APPLYING A HEURETIC GENERATOR WITHIN ARCHITECTURAL EDUCATION:
REEVALUATING THE CITY PLAN’S VIABILITY

By

LAUREN MITCHELL

A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTERS OF SCIENCE IN ARCHITECTURAL STUDIES

UNIVERSITY OF FLORIDA

2007
To my teachers
ACKNOWLEDGMENTS

I thank my parents for their unending support. I also thank Nina Hofer, Dr. Greg Ulmer, and Jason Young for all that they have helped me to understand in the last two years.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>7</td>
</tr>
<tr>
<td>LIST OF OBJECTS</td>
<td>8</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>9</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1 APPLYING A HEURETIC GENERATOR</td>
<td>11</td>
</tr>
<tr>
<td>Heuretics</td>
<td>11</td>
</tr>
<tr>
<td>Heuristic Generator, the “CATTt”</td>
<td>14</td>
</tr>
<tr>
<td>2 FREEDOM FROM THE “EYEPiece”</td>
<td>19</td>
</tr>
<tr>
<td>3 CIRCULATION AND RESERVOIR</td>
<td>25</td>
</tr>
<tr>
<td>Contrast: Unger’s Filter</td>
<td>25</td>
</tr>
<tr>
<td>Method of the Filter</td>
<td>27</td>
</tr>
<tr>
<td>Values of the Filter</td>
<td>28</td>
</tr>
<tr>
<td>Electracy</td>
<td>32</td>
</tr>
<tr>
<td>Target</td>
<td>33</td>
</tr>
<tr>
<td>Vibrations Above the Surface: Urbanism that Evades Perception</td>
<td>35</td>
</tr>
<tr>
<td>4 500 ML CHICKEN STOCK</td>
<td>48</td>
</tr>
<tr>
<td>Theory</td>
<td>48</td>
</tr>
<tr>
<td>Heidegger</td>
<td>50</td>
</tr>
<tr>
<td>Phusis</td>
<td>50</td>
</tr>
<tr>
<td>Alethia</td>
<td>52</td>
</tr>
<tr>
<td>Serres--The Soup</td>
<td>53</td>
</tr>
<tr>
<td>5 MEAT AND POTATOES; ANALGOY AND TALE</td>
<td>62</td>
</tr>
<tr>
<td>Analogy, Standing on the Shoulders of Dr. Ulmer</td>
<td>62</td>
</tr>
<tr>
<td>The Work of Francis Bacon</td>
<td>63</td>
</tr>
<tr>
<td>The Situation</td>
<td>64</td>
</tr>
<tr>
<td>Diagram</td>
<td>66</td>
</tr>
<tr>
<td>Cliché</td>
<td>66</td>
</tr>
<tr>
<td>Traits--The Asignified</td>
<td>67</td>
</tr>
<tr>
<td>Contour</td>
<td>67</td>
</tr>
<tr>
<td>Science</td>
<td>69</td>
</tr>
<tr>
<td>Tale of a Journey, Featherless Chicken Soup for the Suburban Sprawl</td>
<td>70</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Greg Ulmer’s Apparatus Diagram.</td>
<td>18</td>
</tr>
<tr>
<td>3-1</td>
<td>An example of Ungers’ “interpretations,” titled, “City with independent satellites.”</td>
<td>41</td>
</tr>
<tr>
<td>3-2</td>
<td>An example of Ungers’ “interpretations,” titled “Ideal city on an island, Joseph Furttenbach, 1620.”</td>
<td>42</td>
</tr>
<tr>
<td>3-3</td>
<td>Image from Dolores Hayden’s <em>A field guide to sprawl.</em></td>
<td>43</td>
</tr>
<tr>
<td>3-4</td>
<td>An example of Ungers’ “interpretations,” titled “Plan for Victoria, J.S. Buckingham, 1848.”</td>
<td>44</td>
</tr>
<tr>
<td>3-5</td>
<td>An example of Ungers’ “interpretations,” titled, “La Ville Radieuse, Le Corbusier, 1952.”</td>
<td>45</td>
</tr>
<tr>
<td>3-6</td>
<td>Sampling of correspondence post cards taken as part of my research on big box culture.</td>
<td>46</td>
</tr>
<tr>
<td>3-7</td>
<td>Greg Ulmer’s Apparatus II.</td>
<td>47</td>
</tr>
<tr>
<td>Object</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>5-1</td>
<td>“Inner disturbance” web site. This was the final project from “Imaging Metaphysics,” a course taken with Greg Ulmer.</td>
<td>73</td>
</tr>
<tr>
<td>5-2</td>
<td>This was the first project from “Imaging Metaphysics.”</td>
<td>73</td>
</tr>
<tr>
<td>5-3</td>
<td>Ideas Work Society project work and materials.</td>
<td>73</td>
</tr>
</tbody>
</table>
Neurosis is characterized by outbreaks and disturbances of sensory motor functions not attributable to any known neurological or organic dysfunction. Scientists induce nervous breakdowns in lab rats to unveil this phenomenon. When forced to react in a certain way long enough these rats become unable to react in accordance to primal desires even when they are set free. They may see food in front of them, but are paralyzed. The inability to move toward what they desire causes convulsions which can result in death. Neurosis, occurring naturally only in humans, is a visual which has driven my work. One must ask; why do scientists seek to understand such paralysis? The answer is simple. They would like to know how to fix it.

The thesis excites various conversational threads consisting of complex fibers and filaments that twist and tie us together. Thus, there is an assumed similarity in responses to circumstances and bodies of knowledge based on the reality of words within specific cultural situations. Our experience and perception of the world conforms to the words, metaphors, and images we use to discuss them. This is problematic in the digitized culture of 2007, where more experiences exist than do words. The literate apparatus, grounded in reason, is no longer sufficient alone for the academic institution - especially in urban analysis today.
The target of this research, a digital culture of rapidly expanding urban conditions of the United States (rapid urbanism), combats “the author.” It is difficult for architects and designers to look at rapid urbanism without feeling frustration because of this. Nostalgia, the desire for control or authorship, is brought on by a “compare and contrast” mentality seen through the lens of the Utopian European city plan. I am proposing that architects must free themselves from the habitual roles of “author,” and “problem solver” in order to become useful within rapid urbanism. The work of Dr. Gregory Ulmer and the study of heuretics have provided me with a methodological approach to invent new ways of “seeing” rapid urbanism, attracting precipitation to the ideas which have been floating in the clouds of my thesis. Now, something may fall to the earth in a form that will nurture “health” and grow.
Heuretics

Heuretics is defined by Gregory Ulmer as the logic of invention by way of artistic thought processes.¹ His work has rearranged the direction of traditional scholarship in altering its goals. As such, his courses push traditional hermeneutics, the study and application of theory in interpreting texts and systems of meaning, into heuretic methods. This subtle shift can be thought of as moving from description (alone) into action. To study a theory traditionally involves becoming aware of another person’s point of view in order to interpret cultural artifacts and most often texts, yielding new texts. Essentially the effect of a hermeneutic approach is circular and remains solely within literacy. The theory provides a way to see, the application of that theory in interpreting artifacts then yields more theories; questions provide answers which generate more questions. Heuretics adds to hermeneutics the ability to produce. Ulmer states that theory is assimilated into the humanities in two ways, by artistic experiment (heuretics), as well as by critical interpretation (hermeneutics).² In the academic arena one traditionally only experiences the latter. He explains,

Vanguard artists, like their counterparts among academic critics, often base their projects on the important theoretical texts of the day. The difference between the two applications had to do with their respective modes of representation: the artists demonstrate the consequences of the theories for the arts by practicing the arts themselves, generating models of prototypes that function critically as well as aesthetically.³

The architectural design studio often works this way, analyzing existing urban situations and the theories which accompany those situations in order to generate methods of production.

¹ Gregory Ulmer, *Heuretics the Logic of Invention*, p. 4.
² Ibid, p. 3
³ Ibid, p. xii
In Chapter 3 I will look more closely at O.M. Ungers’ canonical text, *Morphologie/City/ Metaphors*, an example of this. I feel that architectural design, generally tries to assimilate theory into the discipline in two ways, operating both as critic and as “vanguardist” who doesn’t primarily analyze what is existing, but rather composes alternatives by generating or inventing new poetics. Academic architectural education is an interesting arena within which something useful might be added to current heuretic thinking. This is because heuristics attempts to integrate visual and verbal discourse, which is fundamental in design process. Heuristics is put forth to develop workable methods for inventing image-based logics, drawing upon our ability to make the “affect” smart, to augment verbal based logics of literacy which are well known. Where better to begin inventing such logics than architecture?

Applying heuristics, with the help of Ulmer, to academic architectural education will offer the discipline a chance to put forth its methods and approaches of seeing in a form which are repeatable by others; methods and modes of operating within the world that move beyond traditional theory and criticism. It is profound when it provides an understanding on one’s position within the flows of the universe, as well as a heightened awareness of that universe regardless of the scale. In the words of Alberto Perez-Gomez,

Architectural beauty, like erotic love, burns itself into our soul; it inspires fear and reverence through a “poetic image,” one that affects us primarily though our vision and yet is fully sensuous if not synaesthetic. It is thus capable of seducing and elevating us to understand our embodied soul’s participation on wholeness.4

Architectural discourse might augment the study of heuristics; how can we use an image intelligently to inspire “fear or reverence.” Working heuretically invites the student to imagine actively rather than to simply describe or criticize. Methods currently developed in architectural design may be heuretic in essence, however they are generally isolated individualized practices

---

4 Perez-Gomez, “Ethics and Poetics in Architectural Education,” from *Architectural Ethics and the Personhood of Place* p. 121.
that are rarely revealed. Emphasis is placed on the authorship of a given solution, (i.e. the building, the plan etc.), and the intricacy of design process is rarely fully established and comprehensible beyond studio walls if at all.

Ulmer’s work has helped to ground my conception of “the eyepiece” (discussed in the following chapter) pedagogically. As a student in his theory course, “Imaging metaphysics,” (in spring 2007), I was asked not to follow in the footsteps of the masters, but to seek what they sought. Below is Ulmer’s course description,

These discussions are a symptom of a shift underway in the language apparatus away from literacy toward electracy. The Classical Greeks invented metaphysics in the context of the new institution of school (the Academy, the Lyceum), as part of their development of the possibilities of alphabetic writing. Aristotle produced a set of categories (beginning with Substance) and topics (headings for guiding the generation of propositions). These categories and topics, codified in a tradition of commonplaces, provided the core of education up to the early modern period. Our goal this semester is to begin doing for electracy what Aristotle did for literacy.

Rather than learning how to execute the perfect essay, we were asked to invent for the electrate apparatus, analogous to the essay for the literate apparatus, a cultural invention and a method for experiencing the world. We temporarily ignored our traditional mind set temporarily. For the sake of progress, we traded into new assumptions, applying art strategies to problems of textual production to make something appear. We did for the electrate apparatus what Greeks did at the inceptive moment of the literate apparatus. A heuretic curriculum looks at theory, teaching its applications, while communicating the circulation of a cultural invention. As I have come to understand from Dr. Ulmer however, theory is only one ingredient in the recipe of a cultural invention. Architecture is for me a cultural invention which, when successful, provides its inhabitants the ability to understand their position within the flows of the universe, as well as

---

5 Gregory Ulmer, course description from ‘Imaging Metaphysics’, ENG 6077. I participated in this course in Spring 2007 Semester, where I was first introduced to heuretics and Electracy.

6 Electracy is expanded upon more fully in the following chapter.
provide for them a heightened awareness of that universe. I would like to share with the
discipline an investigation of the other ingredients operating in the creation of cultural
inventions.

Our current cultural situation, along with the technological apparatus which continues
to emerge at an incomprehensible speed, requires inventive pedagogical strategies. If the
academic institution becomes involved in the electrate apparatus, I feel that the increasing
“specialization” of the world may slow as more people become electrate. As an educator of
Architectural design in 2007, it is critical to understand the appropriate ingredients necessary in
formulating productive and successful cultural inventions, as well as how to effectively cultivate
these ingredients into replicable methods which might be widely utilized. I think that academic
architectural education should play an active role in constructing new methods within the
electrate apparatus. Heuretics will enable the discipline to find repeatable operations rendering
generative inventive logics that are both actionable and describable.

**Heuristic Generator, the “CATTt”**

Ulmer posits that working heuretically necessitates the use of the method being invented
while inventing it, exemplifying the use of “hyperrhetoric,” which is considered akin to the
dream logic of surrealism. From Ulmer’s pedagogical approach, I have adopted a heuristic
generator. This generator facilitates my aim—to produce a repeatable method by which urban
research can be as generative as it is analytical. Ulmer suggests that the system of most
intellectual inventions can become accessible through this heuristic generator which is
mnemonically identified by the acronym "CATTt." He reveals that all of the manifestos of the
avant-garde, including “The Manifesto of Surrealism,” belong to the tradition of the discourse on

---

7 Gregory Ulmer, *Heuretics the Logic of Invention*, p.8.
method, and that they tend to include a common set of elements found in the “CATTt.” which includes these operations:

\[
\begin{align*}
C &= \text{Contrast (opposition, inversion, differentiation)} \\
A &= \text{Analogy (figuration, displacement)} \\
T &= \text{Theory (repetition, literalization)} \\
t &= \text{Tale (secondary elaboration, representability)}
\end{align*}
\]

This generator offers the discipline of architecture an academically rigorous method of approaching design projects that will help us to realistically look at the situation that we are currently in (2007), fully immersed in an electronic culture. Looking more realistically at a situation by working inventively within it will also ground us more productively in history. With the “CATTt” as my generator I will attempt to invent a practice of urban analysis appropriate for the complexity of such culture. Developing an awareness of the electrate epoch within academic architectural education reestablishes the architect’s role as part of “the everyday circus of big box culture.”

The *Contrast* for my “CATTt” is O.M. Ungers’ *Morphologie City Metaphors*. I am using Ungers’ anthology in order to identify a clear example within the discipline that may no longer be useful, or from which I wish to move beyond. Ulmer suggests that “the components of the selected contrast provide an inventory of qualities for a new method.”

---

8 Ibid.

9 It isn’t my intention for the thesis to be primarily an addition to heretic curricula, nor am I interested in becoming a master of the theories I am utilizing. Both of these avenues would be more appropriately suited for a Ph.D. in my field. I simply wish to work in an interdisciplinary manner, proving that rigor in architectural academia can happen inventively.

10 Jason Young, Architectural Design professor at University of Michigan. During “Labyratorium” my first graduate studio at Michigan which took part in a larger class wide focus on “the perimeter,” we were asked to correspond with the condition of big box. Jason sometimes referred to this condition as the everyday circus of big box. The everyday circus was adopted as common nomenclature within the studio culture.

11 Ibid.
ability to understand the filter that Ungers has created so that we can understand other filters. I sense that if architects can look at the rapidly developing urban conditions within the United States with a critical understanding of our own filters, we may feel more capable of operating within it.

The Target concerns rapidly developing urban conditions, which constitutes much of the United States. I am suggesting that within this “split second urbanism,” “the plan” as it is utilized by Ungers, is no longer a viable starting position for the architect. This kind of urbanism, in which the inhabitants are the authors, grows in response to complex forces of these inhabitants’ desires. Thus, the formal character has little significance to the apprehension of organization. The designer, I feel, must understand his or her own inner desires in order to understand organizing principles within a condition where formal/structural character are nearly insignificant in contrast to the dominant presence of the “atmospheric” pressures of the inhabitant’s desire.

The Theory is Michel Serres’ Hermes Literature, Science, Philosophy, focusing on the essay, “Michelet: The Soup.” With the help of Serres’ recipe, I aim to generate an approach to urban analysis which isn’t dependent upon the city plan. Serres’ work is perpetually founded upon illustrating the existence of a complicated passage between “science,” and the science of man, “humanities.” The gathering of knowledge for Serres is more like making soup than shelving information. In this experiment, electracy provides the techne for the establishment of such a passage.

Serres points to a bridge between science and art, which begins to establish the Analogy for my experiment. I will apply both a scientific and an artistic lens in order to displace aspects of both of these fields into my architecture, establishing figuration for the new approach to urban
analysis. Art establishes the complexity of the individual as significant in the development of urban analysis. Additionally, it brings forward the importance of process and development and suppresses the importance of final results. Science has provides new methods and “procedures,” (such as biopsy) to reevaluate the level at which one “sees.” The realm of scientific knowledge provides a specific intensity to the way I perceive taxonomy.

The targeted condition offers an exaggerated example from which to start breaking our addiction to reductive logics. Ulmer’s “CATTt” will help to generate a method to practice operating in a new way. The element of practice is extremely important. As with learning a language or a musical instrument, the development of one’s ability to trade into or out of filters at will require discipline and practice. Ulmer is known for the following quote,

Electrate logic proposes to design these atmospheres into affective group intelligence. Literacy and electray in collaboration produce a civilizational left-brain right-brain integration. If literacy focused on universally valid methodologies of knowledge (sciences), electray focuses on the individual state of mind within which knowing takes place (arts).  

In order to conceive of the architect’s role in such affective group intelligence, it is necessary to examine the lenses through which we see and conceive of ourselves. This will be discussed as the “eyepiece” more comprehensively within the following chapter.

---

12 Gregory Ulmer. The quote is found on www.wikipedia.com, under ‘Greg Ulmer.’ Typically I would utilize a more rigorous source. Due to the playful nature of the course, and Ulmer’s interest in the internet, it is fitting to use this as a source.
Figure 1-1. Greg Ulmer’s Apparatus Diagram depicts the technological, institutional, and identification transformations from the oral epoch to the literate epoch and into an electrate epoch. This was presented as additional material within his course. This diagram, as well as many others is generously available on Ulmer’s web page under curriculum.
CHAPTER 2
FREEDOM FROM THE “EYEPIECE”

In my attempt to loosen my own rigidly woven and predetermined synaptic reactions, my mantra has been, “neurons that fire together wire together.” ¹ I have been operating under the assumption that if individuals live architecture within the current state of their own minds, they will have no fertile ground to sprout and cultivate creative active energies – the muse has no space within these beings on which to perform. I would like to fire as many neurons as possible in my creative process--trading into complexity--in order to avoid common and easy habits of reduction. The concept of “Eyepiece” is expanded upon in this chapter in order to express the depth of my interest in unpacking the work I have done with Gregory Ulmer in studying heuretics within the realm of architectural Pedagogy.

I have noticed an emerging awareness of a claustrophobic feeling among architects and architectural academics, bound by their current methods of formally communicating/representing ideas, (translation). Additionally, I am intrigued by the saturated cultural condition in areas of rapid expansion. In merging these two interests, I have developed a deep admiration for the complexity in thought which is necessary to conceive of and work spatially and aesthetically within accelerated conditions of information networks of mixture and desire. These conditions are not “imageable” in the way we typically conceive of urban analyses. Applying a heuretic generator, I attempt to fuel a mental model with which one is able to produce urban analyses without simply reducing the thinking to a new set of terms.

¹ Mark Bear, Barry Connors, and Michael Paradiso, Neuroscience: Exploring the Brain, pp. 724-725. When an axon of cell A is near enough to excite a cell B and repeatedly or persistently takes part in firing it, some growth process or metabolic change takes place in one or both cells such that A’s efficiency, as one of the cells firing B, is increased.
The ability to instantly visualize levels of abstraction or entire systems of logic, allows us the use of available “knowledge,” while remaining free to go beyond this in search of accelerated alternatives. I begin to ask myself: how Do I Translate [My] Reality in 2007?

Just as a tangent touches a circle lightly and at one point, with this touch rather than with the point setting the law according to which it is to continue on its straight path to infinity, a translation touches the original lightly and only at the infinitely small point of the sense, thereupon pursuing its own course according to the laws of fidelity in the freedom of linguistic flux. ²

Translation requires a reworking of representational systems at hand. According to Hebbian postulate, “neurons that fire together wire together.” This suggests that our semantic reactions neurologically occur and are predetermined based on previously repeated thoughts and actions. Repetition of a particular system or thought pattern accelerates wiring, establishing fixed connections and perpetuating predetermined habits and assumptions. Thus, one is able to ascertain that the semantic structure or, “eyepiece” within each of us, constitutes that which we are able to perceive and conceive. Subsequently, it constitutes the deployment of the representational systems which will collectively be rendered. The representational systems deployed become the “images appearing substantive” that are conceived of as reality.³

The “eyepiece” is the device that each of us carries around to peek out at the noumenal configuration or “thing-in-itself.”⁴ What we see of the world is what it lets us. The scientific phrase used to describe the potential for synaptic structures and predetermined semantic reactions to rewire is “synaptic plasticity.” An early exploration of synaptic plasticity, and its

---


³ Alfred Korzybski, Science and Sanity, pp. 198-203. This notion comes from a recurring theme in most of Korzybski’s work, often referred to simply as, “the map is not the territory.” I have practiced remembering that the map is not the territory by calling the things I see within the world image appearing substance or substantive.

⁴ Ibid, pp. 386-411. In order to fully grasp this concept it I suggest studying Korzybski’s Structural Differential, a three dimensional diagram which explains the abstraction process in humans.
implications, was illuminated by A. Korzybski in the 1930’s. His general semantics theory offers methods to thalamically process ventures into the study of complexity, loosening the semantic structures constituting the archaic devices which we carry around to look through. To drop this device, or even parts of it, would be dramatic for the discipline of architecture; for to make a change in an object is insignificant in comparison to a change made in the lenses it is viewed through.

As noted by Sanford Kwinter architecture plays, or should play, a privileged role in the study of complexity, called by Bergson the science of intuition.

Through materialization of actualization, architecture has the capacity to free the imagination from three-dimensional experience, to free it from the curse of so-called “invisible processes” and hidden diagrams and to show us that processes and events, the ones that give form to our world and our lives, have shapes of their own.5

Such a (time based) space or science of intuition requires self reflexive practice. To illustrate, Manuel Gausa’s introduction in Operative Optimism resonates within the discipline of architecture, an awareness of the binding nature of our current modes of communication, translation, and representation. A claustrophobia which binds in expressive ability has surfaced within the image heavy books like Gausa’s headlined by Koolhaas and Bruce Mau’s efforts, nakedly illustrating that more experiences exist than do words.6 These examples reveal the saturated state of our economic evolution and beautifully depict the relevance of this thesis. Gausa’s plea is stimulating in what it suggests for the evolutionary state of even a small percentage of humans. He seems subconsciously aware of a vertical evolutionary shift in the semantic reactions which shape our collective behavioral structures or manifold of values.


6 I am referring also to a number of books within the discipline which invent new terms to deal with the claustrophobia. A clear example of this is found within the text by Lebbeus Woods within Pamphlet Architecture, “Some of them are Killers” #24. Here he describes a new type of space, giving it the name “data space.”
Korsybski identifies three “stages of civilization,” historically illustrating the shift from one-valued semantics to two-valued semantics when the “laws of identity” were established by Aristotle. This shift should be conceived of as rolling or folding in on itself, vertical rather than horizontal. For Korsybski, marking this dramatic shift in the collective semantic structure proves the necessity for conceiving the shift which is currently occurring. Gausa calls for a new way of understanding old notions of architecture and culture. He asks us to shift our gaze from a defensive (or over-vigilant) vision of architectural action which in his view is the most traditional. I agree, a shift needs to and will take place, but to simply ask a generation of architects to shift into a new gaze perpetuates a two-valued, identity based collective mentality. Korsybski shows that this wreaks havoc on our ability to operate within the space of intuition. Operative optimism is not so much about a “new” gaze or “new” logic, but rather, a logic and gaze “in addition to.” To simply drop “new” from this plea might be a start.

Practicing conscious abstracting, according to Korsybski, is a self reflexive process will result in an elimination of serious fixities and blockages, which disallow fluid negotiation within representational systems. Korsybski renders the words and languages we use as nothing more than semantic maps to correspond with the configuration of complex reality. Consider Gaston Bachelard’s “Dialectics of Outside and Inside” in light of this discussion. He might see Korsybski’s methods of loosening rigidly woven semantic reactions as “little pieces of experimental folly, like virtual grains of hashish without which it would be impossible to fully

7 Alfred Korzybski, Science and Sanity, pp.133-287.
9 Manuel Gausa, from the introduction to Operative Optimism, pp. 19-27.
10 Samuel Ichiye Hayakawa and Alan Hayakawa, Language in Thought and Action, pp. 112-124. Also see Alfred Korzybski, Science and Sanity, pp. 452.
enter into the reign of “imagination.” 11 Bachelard excites a similar convergence of conversational threads when he suggests that phenomenology is what gives us the psychic positivity of the image. I would ask that you pause to truly grasp the statement. A phenomenon, or process that is known through the five senses, and thus understood as we have seen through a predetermined synaptic structure, is what gives us the substantive of a mental image. In other words, “the map is not the territory.”12 Bachelard’s essay provides a beautiful portrayal of the complexity with which it is necessary to use our current state of communication, to become aware of “our body” and “not our body,” or more clearly, what we see through the “eyepiece” and what is actually going on.

Many people are convinced that, as science proceeds, we are learning to perceive better, and we are coming nearer and nearer to the point where we will be able to describe reality in very exact terms. They miss the fact that describing something is to distort it, shrink it, and betray it. With even a loose understanding of Hebbian theorem, one sees that to break restrictive mental habits would in fact cause a neurological rewiring within the brain. Shifting semantic structures allows for involutionary understandings of situations, and the ability to break apart representational systems, resulting in the shift in gaze required in Operative Optimism. Simply, I am suggesting that part of the translation process in architecture must account for some form of self reflexive action, which for me begins with the acceptance of one’s own Eyepiece.

11 Gaston Bachelard, “The dialectics of Outside and Inside,” from The Poetics of Space, p. 219. This sentence marks the beginning of one of my favorite passages by Bachelard, of which the following quote has been the most impactful. “But if reduction is easy, exaggeration is all the more interesting, from the standpoint of phenomenology.” I have begun to exaggerate images in order to disassemble my eyepiece.

12 Alfred Korzybski, Science and Sanity, pp.133-287.
A model that is much simpler than the phenomenon it is intended to illustrate shrinks our thinking to the model’s dimensions and causes us to miss the complexity of the phenomenon.\(^{13}\) The structure we see and represent is made by the instrument inside through which we use to look at the configuration outside. Thus, the more interesting voyage of discovery consists not in seeking new landscapes and gazes, but in freeing ourselves from the addiction we have the singular “eyepiece.”

In the remaining chapters I attempt to invent a pedagogically relevant method to understand and practice shifting the lenses of “the eyepiece”. I don’t associate myself with the success or failure of the project, thus I remain optimistic about the outcome regardless. I understand that there are certain aspects of my being which limit my creativity. My motivation isn’t derived solely by the outcome (how well I did and how well “I” am received). It is also a result of my willingness to adhere to the challenge of breaking free from the addiction that I have to solidifying my narrow view of the universe, expanding the aspects of myself which restrict or limit my creativity.

---

\(^{13}\) Samuel Bois, *The Art of Awareness*, p. 146.
CHAPTER 3
CIRCULATION AND RESERVOIR

Contrast: Ungers’ Filter

Contrast for the “CATTt,” in this case, ensures the viability of the architectural connection. The contrast helps identify a clear example within the discipline that may no longer be useful, or from which we wish to move beyond. “The components of the selected contrast provide an inventory of qualities for a new method.”¹ Of course, because the Target is very specific and very loaded, the Contrast necessitates a certain level of specificity. I am concerned with the current state of urban analysis, thus the image play selected involves urban analysis. I have chosen O.M. Ungers’ Morphologies City Images. Ungers has deposited this canonical form of image play into the architectural arena, forming one layer or filter of an “Eyepiece”. To understand the filter that Ungers has created will allow us to understand more of these filters. I sense that if architects were able look at the rapidly developing urban “big box” conditions within the United States without such filters, they may feel more capable of operating within it.

Filters are formed in a twofold operation. First, parameters of values are set up. Ungers determines, for example, what is looked at and what isn’t. He chooses: 1, a city plan, 2, a very particular image, 3, a German word, and 4, the English translation. Secondly, a powerful form or shape is given to thinking, establishing method. The method, for Ungers is emphatic. I will discuss a few of these examples in order to better explain the mechanism of Ungers’ filter, developing enough awareness to engage and disengage from these filters at will.

Morphology is derived from the Greek term morphe meaning shape or form. Used in biology for example, morphology refers to the basic outward appearance or form of an organism, relating to its size, shape, or structure. Morphology can be applied to the whole or any part of an

¹ Gregory Ulmer, Heuretics the Logic of Invention, p. 8.
organism. Because morphological classification pertains to external characteristics and observable appearance, it seems that using it in urban analysis runs the risk of grouping together pieces of information that are actually relatively unrelated. 2

Through the use of molecular biology, genetic similarity is now considered in addition to morphology in modern systems of taxonomy. Those who believe in morphological logics like Unger prioritize the meaning of form in architecture and urban analysis. I feel that forming metaphorical connections and associations between two very different things based only on form or a surface reading is not productive. In rapid urbanism, this form of thought process is too slow, miring one down into predetermined thoughts and memories, eliciting a compare and contrast thought process that is hard to deviate from.

Working from form, for example, is very different from working from texture. Textural understanding is an area I have focused on in developing freehand drawing exercises for undergraduate design students. Drawing becomes useful in architecture when there is discovery of a repeatable action; when one uncover a system of representation to convey a spatial or structural condition they have observed in life. When this form of discovery occurs, one is essentially uncovering or unconcealing a truth – a repeatable action – and importantly not representing a concept. Once the student uncovers the repeatable action, the irreducible unit involved in the given system of representation, they own it. It becomes a part of them in the way that their “handwriting” might.3

———

3 Roland Barthes outlines several levels of meaning in an image; an informational level, a symbolic level, and a third level, which is transcendent of psychology, anecdote and function. For Barthes this level is significant. This third level (thirdness) pertains to the individual memory. Barthes felt that it was important to understand the logic of this third level which exists within each of us.
Becoming conscious of the irreducible unit, the kind of mark made, reveals a greater understanding of both measure and contour within representation. This concept is actually the link between these two modes of analytical drawing. Becoming aware of the implications that one kind of mark has over another is important in laying basic proportions as well as in establishing scale, and depth within drawing. When looking at form alone, all of what emerges out of understanding texture and “finding” appropriate texture is missed. The breadth of understanding texture in architectural endeavors adds a taxonomical layer to the study of form in the way that genetic similarities radically change morphological readings in science. It is actually only in texture that that concept is lost enough to uncover (something interesting).

**Method of the Filter**

The method of the filter that Ungers presents provides an approach to interpreting city plans. He calls such image play “interpretations.” The method consists of what he considers, “three levels of reality: the factual reality – the object; the perceptual reality – the analogy; and the conceptual reality – the idea, shown as the plan – the image – the word.”⁴ He focuses on the integration of object, analogy, and idea to talk about thinking processes. He is addressing the nature of communication, which has helped me to determine the Theory for the “CATTt.” He is imposing a very particular format or method for categorizing the three layers together in order to establish a gestalt. In this method, thinking happens between image and plan. The words form a bridge that creates an awareness of connotations that may differ between the German idea and its English translation. Ungers attempts to open up the readings of each city plan by the image and word / idea it is paired with in order to embed “meaning” into the transformed reading of city plan. In essence he is pushing back on functionalism, fighting the reductive logic of functionalist

---

and behaviorist tropes. He claims not to be interested in analyzing simply in accordance to function or measurable criteria. He would rather think qualitatively than quantitatively, by way of “thinking and designing in images, metaphors, models, analogies, symbols, and allegories.” He wishes to transition from purely pragmatic approaches of thinking about cities to a more creative mode of thinking. It seems that he felt claustrophobic within his situation over 30 years ago at the books inception, predating the internet and the image flood of our current situation. I am not engaging Ungers on his own field of battle. It helps that Ungers also utilizes a strategy of contrast. On some level we have similar intentions. I also feel claustrophobic in my situation; however I don’t seek a functionalist or a formalist view of the world. My views are much soupier.

Values of the Filter

The values that Ungers sets up within the filter are equally as absolute as the method. I would like to focus specifically on the use of city plan for the sake of this discussion. Remember that he exposes, “three levels of reality: the factual reality – the object; the perceptual reality – the analogy; and the conceptual reality – the idea, shown as the plan – the image – the word.” I am curious if plan really describes “factual reality.” Considering where the city plans come from, I suggest that, the analogy images which Ungers has dubbed “perceptual reality” are more closely tied to fact. The subjects of these images are generally biological, mechanical, or tactile. Any of the images could be found in an encyclopedia. In figure 3-1 Ungers has shown a cat with nursing kittens accompanied by a plan by Raymond Unwin from 1910 titled, “City with independent satellites.” The city plan in this example is not a fact it is a concept. More directly,

---

6 Ibid.
7 Ibid, p. 58.
it is a utopian ideal. This can actually be said of the majority of plans within the anthology. The use of utopian city plans draw upon a nostalgic premise that the architect is a hero whose role is to solve problems with grand narratives. Michael De Certeau, discusses this in comparing “the concept city,” (the experience of Manhattan from the 110th floor of the World Trade Center), with “urban practices,” (the experience of wandering the streets of Manhattan). He asks,

Is the immense texturology spread out before one’s eyes anything more than a representation, an optical artifact? It is the analogue of the facsimile produced, through a projection that is a way of keeping aloof, by the space planner urbanist, city planner or cartographer. The panorama-city is a “theoretical” (that is visual) simulacrum, in short a picture, whose condition of possibility is an oblivion and a misunderstanding of practices. The Voyeur-god created by this fiction… must disentangle himself from the murky intertwining daily behaviors and make himself alien to them.  

Most of the city plans that Ungers uses within his book are utopian city plans or concept cities, as described by De Certeau in the above quote. Generally, the plan drawing is an orthographical cut that reveals an intangible experience of space, for that reason it is actually one of the most difficult to understand. Often, it is a planning document which contains information about future project as prescribed by the author. It is a concept. For Ungers, the city image, “factual reality” is always depicted at a very small scale, rendering gestalt formal information. Embracing authorship, Ungers’ filter disentangles all who have been influenced by his filter from murky intertwining daily behaviors of those “down below.” Down in the streets of Manhattan, nursing kittens exist as fact. figure 3-2 depicts clearly the “Voyeur-god” vantage point. Here the title is “Ideal city on an island, Joseph Furttenbach, 1620.”

The interpretations of “CITY” within Ungers’ pages raise the question: what happens when an urban situation, is not “imaginable?” By this I mean; if the plan isn’t an accurate indicator of anything, an analogy-image of the plan wouldn’t be useful. My Target, the rapid

8 Michel de Certeau The Practice of Everyday Life, pp. 92-93.
urbanism taking over much of the United States provides an example of a “non-imageable” condition. The plan or aerial view of this condition will not render anything productive in design processes. In fact, I suggest that to look at these conditions, as seen in figure 3-3, as “voyeur-god” raises the nostalgic hero complex filter expressed above. When utilizing this filter it is hard to operate outside of the tendency to compare what we see to that which we know.

In order to understand the organizing principles within rapidly forming urban conditions, I an understanding of the powerful forces of capitalism is necessary. This has no plan as we know it. It actually doesn’t have much form at all. Starting with “the plan” in this condition isn’t a viable starting condition for the architect. There is no author; the inhabitants are the authors. It grows in response to complex forces of these inhabitants’ desires, and the formal character has little significance in the comprehension of organization. This complexity cannot be paired with a formal analogy. Pairing this “fact” with an analogy and/or phrase can only cause disruption within the nervous system, because it shrinks reality, creating a model that is not complex enough to comprehend all that was involved in creating that space. It is no surprise that looking at “sprawl” in this reductive manner brings up the familiar comparative lens of the European city, typically accompanied by nostalgia. We don’t know how to look at it any other way.

Ungers’ filter embraces authorship. Our targeted condition, a digital culture, combats the author. I want to deviate from Ungers’ authoritative decision to use plan, however I will bring part of his filter into the “CATTt.” I am interested in how he has “morphed” the interpretation of each city plan in accordance to the aesthetic principles within his own web of fired and wired neurons. He chooses each image very particularly to solidify the form or morphe of each thought. Figure 3-4 depicts “Plan for Victoria, J.S. Buckingham, 1848,” paired with an image of mirrors.

---

reflected into one another. The English word used in the morphology is Reflection. Ungers chooses the images very particularly. For example, the patterns on the wall behind the mirror have been selected aesthetically, reinforcing the thought. They are repetitive and they alternate similarly to the pattern in the city image. The manner in which the frame of the mirror turns the corner at a 45 degree angle and the size of the mirror in relationship to the plan does this as well. The connection brings form to the idea of reduction. Figure 3-5 a very different example of an “interpretation.” We see, “La Ville Radieuse, Le Corbusier, 1952,” paired with an image of Coca-Cola bottles organized rationally. The word used here is Succession. It is obvious in this example that Ungers, whether subconsciously or not, reinforces his critique of functionalism in this pairing. The image play, as described in the example above, makes the reader feel like the inhabitants of La Ville Radieuse, would feel, in their situation, like the Coca-Cola bottles exist in theirs--within the systematic chain or force of the factory, unable to deviate. Modern utopias are paired with mechanical or rational images such as the example above. In contrast, the historical utopias--the plans which have the most pure formal characteristics--tend to be paired with ‘feel good’ images like roses, doughnuts, kittens, and children. I understand the book as a reading of Unger’s eyepiece more than anything else. Examining Ungers’ filter has helped me to understand that such aesthetic decisions are more influential (to thinking) than it might seem. Gilles Delueze calls this undervalued and underdeveloped logic “aesthetic comprehension.”

Aesthetic comprehension is the grasping of a rhythm with regard to both the thing to be measured and the unit of measure. Beneath both the measure and the units, there is rhythm.  

In chapter 5 I will discuss “aesthetic comprehension” further while exploring the artwork of Francis Bacon, as presented by Deleuze in *The Logic of Sensation*.

10 Gilles Deleuze, *Francis Bacon The Logic of Sensation*, from the translators introduction, p. xvii.
Electracy

To fully understand the contrast we must understand our situation. Looking at figure 3-1, an elaboration of the table from chapter two of this thesis, it becomes clear what has happened. Introducing Greg Ulmer’s notion of electracy, the apparatus or epoch which followed literacy is underway; however much of the world is “anelectrate”. Anelectracy is to electracy what illiteracy is to literacy. Ulmer writes of electracy:

What literacy is to the analytical mind, electracy is to the affective body: a prosthesis that enhances and augments a natural or organic human potential. Alphabetic writing is an artificial memory that supports long complex chains of reasoning impossible to sustain within the organic mind. Digital imaging similarly supports extensive complexes of mood atmospheres beyond organic capacity. Electrate logic proposes to design these atmospheres into affective group intelligence. Literacy and electracy in collaboration produce a civilizational left-brain right-brain integration. If literacy focused on universally valid methodologies of knowledge (sciences), electracy focuses on the individual state of mind within which knowing takes place (arts).

Ulmer’s tables help to understand that our target is embedded within the electrate apparatus. The grounding element is of particular interest to architecture. Notice that what has determined “foundation” or form has shifted from “God,” within the oral epoch, to “reason” within Literacy, and now to “body” within electracy. If we were able to trace this idea through architectural history, I believe it would become very obvious. Aesthetics, desire, entertainment, play etc. coalesce in the individual body, which is now apparently the grounding element within our epoch. I am going to assume for this experiment that the body provides the grounding of architecture within our situation. It is hard to operate outside of our preferred pathways. Thus, developing an approach to design within the transient dreams of the individual body feels absurd. The following chapter will help in explaining this point. Traditionally, the systems we utilize

---

11 Gregory Ulmer. This quote has been taken directly from www.wikipedia.com under ‘Greg Ulmer.’ Typically I would utilize a more rigorous source. Due to the playful nature of the course, and Ulmer’s interest in the internet, it is fitting to use this as a source. Additionally, I find that the quote is very beautiful.
have always been structured around the notion that one should privilege order over disorder.
This is because ground in the literate apparatus was reason, as it was once God. Using Michel
Serres as our primary theorist of the “CATTt” I would like to further explores the reorganization
of Ungers’ filter.

**Target**

*Target* for the “CATTt,” provides an “area of study” which the emergent method is
intended to address within architecture. Ulmer writes, “The target is often identifiable in terms of
an institution whose needs have motivated the search for the method.” 12 It is puzzling to me why
there is no (A)rchitecture found in the rapidly developing urban conditions constituting much of
the United States. My curiosity is more than likely a result of having grown up outside of
Orlando Florida, embedded deeply within a ubiquitous “ticky-tacky.” In my view, the absence of
architecture within rapid urbanism suggests that our institution is in need of a method which will
allow creative operability within these urban conditions. It doesn’t feel like an exaggeration to
say that the situation is ignored, even within rigorous architectural curricula. Students
understand that what they learn will be useful once they graduate. This is, of course true.
However their experience is applicable only in a very small number of situations across the
country; those which constitute the level of density required for what has been studied. The fact
that modes of operation within “sprawl” are not present within architectural curricula is not due
to a lack of creativity on the parts of either the architect, nor of the institution in my view.
Rather, I see it as an inability to function within a situation that is not “imagable,” as discussed
above. I arrive again at the imagery of the lab rat.

---
12 Gregory Ulmer, *Heuretics The Logic of Invention*, p. 9
“The Florida Landscape” project within the University of Florida’s School of Architecture curriculum addresses the issue of a “non-imagable” situation. In this project the students develop an ability to construct context models and drawings which are more about revealing deliberate and accessible descriptions of physical and spatial aspects of the context (i.e. fluidity and looseness) than the image or exactness of it. Depictions of context/ landscape are typically constructed texturally, of and with spatial and architectural intent. The students are pushed beyond romanticized portrayals of the landscape. Working intimately within the varied landscapes that make up “ground” in Florida provides the students an opportunity to become aware of measured and immeasurable aspects of site. The students might be asked in an initial study to capture various spatial phenomena that define the site by challenging perception at all levels of sensory modality; exteroceptoin, proprioception, and interoception. This project contrasts an intense urban “infill” project that occurs in the semester immediately prior, providing students the ability to understand that generating from “context” modes and methods of operation can happen in many ways.

I propose that we must become both literate and electrate in order to design within the targeted condition. We have to understand capitalisms effect on architecture in order to teach it something. Aaron Betsky captures my sentiment. He states,

We are real bodies in real space. As sprawl saps meaning and form away from our experience, we need to build back a sense of who we are as physical beings inhabiting a space we have made for ourselves. The artifice of human construction is what makes us real. To make us aware of this condition, designers should create forms with expressed connections and delightful surfaces that dance over the land like a spider’s web of suggestive spaces. Tents rather than palaces are the model for a world disconnected from one particular time or place. The shapes by which we can know ourselves are, moreover, deformed. Drinking into themselves the fast flows of capital, they resist consumption.
They give back a sense of a body that is both like us and wholly new, unfamiliar and strange. This is the architecture of the self that replaces us with what we have made.\(^\text{13}\)

**Vibrations Above the Surface: Urbanism that Evades Perception**

Sanford Kwinter suggested 10 years ago:

as the world continues to vary and flow, to aggregate, self-organize, and to re-break apart, that most modern humans operated within a girded metaworld of abstraction, ratiocination, and the crudest approximations to nature, and the arrested world, blind to the dimensions of time, was producing an equally blind architecture, thrown from the metaworld into the real one, like a lead boot into time’s refreshing river.\(^\text{14}\)

Seeing ourselves in the reflection of our filters, we are unable simply to look out at the process world of constant change and “see.” As discussed in chapter one, our “Eyepieces” are not suitable to perceive the complexity of the territories that we represent. A mental model that is much simpler than the phenomenon it is intended to illustrate shrinks our thinking to the model’s dimensions and causes us to miss the complexity of the phenomenon.\(^\text{15}\) By establishing the necessity for heuretic invention, and introducing the “CATTt” I am suggesting that exaggerated mental processes, which go beyond our contrast, would render us more apt to deal with our reality in productive and positive ways. To follow the movements of matter in its free and irregular flow, and to tap into the vast subtle potential of the fluid universe, one must first start with a break from the limitations of daily language. We have to invent something new.

Ungers’ model suggests that we have been forgetting relevant vibrations of urbanism within the reductions and abstractions we make. We could apply heuretics to many veins of architecture; however my explicit architectural interest in the split second urbanism of my

---

13 Aaron Betsky, *Architecture Must Burn*, p. 3.0. The quote expresses the way I will talk about ‘the body’ as grounding element for architecture within digitalized cultures of 2007.

14 Sanford Kwinter, “Flying the Bullet. Or When did the Future Begin.” from Louis Kahn: *Conversations with Students (Architecture at Rice)*, p. 71. This essay resonates with my thesis on many levels. The experience of Yager, a fighter pilot, exposes Kwinter’s interest in complexity and intuition.

current situation offers an exaggerated (“un-imageable”) example from which to start breaking our addition to reductive logics. The “fact” within Ungers’ morphological approach will have no use within the contemporary manifestations of urbanism within the United States. These forces, illustrated often by Kwinter as potential or incorporeal, are the ones which result in formal residues into which, as seen through Ungers’ model; we place our interests and effort.\textsuperscript{16} Within the discipline of architecture, it is singularly this residue, the plan or aerial view of sprawl, which is reacted to critically and defensively. Visually, the layer of urbanism I am interested in targeting can be visualized as vibrations above the surface of the energies appearing substantive.\textsuperscript{17}

Energy appearing substantive, or substance, is a term which I have used in reference to “objects” I see “outside”. Doing this reminds me “objects” within urban conditions are not the abstractions used to communicate with others about them. Rather, the stuff I see, abstract, and give names to, are in reality, dynamic configurations of units of energy. However, one should not deny or reject “the image” or its abstraction. The image is real, it is a projection of the mind, but “reality configures infinitely always.”\textsuperscript{18} To avoid abuse of one’s nervous system, it is best to always remain conscious of this.

“Neurons that fire together wire together.” The Hebbian postulate has been useful in conceptualizing vibrational urbanism--mapping potential trajectories of desire. However, I realize that I am using the Hebbian Postulate within this thread of the thesis work more loosely. Here, this analogy should not be used too rigidly, as analogies give our thinking processes a pattern from which it is not easy to break free.\textsuperscript{19} Gausa would agree that as architects we tend to


\textsuperscript{17} These are the layers I am claiming we forget to represent.

\textsuperscript{18} Alfred Korzybski, \textit{Science and Sanity}, pp. 386-411.

\textsuperscript{19} Samuel Bois, \textit{The Art of Awareness}, p. 137.
work “from” complexity.\textsuperscript{20} We saw in chapter one that to work “with” complexity would mean to work “with” yourself; conceiving of having multiple selves (within ones semantic structure).\textsuperscript{21}

If an aim is to expand the capacity to experience more of the process world of constant change in the study of urbanism than one’s filter would already allow, then representations and translations made must reflect that aim. Additionally, the assignments we give ourselves must have elements which develop this expansion embedded within them. Often, because we easily digest what we are used to, that which flows through the preferred pre-fired synapses, we feel most comfortable having discussions which are extremely reductive. Korsybski offers his structural differential to practice this break from common-sense daily language, and to become conscious of one’s abstractions. In our Heuretic invention we intend to do the same. Seeking to work outside of common-sense language tends to make one layer of the self very frustrated and stressed. It takes practice not to default to the old lens. However, as the world of economics has shown, stress is the healthy state of capital. The saturation of one aspect of the production of stress allows us the ability to perceive of the forces which are rendered unto us, and those which we render. And as we give up these frustrations little by little, we will come to a position where we can turn around and look back to find out that we didn’t give up a thing. In severing the “Eyepiece” there is nothing to lose except the values that are given to images appearing substantive.\textsuperscript{22}

\begin{flushright}
\textsuperscript{20} Manuel Gausa, \textit{Operative Optimism}, pp. 4-31.
\textsuperscript{21} Alfred Korzybski, \textit{Science and Sanity}, pp. 386-411.
\textsuperscript{22} Consider, for a moment, the middle. Find a writing pen lying around, it doesn’t matter what kind. Now, balance it on your index finger. You will see that in this case “the middle” is a balancing point which is only found with inclusion of all of both sides. This exercise, presented to me first by a Zen priest, is interesting in its application to the study of urbanism, to the discipline of architectural education, as well as Heuretics. The “plan” in our contrast is not a balancing point - It is not middle, rather it attempts to be a whole or gestalt. It has one author. I want to start in the middle in order to make something appear. I don’t want to be in control.
\end{flushright}
Advanced capitalism, as Neil Leach maintains, has turned the world into a mythologized dream world, based on fantasy and escapism. He maintains that throughout his article, “Wallpaper* person,” his argument was intended to be deliberately exaggerated, so as to become less a representation of [objective] “reality” than a transcendence of it. In so doing, he uncovers certain truths about the world and demonstrates an accelerated ability to map extensional relationships and accounts of these relationships. 23 He practices, through exaggeration, the ability to see something else, along with what he would have seen anyway. The article transcends canonical approaches via Leach’s self-reflexive account of the/his current condition, it requires and allows, simultaneously, the manipulation of his daily language. His notion of “aesthetic cocoon,” the isolated state of being cosseted from reality and locked into some dream world is not farfetched in relationship to the heuretic invention we are cooking up. The cocoon offers another angle from which to conceive of the addiction we have to our predetermined semantic reactions, and beautifully illustrates Hebbian theorem. Wallpaper* person provides a more psychological angle invested in the original story of narcissus, but as we will see, all angles are relevant. It actually offers an interesting model for much of contemporary life. Leach poses that the habitat of the Wallpaper* person is an extension of that very individual, or rather it is even an inverted mould.

At this point, it becomes clear that we are looking at an individual body in order to unpack a new way of “seeing” American Urbanism. Again, we want to conceive of design processes which factor in the complexity of contemporary manifestations of urbanism. Urbanism understood with an architectural mentality of an autonomous and purely phenomenological interest in mediums of mass, space, light and organization is not sufficient. We are always going

to be interested in those things. We want to see something else in addition to what we would have seen anyway. Thinking in this way might allow for designs which awaken a new layer of evolution. With that mentality we will no longer habitually seek monumental axis, and position of center. Nostalgia will not drive our motivations. We will be inventive and positive about sprawl.

In my research, I have practiced “looking” at sprawling big box landscape by corresponding within them. In so doing, I developed an awareness of five spatial “tendencies,” within this deported landscape. These tendencies provided a very productive launching point for the design project that followed. There was no need to impose a reductive model or method to read this landscape, the method was within it. Rather than assume the role of “wanderer” or “voyeur,” roles that have been studied in the past, I became more of a “hawker-barker.” I developed over a hundred postcards which listed the potentials within this deport landscape, (See figure 3-5). I gave myself no set boundary, I simply began to look and observe; and then I listed. I advocated; I sold. I wanted to see something else, in addition to what I would have seen anyway. The tendencies I came to see are as follows:

1. Rapidly developing (big box) urbanism is an ethereal context of transient dreams.
2. Loose mediums and connectors sanction loose associations within context.
3. A loose impulse results in overabundance, indulgence and a lack of restraint.
4. Large modulated context creates an immediate loose fit with what is desired, resulting in the hunt for something new.
5. The immediate trucking of portable modules of context responds to these transient dreams, which can never be fulfilled.

While uncovering these truths or tendencies, it became clear that the plan, what Ungers refers to as the “fact” within his morphological method of communication is not useful. This is because, as I have discussed, there is a dimension within these territories that is not “imageable.”
As such, seeking the perfect analogy, even aesthetically, is reductive and harmful to ones mental processes. Found within the tendencies stated above one begins to sense the emergence of the influence the individual “body” has on the forms which manifest. We see that impulses are responded to with immediacy. A beautiful logic of looseness reigns within the mathematically sublime landscape. Gathering information within these landscapes must allow for slippage. If it is too fixed and rigid, then it will not be accurate. Thus, there is a rift or unknowable characteristic within the aggregation and self replication of sprawl that is determined by our desires rendering any form of plan as we know it useless. How does the architect operate when the “plan” is no longer a viable tool? To answer this we must make a new method appear. This is our task.
Figure 3-1. Above is an example of Unger’s “interpretations.” Here, he has shown a cat with nursing kittens accompanied with a plan by Raymond Unwin from 1910 titled, “City with independent satellites.” This image is found on pages 58-59. [Reprinted with permission from Publisher]
Figure 3-2. Above is another example of Unger’s “interpretations,” titled “Ideal city on an island, Joseph Furttenbach, 1620.” This image can be found on pages 20-21. [Reprinted with permission from Publisher]
Figure 3-3. The image from Dolores Hayden’s *A field guide to sprawl*, depicts the standard view that designers take of rapid urbanism. I am suggesting that this vantage point is not a useful place to begin analysis of these sprawling conditions. This image/spread can be found within the second chapter, “An illustrated Vocabulary of Sprawl. [Reprinted with permission from Publisher]
Figure 3-4. Above is another example of Ungers’ “interpretations,” titled “Plan for Victoria, J.S. Buckingham, 1848.” The plan is paired with an image of mirrors reflected into one another, and the word used in the morphology is Reflection. This example expresses how Ungers uses aesthetic intelligence to make a point. This image can be found on pages 90-91. [Reprinted with permission from Publisher]
This example is titled, “La Ville Radieuse, Le Corbusier, 1952,” and is paired with an image of Coca-Cola bottles organized rationally. The “idea” used here is Succession. Unger’s choices obviously reinforce his critique of functionalism in this pairing. The image play makes the reader feel like the inhabitants of La Ville Radieuse would feel, in their situation, like the Coca-Cola bottles exist in theirs. This image can be found on pages 108-109. [Reprinted with permission from Publisher].
Figure 3-6. Sampling of correspondence post cards taken as part of my research on big box culture. During this research I began to “correspond with the condition of big-box.” I temporarily dispelled my preconceptions, and thus began to understand the condition as an ethereal context of transient dreams.
Figure 3-7. Greg Ulmer’s Apparatus II. This expands upon the one provided in the first The above diagram adds more specificity within the areas of ontology, ground, philosophy, state of mind, and practice in the transformation over time from the oral epoch to the literate epoch and into an electrate epoch. This was presented as additional material within his course. This diagram, as well as many others is generously available on Ulmer’s web page under curriculum.
CHAPTER 4
500 ML CHICKEN STOCK

Theory

Theory for the “CATTt,” will be Michel Serres’ *Hermes Literature, Science, Philosophy*, focusing on the essay, “Michelet: The Soup,” with a detour through Martin Heidegger’s *Introduction to Metaphysics*. Ulmer states, “In each case the theorist generates a new theory based on the authority of another theory whose argument is accepted as a literal rather than figurative analogy,” ¹ Serres provides an ample medium from which to base the conception of the new invention. I felt that using this particular essay for theory was perfect because the “CATTt” itself is soupy. Working must take place in all categories at once. As was discussed in the previous chapter, gathering information within our targeted context must allow for slippage. If it is too fixed and rigid, then it will not be accurate. I like to imagine having the pleasure of operating under the authority of Serres.

Harari and Bell list Serres’ five theorems within the introduction of the book. I will discuss the work through these theorems to provide structure for this chapter. The first of Serres’ theorems, as presented by Harari and Bell, suggests that an encyclopedia which omits any of the multiple dimensions of knowledge would render an encyclopedia false from the moment of its realization. Within Serres’ work, this common thread of the assimilation of all knowledge, suggests a kind of soupy “ultimate encyclopedia,” not unlike the internet. The soupiness is a result of a shift from descriptive categorization to active categorization. Serres moves beyond a typical scientific mentality of categorization, taking description into the realm of procedure by uncovering similarities between seemingly dissimilar subjects to reveal deeper fundamental truths about the structure of the universe. His intentions are fundamentally scientific though they

¹ Gregory Ulmer, *Heuretics the Logic of Sensation*, p. 9.
are reliant upon poetic and narrative. Serres’ work provides ample imagery from which to begin gathering knowledge inventively within the Electrate apparatus. It reinforces the nature and structure of a “distributive” or “additive “gathering mechanisms.

In short, Serres’ work is truly interdisciplinary. It is perpetually founded upon illustrating the existence of a complicated passage between “science,” and the science of man,“humanities.” Serres shows us that this path is complicated by the essential nature of knowledge as well as by the evolution of modern knowledge. He places the reader back into a time within which philosophy and science were singular. Philosophy is derived from the Greek *philia* meaning love and *sophia* meaning wisdom. ² The increasing complexity of our environment seems to call for an increasing complexity of specialization.³ However, from the *theory* for this experiment,

The tendency to divide in order to conquer has brought science to a critical point at which it is slowly becoming more of a trade the scientist practices than a *scientia* whose object is knowledge.⁴

We are not taking advantage of the electrate apparatus, which is capable of supporting a more complex and distributed gathering of knowledge, one that is a mixture. A soupy gathering of knowledge would not divide, it would unify. I will dive deeper into this question about the nature and evolution of knowledge by taking a brief detour into Martin Heidegger’s *Introduction to Metaphysics*. From Heidegger I will establish a few key phrases which will augment my ability to articulate an understanding of the evolution of modern knowledge.

---

² Ibid

³ This issue has been ripe and ready to be tackled in architecture for decades. I’m optimistic about addressing this issue because, like Serres and many others I am skeptical of the specialist.

⁴Michel Serres, *Hermes Literature, Science, Philosophy*, from the translator’s introduction, p. xii.
Heidegger

Phusis

Heidegger shows us that the Greek's fundamental questioning of Being of their great historical Dasein⁵ (situation) once pertained to nature's overwhelming, all-abiding-sway, which was conceived of as phusis.⁶ The all-abiding-sway of nature that the Greeks faced in their gathering of knowledge is like the flood of images and desire machines of capitalism that we face in our own historical Dasein. Heidegger shows us that the notion of phusis collapsed into the verb "to be," which became a primary structuring element of Western metaphysics. Before this inceptive moment of literate Metaphysics the "thing" had not yet been invented. One’s ability to use language in a very particular way to describe a thing did not exist before Aristotle. Unfortunately once the “thing” became a method of gathering, we became obsessed. The obsession with things--gathering them, categorizing them, testing them, and shelving them in very particular ways--got so out of hand that Heidegger suggests we forgot about the essence of Being and we can no longer even conceive of questioning the essence of Being as the Greeks once did. I believe that Serres simultaneously demonstrates and calls for an understanding of the essence of Being. For most of us however, this curiosity is no longer indexed within our minds because our Eyepieces do not register that frequency. "We involuntarily explain the infinitive "to be" to ourselves on the basis of the "is," almost as if nothing else were possible," ⁷ In this quote, Heidegger expresses that this has long ruled our historical Dasein. The addiction we have to our preferred mental processes begins here. The Photograph by Andreas Gursky titled “Salerno

---

⁵ Martin Heidegger, *Introduction to Metaphysics*, pp. 1-6. The use of Heidegger within the theory of this “CATTi” comes directly out of the work that I have done with Ulmers. Within “Imaging Metaphysics,” we used only Heidegger as our theorist.


⁷ Ibid, p. 96.
1990,”8 beautifully captures the notion of phusis, the all-abiding-sway of our situation. I am interested in this image because of the juxtaposition between both nature, phusis within the Greeks historical dasien as well as the power and complexity of the current historical dasien.

Heidegger maintains that the logic of cognition, literate metaphysics, i.e. gathering with the written word as means of finding "truths" is a way, and not THE way. He valorizes our mission. Pure reason, as for Serres, is too abstract for Heidegger. He believes that we are ready to go back and actually experience Being before it was crushed under the pressure of the infinitive "is," and to utilize a more practical based reasoning to seek out logics that are affect driven. As mentioned in the previous chapter, these logics would find "truths" grounded within the erotic forces that flow through our bodies. Heidegger suggests that it is within these forces or sensations--the recognition of beauty and what generates the golden section--that the sway of phusis can be felt.

This mode of ontology, necessarily, pushes beyond the substance or ousia of a thing. For example, it moves into territory beyond the definable essence of a thing (i.e. a cup contains, or a chair supports the weight of a person). It is not like this, but more like this. The point is to get beyond the level of meaning and to get at the thing itself. Due to our canny nature, and the forcefulness of the all-abiding-sway of capitalism, getting to the thing itself is not so easy. Heidegger suggests that breaking out of what is familiar would require a violence-doing to that which establishes the routes of these circuits. We arrive again at the necessity to conceive of the “eyepiece.”

---

8 This image is printed within Andreas Gursky: Images by Fiona Bradly of Tate Gallery Publications, pg. 31.
Alethia

Looking more closely at the narrowing of Being which took place, one might imagine it as a choice that was made by the Greeks long ago. A window into understanding this choice grows directly from the Greek’s notion of unconcealment or *alethia*. "This essence of truth could not be held fast and preserved in its inceptive originality. *Unconcealment*, the space founded for the appearing of beings, collapsed." 10

*Unconcealment* flattened out to mean correctness, and its essence was thus abandoned. I would like to imagine the re-emergence of this concept of *alethia*. It is in the unconcealed truth (*alethia*) that the Greeks established fundamental truths about their existence within their situation. They were commonly in the practice of inventing ways to exist within the all-abiding-sway. Exploiting the power of their apparatus, the Greeks used WORDS as recording devices, gathering up truths about nature's substance. Heidegger insists that we become aware how and when we got stuck in the trajectory of logic or *logos*11 as the only form of questioning the Being of beings. Working our way back to Serres, we see that he also noticed the choice that was made. Serres states,

*My body (I cannot help it) is not plunged into a single, specified space. It works in Euclidean space, but it only works there. It sees in a projective space; it touches, caresses, and feels in a topological space; it suffers in another; hears and communicates in a third; and so forth,. Euclidean space was chosen in our work-oriented cultures because it is the space of work – of the mason, the surveyor, or the architect.* 12

In effect, Being becomes singularly an idea such that "the grass is green," or "the grass is wet;" forgetting that "The grass (simply) is." Serres points to the realization our bodies are not

9 Ibid, pp. 75-88.
10 Ibid, p. 203.
11 Ibid, pp. 94-133.
12 Michel Serres, *Hermes Literature, Science, Philosophy*, p.44.
plunged into a single space, but rather into “difficult intersections and sets of connections and junctions which always need to be constructed.” 13

Heidegger demonstrates through poetry that there is another direction this "choice" could have taken us. He points to art, making the claim that this specific vehicle of communication did not get sucked into the "fall." Heidegger's interest in art as a form of communication allows us to use art as part of the analogy of the “CATTt,” looking specifically at the work of Francis Bacon. In doing, we will see a clear example of how a” logic of sensation” has actually been achieved. We will use the analogy to invent a way to move beyond Ungers’ morphological model which uses the plan, the image, and the word, together to think about “CITY.” The target is complex, and requires the use of the electrate apparatus of our dasein (see figure 4-1) which supports a complex logic of distributed categories.

From all of this, we gather that in noticing one thing, other things disappear from consciousness. If we are not careful, a limited and diluted truth then becomes fixed in the mind which results in a fractt understanding of Being. Also, we must realize that we are in a situation, a historical moment where flows of forces are acting on us.14

Serres–The Soup

Understanding Heidegger’s perception has provided a greater understanding of Serres’ complex passage between “science” and “art.” I will move onto his essay, Michele: The Soup. Serres does not simply make elaborate claims, leaving one to contemplate how to utilize the material presented. He operates more like the “vanguardist” that was described in chapter two on the Heuretic method. In his work he is preoccupied not simply by an object or a domain, but

13 Ibid.
14 For example, Heidegger takes an active position with the Nazi party in his situation because he thought he could influence the masses.
most importantly with sets of operations, methods, and strategies which are applicable to formations of all kinds. These methods are illustrated clearly by Serres’ five theorems listed by Harari and Bell in the Introduction of the book. The theorems collectively render Serres’ conception of the “ultimate knowledge gathering mechanism,” and most importantly, how it operates. The theorems offer fuel for the setting up of heuretic inventions and reflect the potential of an electrate apparatus. I am intrigued specifically with how they might be used in formulating our ability to understand how the subtleties of individual bodies influence the form of American urbanism. I will be using the theorems for clarity and structure in order to talk about The Soup.

Theorem 1: In order for there to be an encyclopedic totality, this totality must be constituted as a theory providing access not only to a field of knowledge but to the world as well. (An encyclopedia that omits any of the multiple dimensions of knowledge is a false encyclopedia at the very moment of its realization: this explains, in Serres’s view, the repeated failure of all philosophers of totality.)

This theorem provides a point from which to deviate from Ungers – the contrast. Serres’ would consider Ungers’ anthology a false encyclopedia because it includes only one view of “CITY.” In using the city plan, Ungers omitted certain dimensions of experiencing “the City.” Because Serres is combating a reductive encyclopedic gathering of knowledge, he proposes that new theoretical operations must be discovered and defined. If the separation of knowledge into compartmentalized units of specialization is no longer applicable to our epoch, then we must define new ones. We want to invent new techne within the electrate epoch in the way that the Greeks began to gather knowledge (about nature) with words in the literate epoch; without preconceptions.

---

15 Michel Serres, Hermes Literature, Science, Philosophy, from the translators introduction, p. xvi.
Most of Serres’ work is concerned with Information theory. He investigates the structuring of information, with a preoccupation with the nature of communication.

Modern science is thus specifically concerned with the study of all aspects of the transmission and propagation of messages – information, noise, and redundancy. (Literary criticism understands these same problems in terms of theories or code, language, writing, and translation.).

I am interested in how Serres focuses on the message to talk about the structure of communication, bringing in the specificity of each body or receiver. Ungers, in contrast, focuses on a morphological integration of analogy, fact, and idea to talk about “thinking.” He is imposing a particular arrangement of these three simple components to establish a whole or Gestalt. He celebrates the gestalt of his own authorship – one mind. Serres’ celebrates a rich soup that can account for all knowledge – many minds.

For Serres, the way that Ungers presents fact is too “dry.” The taxonomic absolute format is reductive and restrictive; it dries the skin, it will not nurture health and growth. Serres might actually enjoy Ungers’ use of image and word; however for Serres, divisions of information are never (only) taxonomical. Rather, communication is a “journey” and the message is a bridge. The message is transmitted at specific nodes or intersections along the “journey”. The journey forges new paths between man and the world. The journey has infinite potential, it can be tracked and has access through all areas of the encyclopedia, past present and future. Thus it is continuous and all inclusive. Serres states,

One might assume a gap between the so-called physical sciences and the sciences of living beings. No such gap is to be found in The Sea. The world is a static machine, a compression engine, an electrical engine, a chemical machine, a steam engine; the world is an organism – all without contradiction. The basic philosophy is hylozoism. What is hylozoism if not mechanism coupled with vitalism in a synthesis in which there are no gaps? …For Michelet the synthesis of mechanism and vitalism is justified by the

16 Ibid, p. xxiii.
succession of areas of knowledge within the encyclopedia. Why should sciences be contradictory among themselves? 17

Serres teaches about science and its history without focusing on one specific area. He is able to expose all areas of the encyclopedia at once by taking the reader on a journey through the structure of information. In this case it is a journey through The Sea as it is presented by Michelet through Serres.

The nature of the journey or story is the most productive for my purpose. In the transmission of each message, one can see down the trajectory of each converging axis of information including where the axis came from and where it might be going. My theory is that because what is being expressed is formulated as a narrative, the filter which is typically used to understand “science” isn’t turned on – the ubiquitous eyepiece isn’t on guard. It is as if one exists in the arms of mother, calm and relaxed, taking in the world as if it were the first time. Serres tells a story, specifically playing on Michelet’s obsession with the repetition of the feminine theme to intensify the flavor of the soup. Again, for Michelet, the moist/warmth theme is beneficent, whereas the dry, scholastic themes are maleficent.

For Serres the only thing to note about the nature of the soup is this, there are reservoirs for its circulation. More clearly, Serres provides this list claiming,

To understand the prebiotic soup . . . I have only to perform the following simple addition.

1. The centers defined by geometric and differential properties are the poles of the circulation of movements in general.

2. They are the poles of circulation of fluids in general, through the interaction of high and low pressures.

3. They are the positive and negative poles for the circulation of electric current.

4. They are the hot and cold sources of the Carnot cycle, which functions for all kinds of liquids.

17 Michel Serres, Hermes Literature, Science, Philosophy, p. 35.
5. They are concentrations for the circulation of saline solutions.

6. They are hearts for the circulation of the blood.

7. They are breasts or uteri for the circulation of milk or for menstrual circulation in which we can recognize, as in a circle, the cycle of the planets and the first factor of the addition.

What is the Soup? It is the sum of all elements analyzed in relation to the areas of the encyclopedia cited above. It is milk, blood, a solution of mineral salts, and electrical flux etc., all at the same time. It has reservoirs for its circulation.\(^{18}\)

Rather than study the Carnot cycle separately from the menstrual cycle, Serres suggests that we gather them together, with all other circulation “centers,” as described above, in order to understand a latent structuring reality which operates more deeply at the root of knowledge; there are reservoirs for the circulation of the soup. For Serres, these two notions remain structurally stable through all the divisions of the encyclopedia. He is not defining a structure, he is defining structure itself. In grasping this more deeply, one might feel again, the “all-abiding-sway” of \textit{phusis}, and begin again questioning the essence of being.

Theorem 2: Any theoretical exigency is inextricably linked to a moral or political exigency. (Theory always borders on terror – something that has always been known in academic circles that engage exclusively in theory.)\(^{19}\)

This theorem might help demonstrate how the political and the entertainment industries are already utilizing the internet in inventive ways. I have come to see from Dr. Ulmer, that as an aspiring educator in 2007, I am responsible for engaging in the process of developing an electrate society. He suggests that we can figure out, by becoming electrate, how to teach capitalism something. I think that this is an important area of research, especially in application to the realm of rapidly expanding urban conditions expanded upon in the previous chapter. Finding a way to teach capitalism something which might enable architects more operational ground within

\(^{18}\) Ibid.

\(^{19}\) Michel Serres, \textit{Hermes Literature, Science, Philosophy}, from the translators introduction, p. xvii.
sprawl is a longer term goal. Thus, for the sake of this exercise, I will not be focusing on this theorem in particular, as I feel it must come later, once the tale has become productive.

Theorem 3: there is no hierarchy of cultural formations. Science and myth are never on two sheets.
3.1 Science is a cultural formation equivalent to any other.
3.2 There is no “natural” hierarchy within sciences. Myth informs science.20

Theorem 4: Science is the totality of the worlds’ legends. The world is the space of their inscription. To read and to journey are one and the same act” 21

Serres’ envisions and renders within this essay a method of communication that goes beyond metaphor/ model/ analogy/ symbol in their singular relationship with fact. He claims that each time he has gone through an area of the encyclopedia he has found a concrete model involving a circulation and a reservoir.

The same scheme is found in the primary cycle of the eternal return or in the last cycle of generation: the mother soup engenders the mother siren. Woman is the genetic reservoir.22

The Vedic texts long ago recommended the use of a similar recipe for the reparations of the "amrta" of immortality: a pot was needed--this was the sea; it was to be stirred by means of a certain number of utensils--among them, a mountain--and the nature of the mixture was defined. Now the recipe for the soup is the encyclopedia, which, since Hegel at least, is a cycle. … 23

Both of the quotes provide explanations of the third theorem. Science and myth are never on two separate sheets. Science is actually informed by myth. Serres sets up the existence of a chain, where mother emerges from mother, a circular generation of the eternal feminine, an earth that is in labor (genetically speaking). He then asks what the conditions are for the achievement of this aim, as well as what happens in the course of this labor. His point is that in answering specific questions about reservoir and circulation, one will find themselves in every area of the

21 Ibid, p. xxi.
22 Ibid, p. 36.
23 Ibid, p. 31.
encyclopedia--geography, geometry, astronomy, oceanography, gravity, barolgy, biology, gnoseology, neptunism, heterogeny etc. Discussing all of these areas within the encyclopedia, as they exist together in the soup, Serres gives no distinction in the level of importance between myth and “fact.” This obliteration of hierarchy perfectly opposes our contrast, whose format resides upon the “fact” vs. the “analogy.” In this experiment the plan is actually a myth that needs to be read as part of a story within which the individual body and its messages become the grounding elements forming foundation within rapid urbanism. To don this filter will yield a soupy reading of “CITY” more fitting for the analysis of the sprawling landscapes of the United States. I hope it might allow a designer to operate more comfortably in this condition, without the injunction of a (compare and contrast) logic. Additionally the designer would not feel burdened by the need for authorship.

We begin with a myth, or a story of a journey with no specified plan or territory. Our situation is the soup. The internet is the pot. Bodies and messages form “ground.”

Theorem 5: Order is not the law of things but their exception.

Consequently, it is necessary to rethink the world not in terms of its laws and its regularities, but rather in terms of perturbations and turbulences, in order to bring out its multiple forms, uneven structures, and fluctuating organizations. … The introduction of the notion of parasite puts into question the crypto-egalitarian ideology of exchange…

The parasite invents something new. It intercepts energy and pays for it with information. It intercepts roast beef and pays for it with stories. These would be two ways of writing the new contract. The parasite establishes an agreement that is unfair, at least in terms of previous accounting methods; it constructs a new balance sheet. It expresses a logic that was considered irrational until now, it expresses a new epistemology, another theory of equilibrium. 24

This Theorem reiterates the break from the format of our contrast. The form of the plan is not fact – “the law of things”. The plan is “an exception” – a concept or utopia. This distinction

is important. Heidegger shows that The Greeks ignored the accident when making their metaphysics. Because of this, it is hard to see any other way. In allowing ourselves to look at communication as a journey, and to think of an information gathering that is soupy, it seems the accident is no longer an accident, but is part of the “abiding sway” of our situation. It might even be thought of as a moment which exposes the forces within the sway, yielding part of our goal – to see something else when analyzing urbanism in addition to what we would have seen anyway. I would like to conceive of knowledge “not in terms of order and mastery, but in terms of chance and invention.”

Roland Barthes discusses Michelet’s use of “themes” within his work. “The themes are repetitive, they are substantial, and they are reducible.” Substance, for example, can always be divided into beneficent and maleficent states. Serres points out that Michelet uses the themes moist-warmth and dry repeatedly to make truths about communication appear. Scholastics (historical encyclopedic gathering) and Hegel are dry and maleficent. Moisture, incubation, and mother are beneficent. Michelet’s repetitious obsession with substance is particularly interesting for us in relationship to our wish for a “re-grounding” of the body. If the body is the new grounding element of this epoch, and the message--the node along the journey of communication – within which learning happens, we must always consider good and evil in relation to its effect on the body as the following quote suggests.

Contrary to current opinion, Michelet’s morality is not at all rhetorical; it is a morality of the body; History is judged at the tribunal of the flesh: good is determined by virtue of its seamless, fluid, rhythmic nature, and evil as a consequence of its dryness and its discontinuity,


26 Roland Barthes’ *Michelet* gives an interesting account of Michelet’s use of themes.

I will now ask a question. Is it the body in our epoch that determines “fact?” The body creates the soup (the gathering of information) for itself, and for the well being of others. The soup is never maleficent; it is prepared, heated, mixed, ingested, and digested. It is a mixture which requires movement to disperse the solute through the solvent. In our situation, the reservoir is internet, or the electrate apparatus. Circulation is produced by the desire machines – play, aesthetics, and entertainment. To understand the messages, we must take a journey through the sea (the internet), mapping circulation and reservoir. There are hot and cold sources. Below Serres gives us some examples of how to begin.

Now consider the reservoir and the circulation and ask yourself questions like these: where is the reservoir? What is the reservoir? What is in the reservoir? What are its elements and what is their configuration? How does this reservoir function? Is it stable or metaphorical, open or closed? And so forth…

Ask yourself a second series of questions: what is circulation? What are the circulating elements? What is the plan of the transportation system? How do the elements circulate according to this plan? By what law? In a stable manner, or transformationally? And so forth…

Here are examples of some answers: the reservoir is capital, the quantity of enery, the constancy of force, the libidinal reservoir, and so forth; what can be applied to the pattern of general circulation or the circle of circles is language, speech, words, vocabulary, values money, desire. Here are some examples of related questions: What blocks circulation? What stimulates it? Who or what governs or forms the reservoir? And so on. With these questions and these answers, varied and multiplied into several voices, you will reconstruct the entire set of interpretive organons formed in the nineteenth century.

These questions and answers will be applied within the following chapter on the analogy of this “CATTt:.” I will be adding the work of Serres (science) to the work of Francis Bacon as presented by Gilles Deleuze (art).

---


29 Ibid.
CHAPTER 5
MEAT AND POTATOES; ANALOGY AND TALE

Ulmer suggests that the heuretic method becomes invention when it relies upon analogy and chance. *Analogy* provides the *tale* (the new alternative) figuration by displacing a method from one area of study into another. Finding analogies for emerging method from within other realms of knowledge offers an opportunity to practice breaking the habitual use of the normative filter by temporarily donning a new one. This practice taps into an imaginative realm of Being that is childlike and playful. “If methods tend to be practiced as algorithms, their invention is heuristic (heuretics is a heuristic approach to theory.)” ¹

*Analogy* for the sake of this experiment is derived both from *science* as well as from *art*. I look at my problem as a scientist as well as an artist simultaneously. In my *tale* I will be building upon the final project that I completed within Ulmers’ course offering “Imaging Metaphysics,” as described in chapter 1, as well as work that was completed in a graduate design studio at the University of Michigan, titled “Ideas work society.” In this chapter I will discuss Ulmer’s course, which provides a base for my understanding of heuretics, as well as expresses one’s ability to track, in a repeatable way, ones eyepiece. It is a part of my research, and in a way, both of these courses have provided training wheels for the success of my own “CATTt.”

**Analogy, Standing on the Shoulders of Dr. Ulmer**

The *analogy* for the “CATTt” within the project completed within Ulmer’s course was *art*. As Heidegger suggested, within the realm of art and poetry, questioning the essence of the being of beings remained. In Ulmers’ course we used the process of 18 artists as an analogy for our own process. I will only bring forth the work of Francis Bacon within this thesis, in order to expose how analogy becomes algorithmic.

¹ Gregory Ulmer, *Heuretics the Logic of Invention*, p. 8.
Within the heuretic invention, I developed an image category “inner disturbance,” in order to track inner forces. In retrospect I see that the project became a process of finding the second half of my body – developing the “left-brain right-brain integration” necessary for the journey of my new tale which begins to bridge science and art.²

In developing this image category, I feel that I was developing an ability to trust and understand the forces within my being in the way that an artist does. For the “CATTt” tale, I am constructing a design competition. The competition begins with a selection process. One must develop and submit their own image category before final invitations are sent out. From the image categories submitted, only 10 designers will be chosen to participate in the competition (the tale).

The Work of Francis Bacon

In his text, Francis Bacon: The Logic of sensation, Gilles Deleuze demonstrates how Bacon began to convey a logic of the manifestations of his particular inner forces. Deleuze helps us to see that internal forces such as desire contain fundamental truths which hold as much weight as fundamental truths of substance for example. He moves out of literate cognitively based ontology into a more image based ontology, demonstrating a means for gathering and unconcealing (alethia from the previous chapter) these deeper forces which Heidegger and I wish to understand. Heidegger was calling for another form of metaphysics, one which questions the essential being of Beings. Ulmer’s course description, “Imaging metaphysics” suggests that within this new metaphysics, images have as much weight and influence as reason and logic. In light of the previous discussion, Serres would definitely approve. The electrate

² I don’t intend to explain the project in full. For full access of this project please see Objects 5-1 and 5-2. I am operating under the assumption within the current thesis that I now have an ability to utilize an electrate ability. The instructions within my project (.pdf on left column of web site pages) provide a means by which someone else may develop their own image category. The guide comes directly out of the art analogy, and provides access into my thought process while developing my image category.
apparatus is an advanced gathering mechanism which can allow for a distributed gathering of
information which goes beyond a literate gathering.

Bacon’s work provides an understanding of how this might be so. His work contains a
dimension which is not accessible through sheer literate forms of metaphysics. Deleuze portrays
Bacon's work in its process of functioning, suggesting that image metaphysics is not static. Its
gathering devices are not fixed like the gathering devices within literate metaphysics. In this
dimension, Bacon actually thinks with his desires and feelings. He makes the affect smart,
developing his other half.

Using Francis Bacon in the course, we pulled an inference system which can be studied
and utilized to find many new forms of image metaphysics. This is evident in my experiment
provided by the link above. His process depicts the metaphysics of an individual within a very
particular situation by tracking the affect produced on his own body by given forces. He studies
those affects and forces simultaneously. His paintings are both document and procedure. In
reading his work, one can become aware of the process of its construction which becomes a
window into the possibility of electrate metaphysics, while at the same time exposing something
very specific about the workings of one individual body.

The Situation

The spectacle and media flood is for Bacon what nature and natural poetic language was
for Plato and Aristotle. His paintings are gathering devices in the way that words once were.
Remember *phusis* from chapter 3, that all abiding sway? Bacon steps back to the inceptive
moment of questioning the Being of beings in his awareness and analysis of the spectacle. That
is, he is within "the sway" while questioning it simultaneously. His paintings expose that he is
aware of his position within the sway through his use of cliché. He senses the structure of the
“circulating” forces driving his situation, and he is creating for his apparatus a logical means to
mediate within it. He wants to find the intelligence of his libido. It is not enough to simply perceive the situation, (though this is important). It isn’t enough to conceive of the spectacle and its media flood as the Greeks perceived the notion of phusis. It is important also to understand how to gather. The Greeks gathered with words. The image categories which were developed in Ulmers course gave glimpses of an electrate gathering mechanism.

Deleuze posits that this requires a purely aesthetic comprehension of the unit of measure. Measure is subjectively determined because the media flood is so fast. Thus, it is subject to constant evaluation and re-evaluation.

Beneath the successive apprehension of arts, there is a logical synthesis that requires a purely aesthetic comprehension of the unit of measure . . . Aesthetic comprehension is the grasping of a rhythm with regard to both the thing to be measured and the unit of measure. Beneath both the measure and the units, there is rhythm. 'Rhythms are always heterogeneous, we plunge into them in a sort of exploration,' in experimentation . . . The foundation of perceptual synthesis is aesthetic comprehension, but the ground on which this foundation rests is the evaluation of rhythm,”

In image metaphysics this is critical. We zoom out, to place ourselves within a particular situation and the "rhythm" of that situation, but we must simultaneously zoom into ourselves at the same time. In my experiment, for example, I was pasting images from within the media flood onto a filter of the familiar. I was able to observe and make sense of the forces within my being. Loosely, within the site, these are “confusion,” “lust/crave,” and “suppression.” They have been labeled a, b, and c, because in the end they were not easily split based on category. I found that leaving a degree of looseness within the gathering provided a space for serendipitous chance.

---

3 Gilles Deleuze, *Francis Bacon the Logic of Sensation*, from the translators introduction, p. xvii.
Diagram

Within Bacon's work a clear structural relationship roots each of his paintings, although each contains very different sensations. This structuring element, the diagram, is a fundamentally repeating operation which is used in order to elicit another possible world in a work of art. The diagram is used to battle figurative givens which exist within the artist.

The diagram is indeed chaos, a catastrophe, but it is also a germ of order or rhythm. It is a violent chaos in relation to the figurative givens, but it is a germ of rhythm in relation to the new order of painting. As Bacon says, it “unlocks areas of sensation.”

Bacon had a diagram, so in the course, we tried to find one as well. I have elaborated upon the elements within Bacon’s diagram in the sections which follow. In my project the diagram took on a triptych format much like that of Bacon’s famous triptych paintings. Beyond the triptych format, there are operations within Bacons diagram which relate particularly well to our situation, namely his use of found materials, which Deleuze has dubbed “the cliché.” Within the diagram there is always a cliché, an asignified trait, and some form of contour.

The diagram ends the preparatory work and begins the act of painting . . . It is a violent chaos in relation to the figurative givens, but it is a germ of rhythm in relation to the new order of the painting.

Cliché

Bacon arms himself with various methods to battle the givens--those things that are latent within the canvas. Delueze describes Bacon’s selections of such givens as “clichés.” Bacon’s “Cliché” may be a famous painting, a photo of a close friend, or a photo of himself. It establishes within the audience a semblance of familiarity. Bacon forces himself not to paint what he considers is already present; a battle takes place which is captured on the canvas. Bacon uses the figure as a vehicle to track his inner sensations. The motivating forces within the action of

---

4 Gilles Deleuze, Francis Bacon the Logic of Sensation, p. 102.
5 Gilles Deleuze, Francis Bacon the Logic of Sensation, p. 83.
painting are Bacon's obsessions, and he relies on the element of chance or accident. When we see
anatomically correct traits which are distorted smeared and truncated, feelings emerge. Deleuze
suggests that the terrain is sensation and that the enemy is figuration. I used the notion of façade
and company logo in the development of my image category which can be understood more
completely by referencing objects 5-1 and 5-2. "The most significant thing about the photograph
is that it forces upon us the "truth" of the implausible and the doctored images." 6

Traits--The Asignified

Bacon also introduces an “asignifying” trait which is a graphic or image. It is analogous to
the figure only through its diagrammatic mapping of sensation. Bacon is not simply using
vernacular photographic means of resemblance and representation. Rather, he has constructed a
gathering mechanism. Two things may resemble by analogy such that a friend of Bacon, (within
his situation), is like the beef or the bird in its situation. The friend in this case would be the
cliché, (the figural locked to representation), and the hanging meat would be the asignified trait.
One might begin to “feel” like the meat when looking at the paintings. For Bacon, Deleuze
explains, "every man who suffers is a piece of meat. Meat is the common zone of man and the
beast." 7

Contour

Using free marks and smudging, (chance) Bacon feels or senses his way into
understanding forces within himself which are associated with the figure he paints. Bacon states
that there is no chance except "manipulated" chance, and no accident except "utilized" accident.
Thus, in order to understand that his inner forces have intelligence, he must track these forces.
The contour mediates this process, and is the gathering mechanism within the art work. It is

6 Ibid, p 74.
7 Ibid, p. 21.
within the contour of Bacon's paintings that associations are made between an open mouth, a cut artery and a jacket sleeve. In mapping seemingly dissimilar images onto one another, Bacon reveals that they share a similar “contour.” He exposes that by exaggerating the similar formal or morphological characteristics of each of these “hangings” the painter is able to unlock areas of sensation which move beyond simple illustration. At the moment something appears within the contour one can see that Bacon has moved from the synthesis of perception, into aesthetic comprehension or rhythm, to the catastrophe or chaos, and then back again. He must trust each level within his being to create such a gathering principle. Bacon gathers asignified traits, and maps them onto the cliché. He distorts the cliché, revealing something which could not have been seen before the violent act of fighting what is already within the canvas. Within this new “CATTt” we are fighting the habitual reliance on the plan in order to find a way to fight other habits that we would like to forget.

In Ulmer’s course we began to understand that Bacon was revealing something within his method, and that the method is clear. Above are three irreducible units within Bacons process. Much like a syllogism, his logic is a little machine which can churn out multifaceted results. The process is a fundamentally repeatable operation; however it is imperative not to forget that his work cannot be separated from Bacon’s very particular feelings and obsessions. In this way, each form of image metaphysics developed during the project was considered an “image category.”

Within my tale I use art algorithmically to explain a specific artist’s methodologies. Typically I do not utilize the artist’s specific subject or interest to drive the analogy; however Bacon provides an interesting example because his method is about capturing inner forces. Bacon provides one example of an “image category.” I have done the same, (see objects 5-1 and 5-2 at the end of this chapter).
Science

Science is used also as analogy for its methodologies in contrast to its scientific intentions. For example, I do not use “biopsy” in my tale in order to search for “lymphoma.” Rather, I apply “biopsy” – an unfamiliar method- to something that is familiar in order to let a connection between the two emerge. Simultaneously, I am tracking many scientific “circulation centers,” in order to make new associations about that particular area within a Serresian encyclopedia. Theory and analogy become blurred because my theorist is also a scientist. The use of science as analogy differs dramatically because it is a gathering mechanism which is born directly out of literacy. Serres suggests that we view communication as a journey, and to conceive of information or knowledge as being soupy. He shows us that science and myth are one and the same, obliterating the rigid hierarchy of dry storage that has taken place for so long.

In allowing ourselves to look at communication as a journey, and to think of an information gathering that is soupy, I have begun to see that the accident no longer registers as such. Rather, an accident is part of the “abiding sway” of our situation. It might even be thought of as a moment which exposes the forces within the sway, yielding part of our.

As stated, the tale builds upon two projects within my past. The first I have revealed to you in objects 5-1 and 5-2. The journey of which the tale will be told occurred two years ago at the University of Michigan. I began to generate a soupy gathering of knowledge using science as analogy within the project. For this reason alone, the project perfectly suites my “CATTt,” particularly Serres. Incredibly, it also included meat and potatoes – the perfect ingredients for soup. The voyage was piloted by Professor Jason Young, who helped me to realize that Ideas rather than plans “work” society. Young’s use of the idea is synonymous with my use of the message within the tale and it also acted much like the diagram from Deleuze on Bacon. Below is a list of the areas of science “within the encyclopedia” that I encountered along my journey.
• **Biopharmaceuticals:** Insertion/injection of additives helpful to human health.

• The Axolotl

• Poultry genetics

• **Scientific uncertainty:** Uncertainty is a common feature of regulatory decision making.

• **Error Bias:** The potential harms or benefits of an activity. Molecular breeding by DNA shuffling will result in at least some outcomes that fundamentally are uncertain and always will be virtually impossible to predict. We will remain ignorant of them until they occur, and even then, might only identify them if we search in sensitive ways. Attempts to estimate the probability of harm (or benefit) from such a fundamentally uncertain activity must be undertaken with great care since ignorance – of ignorance might lead to serious errors. The kind and degree of scientific uncertainty have implications for the processes agencies use or devise to reach sound and publicly acceptable decisions.

• Cell replication

• Biopsy

For a more comprehensive understanding of the work that took place within the Ideas Work Society studio please see Object 5-3.

**Tale of a Journey, Featherless Chicken Soup for the Suburban Sprawl**

Considering the economic contributions made by the poultry industry and Americans undeniable love of chicken, I found it fitting that in September of 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 Chaner, with his molecular shuffling of chicken DNA was a guest of honor. Thus, we now enjoy, “The featherless chicken,” an idea of the year as advertized by New York Times magazine.

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 decisions. This notion of public acceptance is interesting in its ability to accelerate and decelerate.
Regarding the featherless chicken, it seems that societies rather than agencies make these decisions based on a system of want and desire in correlation with the speeds that these desirables are able to reach them. The featherless chicken acts as an agent of understanding this condition.

The injection of Chaner’s accepted oddity into the media created a delay of kind within evaluation, accelerating this sliding precautionary error bias window, thus pushing public acceptance. When I look at this red bird, the abstract notion of farm no longer registers. I feel the reality of my situation, and position within it.

This is a quote I came across online which sited Chaner’s name:

“And then there’s parsley. What a great bit of design: grow some parsley in the garden and you can cut some off, happy in knowledge it will grow back. How about a sheep with the same feature? I’ll bet Chaner is already working on it. Just splice in some axolotl genes and we could all keep one sheep in the backyard. Leg of lamb for dinner? Just hand me that knife, and give me a moment.”

Axolotl is studied for its rapid regeneration rate. It is in a sense, a tiger salamander which never undergoes metamorphoses, a trait which is known as neoteny. It reaches sexual maturity within the larvae stage of development. They live much longer than metamorphosis salamanders, and can regenerate entire limbs. The axolotl gene is studied very heavily for this reason understandably.

**Tale: Step 1**

Candidates are asked to construct a diagram in order to develop an image category. The candidate will know it is done when something appears. The diagram, or catastrophe, is used to battle figurative givens which exist within the candidate.
The diagram is indeed chaos, a catastrophe, but it is also a germ of order or rhythm. It is a violent chaos in relation to the figurative givens, but it is a germ of rhythm in relation to the new order of painting. As Bacon says, it “unlocks areas of sensation.” In developing the diagram and image category, the candidate will find a rhythm or measure which is specific to them. That is, they will develop an ability to unlock areas of sensation which move beyond simple illustration. At the moment something appears within the candidates “gathering,” they will have moved from the synthesis of perception, into aesthetic comprehension (rhythm), to the catastrophe or chaos, and then back again. In order to be considered for the competition the candidate must trust each level within his/her being to create such a gathering principle.

The image category should acts as an interface guide or “legend” which will allow the organizing principle of the creation to be discernable. This is very different from finding “measure” for a design or composition from normative external sources such as Euclidean Geometry or the golden section. The development of an image category necessitates that the candidate rethink architecture through all of the realms of knowledge and life in order to form a “violent” practice of learning how to forget.

**Tale: Step 2**

Soupiness is a result of a shift from description into action. Serres’ gathering mechanism takes description into the realm of procedure by creating a recipe for soup. In the development of an assignment (a recipe) morphological concerns ease up and interest in informing sets in. In other words, meaning of process is more important in the act of developing the recipe than the meaning of form. Because Serres’ and Bacon focus on the recipe rather than the form of how the information is presented, they are demonstrating a unique practice. They have discovered an

---

8Gilles Deleuze, Francis Bacon the Logic of Sensation, p. 102.
understanding of another part of themselves by *practicing* their ability to forget the givens. The candidate must present their proposal only in the form of a recipe for soup (an assignment). In addition, the recipe should come with a tale to tell about the journey which was taken to develop this recipe. To insure that focus remains on the individual, messages must be tracked and explained. The first and second place recipients will demonstrate that they understand the latent structuring reality which operates more deeply at the root of knowledge; there are reservoirs for the circulation of the soup.

Object 5-1. “Inner disturbance” web site. This was the final project from “Imaging Metaphysics,” the course taken with Greg Ulmer. This site is a critical piece in understanding the breath of this thesis work. It marks the first step within the tale of my heuretic generator.

Object 5-2. This was the first project from “Imaging Metaphysics.” The project, using art as analogy, is suggestive of an art gallery presenting Heidegger’s *Introduction to Metaphysics*, and Gilles Deleuze’s *Francis Bacon: The Logic of Sensation*. This site sets up the work.

Object 5-3. Ideas Work Society project work and materials. This link provides a glimpse of the journey that I took, comprising the science portion of analogy as described above. This work further expresses the story of my journey as described above. It is through this work that I began to see urbanism in a soupy way rather than viewing it as an author.
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

My interest in American urbanism was accelerated by exposure to the larger interest in “the perimeter” at the University of Michigan, marked specifically by the course offering, “SUB_situation urbanism big box,” by Jason Young. Within this course I was first exposed to the true benefit of “trading in or out of a certain mentality.” We were encouraged to temporarily break some modes of thinking in order to explore new ones. Because I was well versed in this mind set, the heuretics work that I began with Ulmer last spring was exciting. I am currently pursuing a Master of Science in Architectural Studies, with emphasis on pedagogy.