the conceptual and physical intersection between Disney's stage and Utilidor, we can see the juxtaposition between the spatial material rhetoric of Magic Kingdom and the infrastructure supporting it. This intersection exposes the relational nature of libidinal boxes at work. The utilidor system is as much a part of Disney's packaging as are the brochures at Orlando's official visitors center on International Drive, the billboard seen on the side of Orlando's Turnpike, and www.disneyworld.disney.go.com. Further understandings of the relationship between these layers of libidinal packaging present opportunities for disciplinary expansion.

Theorist Jean-François Lyotard's text *Libidinal Economy* (*LE*) provides an ideal theoretical lens through which such a reading of Orlando's libidinal boxes can be generated. Within *LE*, Lyotard develops a set of figures as a method of depicting libidinal dispositions as they compete for energies of libidinal events. Through the construction of these figures, Lyotard attempts to portray a complex relationship between the libidinal and *dispositifs*, or apparatuses (controlling mechanisms such as capitalism).[67] The resulting libidinal affects are concrete material entities, which

he explains through emphatic phenomenological descriptions. Below I overlay these figures onto aspects of Orlando, expanding Lyotard's visualization of a libidinal economy at work, illustrating further that ubiquitous aspects of our environments proliferate and are repeated in response to desire.

In addition to working with Lyotard, in participation with rhetoric scholars and others in this collection, I wish to open up the following questions: Are there architectural techniques, such as the static "plan," driving the field of urbanism that need to be reconsidered within big-box culture? For example, are such documents incapable of capturing the many layers of urban conditions such as the ones that Jeff Rice's *Digital Detroit* (an exploration into rhetorical invention) points us to? Might we similarly consider appropriating Ulmer's "electracy," a form of literacy based upon the image, as an added layer in order to augment and reconsider the usefulness of traditional architectural *techné*? How, for example, might we invent an "electrate" equivalent to the scaling up and down, which occurs within architectural design?[68] Merging architecture and rhetoric, by way of invention, I'm hoping to stretch our understanding of the term urbanism to include areas of big-box culture.[69]

Big-Box Urbanism

I graduated in 2003 from University of Florida with a bachelor's degree in architectural design. I realized much too late that the highly nuanced design skill set that I had unquestioningly and passionately, even obsessively, devoted my life to for four years had very little relevance around much of my hometown, nor much of my

home country. The divide between the culture of architecture and my *habitus* could not be more pronounced. Populated primarily by capitalistically driven developments comprised of big-box franchises and tract homes, or "suburban sprawl," Orlando holds very little value for the kinds of objects and spaces architecture students are taught to create. Bernard Tschumi suggests,

> … a pervasive network of binding laws entangles architectural design. These rules, like so many knots that cannot be untied, are generally paralyzing constraints. When manipulated, however, they have the erotic significance of bondage. To differentiate between rules or ropes is irrelevant... what matters is that there is no simple bondage technique: the more numerous and sophisticated the restraints, the greater the pleasure.[70]

The vast majority of Orlando's physical environment is limited by very few tectonic and material restraints beyond value engineering. The fewer corners a building has, generally speaking, will reduce the cost of construction. This is why Orlando has so many boxes. Yet, a realm that is foreign to the field of architecture governs its predominant construction practices. Market segmentation data, I will expand upon below, actually aid in the development of much of our shared public and private space. If we can tap into such data collection and manipulation, through the integration of rhetorical invention and architectural design, these bondage techniques may become pleasurable to designers as well.

Upon graduation from UF in 2003, I felt I would either have to move to one of the few densely populated areas within this country with enough design culture to

sustain a living as an "architect," or I would have to find a new profession. Tschumi holds, "Neither space, nor concepts alone are erotic, but the junction between the two is,"[71] and I had become addicted to the particular cocktail of concept + space. I was too hooked on the pleasure of architecture to give it up. Ignoring my nagging concerns about the potential uselessness of my profession, I applied to graduate school in Architecture.

An answer to my concerns arrived in the mail as part of the acceptance package to the University of Michigan's Taubman Collage of Architecture and Urban Planning. The school had sent a copy of *Dimensions*, a yearly student publication of the school's work. In it I found images of tract homes, shopping carts, semi trailers, Walmart, and French fries along with the images I expected to see in a publication on graduate architecture student projects. I obsessed over a series of short essays titled, "Contested Urbanism," and was struck in particular by a quote from professor Jason Young about his recent studio project, a truck stop. In the article, Young notes, "Often referred to as 'suburban,' many of these sites are significant given their frequent repetition and virtual ubiquity within the American lifestyle. Big-box retail, strip center developments, franchise space… each is an example of an urbanism which falls outside of the comparative taxonomy of traditional, central, dense cities…" [72] Young's agenda attempts to shift the discipline of architecture's focus from the form and space of cities in order to gain, "more penetrating understandings" and more insightful strategies for urban work.

This set of short essays gave me hope that my diametrically opposed worlds might actually be allowed to touch. At Michigan, as a participant in a seven-year initiative to explore this notion of "Contested Urbanism" within the first-year graduate studio sequence, I began to make sense of my addiction, and of my home. Young's pedagogy guided me toward a legitimate place within the field, in the *doxa*, of architecture to consider the "ugly" architecture from which I, just like so many Americans, have come.

(Figure 2.3: Behind the Strip)

As a result of my experience within this pedagogy, one which Michigan's school of architecture has sadly let fall away in the last few years, I feel confident arguing for the inclusion of ubiquitous systems of production, and digital publics within urban analyses. I'm hopeful that my investigation into Orlando's libidinal boxes will add further legitimacy and interest in this conversation by offering new *topoi*, or new ways to "begin" working on and in big-box urbanism.

Strip Appeal, http://www.strip-appeal.com, is a design competition that seeks participants who will join them in their efforts to address the "blight" that small-scale strips have become in neighborhoods throughout the United States.

Orlando is littered with strip malls fitting this description, long past their prime, yet somehow hanging on. Just west of the Walmart Super Center on Highway 50, for example, are several strips that have steadily fallen out of favor since 1999 when the Waterford Lakes Town Center, a Simon mall, débuted around the juncture of 408 and 50.

Strip Appeal participant David Karle notes, "The thinness of the strip mall roof is one of hyper efficiency, developer driven economic reasoning, and a maximization of materials, but the roof could still be conceptually and physically thinner… Reinterpreting the flat datum strip mall roof… repositions the roof as a spatial driver for *new* suburban strip mall typologies."[73] Others and myself would enthusiastically welcome these proposal's to intervene on the roofs of the strips along highway 50. However, because participants in Strip Appeal such as Karle view the strip-mall as "problematic," advocating for "new" typologies, their proposals would likely become targets in the same cycle of "blight" in generations to come. Projects within big-box culture require an added dimension. This dimension requires invention oriented toward greater awareness and willingness to understand the desires that warrant the proliferation of these ubiquitous boxes.

Ubiquitous Boxes

The Waterford Lakes Town Center, a Simon Mall, is the first major retail shopping experience one reaches when traveling west along highway 50 toward Orlando.

(Figure 2.4: Waterford Lakes Town Center Entrance)

We shopped at this elaborate outdoor mall most regularly after its construction in 1999 because it dramatically shortened our commute. Simon Property Group must have accurately predicted that the eastern fringe of Orange County would become a hub for residential development in Central Florida. The property's success can be seen clearly in satellite imagery of the area.
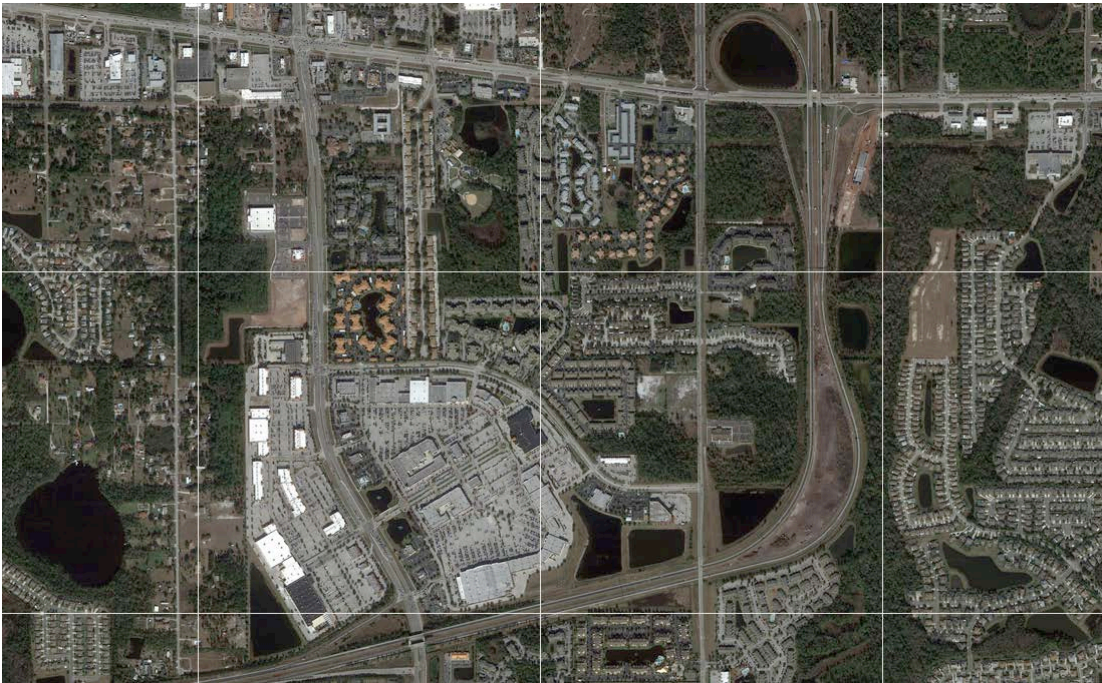
(Figure 2.5: Waterford Lakes Seen via Google Map's Satellite Imagery)

These images expose the sheer quantity and variety of libidinal boxes, the fast and loose architecture that has quickly surrounded the plaza.

Nielson, a global information and measurement company has developed a "segmentation" system called *My Best Segments*, which helps to explain how and why such construction proliferates in this country. This product provides one example of libidinal infrastructures made visible. PRIZM, one of three available *My Best Segments* products combines demographic, consumer behavior, and geographic data in order to help marketers identify, understand, and reach prospective customers. The site states,

> PRIZM defines every U.S. household in terms of 66 demographically and
> behaviorally distinct types, or "segments," to help marketers discern those

consumers' likes, dislikes, lifestyles and purchase behaviors. Used by

thousands of marketers within Fortune 500 companies, PRIZM provides the

"common language" for marketing in an increasingly diverse and complex

American marketplace.[74]
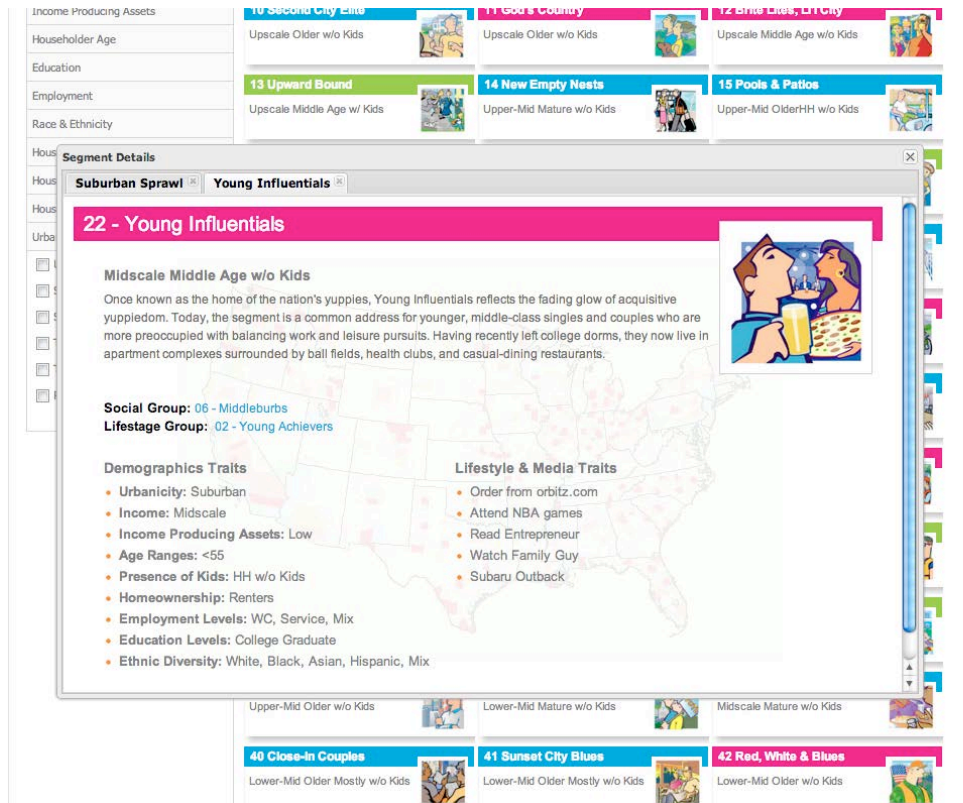
(Figure 2.6: Snapshot of Nielson's "My Best Segments" Interface)

My Best Segments catalogues desire (spending habits) by way of statistical data and

analysis that I am not qualified to explain. However, this record is made visible and

easily searchable, allowing the information to inform business strategies to repeat,

adjust, or morph as needed from place to place depending upon what kind of

libidinal intensities might persist there. This operation results in the ubiquitous and

sometimes surreal spaces seen in and around the eastern portion of Orange County.

Entering the zip code 32828 into My Best Segments' zip code search query

renders the five most common of the 66 PRIZM lifestyle groups found in this section

of Orange County. These five groups are, Blue Chip Blues, Home Sweet Home, Kids

With Cul-de-sacs, Winner's Circle, and Young Influentials. Each group provides

corporations such as Simon Property Group a snapshot of the group's lifestyle and

media traits in addition to 2011 demographics data. The Winner's Circle, for

example, is described as follows:

> Among the wealthy suburban lifestyles, Winner's Circle is the youngest, a
>
> collection of mostly 35 to 54 year-old couples with large families in new-
>
> money subdivisions. Surrounding their homes are the signs of upscale living:
>
> recreational parks, golf courses and upscale malls. With a median income
>
> over $100,000, Winner's Circle residents are big spenders who like to travel,
>
> ski, go out to eat, shop at clothing boutiques, and take in a show.[75]

The influential nature of this data collection and visualization on our shared public

environment recommends the possibility for intervention within it. What if

designers were to use this product as a model for what could be achieved by

incorporating a closer look at desire's influence? I don't mean to suggest architects

should forget about physical construction, or about Tshumi's pleasurable binding

laws of spatial and material design, taking up market segmentation research

instead. Areas bound by the hooks of such segmentation data, exemplified by the

Waterford Lakes Town Center, escape the common definition of urbanity in

architecture. But, these areas are significant to so many in Orlando and much of the

United States. Thus, they are viable conditions for serious urban analysis. Such analysis must be willing to consider the perspective of those individuals making up the "Winner's Circle" lifestyle segment, living adjacent to Waterford Lakes Town Center, and loving it.

(Figure 2.7: Behind Waterford Lakes 1)

(Figure 2.8: Behind Waterford Lakes 2)

Lyotard's term *differend*,[76] used to describe a situation that defies resolution, is useful here. In *Libidinal Economy* he explores the *differend* in the chapter, "The Desire Named Marx." Lyotard demands that we consider Karl Marx's humanness—his potential madness—simultaneously while we are considering his writing. Victor Vitanza has suggested on this topic that the text actually be conceived *as* Lyotard's madness even more than as a theory.[77] Lyotard portrays "fat bearded Marx" and

"little girl Marx" as one conflicting figure, as one hermaphroditic and conflicting body. Captured in this section, Marx's non-rational forces of sensation and conflicting emotions allow Lyotard to express that the world is actually moved in the ways that feelings move people.

Lyotard does so controversially by comparing a prostitute's body of work with the work of "intellectual sirs," we academics in our ceaseless efforts to produce "more and more words, more books, more articles." Lyotard questions why we, "political intellectuals," tend to commiserate towards the proletariat, suggesting that a proletarian would hate us because we are unwilling to accept the reality "that one can enjoy swallowing the shit of capital…" Lyotard posits further,

> You situate yourselves on the most despicable side, the moralistic side where
>
> you desire that our capitalized's desire be totally ignored, forbidden, brought
>
> to a standstill, you are like priests with sinners, our servile intensities
>
> frighten you… And of course we suffer, we the capitalized, but this does not
>
> mean that we do not enjoy, nor that what you think you can offer us as a
>
> remedy…does not disgust us, even more.[78]

Vitanza similarly exaggerates and prioritizes the importance of holding contradictory thoughts/emotions when "making" rhetoric.[79] This is undoubtedly a critical skill for architects and urbanists to develop also. However very few pedagogical strategies are currently being developed to strengthen such a skill. Both Vitanza and Lyotard allow their writing to fold and zigzag. There is an obvious pain and pleasure involved in the process of both thinkers' writings. This pleasure and

pain is marked by shifts away from the intention to inform (although a transaction of information does happen) toward an intention to inspire perpetually new realizations about commonly accepted principles. There is a shift away from a finite, or set amount of information to be conveyed through neutral language, toward an understanding of writing as capable of uncovering the unknown, suppressed, or forgotten—the ubiquitous. This shift can also be conceived as a process of discovery or design.[80] Lyotard would have us all bear witness first, initiate reasons to pause, before seeking solutions through trending theories, technologies, or structural systems.

It is with this intention that I offer the phrase *ubiquitous libidinal boxes*. With it I call attention to externalized (physical and/or digital) manifestations of human desire-driven energy flows. Though ubiquitous libidinal boxes, such as the Waterford Lake Town Center shopping experience, are prevalent within and around Orlando, representing one is difficult. They are hard to pin down because they are backed by statistical and numeric feedback loops acting upon constructed data and market research. Desire is manipulated by this data. Franchises channel this information toward our discretionary income most easily while within a libidinal economy—when we are on vacation, immersed within a franchised experience, when using our iphones, or even when driving our car. As a hybrid rhetorician/designer I have allowed myself to view this reality with fascination—to regard it as an opportune moment from which disciplinary invention and expansion might occur—rather than to resist it. The logics found in big-box culture, while

studied in marketing and packaging design, have outlived most of the static and formally oriented strategies and tactics found within most architectural design studios.

Operating virtually, behind the scenes, ubiquitous mechanisms actually aid in forming vast amounts of our shared public and private environments.[81] Such research endeavors literally materialize desires. Bringing further rhetorical scholarship to bear on this situation will offer architects and urbanists an opportunity to design with more awareness about the ubiquitous, what drives it, and why it is there.

Offering designers a way into the intricately woven realms of both market segmentation and the spatial experiences they statistically track, I diverge in my exploration of Orlando's ubiquity from Venturi, Scott Brown and Izenour in their iconic project *Learning from Las Vegas*. Within this project, only the physical aspects of Las Vegas' everyday/ugly/ubiquitous are considered in relation to architecture and its communication. I argue that we must see beyond the physical appearance of Orlando's libidinal boxes so that we may actually see them. The physicality of these boxes, their transient nature is so ubiquitous that they are nearly invisible. To be in and around Orlando's boxes is to exist in a realm of heightened desire. In this state, we exist in our minds and bodies, acting quickly upon impulses. This invisible force points to the distributed and networked aspects that now drive urban forms today. Such driving forces require more disciplinary concentration.My investigation is supported by designer Jaakko van 't Spijker, former Studio Sputnik founder, who

examines what opportunities the study of mass culture can offer architecture by

shifting the field's traditional analytical focus away from the physical aspects we see

around us in the process of spatial design toward a more relational view of how

culture and space construct one another with seemingly unexplainable complexity.

Spijker suggests that architecture "can be approached as 'packaging machine' rather

than either Duck or Decorated Shed, demonstrating that objects and the lifestyle

surrounding objects become entrenched into a vicious circle where each become

symbols for the other, they become a

package."[82]
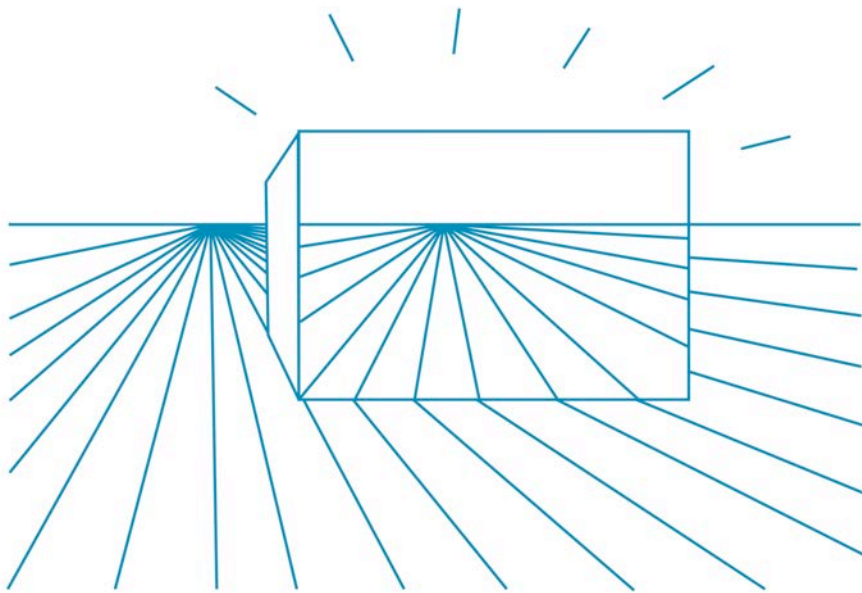
(Figure 2.9: Packaging Machine Diagram, Reproduced with permission of Jaakko
van't Spijker, Studio Sputnik founder)

Spijker, like architect and urbanist Rem Koolhaas of OMA, now place a premium on

the experience of architecture.[83] Kazys Varnelis explores this disciplinary evolution

in *Networked Publics.* Varnelis describes such architecture as similar to the work of

Artist Andreas Gurskey, Andrea Fraser and Cristoph Buchel, dubbing them, "studies

of the real." [84] It is to this emerging fascination/excitement about urbanism that I

wish to offer my interest in Orlando's *ubiquitous libidinal boxes.*

Spijker's "packaging machine" diagram helps support my claim that the

field's relationship to representation is in a state of flux. I'm interested in harnessing

the design potential imbedded within human desire, in imagining ways to visualize

the impact invisible libidinal intensities have on materiality. The simultaneous

ubiquity and fantasy found in Orlando, offer a perfect subject matter. I realize, with

Lyotard as my guide, that suggesting a singular, overarching solution would be

inappropriate. What I offer here is an example—one approach. I wish to lay the

foundation for architectural projects that are more capable of operating—

employing aesthetic and critical thinking skill sets—within ubiquitous libidinal

infrastructures of urbanism. Resting on the assumption that such spatial practices

derive solely out of capitalism results in resistance and criticism, and limits the

possibility for a fuller spectrum of inventive design processes from occurring there.

Destabilizing fixed *stasis* loops surrounding the unsustainable nature of these

building practices offers more architectural operability. The construction found

within these seemingly infinite boxes could perhaps be considered more

architecturally if this language game were to become altered. This shift might

happen if students of architecture were provided opportunities to develop work with the cultural agency of projects like *Libidinal Economy*, stressing inventive cultural research methods alongside the important inventive design and composition that will always persist. Lyotard refers to this unique process as a "theatrical fiction."[85] It is an additional or alternative—alternative to what we might automatically assume or discern—description of how social structures and reality operate.

The area surrounding the Waterford Lakes Town Center could alternatively be described as an ethereal context of transient dreams where loose mediums and connectors such as paint, asphalt, and thin unarticulated surfaces can easily authorize fast and loose associations. Here a loose impulse can result in overabundance, indulgence, and a lack of restraint, resulting in a radical transformation of over 500 acres in less than five years. Large modulated contextual elements can be deployed to create an immediate loose connection with what has been communicated to "be," resulting only in the hunt for something new. The immediate trucking of portable modules of context acts in response to these transient dreams that never seem to be fulfilled. The large modulated context might begin to morph with the truckability of the ubiquitous asphalt surface. This aleatory surface might loosen, becoming thin layers, which thicken and fold to house more libidinal boxes, thus continuing to indulgently allow for even more immediate trucking of portable libidinal infrastructure.

Exaggerating the libidinal nature of these architectures might offer more transparent awareness of how desires influence space. Such a shift in architectural agendas, away from problem solving and onto inventive cultural observation, reveals my interest in overlaying rhetorical scholarship onto the field of architecture.

Mobilizing Libidinal Boxes

A libidinal economy can be described simply as a system that attaches value or exchange onto human fantasy or fear. Orlando's tourism industry, as well as its emphatic acceptance of franchised experiences exemplifies libidinal economics. Lyotard uses his figures to demonstrate that the libidinal exceeds representation. Again, Orlando's network of packaged experiences is similarly a moving target.

In Lyotard's theatrical fiction, the *libidinal band* is used to represent the "primary processes" of desire or libidinal intensity. He describes this band with the help of the visual/formal metaphor of both a Mobius strip and a Klein Jar. The *libidinal band* is continuous, like both of these examples, it has no inside or outside. Libidinal energy circulates along the band in a random fashion with "red-hot intensity," or potentiality. Ian Hamilton Grant suggests in the introduction of *LE*, "As a kind of persuasive fiction, the various descriptions of the band… account for the closures and exclusions inherent to re-presentational thinking and suggest a 'pagan' manner of affirming the differences and singularities that run through the libidinal band in an aleatory and indeterminate fashion."[86] Lyotard's vivid treatment of flesh aids in expressing the corporeality inherent in libidinal investments, a shift away

from rigid opposition toward a system of continual framing and reframing of the same surface into *this* and *not this*.

I like to think of Orlando's unending roadways in relation to Lyotard's libidinal band. Using Orlando's corporeality, we can expand Lyotard's figures in order to further materialize them. For example, there is a drag strip called Speed World off of Highway 50 along the eastern fringe of the city. The sign for this place is a tricked out school bus claiming to be the fastest in the world.

(Figure 2.10: Speed World Bus)

The thrill of drag racing is tied up intricately in working on your vehicle, putting yourself in real danger, and of course the documented speed-time and bragging rights that winning offers. Speed World would not exist without the cultural inheritance of the ubiquitous asphalt band that twists throughout Orlando, its auto dependency, and the junkyards this dependency renders. The obsessive passion for cars, loud ones with elaborate muffler appendages, white powder coated wheels, and other more radical customizations, is born from the ubiquitous flat and expansive highway in and around Orlando. Eliminating the highway system would mean the eventual extinction of this particular manifestation of libidinal intensity, a significant sub-culture in Orange County.

Lyotard considers the bar and the band to be one and the same.[87] Orlando's unending asphalt band and its libidinal boxes are also one and the same. The ubiquitous highway system is understood as goods transport infrastructure, as a hardcopy of a network, as a way out, and a way back home. The truck stop, the rest stop, the gas station, and the fast food joint all rely on and also support this undervalued life supporting substrate of American urbanism.[88] Orlando natives treat everything as if we are moving on a roadway, having no time for fine grain subtlety. We always have somewhere further to go.

Yet, Orlando's highway and its libidinal boxes are also not the same. Lyotard suggests that in time the red-hot band begins to slow and cool, forming bars. *The Bar* references stable structures that exploit libidinal intensities. Contingent upon one's speed, as with Lyotard's bar, Orlando's boxes become unique experiences that

are distinguishable from the relational yet distinct experiences one feels while driving. The billboard signs populating Orlando's 408 can be seen similarly, as yet another manifestation of libidinal intensities slowing and cooling. Paul Virilio poignantly describes this driver as a "voyeur voyager," a non-passive subject position, who unlike the cinema spectator, penetrates the screen, perforates the landscape, and composes moving imagery with the steering wheel, the brake, and the accelerator.[89] With Virilio's voyeur voyager as a new urban subject, we can see how desire manifests Orlando's urbanism rather than the other way around.

(Figure 2.11: Mobilization of Libidinal Desires)

Desires are mobilized in capitalism's design along the asphalt band offering a continual flow of consumption. The uncanny correlation between what is consumed and consumable in relation to Nielson's My Best Segments predictions for Orange

County provides proof of the inability to easily break from the pervasiveness of these building practices. Thus, I feel compelled here to urge designers and scholars to work with rather than against them.

Lyotard's figures help to expose a suppressed awareness of the agency of objects—how they operate in and on us. Along with the jacked-up, the chopped, and the low-riding vehicles surrounding Speed World, the more universal narrative mythologies of highway space and its frontier narratives such as the Marlboro man, and ad campaigns like "Built Ford tough," and "Chevy: like a rock," operate beyond means-ends capitalist objectives. Conceptual opposition to these apparatuses, Lyotard maintains, can be reconsidered through an exploration of material figures. With this added dimension, architects can conceive of the simultaneous pleasure and pain of *incompossibility.*[90] That is, we can suspend our conceptual opposition to big-box urbanism in order to understand the libidinal as a powerful influence over it, in the process of developing an expanded understanding of urbanism.

Wrapping Up

Libidinal intensities and *affects* are two concepts that Lyotard uses to refer to unpredictable occurrences, or events exceeding in logical/ rational interpretation and/ or representation. The notion that more exists than can be clearly accounted for by a theory or model—an excess or slack—is central to *LE*. We forget how much we abstract and omit in the process of "disciplining," of becoming and sustaining a discipline. This is a significant thought experiment that I would like architecture to

take a larger part in, as a strategy to balance our current bend toward architecture as an act of problem solving.[91]

An acute awareness of Virilio's "voyeur voyager," and her libidinal potentiality, her invisible yet material *puissance*, ought to reconfigure the way we teach and learn about space, architecture, and urbanism today. This will require participation from many disciplines, blending the sciences and the humanities even more carefully and thoughtfully. My transdisciplinary call to action should be viewed positively toward productive disciplinary expansion on urbanism.

It is impossible to clearly state goals and anticipated outcomes of such expanded projects at this time. I can simply suggest that such works consider rhetorical invention as part of the design process, and exaggerate and/or re-frame human desire, affirming that "the manmade landscape is a cultural inscription that can be read to better understand who we are, and what we are doing."[92] Such works must never start the invention/design process with the sole premise of solving problems. They must also be willing to look beyond the formal and material aspects of a built work in order to understand more fully its relational context. Scholarly works on urbanism aught not attempt to directly solve world, or even disciplinary problems. Rather, such research, borrowing here from Greg Ulmer, should address what we can't yet understand about these problems.[93]

I would like to conclude by discussing Douglas Darden's project "Sex Shop," from the book, *Condemned Building*. This compilation of design projects provides an example of how architecture has integrated poetry and literature successfully in the

past as a means to address what we cannot yet understand about the field of architecture and its purpose. Darden asserts, "The ten works of architecture cited in this book were constructed from a particular canon of architecture that has persisted throughout the centuries and the varieties of architectural styles. The buildings are a turning-over, one by one, of those canons. Like the action of the plow, this was done not to lay waste to the canons, but to cultivate their fullest growth."[94]

One of these projects is particularly useful in exposing my claim that disciplinary expansion must continue within urbanism. Peter Schneider notes, "Of the ten projects illustrated in *Condemned Building*, Sex Shop is marked by the dramatic fact of the absence of the project itself. All of the other projects in Darden's corpus are compellingly present."[95] Examining Orlando's corporeality in relation to Lyotard's figures frames Darden's struggle to represent Sex Shop. The tight urban site chosen for the project is problematic. A sketch of the proposed site configuration can be seen in the un-published drawings Schneider has uncovered, highlighted here in figure 12.
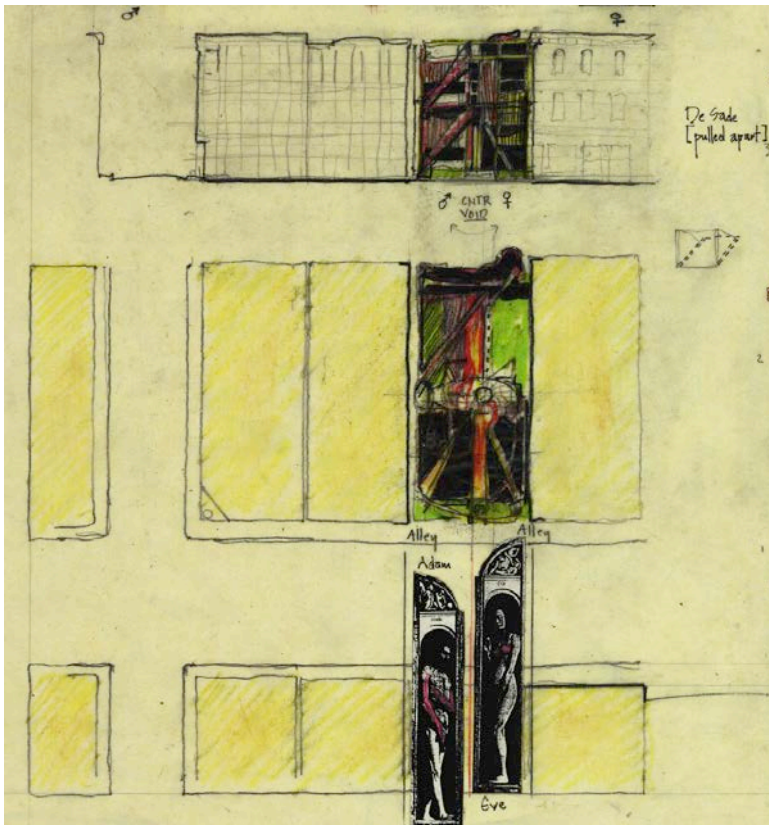
(Figure 2.12: Douglas Darden's sketch of Sex Shop in context, image reproduced with permission of Peter Schneider, Douglas Darden archivist.)

Darden's Sex Shop is better suited for the urban condition of Orlando's ubiquitous libidinal boxes, where infrastructures supporting wild desires thrive. Orlando's boxes exist within a vast, flat expanse affected by minimal formal constraints. Such a condition is needed in order to explore the cultural mythologies that Darden used to map the ground for Sex Shop's rhetorical territory. As I have demonstrated in this chapter, there are other laws governing this territory that are not currently included within studies of urbanism. We do not currently understand, and typically don't even consider the immaterial forces acting upon physical environments. As such,

architectural projects are very rarely conceived as "fitting in" among the urban conditions I have chosen to explore here.

Sex Shop is also distinct in the collection because it attempts not only to turn over the canons of architecture, but it also forces us to consider the relationship between architecture and desire. Architectures within a libidinal economy such as Orlando can be described through this relationship. To study the ubiquitous architectural practices of immediacy between desire and the strange and surreal physicality of Orlando's libidinal boxes is to approach the problem currently defined as unsustainable building practices from a radically new direction. My investigation might be described simply as a pause, as an attempting to map a new, yet ubiquitous territory. This is an example of research that aims to describe, to map, that which can't be understood about the problem.

CHAPTER THREE

MYRTLE BEACH SOUTH, CAROLINA'S LIBIDINAL EXCESSES

"Ours may be the age of testimony, but this is not to say that anyone knows how to witness."[96]

Productive Waste

Within this chapter I will continue to draw upon Jean-François Lyotard's *Libidinal Economy* as a theoretical lens, now with added emphasis on the *differend*. Lyotard describes a *differend* as an unstable state of language wherein a situation exceeds communicability. This unstable state is signaled by "what one ordinarily calls a feeling: 'one cannot find the words,' etc."[97] Lyotard's *differend* generally addresses a conflict between two parties "that cannot be equitably resolved for lack of a rule of judgment applicable to both arguments. One side's legitimacy does not imply the other's lack of legitimacy."[98] Auschwitz is an example by which Lyotard explains the *differend* as a "double bind" or catch 22. The victims (witnesses) of the Nazi gas chambers at Auschwitz, for example, cannot prove their case according to Faurisson's requirements for an eyewitness testimony.[99] There are no surviving eyewitnesses. Though the subject matter of big-box urbanism[100] will never match the painfulness of this example, exigency for bearing witness to new architectural idioms within it is far reaching. Big-box logics rival institutions for culture's attention, and they are currently winning.

That is, big-box logics elude the discipline of architecture. Its overwhelming pervasiveness threatens the foundation of our curricula. We turn away at the precise moment big-box culture generates the context for many lives to happily

unfold in this country. We remain un-engaged or partially engaged with it because we do not fully understand it. We argue with it, but at cross-purposes.

With his theoretical construction, Lyotard provides his reader's permission to hesitate, urging us to listen when "something 'asks' to be put into (new) phrases."[101] He emphasizes finding new linguistic idioms. I re-read this theoretical construction for urban and architectural applications, offering that the pervasiveness and sheer quantity of big-box urbanism in this country demand that libidinal infrastructures are brought into focus. In the last chapter, I addressed architecture's inability to work within conditions of big-box culture/urbanism. I offered the need to invent new conceptual starting places in order to focus on what cannot yet be understood about this "problem." Trans-disciplinary agendas between rhetorical scholarship and urban intellectual work will offer architects and urbanists an opportunity to break from disciplinary stasis loops such as "sustainable." Only then can we discover ways to bear witness to new idioms.

Such an approach contrasts sprawl rhetorics that fault the land-use patterns prevalent within spaces like Orlando and Myrtle Beach for aspects of social strife. Galina Tachieva suggests, within *Sprawl Repair Manual*, "social problems related to the lack of diversity have been attributed to sprawl, and health problems such as obesity to its auto-dependence."[102] Tachieva defines sprawl as "a pattern of (urban) growth characterized by an abundance of congested highways, strip shopping centers, big boxes, office parks, and gated cul-de-sac subdivisions—all separated from each other in isolated, single-use pods."[103] From this perspective, physically

modifying Myrtle Beach's urban growth patterns appear as the ideal solution to such problems. I would like to see architecture move beyond its compulsion toward problem solving pedagogy. In my search for new kinds of conceptual starting places, new *topoi*, I have grown to view waste and expenditure with perhaps more vigilance than sprawl rhetorics would typically allow.

With my reading of Myrtle Beach, I wish to complicate perspectives that hastily react to wastefulness principally as a problem to be solved. I wish to call them out on their well intentioned yet limited scope in order to address a fuller spectrum of urbanism. An expanded urban focus requires the invention of *seeing practices*, or practices of seeing more than we would have already automatically been able to see.[104] With a fuller spectrum of what is categorized as urban, we gain access to certain unforgiving realities that allow for the current practices of urbanism in America. An example is the rendering industry of animal co-products, which I explore in the next chapter in detail. My close encounter with the rendering industry offers this project a perfectly gruesome and little known secret that supports our ways of life in this country. Seeing rendering as a ubiquitous libidinal infrastructure will help me to pick at the tightly woven threads of disciplinary perspectives, hopefully starting an unraveling process.

Jean Baudrillard argues that affluence ultimately only has value in wastage.[105] He would have us revise our assumptions about cultural needs such that waste is seen as an essential function, becoming the site where our values are actually produced. If the superfluous precedes the necessary, wasteful building

practices then are not understood as irrational residues of consumption, or reckless enjoyment. "Within this perspective, a definition of consumption as consumation [sic]—i.e. as productive waste—begins to emerge . . . expenditure takes precedence in terms of value over accumulation and appropriation (even if it does not precede them in time)."[106] Within the logic of big-box urbanism, to consume and to throw away is to communicate to others about what you are and have become in this world. What we throw away signifies our status in life.

Baudrillard believes that we are coerced into using consumption's system of signs in this way. I contrast this view through my reading of Lyotard. Looping back to the last chapter, recall Lyotard's hermaphroditic Karl Marx who demanded that we consider Karl Marx's humanness—his potential madness—simultaneously while considering his writing. Lyotard portrays "fat bearded Marx" and "little girl Marx" as one hermaphroditic and conflicting body. Marx's non-rational forces of sensation and conflicting emotions allow Lyotard to express that the world is moved as feelings move people. Melodramatically, Baudrillard commiserates with the proletariat. He is unwilling to accept the reality "that one can enjoy swallowing the shit of capital…"[107] I draw upon his melodramatic stance, offering that we need to extend a more compassionate stance toward ourselves and our intricately woven relationship with the capitalistic spaces our desires are complicit in creating.

We need to be honest with one another and ourselves about a few things. First, most Americans enjoy eating—meat and poultry in particular. Considering the economic contributions made by the poultry industry and Americans undeniable

love of chicken it is fitting that in December of 2002 New York Times Magazine

announced Avigdor Cahaner's molecularly shuffled featherless breed of chicken as

an idea of the year.[108] I know about this because I was asked to study the featherless

chicken as an architecture student at University of Michigan within the studio titled

Ideas Work Society.[109] After drawing the featherless chicken randomly from a ball

cap in early September 2005, my studio work joined in the celebration of September

as national chicken month. In its 16th year of observance this celebration sought to

highlight the health benefits, ease of preparation, and the versatility of chicken.

Avigdor Cahaner was a guest of honor.

My design research uncovered that an error bias, the kind and degree of

scientific uncertainty an activity might have, has implications for the process

agencies use to reach sound and publicly acceptable scientific explorations. This

notion of public acceptance is interesting in its ability to accelerate and decelerate

based on shared cultural values. The featherless chicken, and the research it helped

direct, prompted a conceptual framework to be explored materially and visually.

Each step in the design research project, guided by the featherless chicken's cultural

material rhetoric, sought to reveal that which was hidden in plain sight. For

example, mapping an Idaho baking potato established a visualization technique,

which drew upon the notion of latency, and non-neutrality within the seemingly

homogenous surface of each slice of the potato. Building upon the potato slicing

technique, a biopsy and an x-ray of a New York Times Magazine Sunday edition

helped me to reveal a new spatial material condition by manipulating ones

awareness about the material surfaces of the newspaper
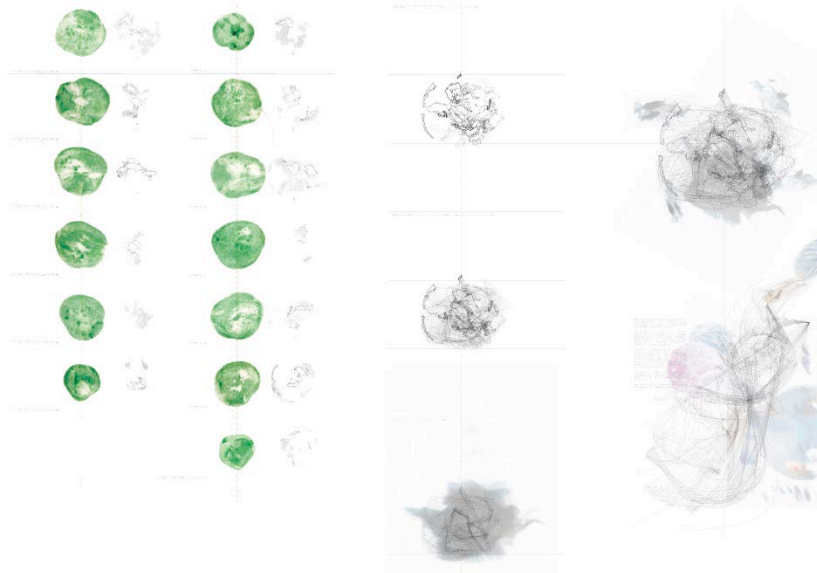
(Figure 3.1: Mapping an Idaho Baking Potato)

(Figure3.2: Biopsy of a New York Times Sunday paper)

The featherless chicken project supports my current project. It guided me to a new

way of seeing, which has in turn led to my understanding of the libidinal. The

featherless chicken, and its ecology of objects demonstrates that libidinal economics, rather than agencies establish decisions about what is scientifically acceptable or not based on a system of wants and desires in correlation with the speeds with which desirables are able to reach us. The featherless chicken acts as an agent through which we can develop an understanding of libidinal infrastructure. The injection of Cahaner's accepted oddity into the media created a delay within evaluation, accelerating the sliding precautionary error bias window, and thus pushing public acceptance. Most importantly, it accelerated our consumption and enjoyment of chicken.

Rhetoricians are familiar with the contemptuous Diogenes who presented Plato with a plucked chicken as a way to disprove Socrates' definition of man, "featherless bipeds." It is uncanny that I can now use the featherless chicken millennia later as a persuasive cultural material rhetoric, a vehicle through which authoritative positions can be called into question. I would like to encourage more focus and value be placed on cultural material rhetorics such as the featherless chicken. Doing so will help us revise our assumptions about waste and expenditure. Waste streams are resultant externalized (physical and/ or digital) manifestations of human desire-driven energy flows. In the fifth chapter, I will call again upon the featherless chicken, examining the pedagogical need for aleatory (chance) procedures within rhetorical invention and architectural design.

Americans also love being on the move. In the last chapter I drew upon Paul Virilio's description of driver as a "voyeur voyager," a non-passive subject position,

who unlike the cinema spectator, penetrates the screen, perforates the landscape, and composes moving imagery with the steering wheel, the brake, and the accelerator.[110] I argued through this non-passive subject that libidinal drives manifests urbanism rather than the other way around. From Virilio we understand, "in the driver's seat, the immediate proximity matters little, the only important thing is that which is held at a distance; in the continuum of the trip, what is ahead governs the progress, the speed of propulsion produces its own horizon: the greater the speed, the more *distant* the horizon."[111] Virilio's non-passive urban subject helps me to illustrate an important characteristic of big-box urbanism. From the driver's seat, behind the dashboard and windshield we loose site, as Virilio suggests above, of our immediate surroundings. What lies in the distance, our future desires, are all that matter. Our culture's speed renders the spaces of the moment invisible to us. We do not really see them. Though I draw upon Virilio in order to make my claim, I do not join him in his critique of "dromospheric" (speed) pollution.[112] In turn I argue that we should embrace the reality that libidinal drives manifest urbanism rather than the other way around. Regarding libidinal infrastructures as cultural realities without critique, but with curiosity, designers will begin to tap into and design within the libidinal economy. Such a shift requires identifying a connection between information, various stimuli, and the material forms and spaces that may exist "in the distance" or farther along on the trip. This is to say, we must identify what gets us going, what keeps us going there, and what is on the horizon.

The two motorcycle rallies occurring annually in Myrtle Beach posit a cultural situation, another cultural material rhetoric, which brings specificity to my assertions above. Myrtle Beach Bike Week has brought a flood of bikers and tourists to Myrtle Beach for the last 70 years. Myrtle Beach is the primary city along what is known to participants as "the Grand Strand," a bike route that traces a strand of uninterrupted beaches stretching 60 miles from Little River to Georgetown, SC. The Grand Strand is a destination point. Successive encounters like the yearly tradition of bikers traveling to Myrtle Beach to "cruise" the Grand Strand help to build a shared sense of libidinal identity. Gregory Clark articulates this well in his *Rhetorical Landscapes in America*. This form of rhetoric involves much more than prose narrative or the rhetorical analysis of history. Cultural material rhetorics such as the ones surrounding and composing the Grand Strand keep generations of bikers coming and continue to stimulate a particular facet of urbanism in the area.

The largest African American motorcycle rally also takes place in Myrtle Beach every spring. Black Bike Week, also known as Atlantic Bike Week, "was created in response to a history of discrimination against African-American visitors and riders to Myrtle Beach and the Grand Strand Area."[113] The NAACP has used the cultural material rhetoric of Black Bike Week as a means of pointing out a racial material rhetoric, ultimately suing the city of Myrtle Beach and Myrtle Beach businesses for holding black bikers to different sets of laws, hours of operation, and general receptivity. This specific situation requires its own project. However, it is worth noting that not only does Black Bike Week bring almost double the number of

riders, but it has been reported that over 50% of participants in the Black Bike Week rally are women, whether they ride or not. "Black Bike Week is not only the largest black bike festival in the world but it's also the largest black beach week event period."[114] Though emphasis is placed on biking, both Harley's and Sports Bikes, the atmosphere during Black Bike Week has more of a party/celebratory atmosphere than during Myrtle Beach Bike week.

Recalling my discussion of Lyotard's *Libidinal Economy* from the previous chapter, Lyotard constructs the *libidinal band* in order to expose the "primary processes" of desire or libidinal intensity. The band is continuous, with no inside or outside. Libidinal energy circulates along the band in a random fashion with "red-hot intensity," or potentiality. Lyotard's vivid treatment of flesh aids in expressing the corporeality inherent in libidinal investments, a shift away from rigid opposition toward a system of continual framing and reframing of the same surface into *this* and *not this.* Previously, I drew connections between the ubiquitous and uninterrupted asphalt surfaces of big-box urbanism in Orlando, Florida where the highway seamlessly transitions into the parking lot, which flows easily in and out of libidinal boxes. Here, I reference the libidinal band again in response to Myrtle Beach's contested reception of Black Bike Week participants. Perhaps the influx of black women bikers pushes the speed and intensity of the circulation of the band beyond the limit with which it can be controlled/slowed/cooled down.

The female body is not unlike the millions of chickens we consume daily. Yet, unlike the tons of discarded chicken carcasses thrown into rendering cookers each

day, the female body remains within the libidinal economy. She can act as a witness

to her numerous exploitations. Her subject position offers an eyewitness, an

authoritative account of how libidinal infrastructures are manipulated. We are able

to learn from the female body, and from the featherless chicken, as evidence of

productive wastage.

Americans also seem to love sex. As we know, sex sells, but there is much

more to it. The sexualized feminine body is the most ubiquitous mechanism by

which libidinal energies are elicited. It plays a primary role in the entertainment

industry. Ulmer suggests, "we need to learn from Salome and her representations

exactly how "seduction" works as a rhetoric, having in mind its possible relevance as

a strategy of public policy formation."[115] I counted ten strip clubs along the ten-mile

section of the grand strand I analyzed. Myrtle Beach is perhaps the perfect place to

begin observing mechanisms of seduction. Roland Barthes, in his essay *Striptease*,

argues that stripping is a spectacle based on fear. It is a contradiction.[116] The over-

engineering of the stage performance, the show, and the costumes establishes a safe

distance between the men and their objects of desire. Feathers, tassels, fringe, and

other props establish an important gap between the dancers and the wives of the

mostly male audience. This gap provides the inherent assumption that the striptease

is a harmless and playful show. Barthes suggests that a naked woman standing still,

without the distance the choreographed strip tease allows, would actually be more

overt and forcefully sexual. The intensity of a stripped strip tease, like the onslaught

of black women bikers during Black Bike week, pushes the speed and intensity of

circulation along the libidinal band beyond the limit with which it can be controlled/slowed/cooled. Why do we perpetually orchestrate such distances from truly witnessing the libidinal band's red-hot intensity? Finding ways to observe this limit is important for my ongoing project.

Americans also love air conditioning. In Myrtle Beach air-conditioning is a must. Koolhaas et al. uses the history of air-conditioning in the United States as a pretext for the *Project on the City 2: Harvard Design School Guide to Shopping*. Sze Tsung Leong and Srdjan Jovanovic Weiss note within "Air Conditioning":

> Shopping could not have become as effortless as breathing without air-conditioning. Only air conditioning can make windowless, sealed, interiorized, artificial environments so natural and so comfortable. Along with the escalator, mechanically engineered climates enabled an explosion of the depth of the interior creating spaces increasingly divorced from the outside, increasingly inescapable, and increasingly able to accommodate virtually any type and scale of human activity, in almost any combination.

Koolhaas' *Project on the City 2* argues that shopping practices, dependent upon the artificial environment air conditioning allows, have dramatically refashioned the city. My project explores the reciprocal relationship that human desire, a latent undercurrent to shopping practices, has played in this refashioning.

A brief account of these critical admissions about our nation's love of eating, speed, sex, and artificial environments reveals a pattern of intentional distancing that was forecast by Guy Debord in *The Society of the Spectacle*. Debord asserted,

"This society which eliminates distance reproduces distance internally as a spectacular separation."[117] I am interested in finding out more about these distancing mechanisms, and their relationship to the field of urbanism. These gaps that are intentionally construct between the body and its immediate surroundings undermines the foundations of architecture. Like the overwhelming pervasiveness of big-box urbanism, the presence of these distancing mechanisms threatens the foundation of our formal and physically oriented curricula. Below I will blend design research techniques such as the ones discussed through the featherless chicken with rhetorical invention. With this trans-disciplinary construction, I address two issues. The first is the development of a mechanism through which we might learn how to witness these aforementioned orchestrated gaps or buffers. Secondly, it addresses architecture's perspective on capitalistic space. By reevaluating its conceptual starting places, its *topoi*, I help the field face a more difficult non-dualistic perspective on big-box, one which Lyotard's *differend* aids in producing. When we can operate in and on big-box urbanism from something other than problem-solving pedagogy, we will gain greater agency there.

A Paranoid Critical Method

"The subconscious has a symbolic language that is truly a universal language, for it speaks with the vocabulary of the great vital constants, sexual instinct, feeling of death, physical notion of the enigma of space—these vital constants are universally echoed in every human. To understand an aesthetic picture, training in the appreciation is necessary, cultural and intellectual preparation. For Surrealism the only prerequisite is a receptive and intuitive human being."[118]

In his discussion of invention within electracy—a form of literacy based upon images and intensified through digital technologies—Greg Ulmer theorizes a contemporary cultural shift from a literate epoch into an "electrate" epoch. He traces cultural shifts from orality into literacy in order to understand the current growing pains surrounding the emergent "electrate" epoch. His exploration is aimed at how "electracy" influences his discipline, English. Ulmer's work is unique in its emphasis on providing English and composition studies both theoretical and pedagogical approaches to begin operating electrately. He bravely asks his field to re-examine some of its foundational underpinnings within electracy. Such an approach is significant for my dissertation, which similarly focuses on how a networked culture—urbanism in an electrate epoch—might change or augment the discipline of architecture.

Ulmer's apparatus diagrams illustrate the broad strokes of his theory of electracy.

APPARATUS-2

Apparatus	Orality	Literacy	Electracy
Practice	Religion	Science	Entertainment
Procedure	Ritual	Method	Style
Institution	Church	School	Internet
State of Mind	Faith	Knowledge	Fantasy
Behavior	Worship	Experiment	Play
Philosophy	Mythology	Epistemology	Aesthetics
Ground	God	Reason	Body
Ontology	Totem	Category	Chora
Mode	Narrative	Argument	Figure
Axis	Right/Wrong	True/False	Joy/Sadness

(Figure3.3: Ulmer's Apparatus Diagram 2)

He is interested in the predominance of image culture, which has begun to act as a supplementary layer to our rootedness in literate culture. My investigations into Orlando and Myrtle Beach embrace Ulmer's assertion that entertainment and style have now begun to move into institutional focus. The *spirit* within "orality" becomes the literate *self*, which has now evolved into the electrate *avatar*. We are now cultivating identity through our online avatars by way of Facebook, Twitter, and Pinterest for example. Ulmer claims within *Electronic Monuments* by way of Lyotard

that the deferred trauma of posttraumatic stress disorder is illustrative of the compassion fatigue we currently feel as media consuming electrate subjects.

Ulmer offers the body as the new ground in electracy, analogous to where the school or church once operated within the epoch of literacy. Ulmer's hypothesis is that "the non-empirical, noninstrumentalist, disciplines do not replace scientific knowledge or literacy, but supplement it in a practical way."[119] The body in electracy is important for many reasons. To operate compassionately toward more comprehensive understandings of America's libidinal economy, one needs to understand the internal landscape of the body as well as the body's virtual extensions. Ulmer's *Avater Emergency* is devoted to this complexity. Avatar is an important issue within my project, as it provides a mechanism by which we can understand the prevalent disconnect between the body and its physical immediate proximity within big-box urbanism. Big-boxes know how to speak to avatars, and rivals architecture for this reason.

Ulmer offers an added axis of thinking we might cultivate within the electrate epoch as a clue to help us understand reasoning within electracy. Drawing upon Immanuel Kant, he refers to this axis as the pleasure/pain or joy/sadness transversal. The body helps us to develop knowledge formation strategies along the pleasure/pain transversal. With this added "axis" of thinking Ulmer posits that literacey's *topos* (categorization) morphs into electracey's *chora*. Chora is an ordering of topics into electrate categorization system based upon aesthetics, the image and mood. Chora, as an ordering system, relies upon the body to feel its way

around. Drawing upon the metaphors of electricity and felt, Ulmer has described a

logic of conduction as the primary difference needed to traverse choral information.

Ulmer offers that language, within the literate epoch, censors and limits libidinal

energies. Where Ulmer targets new understandings of civic practices through the

invention of public policy, I target new understandings of civic practice and

engagement in everyday urbanism.

Ulmer offers that the word design, in electracy, becomes design, spelled with

an "S", but pronounced with a "Z" and represented as the dollar symbol (de$ign).

Ulmer explains through Roland Barthes that the slash of the letter "Z" stings. It

offers a more biting conception of the concept of design. Quoting Ulmer:

> The axis of Pleasure-Pain concerns human well-being or thriving in the
>
> world, and is institutionalized in the Entertainment institutions of electracy,
>
> just as Right/Wrong are institutionalized in the oral apparatus through
>
> religion, and True/False institutionalized in the literate apparatus through
>
> science. One of the challenges for electracy is to discover how to manage this
>
> third mode of intelligence.[120]

Salvador Dali's *Paranoid critical method* (PCM), which Rem Koolhass draws

upon heavily within his project *Delerious New York*, adds aesthetic valorization to

Ulmer's theory of electracy. Ulmer suggests within Avatar Emergency, "one goal of

this experiment is to show that the resources of flash reason already exist, ready to

be extracted from the arts and sciences of our own time."[121] Dali's discussion and

enactment of his method through his paintings, as well as Koohaas's urban riff on

the method, offers material specificity to Ulmer's notion of conduction, or "flash reason." Koolhaas asserts, "instead of the passive and deliberately uncritical surrender to the subconscious of the early Surrealist and automatisms in writing, painting, sculpture, Dali proposes a second-phase Surrealism: the conscious exploitation of the unconscious through the PCM."[122] The PCM helps to discuss the possibility of harnessing the potential intelligence in human desire. As Koolhaas suggests, "The paranoiac turns the whole world into a magnetic field of facts, all pointing in the same direction: the one he is going in."[123] That is, Dali trusted the human brain's intuitive perception, finding connections that literate logics don't normally support.

Gilles Deleuze examines the process of artist Francis Bacon whose project similarly seeks to expose the insightful logics of sensations. Both Dali, by way of Koolhaas, and Bacon, by way of Deleuze, have imbued me with a better understanding of moments in my own design process that have granted me access into Dali's Paranied Critical Method, or Umer's flash reason. A prominent example is the role the featherless chicken visualizations played in alerting me to the significance of the opportunity to work within the rendering industry of animal co-products (explored in the next chapter). With the help of Deleuze and Kookhaas, I value those stinging moments within my design process and pedagogy as perspective ways of seeing and sustaining delirious phenomena. The more I am able to tune into them, the sooner I will be able to integrate Ulmer's electracy into the field of urbanism. Conflating urbanism and electracy means developing practices of

analyzing urban space with added emphasis on seeing more than we would automatically already see. Ulmer's pedagogy celebrates and invites established and available aspects of art and design practice such as Dali's PCM into the writing classroom. He warns that from the point of view of literacy symptoms (new practices of knowledge formation) of the emergent electerate subjectivity will appear as a generalized schizophrenia. This point will be significant if architecture wishes to move beyond its reliance upon problem-solving pedagogies.

The signs and billboards populating King's Highway in Myrtle Beach lurk above the surface of our conscious awareness and shamelessly evoke and prey upon primal human temptations. Distracted by our own hunger, lust, and desire we remain oblivious to the emptiness masked by their shadows. The owner of the sign below understands and realizes he stands to gain from this reality. Like him, I choose to see this type of condition as an opportunity for disciplinary unraveling and expansion. I fear we may never be capable of imagining "more sustainable" solutions in these ubiquitous everyday conditions unless we find new ways to understand their complexity. Problem-solving pedagogies alone will not get us there.

(Figure 3.4: Barking In Myrtle Beach)

The middle three chapters of this dissertation are devoted to an urban

exploration of the pleasure/pain transversal. Within this chapter, continuing from

the last chapter on Orlando, Florida's libidinal boxes, I draw upon at Myrtle Beach,

South Carolina. One of our country's pleasure seeking centers, Myrtle Beach is an

active tourism industry to mine for libidinal infrastructures. In the next chapter,

focusing on the opposite end of the pleasure/pain spectrum, I will draw upon the

rendering industry of animal co-products.

Bearing, Witnessing, and Standing

The Meher Spiritual Center, located at 10200 North Kings Highway, Myrtle

Beach, SC 29572, is a retreat and place of pilgrimage to the late Meher Baba (born

Merwan Sheriar Irani), an Iranian/Indian spiritual teacher who lived from 1925 to

1969. Meher Center sits on a 500-acre section of mostly virgin land along the

Atlantic coast. The presence of this chunk of land is useful in exposing the dramatic

transformation of Myrtle Beach's terrain over the last 70 years.

(Figure 3.5: Meher Center Boathouse)

I have identified the territory surrounding Meher Spiritual Center, and much of

Myrtle Beach, as an ideal site to study libidinal infrastructures.

Like Orlando, the Myrtle Beach area can also be described as an ethereal

context of transient dreams. The institution of American tourism, epitomized by the

Myrtle Beach motorcycle rallies, is also embraced in Myrtle Beach with an added

emphasis on the body. Feeding the body, showing off the body, entertaining the

body, and recreational activities surrounding the body comprise the majority of

Myrtle Beach's destination activities. Ulmer holds, "entertainment is not something

superficial, not a matter of spare time in the apparatus, but a fundamental

counterpart to work and productivity, with equal claim in the human project."[124] My

project takes this assertion seriously, by asking what it means for the discipline of

architecture.

The abruptness, with which Meher Center touches the adjacent Walmart

Supercenter to the south, and the one-mile long interruption of the emphatic

presence of hotels and condos along the Atlantic coast at the center's eastern

boundary, create an interruption in the ubiquitous, amplifying it.

(Figures 3.6: Meher Center's Cultural Material Rhetoric)

The figures expose a sharp juxtaposition between the material rhetoric within the bounds of the retreat center from the material rhetorics surrounding it. Native rocks and driftwood, for example, are carefully placed to encourage foot travel remains on the raked clay paths so as to avoid snakebites. Wildlife is abundant on the Meher Spiritual Center property, where it is lacking outside of these bounds. My tour guide informed me that the center's board is in the process of determining how to ebate the bear and deer overpopulation on the center. The forest has become depleted, and many animals are unable to find enough to eat. The guests as Meher Center withdraw from ubiquitous libidinal infrastructures of urbanism. They often arrive with all the food they will need for the duration of their stay so as to avoid having to leave the center property. They are annoyed by the steady grumble of bikes cruising up and down the strand for two solid weeks during prime retreat season in the spring.

Beyond the overt contrast between the material rhetorics of Meher Center and its surroundings, are also extreme differences in their land development and modes of exchange. Meher Baba gave five directives to his western disciples, mandating where and how the center was to be constructed. These directives were, "the place must have an equitable climate; virgin soil; ample water; soil that could be made self-sustaining to a large number of people; and the property should be *given from the heart.*"[125] Elizabeth Patterson, a prominent western follower of Meher Baba was given the land by her father for the purpose of the retreat. A letter written from Patterson to Meher Baba reads:

> It is my one desire to give the property to you forever for your spiritual cause. How best to do it can be decided when you come. You may be sure it will be given 'from the heart.' Also I am pleased to say Father gave it to me 'from the heart!' and he knows that it will be used for your spiritual and humanitarian purposes eventually. It would be the dream of my life for you to have a great center here. I can only hope you find it useful for your Universal Cause . . . [126]

Noting further contrast, the various cabins on the center, most of which were also given to the center "from the heart," have no air conditioning.

(Figure 3.7: Outdoor World seen from within the bounds of Meher Center Property)

Across from the Meher Spiritual Center is Outdoor World, one of the Myrtle Beach Mall's flagship retailers. Merchandise such as speedboats, four-wheelers, and deer stands populate portions of the mall's parking lot. Within this context the deer stand helps to illustrate that conductive logics like re-mix, mash-up and jump cut are already active in big-box culture. The decorative grasses, seen in the figure provide the only thread of association potential hunters and huntresses need to visualize their prey.

(Figure 3.8-3.9: Outdoor World, Deer Stand for sale in Outdoor World Parking Lot)

Drawing upon the argument within the last chapter, when we are in and around libidinal infrastructure, we exist in a realm of heightened desire. In this state, we retreat into our minds and bodies, acting more quickly upon impulses. We are at a distance from our immediate surroundings existing within what Koolhaas calls hyper-reality—something more and better than reality. Thus, we see past the parking lot, the leaf blower, the expansive and horrifying unarticulated surfaces of the mall and exposed utilities equipment, gazing instead upon our individualized fantasies. In *Avatar Emergency*, Ulmer expresses a similar situation when discussing the "electrate" city. He offers, "the challenge is that the lived city as a space and place is no longer visible, its borders or shape lost to perception, a loss that affects border

itself and hence identity as such."[127] Again, I respond to this as an opportunity for disciplinary expansion. My project invites architects to work with the immaterial aspects of urbanism and to participate excitedly with desire as a new medium of design.


(Figure 3.10: Seeing Practice Snapshot)

Sean Morey explains how a MEmorial is preformed in his review of *Electronic Monuments*; "The egent becomes attuned to the information sphere until she notices

a sting, theorized as Roland Barthes' 'punctum.' When the egent notices this feeling

produced by an image, news story, or other medium, the egent explores that feeling

in order to produce an image category that can capture the mood."[128] The deer stand

stung me as I stood within the Outdoor World parking lot. It did not elicit dreams of

hunting, yet it was not invisible to me either. Its obtuse qualities, for example,

resonated with famous works by architect, poet and theorist John Hejduk such as his

Berlin Masque. The stands also resemble the immense quantity of utilitarian

infrastructures that populate the extent of big-box urbanism. Some examples of

these are utilities bridges, pedestrian bridges, highway sign infrastructures, air

conditioning units, and cell towers. Like these residues of our cultural land-use

behaviors, the deer stands remain invisible to those who do not resonate with it as

useful or additive to their desiring structures.

Ulmer notes, "electronic monumentality takes up the ethics and politics as

well as the logic of tangles: the metaphor of electrate writing is not textile but felt,

not weaving but fulling. It takes the categorical image to map this tangle."[129] The

deer stand will from here be referred to as the bearing witness stand. It serves as

this project's categorical image. As noted above, there is a distance that exists

between today's urban electrate subject and their immediate surroundings.
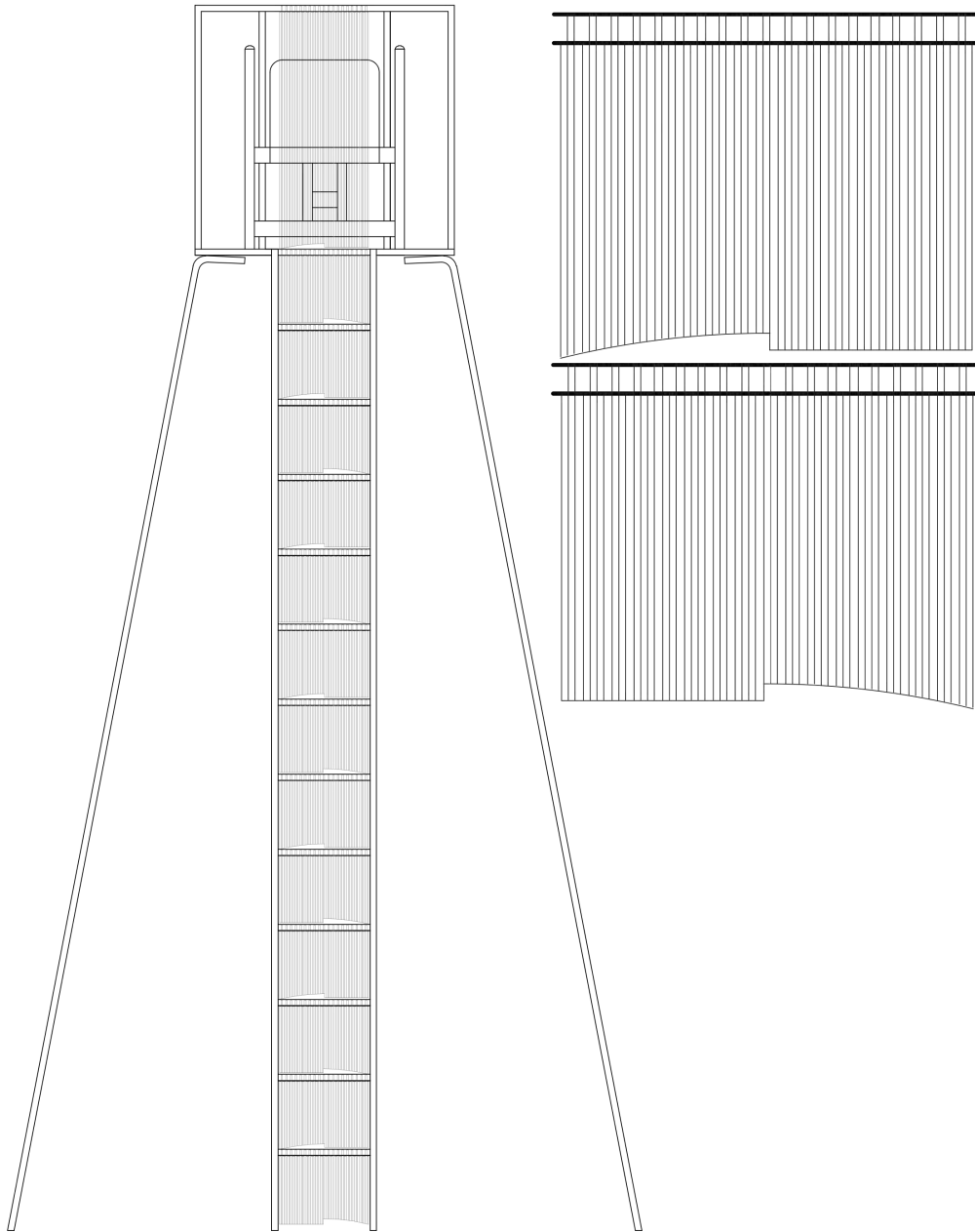
Bearing Witness Stand 1: Harley/ Hooters | Coordinates: 33.790265,-78.768309

(Figure 3.11: Bearing Witness Stand #1)

This distance prevents us from "seeing" the physical spaces of big-box urbanism—
we are blind to them. However, this collective blindness establishes one side of a
differend. Where "society" is blind—perhaps blissfully—to big-box urban abject
space, architects and urbanists as a discipline are similarly blind to society's big-box
blindness. Our discipline is built upon the visibility, tactility, and sensuality of
physical form. Both sides of this double big-box blind must be observed. Morey
notes further,

> MEmorials expose the personal and collective ATH, that is, the blindness or
> foolishness that causes us to behave in a certain way according to certain
> values. As the example of child abuse shows, our society displays "dumbness"
> about freedom at the level of child rearing. Cumulative MEmorials would
> help to map this blindness. Because the image stings at the level of emotion,
> the gathering device that helps to eliminate compassion fatigue is not the
> literate concept but mood. [130]

Mood is carefully exploited in the intricate material construction of each of the
bearing witness stands. These trans-disciplinary objects appear as ready-mades
from a distance, but they are each a one-off creations. The careful detailing and
associations the stands solicit serve many functions. Each unique apparatus attracts
only certain pockets of desiring bodies.
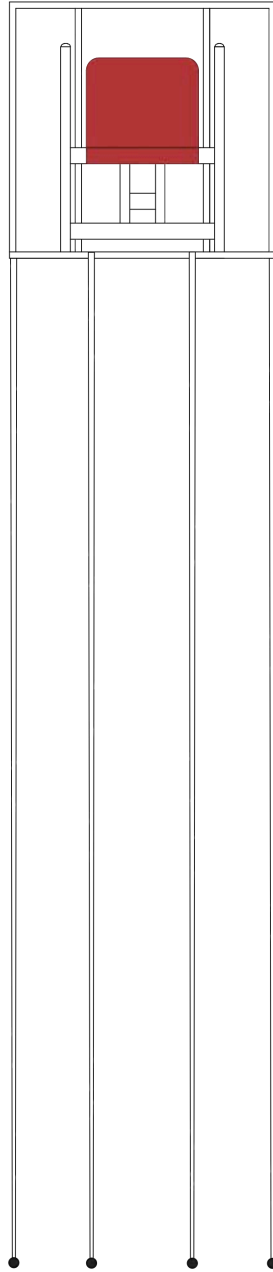
Bearing Witness Stand 2: Ferrari/Thee Dollhouse | Coordinates: 33.779522,-78.791714

(Figure 3.12: Bearing Witness Stand #2)

They lure bodies in, asking them to bear witness to new and imaginative thought processes within both the physicality and virtuality of big-box urbanism. The bearing witness stands emerge in the middle of the dissertation, at a heretofore-unintelligible tangle of scholarship on urbanism, rhetorical invention, electracy, and design pedagogy. Their presence within this chapter calls into question disciplinary expectations from each of these angles.
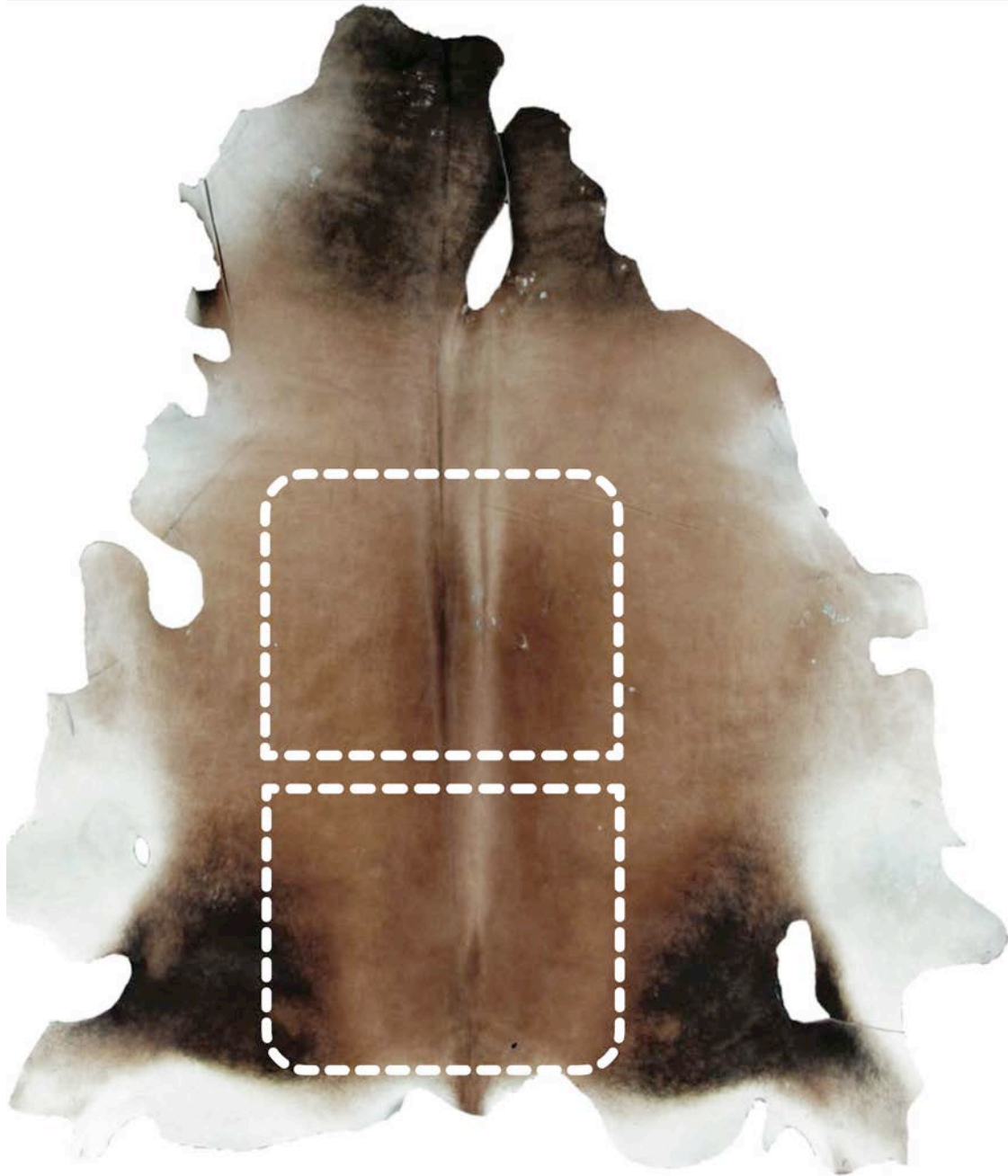
Seven bearing witness stands have been consciously positioned within the context of Myrtle Beach. Each work together to form an electronic monument, also called MEmorials [sic] by Ulmer. Together the bearing witness stands count the number of hours the double big-box blind has been witnessed. Because "the image category intensifies the "veil" in "surveillance,"[131] the deer stand's original function solicits the correct connotation to serve such a function.

The presence of the witness stand teaches us about our behaviors in Myrtle Beach, and while we are on vacation. They expose, for example, that gaudy welcome centers provide the first glimpse of the reality of Myrtle Beach, South Carolina's tourism industry. Great barkers, these shacks enlist flags, flyers, lights and color to do their bidding. Rampant advertisements and signs easily authorize loose impulses, resulting in overabundance, indulgence, and a lack of restraint at buffet-style restaurants populating the grand strand. The immediate trucking of meat (those featherless chickens) responds to the transient dreams of Americans on vacation.
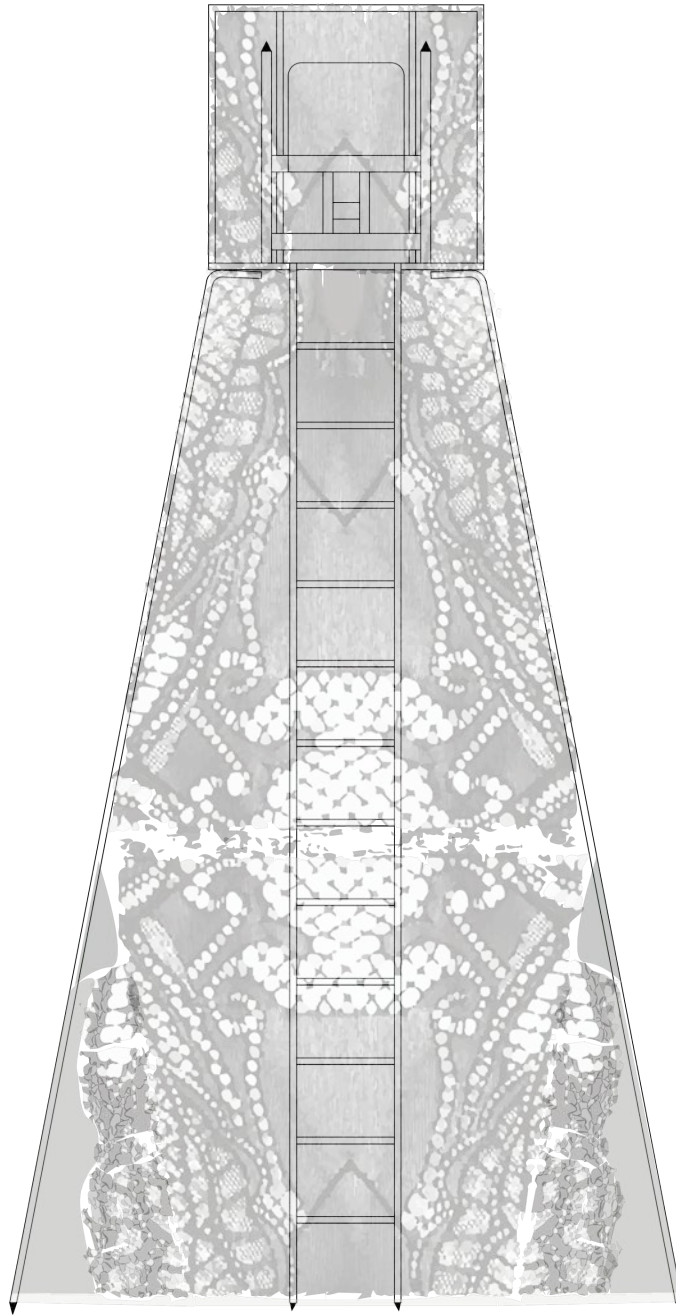
Bearing Witness Stand 3: McQueen/Market Commons | Coordinates: 33.670193,-78.940061

(Figure 3.13: Bearing Witness Stand #3)

(Figure 3.14: Bearing Witness Stand #4)
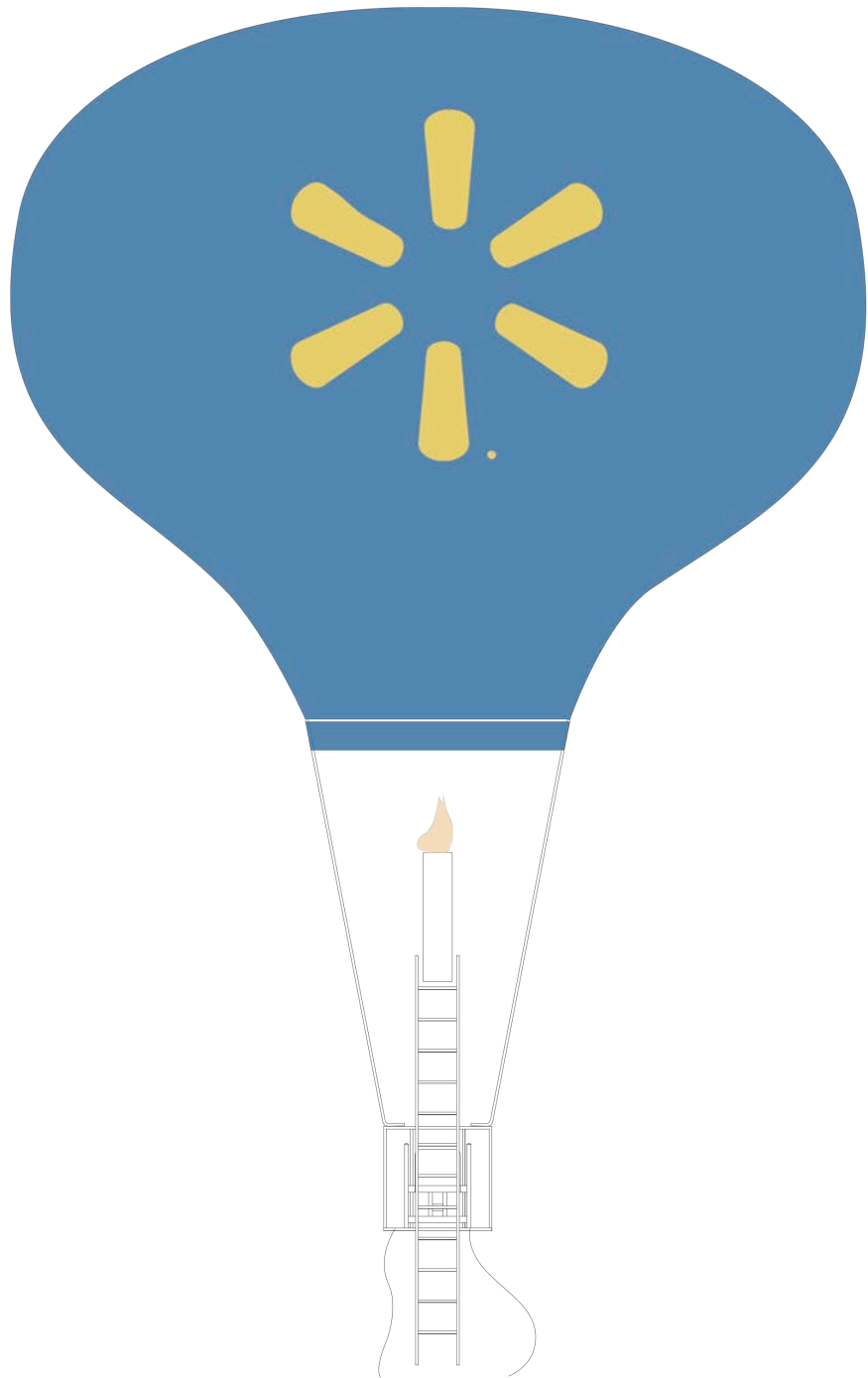
Bearing Witness Stand 5: Meher Center/Walmart | Coordinates: 33.787485,-78.768089

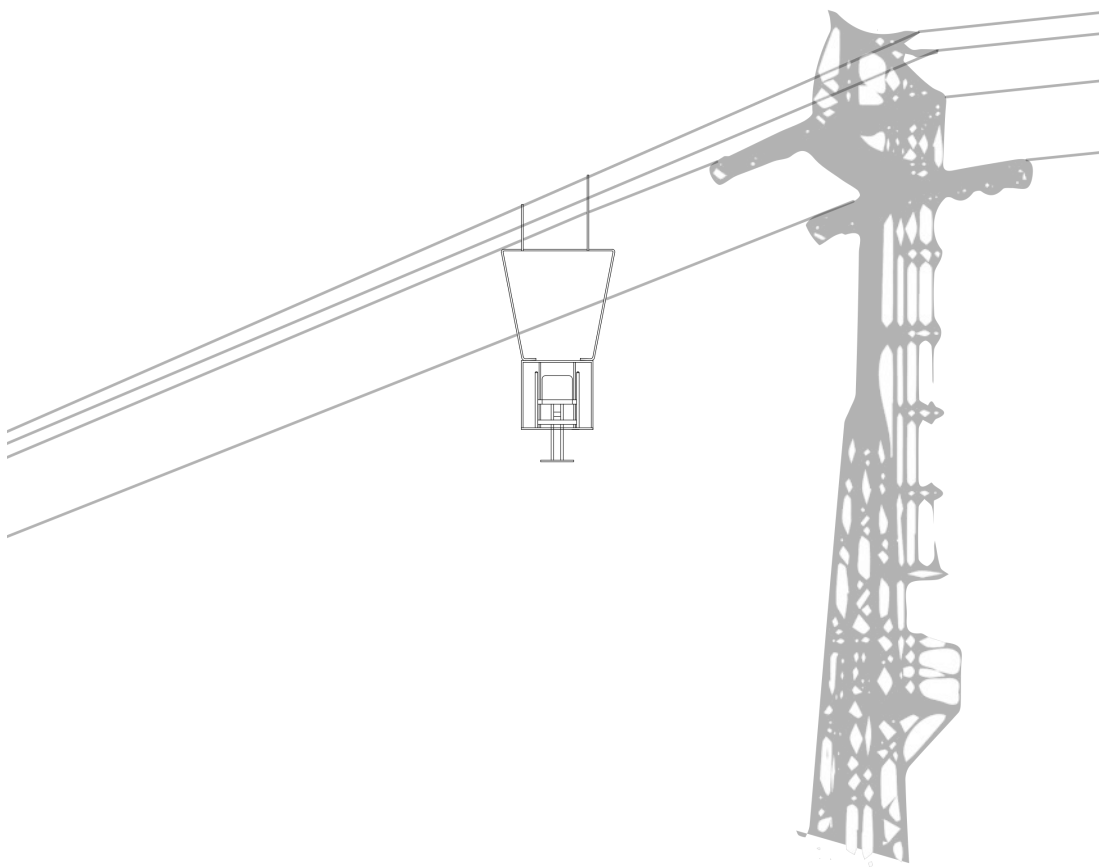(Figure 3.15: Bearing Witness Stand #5)
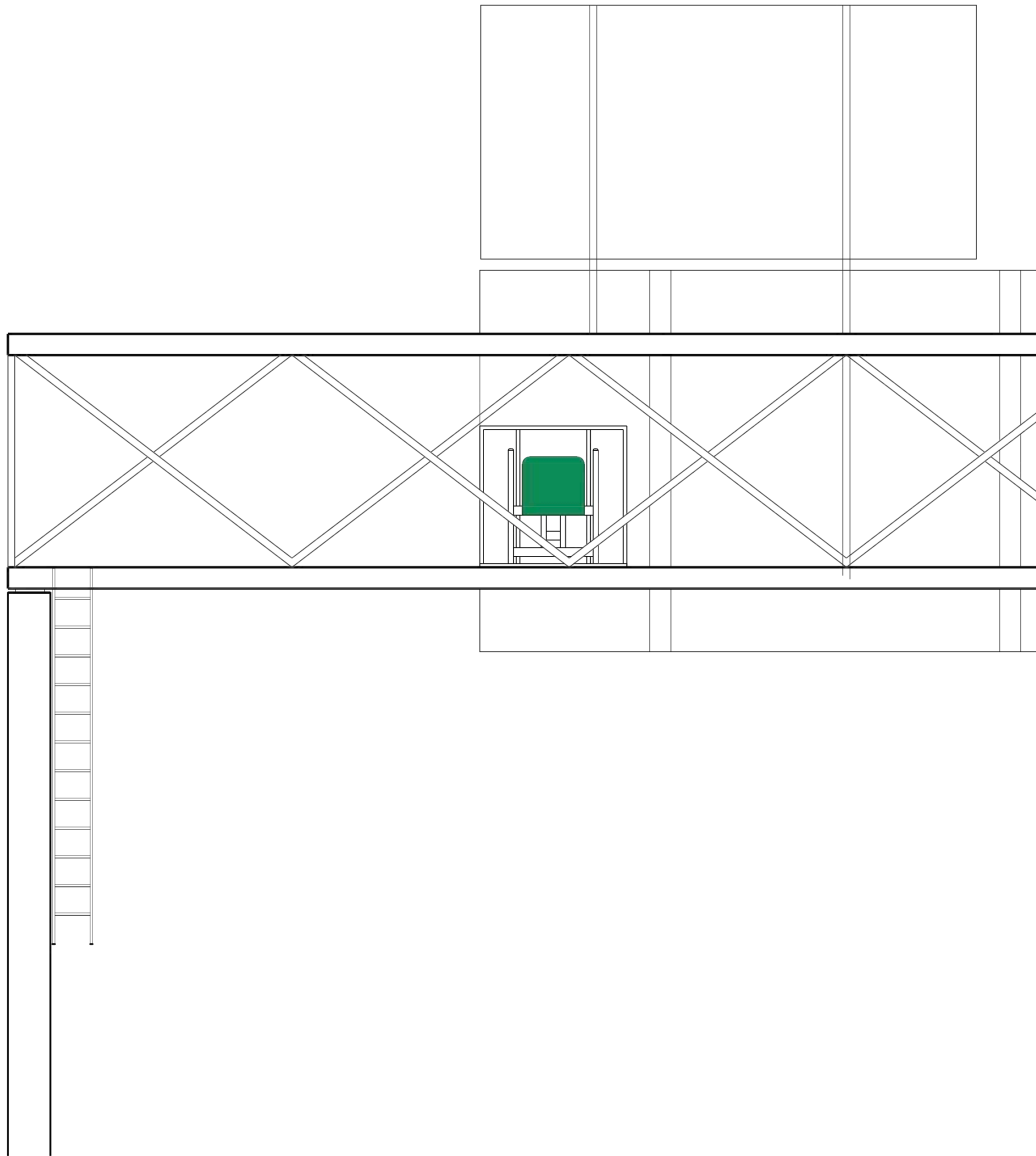
Bearing Witness Stand 6: Highway Sigh | Coordinates: 33.789663,-78.768054

(Figure 3.16: Bearing Witness Stand #6)

Bearing Witness Stand 7: Sign Seeing/Gondola | Coordinates: 33.778185,-78.794463

(Figure 3.17: Bearing Witness Stand #7)

The signs and billboards populating King's Highway in Myrtle Beach, South

Carolina are dangerous. Massive yet truly unseen, these hunters lurk above the

surface of our conscious awareness and shamelessly evoke and prey upon primal

human temptations. Distracted by our own hunger, lust, and desire we remain

oblivious to the emptiness masked by their shadows. We sense only the rhythm by

which these giants shuffle us along during those lucky green light streaks.

Inscrutably we become hungry, lustful, and impulsive. As our induced and

uncharacteristic hunger increases, we find ourselves before a 150-item buffet.

Tantalizing our eyes further, each food item on display contains varying amounts of

the vibrant yellow number five and red number seven. The heat and vastness of the

parking lot seems foreign after feasting. Seeing now what had previously been

masked, a shameful regret starts to rise to the surface. An advertisement for teeth

whitening comes into focus, and then we remember that we need to go on a diet. We

find ourselves in Target trying on workout clothes, but leave with over $200 of

merchandise we didn't know we needed.

Photobomb,[132] a mobile device application was designed in response to the

2012 popularity of the photobombing meme. The application, Photobomb allows

users to place images, such as the famous crasher squirrel,[133] directly into the

photograph they are taking. Users can also upload images of their choice for live

insertion of personalized bombs into photography. Photobomb would be a tool by

which the bearing witness stand concept might be proliferated throughout

architectural circles. Bearing witness stand photobombs would allow urbanists to

speculate with one another about physical addresses which would benefit less from our formal and physical skill sets, that from our budding interest in big-box virtualities.

(Figure 3.18: Crasher Squirrel, popular Internet sensation, image from knowyourmeme.com)

The federal Transportation Enhancements (TE) program provides funds for 12 categories of transportation-related activities. Through activity 4, the "Scenic or historic highway programs, including tourist and welcome center facilities,"[134] communities are able to draw upon this funding stream for the development of the "scenic and historic character of highways."[135] The program is intended to make "the travel experience educational and attract tourists to local roads."[136]

Since the TE program began in 1992, only around six percent of available TE funds have been programmed for scenic and historic highway program projects.

According to the United States Federal Highway Administration, each state's

Department of Transportation (DOT) determines the eligibility of TE projects for

funding. Their site states,

> Examples of projects that may be eligible include: Construction or
> restoration of tourist and welcome centers related to scenic or historic
> highway programs, including interior fixtures and parking areas; purchase
> and installation of items which support or interpret the scenic or historic
> highway program or site such as brochure racks, maps, or kiosks;
> Construction of turnouts and overlooks; and the design, fabrication, and
> installation of designation signs, markers, and interpretive displays.[137]

Architect Brad Cloepfil of the firm Allied Works drew upon TE funds to erect the

Maryhill Overlook project, what the firm refers to as a "site installation. " The project

is part of a series of conceptual proposals that seek to interpret and reveal the

diverse landscapes of the Pacific Northwest."[138] Cloepfil's interest in using

architecture to amplify aspects of the natural environment is not new within the

field of architecture. He offers on his firms website, "through a single act of making,

the inherent architecture of this landscape is revealed." Using TE funding is however

quite unique within the field of architecture, much more interesting to me, and not

noted on their site.

As Lyotard notes, the sublime is a mixture of pleasure and pain. He suggests

that the sublime is able to present the un-presentable, and transcends moral

categories. The institution of architecture gets in the way of witnessing sublime

edge conditions like the one between the Meher Center and Walmart. In this space, virgin forest crashes against the abject and sublime spatial quality that can only be found on the top and behind Walmart. It is a space worth experiencing. Bearing witness stands offer the individual body a similar interaction with highway space, libidinal boxes, and libidinal excess. They will position the body behind a strip club, in the parking lot, revealing objects of desire off-stage as daughters, mothers, girlfriends and wives. Each stand is a unique act of détournement, but with a spin. The stands call into question capitalistic expressions, but also institutional expressions from within architecture. Each individual and delicate construction generates a potent pause, allowing us to observe ubiquitous libidinal infrastructures. Together, the stands act powerfully as a system. Electronically connected, the system of stands engenders disciplinary expansion and cultural production.

In this chapter I have offered a potentiality, "a retroactive manifesto on a forum of urbanism, in an age disgusted with them."[139] As Rem Koolhaas suggests in *Delerious New York*, the manifesto is difficult because it has no evidence. And as was Manhattan for Koolhaas, Myrtle Beach, for this project, "is a vast expanse of evidence without a manifesto."[140] This chapter takes a step forward in characterizing this evidence found in Myrtle Beach, South Carolina in a useful manner. If Manhattan was, for Koolhaas, the 20th century Rosetta stone, "Generica," and its ubiquitous libidinal infrastructures are my version of the 21st century

Rosetta stone. The bearing witness stands offer a mechanism by which we might decipher it.

CHAPTER FOUR

RENDERING: AN INVISIBLE LIBIDINAL INDUSTRY

An Invisible Libidinal Industry

To begin, Dr. Andrew Hurley (Clemson University Packaging Science and

Design) and I were researchers on a project for the Animal Co-Products Research

and Education Center (ACREC) at Clemson University between 2011 and 2012.

ACREC initially awarded us a $44,00 grant based on our proposal to develop a

sustainable liner and logistics visualization for safer and more profitable transport

of animal waste. The project was awarded a second grant for on-site testing of the

liner.[141]

Within the previous chapter I argued that finding ways to expand our

conception of urbanism would reveal some unforgiving realities that allow for

current practices of urbanism in America. This chapter documents my involvement

with the rendering (animal co-products) industry, and offers the dissertation a

perfectly gruesome and surreptitious example of an infrastructure that supports our

ways of life in the US. Revealing rendering as a *ubiquitous libidinal infrastructure*

helps me to pick at tightly woven threads of disciplinary perspectives, starting an

unraveling process within scholarship on urbanism. Though I have classified this

chapter as falling on the pain end of the pleasure/pain transversal discussed in the

last chapter, it is not my aim to expose rendering as a dirty little secret. Rather, I

have inserted myself within the rendering industry in order to witness it as a

necessary libidinal infrastructure as a relay for the discipline of architecture to learn from.

Looping back again to my discussion of productive waste, Jean Baudrillard would have us revise our assumptions about cultural needs such that waste becomes viewed as an essential function—the site from which our values are actually produced. If the superfluous precedes the necessary, wasteful urban practices are then understood not as irrational residues of consumption or reckless enjoyment, but as evidences of cultural values and affluence.[142] What we throw away suggests who we are and what we have strived to become. What we throw away signifies our status in life. Viewed from this perspective, the sophisticated rendering industry should be celebrated, or at least mapped. Yet, as we know Baudrillard commiserates with the proletariat. He is unwilling to accept the reality "that one can enjoy swallowing the shit of capital…"[143] If we were to follow Baudrillard's reasoning here with regard to the rendering industry, this chapter would serve to "rub our noses in it" so to speak. I have sought to orchestrate an instance by which I would be able to witness the rendering industry in response to Jean-François Lyotard's *Libidinal Economy,* as a ubiquitous libidinal infrastructure. That is, I have attempted to explore the industry as an externalized manifestation of human desire-driven energy flow, free of judgment but full of curiosity.

Rendering, self-proclaimed as "the invisible industry,"[144] represents a perfect example of a libidinal infrastructure that we are fully dependent upon yet know very little about. As did the contexts of Myrtle Beach, and Orlando for the previous

two chapters, the rendering industry acts as another exaggerated and unforgettable example of a ubiquitous material practice through which libidinal infrastructures can be studied. My choice to highlight rendering stems from a hope to produce scholarship on urbanism that exposes unknown realities—often invisible but in plain sight—supporting our daily lives. Taking cues from the complexities of how rendering influences urban spatial practices will expand the field of urbanism, and will unravel it from its insistent emphasis on the formal and physical organizations of urban space. It will also nudge the field away from the tendency to preference empirically driven research methods when generating new urban ideas and planning policies. My assertion throughout the dissertation is that intervening within libidinal infrastructures will offer planners and designers increasingly more agency.

(Figure 4.1: Pet Food-grade Protein Meal Silo)

It is common within first year design studio for professors to turn student work upside down or on its side offering, "It is better that way." Yet, we do not apply such common formal strategies for looking/seeing to urban issues. Revisiting an assertion by rhetorician Craig Saper that I referenced in chapter one, "In architecture, aesthetics or questions of representation continue to have a prominent position, except when planners consider urban contexts. Then, architects demur to the supposed wisdom of social scientists instead of continuing to consider aesthetic issues." [145] Saper's observation, and larger project on the artificiality of myths, has led me to question why design pedagogy does not try harder to find a function or purpose in every context, every kind of research. Gregory Ulmer and Jean-François Lyotard have been used throughout this project to articulate the importance of why the development of aesthetic and material intelligence is important in today's digitally enhanced culture. The burden of valorizing design's intelligence to others, I argue, falls on the shoulders of designers themselves. We must be willing to get messy in order to find ways of asserting our strengths within contexts unfamiliar to us. I have attempted to valorize such an agenda by asserting myself within the rendering industry.

(Figure 4.2: Raw Waste Drop-off Point)

Without rendering, our lives in the United States would radically change. Yet, with a deeper understanding of this industry, it is likely that we could not live with ourselves knowing the realities of its gruesome detail. Animal by-products resist visibility. The reality of this substance—where it comes from and where it might end up—disturbs our way of being in big box culture.[146] Much like the utilities infrastructures discussed in the last chapter, the industry goes largely unnoticed. We keep the rendering industry at a distance. It is invisible to the majority of us. Learning to think through this kind of paradoxical complexity is something that rhetorical scholarship can help urban focused design to do.

Scientific rhetoric, in general, provides yet another instance within our culture where we orchestrate distance from our immediate surroundings. I have sought to examine these gaps throughout the dissertation. I argue that once we have learned how to conceive of libidinal infrastructures—the physical/digital materialized manifestations of human desired driven (virtual) energy flow—we will have more impact on urbanism than if we continue focusing solely on the formal aspects of our environments.

Rhetorics and Science

Scientific rhetoric is generally invisible to us. We tend to collectively assume that science will provide the most reliable and accurate information available. Because it deals with irreducible and scientifically tested facts, the involvement of rhetoric is rarely considered in scientific writing and discourse. As such, scientific rhetoric might be the most successful of all rhetorics available for us to learn from.

Overlaying rhetoric onto scientific discovery and discourse, allows for rich historical, philosophical, cultural, social, political, and textual discovery. [147]

Studying the rhetoric and language of science allows us to tap into inconsistencies within our cultural groundings, allowing for important breaks from disciplinary *stasis* needed to account for indeterminate or affective experiences. Such explorations address that which lies beyond empirical or rational investigation, and are essential in developing methods for understanding libidinal infrastructures.

Philosophers of science, notably Paul Fayerabend, Thomas Kuhn (*The Structure of Scientific Revolutions*), and Bruno Latour, have been wrestling with the nature of scientific thought for many decades. Feyerabend, in *Against Method*, attacks the use of one standard method of scientific discovery. He argues the inclusion of many approaches to knowledge formation when seeking "truths." He favors a pluralistic, or "para-" methodology—many methods working side by side. The world, (truth) for Feyerabend is vastly unknown, and can be found only when boundaries within scientific methodologies are expanded to include human nature and individuality. For Feyerabend, counter-induction, a theory founded by contrast, is the optimal form of knowledge where an "anything goes" mentality allows for a radical openness needed for less reductive approaches to knowledge formation. He argues for understandings of the formation of knowledge through the study of argumentation (rhetoric) within scientific contexts.

Bruno Latour, in *Science in Action: How to follow Scientists and Engineers through Society*, argues that knowledge is formed in action, or within contexts. Latour sees value in the knowledge that is gained in finding ways to learn about science from the outside. That is, he suggests that a few minds (scientists) discover and dictate what reality is, leaving the majority of people passive prisoners within our social structures. Latour's ongoing project seeks the development of strategies that will help us follow and understand, to track, scientists and engineer's processes.

He uses the conception of black boxes from cybernetics to discuss the reality that seemingly obvious facts are often actually very complicated and are thus taken for granted. He suggests mechanisms for opening them up. Latour states, "scientific and technical work is made invisible by its own success … the more science and technology succeed, the more opaque and obscure they become."[148] In recognizing a black box, the "known" becomes the unknown. When black boxes are opened up, Latour argues, questions arise about the foundations that our paradigms rest upon. A rendering plant can be conceived as a black box. Below I merely open the lid. I'm hopeful that the dissertation at large offers a platform for future design studios to investigate the contents of this black box using design and rhetoric.

Latour also offers the double head of Janus, the ancient Roman God of doors, passages, transitions, and beginnings/endings as a figure to illustrate the importance of simultaneously looking back at the past from the position of ready-made science, while looking forward from the position of science in the making. This double vision exposes the gestalt switches that must occur in the mind in order to

see science in action—the rhetorics of science. The double-headed figure of Janus also cues us in to the importance of Latour's oeuvre within the field of rhetoric.

Here I wish to reiterate my interest in developing the pleasure/pain transversal, an aspect of knowledge formation that Ulmer (by way of Kant) argues we must add to the well established aspects of right/wrong, true/false within the construction of his "electracy." Gerald Holton, a philosopher of science and historian, argues similarly in favor of an excluded "Z" axis in scientific exploration. The "Z" axis, Holton suggests, encompasses the personal, intuitive, or even accidental aspects that influence scientific discovery. Holton maintains, "The very institutions of science, the selection and training of young scientists, and the internalized image of science (its rhetorics) are all designed to minimize attention to the personal activity involved in publication."[149]

It is actually Holton, who Ulmer works through in his development of the image of wide scope, a vehicle through which individuals cultivate a resonance with the feeling of epiphany surrounding an event in early childhood. One's image of wide scope is found or uncovered through the process of constructing a mystery, one of many tactics Ulmer has given us to help him invent for electracy. Ulmer notes, "The wide image thesis is that innovators are able to access the affective power of an image of satisfaction formed in childhood, as a regulative idea (Kant) to guide discovery."[150] Einstein's childhood compass is Holton's driving example, while Ulmer points us to a few other examples of productive individuals who have tapped into a guiding image (Virginia Woolf's *Waves*) that propels them into action. These

individuals are driven to recreate, suggests Holton and Ulmer, the feeling of

satisfaction or epiphany, which is elicited by the accompanying memory their image

evokes. Thus, a pattern emerges in their thinking/discovery process.[151]

It is perhaps easier to recognize the missing "z" axis in the sciences. This

missing (or at least undervalued) aspect of knowledge generation is less overtly

missing within humanities based research. However, the humanities can uniquely

provide the context from which an understanding of it can be developed. Ulmer's

goal has been to provide a course of action by which the humanities might lead us in

the effort to invent a new system of knowing, based on images, modes, electricity,

and even paranoia. My project extends this argument into the fields of urbanism and

architecture.

(Figure 4.3: Wilber's Last Stop)

Dealing only within the X-Y plane, a scientific theory or proposal can be relied upon as both empirically and analytical significant or insignificant. For positivists and empiricists, questions that cannot be verified or falsified empirically or with mathematical notation simply cannot be asked "scientifically." Such questions will have little or no cultural value. A. J. Ayer, a 21st century logical positivist, for example, argued for the elimination of metaphysics. Ayer believed and argued for a clear relation between word and thing (or object).[152] To use Holton's vocabulary, Ayer values only that which lies along the X and Y axes, as capable of leading to "real," and "verifiable" truths. The rendering industry has grown in reaction to the need to discard roughly 3,000 semi truck trailers of discarded animal "by-product" a day in this country. I'm interested in tapping into the "z" axis of this reality.

My project resonates with Alain Corbin's research within, *The Foul and the Fragrant: Odor and the French Social Imagination.* His historical mapping of the perception of smell argues on behalf of the excluded olfactory system in knowledge formation within eighteenth and nineteenth century France. Corbin demonstrates that cultural perceptions of odor within the 18th and 19th century reinforced a prejudice against the complex olfactory system as useless in civilized societies. That is, sight and sound hold much more power over current cultural production than does the sense of smell.

Corbin exposes intricate accounts such as the moment we began implementing protocols for the single occupant bed and sterile metal bed frame in

hospitals and the celebration of perfumes and flower gardens as mechanisms that have worked together to influence valuation in knowledge formation and perception in the west. Corbin's refreshingly inclusive historical enterprise exposes how our perception of smell has been impacted by rhetorically driven practices of cultural productions often backed by scientific facts. Corbin claims, "Abhorrence of smells produces its own form of social power. Foul-smelling rubbish appears to threaten the social order, whereas the reassuring victory of the hygienic and the fragrant promises to buttress its stability."[153]

It is with Corbin's example of scholarship in mind, in addition to the review of literature above, that I introduce the rendering industry to the fields of rhetoric and urbanism/architecture. I wish to develop a new perspective on waste—a perspective that understands waste as the site from which our values are produced. Within the logic of big-box urbanism, to consume and to throw away is to communicate to others about what you are and have become in this world. What we throw away signifies our status in life according to Baudrillard.[154] Revising our understanding of waste will help reverse the belief that wastefulness, or "unsustainable" building practices are drawn up out of a flawed economic valuation system. Our waste, I offer, is a record, a map, of the externalized (physical and/or digital) manifestations of human desire-driven energy flows—our libidinal infrastructure. I position the rendering industry as a resulting material practice, which grew/grows in response to libidinal boxes and libidinal excesses. Observing

its impact on this country, its staying power, and its brutality, will offer a new perspective on the libidinal economy.

(Figure 4.4: Raw Waste Clean Up)

     To fully understand our values in this country, we must visualize or map our waste. [155] I am starting to do this by way of opening up the rendering industry. I argue that a third disciplinary space between rhetorical invention and design is the best possible space from which to produce discussions about the value of the

rendering industry and our reliance upon it in this country. Such trans-disciplinary research will also help to raise difficulty questions such as how the rendering industry is radically altering our ecosystem on a fairly large scale. For example, should our livestock and farmed fish be eating the protein meal source produced by way of the rendering process? That is, should omnivores be eating processed bone, feathers, and hide? What impact might this have on our heath?

The Material Transformation of Animal By-Products

The rendering industry supplies "by-product," an ingredient that is found in most pet and animal feed, as well as various oil based products such as bio-fuel and cosmetics. The rendering process serves to melt fat content allowing for separation of by-product into two separate products, fats and proteins. In North America, more than 59 billion pounds of these materials are generated annually as residual from the meat and poultry processing, food processing, and supermarket and restaurant industries.[156]

More than 3000 industrial products are currently generated from rendered animal by-products. Subjecting raw waste materials to rendering processes helps to produce many products including meat and bone meal, meat meal, poultry meal, hydrolyzed feather meal, blood meal, fishmeal, animal fats, biodiesel, cosmetics, soaps, paints and varnishes, lubricants, leather and numerous chemical ingredients.

Between one-third to one-half of the animals produced for meat, milk, eggs, and fiber, are not actually consumed by humans.[157] By 2020, developing countries will consume 100 million metric tons more meat than was consumed in 1993.[158]

These statistics are illustrative of the everyday concerns and benefits surrounding rendering and legitimates the need for continued research on rendering, more exposure and awareness about the field, particularly the awareness of individuals responsible for shaping the quality and enjoyment of lives such as planners and architects.

Out of the roughly 250 rendering plants in the US, currently only 117 plants are certified by the National Renderers Association (NRA). That is, only 117 follow the NRA's code of practice. Most plants run continuously for 24 hours per day, seven days per week converting a constant stream of rancid restaurant grease, dead livestock, euthanized pets, animal hides, and even dead zoo animals into bio-fuel, pet and livestock feed, and industrial products The economic model of the rendering industry is quite unique. Companies such as Darling/Griffin who own over 45% of the NRA compliant plants, are paid to pick up these raw materials from grocery stores, restaurants and farms; while they are also paid for these products mentioned above.

Recognized as one of the oldest industries, the role of rendering can been traced into the eighteenth century.[159] It is likely that it will persist for centuries to come. We must begin to see the industry as more than a service deliverable, a material manufacturer, and as a source of bio-fuel production. We must see it as an abject and suppressed cultural reality. Because the rendering industry is made up of so many variables and its impacts are far reaching, I argue that the optimum team to carry out such research should be interdisciplinary, and that humanities scholars

must be included in the conversations. I argue that we must find ways of exploring

Holton's "Z" axis of thinking within the rendering industry.

A review of literature suggests that there are currently under explored

research areas associated with the rendering industry, specifically related to

transportation and safe handling of animal waste. Because disease control is

dependent upon the speed at which control measures can be implemented,[160] and

because the rendering industry is dedicated to protecting human and animal

health,[161] it is critical that innovative research be executed.

There is currently little research underway with the sole purpose of ensuring

safe transit of carcasses from agriculture fields to rendering facility during natural

disasters, bio-terrorist attacks, and or epidemics. In light of the increase in

population and expansion of the mass-market meat industry since the inception of

rendering in the eighteenth century, the rendering industry is now critical during

situations in which the need to transport and dispose of high quantities of animal

carcasses or by-products to an appropriate disposal site becomes amplified.[162]

Although information regarding carcass disposal is prevalent, relatively little has

been predefined concerning the design of systematic response protocols during

emergency situations inclusive of safe transportation routes and procedures when

handling unsafe animal waste.[163]
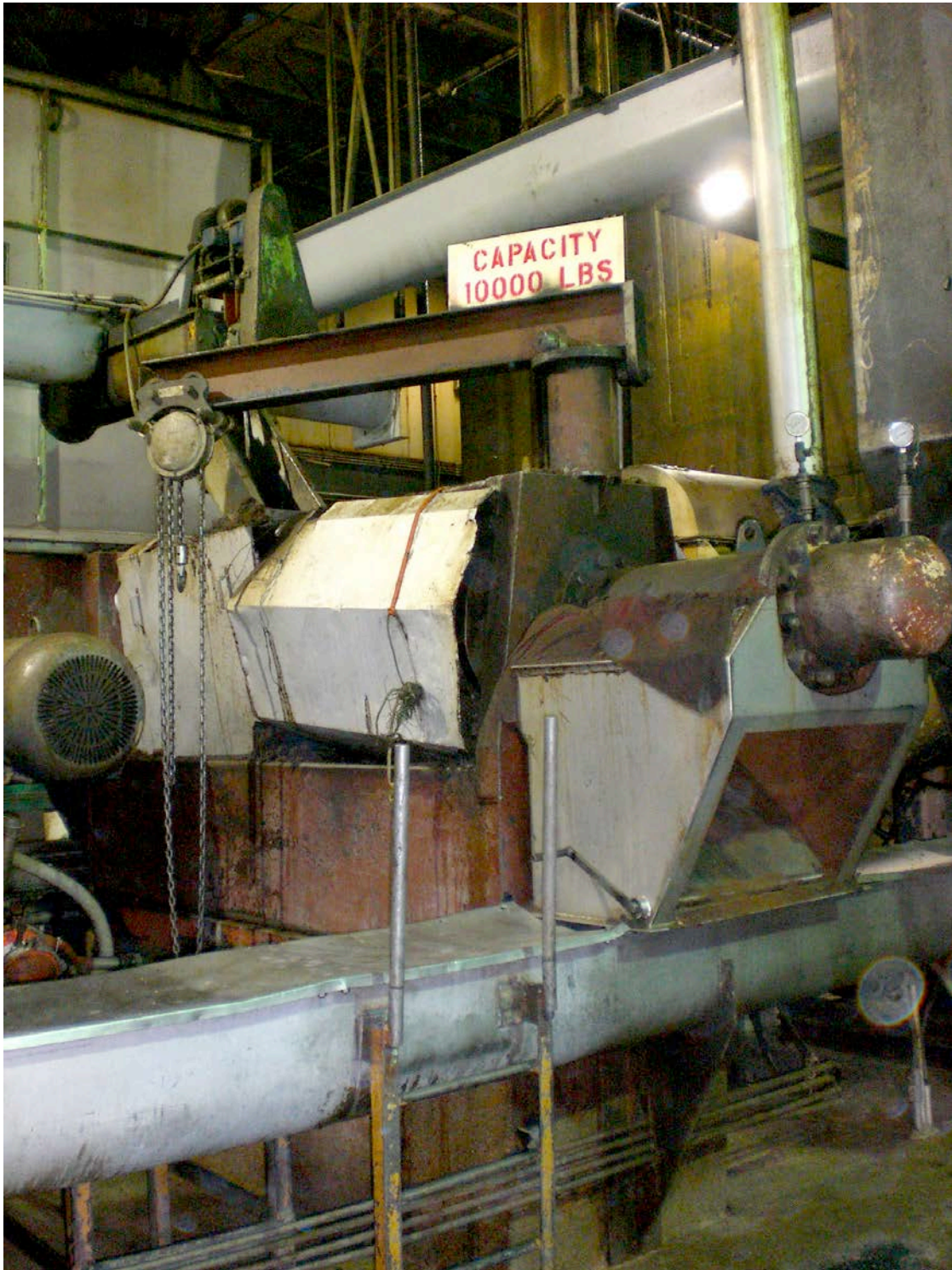
(Figure 4.5: Capacity 10,000 LBS)

Livestock and poultry mortalities represent a major stream of waste within agriculture.[164] The four common mortality disposal methods in use within agricultural sites are on-site burial, incineration, composting, and rendering, however other, currently very expensive, methods such as anaerobic digestion and alkaline hydrolysis are currently being studied.[165] Each of these methods has potential environmental and economic hazards as well as benefits.[166]

Throughout history, disposal of on-farm mortalities has been primarily burial, and burning.[167] Farmers in the US and Canada continue to prefer on site disposal methods due to cost.[168] As a result of the European Union (EU) Animal By-Product regulations, these practices are now forbidden and/or highly regulated within the EU.[169] There is question as to whether legislation will change in the US and Canada as a result of the EU limiting disposal options to rendering and incineration.[170] This ban, resulting from the perceived risk of pathogens and infective agents entering animal feed chains during burial and/or burning has exposed increased need for research into the architecture and master planning of transportation, and safe handling required during the rendering process.

Because transporting diseased animals and/or diseased carcasses is not part of the normal procedure for American transportation and/or construction workers, David Pullen suggests:

> Prior to engagement in such a project, supervisors, equipment operators, and drivers should be provided training and guidelines in (1) using personal protective equipment, (2) handling diseased animals and carcasses in

various states of decay, (3) completing/maintaining required written

transportation documentation, and (4) responding to media personnel

seeking information for public broadcast.[171]

The above points to an exaggerated issue worthy of design infused rhetorical

analysis. During events of increased rendering and animal depopulation needs such

as hurricane Floyd in 99, and the Texas flood of 98, our safety may depend on

rendering infrastructure. Yet, as Pullen suggests, there are currently no clear

protocols in effect for officials to follow during the complexities involved in solving

problems such as animal carcass disposal during such emergencies. Whether as a

mandate by governmental agencies at sate, or governmental levels, or in the event of

eminent emergencies, it is clear that further research into this area is needed.

Though I am interested in uncovering less exaggerated exigencies for the insertion

of designers into the rendering industry, such an exaggerated example will feel

comfortable to urbanists and architects who are accustomed to relying on "problem-

solving" as a conceptual starting place.

Evidence of continued interest in and value placed on the rendering industry

was marked by the establishment of Clemson University's Animal Co-Products

Research and Education Center (ACREC), established in October of 2005. At this

time, the Fats and Proteins Research Foundation, Inc. (FPRF) entered into an

agreement with Clemson University, initiating ACREC. The goal of this initiative has

been, thus far, oriented around bio-security issues research as well as innovative

developments of uses for rendered products.[172] As it was stated in the preamble for

the ACREC dedication conference in April 2006, "It is imperative to society that the rendering industry remains viable." ACREC is one of few places for such innovation to take place. ACREC offers up to $270,000 of funding per academic year to researchers exploring rendering related research spanning a wide range of agendas. In 2011, their call for proposals targeted "agriculture, biology, chemistry, engineering, computer science, transportation, regulatory, management, marketing, public relations, business, finance, international trade, new product development, environment, education, health, and many, many more areas."[173]

Dr. Hurley and my proposal reacted to ACREC's expressed need for a biosecure way to handle and transport carcasses during emergency "animal depopulation" in case of disease outbreaks. ACREC's call was as follows:

We would like to have a biosecure method to wrap dead animals in secure films (ideally made from animal co-products—but at least of a polymer that can be placed into the rendering cooker), to disinfect the outside of the vehicle, and to transport the cargo in a bio-secure manner to the rendering plant. Once at the plant, the material would be deposited into the cooker in a biosecure manner while still sealed in the films. It will subsequently be cooked to destroy disease-causing entities. If the polymer surrounding the animals is made of rendering materials, there would be no problems with plastics or other materials introduced into the cooker. Though this component was not funded, we also addressed the expressed need for improving the image of rendered animal co-products.

134

Though the majority of the other research interests expressed by ACREC in 2011 called for research investigations targeting the traditional economic interests of the industry such as improving service deliverables, raw material manufacturing output, or as bio-fuel production, my research suggests that there is need for design research and rhetorical invention within the field of rendering. Other areas we found compelling with regard to our backgrounds were listed as, "computer and iPhone applications of value to the rendering industry, employee safety issues, and transportation—cost reduction, safety, product tracking, product protection, and recall plans."

New directions in research through ACREC grants in 2013 include: finding value in DAF sludge, fighting hazards with bacteriophages, optimizing production of biofuel, improving feed potential of tallow, exploring growth-promoting extracts, estroying the avian influenza virus, looking for protein-derived antioxidants, determining biodiesel energy costs, isolating antimicrobial compounds, controlling Salmonella with bacteriophages, ensuring accurate bacterial counts, creating new geostructural polymers, measuring the industry's carbon footprint, validating temperatures inside cookers.

Libidinal Liners Becoming Ubiquitous

The project objective was to, "Develop an economical packaging material that will ensure safe transit of animal co-products from industry to rendering facility that is 100% disposable within the rendering cooker." The project consisted of four phases, which are outlined briefly below.

Phase 1-exploration, consisted of preliminary polymer identification, and plant and route tours. Results of the preliminary research and consulting identified the following polymers to work within the constraints of the rendering system: gelatin, PLA, Ecoflex, Celephane, Mater-Bi, Cereplast/Starch. During this phase, we identified resources for procurement of materials and ordered various samples of the polymers to be tested in resin form, extruded sheet form and blown film form.

In February 2012 visited Valley Proteins/Carolina By-Products plant in Ward, SC to observe the rendering process in action, and we accompanied a route Darling/Griffin truck driver on route in Georgia. The figures outline important aspects of our observation such as little consistency with regard to liner use during pick-up, as well as many foreign objects entering and exiting the rendering vat.

Phase 2-polymer testing, confirmation, and outsourced analysis, consisted of reviewing various polymers and tests using a small-scale batch cooker in the ACREC lab at Clemson University. Gelatin, PLA, Latex, Ecoflex, Celephane, Mater-Bi, and cereplast/starch were each analyzed to determine which polymers would be suitable for rendering. The ideal polymer was identified as being non-toxic, 100% and filterable from the fat, and invisible in the final protein product. Polyethylene is the most common polymer currently used for bags and liners in the rendering process, which explains its common presence in raw fat product entering the rendering system. However, polyethylene becomes highly amorphous at rendering temperatures, making it difficult to filter, thus contaminating fat.

Though tests are conducted for the presence of polyethylene on each batch of

fat, instances of purchasers returning bio fuel product with "black strings," likely polyethylene, have become common. These reports discussed during our plant visit, and with the members of ACREC helped us to narrow our scope and testing method. From the tested commercially available bio based resins, we concluded that Materi-Bi, a plant based polymer produced by NovaMont, as the most appropriately suited product for the rendering industry. It has no measured effect on animal oils or proteins, and in its melted state. Most importantly, it behaves in a way that will not negatively impact machinery. When heated, the material quickly gloms together with itself, forming into what appear to be wads of chewing gum, which actually harden. This hardening ensures the material will not enter into future biofuel product. Mater-Bi is currently used by commercial composting companies and has successfully passed a modified ASTM 4169 transport test protocol. You can find the product Biobag, made from Mater-Bi, in stores such as whole foods for common kitchen compost bags, and smaller dog waste bags.

Phase 3-scouring and pricing consisted of reporting to ACREC cost of developing a 44-gallon version of the Biobag liner appropriate for their purposes. Phase 4-liner converting and field-testing required that Dr. Hurley and I visit a facility equipped with an older batch cooker, offering the ability to test batches of product with and without our product for controls. As mentioned, most facilities now run with continuous cookers, making it difficult to truly test contents of the material from load to load.

Based on the volume of the Darling International batch cookers we were invited to use for our test, it was determined that 20 lbs of Mater-Bi would represent 100% liner use, that is assuming that all product in the batch was transported in a bag. 10 lbs of material would then represent 50% liner use entering the cooker.

3 gallon BioBags, converted from 100% Mater-Bi, were used for the field test. The liners were spread and dropped directly into the auger within 20 feet of the start of the rendering process. The bags entered the cooker with the raw product. Three batch cookers were utilized for the field test, 1 was a control (no liners), 2 was 50% (10 lbs of Mater-Bi) and 3 was 100% (20 lbs of Mater-Bi).

(Figure 4.6: Liners Entering Augur)

Our results determined that the Mater-Bi liners do not impede the augers or turning mechanism within the rendering facility. The liners did not catch on augurs and entered the batch cooker along with the product with no issues. Pre-grind visual analysis showed very small fragments of Mater-Bi, however the post grind analysis showed no visual indication of Mater-Bi, despite its green color. Lastly, microscopic analysis of post-hammer-milled protein yielded no visual signs of Mater-Bi. The final Modern Labs ACOS testing results are discussed below. Note that the variable batches do not differ from the control. David Kirstein from Darling International commented on the companies internal testing of the samples. Crax refers to the material produced from all solids, such as bone and feathers, which do not enter into the fats product used to create bio-fuel. Kirstein says:

> Good morning, Andrew and Lauren, I finally have the crax and meal samples. It took more time than expected to get the crax delivered to Omaha for grinding. I went to Omaha on Friday, May 18th and collected samples of the pre- and post- grinding solids. We examined both by spreading them over white paper and sorting through them. I found two pieces in the un-ground material, but I could not identify any in the ground sample. Although we did not examine the samples extensively or under a microscope, the evidence of the bags in the ground material was not apparent to the naked-eye. It will be interesting to see whether we see similar results once we use the heavier weight bags with the color of MBM Modern Labs testing analysis revealed

that the 50% and 100% samples of the field test did not differ from the

control (0% liners).

It was concluded that Mater-Bi neither contaminates oil nor proteins.

An ASTM 4169 transport/distribution test was also conducted on the 44-gallon liner in a standard waste bin filled with animal by-products. The test yielded no damage to the liner; however only refrigerated product was utilized. Further testing is required to determine the effects of hot product with Mater-Bi liners.

In summary, the research project tested many commercially available resins and discovered a polymer that meets the requirements of the rendering industry. Specifically, Materi-Bi, a polymer produced by NovaMont, is made from plant-based materials and once rendered, has no measured effect on animal oils or proteins. The polymer is currently used by commercial composting companies and successfully passed a modified ASTM 4169 transport test protocol.

Mater-Bi resin was converted into bags and tested in the lab. The polymer passed ACOS CA 16-75. A full-scale experiment was conducted at Darling International's batch plant, where 900 bags were mixed in with product. Post-test analysis yielded negative on PCBs, pesticides, and polyethylene count did not differ from the control (no bags present in cooker). The final liner has passed various ASTM and ISTA distribution procedures ensuring to be useful in lining current 44-gallon waste bins.

Phase 4 of our project took place through an addition grant based on ACREC's request that to we run an extensive confirmation of the liners in two

140

difference thicknesses (0.88 and 1.5 mils) within the supply chain of 2 Darling

facilities over a four-week period.

The experiment required a special short-run of 12,000 color-matched liners.

This test acted as final confirmation of the liner performance during in-store

operation, collection, and processing. We sought to determine if the more expensive

liner (1.5 mils) would be necessary. We ran 14,000 liners across 100 stores over 2

weeks. Preliminary survey research determined that 88.37% of uses reported water

saving @ 9 gallons per minute, or 50% usage of water during cleaning. This

measurement equals a savings of 22.5 gallons of water per barrel, or 11 cents of

water savings per liner. In addition more than 80% reported time saved during

cleaning. Though we have not determined the cost savings per barrel as a result of

this time saving, the ACREC researchers responded very positively to the prospect of

putting these Mater-Bi liners into production.

Re-beginnings

To conclude this chapter is really to re-begin it. I have learned a lot about an

industry I knew nothing about, and now only have more questions. The

unanimously positive reaction to the liner, based on the findings of our final stage of

testing, suggests that it is likely production and implementation of a Mater-Bi liner

will begin to percolate into NRA compliant rendering plants. Where route truck

workers have historically been instructed to ensure polyethylene liners are kept

from entering the rendering facility, large quantities of it entered the system. With

the insertion of our new liner into the system, it is likely that such practices will actually be reversed. Most, if not all Mater-Bi liners used will enter the system.

Because polyethylene contaminates fats products such as bio-fuel the substance is highly regulated. Mater-Bi entering the system will remain in the solids products, which are regulated only by way of texture/color and the regulation of input streams (i.e. pet food should never be made from road-kill or euthanized pets). Though Mater-Bi is a verified compostable corn-based product, I believe our project begs the question, is it safe for the animals we eat to eat large quantities of it?

The design research work within my previous chapter successfully married Lyotard's theory, with the context of Myrtle Beach, in order to generate a third thing—images that help us bear witness. I regret that this chapter has not yet culminated in more concrete examples of this third disciplinary space. However, my peek into the rendering industry rounds out my previous two chapters, and exposes a more realistic and comprehensive understanding of ubiquitous libidinal infrastructures. The chapter, and my participation within the ACREC project in itself, is an act of bearing witness to new architectural idioms.

(Figure 4.7: Raw Waste Storage)

CHAPTER FIVE

RHETORICAL INVENTION AND CHANCE PROCEDURES IN ARCHITECTURAL
DESIGN PEDAGOGY

Introduction

In 2002, Peter Elbow published an important essay, "The Cultures of
Literature and Composition: What Each Could Learn from the Other" in the journal
College English. In the intervening decade, many more opportunities for cross-
pollination between composition/rhetoric and other disciplines have arisen. This
chapter looks at *invention* within both rhetoric and architecture in order to expose
mutually productive overlap between these two disciplines.

In her book *Architecture from the Outside: Essays on Virtual and Real Space*,
Elizabeth Grosz pulls architecture and philosophy into a conversation with one
another. She theorizes a third territory from which these disciplines can begin to
implicate each other in mutually productive ways. For Grosz, this third territory
must exist completely outside of both discipline's preoccupations and anxieties.
Grosz' call is trans-disciplinary. Within her chapter "The Future of Space: Toward an
Architecture of Invention," she prompts both fields to reconsider the *virtual* as a
means to find or invent strategies for divergence from the status quo. Her aim in this
chapter has been vital in bringing my conception of libidinal infrastructures into
focus. Her third territory, constituted by architectural and philosophical skill sets, is
theorized as a new logic of invention. She offers the notion of *virtuality* as an
opportune point of overlap between the two fields.

In this chapter, I explore the overlaps between *rhetorical invention* and *invention* (design) in architecture, as well as *aleatory* (chance) procedures, both with an emphasis on pedagogy. Merging rhetorical invention and architectural design, I argue, will lead to more actionable intersections between the productive and practical concerns found in architecture, and the reflexive thought processes within philosophical discourse. Thinking through traditional notions of rhetorical invention, through the lenses of urban and architectural intellectual work, will aid in exploring the possibility of Grosz' conceptual third disciplinary space/logic of invention from a truly trans-disciplinary perspective.

In bringing together the two supporting research areas of rhetorical invention, and virtual (invisible) publics within this dissertation, I have aimed to re-evaluate and to open up outdated, exclusionary, and potentially harmful urban architectural pedagogies that resist a full spectrum of our current cultural reality. This chapter provides a more pedagogical emphasis on the ideas within the previous four chapters.
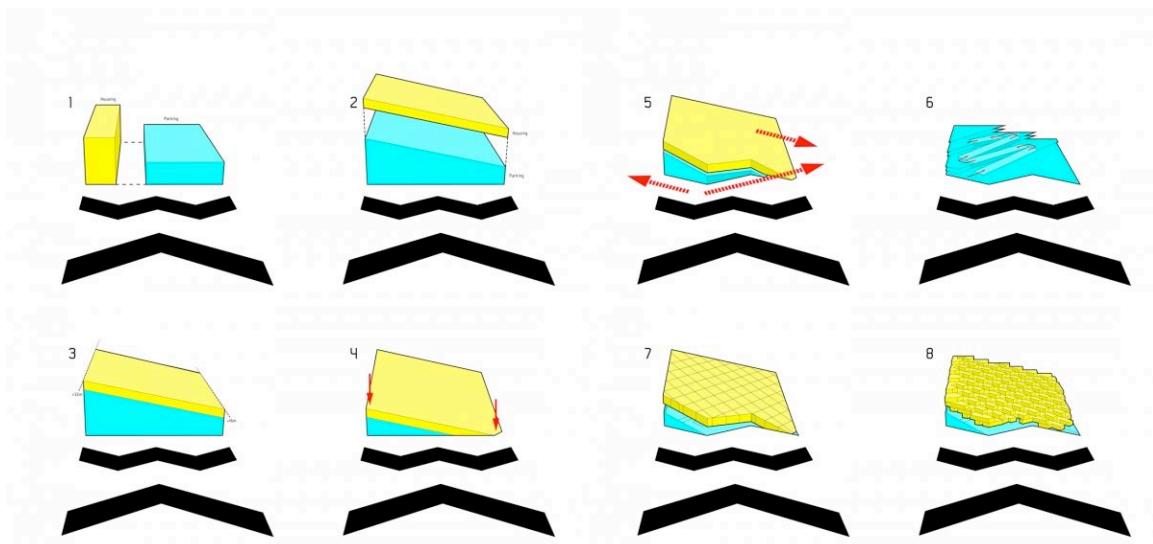
(Figure 5.1 Mountain Dwelling (Massing), By Bjark Ingles Group)

To begin, I will first position the architectural diagram as a mode of *rhetorical invention*, similar to the classical topics of invention, or *topoi*. Taking this step forward in identifying such a simple disciplinary overlap, I hope to open up potential for mutually productive research between rhetoric and architecture. This simple, yet significant observation provides a strategy for more potent design processes, which will help to begin funneling rhetorical scholarship and architecture toward a broader disciplinary focus on cultural production/analysis.

The topics of invention, or *topoi*, are conceived as "places" to find things to say. Each can act as a pattern or heuristic for discovering what to say about situations. The architectural diagram, in its most reduced conception, operates much like rhetoric's common topics of invention. Take for example the above diagrammatic sequence from the Mountain Dwelling project by the Bjark Ingles

146

Group (BIG). The diagrammatic strategy offers a visual counterpart to the topics of *definition* and *division*. A systematic visual approach to delivering information has been chosen and executed which clearly marks the strategy of distributing the building's programmatic massing. The sequence is persuasive in its concise ability to communicate the schematic goal of offering each dwelling unit (shown in yellow) views and sunlight. Such placement offers the added benefits of masking parking and service (shown in cyan), all while enabling the surrounding existing structures to maintain a certain quality of light and views. With this set of diagrams, the designers are strategically *not* talking about decisions regarding the structural and material decisions that went into the building design/invention. Each of these would have a different set of drawing sequences or strategies.

(Figure 5.2 Nolli Map of Rome, c1748 - courtesy of UC Burkley Library
<http://cluster3.lib.berkeley.edu/EART/maps/nolli.html>)

Above is a small fragment of the 1748 engravings, "The Great Plan of Rome" created by Giambattista Nolli. The significance of this historic document was found in its inventive iconographic figure-ground representation of the relationship

between built (demarcated with dark pocé) and open public space (left white). Due to its precision and comprehensive nature, the map itself continued to be a viable document for city planning in Rome through the 1970's. This figure-ground technique, however, continues to persist as a fundamental communication strategy within urban and architectural planning and design.
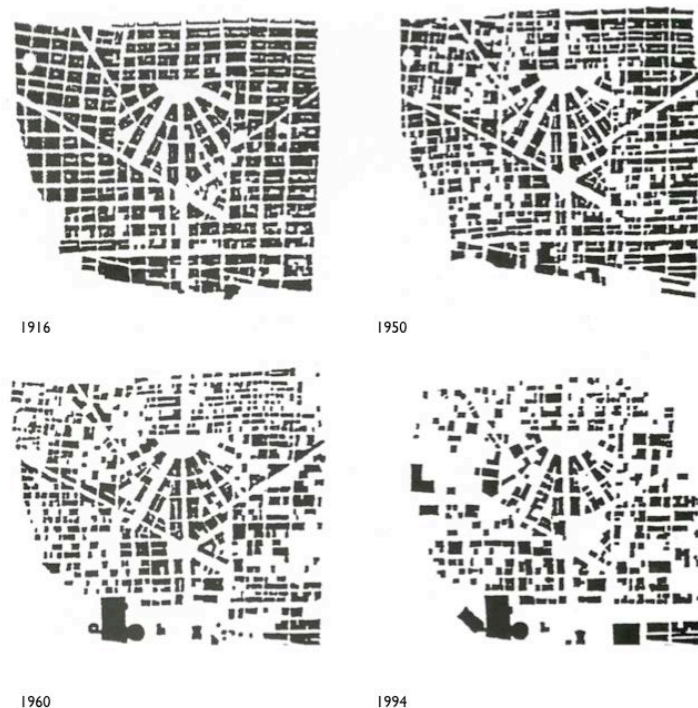

(Figure 5.3: Detroit downtown figure-ground diagrams, Richard Plunz, "Detroit is Everywhere," *Architecture Magazine,* April 1996, 85:4, 55-61. Published in *Stalking Detroit.*)

Utilizing the same technique centuries later, the above diagrams can be understood as drawing upon overlaps between the topics of *circumstance* and *testimony*, working conceivably within several rhetorical figures in order to effectively convey—by way of shock perhaps—the decay of the city of Detroit between 1916

and 1994. The rhetorical device *pathos* is also called upon in this example of visual

rhetoric.

Dependency · Abhängigkeit
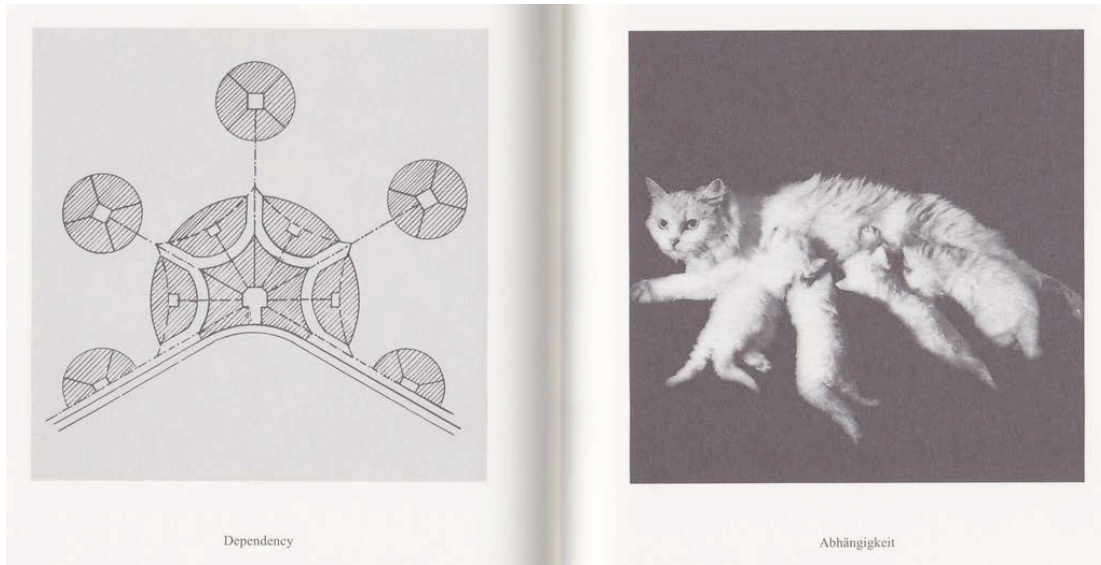
(Figure 5.4: O.M. Ungers, excerpt from *Morphologie. City Metaphors*)

Diagrammatic language is not limited to line drawings. Above is an example

of one of O.M. Ungers' "Interpretations," from *Morphologie, City Metaphors*. Here

Ungers shows a cat with nursing kittens accompanied with a plan by Raymond

Unwin from 1910. This composition is titled, "City with Independent Satellites." The

metaphor chosen here is "dependency." In *Morphologie*, Ungers develops this

strategy of choosing an image (metaphor), a city plan, and a German word with its

English translation as a means of visually explaining the functionality of various

historic and/or utopian city forms. This sequence by Ungers demonstrates diagrams

in a visual context as rhetorically persuasive. In this particular example, I draw a

relationship to the topic *comparison*, while the rhetorical figures of *amplification* and *metaphor* are both clearly in operation.

The Unnamable of Inventive Language

Beyond a visual counterpart to the classical *topoi,* both architectural diagrams and rhetorical invention perform multiple roles. The diagram in architecture is a mode of notation serving analytic and reflective functions. It is also a process or function of thought that is generating and productive. Still more, it remains as a record of that thinking process, living on beyond actualized offspring that it may or may not have aided in producing.
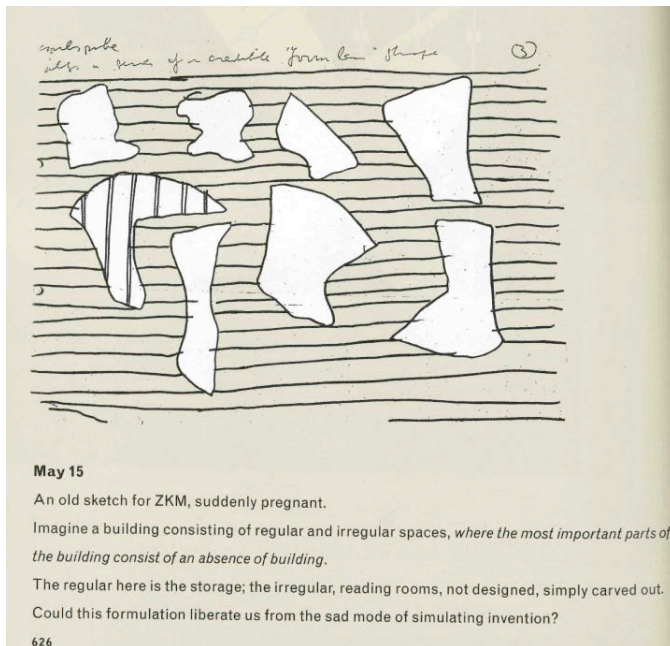
(Figure 5.5: Rem Koolhaas (OMA-AMO), "Strategy of the Void: Excerpts from a Diary," In *SMLXL*. The text reads: "May 15. An old sketch for ZKM suddenly pregnant. Imagine a building consisting of regular and irregular spaces, where the most important parts of the building consist of an absence of building. The regular here is the storage; the irregular, reading rooms, not designed, simply carved out. Could this formulation liberate us from the sad mode of simulating invention? ")
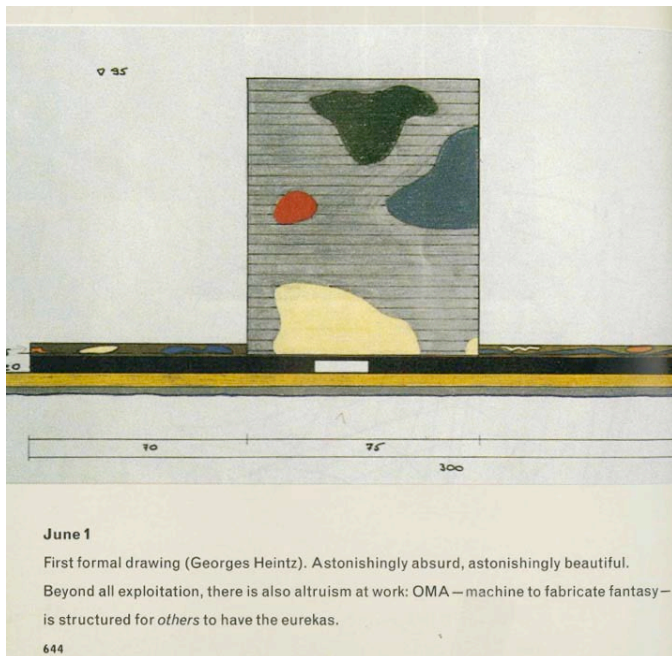
(Figure 5.6: Rem Koolhaas (OMA-AMO), "June 1. First formal drawing (Georges Heintz). Astonishingly absurd, astonishingly beautiful. Beyond all exploitation, there is also altruism at work. OMA—machine to fabricate fantasy—is structured for *others* to have eurekas.")

These above diagrams by Office for Metropolitan Architecture (OMA-AMO), published by Rem Koolhaas in *SMLXL*, could certainly be considered within the above terms. Both diagrams operate within the framework of the topic *definition*. However, when the diary entries are also considered (transcribed below each image), it becomes clear that the diagram speaks differently to the designers. Now out of sequence, a reinterpreted diagram becomes appropriated into the development and acceleration of a new concept/idea. In this role, the architectural diagram pushes the boundaries of classic rhetorical invention, and also helps us to think through rhetorical scholarship that has pushed on this boundary in similar ways.

For example in *Tropics of Discourse*, Hayden White offers a tropological system to be utilized alongside or stand in for the *topoi*. White suggests that discourse is too slippery to fit within a set or rigid logic, offering that discourse must always reference itself as much as it references its subject matter. White suggests that discourse must be analyzed based on three levels, description (mimesis), narrative (diegesis), and most importantly for him, on the combinatory effects of the first two levels (diataxis). White pulls from Kenneth Burke, in *A Grammar Of Motives*, in which closer attention is brought to the commonly held conceptions of stasis theory. Burke expands upon and reminds us of the relational and situational aspects of thought. He memorably states,

> Distinctions, we might say arise out of a great central moltenness, where all is merged. They have been thrown from a liquid center to the surface, where they have congealed. Let one of these crusted distinctions return to its source, and in this alchemic center it may be remade, again becoming molten liquid, and may enter into new combinations...[174]

Burke's reflexivity offers language the same quality that the OMA diagrams offered Koolhaas above.

Architectural theorist Sanford Kwinter has suggested that a major challenge of contemporary design is inventing ways to approach the intangible. Libidinal infrastructures, as I have argued throughout this project, are generally intangible. They can be tracked, but we must uncover strategies for seeing them. Kwinter urges us first be able to conceive of and design the space from which forms are launched

and filtered as distinct from where they are made. White and Burke similarly argue that we must focus on the design and construction of thoughtful discourse (visual and/or textual). It is from inventive discourse that new cultural practices of invention arise. Designing cities and buildings without inventive discourse, relatively speaking, will only produce more of the same. However, when dealing with the libidinal—its boxes, excesses, and invisibilities—I believe we must push beyond even what White and Burke offer. Drawing again from Kwinter, who picks this up from Gilles Delueze's reading of Foucault, the diagram must be thought of as a contraction, or complication, of reality that holds a capacity to unfold in order to explicate.[175] Conceiving of the architectural diagram in this way places it more in line with the electrate logics of Greg Ulmer discussed in chapters one and three of this project.

The majority of architects and planners tend to speak of diagrams and drawings as little more than useful and practical reductions of a manifold. Sometimes this is really all that diagrams need to be. However, in other situations, when conditions such as powerful libidinal forces arise, which can not quite be articulated, we must learn to employ the layers of information Martin Heidegger reminds us of when he asks, "What are Poets for?"[176] Infusing this poetics with drawing, as expressed by way of the bearing witness stands in chapter three of this project, we are able to capture new virtualities, new architectural idioms.

Joanna Drucker holds a similar intention. She speculates about a theory of visuality, not just as a reading of visual representations but an understanding of the

cultural-cognitive foundation of visuality as a way of knowing and thinking. She has suggested that drawing is to visual epistemology what language skill sets have been for philosophy.[177] She has stated that no artist would be surprised when scholars such as Barbara Stafford proclaim the visual as a viable medium through which thinking and knowledge can be constructed. Drucker helps to contextualize my concern and observation as one small example of a topic that spans the majority of academic areas today.

Grosz does not use this language directly, however she suggests that her theorized logic of invention must alter the current relationship we have with conceptual starting places. I have offered that we must do so within both rhetoric and in architecture, and suggest that this alteration must go beyond what Burke and White offer. I would like to see more radical allowances for where invention might arise, learning to trust aspects of our being that are closed off by the rigidity of places from which we currently pull. In order to think of space, for example, as more than the binary opposite of duration—as *potentiality* itself—we must also be willing to consider aleatory (chance) procedures as a viable beginning.

In T*he Archeology of Knowledge*, Michel Foucault also addresses this concern. Foucault proposes that "another" kind of history might be created. He offers interruption as a viable method of analysis, illustrating the importance of ruptures, thresholds, and discontinuity in thought. With the help of Foucault we can suspend our conceptions of stasis, which bind us to limiting uses of the diagram. He calls into question the notion of beginnings and endings. For Foucault, distribution and

context (relations) rather than a fixed objects/subjects of inquiry is the most important. My design research has explored the question, what might the conceptual starting places be for architecture if the inherent assumption was not that its ultimate purpose is making buildings?
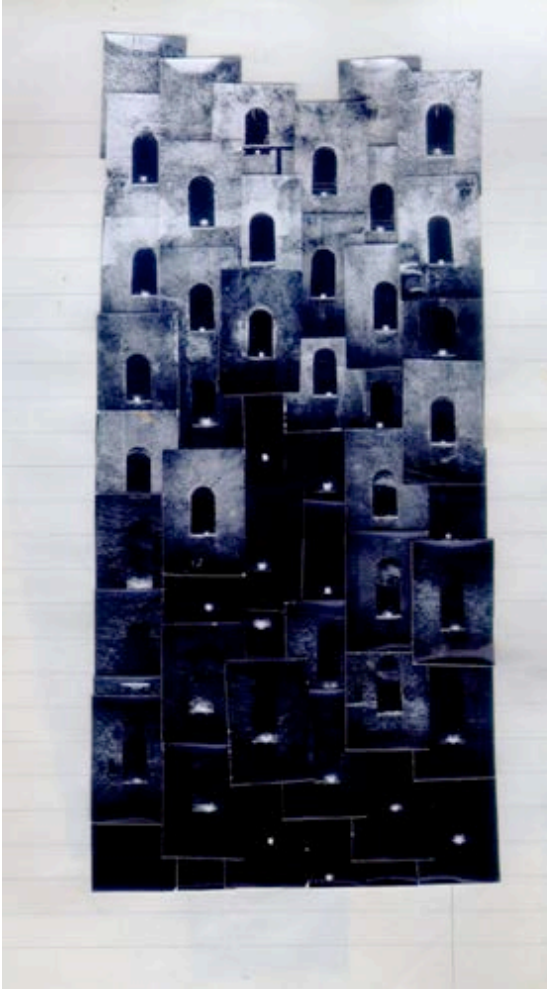
(Figure 5.7: Mary Ann Ray, *Seven Partially Underground Rooms for Water, Ice and Midgets, Pamphlet Architecture 20*. Drawing Title: "Every Window From Every Window: A Traveler's Path in the Well's Looped Space")

Gilles Deleuze suggests in his reading of Foucault's *Archeology* the notion of thinking as experimentation and complication. His *topology* of thought, or "folding"

thought, offers the architectural diagram an opportunity to exist as other than a

reduction of a manifold. Rather, when we consider Foucault and Deleuze, we might

begin to think about diagrams and rhetorical invention as having multiple functions

simultaneously. They might offer practical and useful instructions or statements.

However, we must remember that they also are capable of contracting and

complicating reality, ready to both explicate and to fold.[178] In Fact, Deleuze himself

hedges toward the diagram in his reading of Foucault's *Archeology* by drawing upon

the example of topology as a geometric model of space which calls into question

basic assumptions found within the Euclidian geometric model.

Mary Ann Ray provides an interesting example above. Her project *Seven*

Partially underground Rooms for Water, Ice, and Midges[179] actually finds virtualities

within actualities. In this set of drawings a new sequence of imagined spaces

emerges out of her reading of existing ubiquitous infrastructural systems found in

the Italian landscape. The "built" nature of her frames, as seen in the example above,

pulls from a joiner technique popularized by David Hockney. Such a drawing results

in a sequence of invented *virtual* realities. Ray's experimental project offers

precedent for my explorations found in chapter three. In pursuit of libidinal

intensities, one must be able to recognize the virtualites in operation within and

around actualities. Grosz argues that *virtualities* can live on beyond what is

actualized if we resist the assumption that they are the direct inverse or opposite of

actuality. [180]

The diagram, when understood as an aspect of rhetorical invention, offers rhetoric scholars and architects the capacity to recognize physicality as it relates to virtuality more complexly. With an expanded and unraveled disciplinary ground, cultural producers, with emphasis on rhetoric and architecture, will be more able to operate actionably in a world that is increasingly influenced by digital processes. This is in an effort to target urban architectural practices that are more viable within today's digitally enhanced and driven environments. As discussed in chapter three, my plates offer an example of this kind of thinking. In each plate I have attempted to achieve three functions: I wanted to ensure they recommended an architectural idea rather than being architecture; I sought to mobilize rhetorical theory through the context of Myrtle Beach in order to yield a third (new) thing; and finally I sought to express an example of an electrate thinking process—each plate was to produce a feeling.

Aleatory Methodologies

Design projects typically originate out of some combination of three elements: the site or "context," the program, "function" or "use," and the intentions of the architect, his/her "project." If architectural procedures are reducible to one of these starting places alone, the full ecology, and therefore, potential of generating designs through alternative methodologies becomes lost. Beginning with site and/or program alone restricts the designer's (or rhetorician's) agency, by reducing creative action to a means-ends attitude wherein the act of design becomes mere problem solving—spatial, ecological, or otherwise.

Drawing again from current rhetorical terminology, the identification of a beginning, or new juncture, first requires the recognition of a hiatus, or a break, from known (disciplinary) *stasis* points. Stasis, here, refers to articulated or unarticulated norms in architectural education in which the site/program or "design problem" founds the only legitimate architectural approach. In order to explore projects within a libidinal economy, such as in my Myrtle Beach exploration, more attention to aleatory (chance) methodologies as a starting place within the design process will result in a much-needed hiatus, opening up possibilities for new beginnings. In both rhetorical study and in architecture pedagogy, I hope to encourage teachers to also utilize methodologies that are chance-based, directing students beyond comfortable starting places that they are confident will guide them toward a single or, at least, narrow range of solutions.

Had I not been asked to choose the featherless chicken out of a ball-cap, my presence within the rendering industry would be non-existent. Aleatory methodology encourages the design of discourse as a significant ecological practice inherent in any creative act because it breaks disciplinary stasis. More pedagogical emphasis should be placed on aleatory. Drawing upon image, memory, and spatial procedures, aleatory procedures explore methods for gathering information, distinct from and transformative of the normative literate logics, which have ruled since Aristotle, and continue to dominate invention-in-general. Use of literate logics alone exclude important bodily forms of knowing.

Aleatory is part of three categories of general approaches to problem solving – algorithmic, heuristic, and aleatory procedures.[181] Of the three, the second term, heuristic, circulates across cognitive psychology studies, architecture pedagogy, continental philosophy, contemporary rhetorical invention, and, certainly, the discovery process-in-general at the level of common sense and everyday reasoning. This specific use of these three terms, to describe rhetorical processes of invention are explored by Victor Vitanza as a way to think of problem solving across a variety of media.[182] Vitanza defines each schematic as the following:

> An algorithmic view of a social problem invites the audience to see the problem as a well-made one and that has one, and only one, correct answer [OR] solution. A heuristic view invites the audience to see the problem as ill-defined or, better put, noisy and that has a number of reasonable answers [OR] solutions. An aleatory view invites the audience to see the problem as resolvable by chance (or is a product of chance and time) and that has an infinity of possible answers/solutions.[183]

These processes have productive parallels to thinking about any design/inventive process.

Working under the pretense of "sustainability," or "sprawl," a problem-solving pedagogical approach to design is nearly unavoidable. Such a pedagogy will elicit either heuristic or algorithmic methods. Algorithmic methodologies refer to design scenarios with a clearly defined problem that has a single solution. In other words, if we input A, then B invariably results, such as when a building fails because

an individual structure fails. Algorithmic processes are useful when a calculation can be made or when a new definition of a problem is not really necessary.

A heuristic methodology, by contrast, assumes that a design problem is unclearly defined and, as a result, makes a move to define the problem. This immediate resolve at the outset necessarily limits the range of potential solutions to those of knowledge, experience, possibility, or probability. To argue in our previous example of the beam, common sense would not suggest solutions against the laws of nature. In expanding the girth of the beam, in other words, it is unlikely that tin foil could be substituted for steel. Instead, heuristics, in general depends upon experience-based techniques and knowledge in order to increase the speed at which a solution can be found. Heuristics tend towards the known and prior as a way to take account of new design challenges. Take, for instance, the design problem of passive heating and cooling strategies in a sustainability strategy. For a given building, the problem would likely be framed as a matter of material efficiency. With the problem initially defined, the solutions begin to present themselves: the cost of material up front measured could be measured against the heating and cooling costs down the road. A few different materials could be used, each with a specific trade-off, and so on.

Yet, heuristic thinking does not account for the third type, aleatory. Aleatory becomes a way of re-sorting and unsettling the known—breaking as discussed with the hiatus—with the intent of necessarily looking immediately for the "right method of invention." Instead, an aleatory process allows one to become open to detect new

patterns that would have been impossible to discover using the algorithmic or heuristic thinking. If adopted as a primary methodology to solve any design issue, a directly feasible solution would be unlikely to avail itself; however, there is also the chance that something new might enter through the process of "un-thinking" the activity of invention. In other words, the only certainty with the aleatory is that they are guaranteed to produce a final result that is unexpected.

The claim is that practicing the use of aleatory methods, in addition to algorithmic and heuristic procedures, may encourage/allow designers to act more instinctively to crisis, or when a situation demands an immediate or swift creative response and the magnitude or emotional reaction of the event overwhelms heuristic experience or renders simple, algorithmic solution untenable. Practice with aleatory methods can improve the flexibility of inventional discovery.

Practice with aleatory methods, as Vitanza, but also Greg Ulmer spend much of their scholarship proving, can also help open rhetorical invention to new territories of thought. The significance of the hiatus aleatory methods offer through rhetoric and within design and composition processes rests on the designer or student's willingness to trust in the value of the risks involved.

Virtualities of Everyday Objects

Grosz' book, and the larger presence of MIT's "Writing Architecture" series indicate that the concept of merging architecture and discourse is not new to architectural theory or philosophy. However, such conversations remain isolated within the theoretical realm. While Grosz' work is thought provoking and potentially

161

very generative of more complex text based works, it lacks direct emphasis on productive pedagogical strategies. Thus, we are unable to bring her ideas into everyday spatial cultural practices. They are not generative of inventive cultural production. I want more for her (and all of our) ideas. I believe this requires becoming seriously familiar overlapping aspects of curricula across the humanities.

Architectural modes of working—artful visualizations—are potentially useful in opening up complex thought. Architectural diagramming understood as a mode of rhetorical invention, can help us to better understand how philosophical scholarship such as Agamben's *Potentialities* or even Ulmer's oeuvre applies to our everyday environments. Moving forward with this research, and as a teacher in Architecture, I also have to argue the flip side of this project. To my architecture audience, I must convey the importance of rhetorical investigations in the development of urban forms and diagrams.

As seen in the middle three chapters, my exigency is truly rooted in a lacking relationship between architectural pedagogy and capitalistically driven development. I observe an opportune moment of insertion for rhetorical invention in this particular context. Architects and urbanists have a restricted set of *topoi* from which to pull preventing them from fully understanding the complexity of this ubiquitous landscape. I fear we may be incapable of imagining more sustainable solutions in such areas of development because we are generally unable to think of the unnamable in our diagrams much less to see the unnamable in our built environment. We certainly do not teach this as a facet of architectural education,

rather sustaining the assumption that the potentiality of our work exists only to support the actuality of future forms... Our diagrams are thought of as reductions. This prevents us from also seeing and understanding immaterial influences on our built environment.

I have hoped to demonstrate that the physical attributes of public environments constitute only one aspect, or layer, for architects and urbanists to analyze and to consider when designing. My work emphasizes desires and the data networks serving them-- statistical and numeric feedback loops acting in anticipation based upon constructed data and statistics. Desire is constructed and predicted by such data, and franchises leverage this data-scape towards our discretionary income. I focus in particular on Orlando, Florida, Myrtle Beach, SC, both much like Las Vegas, as zones of unique stratum within what I call the libidinal infrastructures of urbanism.

As I have argued, operating virtually, behind the scenes, ubiquitous mechanisms actually aid in forming vast amounts of our shared public and private environments. Such research endeavors literally materialize desires. Bringing further rhetorical scholarship to bear on this situation will offer architects and urbanists an opportunity to design with more awareness about the ubiquitous, what drives it, and why it is there. The simultaneous ubiquity and fantasy found in tourist spaces provides insight, but architects have to be willing to go there. It is my hope that my research will engender a new breed of rhetorically savvy designers who are quicker to respond and involved in more circles, academic or otherwise.

Notes

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[1] Lyotard, *LE*, 262.

[2] Lyotard, *LE*, 258.

[3] Note the importance that the RCID Program places within the statement on their website, < http://www.clemson.edu/caah/rcid/program.html>.
"The RCID program, however, attempts so much more in as much as it seeks an overall balance of ecologies in rhetorics and communications and, thereby, features a cross-cultural, transdisciplinary curriculum with a conceptual emphasis on Aristotle's triad of knowing, doing, and making, that is, on theoretical, practical-pedagogical, and productive approaches to knowledge. Communications is not simply speaking and writing. The RCID curriculum emphasizes, in addition, the study and multimodal production of language-communication apparatuses such as pictographic and alphabetic rhetorics, or more specifically, gestural, silent, oral, aural, temporal-spatial, visual, written and digital rhetorics."

[4] I will let someone else take on the project that proves a shift in disciplinary approaches on objects (singular forms), to disciplinary approaches on fields (networks and distributions) does not fundamentally change what a discipline is producing.

[5] Reference the market segmentation product by Nielson, PRISM-My best segments. This system offers clients the ability to answer questions such as, "Who are my best customers? What are my customers like? Where can I find my best customers? I am interested in the products development of 66 "segment" profiles, as well as the zip code search access to find out where each segment is most populated across the US. <http://www.claritas.com/MyBestSegments/Default.jsp> I began research on My Best Segments in 2005 as part of my Masters Thesis in Architecture. An article was published on that project titled, "Seeing Practices," in *Journal of Architectural Education*, Blackwell 2008. Another useful, and more recent reference on this topic has been the book Karma Queens, *Geek Gods and Innerpreneurs: Meet the 9 Consumer Types Shaping Today's Marketplace*, by Ron Rentel."

[6] Quote taken from the CLUI website: <http://clui.org/section/about-center>

[7] The term "Big-Box Urbanism" comes from an architecture graduate seminar course at University of Michigan taught by Jason Young. The course title is, Situation Urbanism Big-Box. The seeds for this project were plated during my two years studying with Jason Young at Michigan in this course as well is in two design studios. One of these studios, titled, "Ideas Work Society," has also been very influential in the development of my scholarship.

[8] Again, we do study these ideas through theory and history, however my distinction is that we have yet to try to teach theory as repeatable, teachable, cultural analysis mythologies within in design studio curricula, as an important aspect of the design process.

[9] Cf. John Rajchman, *Constructions* p. 11-35, Bernard Cache's, *Earth Moves*, and Greg Lyn's *Folding in Architecture* found in *Architectural Design*, 1993. The notion of folding, as is seen in the work of Cache, seems more easily appropriated into architectural spaces. This perhaps is due to the obvious connection between the word fold and a material's ability to fold. Cache does apply his version of topology, "enframing" to larger, urban territories. I would like to suggest here is that this larger application of topology in Cache's work is most similar to Lyotard's *LE* and Deleuze and Guattari's *Anti Oedipus*. Most importantly for my project, it is this larger urban scaled, application that interests me most. This perspective allows for the blending in of work such as that by Georg Simmel and Walter Benjamin on the urban subject under capitalism. Exploration of this can be seen in the introduction to Cache's book by Micheal Speaks, as well as in Niel Leach's "Wallpaper* Person: Notes on the Behavior of a New Species," in *This is not Architecture* ed. Kester Rattenbury, p. 231-243.

[10] Eran Ben-Joseph, in *Rethinking A Lot: The Design and Culture of Parking,* states, "There are an estimated 600,000,000 passenger cars in the world, and that number is increasing every day. So too is Earth's supply of parking spaces. In some cities, parking lots cover more than one-third of the metropolitan footprint."

[11] It would be an exaggeration to say that architecture, as it is aesthetically idealized in the academy, only impact the "1-2%." However, I do feel that the percentage of humans who have access to architectural "services" is very low.

[12] See Bernard Stiegler's *For a New Critique of Political Economy*.

[13] Lyotard, *LE,* xxiv.

[14] My dissertation is not "on" the work of Gregory Ulmer, though I utilize his heuretic generator, which is mnemonically identified by the acronym "CATTt." See Ulmer, Greg, *Heuretics* The Logic of Invention, 8. Ulmer suggests that all of the manifestos of the avant-garde, including "the Manifesto of Surrealism," belong to the tradition of discourse on method, and that they tend to include a common set of elements found in the "CATTt," which includes the following base operations: C = Contrast (opposition, inversion, differentiation), A= Analogy (figuration, displacement), T= Theory (repetition, literalization), T= Target (application, purpose), t= Tale (secondary elaboration, representability). Ulmer's CATTt is an appealing methodological precedent for this project. It supports the development of repeatable methods by which urban research and analyses can become as generative as they are analytical. Using Ulmerian techniques such as this one within architectural design studios will help to reestablish the architect's role in society today.

[15] This term seems to be a suitable term to refer to conceptual architecture, such as those developed by Lebbeus Woods and John Hejduk.See Hejduk's *Bovisa* and *Mask of Medusa: Works 1947-1983*, and Wood's *BorderLine* and *War and Architecture.*

[16] Lyotard, *LE*, 11 (parenthetical insertion mine).
[17] "Has not the problem always been What to do with the Jews/"jews," with the Gypsies, the Queers, the rootless; always been What to do with that-which-cannot-be-represented? The Others The Waste? ...what we, or I, do with the Sophists, when writing history(ies) of rhetoric(s), will have established the conditions of the possibilities for any (future-past) history of rhetoric. ...How to Speak of the Sophists?, For they have been exterminated: This, Then, is the problem that I wil examine, the question that I will interrogate, and address in this chapter and throughout this book" (27). I would like to draw a connection here between what Vitanza suggests about the history of the Sophists as they pertain/ pertained to the development of the discipline of rhetoric. I feel as though architecture treats big box culture in the way that Vitanza helps to show that rhetoric treats the Sophists—it is too complicated and problematic thus we try to forget about it.

[18] Tmesis is a rhetorical device. It offers words the ability to wrap around other words. There is thus, an action of "cutting, which allows the writer to interject "a word or phrase between parts of a compound word or between syllables of a word. See: <http://rhetoric.byu.edu/Figures/T/tmesis.htm>.

[19] Vitanza's discussion of "Making" rhetoric can also be found in *Chaste Rape*. See pages 186-224.

[20] From the website of Mollleindustria: <http://www.molleindustria.org/blog/about/"Mol·lein·dus·tria / > mòl-le indùstria /mòl-le in ' dustrja/ > "1. Soft Industry. 2. Soft Factory. 3. A project of reappropriation of video games. 4. A call for the radicalization of popular culture. 5. An independent game developer. Since 2003 we produced homeopathic remedies to the idiocy of mainstream entertainment in the form of free, short-form, online games. Our products range from satirical business simulations (McDonald's Video game, Oiligarchy) to meditations on labor and alienation (Every day the same dream, Tuboflex, Unmanned), from playable theories (the Free Culture Game, Leaky World) to politically incorrect pseudo-games (Orgasm Simulator, Operation: Pedopriest)."Here you can watch a video introduction of Molleindustria's games until 2010.

[21] < http://www.mcvideogame.com/index-eng.html>

[22] Experimentation within rhetoric and composition are seen within the realm of serious gaming. This project does not fully engage in the breadth of that area of research, though my exposure to Jan Holmevik and Cynthia Haynes who have both invested many years of research, writing, and engagement with this topic, has influenced my understanding of the possibility for rhetoric and composition. My project, I feel, falls into a similar category as game studies, as I see architectural space, and life in general, particularly in areas of heightened libidinal infrastructure, quite similar actually to video games. The medium is quite different, however I would love to see more rhetoric and composition scholars take part in "composing," that is designing, architectural space.

[23] Vitanza, *CR*, 148.

[24] Here I brush up against the notion of ubiquity, a term I will expand upon further below, as well as in Chapter 2 on aleatory procedures.

[25] Steigler, 68.

[26] IBID, 6, emphasis mine.

[27] See Lyotard's *The Differend*, particularly Nos. 21-24, pages 12-13, and *Just Gaming.*
[28] Stiegler, 129.

[29] The second section of the book is dedicated to him.

[30] *LE,* 140 (bolded emphasis mine). (Cf. Lyotard, *LE*, 95-154 and Vitanza, *CR*, 97-145.)

[31] Notes from seminar with Victor Vitanza on Lyotard at The European Graduate School in June, 2010.

[32] Lyotard, *LE*, 115.

[33] IBID, 116.

[34] See the site, < http://www.claritas.com/MyBestSegments/Default.jsp>.

[35] IBID*,* xii.

[36] IBID, xiii.

[37] IBID, xv.

[38] Agamben, *What is an Apparatus*, 11-14.

[39] Lyotard, *LE*, x.

[40] IBID, bolded emphasis mine.

[41] IBID, xi.

[42] Merriam Webster online dictionary.

[43] Big-Box Urbanism is a term that emerged within design studios and seminars taught by professor Jason Young, at University of Michigan within Taubman College.

[44] I began research on My Best Segments in 2005 as part of my Masters Thesis in Architecture. An article was published on that project titled, "Seeing Practices," in *Journal of Architectural Education*, Blackwell 2008. Another useful, and more recent reference on this topic has been the book Karma Queens, *Geek Gods and Innerpreneurs: Meet the 9 Consumer Types Shaping Today's Marketplace*, by Ron Rentel.

[45] Guy Debord, *Society of the Spectacle*, Aphorism 169.

[46] Deleuze, *A Practical Philosophy*,124-127.

[47] This is perhaps the first time that the term urbanism was introduced to in architecture as a disciplinary offshoot.

[48] See David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* 25-26.

[49] See Peter Laurence. "The Death and Life of Urban Design: Jane Jacobs, The Rockefeller Foundation and the New Research in Urbanism, 1955–1965," *Journal of Urban Design*, Vol. 11. No. 2, 145–172, June 2006.

[50] IBID, 164.
[51] See Le Gates, R. T. And Stout, F. (1996), The City Reader, London, Routledge.

[52] Such a provocation is far beyond the scope of this dissertation, and has already been written about at length both within *Stalking Detroit* as well as in a recent Chapter of *Distributed Urbanism*, "Density of Emptiness," by Jason Young. See also, Rem Koolhaas' essay from *S,M,L,XL,* "Whatever Happened to Urbanism."

[53] Daskalaskis et al., *Stalking Detroit*, 14.

[54] IBID.

[55] See Costa, Xavier, and Libero Andreotti. *Situacionistas Arte, Política, Urbanismo = Situationists Art, Politics, Urbanism*.

[56] Young, Jason. "Phenomeno-praxis" From *Dimensions 13* Taubman Collage: Ann Arbor, MI 1999. P 58-69.

[57] IBID, 61.

[58] See Greg Ulmer, *Heuretics The Logic of Invention*.

[59] Craig Saper, *Artificial Mythologies*, 97, emphasis mine.
[60] IBID, 105.

[61] I will be working with *Orlando* further in chapter two.

[62] *LE,* 140.

[63] Notes from seminar with Victor Vitanza on Lyotard at The European Graduate School in June, 2010.

[64] Mark Wigley, "Resisting the City," from *Transurbanism*.

[65] Orlando has the second largest number of hotel rooms, second only to Las Vegas, Nevada and is called the Theme Park Capital of the World. See wikipedia's entry for Orlando, FL, <http://en.wikipedia.org/wiki/Orlando,_fl>.

[66] Big-Box culture is a term developed by Jason Young within the course "SUB-Situation. Urbanism. Big-Box," a graduate course at University of Michigan within Taubman College.

[67] Lyotard's definition or treatment of the word *dispositif*, (set up or apparatus), diverges from that of Giorgio Agamben's in his text *What is an Apparatus?*. Lyotard's reading complicates Agamben's careful analysis, such that where Agamben argues that a struggle exists between the organic living being and *dispositifs*, Lyotard would argue that both are fundamental elements of the libidinal economy, mutually constructing one another. Lyotard refers to such *incompossible*, logical violations, as Grant offers in the glossary, as expensive and metamorphic economics. See Agamben 11-14.

[68] See Rania Ghosn et al. "The Space of Controversies: An Interview with Bruno Latour," in New Geographies 0, 129. In this interview, Latour mentions his colleague, Albena Yaneva's article, "Scaling up and Down, Extraction Trials in Architectural Design," Social Studies of Science, 35(6) 867-894. Her article articulates, from the perspective of someone outside of Architecture, how scalar shifts are crucial to the design process after observing the firm OMA.

[69] Shift from dense urban conditions to include these types of spaces as "urban."

[70] Tschumi, 536.

[71] IBID, 537.

[72] Young, "Contested Urbanism," in *Dimensions* 19, 60-62. Dimensions is available online at:
<http://taubmancollege.umich.edu/architecture/publications/dimensions/>.

[73] See David Karle, "The ~~Strip~~ Mall Stripped," in the proceedings for the National Conference on the Beginning Design Student, 28. Italicized emphasis mine.

[74] Explore Nielson's products at:
<http://www.claritas.com/MyBestSegments/Default.jsp?ID=20&menuOption=ziplookup&pageName=ZIP%2BCode%2BLookup>, (parenthetical insertion mine).

[75] < http://www.claritas.com/MyBestSegments/Default.jsp?ID=20>

⁷⁶ See Lyotard's *The Differend*, particularly Nos. 21-24, pages 12-13, and *Just Gaming* for more information on this.

⁷⁷ This comes from seminar notes from course on Lyotard with Victor Vitanza at The European Graduate School in June 2010.

⁷⁸ Lyotard, *LE*, 115.

⁷⁹ See Vitanza's explorations on "what to do with the Sophists," found in *Negation Subjectivity and The History of Rhetoric*, 27-55, and his discussion of "Making" rhetoric, found in *Chaste Rape*, 186-224.

⁸⁰ The Center for Land use Interpretation (CLUI) has been a very influential inspiration in conceiving of exploring the *differend* in relationto urban intellectual work. The center believes "the manmade landscape is a cultural inscription that can be read to better understand who we are, and what we are doing see <http://www.clui.org/>.

⁸¹ I began research on My Best Segments in 2005 as part of my Masters Thesis in Architecture. I am published on this project titled, "Seeing Practices," in *Journal of Architectural Education*, Blackwell (2008). Another useful, and more recent reference on this topic is the book Karma Queens, *Geek Gods and Innerpreneurs: Meet the 9 Consumer Types Shaping Today's Marketplace*, by Ron Rentel."

⁸² See Studio Sputnik 22-23.

⁸³ See Ibelings' disucssion of this. Ibelings refers to this focus on experience, or affect, as "Supermodernism."

⁸⁴ See Varnelis,152, bolded emphasis mine.

⁸⁵ This phrase also seems to be a suitable term to refer to conceptual architecture, such as those developed by Lebbeus Woods and John Hejduk.See Hejduk's *Bovisa* and *Mask of Medusa: Works 1947-1983*, and Wood's *BorderLine* and *War and Architecture.*

⁸⁶ Lyotard, *LE,* xii.

⁸⁷ Lyotard, *LE,* xii.

⁸⁸ In *America*, Jean Baudrillard uses both the desert and the freeway as models for articulating the American sensibility.

[89] See Virilio, 101-150.

[90] See Greg Ulmer's pleasure pain transversal diagram by clicking on "Kant" at the folowing link, < http://www.clas.ufl.edu/users/glue/diagrams/diagrams.html>.
[91] I argue within my dissertation that you, my readers as well as my co-authors here, might make more of a difference with your work by finding an architectural audience to influence and inspire.

[92] See CLUI's site, < http://www.clui.org/>.

[93] Ulmer, xxxi.

[94] Darden, 9.

[95] IBID, 9.

[96] Ulmer *EM* xxvii

[97] Lyotard, *Differend* 12.

[98] Lyotard, *Differend*, xi.

[99] IBID.

[100] Big-Box Urbanism is unpacked with detail in chapter 2 of this dissertation.

[101] IBID, 13 (parenthetical insertion mine).

[102] Tachieva, *Sprawl Repair Manual*, 11.

[103] IBID.

[104] Mitchell, "Seeing Practices," *Journal of Architectural Education*, 62:1, 20-26. Blackwell, 2008.

[105] Baudrillard, *Consumer Society*, 44.

[106] IBID.

[107] Lyotard, *LE*, 114.

[108] See Jack Hitt, "The Year in Ideas, The Featherless Chicken," in *New York Times Magazine*, December 15, 2002.

[109] Ideas Work Society, or IWS is a graduate design studio option taught by Jason Young at University of Michigan in the architecture department.

[110] See Virilio, *Negative Horizon*, 101-157.

[111] IBID, 106.

[112] Virilio, *Open Sky*, 22.

[113] Reference the Wikipedia article for The Grand Strand, < http://en.wikipedia.org/wiki/Grand_Strand>.

[114] Reference, <http://www.blackbeachweek.com/blackbikeweek1.html>.

[115] Ulmer, *Avater*, 58.

[116] Barthes, "Stiptease," in *Mythologies*.

[117] Debord, *Society of the Spectacle*, Aphorism 167.

[118] Salvador Dali, quote from address delivered to Museum of Modern Art in 1932, referenced in J. Levy Surrealism, and Gauss' "The Theoretical Backgrounds of Surrealism."

[119] Ulmer, *Electronic Monuments,* xxx-xxxiii.

[120] See Ulmer's website, specifically the Kant diagram which can be accessed here, <http://www.clas.ufl.edu/users/glue/diagrams/diagrams.html>.

[121] Ulmer, *AE*, 120.

[122] See Koolhaas, *DNY*, 237-238.

[123] IBID.

[124] From Ulmer's forward to *Inter/vention: Free Play in the Age of Electracy*, by Jan Holmevik.

[125] Elizabeth Patterson's letter documented in *Lord Meher*, Volume 8, 2954.

[126] Kalchuri, *Lord Meher*, Volume 8, 2950.

[127] Ulmer, *AE,* 99.

[128] See Sean Morey, *Rhizome 17*, <http://www.rhizomes.net/issue17/reviews/morey.html#_edn4>.

[129] Ulmer, *EM*, 160.

[130] Morey, *Rhizome* 17, <http://www.rhizomes.net/issue17/reviews/morey.html#_edn4>.

[131] IBID.

[132] Photobomb is as software application that was designed by developer Brian Bagheri in 2012. The patent application is currently pending.

[133] See: <http://knowyourmeme.com/memes/crasher-squirrel>.

[134] See: <http://www.fhwa.dot.gov/environment/transportation_enhancements/teas.cfm>

[135] IBID.

[136] IBID.

[137] IBID.

[138] See <http://www.alliedworks.com/projects/maryhill-interpretive-overlook/#/site/2>.

[139] See Koolhouse, *DNY*, 9.

[140] IBID.

[141] Dr. Hurley and I are now negotiating the development of our selected liner substrate into an entire product line, "rendering," which will include an accompanying bin for the liners in addition to aprons, gloves, and boot all made from Mater-Bi specifically for the rendering industry.

[142] IBID.

[143] Lyotard, *LE*, 115.

[144] Burnham, *Rendering The Invisible Industry*.

[145] Craig Saper, *Artificial Mythologies*, 97.

[146] Reference chapters 2 and 3 of this dissertation.

[147] These ideas arose out of a course taught by Dr. Steven Katz at Clemons University in the fall of 2010, "Rhetorics of Science."

[148] Latour, *Pandora's Hope: Essays on the Reality of Science Studies*, p.304.

[149] Holton, Gerald, <u>xx</u>, parenthetical insertion mine.

[150] Ulmer, "The Chora Colaborations," in Imaging Place… Rhizomes… <http://www.rhizomes.net/issue18/ulmer/index.html>. Also reference Ulmer, *Internet Invention*, 89.

[151] I was asked to create a mystery during one of my courses within the RCID program taught by professor Jan Holmevik, author of *Inter/vention: Free Play in the Age of Electracy*, and transdisciplinary scholar. My image of wide scope became fabric—piles and piles of potential—that surrounded me as a child of an avid sewer. I won't suggest that this discovery has driven me in selecting my three exploratory contexts within this dissertation. I can say with certainty, however that there is a strong connection between my choice to participate on the rendering project and the research that I did in 2005 on the featherless chicken. Because I have been working through Ulmer's pedagogy for so many years, and with the help of thinkers such as Holmevik, I am compelled to argue in favor the importance of developing conductive reasoning.

[152] Ayer

[153] Corbin, *Foul and the Fragrant*, 5.

[154] Bauldrillard, *Consumer Society*, 44.

[155] I very literally have nightmares from visiting two plants last year, and accompanying a route truck pick up. The smell of the plants is singed into my consciousness. I do fully believe if the rendering industry was more visible, animal rights activists would attempt to shut them down.

[156] Burnham, *Rendering The Invisible Industry*.

157 Meeker and Hamilton, 2006, and Nates, 2006.

158 Nates, 2006.

159 Franco and Swanson, 1996, and Pearl, 2006.

160 de Klerk, 2002.

161 Hamilton et al, 2006.

162 de Klerk, 2002, Pullen, 2004, an dMeeker, 2006.

163 Pullen, 2004.

164 Gwyther et al, 2011.

165 Nates, 2006, Harper, 2008, and Gwyther et al, 2011.

166 CAST, 2008.

167 Pullen, 2004 and Gwyther et al, 2011

168 Gwyther et al, 2011.

169 See Gwyther et al, 2011.

170 Meeker, 2006 and Nates 2006.

171 Pullen, 2004.

172 ACREC Website, 2011.

173 IBID.

174 See Burke, Grammar, xix.

175 See Sanford Kwinter, "The Hammer and The Song", in *OASE* 48

176 See Heidegger, "What are Poets For?," *Poetry, Language, Thought*. New York: Harper Perennial Modern Classics. 87-140. Print.

[177] Drucker, "Visual Studies," in *Afterimage.*

[178] Sanford Kwinter, "The Hammer and The Song", in *OASE* 48.

[179] See Ray, *Pamphlet Architecture 20: Seven Partly Underground Rooms and Buildings for Water, Ice, and Midgets.*

[180] See Giorgio Agamben's *Potentiaities,* which brings further complexity to Grosz' discussion of invention by exposing (by way of Aristotle) a potentiality that survives actuality.

[181] Reference Richard Young's essay, "Invention: A Topographical Survey."

[182] Vitanza, Victor J. "From Heuristic to Aleatory Procedures; or, Toward 'Writing the Accident." *Inventing a Discipline: Rhetoric Scholarship in Honor of Richard E. Young.* New York: National Council of Teachers, 2000. 185-206.

[183] "Seminar on Foundations of Rhetoric and Composition." University of Texas-Arlington. Web. <http://www.uta.edu/english/rcct/E5311/notes3.html>.

Works Cited

Agamben, Giorgio. *What Is an Apparatus? And Other Essays*. Stanford, CA: Stanford UP, 2009. Print.

Agamben, Giorgio. *Means without End: Notes on Politics*. Minneapolis: University of Minnesota, 2000. Print.

Agamben, Giorgio, and Daniel Heller-Roazen. *Potentialities: Collected Essays in Philosophy*. Stanford, CA: Stanford UP, 1999. Print.

Anderson, Iain. *Foot and Mouth Disease 2001: Lessons to Be Learned Inquiry Report*. London: Stationery Office, 2002. Print.

"Animal Co-Products Research & Education Center." *ACREC*. Web. 21 Apr. 2012. <http://www.clemson.edu/public/acrec/>.

Aristotle, *On Rhetoric: A Theory of Civic Discourse* (Kennedy Trans., 2nd ed.),

Arakawa. Madeline Gins, and Jean-Jacques Lecercle. *Making Dying Illegal: Architecture against Death: Original to the 21st Century*. New York: Roof, 2006. Print.

Augé, Marc. *Non-places: an Introduction to Supermodernity*. London: Verso, 2008. Print.

Barthes, Roland. *Mythologies*. New York: Hill and Wang, 2012. Print.

Baudrillard, Jean. "Astral America," *America*. London: Verso, 1988. 27-73. Print.

Baudrillard, Jean. *Fatal Strategies*. Philip Beitchman, W. G. J. Niesluchowski, and Jim Fleming. London: Semiotexte/Pluto, 1990. Print.

Baudrillard, Jean. *Simulacra and Simulation*. Ann Arbor: University of Michigan, 1994. Print.

Baudrillard, Jean. "Structures of Atmosphere." *The System of Objects*, London: Verso, 1996. 30-69. Print.

Ben-Joseph, Eran. *ReThinking a Lot: The Design and Culture of Parking*. Cambridge, MA: MIT, 2012. Print.

Berger, Alan. *Drosscape: Wasting Land in Urban America*. New York: Princeton
    Architectural, 2006. Print.

Bergson, Henri. *Matter and Memory*. Trans. Nancy Margaret Paul and W. Scott
    Palmer. London: Allen, 1911. Print.

Bhatia, Neeraj. *Coupling: Strategies for Infrastructural Opportunism*. New York:
    Princeton Architectural, 2011. Print.

Blake, J.P. "Methods and Technologies for Handling Mortality Losses." *World's
    Poultry Science Journal* 60.4 (2004): 489-99. Print.

Breitmeyer, Richard, and David Kirstein. "The Rendering Industry's Biosecurity
    Contribution to Public and Animal Health," *Essential Rendering: All about the
    Animal By-products Industry*. By David L. Meeker. Alexandria: National
    Renderers Association, 2006. 71-94. Print.

Burke, Kenneth. *A Grammar of Motives.* Berkeley: University of California, 1969.
    Print.

Burke, Kenneth. *A Rhetoric of Motives.* Berkeley: University of California, 1969.
    Print.

Burke, Kenneth. *Attitudes towards History*. Boston: Beacon Press, 1961. Print.

Burke, Kenneth. "John Dewey, and the Pursuit of the Public," *Philosophy and
    Rhetoric*. 38, (2005): 226-247. Print.

Burke, Kenneth. *Permanence and Change: an Anatomy of Purpose*. Berkeley:
    University of California, 1984. Print.

Burke, Kenneth. "War and Cultural Life," *The American Journal of Sociology*. 48.3,
    (1942): 404-410. Print.

Butler, Judith. *Subjects of Desire: Hegelian Reflections in Twentieth-century France*.
    New York: Columbia University Press, 1987. Print.

Cache, Bernard. "Extended Play: Plea for Euclid," in *ARCH'IT Rivista Digitale Di
    Architettura.* ARCH'IT. Web. 20 Aug. 2011.
    <http://architettura.it/extended/19990501/index_en.htm>. Web.

Cache, Bernard. *Earth Moves: the Furnishing of Territories*. Cambridge, MA:
    MIT, 1995. Print.

Costa, Xavier, and Libero Andreotti. *Situacionistas Arte, Política, Urbanismo =
　　Situationists Art, Politics, Urbanism. Barcelona: Actar, 1996. Print.

Clark, Gregory. *Rhetorical Landscapes in America: Variations on a Theme from
　　Kenneth Burke*. Columbia: University of South Carolina, 2004. Print.

Coolidge, Matthew, and Sarah Simons. *Overlook: Exploring the Internal Fringes of
　　America with the Center for Land Use Interpretation*. New York: Metropolis,
　　2006. Print.

Corbin, Alain. *The Foul and the Fragrant*. Cambridge, MA: Harvard UP, 1986. Print.

Crang, Mike. "Public Space, Urban Space and Electronic Space: Would the Real City
　　Please Stand Up?" *Urban Studies* 37.2 (2000): 301-17. Print.

Darden, Douglas. *Condemned Building: An Architect's Pre-text.* New York: Princeton
　　Architectural, 1993. Print.

Daskalakis, Georgia, Charles Waldheim, and Jason Young. *Stalking Detroit*.
　　Barcelona: Actar, 2002. Print.

de Klerk , P.F. "Carcass disposal: lessons from The Netherlands after the foot and
　　mouth disease outbreak of 2001." *Rev Sci Tech*. 21.3 (2002): 789-96. Web. 21
　　Apr. 2013.

Debord, Guy. *Society of the Spectacle*, Detroit: Black and Red. 1983. Print.

DeLanda, Manuel. *A New Philosophy of Society Assemblage Theory and Social
　　Complexity*. London: Continuum, 2009. Print.

Deleuze, Gilles, and Seán Hand. *Foucault*. Minneapolis: University of Minnesota,
　　1988. Print.

Deleuze, Gilles. *The Fold*. Trans. Tom Conley. Minneapolis: University of
　　Minnesota Design Institute, 1993. Print.

Deleuze, Giles. *Spinoza: Practical Philosophy*. San Franscisco: City Lights Books,
　　1988. Print.

Derrida, Jacques. "From Restricted to General Economy: A Hegelianism without
　　Reserve." *Writing and Difference.* Trans. Alan Bass. Chicago: University
　　of Chicago Press, 1987. Print.

Elkins, James. *Why Art Cannot Be Taught a Handbook for Art Students*. Urbana: University of Illinois, 2001. Print.

FEMA. "The Declaration Process | FEMA.gov." The Declaration Process: FEMA.gov. Web. 21 Apr. 2013. <http://www.fema.gov/declaration-process>.

Feyerabend, Paul. *Against Method*. 3rd Edition. London: Verso, 1993. Print.

Foster, Hal. *Compulsive Beauty*. Cambridge, MA: MIT, 1993. Print.

Foucault, Michel. *Archaeology of Knowledge and the Discourse on Language.* New York: Pantheon, 1982. Print.

Franco, Don A., and Winfield Swanson. *The Original Recyclers*. Animal Protein Producers Industry, 1996. Print.

Gandelsonas, Mario. *X-urbanism: Architecture and the American City*. New York: Princeton Architectural, 1999. Print.

Gins, Madeline, and Arakawa. *Architectural Body*. Tuscaloosa: University of Alabama, 2002. Print.

Gordon, Eric. *The Urban Spectator: American Concept Cities from Kodak to Google*. Hanover, NH: Dartmouth College, 2010. Print.

Grosz, Elizabeth. *Architecture from the Outside: Essays on Virtual and Real Space*. Cambridge, MA: MIT, 2001. Print.

Gwyther, C. L., Williams, A. P., Golyshin, P. N., Edwards-Jones, G., & Jones, D. L. 2011. The environmental and biosecurity characteristics of livestock carcass disposal methods: A review. *Waste Management, 31*(4), 767-778.

Harman, Graham. *Prince of Networks: Bruno Latour and Metaphysics*. Prahran, Victoria: Re.press, 2009. Print.

Harper, Allen H. *Swine Carcass Disposal Options for Routine and Catastrophic Mortality*. Ames, IA: Council for Agricultural Science and Technology, 2008. Print.

Harris, Randy. *Rhetoric and Incommensurability*. West Lafayette, IN: Parlor Press, 2005. Print.

Hayles, N. Katherine. *My Mother Was a Computer: Digital Subjects and Literary Texts*. Chicago: University of Chicago, 2005. Print.

Haynes, Cynthia. "Writing Offshore: The Disappearing Coastline of Composition Theory" *JAC* 23.4 (2003): 667-724.

Heidegger, Martin. "What are Poets For?," *Poetry, Language, Thought*. New York: Harper Perennial Modern Classics. 87-140. Print.

Haynes, Cynthia, and Jan Rune. Holmevik. *High Wired: on the Design, Use, and Theory of Educational MOOs*. Ann Arbor: University of Michigan, 1998. Print.

Holmevik, Jan. *Inter/vention: Free Play in the Age of Electracy*. Cambridge, MA: MIT, 2012. Print.

Holton, Gerald James. *The Advancement of Science, and Its Burdens*. Cambridge: Cambridge University, 1986. Print.

Holton, Gerald James. *Thematic Origins of Scientific Thought: Kepler to Einstein.* Cambridge, MA., Harvard University Press, 1974, c1973.

Katz, Steven. *The Epistemic Music of Rhetoric*. Carbondale, IL: Southern Illinois UP, 1996. Print.
Kuhn, Thomas. *The Structure of Scientific Revolutions*. 3rd ed. Chicago: University of Chicago Press, 1996, Print.

Ibelings, Hans. *Supermodernism: Architectre in the Age of Globalization*. Rotterdam: NAi, 2002. Print.

Ingersoll, Richard, "Jump-cut Urbanism: Cinema, the Automobile, and the New Code of Urban Perception," *Sprawltown: Looking for the City on its Edges*. New York: Princeton Architectural Press, 2006. 72-97. Print.

Jackowski, Nannette, and Ricardo De. Ostos. *Ambiguous Spaces*. Pamphlet Architecture.Vol. 29. New York: Princeton Architectural, 2008. Print.

Jacobs, Jane. *The Death and Life of Great American Cities: the Failure of Town Planning*. Harmondsworth: Penguin, 1974. Print.

Kennedy, George Alexander. *Classical Rhetoric and Its Christian and Secular Tradition from Ancient to Modern times*. Chapel Hill: University of North Carolina, 1980. Print.

Klingmann, Anna. *Brandscapes: Architecture in the Experience Economy*. Cambridge, MA: MIT, 2007. Print.

Koolhaas, Rem, "Bigness, or the Problem of Large," in Rem Koolhaas/OMA and Bruce Mau, *S,M,L,XL,* Cologne: Taschen, 1997, 495-516. Print.

Koolhaas, Rem. Rem Koolhaas: *Conversations with Students (Architecture at Rice, 30)*. Ed. Sanford Kwinter. New York: Princeton Architectural Press, 1996. Print.

Koolhaas, Rem, "Junkspace," in Rem Koolhaas/OMA,eds, Content, Cologne: Taschen, 2004. 162-171. Print.

Kwinter, Sanford. "Flying the Bullet, or when did the Future Begin?" *Conversations with Students (Architecture at Rice, 30).* Ed. Koolhaas, Rem. New York: Princeton Architectural Press, 1996. 67-92. Print.

Kwinter, Sanford, "Mach 1 (and Other Mystic Visitations)", *Far From Equilibrium*, Barcelona: ACTAR 2008. 36-45. Print.

Kwinter, Sanford and Fabricus, Daniela, "The American City," *Mutations*, Barcelona: ACTAR, 2000, 484-649. Print.

Kwinter, Sanford, "The Hammer and the Song," *OASE 48*, Rotterdam: NAi, 1998. 31-43. Print.

Latour, Bruno. *We Have Never Been Modern*. Cambridge: Harvard University Press, 1993. Print.

Latour, Bruno. *Science in Action: How to Follow Scientists Through Society*. Cambridge, MA: Harvard UP, 1987. Print.

Lauer, Janice M. *Invention in Rhetoric and Composition*. West Lafayette, IN: Parlor, 2004. Print.

Le, Corbusier. *The City of Tomorrow and Its Planning*. New York: Dover, 1987. Print.

Lerup, Lars. *After the City*. Cambridge: MIT, 2000. Print.

Lyotard, Jean-François. *The Postmodern Condition: A Report on Knowledge.* Trans. Geoff Bennington and Brian Massumi. Minneapolis: University of Minnesota Press, 1984. Print.

Lyotard, Jean-François. *Just Gaming*. Trans. Wlad Godzich. Minneapolis: Univ.
     of Minnesota, 1989. Print.

Lyotard, Jean-François. *Libidinal Economy*. Trans. Iain Hamilton Grant.
     Bloomington: Indiana University Press, 1993. Print.

Lyotard, Jean-François. *The Differend: Phrases in Dispute*. Trans. Georges Van
     Den Abbeele. Minneapolis: University of Minnesota, 1988. Print.

Mau, Bruce. *Massive Change*. London: Phaidon, 2004. Print.

McEwen, Indra Kagis. *Socrates' Ancestor: an Essay on Architectural Beginnings*.
     Cambridge, MA: MIT, 1993. Print.

McKeon, Richard. *Rhetoric: Essays in Invention and Discovery*.
     Woodbridge: Ox Bow, 1987. Print.

McKeon, Richard. "The Uses of Rhetoric in a Technological Age: Architectonic
     Productive Arts." *The Prosepct of Rhetoric: Report of the National
     Developmental Project*, ed. Lloyd F. Bitzer and Edwin Black, 44-63.
     Englewood Cliffs: Prentice-Hall, 1971. Print.

Meeker, David L. *Essential Rendering: All about the Animal By-products Industry*.
     Alexandria: National Renderers Association, 2006. Print.

Mitchell, William J. "Connecting Creatures," *ME++ the Cyborg Self and the
     Networked City*, Cambridge: MIT Press, 2003, 19-39.

Mitchell, William J. *City of Bits: Space, Place, and the Infobahn*. Cambridge: MIT,
     1995. Print.

Nates, S.F. "Future Research for the Rendering Industry," *Essential
     Rendering: All about the Animal By-products Industry*. By David L. Meeker.
     Alexandria: National Renderers Association, 2006. 273-276. Print.

November V., Camacho-Hübner E., Latour B. "Entering a risky territory: space in the
     age of digital navigation" *Environment and Planning D: Society and Space.*
     28.4. 581-599. Print.

O'Gorman, Marcel. "Detroit Digital: On Tourists in the Apocalypse," *Ctheory.net.* 1000
     Days of Theory.td060 (2005): n. pag. Web. 31 October 2011.

Ong, Walter J. *Interfaces of the Word: Studies in the Evolution of Consciousness and*

Culture. Ithaca: Cornell University Press, 1977. Print.

Pallasmaa, Juhani. *The Eyes Of the Skin: Architecture and the Senses.* Great Britain: Wiley Academy, 2005. Print.

Perelman, and Lucie Olbrechts-Tyteca. *The New Rhetoric: a Treatise on Argumentation*. Notre Dame, [Ind.: University of Notre Dame, 1969. Print.

Poe, Edgar Allan. "The Man of the Crowd," *The Complete Stories and Poems*. New York: Tess, 2006. 215-221. Print.

Polya, George. *How to Solve It; a New Aspect of Mathematical Method*. Princeton, NJ: Princeton UP, 1971. Print.

Pullan, David. *Carcass Disposal: A Comprehensive Review.* National Agricultural Biosecurity Center Consortium USDA APHIS Cooperative Agreement Project Carcass Disposal Working Group. Web. 2004

Ratliff, Evan. "The Whole Earth, Cataloged. How Google Maps is changing the way we see the world," *Wired Magazine*, (2007) < www.wired.com >.

Ray, Mary-Ann. *Seven Partly Underground Rooms and Buildings for Water, Ice, and Midgets*. New York: Princeton Architectural, 1997. Print.

Rawes, Peg. *Irigaray for Architects.* New York: Routledge, Thinkers for Architects Series, 2007. Print.

Rice, Jeff. *Digital Detroit*: *Rhetoric and Space in the Age of the Network*, Forthcoming book from Southern Illinois University Press. 2011. Print.

Rice, Jeff. "21st Century Graffiti: Detroit Tagging," *Ctheory.net.* 1000 Days of Theory.td005 (2005): n. pag. Web. 31 October 2011.

Rowe, Colin, and Fred Koetter. *Collage City*. Cambridge: MIT Press, 1984. Print.

Ruskin, John. "Lecture IV Influence of Imagination in Architecture," *The Two Paths*. New York: Chelsea House, 1983. 69-90. Print.

Saper, Craig J. *Artificial Mythologies: a Guide to Cultural Invention*. Minneapolis: University of Minnesota, 1997. Print.

Saper, Craig J. *Networked Art*. Minneapolis: University of Minnesota, 2001. Print.

Schnapp, Jeffrey T., and Timothy L. Alborn. *Speed Limits*. Milan: Skira, 2009.
    Print.

Schneider, Peter. "Douglas Darden's Sex Shop: An Immodest Proposal." *Journal of
    Architectural Education* 58.2 (2004): 9-13. Print.

Schwarzer, Mitchell, "Automobile," *Zoomscape*. New York: Princeton
    Architectural Press. 2004, 71-117. Print.

Segrest, Robert. "Perimeter Projects: The Architecture of the Excluded Middle."
    Perspecta: Yale Arch. Journal, 1987. Print.

Serres, Michel. *Hermes: Literature, Science, Philosophy*. Baltimore: The Johns Hopkins
    University Press,1983. Print.

Simmel, Georg, and Donald N. Levine. *The Metropolis and Mental Life.* Chicago:
    University of Chicago. 1971. Print.

Sirc, Geoffrey Michael. "Writing Classroom as A&P Parking Lot," *English Composition
    as a Happening*. Logan, UT: Utah State UP, 2002. 185-233. Print.

Smoutt Allen. *Pamphlet Architecture 28: Augmented Landscapes*. New York:
    Princeton Architectural Press, 2007.

Sputnik, Studio, and Lars Lerup. *Snooze: Immersing Architecture in Mass Culture.*
    Rotterdam: NAi, 2003. Print.

Sterling, Bruce, "Dispatches from the Hyperlocal Future," from *Wired Magazine*,
    2007, < www.wired.com >. Web. 31 October 2011.

Stiegler, Bernard. *For a New Critique of Political Economy*. Cambridge: Polity, 2010.
    Print.

Surowiecki, James. *The Wisdom of Crowds*. New York: Anchor. 2005. Print.

Teyssot, Georges. *The American Lawn*. New York: Princeton Architectural with
    Canadian Centre for Architecture, Montréal. 1999. Print.

Tostrup, Elisabeth. *Architecture and Rhetoric: Text and Design in Architectural
    Competitions, Oslo, 1939-1997*. London: Andreas Papdakis, 1999. Print.

Tschumi, Bernard. "The Pleasure of Architecture," in *Theorizing a new agenda for*

*architecture: an anthology of architectural theory : 1965-199*5 . Ed. Kate Nesbitt. New York: Princeton Architectural, 1996. 532-40. Print.

Ulmer, Greg. *Avatar Emergency*.

Ulmer, Greg. *Electronic Monuments*. Minneapolis: University of Minnesota Press, 2005. Print.

Ulmer, Greg. *Internet Invention*: from Literacy to Electracy. New York: Longman, 2002. Print.

Ulmer, Gregory L. *Heuretics: the Logic of Invention*. Baltimore: Johns Hopkins University, 1994. Print.

Ulmer, Gregory L. *Teletheory: Grammatology in the Age of Video*. New York: Routledge, 1989. Print.

Ulmer, Gregory L. "The Euretics of Alice's Valise." in: *Journal of Architectural Education."* 45. (1991): 3-10. Print.

Varnelis, Kazys. *Networked Publics*. Cambridge, MA: MIT, 2008. Print.

Varnelis, Kazys. *The Infrastructural City: Networked Ecologies in Los Angeles*. Barcelona: Actar, 2009. Print.

Vidler, Anthony. *Warped Space: Art, Architecture, and Anxiety in Modern Culture*. Cambridge, MA: MIT, 2000. Print.

Virilio, Paul. *The Aesthetics of Disappearance*. Los Angeles: Semiotext(e), 2009. Print.

Virilio, Paul. *The Lost Dimension*. Los Angeles: Semiotext(e), 1991. Print.

Virilio, Paul, and Philip Beitchman. *The Aesthetics of Disappearance*. Los Angeles: Semiotext(e), 2009. Print.

Virilio, Paul. "Dromoscopy" (1984), *Negative Horizon*, London: Continuum, 2005, 105-119. Print.

Virilio, Paul. "The Overexposed City," from *Lost Dimension*, New York: Semiotext(e) 1991, 9-27. Print.

Virilio, Paul, "The State of Emergency," *Speed and Politics*, Los Angeles: Semiotext(e) 2006, 149-167. Print.

Vitanza, Victor J. "From Heuristic to Aleatory Procedures; or Toward "Writing the Accident," in *Inventing a Discipline: Rhetoric Scholarship in Honor of Richard E. Young*. Goggin, Maureen Daly, and `Richard E. Young. Urbana, IL: National Council of Teachers of English, 2000. 105-206. Print.

Vitanza, Victor J. *Negation, Subjectivity, and the History of Rhetoric*. Albany: State University of New York, 1997. Print.

Vitanza, Victor J. *Sexual Violence in Western Thought and Writing: Chaste Rape.* New York: Palgrave Macmillan, 2011. Print.

Vitanza, Victor J. "Threes," in *Composition in Context: Essays in Honor of Donald C. Steward.* Ed. W. Ross Winterowd and Vincent Gillespie. Carbondale: Southern Illinois University Press, 1994: 196-218. Print.

Walter, E. V. *Placeways: a Theory of the Human Environment*. Chapel Hill: University of North Carolina, 1988. Print.

White, Hayden. *Tropics of Discourse: Essays in Cultural Criticism*. Baltimore: John Hopkins University press, 1985. Print.

Wickstrom, Maurya. *Performing Consumers Global Capital and Its Theatrical Seductions*. New York, NY: Routledge, 2006. Print.

Wigley, Mark. "Resisting The City." *TransUrbansim*. Rotterdam: Nai Publishers, 2002. 103-122. Print.

Woodgate, S. "A World Without Rendering," *Essential Rendering: All about the Animal By-products Industry*. By David L. Meeker. Alexandria: National Renderers Association, 2006. 277-293. Print.

Woods, Lebbeus. "Wall Games." lebbeuswoods.wordpress.com, 9 Nov. 2009. Web. 8 Jan. 2012.

Woods, Lebbeus. *War and Architecture. Pamphlet Architecture Vol. 15*. New York, NY: Princeton Architectural, 1993. Print.

Woods, Lebbeus, and Rehfeld, Ekkehard. *BorderLine*. Wien: Springer, 1998. Print.

Young, Richard E. "Arts, Crafts, and Knacks: Some Disharmonies in the New Rhetoric," in *Reinventing the Rhetorical Tradition*. Ed. Aviva Freedman and Ian Pringle. Conway: University of Central Arkansas, 1980. 53-60. Print.

Young, Jason. T. "Density of Emptiness" *Distributed Urbanism: Cities After Google Earth*, New York: Routledge. 2010 101-124. Print.

Young, Jason. "Phenomeno-Praxis," *Dimensions.* 13. (1999): 58-69. Print.

Zizek, Slavoj. *The Parallax View*. Cambridge: MIT, 2006. Print.