INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE BUILT ENVIRONMENT AS COMMUNICATION: TOTALITY, ALTERITY, AND DISSOCIATION IN URBAN AND SUBURBAN SPACES.

A Dissertation

SUBMITTTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the

degree of

Doctor of Philosophy

By

DAVID STEVEN WORTH

Norman, Oklahoma

2003

UMI Number: 3082925

UMI Microform 3082925

Copyright 2003 by ProQuest Information and Learning Company.
All rights reserved. This microform edition is protected against unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

© Copyright by David Steven Worth 2003
All Rights Reserved.

THE BUILT ENVIRONMENT AS COMMUNICATION: TOTALITY, ALTERITY, AND DISSOCIATION IN URBAN AND SUBURBAN SPACES.

A Dissertation APPROVED FOR THE
DEPARTMENT OF COMMUNICATION

BY

Dr. Eric Kramer, Chair

Dr. Catherine Hobbs

Dr. Sandra Ragan

Dr. Kathleen Welch

Dr. Lawrence Wieder

Acknowledgements

Geometers understand a point in space as an intersection of lines and also a point from which a direction may take reference. A person is similar. His or life is the intersection of many other lives as well as a part of an intersection that contributes to other lives. Several people have intersected to improve my life and help me in this project and I thank them here.

I thank my committee. I owe them a tremendous debt. Drs. Catherine Hobbs, Sandra Ragan, Kathleen Welch, and Larry Wieder have each taught me a more than I can relate here not only about how to complete a project like this or the material in their courses but also about how to live as a scholar. I thank especially my chair, Dr. Eric Kramer, for asking "Well, how's your Nietzsche?" when I asked for a directed reading covering Derrida, for pushing me to the "next level," and for reminding me that the levels are irrelevant anyway. I really enjoyed being the graduate student with no complaints about his committee.

I thank especially Denise Scannell and Dr. Charlton McIlwain. I thank them for a thousand discussions; each one found its way into this study.

I thank my family. My sister Diane Doty is the artist with whom I am simply trying to catch up. My brother-in-law Tim Doty has listened and discussed at many points in my career. He is an interlocutor of great skill and good will. My parents Michael and Sharon Worth taught me from childhood to look at the world critically and to question the values expressed in what people said, did, and made. They also taught me to remain a student. I do not think I could be more thankful for anything.

Table of Contents

GENERAL INTRODUCTION 1

SCHOLARSHIP ON URBANIZATION 9

SPACE AS A COMMUNICATION PHENOMENON 12

TELECOMMUNICATION 16
SPACE AND PLACE 19
DESIGNED SPACE AND EXPRESSION 20

THEORETICAL ASSUMPTIONS OF THE PRESENT STUDY 26

WITTGENSTEIN, DESIGNED SPACES, AND LANGUAGE GAMES 26
GEBSER ON SECTORIZATION 30
DISSOCIATION 36
MERLEAU-PONTY'S CONCEPT OF *ALTERITY* 40
LEVINAS AND DWELLING 49
RESEARCH QUESTIONS 57

METHODOLOGICAL CONCERNS 58

DECONSTRUCTION 60
SEMIOTICS 67
JUSTIFICATION FOR SEMIOTICS 72
DATA 78
RATIONALE FOR DATA SELECTION 81

READING URBAN AND SUBURBAN SPACES 82

ANONYMITY AND POWERLESSNESS 83
GEOGRAPHY OF NOWHERE? 84
SYSTEMIZATION AND LIGHT: EMPHASIS ON VISION 87
SECURITY: LIGHTING AND PARKING LOTS 91
FLOW AND SECURITY: HEIGHT 98
SYSTEMATIZATION AND SIGNALIC EXPRESSION: TRAFFIC SIGN-ALS AND MARKINGS 107
AUTOMOBILES AND THE UNITIZATION OF HUMAN AGENTS 127
ZONES 136
SPACE AND POWER: LINES IN THE AIR AND THE MECHANICAL ENVIRONMENT 148
MECHANICAL THEMES IN ELEMENTS OF THE BUILT ENVIRONMENT 158
HOUSES AS UNITS OF MEANING IN THE BUILT ENVIRONMENT 164

DISCUSSION 172

MOTION, VISION, SPATIALIZATION 172
PERMANENCE AND FLUX 175
PERMANENCE AS CONTROL OF FLOW: TOTALITY 180
THE BUILT ENVIRONMENT AS RELIGIOUS EXPRESSION 190
LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH 197

REFERENCES 202

Table of Figures

FIGURE 1. LIGHT FOR DRIVING, NOT FOR WALKING. 89
FIGURE 2. WALLS AND LIGHTS COMBINE TO CREATE A CORRIDOR. 91
FIGURE 3. PARKING LOT LIGHTING AND ISLAND. 92
FIGURE 4. . VISION AND REGULARITY ARE EMPHASIZED IN THE LIGHTED PARKING LOT. 94
FIGURE 6. LIGHT AND VISION FOR SECURITY. 96
FIGURE 7. COBRA WITH SECURITY CAMERA. 98
FIGURE 8. THE "COBRA." 99
FIGURE 9. ALIEN SHIP. A TILT OF THE CAMERA (SLIGHT CHANGE IN PERSPECTIVE) AND A BIT OF IMAGINATION TURN THIS LIGHTING ELEMENT INTO AN ALIEN SHIP. 102
FIGURE 10. SUPERVISION OVER ALGORITHMIC UNITIZED MOTION. 103
FIGURE 11. SUPERVISION. 107
FIGURE 12. TIME AND SPACE REGULATION FOR A MOTION SYSTEM. 109
FIGURE 13. FIRE ZONE INDICATION: LABELING THE GROUND. 110
FIGURE 14. MESSAGE SYSTEM REGULATOR. EVEN WITH SLIGHT MODIFICATION, THE MESSAGE OF THIS SYSTEM REGULATOR IS SIMPLE. 111
FIGURE 15. TRAFFIC LIGHTS: VERY SIMPLE SIGNALIC COMMUNICATION. 113
FIGURE 16. CORRECTIVE REGULARITY. IRREGULARITY NECESSITATES FURTHER SIGNALING TO PRESERVE REGULARITY OF THE SYSTEM. 117
FIGURE 17. ARROW AS AN ELEMENT OF A SIGN. 121
FIGURE 18. DIRECTION, AS INSTRUCTION AND ALSO SPATIAL DIRECTION. 122
FIGURE 19. LINES AND ARROWS. LINES AND ARROWS IN COMBINATION WITH ANOTHER INDICATION OF A HOSPITAL IN THE DIRECTION INDICATED. 125
FIGURE 20. PARALLEL LINES DEFINE IDEALIZED TRAVEL SPACE. 126
FIGURE 21. DIVISION OF FLOW. 128
FIGURE 22. UNITIZATION "IN MOTION." 130
FIGURE 23. MANAGED FLOW. 135
FIGURE 24. SECTORIZATION THROUGH QUANTIFICATION. 137
FIGURE 25. ZONE AHEAD. THIS SIGN INDICATES A COMING CHANGE IN PREFERRED RATE OF FLOW. 138
FIGURE 26. ADDING LIGHTS HIGHLIGHTS THE INSTRUCTION. 139
FIGURE 27. INCREASED SPATIAL DEFINITION FOR SCHOOL ZONES. 140
FIGURE 28. FURTHER SECTORIZATION WITHIN SCHOOL ZONES. 140
FIGURE 29. PEDESTRIAN CORRIDOR DEFINITION. 142
FIGURE 30. NOT A HUD AREA. 144
FIGURE 31. CHEAPER CONSTRUCTION COMMUNICATES THE LEVEL OF THE AREA. 145
FIGURE 32. EVENLY SPACED POLES CREATE REGULARITY AS A BACKDROP AND FORM A CORRIDOR. 152
FIGURE 33. THIS VERY LARGE STRUCTURE APPEARS TO DISREGARD LESSER GEOMETRIC PLANS IN FAVOR OF ITS OWN GEOMETRY. 154
FIGURE 34. THIS CORRIDOR IS NOT FOR AUTOMOBILES BUT IS NOT A HUMAN SPACE EITHER. 155
FIGURE 35. INTERSECTIONS OUTLINED ON SEVERAL PLANES. 156
FIGURE 36. LINES IN SPACE DESIGNED WITHOUT THE HUMAN IN MIND. 157
FIGURE 37. THE MECHANICAL RISES OUT OF THE ORGANIC. 159
FIGURE 38. MECHANICAL SYSTEMIC ELEMENTS OF THE WATER AND POWER SYSTEM. 160
FIGURE 39. THIS IS AN AREA FOR EXPERTS ONLY. 161
FIGURE 40. REGULARITY AND MECHANICAL EXPRESSION. 162
FIGURE 41. FORBIDDEN BUT VISIBLE. 163
FIGURE 42. BLIND CURVE WITH MCMANSIONS. 167
FIGURE 43. HOLIDAY DECORATIONS. 169
FIGURE 44. CARTOONISM. 170
FIGURE 45. MAGIC AND MYTHIC EXPRESSION. 171

CHAPTER ONE

GENERAL INTRODUCTION

Contemporary lived space has become mechanized. To say that urban and suburban environments alienate and are inhuman is to severely understate the problem. The completely abstract and totally technologized urban environment that is the setting for Arthur C. Clarke's novel The City and the Stars (1987) shows us a potential extension of a philosophy that is well entrenched. In the novel a person seen on the street might be the actual person or simply a holographic image of her projected to the appropriate location on the street. The physical person, meanwhile, resides comfortably in her apartment. The residents of the city live for centuries and then return to the Hall of Creation, to have their memories stored in a computer until they are recreated by the massive computer that runs the city. All is mechanized and transparent. There are no alarms and no surprises.

The idea of bringing space under the control of the abstract was explored by Aristotle, who divided the world by climate into five zones; Hipparchus, who developed a system similar to longitude; and Ptolemy, who experimented with coordinate systems (Mlodinow, 2001). The sophisticated coordinate systems developed by Bishop Orseme and three hundred years later by Descartes demonstrated the scientific potential of conceptualizing space as made of interchangeable and *controllable* points locatable by a grid (Berlinksi, 1995). Our spatial outlook, inherent in modernity, has been applied to our mode of habitation. In the years following World War II planning became extremely powerful, enforcing the modern style and repetitive layout of neighborhoods on most of

the population of the United States. It has been claimed that architectural modernism has been replaced by the understanding of its problems. Jencks (1981), for example, locates its death, writing that, "Modern architecture died in St, Louis, Missouri on July 15, 1972 at 3:32 p.m. (or thereabouts) when the infamous Pruitt-Igoe scheme, or rather several of its slab blocks, were given the final *coup de grâce* by dynamite" (p.9). To be fair, it is important to note that Jencks also discusses the presence of the modern in the postmodern and does not assert the above statement with the full literal force of its construction. In The Language of Postmodern Architecture Jencks emphasizes that postmodern architecture is, in part, an understanding of the transparency of the problems of modernism. In a much less extensive manner, Jencks argues, along with Gebser (1991), that we live in a period of change that is beginning to realize the transparency of the mode of world-understanding that has dominated our outlook beginning at least at about 500 B.C.E. but has gained particular power since the renaissance. This lifestyle expresses an "obedience" to science and the Cartesian separation of human from cosmos and earth (Winter, 1992, p. 63) and is expressed in art and architecture (Vitale, 1992). While Gebser, Winter, and Vitale refer to our overall mode of consciousness, Jencks refers to the much more restricted mode of expression in architecture.

In many conceptions of the "post-modern," the term "modern" is muted. Rarely is it recalled that the "post" part of this term by definition includes the "modern." Architecture, as an art, began to understand the problem of the relationship of the organic to the inorganic decades ago (Giedion, 1967; Gebser, 1991), but the post-World War II emphasis on planning in all aspects of the modern (scientific) life has confidently undercut that recognition. Architecture as "art" is divorced from planning as "science,"

assigning each of them their appropriate domains. The planning of space has itself been spatialized—sectorized to be more "precise." The result has been not the implementation of the postmodern understanding of the transparency of modernism as advantageous as well as disadvantageous (a glass wall, for example, emphasizes the structure but not the wall, allowing light in and highlighting the interior/exterior relationship as a constructed one), but instead has been the transparency of modernism as unquestioningly accepted as a mode of habitat for most of the population. Anyone rejecting this mode, preferring to live in the woods, in a cabin, for example, is likely to be seen as aberrant (Thoreau, 1960). To be more specific, anyone rejecting the mode by also refusing to bring The System to the woods is seen as aberrant. One who has a cabin that has all the accouterments of the urban experience (electricity, communications technology, plumbing, etc.) that is in the woods, will be seen as healthy, wealthy, and perhaps wise. One who simply lives "out there," in a tent, or a "primitive" shelter, for example, is seen as crazy.

The point is that modernism has been academically debated and comprehended, but in the actual lived experience, it has apparently achieved final victory. Only in the high art of expensive artistic buildings has it been discredited. In the space of everyday life, it is dominant (Duany, et. al., 2000). It is this level of spatial experience that this study seeks to understand because this is the spatial experience of most people, and their number increases daily. Neil Postman's (1993; 1985) explanation of our cultural technological outlook is appropriate here:

> Contrary to common belief even among the educated, Huxley and Orwell did not prophesy the same thing. Orwell warns that we will be overcome by an externally

> imposed oppression. But in Huxley's vision, no big brother is required to deprive people of their autonomy, maturity, and history. As he saw it, people will come to love their oppression, to adore the technologies that undo their capacities to think. (Postman, 1985, p. vii)

Postman's observation appears to be as correct as Huxley's prophecy. What is more important to realize is that both Orwell and Huxley may be argued to be right. The technological outlook is both an internal and external process. Technology is the "external" abstract expression of an "internal" identity-based mode of consciousness (Mickunas, 1992; Gebser, 1991). In fact, only from within the technological outlook does this characterization and dichotomization make any sense. Technology, as an expression of the magical mode of consciousness or world-outlook, emphasizes interchangeability and a one-to one correspondence of part for whole. Yet, as both authors, as well as Sigfried Giedion (1969) remind us, technology is abstraction; it is *other* than us. In this study, this otherness is addressed in terms of *alterity*. Additionally, this study approaches the problem of the human-technology relationship from the perspectives of both Orwell and Huxley. Alterity is understandable only along with identity. They are part of the same expression. Because of this, one can only understand the problem of technology by understanding them as a polar relationship. Drawing on Merleau-Ponty and Levinas, this study explores the shaping of each through the other.

This study explores the flattening of experience of spatial reality through the semiotic study of the signs present in the text of the everyday space of what will be referred to as the *semi-urban*, which includes what is traditionally referred to as *suburban* and *urban* spaces. These kinds of spaces have been extensively explored, as will be

demonstrated in the review of literature, but the approach of this study requires an understanding of them as continuous text rather than as individual constructs. Definitions of each are arbitrary at best, as Davis (1965) points out. This study will explore the presence, and increasing dominance, of the *signalic* over the *idolic* and *symbolic* in semi-urban space. This dominance is characterized by a relative mobility between signifier and signified. A signal is a floating signifier that is not derived from motive but rather from interchangeable representation. The signalic can be found, the study argues, in both kinds of spaces and dominates them. Importantly, as will be discussed in the theoretical orientation section, to argue the dominant presence of the signalic does not imply an absence of the other forms of spatial communication, but does imply an emphasis on the signalic. These concepts, as will be discussed, are accretive. They are co-present, but are not equally powerful. In addition, they are assumed here to be neither inherently good nor inherently bad; each is assumed to have an *efficient* and *deficient* mode.

The study examines what is in front of us, behind us, underneath us, and above us every day. Potential signs/objects of the semi-urban text are, on first glance, mundane: houses, apartment buildings, gas stations, streets, convenience stores, commercial spaces, strip malls, shopping malls, supermarkets and other "big box" markets, automobiles, parking lots, power lines/phone lines/cables, administrative buildings, hospitals, parks, yards, and alleys, are a few. Each of these has been subject to study and one is tempted to view the present study as unfocused and overly broad. This study posits, however, the horizon-concept of a text of semi-urban space that includes all of these and cannot be understood independently of them. The modern built environment is a totality—a closed

system—and must be understood as a continuous. It is at the level of their co-operation and co-constitution that they should be conceptualized as a whole that can be posited for study from a perspective. Spatialization and the signalic have increased the presence of alterity in many forms. To understand this alterity, we must examine many expressions of its presence and its constant moving deferral, its continual reworking of self and the Other. Alterity is a constant other-ing of difference or a constant differing of the Other (Derrida, 1978b).

Many of these objects and spatializations are taken for granted; they are transparent. One might argue, in a phenomenological sense, that they are not even seen. The natural attitude allows inhabitants to use the text of the semi-urban as the technological system that it is. The urban is systemic and mechanistic (Kramer, 1997). Many authors have explored the coldness and inhumanity of urban and semi-urban spaces, as will be demonstrated in the review of literature. Mumford (1970; 1961), for example, argues that the built environment can be traced to the clock and that the system that is a city is based on a set of interconnected clockwork functions. This understanding of the built environment sees it as algorithmic, emphasizing the following of a programmed pattern that produces repetitive outcomes. The relationship between communication and systemic technology such as roads as a medium of exchange has been studied by Innis (1986, 1964). In addition, the problem has been the subject of artistic study in painting, cinema, poetry, and music. One might justifiably ask about the necessity of another study. The answer is at least twofold: First, the problem has not been fully understood, let alone "solved" or otherwise dealt with; second, the problem has not been addressed in the manner in which it is here, and there is good reason to do

so. Few, if any, have approached the problem from the standpoints of consciousness and alterity, emphasizing the relationship as a multi-dimensional communication phenomenon that can be understood in the context of the relationship between text and the human. Problems such as the problem of alienation of the suburbs, the subject of so much writing, will not be solved or understood until we inquire into the fundamental characteristics of our world-outlook, our reality. That there is an "our reality" must be understood by acknowledging not an objectively true formalistic reality in the Aristotelian-Platonic sense, but that there is a dominant mode of awareness, consciousness, of mentality, and of world-outlook. As a subset of the problems addressed by Jean Gebser (1991; 1940), Lewis Mumford (1967, 1963, 1961), and Siegfried Giedion (1969, 1967), as well as others (Ellul, 1964, for example), the problem of the technological mode of habitation, a clear expression of the mental rational mode of consciousness, is justified as a subject of study, and will not be understood until it is the subject of inquiry that reveals the transparency of its nature. We must not approach such phenomena, as some have tried to do, by trying exclusively to look at it as strange, but must also try to understand why it does *not* appear to be strange to the everyday person and how it structures the everyday experience of, as Giedion (1967) terms it, *anonymous history.* This study places itself in this tradition, seeking to make a unique contribution from a communication perspective. The importance of such examination is pointed out toward the end of Gebser's book The Ever-Present Origin:

> As Frank Lloyd Wright has pointed out, the continuous construction of skyscrapers and prefabricated houses will lead to a catastrophe in architecture.

> The frenzied quantification is tantamount to a barricading of man, a reduction of life to the anthill and social atomization instead of freedom...
>
> In everyday life, few are aware that the motorization, mechanization, and technologization impose quantitative conditions on man that lead to an immeasurable loss of freedom. (1991, p. 537)

These two passages indicate our problem. Both urban (skyscraper) and sub-urban (prefabricated house) are implicated in the technologization and quantification of habitation. Accordingly, this study will address all three concepts together in order to deconstruct the "freedom" accorded by the utilitarian approach to habitation. This freedom is the freedom of motion, exchange, and location. Obsession with square footage as a measurement of wealth and status, obsession with traffic as movement between home and work and home and commercial sites, and the obsession with the means of motion (the automobile) expression are the subjects of this study. Auto-mobility is the quantified and interchangeable atomization of the individual and of space.

This study addresses the values expressed in the built environment. Defining value is the subject of immense philosophical exchange. In this study, I proceeded from a concept of value as that which a group appears to emphasize in its communicative expression. In this sense, the use of the term *value* here is similar to the use of the terms *bias*, *preoccupation*, the Gebserian use of the term *obsession*, or even the simple use of the term *emphasis*. This is a study of the expression of the contemporary American built environment. It is not an exploration of the phenomena of value specifically, although it may contribute to such an understanding.

CHAPTER TWO

SCHOLARSHIP ON URBANIZATION

Urbanization has been the subject of a great deal of study in many fields. This makes sense since the design and development of living space in cities arguably involves all areas of academic research. One finds dissertations written on this subject in fields as apparently disparate as art history (Duetsche, 1997), business (Tu, 1999), and, of course, architecture. Accordingly, two challenges for this document are accounting for enough of the vast literature on the subject and making a strong case for study from a communication perspective. In this section I discuss the literature on urbanization.

Conceptually dividing the study of urbanization presents one with several general categories within which one may be said to be studying the phenomenon. One might study it sociologically, studying the patterns of movement and settlement, looking for patterns within a single town (Lynd & Lynd, 1929, for example), and patterns of patterns, in human behavior on larger scales than the individual. One might also study urbanization from the perspective of the individual, studying opinions on it or the effects of it on the individual mentality (Simmel, 1969, for example). Such an approach might also examine the experience from an explicitly psychological perspective. Another possibility is to combine the two and study the development of cities historically exploring the societal level and the individual level, as well as the interaction between both, as in the case of Mumford (1961). This kind of study presents a great deal of possibility, since the interaction of the individual and social levels seem to allow access to a many problems of urbanization, such as the need for social workers in urban areas, gentrification (London & Palen, 1984, for example), or alienation. Each of these

sociological possibilities for study could be done using primarily qualitative or quantitative data, or by using both.

From an architectural point of view, at least two possibilities present themselves. One might study the architecture of the urban and suburban living spaces. Such a study would look at current or historical trends in the exterior and interior design of buildings in these spaces, documenting the changes in style and positing effects on the living that goes on there. In this case, the architectural scholar would be studying the effect of the art of architecture on human life, as well as trend in architecture as an art. One might also study the process of zoning and city planning, studying the effects and processes of these two phenomena, and contemplating the division of space in a larger sense. These two areas make up the most general approach to urbanization in the field of architecture. In the related field of art, one could study the relationship between art and everyday life in urban and suburban areas. Such a study explores topics such as the role of public art in the structuring of public space, the setting aside of space for the explicit purpose of public art, and the expression of artistic impulses by residents. Deutsche (1997), for example, studied the relationship between artistic expression and the structuring of public space in New York City. Overlapping with architecture would be the many studies and theoretical writings exploring the idea of monumentality in both buildings and more explicitly commemorative monuments (Collins & Collins, 1984; Giedion, 1967; 1958; Mumford, 1949; Howe, 1942; Reilly, 1912).

From an economic perspective, one can study the perceived and "real" value of urban areas and the potential for creating new markets by creating new definitions of living space. Such a study might focus on the initial value of a space, its potential and

desirability to builders, marketability to potential residents and commercial interests, and the value of the space as it changes over time. Examples of this kind of study include Tu (1999), Bank of America (1995), and Case and Schiller (1987).

These perspectives overlap in concerns, data, and methods. One could study the economic impact, the artistic architectural value, and the potential or real effects on a community either at the individual or community level of setting aside an urban space for a monument, for example. The case could be made that a rigorous study of a proposed monument of significant cost would examine all of these areas in some way. This possibility highlights the inherently interdisciplinary nature of any study that explores urbanization at any level. However one chooses to approach the phenomenon of urbanization, one is confronted with the fact that the designed space in which so many of us live is such a basic form of expression that virtually every academic field can and should have something to say about it. As Mumford (1961) argues, even in the earliest manifestations of the city, "...one has the beginning of a succession of civic institutions that range from the temple to the astronomical observatory, from the theatre to the university" (p. 9). All or our arts and sciences are represented in our cities, and for this reason, "No single definition will apply to all its manifestations and no single description will cover all its transformations..." (p. 3). Accordingly, the present study draws on a variety of literatures, including those cited in this section. As a communication study, however, the present study also draws on the communication literature as discussed in the next section.

CHAPTER THREE

SPACE AS A COMMUNICATION PHENOMENON

The link between space and communication is intimate. This section explores the conceptual relationship between communication and space as well as the literature exploring space as a communication phenomenon and communication as a spatial phenomenon. Space is a condition for all forms of communication. All forms of communication conceptualized in the communication research assume space, in some form, as necessary to communication, even if its presence is transparent. Any study of communication presumes spatial phenomena. To study a communication phenomenon is to study a spatial phenomenon.

Space is an inherent assumption of the research on communication. The sender-receiver model, used so pervasively in communication research, and also a source of reaction in the research, assumes linear communication and is also the basis for the transactional model, which is a response to it. A message is supposed to traverse a distance between sender and receiver through a channel. That this is a spatial model should not be surprising, since it is based on Shannon and Weaver's The Mathematical Theory of Communication (1949). In addition, the assumptions that communication can be measured by measuring the space between points in a data set and the shapes of distributions are themselves spatial assumptions.

Even the idea of communication with oneself, intrapersonal communication, assumes space between message and response. According to Goss (1982), intrapersonal communication includes the cognition of meanings and language, the affective phenomena of attitude and self-concept, and the operational acts of speaking and

listening. These internal processes presume spatial relationships between concepts and/or people. The concept of *intra-* means "within," signifying an interior/exterior boundary, and spatializes the individual in relation to the outside world. In addition, persuasion theories such as Festinger's (1962) cognitive dissonance model, which presumes a kind of intrapersonal communication, presumes spatiality in an internal sense. In this model, dissonance is described as the distance between our belief and our attitude toward new information. Those who have studied the internal communication involved in persuasion assume spatialization, beginning with Aristotle and the *topoi*, or "places" of argument to which a rhetor might appeal in order to persuade. In addition, concepts deriving from and similar to the Elaboration Likelihood Model (Petty & Caccioppo, 1981) assume a spatial understanding of the process of self-persuasion, with information taking a "central" or "peripheral" "route" depending on its perceived relevance.

While some of the ideas in the previous paragraph overlap with other areas of communication research, the relevance of space to communication literature becomes clearer starting at the level of interpersonal communication. At this level, it becomes clear that space is both a producer and a product of communication. The relationship between the two is co-constitutive. Space can create communication or at least structure it in many ways. The most basic way is that space allows or prevents communication. Walls between people can be used in many ways to structure communication (Goffman, 1956). For example, walls can be imposed as punishment (solitary confinement), or as inducement to produce, as in the cubicles used in modern offices, which are designed to isolate workers, or as reward, as when one is given a private office. Solitary confinement is one of the worst, if not the worst, punishments one can be made to endure in prison

(Foucault, 1977). While the cages of cells divide and detain the prisoners, the bars still allow one to feel some degree of co-presence with the other inmates. Even Bentham's panopticon allowed for visual connection to others and, in the original design, to a religious symbol (Bentham, 1995). This condition for communication, as studied by Goffman (1963), is similar to the idea of non-signalic communication. These theories argue that the "feeling" of co-presence is necessary for and productive of communication. Solitary confinement deprives one of that feeling, itself a form of communication, as well as of the capacity to communicate explicitly. If it is indeed the case that humans are animals for whom symbol using and communicating are intrinsic as Burke (1969; 1966), Cassirer (1944), and Chomsky (1975) argue, then it should not surprise anyone that solitary confinement is the worst sanctioned punishment *in prison* or that it is used as a form of torture. While there are other uncomfortable elements to solitary confinement, the absence or relatively extreme dearth of human "contact" is clearly the primary mechanism of punishment. It is the isolation of the body that also isolates the communicative ability of the prisoner. This spatial arrangement orders and conditions the prisoner as a kind of body conditioning studied by Foucault (1977).

In the case of office cubicles, these spatial "dividers" are often no more substantial than carpeted lightweight wood and often do not reach ceilings or actually even absorb sound very well. Privacy and real isolation cannot be the goal of these structures. They are symbolic and directive in function. The dividers are used strategically to induce workers to focus on their work. This mental focusing expresses the modern motive of directed, perspectival spatialization. The occupant is *directed* literally to the "proper" direction. Perspectival space like this is divisive and functional,

expressing the basic outlook of binaristic modernity. It is very different from magic space, in which there is no difference between the space and experience (as in a childhood home) and mythic space, which is scripted theatrical space. This reveals the other half of the statement that the relationship between space and communication is co-constitutive. Space is also communication. It is the expression of communicated messages. The divider structures communication but is also a statement telling office workers that their communication is to be structured in this way. This aspect of space as communication is not only demonstrated here but also in space as explicitly rhetorical communication, discussed below.

In the literature of interpersonal communication research, the study of space and its effect on communication is done in the area of *proxemics* and nonverbal communication research. Research in this area has posited spatial distances that define communicative behavior. Hall (1966) introduced the categories, used frequently in communication research, of *intimate, personal, social*, and *public* distance. Each distance, Hall argues, has concomitant communicative behaviors that both occur as a matter of interaction but also may be used to communicate specific messages. The workplace has been the subject of much research in the area of nonverbal communication study of smaller spaces and their effects on interaction (Leathers, 1976). In addition to the above quality of defining work and giving boundaries for attention, workspace and office layout clearly have communicative functions. Office space design, along with the objects included within it, may indicate status (Sundstrom & Sundstrom, 1986; Konar & Sundstrom, 1986), may affect perceived credibility (Miles & Leathers, 1984), and create specific meanings to users (Mehrabian & Diamond, 1971; Stacks & Burgoon, 1981. In

this line of research, the context is assumed to be communicative, as argued by Rapoport (1982). Not only do spatial relations structure work habits, however, they also structure interpersonal relationships and their accompanying communication practices through attachment to place (Altman, 1993; Altman & Brown, 1992).

Telecommunication

Telecommunication combines many aspects of communication into one set of concerns. This area covers communication ranging from the interpersonal level (the telephone and email) to the mass communication (television and radio) level. Space clearly structures communication in the form of telecommunication, or communication over distances. "Broad-casting" is a spatial metaphor. This argument seems almost to be a truism. Nevertheless, a short examination of the structuring quality of tele-communication is in order, since so much of the communication in the world today is of this kind. A conceptual examination of the subject of research is more beneficial here than a traditional review of literature since all literature in the area of telecommunication presumes distance, or space. Rather than list all sources in this tradition, it is more valuable to consider telecommunication's conceptual relationship to space in order to help clarify the relationship between space and communication both as a phenomenon and as a subject of study. In addition, the subject of the present study is not a telecommunication phenomenon in the sense addressed by that literature. My purpose in this section is simply to demonstrate the mutually defining relationship between space and communication and the communication literature has addressed it.

To begin with, space clearly creates *tele*-communication, since distance is inherent to the communication form. Each kind of telecommunication expresses the need

to overcome space with speed in its unique way. Concomitant with the creation of space is the need to overcome it; they are expressions of the same worldview (Gebser, 1991). The need to overcome space through communication can be found in the histories of many cultures, and could be considered a transcultural phenomenon, as Harlow (1928), and Tegg, (1878) have argued. Harlow, for example, studied the emerging messaging and postal systems of many cultures worldwide, including Europe in its various versions throughout history, in the Incan Andes, China, Japan, India, "Arabia," Egypt, Russia, Poland, Denmark, and Norway. Harlow found that even before colonization, which brought in most cases a European, especially English, system of messaging, messaging systems were strikingly similar, using people, posts and horses.

Today, the need to overcome space through communication takes on even greater significance, as so much of the communication has changed from messages about something to messages that *are* something. Banking is done through communication, in the form of electronic exchanges of symbols that have little or no value on their own, outside of the communication context of "banking." In addition, concern with speed in "transacting" with the stock market is highly sought after. While the phone was used in the past to converse with one's stockbroker, and office visits before that, the smart investor today is portrayed as using the internet to eliminate the middle person by eliminating the need for synchronous communication that occurs on the telephone.

Overcoming one entails the other, both in overcoming and in creating. Space and time are mutually defining and cannot be considered independently. Creating this basic need, the need to transact with the stock market, is the problem of space. The investor cannot be at the stock exchange and could not access it if she wanted to, unless she was

allowed to enter the space of the exchange, itself a closed place. Moreover, were the market limited to those who lived in the space around New York City, it would have but a fraction of its value. To generate value, more investment is needed. Accordingly, people from other places are needed as investors. Telecommunication allows this process, since the process is essentially communicative in nature.

So we have seen how through the example of investing using the internet and telephone, a contemporary need for telecommunication is presented. The market represents a critical indicator and motivator of the economies of both the United States and the world. As such, it is a significant example demonstrating the need for telecommunication. But this is only one example of the pervasiveness of telecommunication in everyday life. The phone, the internet, and the television have become nearly indispensable parts of life to those who live in the electrified world, and have gained increasing importance outside of it.

As structuring elements, these technologies are more than "channels." They give form to communication in the most basic ways. The telephone eliminates sight from the communication process, necessitates synchronous communication, and enables communication to only areas wired or covered by wireless services. The television, allows sight, but is one-way communication in its most pervasive form; it allows communication from a source to many, but not the other way. Teleconferencing allows both the two-way communication of the telephone and the visual capabilities of the television, but is also as limited as they are. They are limited to the technology that creates their communicative form. Finally, the area of computer mediated communication as a subject of research clearly demonstrates a case of the use of

technology to overcome space as having effects on communication that are the result of the structuring of the channel (for example, Walther, 1994; 1993; Bardini & Horvath, 1995; Myerowitz, 1997; and Strate, 1999).

Space and place

Communication also creates places out of space, and thereby acts as a mechanism of spatialization. Specifically, communication in the form of naming, and in the form of social practices particular to a specific location can play a role in creating a place that has unique characteristics. This occurs on many levels. Perhaps most obvious, language creates place through the particular language being spoken, because it brings cultural practices and norms associated with the language as well as the linguistic constructions and conceptualizations particular to that language form. More specifically, however, communication practices can create places on a more particular level, as Philipsen (1975) demonstrated in the case of speaking in Teamsterville. In addition, the role of listening, or receiving communication also serves to create place, as demonstrated by Carbaugh (1999) who argued in his study of the Blackfeet and listening as a way of "dwelling-in-place" (p. 263) and as a way of interpreting landscape and world. Similarly, Simpson (1999) studied the role of the communicative practices of artists in creating place.

Thus it seems at least defendable that space and communication are related and that as a subject of study, space may be seen as a condition of communication or an effect, or as both. In the preceding section, I sought to demonstrate the relevance of the present study to the communication discipline in the broad sense by arguing that almost no aspect of communication research is free from concerns with space. In the case of

telecommunication, the concern is mandated. In other areas, it is, at a minimum, implicated.

The point here is that both form and content (where presuming a difference is useful) of communication are shaped by the spatial conditions in which the communication occurs, and they shape the space in which they occur. A whisper in public creates a space. The public nature of the space also creates the whisper. In the subject of the present study, semi-urban settings as text, the space is created by communication, is communication, and creates communication. Semi-urban settings are created in part through the communication of zoning codes, they are expressions in themselves of those codes, architectural styles, and values, and they help to structure the communication that takes place within them. In short, cites are communication phenomena; they are given substance and meaning by communication and they give substance and meaning to communication. As enduring and changing texts, they are examples of long-term communication discussed by Benford (1999), who argues that structures intended as permanent (monuments, etc.) are the means by which humans communicate with those living beyond the span of their lifetimes. The oldest messages we have, Benford argues, are mounds of earth left by ancient people that simply signify presence. While much more complex, cities are such messages. Their meanings change over time, but they remain instances of long-term communication.

Designed space and expression

On the subject of designed space, or space that is planned with motive in addition to being planned as expressions of transparent worldviews and attitudes, there exists literature in the communication discipline that is directly relevant. Much of this work

falls into the rhetorical area of communication research, while some blurs the line between rhetoric and other concerns. This work covers the study of design of space and the subsequent influence on both communicative behavior as well as other kinds of behavior. Combining a telecommunication-oriented study and a study of space in shopping malls, Gumpert and Drucker (1992) studied space, communication, consumerism, and community. Combining the study of nonverbal proxemics and the behavior-affecting role of highly planned physical environments, Eaves and Leathers (1991) studied the physical environments of McDonald's and Burger King. In the area of the historical study of rhetorical spaces, Becker (2000) studied democratic space in early Boston, in a study similar to Goodsell's (1988) general study of the relationship between space and authority. Stuart (1973) also did an historical study of this kind.

In the area of the relationship between space and power, there are studies that clearly begin from a communication perspective. The need for more research in this area was argued by McKerrow (1999), who argued that communication scholars must begin to deal more directly with space and time as structuring factors of communication and power. Croft (1999) studied the relationship between story telling, identity, and agency in a home for mentally challenged men, arguing that story telling created spaces within the space of the setting, and gave power to the men in the setting. Davis (1999) studied the relationship between the conceptualization of the space of kitchens and the conceptualization of space in the academy, using the relationship to study the situation of African-American women in the contemporary academy. Birmingham (1999) examined the architecture of urban settings and their relationship to institutional racism. Importantly, all of the studies cited in this paragraph appeared in a special issue of the

Western Journal of Communication. The appearance of such an issue indicates a growing acceptance of the importance of studies that address space and communication. In addition, the concern with power, prevalent in many of the articles, indicates the perception, at least on the part of the editors of that journal, that communication scholars should be concerned with the relationship between space, communication, and power.

In addition to literature that expresses broad and varied concerns with the relationship between space and communication, there is also literature arguing for architecture and designed space as clear and explicit communicative forms. Jencks (1972, 1981), for example has argued that there are clear rules and processes involved in architectural communication. Similar arguments are made by Broadbent (1980), Eco (1980), Ehrenhaus (1988a), Gandelsonas (1972), Guillerme (1977), and Hattenhauer (1984). Whether these authors take a semiotic or rhetorical approach to explanation, they all argue that specific messages operating according to discernable rules are present in designed space. Further, they argue that these messages and the ways they work are accessible to study, and that such study is worthwhile.

That architecture is readable text can be demonstrated by considering the role of style in architecture. In particular, the "international style" of modern architecture propagated by Mies, Gropius, Corbusier, and others. Authors in many fields have written about this style over the decades since its beginning and about the postmodern response developed in opposition to it (Giedion, 1967; McLeod, 1985; Portughesi, 1980; Broadbent, 1980; Jencks, 1981; Hattenhauer, 1984; Fischer et. al., 1985; these are a few among many others). Much attention has been given to the attempt to deny history and local style in favor of functional architecture whose designers argued it to be non-

symbolic and freed from historical association. Its potential to interfere with the rational society the architecture was supposed to help foster has proven to be true, as the Pruitt-Igoe experiment points out.

Pruitt-Igoe was a public housing facility completed in St. Louis in 1956. By 1972, the first stages of its demolition were under way. Put simply, the project was built in the belief that a clean and orderly geometric environment would lead to an orderly and productive life for its occupants. The project was made of thirty-three eleven-story units and won awards for its ultra-modern concrete slab design. City officials hoped to create a Corbusier-inspired New York on the Mississippi and provide safe and affordable housing for one of the city's poorest sections (von Hoffman, 2000). The hospital-like design was intended to instill virtue in its inhabitants; good form was presumed to lead to good content (Jencks 1982). While many of the occupants liked their individual apartments, most disliked to general setting (Rainwater, 1970). Crime was rampant. The inhuman environment led to a devaluing of humanity (Gallagher, 1993). Conditions were grave. Elevators and hallways were used as toilets; rates of rape, assault, and property damage soared; and by 1970 delivery and maintenance personnel refused to enter to area without guards (Montgomery, 1985). In the case of Pruitt-Igoe, the elimination of human-centered design and the personalized "defensible space" discussed by Newman (1972) from habitation in favor of machine-like values proved disastrous. Arial photographs of the project show a design that resembles a set of blocks, a prison, a government administrative area, the inside of a computer, or a power transfer station.

The postmodern response in architecture has sought to "restore" the rhetorical dimension to architecture as an expressed aim of it as an activity. This response, made by

such architects as Venturi and Stern, has sought to restore historical factors as well as multi-layered meaning to building design. In addition, this response has expressed a concern with the regional and immediate context of buildings, further demonstrating the communicative nature of architecture by recognizing the relationship between communication and context.

While the present study is not the place for an extended discussion of the difference between modern and postmodern architecture, it is important to recognize that the major architectural movement of the twentieth century and the response to it were philosophically concerned with the role of communication in the design of buildings. The international style, as an expression of rationality and efficiency, is an expression of values. Even the expression that values should be rejected is in itself a negative value. The claim to be free from such concerns was communicative. The response was also communicative. Thus even a cursory examination of the debate between modern architecture and postmodern architecture demonstrates the idea that architecture clearly expresses values and power. This idea has been explored both within and outside of the communication literature.

In addition to the study of the communicative nature of architecture in general, studies of monuments and memorials are also present in the communication literature. In particular, several studies exist that analyze the Vietnam Veteran's Memorial in Washington, D.C. These include Carlson and Hocking, (1988); Blair, Jeppeson, and Pucci, (1991); Ehrenhaus, (1988b); Foss, (1986); and Haines (1986). Other memorials have been studied specifically, including the Martin Luther King, Jr. Memorial (Gallagher, 1994), and Saddam Hussein's Victory Arch (al-Khalil, 1991).

The subjects of the present study, urban and suburban environments, are textual and therefore clearly communication phenomena in at least two senses. First, they present themselves semiotically as texts that can be read for their codes, for the threads that give them coherence and meaning on many levels. Second, they are the products of more obviously textual phenomena. Zoning codes are the texts on which sectorized urban environments are based. In addition to the broadly conceptualized way in which the present study is a communication study, the argument that zones and buildings arise partly from texts that are clearly traditional pieces of language is perhaps the strongest argument in this area. The relationship between these two kinds of texts is exactly the kind of correlation discussed below that render urban settings not only textual but also complicated and therefore deserving of study.

Clearly, the concern with space and communication, in the sense of designed spaces of living, in the sense of the communicative nature of architecture in general, and in the sense of memorials and monuments, is present in communication and related literatures. Overall, in this section I have attempted to show that there is a thread of concern with this general issue that runs through several disciplines in contemporary scholarship. The present study places itself as a part of this general interdisciplinary discussion, while starting from a communication perspective. This perspective places the study squarely within the communication literature and also squarely within the concern of communication scholarship in general.

CHAPTER FOUR

THEORETICAL ASSUMPTIONS OF THE PRESENT STUDY

In the present study, I attempt to read the values expressed in the designed spaces of urban and suburban areas. In addition to other values presenting themselves, I would also look specifically for the presence of the value systems associated with the systems theorized by Gebser (1991), in his arguments on modernity and sectorization, Kramer (1997), in his theory of dissociation, alterity as conceptualized by Merleau-Ponty (1968), and dwelling, as conceptualized by Levinas (1969). In order to help understand that values are expressed in the text of semi-urban spaces, such spaces are conceptualized as language games, in the Wittgensteinian sense. The appropriateness of these value systems for this subject of study is demonstrated in the preliminary examination section of this document. Part of the aim of the present study is to determine the pervasiveness of these value systems in the designed space of urban and suburban areas because prima facie they appear to be present. Before addressing method and data sources, I will briefly outline each of the systems addressed above.

Wittgenstein, designed spaces, and language games

One way to look at the text of semi-urban spaces is to take the view that such spaces are instances of language games. Wittgenstein argues in Philosophical Investigations (1953) that language is composed of innumerable collections of games in which meaning is determined by context. Rejecting essentialism, Wittgenstein argues that meaning results from the understanding of a language unit in context. The rules of the game are learned by playing the game. While we may teach a child that a word is

associated with something, the child learns that there are many uses of the word that do more than signify the thing and that the word is not the thing itself. Language is clearly a multiplicity, as Wittgenstein points out in section 23 of Philosophical Investigations:

> But how many kinds of sentence are there? Say assertion, question, and command? --There are 'countless' kinds: countless different kinds of use of what we call 'symbols', 'words', 'sentence'. And this multiplicity is not something fixed, given once for all; but new types of language, new language games, as we may say, come into existence and others become obsolete and get forgotten.
>
> Here the term "language- *game*" is meant to bring into prominence the fact that the speaking of a language is part of an activity, or a form or life.
>
> Review the multiplicity of language games in the following examples, and in others:
>
> Giving orders, and obeying them--
>
> Describing the appearance of an object, or giving its measurements—
>
> Constructing an object from a description (a drawing)--
>
> Reporting an event--
>
> Speculating about an event--
>
> Forming or testing a hypothesis--
>
> Presenting the results of an experiment in tables and diagrams--
>
> Making up a story; and reading it--
>
> Singing catches--
>
> Guessing riddles--
>
> Making riddles--

Making a joke; telling it--

Solving a problem in practical arithmetic--

Translating from one language into another--

Asking, thanking, cursing, greeting, praying. (p. 11-12)

For each part of a language (words, etc.), there is a corresponding role in the language: "the meaning of a piece is its role in the game" (p. 150). The piece is only meaningful within the particular game; a bishop is not meaningful in checkers, or, at a minimum, it is clearly out of place and signifies such out-of-placeness.

This concept also applies to design in the built environment. As Kuntsler (1993) has argued, many contemporary architectural practices place facades and other elements on strip malls and houses that are out of place in this way. A medieval theme or an Egyptian them applied to the outside of a restaurant is out of place in its immediate context. One might argue that it is meaningless here, or simply communicating "out of place." What Kuntsler (1996) refers to as *cartoonism* also applies here, with caricature being prevalent in the commercial built environment.

Wittgenstein argues that understanding a particular case of communication is possible only within context, but also in order to understand a communication context one must understand the instances of communication within it. The contingencies construct the game; one cannot play chess without each piece. These games make up real communicative interaction, as Wittgenstein argues in section 19, writing, "...to imagine a language is to imagine a form of life" (p. 8).

Interestingly, a metaphor Wittgenstein uses to explain the indefinable and incomplete nature of language relates directly to the present study. Arguing that there is

no boundary to a particular language game, Wittgenstein argues in section 18 that language games resemble towns:

> ...ask yourself whether our language is complete; --whether it was so before the symbolism of chemistry and the notation of the infinitesimal calculus were incorporated in it; for these are, so to speak, suburbs of our language. (And how many houses or streets does it take before a town begins to be a town?) Our language can be seen as an ancient city: a maze of little streets and squares, or old and new houses, and of houses with additions from various periods; and this surrounded by a multitude of new boroughs with straight regular streets and uniform houses. (p. 8)

If one were to turn this metaphor around, rather than seeing language as urban or suburban space (a useful metaphor, for Wittgenstein's purposes), one would see urban and suburban space as language. Interestingly, the interaction between *focus* and *frame*—the fuel for the comparison, what Max Black (1962) called "ground"—seems to hold. In the first case, the quality of urban spaces that Wittgenstein is using to explain language is its inherent incompleteness, the meaninglessness of the "city limits" and the impossibility of locating a true "beginning" of the city. As space changes from city to countryside, the point of change is not only unclear, it is not "there." Without the countryside there is no city and vice versa. It is the difference that defines. Of course we are using language to describe the "place" where we might say one begins and the other ends. This is no coincidence. The city limit is a linguistic phenomenon. It tells us where we may *say* one begins and the other ends. In addition, however, the context for

communicative activity changes as well. For example, the city limit designates where a city code becomes a force in the language game of law.

But, perhaps more germane to the present study, one cannot define where the feeling of the city as a lived space, with the corresponding communicative phenomena, begins. Wittgenstein's point in section 18 could be read as indicating that the pieces that make up the city, streets, houses, etc., constitute an unlimitable situation in which the presence of the pieces does not necessarily indicate the presence of the game. Here is the indefinable human constitution of the game.

If we take Wittgenstein's metaphor and treat it as more of a literal statement, we find that it appears to be reversible. Viewed semiotically, houses and streets, as well as the other elements of the urban and suburban setting do constitute a language game into which one can literally walk (or drive). The point of such a move is to enable us to use Wittgenstein's notion of rules in order to understand the setting as a language. The present study treats urban and suburban settings in this way, seeking the rules by which the language that is the setting operates. Such a study would not assume that there is an essential language game that is a city setting, but that there is at least a constructible game that can be experienced from a perspective (namely, that of the author) and that can be demonstrated through evidence. Thus, such a study would seek to understand the setting as something one may get the sense of, but would not argue that the game is essentially extant.

Gebser on sectorization

In The Ever-Present Origin (1991), Gebser argues for an accretive theory of consciousness that accounts for changes in consciousness over the course of human

history. Gebser posits four mutations of human consciousness in a framework that seeks to account for clearly visible differences in consciousness at different times in history and also within an individual in a single day. Gebser's theory describes structures of consciousness that exist simultaneously in human experience. The term mutation is important to Gebser's theory because it does not imply evolution, but rather simply change and accretion. Gebser's four mutations are not linear evolutions, but are changes that are different from the previous structures but also include them. Citing a great deal of evidence from many sources. Gebser argues for the emergence of the archaic, magical, mythic, and mental-rational structures of consciousness. These structures are tied to dimensional awareness as well as several additional characterizing qualities. In addition to the four structures already experienced, Gebser also argues for the emergence of a fifth structure, integral consciousness. He argues that this structure is currently unfolding.

Sectorization is a quality of the fourth structure, the mental-rational, which corresponds generally to the concept of modernity. The mental-rational is characterized by, among other qualities, an obsession with measurement (*ratio*-nalization) and abstraction (mentalization). Measurement is a spatial phenomenon. The mental-rational consciousness structure spatializes world through measurement, sectorizes that space, and also atomizes phenomena within in. Atomization pervades the mental-rational world. It is an inherent quality of it. The mental rational is characterized by the division of world into space and the subsequent and further division of that space into more space. Sectorization divides and defines space as well as time; the mental-rational is the rationalizing of both. The evidence of this quality, so well documented by Gebser, is also easy enough to see in the everyday semi-urban experience: drive down a street (a grid),

find an address (location), and be sure to be there "on time." These are some of the dominant characteristics of the mental-rational. But this quality of division orders and creates space out of world in other, subtler ways. In particular, the relationship between the division and creation of space and the division and creation of time is important. According to Gebser, time is a constituent of space and vice versa. Gebser explains that "the present," a spatio-temporal phenomenon, is a problematic concept by which time is spatialized:

> As soon as the Now is interposed as an "in between" between past and future, it ceases to be a purely mental modality. It is no longer merely oriented, but has the additional (and deficient) aspect of spatiality. In this sense of "in-betweeness" the Now is a conceptual positing as a part of time, a definitely spatializing and rationalizing act of consciousness applied, not to space, but to time which spatializes space. (179)

Thus the rationalizing (measuring, dividing) of time into the Now has profound implications for both time and space. The idea of "the present," the abstraction of it, locates spatiotemporally, and this location is division. Further, he writes that

> ...the setting-fast of time as "in-betweeness" is a perversion of time, since time thereby acquires spatiality and ceases to be the initiator and function of space as a result of its partitive and severing characteristic. Time, and with it the temporal as well as the timeless, is a basic constituent of space; it is not a part of space, that is, a disqualified dimension, but its very basis and basic dimension. (179)

Dividing time and space inherently leads to atomization. Spatialization (abstraction) is self-defeating, since dividing space "divests space itself of its foundation" (p. 180). Thus

the perversion of time, as Gebser puts it, leads us to a contradictory position of both having space and having no space. We are somewhere and nowhere. The same goes for time. Gebser also writes that division of time both creates it and robs us of it. He writes that the result is a

> ...nullity which occurs whenever the concept of time is spatialized in a psychistic and deficiently mentalized manner. This spatialization is subject to dissolution because it destroys the very basis for space... our rational thought is a spatializing act and the expression of this spatialization. Here we would only note once again that the phenomenon of 'lack of time' is characterized of our material, spatially accentuated world: How is anyone to have time if he tears it apart? (180)

In addition, Gebser writes that, "Wherever time is able to become "the present," it is able to render transparent "simultaneously" the timelessness of magic, the temporicity of myth, and the temporality of mind. There are already signs of this inceptual mutation that can be demonstrated" (p. 181). This is the problem with simultaneity. As "extension" of present, as the explosion of the Now/Here, we create what amounts to logical impossibility if understood from within the mental-rational. This manifestation of the mental-rational is deficient and causes anxiety because, in part, it violates its own first principles, in particular the law of non-contradiction. Given enough "extension," it will be impossible to "be" in this way. Extending the present places impossible demands on the human. These demands operate within the mental-rational outlook and lead to anxiety, as Gebser argues:

> We have already noted this form of untimely leap: It is atomization. It expresses the negative aspect of the tension which, when overstretched, destroys rather than

> creates life, bringing not death but annihilation. Such overstretching is always present where one extreme comes to an end: the dead end that evokes anxiety. (139)

Gebser's observations about anxiety and its expression and effects can be clearly seen in communication anxiety as well. To begin with, Gebser argues that anxiety is a feeling of being lost:

> A person who is anxious, or who is fleeing from something, or who is lost either with respect to his own ego, or with respect to the world—it holds equally true in both instances—is a person who will always be intolerant, as he feels threatened in his vital interests. He sees only a vanishing point lost in the misty distance (the vanishing point of linear perspective of which Leonardo once wrote); and he feels obliged to defend his point fanatically, lest he lose his world entirely. (23)

Space and time in this sense are both created by the mental-rational and now rendered impotent by the ability to overcome them. Space and time are both potent and impotent as constructs. This is an instance of one of the

> ...things circumscribed by the mental terms essence, existence, substance, and the like; by such psychic phenomena as images or symbols of fire, the sun, the "divine" spark, and light; or by magic expressions of any form of unity of identity. All such concepts, images, and "identities" manage their limited pseudo-existence in each instance by rationalization, by their appeal to myth or to magical unity. Concepts in particular have their spatial limitations since they must proceed from a world of being, space, and thought which makes them possible and which, in turn, is not only temporally, but also spatially limited. (135)

Gebser argues here that spatialization and temporalization are expressions of the same outlook. They define and deny each other. Sectorization is a problem that characterizes an entire consciousness structure.

This problematic nature causes sectorization to be a source of anxiety in contemporary humanity. Gebser argues in the passages cited here and in other passages that this contradiction, evidence of the deficient quality of this structure creates anxiety in contemporary humanity. The present study applies the argument outlined here to sectorization (measurement, abstraction) to cities to explore this assumption. If urban and suburban areas are empty meaningless spaces, as so many authors have asserted, perhaps understanding them as expressions of deeper impulses that also try to exclude other necessary elements of human consciousness, such as the magical and mythical aspects will shed light on the problem, showing the values expressed.

Perhaps the imposition of place on space without connection to any magic or myth robs those living there of necessary elements. Mike Davis (1990) describes the development of the desert outside of Los Angeles as being done "...with such malice toward the landscape..." (p. 6), that the Joshua tree forest is regarded as a nuisance and the desert is "...another abstraction of dirt and dollar signs..." (p.5). Places in which history is either not present or is artificially implied through design may lack magical and mythical spaces. Alternately, they may also attempt to impose them where they have not been. A reading relying on these concepts may shed light on whether suburban spaces are actually "empty" of meaning. Gebser's theory allows us to see more than the level of signalic meaning. This theory allows the demonstration of other kinds of meaning that are expressed simultaneously with the signalic. For this reason, Gebser's theory allows a

much richer analysis than theories that focus simply on one of the forms of expression or on one specific expression. The Gebserian concepts of the consciousness structures and the effects of rationalization on meaning guides this part of the present study in order to examine the magical, mythical, and mental-rational qualities of designed spaces.

Dissociation

The present study also relies on the theory of dimensional accrual/dissociation presented by Kramer (1997). This theory builds on Gebser's theory and posits that identity reduces toward the individual as dimensional awareness accrues. With identity reduction comes reduction in emotional attachment, eventually heading toward unitized individualism. This corresponds to Gebser's argument that as consciousness structures accrue, separation from world becomes more pronounced. Ego emerges with increasing distance from Gebser's concept of *origin.* The procession of consciousness structures is the progressive emergence of human from world toward arbitrary abstraction, until rationality makes the abstract (secondary, tertiary, and perhaps even further) world seem primary. This underlies Kramer's argument and is further elaborated in his theory of communication/behavior. While Kramer builds on Gebser's theory, it is important to remember that Gebser was not developing a theory of communication, but rather a very broad theory that explored human experience through expression.

The theory argues that there are four kinds of expressivity. Magic/idolic communication is univalent, mythic/symbolic communication is bivalent, and perspectival/signalic-codal communication is trivalent. The fourth type is based on Gebser's idea of the emerging integral consciousness structure and is "barely covered" (p. xv) in the book. The three types that are explained thoroughly, however, argue that

with dimensional accrual comes a reduction in qualitative difference and an increase in quantitative difference, which is unitization and is not really difference. Units are systematized and dissociated. Discussing the link between dissociation and systemization, Kramer writes that the mode of dissociation is abstraction:

> Gebser's entire effort is to show a progressive alienation, and widening gap of dissociation from the magic icon, to the mythic ambivalent symbol, which is yet emotionally charged but which stands in for something else, to the perspectival sign which is totally arbitrary and stands only for itself. Art becomes more and more abstract until it is for its own sake. We have passed from an emphasis on identity to one of referentiality and now to "detached" disinterest. Relic becomes art, and art loses its sacrality to commodity reason. Accounts and equations must be balanced. The golden mean and central tendency are the sacred values of the new mass society. Even deviance is standardized. Finally, value exists only by exchange across an arid vacuum. As George Homans has argued, communication is reduced to informatics, exchange. The formula for all behavior/communication is "Profit=Reward-Cost." The cybernetic feedback loop version of stimulus/response that made Robert Wiener, Peter Monge, and Gregory Bateson academic superstars, closes the system into static self-surveillance. The emphasis is on feedback in the interest of self-maintenance (equilibrium). (59-60)

The development toward abstraction has led from a world of identity to one of reference. Contrasting magic incantation, which is idolic, and therefore identity-making and remaking (in the case of name changing, for example), with communication in the mythic mode, Kramer argues that the symbolic is dissociative:

> By contrast, mythic consciousness exhibits a tendency toward dissociation so that communication is ambivalent and symbolic, as in allegory and metaphor, which calls into being the need for interpretation (hermeneutics, protomethod, oracles, and "channelers"). For example, to steal someone's crucifix may be sacrilegious, but it is not the same as stealing her god. The crucifix is only a symbol that "stands in for" the deity. This indicates a nascent spatialization which enables an ontological (and for many a literally physical) gap to open. However, in a mythic world, the crucifix is not totally arbitrary either, but represents a highly motivated association that can inflame great emotional expression. (98)

Here Kramer argues that with dimensional accrual, or the accretion of dimensional awareness, dissociation increases. The mythic form of communication, the symbol, is shown to be more dissociated than the magic, but less than the mental-rational. Mythic communication is ambivalent because it is both dissociative compared to the magic, but associative compared to the mental-rational.

Idolic communication, which is primarily magical, assumes a high degree of sharedness. This is because identity is so critical to idolic communication. They are part of the same function. "Identification" and "idolic" share a root because they are part of the same mode. Explaining the modern mode of communication, the sign, Kramer argues that, in a conversation between those with a shared language and shared hermeneutic horizon, communicative ground is shared, while in the modern form, the sign is informational and arbitrary. Rather than a conversation, communication becomes a unidirectional transfer, rather than an exchange based on shared ground:

> ...the perspectival modern world exhibits a high degree of dissociation. According to its credo, signs and signals such as mathematical notation and digital coding are *totally* arbitrary... In modernity, signs tend to displace analog symbols and the identity of idolatry. "Modern" is manifested as a privileging and suppression of mental-rationality over emotion, information over communication. The ideal of the modern citizen is to be informed. This is the basic difference between the mass audience member and the conversationalist. (Kramer, 1992, p. 100-101)

Later Kramer argues, relying on Nietzsche (1974), that the drive toward representation, toward the creation of a "second order synchronic universe that claims to be the best model for the 'primary' diachronic universe" (106) is the drive toward order, toward uniformity, and toward the elimination of qualitative difference. The drive to create a unitized, quantified world is an expression of the desire for power motivated by fear. This quality demonstrates a central aspect of the theory: Modernity imposes control through order based on the elimination of difference. Time is standardized based on the clock. Given the defining relationship of time to space, the drive to standardize one leads to the standardization of the other.

This theory applies to the text of urbanization clearly. Unitization of housing, beginning, at least in a really clear sense, with the housing projects after World War II, appears to be the minimization of difference in housing. Identity in housing is suppressed. Housing areas are often limited to a set of floor plans. Codes and legal agreements prevent the owner from making modifications to his or her house that are too far from the norm. One outcome of the study might be to find that housing in suburban

areas is expression of primarily mythic/symbolic communication. Such housing is clearly not magic/idolic, since there is the kind of standardization mentioned above. While such housing is heavily standardized, there is personalization that is associated based on some common ground either of the family or of some conception of home-ness. The trend appears to be toward signalic-codal/perspectival, however. A drive through any contemporary suburb such as Plano, Texas confirms this. Front spaces of the houses vary little. Most have entrances in back, accessible to the automobile. People come out front only to get the mail or the newspaper. The front of the house then tends toward the sign for house. Within the style of the time period, the front says, "house." It also contains meaning that indicates its kind ("large," "expensive," "safe," etc.), but for the most part, the sign of the house does not really differ from the sign presented by the houses around it. This is the key. The houses together do not represent real qualitative difference. They look the same.

Merleau-Ponty's concept of *alterity*

In addition to the theory of dissociation, the present study draws on Merleau-Ponty's work that focuses on what can be characterized as exploring the relationship between flesh and world, between body and surroundings, or between environment and perception. Key concepts in this body of ideas that can be gleaned from Merleau-Ponty's work include *alterity*, the concept of otherness that defines through polar relationship, and *reversibility*, the quality of this polar relationship. Briefly put, Merleau-Ponty argues that world and subject are co-constitutive, with one defining and shaping the other, and, in fact, making the other possible. Merleau-Ponty argues that this relationship exists between "others" and subjects, both at the level of relationships between people and at

the level of relationships between subjects and things. The argument assumes that subjectivity is a result of a network of relationships. It is the otherness that is constitutive, while not identifiable, with the subject that renders the horizon concept of alterity. This condition is characterized by a polar relationship. This is an important distinction: Poles are different but mutually reliant, unlike binaries, which are mutually exclusive. This aspect of Merleau-Ponty's argument will be argued later in this section to be especially suited to the present study. Johnson (1990) explains the idea of alterity as otherness:

> The term "alterity" is nearly a foreign word in English, and the reader may well wonder why a more graceful English word has not been chosen. The term derives from the Latin *alteritas*, meaning "the state of being other or different; diversity, otherness." It does have its English derivatives: alternate, alternative, alternation, and alter ego. The term *alterité* is more common in French, and has its antonym *identité*. (xvii-xix)

This last element of the definition of alterity highlights the consistency with the concept of dissociation. Alterity is the opposite of identity, a central concept in dissociation. In fact, identity is what makes alterity sensible at all, as Dillon (1990) argues:

> ...any viable account of alterity has to include both identity and difference, or immanence and transcendence: difference or transcendence because the other has to be genuinely other, and identity or immanence because the other has to be disclosed, and disclosed as an other who is the same as I. Here the doctrine of ambiguity is in full force—as it must be to allow for both the fact of communication and the fact that communication is never adequate—there must be

> a common ground on which the other and I can reach each other, but still remain in some degree opaque to each other. The other's world and mine are ambiguously the same and different. (16)

Because of the necessary relationship between alterity and identity, the concept of alterity gives us another way to think about the process of dissociation as well as its nature. Dissociation assumes dissociation *from* something, namely, identity. The idea of alterity gives us a middle ground toward polarity between human and environment. Thus, on the way to modern atomization, we find the process of dissociation occurring, with the human and built environment becoming alien to each other. The relationship of alterity thus becomes an important concept in dissociation where space and human are concerned. The relationship between identity and alterity is demonstrated in Merleau-Ponty's concept of reversibility, explained here by Madison (1990)

> Perhaps the most appropriate way to construe the meaning of this term [reversibility]—which, as Merleau-Ponty says, in *sans équivalent* in the history of philosophy—would be to say that it is nothing other than *the presence of the other in the same.* The flesh is the trace of the other, the inscription of the other, in the subject's own selfhood—in its very flesh. What "flesh "means" is that *the subject is for itself an other*...Otherness is that without which the embodied subject would not be a subject; it is constitutive of ipseity itself. (31)

Here Madison reads Merleau-Ponty as arguing for an alienation of one's own body. One describes "my arm" as broken. One does not say that "I am broken" when referring to a broken arm. The body becomes an object. My body becomes other. Similarly, given the dominance of the signalic in the built environment, one's own house can become other

also. Polarity between human and world occurs because each can be found in the other, as Johnson continues, explaining the concept of alterity and writing, that given the relationship of polarity, "as I see objects, they reflect back to me an image of myself. Inanimate things do so only feebly; thus the confrontation with living beings, finally with other persons, is decisive advent for the reversibility of seeing—being seen (p. xx)." This explanation highlights an important point about the academic debate over interpretation of Merleau-Ponty's argument. The question of the degree to which alterity and reversibility apply to the relationship between human and built environment is unclear among interpreters of this part of his work. The strength of an explanation of reversibility or perception of other humans is demonstrated in this passage:

> The visible can fill me up and occupy me only because I who see it do not see it from the depths of nothingness; but from the midst of itself; I the seer am also visible. What makes the weight, the thickness, the flesh of each color, of each sound, of each tactile texture of the present, and of the world is the fact that he who grasps them feels himself emerge from them by a sort of coiling up or redoubling, fundamentally homogenous with them; he feels that he is the sensible itself coming to itself and that in return the sensible is in his eyes as it were his double or an extension of his own flesh. (Merleau-Ponty, 1968; 113-14; 152-3)

It seems clear that an understanding of otherness that seems more like ourselves is easier to comprehend and posit than a similar understanding of this kind of relationship between human and world. Still, the basic claim that our understanding of the world (all we can ever be sure of) will be formed out of our experience of it is defendable argument. Drawing on the vast literature demonstrating evidence for a strong reflective relationship

between the two, this study assumes the same strong relationship for this case. Built environment and human agents are argued to be mutually expressive and constitutive. Just as human agents co-constitute each other through difference (even negatively) (Kramer, 1993; Mickunas, 1997), self and Other, in the form of the physical space surrounding as person, also dialogically co-constitute each other. Merleau-Ponty's (1968) initial description of reversibility demonstrates support for this interpretation:

> For after all, sure as it is that I see my table, that my vision terminates in it, that it holds and stops my gaze with its insurmountable density, as sure even as it is that when, seated before my table, I think of the Ponte de la Concorde, and finally sure as it is that at the horizon of al these visions or quasi-visions of the world itself I inhabit, the natural world and the historical world with all the human traces of which it is made—still as soon as I attend to it this conviction is just as strongly contested, by the very fact that this vision is *mine*. (4-5)

Here Merleau-Ponty argues that the horizon of vision, both of seeing the present physical object as well as an imagined physical object or space must be a function of the perspective of the subject. He emphasizes that the vision is his, highlighting that it is a function of his physical situation, but also a creative phenomenon that arises out of his subjectivity. Merleau-Ponty argues for a sense of the world beyond his subjectivity (the "the natural world and the historical world with all the human traces of which it is made") but can only have "conviction" about his own subjectivity. This is why the relationship between human and world is polar and why perception of the world is a horizon-relationship. Both world and vision are formed from a relationship between the two, as Merleau-Ponty (1968) explains:

> Now that I have in perception the thing itself, and not a representation, I will only add that the thing is at the end of my gaze and, in general, at the end of my exploration. Without assuming anything from what the science of the body of the other can teach me, I must acknowledge that the table before me sustains a singular relation with my eyes and my body: I see it only if it is within their radius of action; above it there is the dark mass of my forehead, beneath it the more indecisive contour of my cheeks—both of these visible at the limit and capable of hiding the table, as if my vision of the world itself were formed from a certain point of view. (7)

This passage further highlights the importance of subjectivity and perspective to Merleau-Ponty's argument. The "singular" relationship between the seer and the object is possible only if the seen is within the seer's visual field. If it is not within it, this relationship cannot be established, although an imaginary one can, as argued above. In this second case, the horizon of the imagined and imaginer is clearly a function of the subject, though one can claim that there must be a sense of the imagined as something other than the imaginer. This does not, however, mean that an objective, "external" world is necessary for the imagination process. Were this the case, we would not be able to think of imaginary places such as C. S. Lewis' Narnia, or George Lucas' Death Star. Merleau-Ponty here clearly argues that in both cases, the subject is the key component and plays an irreplaceable role in the horizon that results.

Despite the importance of the subject in this process, it is the polar nature of the relationship that also points out the alterity of the world to the subject. The horizon is the creation that results from the subject's perspective, but there is a sense of alterity, a clear

sense of otherness. So, while the subject creates the horizon-world, she has no choice but to incorporate (almost literally, in this sense) the alien, non-identity into the horizon. In other words, if we see ourselves in the world in a reflection sense, as argued above by Johnson then we see ourselves as other. This argument seems clearer in the case of other beings, especially humans, as pointed out earlier by Johnson, since the other is more similar to oneself. Given that the basic relationship is the same, even if weakly, as Johnson argues, however, we must concede that the alterity of the world plays a unique role in our vision of self. Merleau-Ponty (1968) reinforces this idea strongly in the following passage, describing the polar relation/separation of the body and world:

> Everything comes to pass as though my power to reach the world and my power to entrench myself in phantasms only came one with the other; even more: as though the access to the world were but the other face of a withdrawal and this retreat to the margin of the world a servitude and another expression of my natural power to enter into it. The world is what I perceive, but as soon as we examine and express its absolute proximity it also becomes, inexplicably, irredeemable distance. The "natural" man holds on to both ends of the chain, thinks *at the same time* that his perception enters into the things and that it is formed this side of his body. (8)

Once we break out of the natural attitude and reflect on what can be understood as a sense of proximity to something actually other than ourselves, we find that such a concept can only be understood and sensible if it is understood as forever ("irredeemably") at a "distance."

This idea is particularly important to the interpretation of Merleau-Ponty's argument we are developing here. The relationship between space or world and human is cast as a spatial relationship, and Merleau-Ponty's claim is that a concept of distance is necessary both for the relationship that he is describing as it occurs as well as for the relationship that presents itself upon phenomenological reflection. This passage also highlights the necessity of spatial metaphor or conception to the general phenomenological concept of the *horizon* a crucial concept for phenomenology.

It is the relationship that is the horizon under consideration in this study. Merleau-Ponty's conception of this relationship is especially suited to the study because it allows for an understanding of the built environment as more than simply inhuman, hostile, or foreign, on which much of the criticism of Modernism focused. It acknowledges the relationship between world and human and that each is found in the other, giving us a phenomenon to study, namely the relationship between the two as a phenomenological horizon that can be studied only as a subjective phenomenon arising from perspective, as Langer (1990) points out:

> In Merleau-Ponty's new type of comprehension, the nonhuman other is no longer inert, alien, meaningless, and even threatening for a sovereign, self-transparent ego. For Merleau-Ponty, self and non-self, human and nonhuman, intertwine in a mutual enfolding, such that comprehension itself becomes a relation of "embrace" with the other. (115)

Dillon (1990), who argues that the constitution of the other in this relationship is motivated, elaborates that this horizon is an expression of an outlook or worldview:

> ... as we learned from Husserl, it is impossible to do justice to the phenomenon of alterity from within the ontology of transcendental idealism. If otherness is but a meaning or significance projected upon some immanent object, then that object is not transcendent, not truly other: otherness must be found; the constitution of the other as other must be motivated. This is the insight that inspires Levinas. But it is also the insight that inspires Merleau-Ponty...(17)

Thus this relationship, which is the result of human motivation, and is a motivating factor in human expression, becomes possibility as an object of study. This relationship posits a subject and a concept of world, but emphasizes their relationship; Merleau-Ponty's concepts of flesh and alterity de-center the subject:

> What it seems to me that Merleau-Ponty above all is attempting in an especially rigorous way in his late work, is a thoroughgoing *refonte* or revision of the notion of subjectivity or subjective experience, of, indeed, selfhood. Somewhat like the late Wittgenstein, he is attempting to rid subjectivity, the "inner" self, of all the psychological *bric-a-brac* (as he calls it) that modern philosophy managed to clutter it up with. To put it another way, he is attempting a "decentering" of subjectivity and is thus engaged in a most postmodern kind of endeavor. (Madison, 1991, p. 31)

Merleau-Ponty's concept of alterity allows the present study to understand the interaction between the other and the subject as a complex process of interaction. Such an approach is necessary to give theoretical basis for a study that posits a polar relationship whereby human and world shape each other, and built environment is viewed as both expression of and expressive of consciousness mode.

Levinas and Dwelling

In Totality and Infinity (1969), Emmanuel Levinas explores the concept of otherness and the corresponding relationship between the self and the other. This relationship is explored using many senses of the basic polarity, including the terms the Same and the Other, and interiority and exteriority (Peperzak, 1993). This study uses Levinas' concepts of dwelling and habitation to explore the problem of alterity in the contemporary human built environment. Dwelling is a significant part of the semi-urban environment. Because Levinas' concept involves both the home and the system outside the home and posits them in a polar relationship, his theoretical approach is appropriate for a study such as this, which assumes both are part of the same shared text, the same system. This polar relationship is explained when Levinas argues that consciousness is of world and from world:

> The analysis of enjoyment and *living from*... has shown that being is not resolved into empirical events and thoughts that reflect those events or aim at them "intentionally." To present habitation as a becoming conscious of a certain juncture of human bodies and buildings is to leave aside, is to forget the outpouring of consciousness in things, which does not consist in a representation of things by consciousness, but in a specific intentionality of concretization. We can formulate it in this way: the consciousness of a world is already consciousness *through* that world. Something of that world seen is an organ or essential means of vision: the head, the eyeglasses, the light, the lamps, the books, the school. The whole civilization of labor and possession arises as a concretization of the separated being effectuating its separation. (153)

Dwelling and the outside social system shape each other and shape the person subject to both. The process is much more than architectural; it demonstrates the mutually defining confrontation between the subject and space. In that moment, each is shaped by the other:

> The home does not implant the separated being in a ground to leave it in vegetable communication with the elements. It is set back from the anonymity of the earth, the air, the elements. It is set back from the road, the sea, the river. It has a "street front," but also its secrecy. With the dwelling the separated being breaks with natural existence, steeped in a medium where its enjoyment, without security, on edge, was being inverted into care. Circulating between visibility and invisibility, one is always bound for the interior of which one's home, one's corner, one's tent, or one's cave is the vestibule. The primordial function of the home does not consist in orienting being by the architecture of the building and in discovering a site, but in breaking the plenum of the element, in opening in it the utopia in which the "I" recollects itself in dwelling at home with itself. But separation does not isolate me, as though I were simply extracted from these elements. It makes labor and property possible. (156)

The relationship is one of separation, and also of sameness. The dwelling makes interiority, exteriority, and the subject possible:

> The ecstatic and immediate enjoyment to which, aspired as it were by the uncertain abyss of the element, the I was able to give itself over, is adjourned and delayed in the home. But this suspension does not reduce to nothing the relationship of the I with the elements. The dwelling remains in its own way open

> upon the element from which it separates. The ambiguity of distance, both removal and connection, is lifted by the window that makes possible a look that dominates, a look of him who escapes looks, the look that contemplates. The elements remain at the disposal of the I—to take or leave. Labor will henceforth draw things from the elements and thus *discover* the world. This primordial grasp, this enterprise of labor, which *arouses* things and transforms nature into a world, presupposes, just as it does the contemplation of the gaze, the recollection of the I in its dwelling. The movement by which a being builds its home opens and ensures interiority to itself, is constituted in a movement by which the latent birth of the world is produced.

So for Levinas, home is the first concretization: "But this civilization refers to the incarnation of consciousness and to inhabitation—to existence preceding from the intimacy of a home, the first concretization" (p. 153). Separation of future uncertainty by representation is established in dwelling. The dwelling allows for the delay of uncertainty and the ability to reflect and plan for the future, as Levinas (1969) argues:

> In order that this future arise in its signification as a postponement and a *delay* in which *labor*, by mastering the uncertainty of the future and its insecurity and by establishing *possession*, delineates separation in the form of economic independence, the separated being must be able to recollect itself [se recueilir] and have representations. *Recollection* and *representation* are produced concretely as *habitation in a dwelling* or a home. (150)

The concept of separation, as necessary to reflection and representation expresses a polar relationship between interior and exterior. These phenomena are not binaries; one would

not be without the other. They are related in a polar relationship. The home allows for the creation of the outside, while the outside allows for the separation of the home. This necessity as a condition for participation in, as well as separation from, the system exterior to the home has been an essential part of the process of reflection and abstraction, as Mumford (1967) notes:

> Without his timely command of fire, man could hardly have survived the vicissitudes of the Ice Ages. His ability to think under these trying conditions may have depended, like Descartes' first insights into philosophy, upon his ability to remain quiet for long periods in a warm, enclosed space. The cave was man's first cloister. (30)

Mumford argues that abstraction and representation were possible only with protected time, allowing for reflection. What Mumford argues started as a critical respite from the outside system of hostile weather later developed into what Levinas (1969) describes as a lapse of the ontological order. It is dissociation of the working world and of the rational world from allowing for abstraction. It is a suspension of the system of societal life:

> But the interiority of the home is made of extraterritoriality in the midst of the elements of the enjoyment with which life is nourished. This extraterritoriality has a positive side. It is produced in the gentleness [douceur] or the warmth of intimacy, which is not a subjective state of mind, but an event in the oecumenia of being—a delightful "lapse" of the ontological order. By virtue of its intentional structure gentleness comes to the separated being from the Other. The Other precisely *reveals* himself in his alterity not in a shock negating the I, but as the primordial phenomenon of gentleness. (150)

Two important ideas arise from this passage. First, even intimate space has a layer of alterity. The outside world defines the intimate space of the home through alterity, but the alterity of the home to the world is a part of the creation of intimate space. Levinas goes on to associate this phenomenon with the creation of a different mood, writing, "The intimacy which familiarity already presupposes is an *intimacy with someone*. Knowing someone else is present somewhere in the house renders the space different. The interiority of recollection is a solitude in a world already human and emphasizes the magical identity function of the home. Recollection refers to a welcome" (p. 155), and later on the same page:

> The simple living from... the spontaneous agreeableness of the elements is not yet habitation. But habitation is not yet the transcendence of language. The Other who welcomes in intimacy is not the *you* [*vous*] of the face that reveals itself in a dimension of height, but precisely the *thou* [*tu*] of familiarity: a language without teaching, a silent language, an understanding without words, an expression in secret. The I-Thou relationship in which Buber sees the category of interhuman relationship the relation not with the interlocutor, but with feminine alterity. (155)

Here Levinas' point is not that a particular sex is exclusively concerned with intimacy, but that intimate spaces are human spaces and that the feminine, as gender that may be experienced by both men and women, plays a role in the constitution of intimate space. As alterity, this gender confronts the subject as part of the moment of homeness. As Peperzak (1993) has noted, for these ideas, Levinas appears to take a "typically masculine" (p. 195) "metaphoric" approach. Whether this is the case is not the subject

here, but is an important question: If Levinas' argument is shown to rest on an essentialist statement about femininity, it may be problematic feature of his argument. Nevertheless, it is mentioned here because it plays an important role in his argument. However the process of alterity within the home works with respect to gender, one may say that it is the notion of protection as well as the notion of the importance of human protection by and for human relationships and reflective processes that characterize the home space. This idea also noted by Mumford (1961), and also within a feminine characterization, but also emphasizing a similar idea:

> Certainly 'home and mother' are written over every phase of neolithic agriculture, not least over the new village centers, at last identifiable in the foundations of houses and in graves. It was woman who wielded the digging stick or hoe: she who tended the garden crops and accomplished those masterpieces of selection and cross-fertilization which turned raw wild species into the prolific and richly nutritious domestic varieties: it was woman who made the first containers, weaving baskets and coiling the first clay pots. In form, the village, too, is her creation: for whatever else the village might be, it was a collective nest for the care and nurture of the young. Here she lengthened the period of child-care and playful irresponsibility, on which so much of man's higher development depends. (12)

Mumford here makes the same point as Levinas: That protection from the exterior through intimate space in turn played a role in developing the exterior. Thus the alterity of interiority and exteriority are intrinsically linked and also poles of the same. Such description is difficult given the concept of identity, which applies here as well. What

both Levinas and Mumford are describing are things that are understood as separate only from a perspective that asserts difference. Both refer to the magical element of the home, intimacy, which is identity, as Gebser (1991), would argue, and is only understood as a "relationship" or "alterity" from a mental-rational perspective. In addition, these ideas refer to the mutual shaping of world and subject as identity issues, which poses the same problem of expression here and documentation. This demonstrates the mutli-layered nature of habitation: The intimate space is identity (magic consciousness) on the one hand, and alterity (identity through otherness) which is, as a polar relationship, characteristic of the mythic mode of consciousness, tending toward the mental-rational, with its binarism. Home as intimate space also develops exteriority, which Mumford argues, and is characterized by its delay of the outside system, according to Levinas. What was the system of the elements and the "caprice of nature," as Mumford puts it, is now also the system of society, as Levinas (1969) asserts: Identity and memory in dwelling is a separation from the system of the outside world:

> The possibility of representation that is constitutive but already rests on the enjoyment of a real completely constituted indicates the radical character of the uprootedness of him who is recollected in a home, where the I, while steeped in the elements, takes up its position before a Nature. The elements in and from which I live are also that to which I am opposed. The feat of having limited a part of this world and having closed it off, having access to the elements I enjoy by way of the door and the window, realizes extraterritoriality and the sovereignty of thought, anterior to the world to which it is posterior. *Anterior posteriorly*;

separation is thus not "known;" it is produced. Memory is precisely the accomplishment of this ontological structure. (170)

Thus the home plays a pivotal role in establishing the outside world as well as the world within the home. The interplay of exteriority and interiority, as polar elements of the same situation, create the dwelling environment. One cannot be understood without the other. For the present study, the implication is that an examination of just suburbs or just urban space ignores the sharedness of the kinds of spaces and ignores the potential conceptions of habitat that may lie, conceptually, between them. A particular suburb, for example may be viewed as preferable to another because it is more habitable. This expands the concept of the dwelling beyond the particular house because it relies on the idea of the suburb, or the particular addition within a suburb as an interiority compared to the larger semi-urban space. It is, of course, an exteriority to the individual home. Thus the polar quality of a relationship of spatial situation within a semi-urban setting benefits from Levinas' conception of dwelling because the multi-dimensionality of alterity is demonstrated. Levinas' concepts enable the present study to explore these divisions.

Together, these theories present the possibility of a consistent approach to the study of semi-urban texts. Because the study of semi-urban settings is the study of a broadly defined text, the need arises to examine the phenomenon as more than communication in order to describe it fully. Gebser's theory of sectorization allows the researcher to do that, accounting for urbanization as more than communication, but inherently communicative. Kramer's theory specifies Gebser's arguments to communication and expands and develops them for a more complete theory of communication than Gebser provides. This theory allows exploration of urban and

suburban settings as inherently communicative with more depth than Gebser's theory could. Together, these theories should provide a framework for understanding urban settings as both space and as communication. In addition, both Merleau-Ponty's theory and Levinas' theory present unique additions to an overall approach to the text and allow the study to posit specific phenomena to be explored.

Research Questions

Given that urban and suburban settings are communication, they can be presumed to communicate messages. The present study explored those messages and sought to answer the following questions:

RQ1: What values are expressed in the text of semi-urban spaces?

RQ2: How are these values expressed? What physical evidence may be read in the text of such spaces?

RQ3: How is alterity expressed in the text of semi-urban spaces?

RQ4: How is dissociation, particularly in the form of signalic communication, demonstrated in the text of semi-urban spaces?

CHAPTER FIVE

METHODOLOGICAL CONCERNS

Approaching the problem from the perspectives of the theories explained above, this study supports the argument that signalic communication, or communication that is increasingly self-referential, encroaches on the built environment. Suburbs represent the victory of the signalic mode of thought over the idolic identification of the concept of dwelling, which Levinas explains is the suspension of time and the suspension of the system of exteriority. Habitation or dwelling is not simply associated with the intimate, with identification, it *is* the intimate, defined in polar relationship with the exterior. Understanding this relationship allows us to isolate a specific kind of communication whereby expression of the intimate and public evinces a new understanding of the suburban condition. The presence of signalic communication as the mode of expression of the text of the suburbs reveals the presence of Levinas' exteriority on the built environment. One might also argue that the encroachment of the literally signalic forms of communication of telephony, television, and computer-mediated communication have reduced the identity presence of the home as well, increasing the presence of the signalic. One must ask at this point, "is this a zero-sum relationship?" meaning, "Does one mode of expression displace the other?" Given the accretive nature of dissociation, the answer would appear to be "No." Since this theory is an extension of Gebser's work, it relies on an accretive notion of the presence of consciousness structures. By extension, then, one would expect that evidence of one would exist alongside evidence of the other.

Importantly, however, the ideas of dominance, efficiency, and deficiency must be recalled at this point. Certainly we are free to argue within Gebser's and Kramer's

theories that at different times one form of consciousness will be dominant. We may argue by extension that the evidence for the dominant structure will prevail when observation is made at that time. It is critical, however to recognize that the prevalence of one does not necessarily displace the other or eliminate it. This is because a subsequent structure always includes the previous.

At this point, the question might become, "How can one demonstrate the aggression of one toward the other?" One could clearly dispute the idea of aggression here, but for the moment the metaphor may suffice. In modernity in general, we see the aggressive enforcement of distance, of spatiality (Gebser, 1991). The impulse and only goal of modernity is self-reference, which includes self-reproduction and expansion (Gebser, 1991; Mumford, 1963; Mickunas, 1992). As such, aggression seems appropriate as description, since the impulse of modernity is expansion. If these theorists are correct, then the one could assume that the evidence for this expansion would be present. An increase in signalic communication in the semiotic text of suburbs, as the increasingly prevalent lived space in late-modern America would be evidence for this phenomenon.

But how does one demonstrate a presence of signalic communication? One must look for semiotic evidence of the qualities of signalic communication, which are outlined in the section of this document describing dissociation. This study utilizes the methods of semiotics and documentary to rigorously demonstrate, following the tradition of deconstruction, the presence, and perhaps dominance, of signalic communication in the text of semi-urban spaces.

Deconstruction

This study uses the posture of deconstruction to analyze the values expressed in the text of semi-urban spaces. Important to realize initially is that deconstruction, like other philosophical approaches such as phenomenology and hermeneutics, is not a method in the sense used in logical positivist study of communication. It does not entail steps to be followed, standard kinds of variables to be operationalized, or instruments to be applied in order to measure variables. According to Culler (1982), deconstruction seeks to show, among other things, the contradictions in the logic of a text; it is demonstration through rigorous argument. Deconstruction seeks to identify the assumptions within a text. Culler writes "...to deconstruct a discourse is to show how it undermines the philosophy it asserts, or the hierarchical oppositions on which it relies, by identifying in the text the rhetorical operations that produce the supposed ground of argument, the key concept or premise" (p. 86).

Important to the process of deconstruction is that the concept being deconstructed is "supposed" as mentioned above. Deconstruction assumes that phenomena are contingent on experience. A *supposed* has a *suppos-er*. This is a basic difference from positions that hold a transcendentalist view that phenomena are independent of experience. Setting aside the idea of a "real" answer to this age-old ontological problem, one can note the usefulness of the approach. Presuming that a phenomenon is a function of experience allows the researcher to study horizon-phenomena that derive their existence through perspective. The horizon is clearly visible, but is not a place one can visit. Nevertheless, it is real. Derrida's deconstruction relies on Husserl's phenomenology but also disagrees with it substantially.

Derrida demonstrates deconstruction of spatial concepts in his book Edmund Husserl's Origin of Geometry: An Introduction (1978), where he argues that geometry, as expression of worldview and as a structuring factor of worldview, is contingent. He deconstructs Husserl's essay "On the Origin of Geometry," found in his last work The Crisis of European Sciences and Transcendental Phenomenology (1970). In this essay, Husserl argued that geometry was transcendental and ideal. According to Husserl, geometry would be rediscovered by a future civilization should the present civilization and its language fall into oblivion. Husserl's argument was that the phenomenon of geometry exists beyond its interpretation by a culture. The principles of geometry hold true regardless of their correspondence to the material world. Shape, as an ideal form, exists whether I witness it in a real application of geometry or in an imagined or dreamed application. As such, Husserl argued, the idea of geometry has a reality beyond interpretation. Derrida's deconstruction of geometry demonstrates the problem with Husserl's argument. Derrida outlines conditions for the potential death of a geometry, demonstrating that geometry is not transcendent, but contingent. He argues that a death of sense that gives meaning for an individual, a death of the graphic sign, may contribute to the death of a civilization's geometry. In addition, he argues that because writing is both a "...factual event and an upsurging of sense..." (p. 97), ideas communicated through it are contingent. That is, because writing can record and also remake, change, or destroy concepts, it does not reflect transcendental objectivity

The present study is not the place for an in-depth analysis of the conflict between the two positions. The point of Derrida's extended and complicated argument is that space can be shown to be value-laden, that spatial concepts are not neutral, and their

meaning is not transcendent. His argument is also that linguistic and cultural assumptions construct spatialization. Conceptions of space can be constructed and demythologized by examining the assumptions that are expressed in their constructions. As argued earlier, designed space is a case of expression of values and messages. Derrida's argument is that even the abstract (idealized, in fact) spatialization of geometry can be demonstrated to be contingent because only the constructed geometry that is a product of the lifeworld can be understood. Only in the context of contingency can geometry be understood:

> Within the infinity opened by the Greeks, a new infinitization is produced, one which will make the previous closure appear, not as the closure paralyzing the Greeks *on the threshold* of mathematical infinity itself, but as the closure secondarily limiting them *within* the mathematical field in general. Even in the spirit of the *Crisis*, the modern infinitization will mark less an authentic upsurging than a kind of resurrection of geometry. Moreover, this new self-birth will be at the same time only a new *obliteration* of the first birth certificate. And, it must be added, the process of intra-mathematical infinitization can then be generalized *ad infinitum* and according to an accelerated rhythm.
>
> But if each infinitization is a new birth of geometry in its authentic primordial intention (which we notice still remained hidden to a certain extent by the closure of the previous system), we may wonder if it is still legitimate to speak of *an* origin of geometry. Does not geometry have an infinite number of births (or birth certificates) in which, each time, another birth is announced, while still being concealed? Must we not say that geometry is on the way toward origin, instead of proceeding from it? (130-131)

As this passage demonstrates, Derrida's critique of Husserl's complex argument is itself very complex. What is shown in Derrida's work, however, is that spatial concepts can be shown to contain contradictory value assumptions, as Derrida shows within Husserl's conceptualization of geometry. This argument, by extension, could be used to support an argument that indicates that a less-idealized spatialization, like the material condition of semi-urban text, can be deconstructed. The built environment is, after all, a *built* environment, and is a product of and contributor to the lifeworld. The present study follows Derrida's lead in studying the values that can be read in the design of urban and suburban space in contemporary American cities.

This study also approaches the text of semi-urban spaces with a hermeneutic of suspicion. Hermeneutics is, generally speaking, the art or science of interpretation and has been characterized as both art and science. Ricoeur (1998) defines hermeneutics broadly, writing, "hermeneutics is the theory of the operations of understanding in their relation to the interpretation of texts" (p. 43). How this activity should be carried out and the nature of hermeneutics as a philosophical activity have been the subject of much academic debate, and as Ricoeur (1970) notes, "there is no general hermeneutics, no universal canon for exegesis, but only disparate and opposed theories concerning the rules of interpretation" (p. 26). This debate is old, dating back at least as far as Aristotle's On Interpretation. In this study, Ricoeur's hermeneutic of suspicion is used in interpreting the text of semi-urban spaces. Hermeneutics is selected in general because it allows for the exploration of values within a text, which is a mode of interpretation. While there are many interpretations of hermeneutics, this approach is applicable here because it allows for the examination of the text as it presents itself, removing the

question of intent as essential to interpretation. Thompson (1998) explains this hermeneutic approach:

> According to another view, however, hermeneutics is regarded as the demystification of a meaning presented to the interpreter in the form of a disguise. This type of hermeneutics is animated by suspicion, by a scepticism towards the given, and it is characterised by a distrust of the symbol as a dissimulation of the real. Ricoeur suggests that it is the latter type of hermeneutics that is practised by Marx, Nietzsche, and Freud. All three of these 'masters of suspicion' look upon the contents of consciousness as in some sense 'false'; all three aim to transcend this falsity through a reductive interpretation and critique. (p. 6)

This succinct explanation of Ricoeur's approach highlights the approach as one which has those practicing it look beyond the face of the symbol (in this study, signs) in order to discern what values may be found in a text expressed by the symbol's appearance or the intent of the author. That there may be a difference in the symbols of the text of the built environment can be demonstrated by the Pruitt-Igoe housing project, which was intended as public housing but is famous for having looked like a prison and for having the effect of encouraging criminal behavior (Jencks, 1981; Newman, 1972; Rainwater, 1970). As discussed in the review of literature, the difference between the intended use and the lived use of a built space is often considerable, and, accordingly, the values expressed by a space may be different from those intended. Because of this, it is necessary to approach such spaces in the manner described above, using a hermeneutic of suspicion. This allows the interpretation of the space as continuous text that is not bound to intent. This study approaches these texts as continually unfolding. The meaning is in the ongoing

flux. This study does not approach these phenomena as "really" meaning one thing or another "independent" of the expression of both the design and the living of the space.

One might at this point argue that built environment or space is very different from a written text. Concerning the appropriateness of this kind of text (not a written text, in the strict sense) as the subject of a hermeneutic approach, Ricoeur (1998) argues that if the object of study displays the features of a text, and if the specific methods involved are similar to those used in hermeneutics, then that approach may be said to be hermeneutic. As argued throughout this document, semi-urban spaces are lived texts that are dynamic, and this study is concerned with discovering the values expressed in those texts. As such, this study may be said to be hermeneutic.

A philosophic posture emphasizing deconstruction and hermeneutics is appropriate for this study for several reasons. First, this approach is most appropriate to the research questions and to the data to be analyzed. As noted above, the explicit goal of deconstruction and hermeneutics is to discern values present in a text. While Hermeneutics simply assumes there are values to be found in the text independent of intent, deconstruction allows for the rigorous demonstration of contradictory, yet co-existent, values. Assuming that semi-urban spaces may be read as text, seeking to identify values within that text is appropriate to a study seeking to identify values in any other text. In addition, the flexibility of deconstruction better allows analysis of a phenomenon not ordinarily conceptualized as text. The emphasis on rigorous argument drawing on a number of data sources and comparison of the values found in the text fits well with the text under study since multiple data sources are needed to understand semi-urban spaces as text. As argued in the preliminary examination included in this

document, the text of the suburbs includes much more than simply the physicality of the suburbs; they are processes. As a site of living and working space, a suburb is a text on many levels including physical, economic, and historical. Also, deconstruction's assumption that a system has a logic to be deconstructed fits very well with the phenomenon under analysis in this study. As argued in the preliminary examination and problem statement in the document, semi-urban spaces are expressions of rationality and what is clearly an ordered system of thought. The coordinate system is a logic system with rules and boundaries for operations performed according to those rules, which are contingent with use. The imposition of order to space proceeds according to the logic of order; it can proceed no other way. Division and sectorization assume order and unitization assumes systemization. As the alternative to "organic" modes of living space orientation, spatialized living modes express a logic. Additionally, the notions of alterity and habitation assume experiences of interiority and exteriority, self and other, recollection, etc. that may be interpreted as systems of meaning. The semiotic notion of codes as systems of signs, and the idea of a language game, all key concepts in this study, rely on the idea of an interpreted or constructed order that may be examined for expression of values. Deconstruction and hermeneutics are useful modes of approach for understanding such phenomena, as demonstrated above.

In addition, there is much research on suburbs and urbanization that utilizes the operationalization/measurement logical positivist approach. The United States Government conducts rigorous and extensive studies that include the suburbs with every Census. In addition, a great deal of private research exists that covers the suburbs from this perspective, emphasizing value, construction rate, marketability, and the like that

uses statistical and measurement-oriented methods. Use of this approach allows this study to contribute to the literature on suburbs in a more unique way, giving researchers in communication and other fields an alternative to the rational-empirical picture of the suburbs.

Semiotics

In the study of communication, as well as in its uses elsewhere, semiotic theory takes the approach that social codes, enacted and evidenced through the use of signs, are texts that can be read in order to theorize the meaning of the signs and the codes that govern their activity and interaction. Semiotics looks at systems and signs and how they interact. Manning (1987) describes semiotics as a method intimately concerned with communicative behavior:

> Semiotics... is an orientation to the analysis of signs and signs about signs. There are several important aspects of the orientation, or the point of view itself. Semiotics is a formal mode of analysis that seeks principles and rules that account for a known pattern. It also is a form of cultural analysis. All human behavior, once interpreted, is conduct. Semiotics looks at rules that govern it or control speech, *language* rules. The language rules, like traffic rules, provide ways to get there, to express "thought." (29)

As Manning explains, semiotics assumes that communicative behavior uses rules to structure itself, that communicators follow and express the rules, and that the rules are accessible to observation. As argued elsewhere in this document, the notion of language games, or rule-governed communicative behavior, can be applied to communicative

behavior beyond the level of verbal communication, as is demonstrated in the extensive literature using semiotics to do just that (Leeds-Hurwitz, 1993).

In general, semiotics relies on two primary concepts to structure its formal mode of analysis. These are *signs* and *codes* (Leeds-Hurwitz, 1993). Manning (1987) explains these two concepts succinctly:

> Signs are composed of two inseparable entities, a *signifier* or *expression* that carries a message, and a *signified* or *content* that is conveyed. The connection that exists between the expression and the content is variable, and must be understood within a given set of rules or principles that guide the connections made. Connections, when identified, isolated, and formalized, can be assembled into a code. *Codes* themselves vary: Some codes are formal and logical, and the conventions or connections between expression and content quite specific and arbitrary (e.g., chemical formulae, computer programs), while other conventions are quite "natural" or commonsensical, such as the understanding that smoke and fire are correlated or that footprints on the sand indicate human presence. (34)

The two-fold nature of the sign that Manning describes above relies on the Suassurian (1969) theory of the sign. In this conception of the sign, the signifier is the materially present element, while the signified is the "tacit element of a sign, what might be termed an 'immaterial' presence, something literally absent yet functionally present because it has been invoked" (Leeds-Hurwtiz, 1993, p. 23). In Leeds-Hurwitz's example, a flag is the signifier while the country for which it stands is the signified.

The theory of the sign is the subject of an ongoing debate, both in its basic nature as well as in its difference from the concept of symbol (Leeds-Hurwitz, 1993), and a full

treatment of this debate is neither possible nor appropriate here. Indeed, one could argue this debate to include most of linguistic and communication theory in the broadest sense, as well as the vast literature addressing the philosophy of language. Saussure's Course in General Linguistics (1969) is the subject of Derrida's Of Grammatology (1976), which provides a starting place for many instances of this broad debate, for example. In semiotic theory specifically, however, the concept of *sign* presented by Manning is distinguished from the Peircean (1985, 1931-1958) concept, which includes the three elements of *representatum* (the sign), *object*, and *interpretant*. In Peirce's view, what Saussure calls the signified is divided into the object, or the thing to which the representatum refers, and the interpretant, or the unique meaning conveyed by the representatum about the object in the case of representatum under consideration.

Three other of Peirce's concepts have found broad acceptance in semiotics. Specifically they are three types of sign: *icon*, which is similar to or resembles the signifier; *index*, which is contiguous or connected to the signified; and *symbol*, which has an arbitrary relationship to the signified (Leeds-Hurwitz, 1993). All three kinds of signs are of interest in this study, even though, as Leeds-Hurwitz claims, the symbol is most often of interest for communication scholars. Because this study focuses on the concepts of identity and dissociation, the kind of relationship a sign has to a signified is of particular significance. For example, a relationship of actual connection (and "actual" must vary with outlook or consciousness structure, given a Gebserian approach) is described in the concept of *index*, and in this term we find a methodological term that allows us to talk about the idolic quality of an idol, for example, or of a relic of a religious figure. This demonstrates a good fit between the method and theoretical

approach of the study. For this reason as well the study in general assumes that a basic distinction, as presented in the Suassurian terminology will be sometimes sufficient, while at other times a more specific relationship might be best described using the Peircean terms. This is because the philosophical and theoretical assumptions underlying this study seek to minimize the role of method in representing the phenomenon under study while also gaining the structure and intelligibility accorded by method. In other words, in this study a balance is advocated, with the phenomenon under study as the guide for the way in which its representation in the document is rendered.

From the perspective of semiotic theory, the meaning of a sign arises not only from the relationship between the signifier and signified, but also from the relationships between signs, grouped together in *codes*. A code is a "system, pattern, network, [or] grid (all of which are used to designate groups of signs)" and also implies the presence of rules that organize the interaction of the signs, giving us a definition of a code as a "'set of signs and rules for their use'" (Leeds-Hurwitz, 1993, p. 51). Meaning at the level of both the sign and the code give semiotic theory the power to explain an instance of communication as well as its context. In addition, semiotic theory assumes both are necessary to adequately describe a communicative phenomenon. O'Sullivan et al. (1983) outline six characteristics of codes:

1) Codes have a number of units arranged in paradigms from which one is chosen.
2) Those chosen units are combined syntagmatically into a message or text.
3) Codes convey meaning derived from the agreement among shared cultural experience of their users.

4) Codes are transmittable by their appropriate media of communication.

5) Codes can be a way of classifying, organizing, and understanding material as well as of transmitting or communicating it.

6) Codes are, by their very nature, full of gaps and inconsistencies and subject to constant change. (36-37)

These broad statements draw together and summarize much about codes. As a way of thinking about codes, they provide a set of qualities for guiding the development of codes as collections of signs as they present themselves and can also be used to study the systems and signs as they develop over time. A phenomenon may change over time in relation to its systemic context. An arrowhead, for example changes in meaning from being a part of an everyday tool to an "artifact" that may become a museum piece, or a source of pride for a private collector. It may also have been a magic item in its first use in killing primary food animals. It might have been part of a ritual of death and rebirth (Campbell, 1988) in one time and might then be considered a magic item in a museum because it is a magical connection to a culture that is no longer. In both cases, the item has a magical meaning, as Gebser (1991) would describe it, but the meaning is contingent on context.

Importantly, while there are several specific sense appealed to in this list, such as the Suassurian concepts of paradigm and syntagm, which convey the ideas of a set of signs and of new ideas resulting from the combinations of signs from different paradigms, for the purposes of this study this list provides a set of general guidelines for identifying and describing codes that present themselves in the text of semi-urban spaces. What is most critical to the present study is the idea that the signs present in the text can

be argued to have an order, along with the idea that such an order might have some or all of these characteristics. Neither semiotics nor this study assumes a finite list of characteristics for the designation of a code. This idea conflicts with the openness of the approach and with the basic idea of looking to the signs themselves for the patterns by which they appear to be organized.

Justification for Semiotics

That semiotics is appropriate for the study of human-built environment is evident as early as Vitruvius' ancient text The Ten Books on Architecture (1960), where he writes, in the first chapter of Book 1 that, "In all matters, but particularly in architecture, there are these two points: --the thing signified and that which gives it significance," (p.5). Demonstration of the presence of signalic communication through argument (a specific goal of this study), deconstruction, and rigorous demonstration relying on semiotic and documentary evidence is a justified means of demonstration for this phenomenon for several reasons. First, and perhaps most important, quantitative demonstration is an example of signalic/codal communication. It relies on unitized differentiation as means of communication. One could argue here that all languages do the same. This is unavoidable as a limit to the argument since demonstration in an academic study is limited to linguistic demonstration. Long before that limit is reached, however, one may find forms of proof that rely to a greater or lesser degree on this form of communication. The argument here is that a perspective is required to create difference in quality and create reference for the purpose of explanation. Given this idea, explanation through means other than the same appears to be advantageous in terms of creating ground for explaining and making meaning. So the first reason to prefer the

approach this study takes is that adherence is beneficial to the basic guideline for definition that one should avoid, if possible, definition using the same or similar terms.

Second, a method of study should be close in terms of form to the phenomenon under consideration (Mickunas, 1998). A method should be conceptually similar to the subject of study. While difference is clearly necessary for the creation of meaning, as argued above, too much difference risks creating meaning that is less defendable. The text of semi-urban spaces presents itself as such in forms of communication that are knowable through means that do not lend themselves to explanation by means of quantification or re-casting through the constructs of methodological transformation. Defining a "unit" of communication that can be said to be typical of the semi-urban space is difficult. Units are sometimes defined in semiotic studies following a semiotics of atomization in which units are heterogeneous and refer to the culture (or code-system) in its entirety, but are discernable as units (Fischer-Lichte, 1992; Jakobson, 1980). The goal of this study is, in part, to describe the elements of the code or language game of semi-urban spaces in a manner that respects the role of perspective and acknowledges the limit of description by perspective but also the necessity of rigor, as argued for by Husserl (1993). Documentary and semiotics, by using multiple methods of demonstration, allow for the communication of description from perspective and allow for description by image, form, and word.

These may be argued as the basic elements of the semi-urban space. Given that planned space or the built environment is physical, and architectural, it can clearly be characterized as form. Form can only be represented in a document such as this through image. I cannot put a house into a dissertation. In addition, multiple senses of image

apply here. Many of the forms of semi-urban space include images, and often the forms are themselves images of ideas, as described in the section of this document explaining the rhetoric of architecture as communication of magic identity, mythic mood, and perspectival ideology/ideas. Since they are built or constructed, they are representations or expressions of identity, mood, or ideas. Finally, words (as well as symbolic communication) are also a part of the semi-urban environment, as shown in advertisements and street signs.

Finally, signalic communication describes a wide variety of communicative phenomena, just as Gebser's understanding of the mental-rational describes a wide variety of phenomena that are expressions of this mode of consciousness. The idea of *sign-al-ic* communication assumes the concept of signs of a wide variety. Semiotics allows for a variety of evidence (signs) that demonstrate signifieds (Manning, 1997), and documentary allows for a wide variety of presentation forms for those signs. In sum, these academic traditions allow many forms of proof that seek to conform to the phenomenon, rather than enforcing a methodical structure on the phenomenon. Obviously, semiotics posits the structures of sign and signified, and documentary assumes that something can be *document-ed*, or made into a document. For justification for the reliance on the ideas of sign and signified, one may argue that any method attempts to demonstrate the presence of something by a sign of it. The difference can be found in the degree to which a method outlines what each of these is prior to the examination of the phenomenon. Semiotics, in a general sense that sets aside the inter-sub-disciplinary debate over the theory itself allows these to be set by the subject of study. In addition, the method may be said to be very similar to that of the theorists on

whose work this dissertation rests. Gebser, for example, cited a wide variety of signs for the phenomena he posited. Without this freedom, the description of such phenomena might not have been possible. This is especially true with horizon-phenomena, since such phenomena are understandable only through perspective and therefore subjective reference (Husserl, 1970) and also with spatial horizon phenomena (Husserl, 1997). Concepts such as alterity and identity are such phenomena. Eco (1976) agrees that semiotics allows researchers to assume a code to be readable while acknowledging the inescapability of perspective:

> Semiotics must proceed *as if* a definite general structure existed; but to be able to do this, one must assume that this global structure is simply a regulative hypothesis, and that *every time a structure is described something occurs within the universe of signification which no longer makes it completely reliable.* (128)

In addition, Gadamer (1989) argues that the presence of prejudice is necessary for a code to be read at all. Semiotics proceeds from the assumption of indeterminacy of the codes it allows one to analyze and thereby acknowledges the need to discover the expressions under study as they present themselves. Manning (1987) agrees, writing that "interpretation is fundamental: Any system of rules, or forms, will have gaps, indeterminacies, and interpretative aspects" (p. 31). As for the justification of the assumptions of documentary, these are the assumptions of making documents that describe phenomena—the main activity of research. Given these ideas, the lines that are drawn by semiotics and documentary appear to be acceptable.

Barthes (1988), generally reviewing the literature on urban spaces and signification, discusses the possibility of a semiology of urban settings and argues that

semiotic and deconstructive approaches are appropriate for the study of urban spaces. Barthes argues that specific methodology in this case is not only misguided, but also probably impossible for several reasons. He argues that no method for such study has been established and that no model can be made because of two sets of problems. The first is a set of conflicts revolving around signification and city spaces. In this area, Barthes argues that, in cities, the function of areas of a city conflict with the semantic qualities, or the meanings of the cities. He gives the example of the tension between the modern functional necessities of life in present-day Rome and the weight of its history. These two qualities often conflict both in the material world and in any interpretation of the city as a text. Additionally, there is a conflict between the signification of a city and the reason element of a city text. Not all the elements of such a text are based in reason, even if their design was intended to be. Finally in this area, Barthes argues that there is a conflict between signification and a supposed reality of the text. The signification experienced by the reader of the city does not equal the signification of the city itself.

These concerns are related to a second set of problems noted by Barthes. Noting that many fields have argued the impossibility of term-to-term symbolism, he applies the difficulty to urban texts. One cannot translate the text of a city into other language forms in a one-to-one manner. In addition, and important to the present study, signifieds are indefinite in two ways. They are "...like mythical beings, of an extreme imprecision, and because at certain moments they always become the signifiers of *something else*..." (p. 197). Because of this quality, Barthes says, "The hunt for the signified can therefore constitute only a provisional undertaking," and "The role of the signified... is only to afford us a sort of testimony as to a specific state of the signifying distribution" (p. 197).

The signifieds of an urban text are subject to this condition because symbolism is the result of correlations of signifiers. Because of this, meaning can never be defined, or as Barthes puts it, it can "...never be imprisoned in a full signification, in a final signification" (p. 198). The result for Barthes is that no clear methodology exists for studying cities as texts and the appropriate approach is to "decipher the city where we are, beginning, if necessary, with a personal report" so that we may "thereby elaborate the language of the city" (p. 201).

The correlations that can render meaning for a text as complicated as a city are myriad, making deconstruction an appropriate method. The conflicts of meaning Barthes refers to are very complicated in the case of urban texts. Meaning for a particular place within a city at a particular time is difficult enough to determine since it is the confluence of many elements, ranging from planning to traffic (pedestrian and automobile) to the individual experience, whether mediated through the automobile or as a pedestrian. Complicating this problem is the historical dimension (or lack of it). The history of a spot is also a factor in its meaning. Awareness (or lack of it) of the reader of that place makes the history relevant or irrelevant. Further complicating this problem is the history of the place and its accretive meaning in the psychology and personality of the reader. If places structure experience in addition to being structured by them, then the signifier-signified relationship is not simply complicated, it is also rendered only partly useful. These kinds of relationships are both mutually defining and negating. That phenomena are so constructed is an assumption of deconstruction (Culler, 1982; Derrida, 1973). As Barthes argues above, study of urban texts can only start with the individual position. Deconstruction assumes that since a text is just such a construction, only a constructed

text can be studied. Such texts must be constructed by someone, making them horizon phenomena and therefore difficult or impossible to operationalize in a traditional social scientific sense.

Deconstruction allows the researcher to admit my position as a reader of the text of urbanization and the construction of the phenomenon of study that would be necessary to undertake the study while recognizing the need for rigor in that construction and in the analysis of the constructed text. As noted above, this is perhaps Derrida's most fundamental definition of deconstruction—as rigorous argument. This rigor demands a refusal to be constrained to operationalizations or to artificially over-limit sets of data. While one can argue that any data set is artificially constructed (a sample may be judged to be "representative" or not, for example) the argument behind its construction should be the determinant of its usefulness and acceptability. Two determinants of rigor are breadth and depth of evidence. Balance between the two must be struck. Too much depth may fail to tell us enough about other similar phenomena. Too broad an approach may obscure important qualitative differences between specific cases. Thus some kind of reasoned multiplicity is necessary for study. Even quantitative approaches value triangulation. In the present study multiple sources of data were explored in hope of ensuring the rigor of the study.

Data

As, argued in the introduction and elsewhere in this document, the phenomenon of technologized lived space is widespread and its expressions pervade the contemporary world. Accordingly, data for this study was gathered from several sources and the phenomenon under study is assumed, with the support of the literature, to be present in

all cities. It is therefore necessary to delimit representative examples of this widespread phenomenon for exemplification. First, in order to answer questions concerning the physical presence of values in the text, maps of major Metropolitan Statistical Areas, as defined by the United States Census Bureau (Statistical Abstract of the United States, 2000), were studied as semiotic texts. These areas are defined as areas including "at least one city with 50,000 or more inhabitants, or a Census-Bureau defined urbanized area (of at least 50,000 inhabitants) and a total metropolitan population of at least 100,000" (p. 908). From cities on this list, representative cities were selected based on geographic region, size, presence of easily discerned semi-urban spaces, and convenience. Using this definition for cities selected preserves the applicability of transit and housing statistics to be used in conjunction with this study. In addition, while the methods of the Census have become the subject of political debate, the scope of the data collection by the Census Bureau, as well as the rigor generally attributed to the survey make it a credible source of data. Definitions derived from the Census are the accepted standard of demarcation for urban and suburban areas.

Second, observations of urban and suburban areas in selected cities were conducted. In addition to representations of the physical design of cities (maps, etc.), should be carried out in order to describe the "feel" of the physical environment as well as to describe the visual qualities of spaces that cannot be represented on maps. Architectural styles, presence of pedestrians, and readily apparent interaction between inhabitants, for example, cannot be observed using city plans. Photographic evidence of the signs present in the semi-urban environment have been gathered and categorized. This process is necessary to document claims about the built environment and to discern

patterns of signs present. As mentioned in the introduction, all elements of the built environment accessible to the everyday inhabitant were used as evidence. This is an important distinction. This study did not, for example examine areas not ordinarily accessible to the "person on the street." The goal was to explore alterity in the built environment that is the setting for the everyday experience now. Observation and collection of photographic data is accepted as standard data for semiotic studies of objects and the environment, as demonstrated by Leeds-Hurwitz (1993) and Broadbent, Bunt, and Jencks (1980), and as explained by Manning (1987).

This study intensely collected data from primarily two areas, Oklahoma City and Dallas, and also observed to a lesser extent, the built environment in several cities in the United States, including Omaha, Nebraska; Los Angeles, California; Houston, Texas; Lubbock, Texas; Corpus Christi, Texas; New Orleans, Louisiana; Santa Fe, New Mexico; Albuquerque, New Mexico; and St. Louis, Missouri.

In general, all of these cities clearly express the contemporary development pattern of urban centers with suburban rings of expansion. Moreover, they are representative of the phenomenon of sprawl and contemporary urbanism. Both of the primary areas are ranked as Metropolitan Statistical Areas (MSAs) studied by the Census Bureau (U.S. Census Bureau, 2000). And many of the secondary areas are also. Los Angeles is a clear example of development independent of landscape and rapid massive growth of sprawl, and has been argued to be perhaps the only American city to rival the growth of other mega-cities of the world (Davis, 1990). It is the second most populous MSA. Dallas-Fort Worth is the ninth most populous MSA, St. Louis ranks 18th, and Oklahoma City ranks 49th.

Primarily, photographic documentary evidence was collected. In addition field notes were taken and observations recorded. In accordance with practice followed in visual anthropology (Collier & Collier, 86), photographic evidence was categorized according to its presentation of the built environment and the theoretical guidelines outlined in the previous chapter. In this heavily qualitative approach the researcher spends time repeatedly viewing and working with photographic evidence looking for patterns in the material represented in the photographs. This method acknowledges the intrinsic and inescapable role of the researcher in this method.

Rationale for data selection

Questions 1, 2, 3, and 4 were addressed primarily through studying the physicality of semi-urban spaces through observation, and gathering photographic evidence. Physical manifestations of the theories and philosophies outlined above was found in the layout and the actual physical structure as observed. These three data sources also contribute to addressing question 4, since they provide physical evidence for dissociative physical arrangements in suburban life.

CHAPTER SIX

READING URBAN AND SUBURBAN SPACES

The American mode of habitation, the subject of this study can be characterized by at least two competing and complementary "freedoms" that also express a part of what has been labeled a democratic system. These freedoms coincidentally are also two of the oldest issues. Motion and stillness, or permanence and flux, are both expressed in our mode of habitation and are expressed together. Freedom of movement, expressed in the automobile, is also a kind of stillness. It is an algorithmic activity that emphasizes the freedom to travel and also the confinement of a unit in a planned system. Freedom to remain, to make one's home on the ranchette is also an expression of both motion and stillness. One is given the reflective time needed for dwelling, but in our mode of habitation, the dwelling I is always really dwelling *from* and is rarely what might be called dwelling *in*. This Levinasian concept describes the difference between the dwelling as a containing element and the dwelling and an enabling base. One leaves the home for almost every activity short of the storage/detainment-oriented processes of sleeping and watching TV. In an example of what Heidegger (1954) feared could become the reduction of humanity to a standing reserve for the service of technological systems, the contemporary worker is stored until the "work-day" begins again. Much of this process is accomplished through movement and stillness. This study reads the built environment for the material features that express this outlook. Mechanized habitation as a systemic process is evident in the built environment and evidence for this algorithmic structuring of our habitat is presented in this section.

Anonymity and powerlessness

While the built environment can be remade according to will just as it was made by will, it cannot be remade according the anonymous will of one who lives within it. The individual confronted by the built environment cannot remake it. She is forced to conform to it—to react to it and to partly derive self from limitation by it (Merleau-Ponty, 1968), and to an Other in an exchange with the built environment (Levinas, 1969). It will not react to her in the immediate present or even in the middle-run. The built environment responds slowly to us and we to it. It is a long-term conversation between that which makes and that which is made, between body and world, which give each other through dialogue (Mickunas, 1997). Neither human agents nor the built environment stand in permanent location in either of these positions; each is at times maker and other times made. This is the power of the built environment as expression of values. The values expressed in the power line, the parking lot, the strip mall, and the sidewalk are not changeable by the individual when concretized by the society.

In the moment of confrontation between the person and the power line or stoplight, however, in the moment of beholding, of the mutual definition of internality and externality, the alterity of the built environment is inescapable and is not malleable. Here is the difference that makes the built environment so powerful. For the architect and planner, this conversation is changeable. The ongoing dialogue between human and environment can be affected. They are privileged to speak. The architect and planner have voice in the conversation and therefore have power in the shaping of human lifestyle. The anonymous agent, however, has almost no voice in the conversation. She may not even be aware that she is in a conversation.

The supposedly leveling form of Modern Architecture has been discredited, but this does not empower the human agent any more than during the time when Modernism was dominant. The writers who claim that the mechanistic/organic problem was solved with the advent of postmodern architecture miss this point: Regardless of the style of architecture or planned space, the anonymous agent cannot change the forms he encounters, so he must change to accommodate them. What Eco (1980) terms "an invitation to use" communicated in a physical setting is actually a command to being. This critical point cannot be overstated. Its power is in its pervasiveness. Yes, one can petition the appropriate governing body to have a historic space preserved or an offensive space removed. The order described in this study, however is pervasive in that it *is* the lived space, not simply an element of it. At every turn, one is confronted with alterity, and its pervasiveness has made it transparent, giving it dangerous power. The author of this study was told he was a fool for questioning the legitimacy of stoplights while he and the person who told him this were idling in a car waiting for the light to change. The stoplight is a very basic communication device. It allows the traffic system to repeatedly issue commands that are followed by human agents. Human agents design the system and decide the timing of these issues and then leave the system to its automation; they leave the human agents to their automation.

Geography of Nowhere?

It has become fashionable to refer to much of the built environment such as the vast stretches of the suburbs, and ex-burbs as "no-where." For example, James Kunstler's book *The Geography of Nowhere* (1993) argues that the advent of modernism in architecture ruined what was otherwise a valuable and important American

Architecture. Kunstler argues for a return to a romantic notion of architecture that includes many aspects of the traditional "American Town" image and demonstrates that such places have actually existed and have included such design elements as the traditional Main Street. Kunstler, along with other authors (Hiss, 1990; Duany, et. al., 2000), argues that contemporary building and zoning codes, many established after World War II, established many elements of this traditional town look through zoning restrictions preventing mixed use, mandatory setbacks from the street and sidewalk, and obsession with the automobile. Many of these codes are traceable to early American preferences in architecture and in European architecture.

Clearly, these authors may be argued to have a compelling point. The obsession in America with the automobile is well documented and is evident in everyday life (Kay, 1997, for example). One need only observe pedestrians hurrying or actually running across streets to realize that the space design at work does not privilege them but rather privileges the automobile. As the evidence in this study demonstrates, design emphasizes geometric abstraction that does not privilege the human form but rather the prosthetic form of the automobile. We hurry because we know that this is not space intended for us. We should get out of the way. Street design has been largely driven by the need for wide radii for turning, the ability for fire trucks to navigate, the minimization of "Fixed Hazardous Objects" (trees), and the elimination of T-shaped intersections that provide a termination in line of sight. These designs have been directed by a perceived need to create a safe street that can be navigated by a drunk driver at speeds of up to fifty miles per hour (Kay, 1997; Kuntsler, 1993). Kunstler even argues based on interview data that many street widths were set based on the ability to allow bulldozers to clean up

more efficiently after a nuclear attack. Clearly, as has been argued elsewhere in this study, the emphasis has not been on the human scale or need, but has privileged the mechanical over the human. This privileging is not a lack of meaning, but rather a wealth of it. It can tell us much about what we appear to value.

It has also become fashionable to refer to urban areas similarly. The trend in several literatures addressed above that address habitation and planning has been toward popular denial of "meaning" in the built environment, arguing, as does Kuntsler (1993), for example, that the something that expresses alterity is not meaningful. Such an expression is still expression of meaning. These spaces are expressions of a dominant outlook, itself meaningful, but also other simultaneously present outlooks, and they express many discourses. As Mumford noted in 1924, these spaces are anything but bereft of meaning (Mumford 1924/1955). Mechanization appears to be the dominant mode in the built environment. Quantitative difference has edged out qualitative difference. The enforcement of The Same has demonstrated the presence of a case of Totality, Levinas' (1969) concept of the unethical closed system. The fashionable view fails to understand that the emphasis on quantitative difference *is* a meaningful discourse. The emphasis on measurement and rationality is an expression of signalic communication, and communicates expressed meaning.

What this view also fails to take into account is that the totality is only one discourse among many present in the built environment. The built environment displays multiple discourses. While the scientific concept of planning is clearly an expression of the mental rational, emphasizing the signalic, this is not the only expression present. In fact, the rational gains its power from the mythic, in which it finds a justifying story,

giving it persuasiveness and its power to demand sacrifice toward the bestowal of blessing, and also from the magical, which expresses the desire for interchangeability, of part for whole, part for part, and whole for part (in fact, the magical does not contain these concepts but is only understandable from this point of view for us, the mental rational). To make such a statement expresses a synairetic awareness (Kramer, 1997) of the simultaneous presence of several discourses or expressions as present and powerful in a given phenomenon.

The emphasis on regularity in the built environment has been well documented as explored in depth in the review of literature for this study. What has not been addressed is that this emphasis is magical and mythical in addition to deficiently rational. In addition, the study of the built environment has failed to account for the continued presence of the magic and mythic as expressed independently of the rational. There are expressions of these present. In particular, the magical y-motivated desire for interchangeability that motivates technological development is part of a process that expresses an enforcement of the technological on the built environment. This section demonstrates the ideas mentioned above, providing evidence in an attempt to document the emphasis on closed, algorithmic, and systematic habitation modes. What has been called a valueless setting appears to display several values. The portrayal of a setting as value-free is in itself a value statement, just as the attempt to be objective is a value statement in that it devalues perspective in favor of an idealized conception.

Systemization and Light: Emphasis on Vision

The use of night lighting, especially to facilitate the use of automobiles, is part of a system. The system is a transportation system and the lighting is used to minimize the

difference between night and day. Herein lies another expression of the mental-rational, modern outlook. The minimizing of difference between night and day is a qualitative change for a unitizing purpose. It suppresses difference for the facilitation of regularity. The desire to keep the system running, to preserve flow of traffic, leads to the use of these lights.

Streetlights are prominent features of the built environment that deserve extended attention. Streetlights are part of the increasing dominance of artificial light in the contemporary experience of human agents and were found to be ubiquitous in this study. Most light now experienced by people is artificial (Hiss, 1990). In addition to, and irrespective of the frequency of streetlights, what can be argued to be most important is their presence; their presence expresses a valuing of vision and its enabling of around-the-clock activity (Kramer & Ikeda, 2001), characteristic of modernity (Gebser, 1991) and may be read semiotically for the values they appear to express.

Flow: Lighting and Corridors

Most obviously, streetlights are used to shed light where the supposed need exists. In this study they are found at intersections, along roads, and in parking lots. This demonstrates an important dimension of streetlights as expressive of value: Streetlights exist largely to facilitate the use of cars for driving at night and also for protection in the wasteland of parking lots. That they are centered on the use of the automobile is shown in their placement and height. Streetlights are no longer built at a height commensurate with a human scale (Kunstler, 1993), but are built much higher in order to provide light for drivers. In addition, they occur most frequently by roadways. The tall lights provide light over large areas to increase visibility for driving.

Figure 1. Light for driving, not for walking.

In the above picture, the emphasis is on the roadway and not on the sidewalk. The lights are directed at the roadway, turned away from the sidewalk. This appears to indicate an emphasis on driving rather than walking. Driving is valued; walking is not. The lights are spaced regularly along the road and are angled over the area to increase lighting efficiency. Where lights are placed as they are in the figure above, a corridor of light is created, emphasizing the relationship between light and the algorithmic motion of the traffic system, the subject of this section. These corridors emphasize the valuing of the flow of traffic or the valuing of systemic, algorithmic motion. On freeways, walls are used in addition to prevent pedestrians from entering the roadway and minimize the chance of automobiles colliding with objects off of the road.

The result is that the corridor creates a space in which only mechanized travel or activity of any kind, or activity that services (serves) the mechanical is allowed. It is often illegal to be on a freeway on foot. While this is obviously to protect the pedestrian, we cannot lose sight of the fact that the space is defined for the mechanical, not the organic. One might argue here that the emphasis on the mechanical is intended to serve the organic; automobiles are tools we use for transportation. This raises an interesting point that this study attempts to show: In the case of the automobile-centered spaces, we have created spaces that serve themselves. Space planning is a technology and as such it serves itself in addition to any service it may perform for us. In order to preserve flow at all times of the day and night, and in order to facilitate the flow uninterrupted, corridors are produced that are reserved exclusively for the mechanized, automobile-centered human, the prosthetic technologized prosthesis that automobiles express and is discussed elsewhere in this study. The simple point here is that the space is not for the non-technologically-enhanced human. The abstract *code* of law says so, and therefore it is legal reality. In the example below, lighting and walls combine to create a corridor for traffic.

In major Metropolitan Statistical Areas (MSAs), these lighting corridors define neighborhoods and areas of the city and act as carriers and barriers to sections of the city (Kuntsler, 1996, 1991; Mumford, 1964). In Houston, one lives in the "inner" or "outer" "loop," for example, depending on where one lives in relation to a particular roadway. Viewed from above at night, say from an ascending or descending airplane, these corridors demonstrate the flow of the system. The emphasis on algorithmic motion is visible in the lighted arteries of a city, as the visual evidence provided by Lewis Mumford

(1970; 1961) demonstrates. The corridors are the channels of flow for the machine of the city and are referred to as arteries, in reference to the flow of the lifeblood of the megamachine, which is capital along with labor. Smaller cities also have "loops" and other thoroughfares that demonstrate the same emphasis on flow in a more limited fashion. Lighting corridors in part create and sustain these corridors. Lights were found to be a prominent feature of the built environment and were observed to be used to create corridors that were unfit for non-enhanced human habitation.

Figure 2. Walls and lights combine to create a corridor.

Security: Lighting and Parking Lots

In addition to driving needs, the automobile is emphasized by light placement in the case of parking lots, spaces that exist solely to facilitate the automobile. These spaces tend to be large flat areas that include nothing beyond marked spaces on the ground along with, sometimes, low shrubs on islands within the lot. Lighting is necessary because

driving occurs in the lots and also for security. Security with regard to driving appears to be connected to light through security in motion and also security in stillness (parking). The idea appears to be that a person should be secure in a car as well as in automobile-oriented spaces. In the modern outlook, security is connected to vision (Foucault, 1977) and this idea was confirmed by the observations made in this study.

Figure 3. Parking lot lighting and island.

In the case of driving, a very real need for vision is evident. Traveling at high speeds (compared to walking) requires emphasis on vision. The resulting valuation is a necessary accompaniment to the activity of driving, or most high-speed travel such as flying or boating. Thus the emphasis on vision for driving is necessary to the activity of

driving. Lights over roadways increase what is (from the perspective of drivers) a practical benefit.

In the case of parking lots, one can navigate the lot more efficiently and safely with lights beyond the lights supplied with the automobile. The lights have the added benefit of providing safe "cover" for a person walking to her car at night. The parking lot, as an area concerned with automobiles, must be secure at all times. The placement of light expresses a valuing of activities connected to the automobile. One must be secure in attending to the automobile. The lights also appear to indicate an acknowledgement of the alien nature of the parking lot. This alien nature is both created and then addressed by the lighting and spatial design of the parking lot. The placement of lighting creates a unique space at night.

Here we see the mental-rational outlook creating a problem and then attempting to remedy it. The problem of the open space has roots in ancient preferences and then modern design. Vast, open spaces are historically regarded as dangerous and this danger is expressed in the phrase "caught out in the open." Humans tend not to feel safe in such spaces, preferring open spaces with some protection but not total enclosure (Gallagher, 1993). This preference is initially denied in the parking lot design and then addressed in the lighting. The parking lot is an extreme space in that it is purely open and preferably flat space. Focus on two dimensions emphasizes and facilitates movement and the mechanical (Giedion, 1969) rather than the human, making the space one that communicates the valuing of machines rather than humans. In the parking lot, order dominates. Regularity is clearly the preference. Rows are divided into equal spaces.

Quantitative difference is the main difference. Geometric design creates the space and the meaning expressed appears to emphasize order, regularity, and the mechanical.

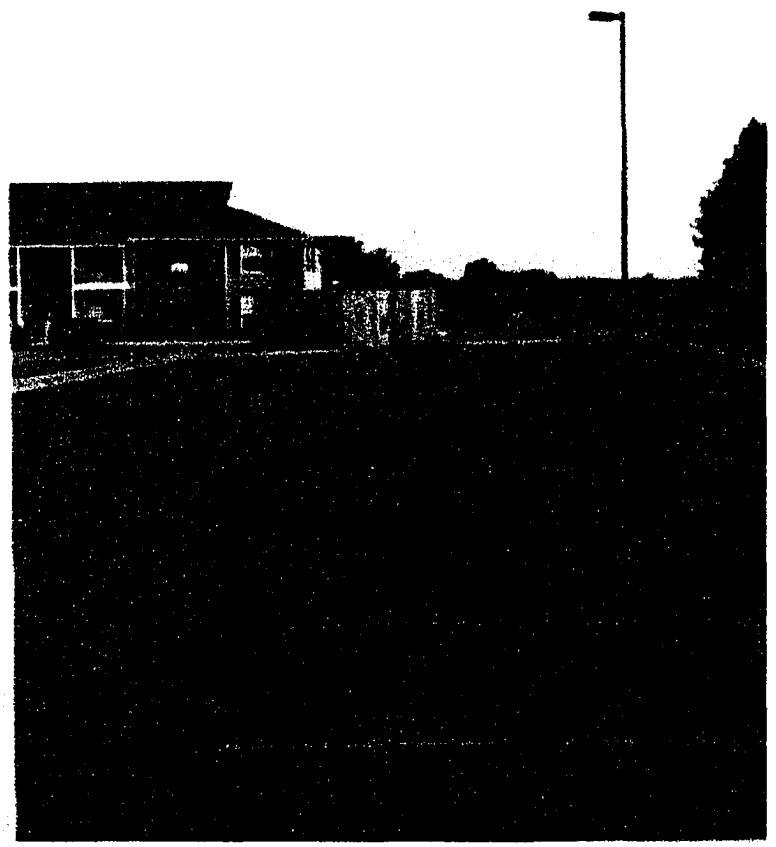

Figure 4. . Vision and regularity are emphasized in the lighted parking lot.

This flattening is also expressed in an attempt to destroy the difference between night and day. Light destroys that difference. This preference enables motion as a steady state, one of the primary aspects of the modern world expressed by mechanization (Kramer, 1997). Here again we see the preference for movement. Motion must be steadily preserved in algorithmic patterns. Absence of light might interfere with the pattern of driving, so light must be provided. Vision-preference is intertwined with

motion preference and with regularity, a basic value in mechanization. Directionality and visuality are related in the modern outlook (Gebser, 1991) and this relationship is expressed in the picture above.

Use of parking lots at night serves the traffic system and helps facilitate flow. Parking spaces are planned for in city planning and their use at night is a critical part of that process. They express an emphasis on motion and the need to travel at night regardless of the time of day, but the presence and sometime emphasis on lighting further expresses the valuing of movement. The traffic system must be facilitated at all times. These ubiquitous elements of the built environment express a valuing of automobile travel. This value is the value of exchange. It is the value of movement.

When the human is devalued, security is necessary, whether it is for the devalued human or to protect against the devalued human. Security is a middle term inserted between human and world in the modern relationship. Humans must be protected from the primary occupants of the space, the automobiles. Increased visibility can prevent accidents. The automobiles must be protected from the human as well. A space absent of human value allows activity that does not value the human. Lighting is in part an attempt to minimize burglary through enabling vision, both human and mechanical. This need for security both protects the human and also subjects him to monitoring. The multiplicity of this space—and the role lighting plays in it—was found in this study to be a valuing of the concept of *security* over the security of the human. "Security" means that the human is secure and is also *secured.* The system is secured from both automobile and human agent. Light enables monitoring of all for all purposes. The light of the parking lot protects a person, and may also protect *from* a person. All are suspect,

so all are safe. Freedom is minimized for the service of security and predictability. Breaking traffic rules for motion or parking results in a traffic *violation.* Maintenance of such a system requires monitoring. Thus in the extreme environment of the parking lot, vision is necessary for protection and light is combined with vision.

In the figure below, a parking lot light also houses a security camera. This artifact demonstrates the bias toward vision and oversight. The desire to see all and know all in a valued area is facilitated by the combination of a light and a camera. This combination of light and vision for control is also present in other contexts, such as in the case of stoplights that also house security devices such as speed monitors and cameras, addressed elsewhere in this document.

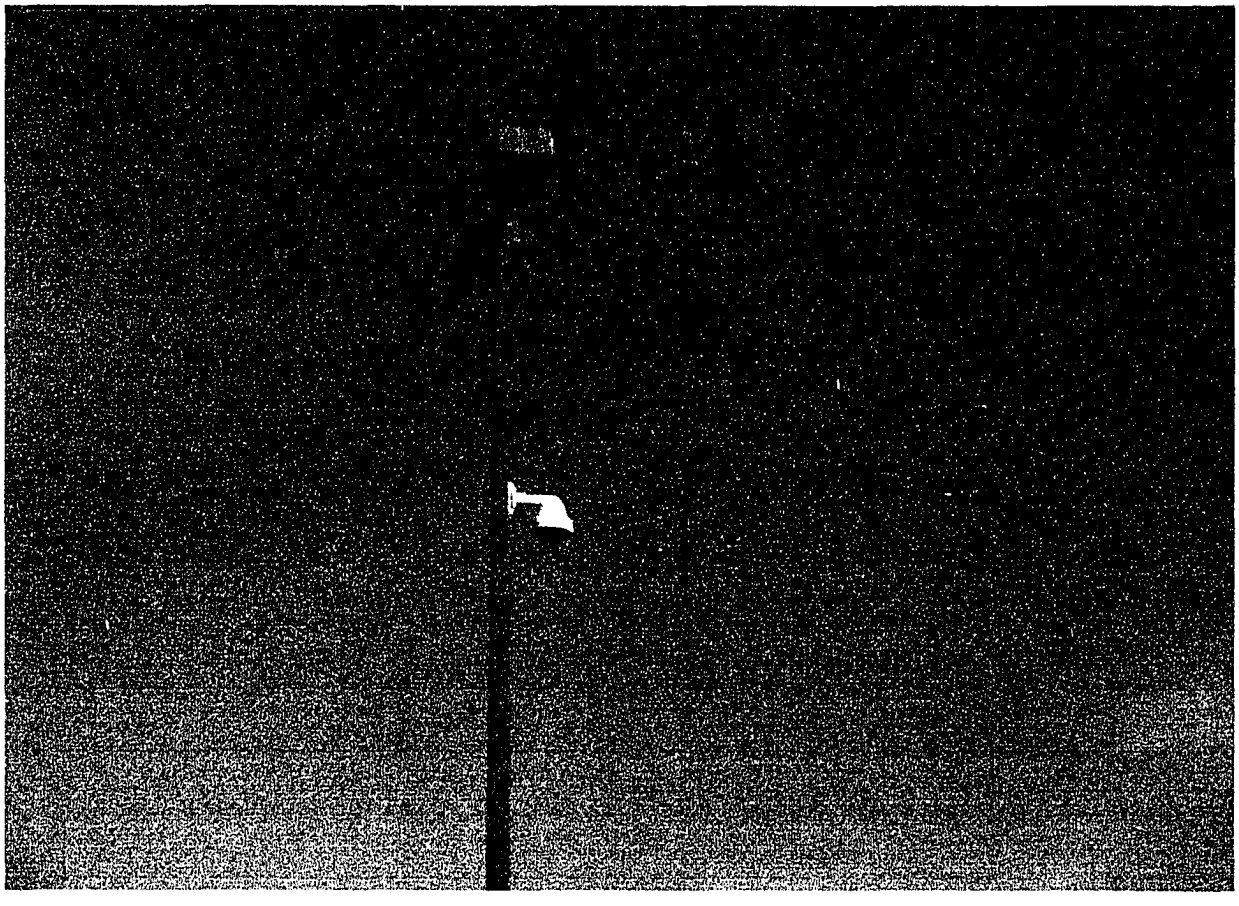

Figure 5. Light and vision for security.

In the above figure, this element of the built environment literally is a tool for over-sight and expresses the mental rational preference toward sight, self-maintenance, and self-control. This configuration is also used in streetlights, for example. The connection of light to monitoring is closely related to driving. Since driving requires sight (requires vision) expressions of the value of vision are consistent with spaces devoted to driving. The goal of "security" (from speeding drivers and the like) might justify the addition of vision-enhancing monitoring devices like the camera in the figure below. The particular motives might have been an abundance of speeding "tickets" in the area, or a prevalence of "accidents" in the area. The monitoring of traffic to reduce speeding and accidents also communicate the value of systemic flow, of algorithmic regularity and reproduction. Predictive and redundant order replaces the accidental. While speed is clearly valued in the modern world (Gleick, 1999), too much speed can disrupt flow by causing accidents and interfering with the orderly progression of traffic. Traffic must be balanced. Traffic must be regulated for optimal flow.

Ironically, some efforts to "optimize" the flow of traffic backfire and impede progress. This fact is acknowledged in one case by Braess's Paradox, a guideline of traffic engineering, which states that adding lanes to a freeway may decrease the flow of traffic, since more people will choose the freeway (Kay, 1997). Here we see the attempt of mathematization to deal with the flux of individual choice expressed on the aggregate level. The guideline attempts to fix the phenomenon of masses of individual choices in a mathematical law. The daily "flow" of workers to and from work or home has an impact on time, a basic value of modernity. Making everyone late for work will disrupt flow; it will disrupt production. Accidents are disruptions in the "smooth" flow of traffic. No

system that has unplanned bottlenecks can be efficient. Whether any of this was on the mind of the traffic engineer when this camera was placed is not known and is not really that important here. The camera is there. Whatever the case, in this area, a need for a camera was deemed consistent with a vision-centered space.

Flow and Security: Height

Vision and regulation of traffic flow are repeatedly connected in the built environment. Parking lot lights and streetlights are increasingly built at a scale that is much greater than the human scale (Kuntsler, 1993). Providing cover, protection, and security necessitate the need for literal over-sight.

Figure 6. Cobra with security camera.

The result is that most lights are placed at great height relative to the human scale. The emphasis here on an expensive scale that is irrelevant to the human scale expresses a preference for inhuman. This height preference has the effect of turning an area under

the streetlight into an extremely brightly illuminated area. Here the ambient environment becomes an expression of alterity. Height and lighting combine to create a surreal environment. While the area under the light is bright enough to read by, the quality of the light is significantly different from both daylight and indoor lighting, which is also largely artificial. Much of our built environment is lighted for roughly half the time (at night), by artificial light. The effect is to create an environment of alterity. The area under the light appears almost alien and is in fact, different enough from natural lighting to be described as alien (Gallagher, 1993). In addition, the shapes of the lights express an alien outlook, as in the case of the "cobra" shaped streetlights that are common (Kuntsler, 1993).

Figure 7. The "cobra."

The height of streetlights and parking lot lights can reach measurements quite beyond human scale, reaching as much as seventy feet, in the case of lights over major

collector roads. Especially in the case of these tallest lights, seemingly hovering over freeways and large parking lots, their height, again, not at human scale, appears to express the mental-rational values of not only vision, but also *super-vision.* The Latin history of the prefix super- shows it to mean "over" or "above." It is the root of the word *superior,* and indicates amount beyond a norm. In this case, the lights are literally over and above the built environment and in the case of the powerful street and highway lights, they saturate the area with light that is clearly outside of, if not "beyond" the norm in lighting. Light enables vision, thus the presence of the elements in the built environment. A placement of great height expresses a valuing of vision beyond the human ability or a hope that super-vision will enable the understanding of the world-as-it-is, not merely the world as represented (Schopenhauer, 1969). Of course, such an element is a human construction, so it must also be understood as a human expression. The implication here is not that the technology has a life of its own independent of the human, but that the human expression indicates a valuing of the technology.

In a Heideggerian sense, this use of scale appears to exclude the human agent. Heidegger (1954) wrote that the possibility of marginalizing or eliminating the human from the technological frame was the greatest danger of technology. His concept of *enframing* described the possibility of the denial of access to the essence of the technological—mystery. For Heidegger, destining was the danger for technology. Technology reveals the mysterious; but the idea of complete over-sight (that sees all and has no mystery unrevealed) denies the human access to the mysterious and therefore denies the unknown, that essential human concept (Nietzsche, 1974). It was this idea referred to by Heidegger when he wrote that in the technological frame humans do not

encounter themselves, but rather the non-human. In the case of framing through lighting (or even through the framing of corridors addressed earlier) we see the difference between alterity and identity.

A very bright light, placed at an extreme height, appears to the observer almost as a hovering light, an alien ship hovering over the freeway and any residential or commercial space that may be adjacent. This desire for oversight is multi-discursive. The height expresses a preference for the god's-eye-view. Spatial difference is an expression of the mysterious and height is often an archetype of attempts at transcendentalisms (Kramer, 2000) and generally expresses importance (Lakoff &Johnson, 1980; Giedion, 1967). The conclusion one may draw here is that the modern values light, but in order to promote systemic flow. The two expressions co-constitute each other. The scientifically derived flow of traffic is overseen by the vision-increasing lighting. Superior lighting from above enables superior lighting below, expressing another traditional association. The god's-eye-view enables superior vision down on the ground. To access supervision is to become superior in the realm of the supervised.

Experientially, when standing at the base of such a lighting element at night, one may lose the supporting pole in the lights above. The lights in effect seem to be hovering over, exerting influence over the expanse of the lighted area, rendering visible anything that happens to be in the area. It is interesting that this feature of the built environment bears resemblance to the floating lights attributed to UFOs. Both are circular rings of lights that seem to hover over the ground and seem to dominate the expanse underneath them.

Figure 8. Alien ship. A tilt of the camera (slight change in perspective) and a bit of imagination turn this lighting element into an alien ship.

In the case of the UFOs, a floating light is taken to be "alien," literally, while for the tallest lighting elements, the idea of a floating light is not noticed or is taken as natural to the needs demanded by broad driving spaces. In this case, the "alien" nature of the lighting element might represent an intersection between the mythology of UFOs and the expression of the mental-rational built environment. This shows the dissociation expressed in the built environment; it expresses the desire for objectivity, for an observed without an observer. Such a study is beyond our scope here, but the coincidence shows, perhaps, an avenue for further study and an expression of the alterity of the elements.

This element of the built environment clearly expresses the objectifying emphasis on the visual that is characteristic of the mental-rational. That the lights are at great

height, relatively speaking, expresses the mental-rational valuing of an all-knowing and all revealing scientific perspective of the kind described by Merleau-Ponty (1968).

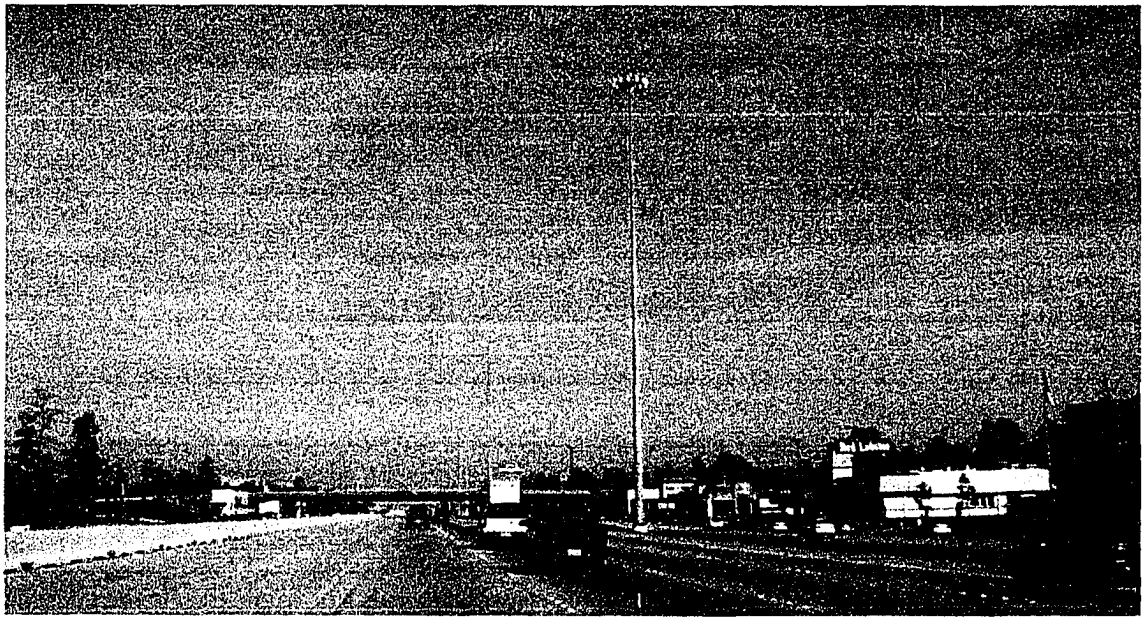

Figure 9. Supervision over algorithmic unitized motion.

He writes that the desire of such a worldview (that differentiates subject and object) is to have a perspective *over* the world that allows the seeing of the objectively true independent of the subjective, blinded by its own lack of sufficient height. Science seeks such a god's-eye-view, hoping to eliminate subjectivism that can distort a "clear" knowledge that establishes ontology as first philosophy (Levinas, (1969). A transcendentalism such as this that allows knowledge and direction of all is frequently described in spatial terms as "elsewhere," and often as "above" (Kramer, 2000).

This bias, Merleau-Ponty writes, has pervaded the scientific outlook, of which planning is clearly a part, as addressed earlier in this study. Scientific planning of lived space applies this outlook to building the environment. The emphasis on height found in this study provides evidence for this interpretation. The elements of the built environment that emphasize light express this bias toward scientific supervision. As one

element of the system of flow, this element influences much of the built environment. Lighting enables travel by car at all times. Facilitating flow of traffic (facilitating the flow of commerce)—of units in a system—is valuable, according to this perspective. Lights that cover more area are good because they allow more flow, or at a minimum, facilitate flow. Systemic motion is facilitated. If properly planned, lighting may aid in the accomplishment of sustained smooth motion along prescribed routes, which is the goal of a good machine: Sufficient complexity to accomplish the task without over-specialization that restricts the machine's power. This is the attempted conquest of time through a conquest of movement. The placement of light a great height expresses desire for illumination (enabling of vision) over a greater area. That the stated reason is safety for drivers and pedestrians is secondary. The preference for vision over great areas also expresses the need for overcoming of space. Super-vision as a technology allows monitoring of larger amounts of space, which is an overcoming of the limitation of space. Where human vision is limited, super-vision can overcome. Machine-vision is required for machine space.

This need also is a creation of space. The shedding of light over a greater area is an intersubjective creation of space. The space under the light becomes "an area." It becomes a public area where things are illuminated. It expresses a desire to "bring to light." The creation of the space and the need to overcome it are the same expression, a characteristic of the mental-rational (Gebser, 1991); modernity creates its own problems to solve as part of its self-fueling nature. The technology of super-vision creates space that can then become problematic, just as tele-vision created "markets" that had no material existence before the ability to tele-vise, creating "problems" (how to reach

markets) to be solved. The bias toward vision (Kramer, 1994; 1992) is a bias toward spatial production, the sectorization and atomization of space. A light creates a space that is concomitant with a mood. The effect of multiple sources of light at night, for example creates an unnatural lighting mood. The color of the lights is designed to facilitate mechanical activity (driving) in the built environment of asphalt and concrete. The result has been the advent of "light pollution" and the transformation of night into a not-quite-day and a not-night observable in so much of the built environment.

This is also evidence for the link between the technological production of space and the ethical situation that is described by Levinas (1969). If the space created by lighting is the Other (in the exchange that one may see as the confrontation between built environment and the agent who experiences it), then the mood it creates, which is the space (lighted area) within a space (city) that it creates has the power described by Levinas. In other words, in the exchange between built environment, a piece of communication, and the agent, the built environment may be seen as the Other, with the power to question the agent's spontaneity and freedom (infinity) and therefore the power to ask about the agent's view of herself. A limiting of the self by the Other in this case is especially powerful because it employs super-human elements, creating a totality into which the human must "fit." A functional outlook (Kramer, 1997) is promoted. Importantly, that power is the result of reversibility, which for Levinas is not equally executable. Alterity is not the simple reverse of identity. Because of this relationship, the encounter between the I and the Other and between the visible and the invisible is subject to ethical judgment. An exchange that outlines and enforces a power relationship must be acknowledged to be just what it expresses itself to be. A valuing of light and

vision expresses the preference for signalic "clarity (as in lack of ambiguity). To allow darkness is to allow the unknown and therefore to allow imagination, which is not "real." This imposition destroys the possibility of judgment by positing a world independent of agency. The subject is denied a part in its constitution. Again we see Heidegger's (1954) idea of enframing. One cannot seek the value-free position of scientific objectivity in a case of mutual and polar definition. The poles co-create each other and in the case of communicative activity, this creation is motivated. Because of the presence of motivation, we must ask about the ethics of such an exchange. In the case of lighting, evidence shown here demonstrates expression of a power-relationship based on supervision and flow.

An emphasis on spatial production and conquering is an emphasis on subjugation and exclusion/inclusion. The move to light an area communicates a creation of territory and a claiming of that territory as well as an enframing of us and a claiming (Mumford, 1970) of the human agent. Externality to subjective will is sought through an overseeing of an area. The height of streetlights and other public lighting communicates a desire for objective overseeing, for external ordering and justice, for objectivity, that removes the human agent from its constitution. The light is to facilitate the mechanical. It is not to facilitate the human. It is a creation of space that is technological both in its creation and in its purpose. A primary characteristic of technology is self-reproduction and expansion (Mickunas, 1992; Heidegger, 1954). In the examples explored in this section, the technology has provided for itself. The human builds the light, a technological creation that facilitates itself, the non-human, and fixes the human as subject to its oversight or

all-exposing glare. That this is valued is demonstrated in the case of celebrity: To "be in the public eye" is valued. The phenomena described here are similar expressions.

Figure 10. Supervision.

Systematization and Signalic Expression: Traffic Sign-als and Markings

Traffic sign-*als* are the most obvious example of clearly signalic expression. They are simple messages that regulate traffic motion and stillness. Observations reported so far in this study have interpreted the contemporary semi-urban environment as characterized by the value of systemic logical order that promotes both motion and stasis in the form of flow. The traffic system expresses this value; it governs flow

according to rules and through the use of positive and negative signals. The system works by issuing admissive or prohibitive signals through lights or non-electrified signs. Because of this quality, the signalic is the primary mode of expression for this phenomenon. While the signal system itself expresses meaning, as in the case of the use of red, yellow, and green for the colors of the system (these colors, the colors of African repatriation movement, were chosen by Garret Morgan, inventor of the traffic light), the primary function of the lights is signalic. Their purpose is to signal. These signals can be found in all urban and suburban spaces and have been documented as a dominant force in the planning of the built environment (Duany, et. al., 2000; Kuntsler, 1993). That the traffic system constitutes a code within which meaningful communicative units may be found is clear enough in the names of two of its elements: The traffic "signal" and the street "sign" make the job of semiotically analyzing the traffic system for its communicative content relatively straightforward, providing easy starting places.

Signalic regulation of a system

The primary goal of signs is the regulation of a system. The traffic signal regulates the flow of the traffic and the street sign indicates rules by which the traffic system must operate. Preservation of orderly repetitive motion (mechanistic flow) is the function of signs. Speed limits, lanes, school zones, and other boundary conditions facilitate flow and efficiency. These elements preserve motion and stasis. One cannot, for example, according to the rules of the system and the design of the boundaries, place an automobile in a "no parking" zone. Such zones may also have temporal boundaries or modifications. In the sign below, for example, a "no parking" zone is indicated with the

additional limitation of a time period. The area is divided by space and time, the two basic divisors of spatialization in the mental-rational outlook.

Figure 11. Time and space regulation for a motion system.

Storage of automobiles between trips constitutes a significant part of the built environment. Keeping them out of the way of flow is important to preserving flow. Spaces where such storage is not allowed are also necessary to preserve flow. As the section on parking lots demonstrated, geometric order also characterizes these spaces. The built environment also contains zones where parking is prohibited at all times, such as bridges or overpasses where stopping is prohibited, or fire zones, intended to preserve clear spaces for evacuation of buildings in the case of fire. In the picture below, we see an indication of such a zone. While the asphalt environment permits movement and flow, one is not allowed to remain parked in this area. What could be a flat space in one area permitting parking appears to be intended to preserve flow of automobiles or people. What appears most interesting here is that the built environment is labeled. Next to the grass and shrubs is a label.

Figure 12. Fire zone indication: Labeling the ground.

The "no parking" zone controls the way drivers control motion by telling them where they may and may not cease motion. Similarly, one cannot travel uninterrupted through an intersection when there is a "Stop" sign in place. Traffic signs are ubiquitous and literally directive. "Stop," "No Parking," "Yield," and "Speed Limit," for example, express clear messages that are generally dualistic in nature, expressing mental-rational duality. There is little semantic room for negotiation in these signs. One cannot really ask, "How much should I stop?" The sign carries, by necessity, a highly signalic message. Space for negotiation of meaning in this case would be unproductive and perhaps deadly. Such signs necessitate direct and predominantly one-way

communication. In the case of the stop sign, even an "all way" addition keeps the message relatively simple. The semantic room of this signal is limited by its function, which is necessitated by the goal of the system, which is the facilitation of automobile traffic. Thus the valuing of automobile traffic creates the sign that ends up directing the human experience many times each day.

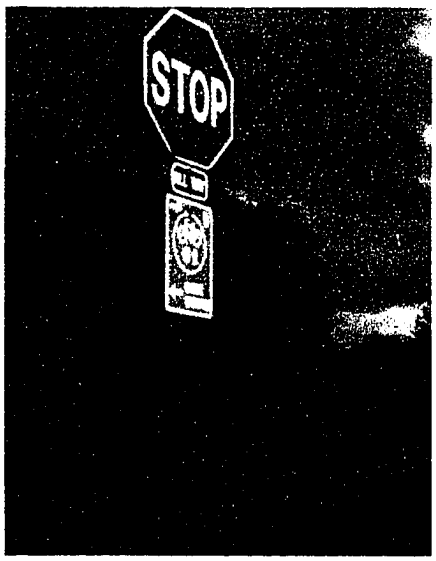

Figure 13. Message system regulator. Even with slight modification, the message of this system regulator is simple.

Efficiency is a value expressed by these signs. Taking too much time to understand a sign would be deadly. The busiest *inter-sections* (this, in itself, is a telling name, since it expresses sectorization and a function of lines in a coordinate system) are regulated by the multi-signalic, but perhaps even simpler traffic signals. In the case of the traffic signal, direction is limited to color and light. Direction is simplified. Red means "Stop," Green means "Go" and Yellow means "Stop signal will soon occur." This last is perhaps one of the most ambiguous signs in the system, which can lead to room for argument (probability-based) with an officer of the law. Semantic room leaves room for the negotiation of meaning. Still, the form of the sign in this case is not linguistic in the way that street signs are. One is directed only to recognize the color and then respond

appropriately and efficiently. This is an enactment of conditioned response to signals that have been associated with an action through rules and repetition.

That these signals are placed at *inter-sections* is important. Whether a road system is a traditional grid or the winding confusing layout of modern housing additions (Duany, et. al., 2000), the area is an intersecting of directional flow and also a boundary of a sectorized space. An intersection is a set of points common to at least two geometric configurations. A geometric design for road shape is designed to accommodate flow of traffic and is a nodal system based on points arranged in space. The signs regulate the flow of individual units between points in the system. What kind of car one is driving is irrelevant to the function of the traffic light. Qualitative difference does not exist and one might argue, from the perspective of the traffic engineer, *should not* exist in this system.

This amounts to a quantifying and therefore qualitatively leveling and standardizing factor in human everyday experience. The quantification of human motion is achieved by the use of the signalic, which is the concomitant form of communication with a system that enforces the Same (Levinas, 1969), the mathematical quantitative elimination of qualitative difference for the pragmatic goal of efficient interchange between points in the system. Interchangeability between points in time and space is facilitated by the efficiency of the system and expresses the magical basis of technological design (Mickunas, 1992). The desire to easily move between points in time and space is a desire based on anxiety about time (Gebser, 1991). Saving time in spatial travel is a reduction of difference. Speed is a measure of the reduction of difference between states at different points in space. Speed as a value, indicated by the data here,

indicates a desire to "be" at more than one point in space at the same time, or with as little difference in time as possible. This is a desire for interchangeability of points.

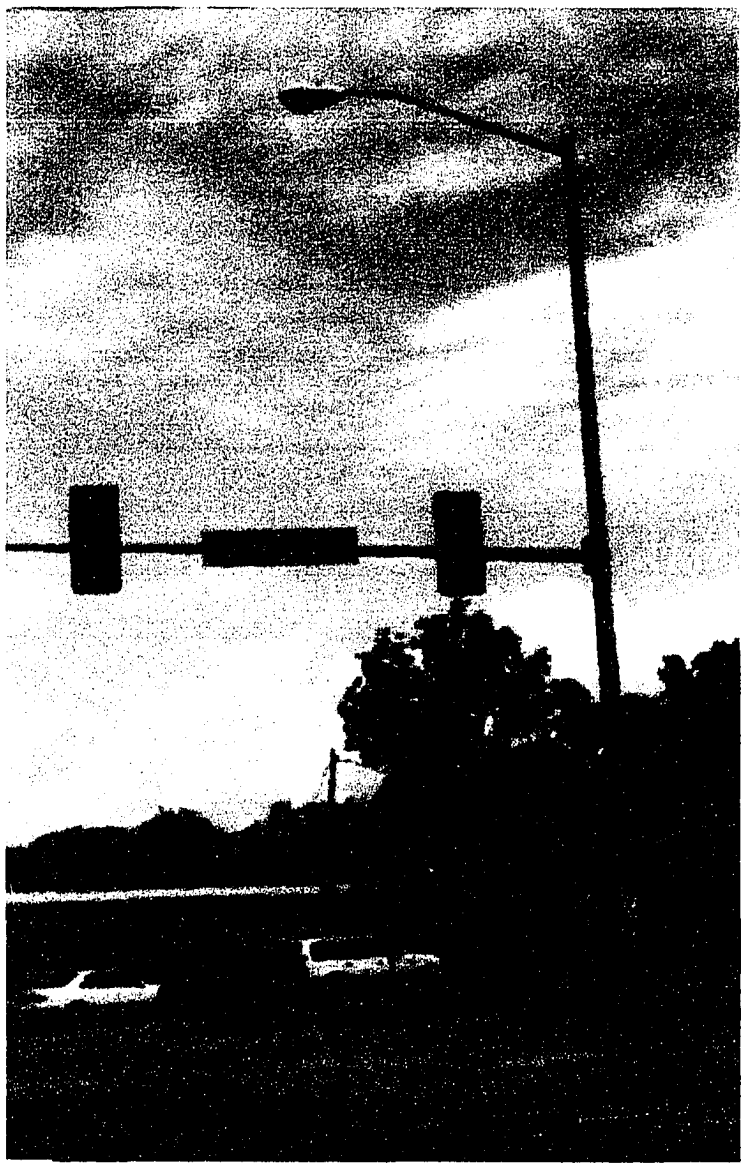

Figure 14. Traffic lights: very simple signalic communication.

The desire for magical interchangeability and the anxiety felt by the division of time combine to create a need for efficient travel. The traffic signal system is an expression of the desire for a privileged point of view that best achieves mastery over the material. The imposition of the design, a result of reflective, abstract, removed (mental) thought provides a "superior" solution to the "problem" of traffic flow. The problem

exists only because of the choice to value motion and flow, speed and interchangeability. Drivers enact (live) this plan. Once in motion, the system is self-regulating (in theory, at least). The signals enforce the plan; they enforce the totality, which contains its own problem and solution. The necessity of interchangeability leads to the need for speed, which leads to the need for flow, which leads to the need for a design. The argument here is not that there is a linear causal relationship, but that one may observe a coherent relationship between elements of the traffic system that implies certain values and needs. In this case, this data has expressed a valuing of these elements that may be seen in this relationship.

Height and signals

That traffic lights are above the space of traffic interaction expresses the height preference discussed earlier in the discussion of light and the desire for over-sight. Of course, traffic lights also need to be visible from automobiles. One cannot deny, however, that the lights are placed *over* the traffic. That light should be placed over the level of interaction, in order to facilitate through providing light or security, has been documented already in this study. In the above example, the traffic light is combined with the streetlight. This saves the need for another structure, but also expresses the connection between light and signalic expression. The regulator of the system is combined with the means of sight (and over-sight, though not human) of the system. Mechanical space has demanded a mechanically oriented light design and a mechanically oriented regulation system. "Stop" and "Go" are binary off/on expressions. An off/on system is implemented in order to promote efficiency, as 1 and 0 are implemented in a computer to promote the similar goal of the efficient processing of unitized elements.

Because the lights, the mechanisms for signalic expression are placed above the traffic, the occupants of vehicles are forced to look up for direction. This simple fact of driving should not be dismissed as trivial or a matter of course. On a very simple level, one may observe that human beings routinely choose to move or not move based on an order from above. The only meaningful differences between the children's game "Red Light-Green Light" and the traffic system are the prosthetic movement technology, and the nature of the signaler. The value system of the activity of driving creates a life and death situation out of the game.

Height has been noted as a signifier of importance. Here that importance, within the traffic system, is significant. Sub-mission to the order from above is submission to the mental plan of the system based on the belief in its superiority to contingent organization. The evidence for this submission is the fact that the plan is followed everyday by millions in the United States alone. So, traffic light placement and the activity of driving show a valuing of planning and a valuing of submission. Height communicates the power of the traffic system literally *over* the individual. One may argue that we have fallen into an attractive linguistic similarity here. The effort of this study, however, has been to point out that much of the evidence around us can be interpreted in very simple ways with astonishing results.

In this case, for example, the societal argument for driving is that it empowers, and within the system that values driving, it does. In a system that does not value private ownership and driving, in New York City, for example, private ownership and operation of a car can be dis-empowering: it can be expensive monetarily and very time-consuming. Within systems that value cars, however, to drive is to be empowered.

Human agents must conform to the automobile. The inability to drive is disempowering, as in the cases of children and the elderly (Kay, 1997). A look at the system that does not give the system primacy, however, interprets the system to be disempowering, with humans simply waiting or moving mechanically at the signal of an automated device. The device is placed above the human, who sub-mits to the device as a matter of submission to the value system that makes the device necessary. The signalic literally has power over the human agent.

Points and lines

The traffic system also creates points in space that the human agent moves between. Points and lines direct this movement. For example, where an irregular intersection exists, one can find further signalic expression. This might include a "do not block intersection" instruction or a "stop here on red" sign. This sign is applicable to almost all in the society. Only governmental figures may break this rule, and then only when "on duty." Such signs express the power of mental phenomena. The point and line exist only as features of the designed traffic system. Common agreement of the valuation of the system create common acceptance of the existence of these points and lines. One stops at a point as directed by the signal or sign. Crossing a line before the signal allows it is prohibited by the system. The system enforces regularity where geography or something else has created difference. The rule of the point and line is maintained by modification, as in the picture below.

Figure 15. Corrective regularity. Irregularity necessitates further signaling to preserve regularity of the system.

The intersection affected by the sign in the above picture is not a standard geometric configuration for the traffic system. Its shape is not the usual set of four right angles that make up most intersections. In this case, the standard rules and practices for traffic flow do not adequately direct the driver. The result is a need for a direction about where to stop when the traffic signal shows red. Importantly, the further direction is just that—direction about how to operate within a system. It is not "elaboration" or "explanation." The instruction appears to be aimed at reinforcing the regularity of the system. Its expression is functional and pragmatic. Instructions like these are intended to direct and command. They are a characteristic of totality, of closed systemic expression.

The Other addressed here is the driver. The communication contains a command. Here we see the expression of a view that sees the human as the reverse of (proportionally responsive to) the sign. In this case, the human agent is expected to enact

reversibility by stopping at a certain point. The exchange is one-way. There is no negotiation of meaning. The other is not treated with openness, but rather is confronted with a closed system in the form of a single option. This particular sign points out in a more straightforward manner the basic function of all street directives. The human agent is expected to modify behavior according to the signs and has no choice but to do so, other than a refusal to participate in the system in which the signs are in force. One could choose to step out of the conventional system that empowers the sign, but would have to accept all of the loss of power, especially economic, that would accompany the move. One might argue here that people choose to ignore stop signs and the like all of the time. While this may be the case, the system can and does enforce penalty on those that are detected committing these acts. We may still argue there that the system enforces compliance and even those who ignore particular signs pay attention to most of the signs.

So, we are left to explore the interaction of the sign and observer. "Stop here on red," says the sign to the prosthetically enhanced human agent in the automobile. At that moment of confrontation, the human is in the nexus of numerous power interpretations and interpretive confrontations. One is the multiplicity of meaning one may find in the automobile and another is the confrontation with the sign. As Merleau-Ponty (1968) might argue, the human agents' gaze is limited by the windshield and terminates at the sign. For that instant, in which the sign is rendered meaningful, the built environment shapes the behavior of the individual. A command is issued and followed. An instruction in a larger set of instructions is followed. A step in an algorithm is followed. Motion is stopped in order to facilitate motion and in order to maximize flow. The human agent is systematized (instrumentalized) as a mechanical agent. The signal is an

expression of the rule of the logic system that applies to this specific point in the system, but is a kind of instruction that is common in the set of instructions for driving. A point is indicated. A unit in the system (a car) is to cease motion at this point until the signaling device indicates the time for further movement, at which time the unit is to move. Again, one can argue that the human agent always has the option to ignore the instruction, and many people choose to do this. There is a penalty for such a choice and some who choose it suffer the cost. Some of the essences of the system, speed and mechanization for example, sometimes inflict a cost of life on violators, while other checks offer lesser penalties.

In discussing "the system," we should remember that such a statement does not imply that the system is in some way conscious and is wrathfully exacting revenge. Rather, ignoring traffic signals can in fact run this risk, which is a possibility resulting from the set of instructions, from the design of the system. To say it is a penalty is a value claim that places value on life, but this is a cost from a perspective that values life. It simply is the case that these directives exist, as the data in this study indicate, and it is the case that sometimes people ignore them and lose their life. It is the nature of the system that creates this possibility as an outcome. Intent on the part of the system is not a meaningful objection given these demonstrable phenomena.

Arrows

The sign above also contains a prevalent feature of the traffic system: It contains an arrow. In this system, arrows indicate points and lines. Arrows are expressive of the directionality characteristic of the mental rational. Within the traffic system, the pointing of the arrow indicates the *right* direction for travel and the *correct* or *proper* mode of

conduct. This is an expression of the directed, discursive thinking that Gebser (1991) cites as characteristic of the mental-rational consciousness structure. What makes this expression particularly interesting is that it is clearly signalic. It is not magical or mythic in expression. One does not need to know the justification for the arrow, the choice to put it there, or the overall design. It simply is a direction, both in the sense of an orientation in space and in the sense of a command. It *gives direction* in both senses. The human agent is directed in space by the arrow. Again, there is no negotiation of meaning. There is only the expectation of reversible definition between the agent and the sign at the moment of interpretation. The arrow is a simple example that allows us to highlight a characteristic of the signalic. The signalic is a dissociated expression that assumes distance between the signified and signifier. This distance can be "accounted for" by a middle term or by an ideal. The assumption of the superior (transcendental, not contingent) nature of the ideal allows for the attempted integration between the other two terms. In the magic and mythic worlds, in which meaningful elements and forces direct, in the signalic world, dead and dumb things direct us. It is this connection, possible logically only by its concomitant conception of a break between the two, that frees, in a sense, the signal from reference (Kramer, 1997; Mickunas, 1992; Gebser, 1991).

Figure 16. Arrow as an element of a sign.

In the arrows of traffic signs we see a signalic-codal phenomenon that appears to be intended strictly for unidirectional information exchange. One might apply this interpretation to all traffic signs, since they are one-way transfers. In the arrow, we see a very simple sign that is one of the basic concepts in the mental-rational outlook. Direction is inherently spatial. It differentiates. Difference (not polarity) allows for the emergence of preference ("should" and "ought"), and therefore allows for efficient mentality and rationality. The move to deficient mental rationality, however, comes with the absence of explanation from the sign and the equalization of qualitative difference in favor of quantitative difference. The traffic sign does this. One is not given anything beyond the arrow. "Direction" is given as code. The information flow is one-way. There is nor exchange that may personalize, such as "Where are you trying to get to?" that might be asked by a human direction-giver. The expectation is that one follows the

direction; one derives him/herself in that moment based on the sign and without debate. My position and identity in the world, and therefore my relation to the world, according to the system that gives position primacy, is derived from the sign. The sign addresses all in the same manner.

Figure 17. Direction, as instruction and also spatial direction.

Of course, what else is one to do? To debate the justification (mythic) for the traffic system while engaging in it could be suicide, literally. Given the system, this is not an acceptable rule; it is not within the instruction set. Assent to the system, in the form of use, surrenders this possibility. In this moment of confrontation between human agent and signal, reversibility is forced and one-way. The built environment shapes the human agent. The sign, and especially the arrow, are the termination of the gaze (Merleau-Ponty, 1968), but this reversibility excludes the interpretation of the other, which in this case is the human agent. The system is a totality because one must submit to this power relationship, one that demands that it and only it shape the human agent in a series of particular moments, as a condition of use for the system. Here is what some

may view as the dangerous point to be made. The potentially distressing thing here is not that someone "stops here on red" at the intersection under consideration, but rather that this is one of hundreds or thousands of such commands followed each day by the user of the traffic system. The signalic prevails in much of the human experience. That such signs are ubiquitous in the built environment points to an emphasis on the signalic. Directed behavior that cedes power to the dissociated sign is the result. One might theorize that repeated exposure to and following of directions given by the traffic system constitute its power. Not just preference for motion and travel, not simply spatio-temporal anxiety, can explain the traffic system. The rules are to be "followed."

We must also note here that arrows are usually used in combination with other signs or language elements to indicate what lies in what direction or otherwise modify the sign. This is important because it implies choice in the system. The preceding discussion of the signalic in the traffic system might be read as indicating that the human agent has no choice in the traffic system. This misses the point that the human chooses to use the system and does enact the instruction of the system for ends. The human agent chooses to submit to the instruction set. Travel, motion, flow, and speed are valued for goals that are partly created by the system and partly fulfilled by the system. It is not the case that the human agent is simply moving around in the system without any apparent goal. The agent moves within the system according to the instruction set given for the system. The system is an expression of human desires and perceived needs. There is use-value in the system. These phenomena indicate what Freud (1961) points out, namely, that some of the needs fulfilled by the technological outlook arise only as a result of the outlook and, in addition, something is surrendered in exchange. In the case of the traffic system, the

signalic element of the system expects behavioral accordance (deriving of the self) with no argument. The moment of confrontation between human agent and sign assumes a one-way relationship between the two. The choice to use a prosthesis for travel is also a choice to yield power in numerous and successive instances while driving. Am I arguing for a traffic system that includes mutual negotiation between human and sign here? I am not. The goal here is simply to point out that the traffic sign, as it presents itself, appears to define a particular kind of relationship between human agent and built environment that has observable and interpretable qualities. The arrow has the particular quality of being a very explicit and directive sign even among the largely signalic elements discussed in this study.

Lines

An arrow indicates a line in space. It indicates direction of a line and the demarcation (creating a sector) created by a line. In the sign "stop here on red," the arrow directs the driver to a stopping place where such a place might not be obvious. This is similar to another sign used to control motion in conjunction with the traffic lights. Usually a "crosswalk" or a broad line exists indicating a stopping place for traffic when the light is red, when the automatic signaling device indicates that motion should cease. This is an expression of abstraction applied to the lived world and that directs activity by human actors. Anyone who doubts the basic geometric nature of the built environment should closely examine such an intersection. There is a straight line (or, rather, a three-dimensional signalic indicator of a line) painted on the ground. Here we have a case of a literal marking of the ground with a set of lines. Lived space of driving, a feature of the built environment designed for specific use, is further spatialized. This is

a feature of modernity, of the mental-rational outlook. Repeated division, the further sectorization of divided spaces, is characteristic of the outlook and the tendency toward division leads to further division (Gebser, 1991).

Figure 18. Lines and arrows. Lines and arrows in combination with another indication of a hospital in the direction indicated.

While roads may be seen as lines or geometric dividers for sections of cities, the lines of the traffic system present us with an expression of abstraction applied to the lived world in the form of division of the flow of traffic. Driving lanes on the road, for example, indicate the preferred or prescribed range of motion of the mechanized movement carried out in the automobile. Lanes are found to be either the construction of "dashed" lines or solid lines. In the case of the dashed line, one may move between the

corridors defined by each, but may not travel in both. Here we see the preference for single-definition. One may travel in one "line" or another, but not in both. The scheme designates for travel these "lines" out of a theoretically infinite set of lines. In such a logical system, a point (a unit) cannot occupy two points and cannot travel along two parallel lines. Lanes are parallel. A unit of the system, an automobile, cannot "legally" travel in both lanes according to the constitutive rules of the system. This basic expression of a geometric outlook, of an abstract idealization of space is pervasive in the built environment, a literal set of lines that define and spatialize space.

Figure 19. Parallel lines define idealized travel space.

That a road is the result of a planned design is nothing surprising. In this study we have explored the literature of roadway design and the spatial considerations that direct that activity. Turning radii, road breadth, and other concerns are centered on the automobiles and the desired speed at which they should travel. What is notable here is that most inhabitants who drive through the built environment follow this basic idealization. Here

is another case of the one-way relationship between sign and human agent as discussed above, another of the numerous instances of command of the signalic. There is sanction for failing to follow or choosing not to follow this idealization and this sanction helps ensure compliance with the idealization, but following it also allows for efficiency. One follows the rule so that he or she can get to his or her destination as soon as possible. Again, lanes, like signs, allow for the achievement of ends allowed by the system.

Automobiles and the unitization of human agents

Lines and arrows are also used to create "exits" on freeway systems. These directional indicators point out potential destinations that one may reach by following the appropriate arrows and lines. An "exit" is a leaving of one zone of traffic flow. It indicates a change in the kind of travel one might be doing in terms of speed and indicates movement from an area of greater flow to one of lesser flow. This is division of space into further sectors and of travel into types of motion that vary with the sector. It is a sorting of units of traffic flow according to destination, similar to the "packets" of information that travel the internet and represent the human user through signalic representation. Preference is given to the larger mass of units, which are allowed to travel faster. In a system that values speed, allowing units to move faster indicates relative value. Ironically, larger road systems paradoxically often move more slowly than smaller roads.

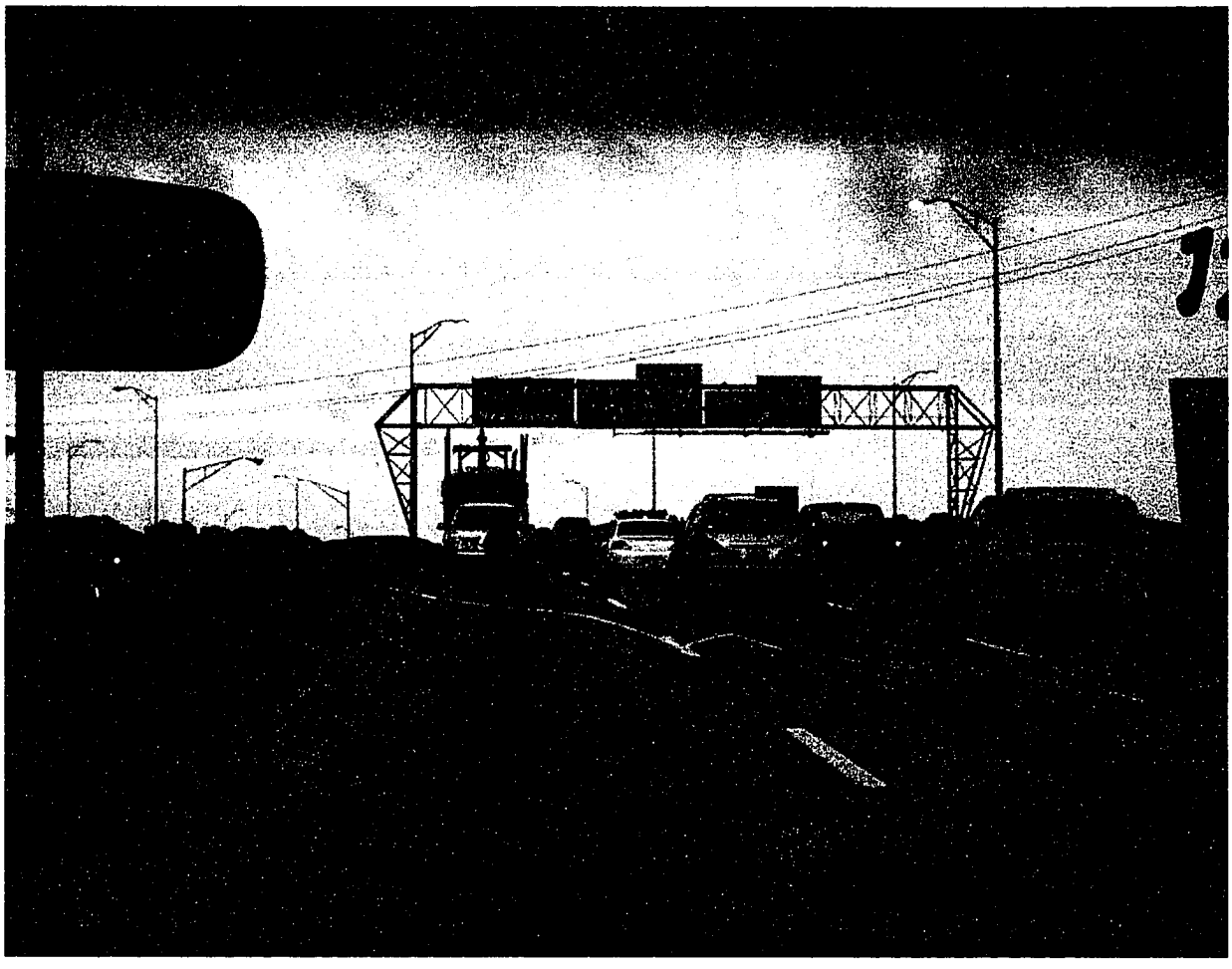

Figure 20. Division of flow.

The preferred state, then, for the travel system, the motion plan for the built environment, is a state of efficient motion based on stopping and starting at the appropriate and efficient times and also based on respecting an established idealized space conception. As a system of order, the idealized space represented by the traffic markings control that mechanization of the system, as in other systems means of control constrain flow: Regulators control voltage in an electrical system, channels control the flow of steel in a steel mill, and gears control the rotation of a wheel in a mechanical clock. Lines facilitate flow and division. The automobile contains all of these elements also. It expresses the same qualities as part of the larger system.

Idealized spaces idealize their constitutive elements. Unitization is necessary for the system to work. Having to figure out whether an object is or is not a traffic light, for example, would lead to disaster. Accordingly, traffic lights need to be standardized; they should be as close to an ideal or model as possible. In addition, regularity of elements of the traffic system is necessary. Likewise, automobiles need to be standardized (within ranges) in dimensions and abilities. An interesting effect arises for the drivers of automobiles. In the prosthetic of the automobile, the driver is no different from the other drivers. We may say that someone is a "better" or "worse" driver, but it seems likely that systematic research in this area would find that these descriptions hinge on things like predictability and skill at following the rules and norms of traffic systems. The better driver less frequently drives in an unpredictable fashion or in illegal ways. The worse driver is not predictable or regular in execution of motion. The preference is for predictability and for conformity. Regularity and evidence of mental (abstract) design in the built environment would seem to be evidence of these preferences. The human agent in combination with the prosthesis of the automobile becomes a motion element in a system. Frustration appears when flow is interrupted. One does not wish to be "be stuck in traffic" because this is not the preferred state for units in the process of traffic. While in the automobile, my "job" (function) as a human with extended and accentuated motion abilities is to be in motion and, especially, to be in flow. To be unpredictable is to be out of order, as in the case of intoxication, for which one might be charged with "disorderly conduct." This function has the effect of turning humans into units in very explicit ways. In order to be allowed to exercise this prosthetic ability (get a driver's license), I must demonstrate predictability and knowledge of the instructions for use for the system

(traffic laws) and the prosthetic (the automobile). Repeated failure to be predictable will result in my disqualification as one licensed to exercise this technological ability, which is a near-death, economically speaking, in the built environment, as the elderly and children know very well (Kay, 1997).

Figure 21. Unitization "in motion."

In the automobile we see an example of the desire for prosthetic godliness to which Freud refers in *Civilization and its Discontents* (1961), where a technological addition to abilities adds to human experience in a "magnificent" (p. 44) manner, but becomes a problem that can counterbalance or even outweigh its benefit. Freud notes that the ability to communicate over long distances, for example, is only a benefit if one forgets that the need to communicate with a loved one who is far away arose as a result of

technology making the trip possible. The resulting ability to communicate with him or her is only necessary as a secondary result. Had technology not made such trips conceivable and executable, there would be no need for communication in this situation. This simplified argument points out that technology expands itself and creates the conditions for its own promotion. Specifically, it is the human desire that accompanies increased ability that pushes technological development. Mickunas (1992) also notes this as a specific tendency of modernity, writing that the desire to overcome the world, to ensure that an external force cannot overcome the human agent, leads to a never-ending chase for objective mastery. As possibilities are created, the need for control over them arises. This need creates further possibilities, and the process continues. The desire for objectivity and the wish not to be ruled by outside forces combine to create a dual process that provides its own fuel. The external is desired while also seen as a problem.

The automobile is a ubiquitous example of this concept. It is a prosthetic that enhances transportation and enables experience of motion not prevalent in humanity before the arrival of automotive transportation. To drive is to be in control of tremendous power and to experience extension of one's abilities and feelings. One can feel the road through his or her prosthetic. One can achieve super-human speeds and travel in relative comfort regardless of weather conditions. The ability to travel faster than walking or running speeds, which are the basic abilities of movement for human beings, other than falling, swimming, or jumping, creates an advantage for facilitation of the ability. Without pavement, most automobiles would be of much more limited use. At a minimum, mechanized travel needs flat ground, and flat ground encourages emphasis on mechanized activity, as Giedion (1969) points out. In order to best use the ability,

alteration of the built environment is necessary. The facilitation has had costs, ranging from the resulting design of the built environment studied here, to economic, military, and human costs. As an artifact, the automobile is a site of many meanings, ranging from increased mobility to slow death-by-asphyxiation to quick death-by-accident and death-by-war. This prosthetic has had many costs and advantages.

Motion/stasis

The prosthetic extension of motion through the automobile is also an example of the motion/stasis emphasis of modernity. Lewis Mumford (1970) notes this emphasis in his description of the space capsule as similar to the tomb. Both are enclosures that are believed to protect the occupant during a journey that takes him or her out of this world into another, alien world. In the case of the tomb, the journey is to some kind of afterlife or spirit world. In the case of the space capsule, the journey is into "outer space." The capsule and tomb are enclosures that confine the occupant, yet both are motion objects. Protection is a concern with both cases. The capsule confines and moves its occupant.

In Mumford's description we can see the expression of an idea and of a broader outlook present in both ancient and "space age" activity. He traces a similar expression across different points in human history. In the automobile we see the same expression. As an augmentation of human abilities, the design of the automobile is concerned with safety and power. Riding in comfort, the occupant of the automobile is confined and yet moves. Of course, in the automobile the movement is constrained by the traffic system when the occupant drives within the built environment, which is most of the time. Travel is confined to designated paths indicated by geometric design on the ground, lighting technology high above the driver, and signs alongside the road. Even movement within

the capsule is confined to specific movements. Here we see the further division of the lived world through the atomization of the individual as a part of the prosthetic enhancement process. Division breeds division; ratio-nale leads to further rationalization. In order to extend our abilities we restrict some of them.

This encapsulation, which many people willingly and often cheerfully embrace is an expression of the tomb outlook and the demand for motion/stasis, as explained by Mumford. It is an expression of movement and also stillness. Thus, in the automobile we see the expression again of the systematic algorithmic style of habitation that is both a life expression (motion disguised as action) and death expression (the tomb journey). The tomb outlook assumes that another superior mode of existence exists "up there," "out there," or otherwise somewhere else. This feature of mysterious transcendentalisms (Kramer, 2000) is expressed in the tomb outlook as another of the kind. The assumption of the need for encapsulation for the afterlife, as Mumford details, is that it will be a journey for which the deceased will need provisions and protection as well as a material connection to this world. Accordingly, the builders of tombs employed traps and other methods for protecting the body and its accompanying death paraphernalia. The tomb outlook is an expression of existence both in the material world and in another transcending world. Again, belief in and valuing of a kind of experience not tied to the lived world is expressed. The tomb was (and is today, in the case of burials) seen as both spaces not simultaneously, but simply *was* (and is) both spaces. Additionally, we must acknowledge that their conceptualization as two "spaces" or "places" is an expression of mental-rational awareness. From a magical outlook, these places were identical and interchangeable (again, "interchangeable" implies dualistic difference). Perhaps mythic

awareness allows us to understand the space of the tomb as expressing polar difference, where two faces of a place are still part of each other. We may argue that each of these understandings is defendable and that such space is multidimensional in experience or awareness.

In such a space, the occupant lies inert in one dimension, while traveling in another. Stillness in one aspect is movement in another. Importantly, the movement is movement in a sacred, external, and preferable place. In the afterlife death is banished; permanence is enhanced to perfection. A state of infinite existence accrues; perfection is achieved. The particular story or tradition that explains this perfection does not make much difference. An expression of perfection "elsewhere" or in a place that is infinite and therefore not bound by time is a mysterious transcendentalism (Kramer, 2000). Whatever the justifying story, the implication is that the "other" world is somehow more powerful, better, or otherwise to be preferred. It is the source of rules and directs all contingencies. More specifically, the implication is that beings in the other world are more powerful or somehow in a state that is preferable the experience of "this" world. This is expression of the ideal, which is probably "above" this world and from which all is understandable (Merleau-Ponty, 1968). In this expression, permanence and flux are simultaneously expressed. An ideal world is fixed; its structure is knowable forever. Plato's ideal chair is and *remains* the ideal chair. In the tomb world, however, there is no time (infinity), meaning, importantly, not bound; awareness, whether in human form or some modified form, continues forever. Awareness can only be flux. It is the knowing of difference. It is time (Gebser, 1991). Perhaps this is why one prepares for the journey to the afterlife, because "journey" expresses travel (change). So the tomb expresses both

stillness and movement with the aim of attaining an external, perfect (or at least better) mode of awareness.

The automobile is such an expression. In it, the driver remains nearly inert. Arms and legs may move at prescribed times and in prescribed ways. The torso is to remain nearly inert. The justification for this state is that by entering this chamber and remaining still, a better state, one of movement will accrue. Life is better with the automobile, at least as indicated by the built environment and its allocation of space for the automobile. We clearly value the automobile. Many of the elements explored in this study might not be prominent if not for the car. The presence of cars and their accompanying features of the built environment indicate the perceived value on motion. We have to be able to move at a faster rate than our basic abilities allow in order to conduct contemporary life. This is now very nearly mandatory, and the ubiquity of the car and its necessary accommodations indicates this. At the same time, stillness is valued in the conduct of motion. We must restrict our abilities and movement when driving.

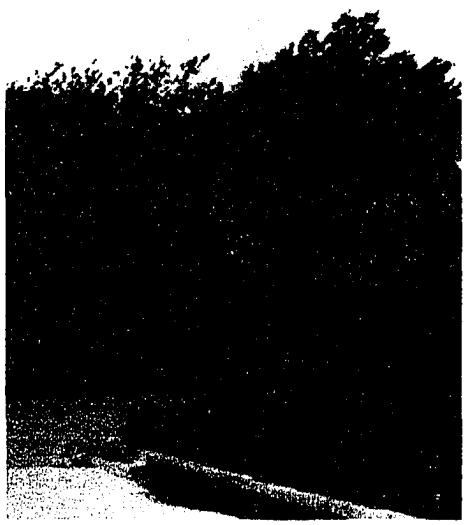

Figure 22. Managed flow.

That automobiles are a prevalent element in the built environment is shown in the data gathered here. Their presence expresses the value of algorithmic (planned and rule-driven activity) movement, as well as life, and death. The outcomes for traffic flow are calculated and through this process human movement is managed.

Zones

In addition, sectorization is expressed in the signs of the code of the traffic system and in the zones created through housing areas. Signs make overt, and literally make, the sectors through which one travels. Signs indicate *speed zones*, *school zones*, and *loading* and *unloading zones*, for example. These zones exist only as a part of the abstract system created by the signs that create them. There is no such thing as a school zone that existed before the sign that created it. These zones create and are created by different rules for behavior. Someone who fails to see or chooses to ignore a speed sign will be punished accordingly. The zones become real when created by the signs and the performance of the appropriate behavior. What appears to be a relatively simple phenomenon can be interpreted as quite significant in its use for deriving the built environment. The abstract takes precedence over the material. One's behavior is regulated by the abstraction created communicatively and enacted intersubjectively. Orienting one's behavior according to anything else results in punishment.

Speed Zones

In the case of speed zones we see a case of the definition of space according to time. Speed zones indicate the division inherent in mental rationality because division defines and creates them. "Miles-per-hour" indicates division as a main semantic device. In addition, travel (flow) is taken to be the primary value of the zone. The zone does not

exist without the defining elements of travel and division, without the idea of time-over-distance. The result of this division is a number--a quantification--that governs the zone. It is an expression of the measurement of space through time, a characteristic of the mental-rational outlook (Gebser, 1991) and a feature of city architecture design and other forms of art since the advent of the automobile (Vitale, 1992).

Figure 23. Sectorization through quantification.

This sign appears to indicate the valuing of travel, flow, and motion in general. A lived space is defined intersubjectively through a mathematical operation. When one is traveling through this area, one is expected to moderate his or her activity such that result of a division operation is a rate of speed less than the prescribed number. A *speed* zone indicates that speed is valued. Something is only regulated if it is valued. Something that is not valued is either ignored or prohibited. The speed zone expresses a valuing of speed in addition to a limiting of speed. Failure to control speed and failure to move (failure to have speed) are both punishable offenses. One is not allowed to simply idle in the middle of the street in a speed zone. Similarly, one is not allowed to move faster than the indicated speed. A controlled flow is commanded. In areas with higher speed limits, a minimum speed is often indicated. Controlled flow is necessary for algorithmic outcomes to accrue. Moving at speeds other than the prescribed range endangers lives,

but also the desired outcome of traffic flow. Signs indicating further changes in rate of speed also regulate flow, as in the picture below.

Figure 24. Zone ahead. This sign indicates a coming change in preferred rate of flow.

This sign also indicates another example of sectorization in the built environment. The school zone indicates a value of education and its intersection with the traffic system. Signs found in the built environment surrounding school zones indicate that speed of flow should be changed in the area. Presumably, this is due to the difficulty in seeing smaller human forms in the area. One might argue here that children are valued in this space at least as much as traffic flow. Traffic does not appear to be edged out completely by education or children, since driving in school areas is still facilitated. Given that driving is the primary mode of transportation, parents need to drive near the school to "drop off" students. Zones are also defined for "loading" and "unloading" school buses. Students are things to be loaded and unloaded. Neighborhood schools give way to consolidation and economies of scale through busing. These seemingly common usages also express a mechanical outlook. As a nodal point in the flow system, schools display a different flow regulation than other elements of the system.

A further valuing of the area around schools in indicated by the presence of another prevalent feature of the flow system. Lights often accompany the signs indicating school zones. As explored elsewhere in this study, light is emphasized in

much of the built environment. The addition of a flashing light to a speed zone sign indicates added importance. Recognition of such a sign is taken to be especially important, so a light is added to insure appropriate modification of behavior, as in the example below.

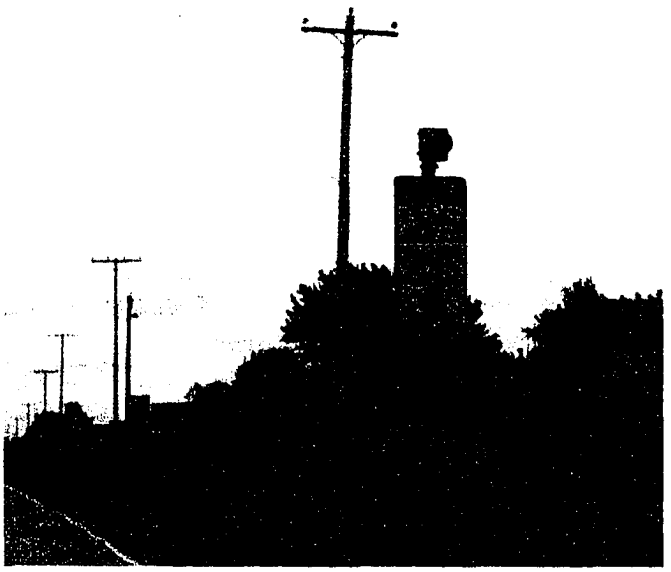

Figure 25. Adding lights highlights the instruction.

In addition, the borders of school zones are well defined. Depending on the direction in which one is traveling, the school zone "ends" with another sign. That school zones are especially well defined indicates a valuing of the area. Modification of speed is expressed as especially important in this area. This is obviously a safety issue for the children, but also expresses a valuing of the space. The specificity of school speed zones also indicates the valuing of traffic flow, however. The activity within a school zone is valued, so traffic must slow down, but once the appropriate safe distance has been reached, flow should resume at preferable rates.

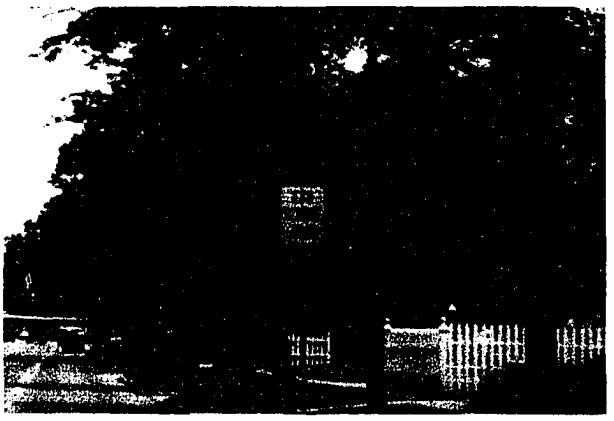

Figure 26. Increased spatial definition for school zones.

In terms of space, this value is also indicated by the difference in punishment for certain crimes within certain distances of schools. The quality of the space is changed by the presence of a school, and the activity within the zone.

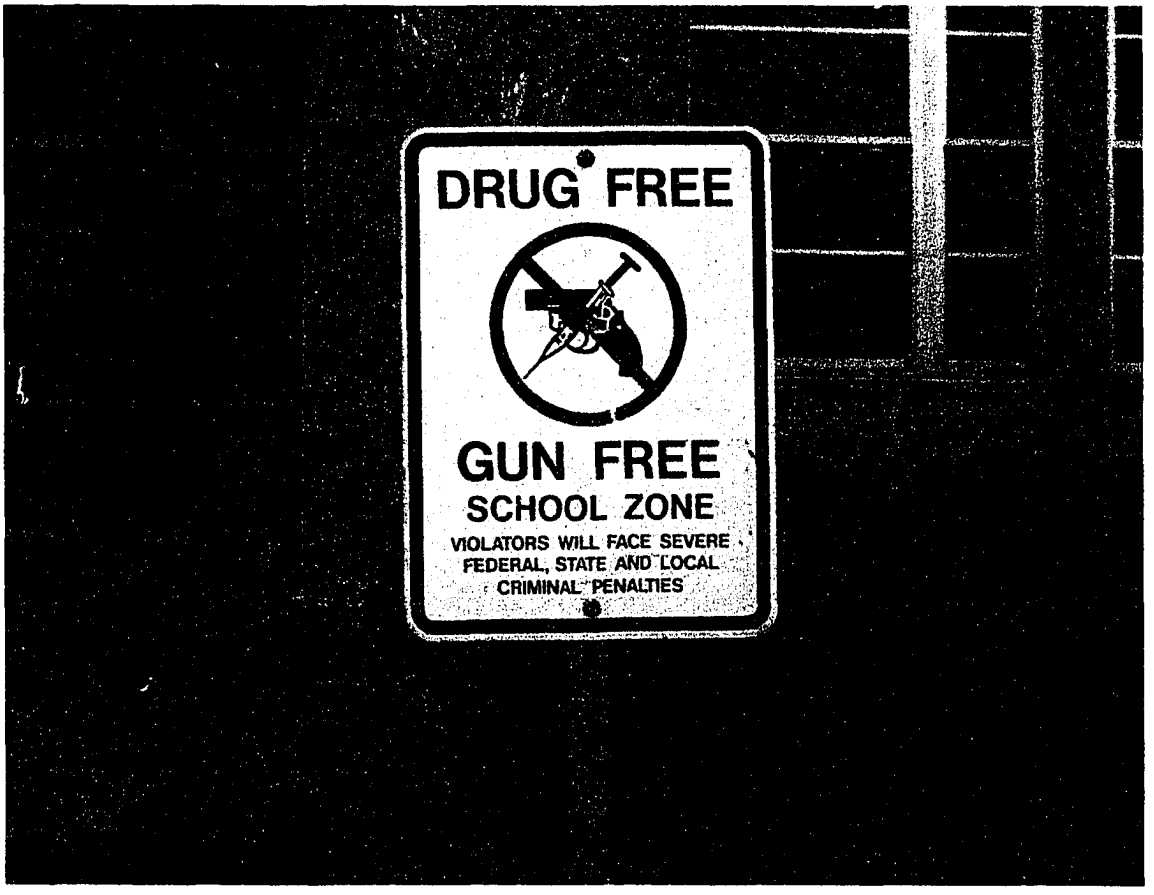

Figure 27. Further sectorization within school zones.

Within school areas activity already illegal can take on increased criminality. In the above picture, we see the indication of additional penalty for possession of guns or drugs in the area. In the case of the sign, the zone is created differently. The sign does not necessarily indicate a specific line where the area starts. This sign is just in front of the building, but the penalty area extends further than the sign. The defining power of this sign is different from that of the school speed zone sign. The school zone is an example of valuing of space, or qualitative expression, within quantitative sectorization.

Crosswalks

The cross-walk is often found in proximity to schools, and in other areas of the built environment. In this element, the need for direct pedestrian interaction with the traffic system is indicated. Pedestrians are—according to the laws at least—given the right of way in these cases. Lines literally painted on the street indicate where traffic is to stop for the pedestrian, and, interestingly, where the pedestrian is and is not to walk. This author observed in one case the very strict enforcement the pedestrian corridor across a street. A police officer on a motorcycle observing some pedestrians crossing a street observed that one of the walkers was outside of the crosswalk by a couple of feet, as she walked next to her companion. The officer, using the public address feature of the patrol cycle, said to the walker, "In the future, if you would stay within the crosswalk, that would be acceptable." The participants in this interaction, namely, the officer and the pedestrian, were within ten yards of each other.

What can we make of this interaction? Does it mean that all officers enforce such pedestrian zones as strictly? No. Neither does it alone mean that such use of technological accentuation of power distance (the PA) to express power relationships is

common in interactions between police officers and pedestrians. The incident does point out a valuing of separation between pedestrian and automobile corridors in the traffic system. The pedestrian did not argue that point or really reply to the officer. The enforcement of the zone at such a microscopic level did not surprise the pedestrian, which alone is interesting.

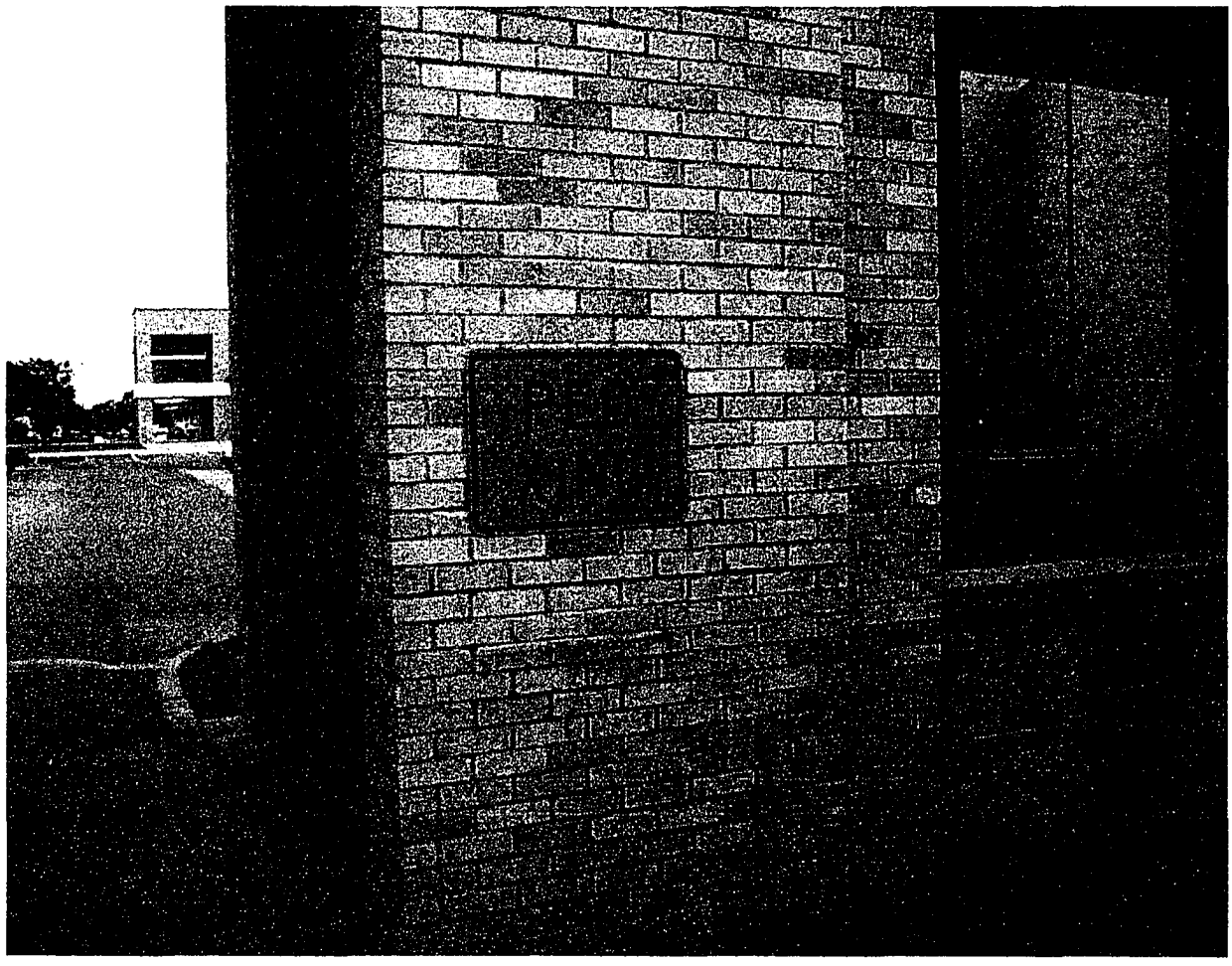

Figure 28. Pedestrian corridor definition.

We must also note the ability of pedestrians to activate crosswalk indicators where such lights are present. Pressing a button on the traffic light pole can activate a sign indicating when to walk and when not to walk. In some kinds of intersections and street situations, the button stops traffic. In this case, the pedestrian is valued and given

the power to stop traffic. A way to control the flow is present in the button. The pedestrian can stop it to allow crossing. This is not present in all street situations and, as Duany, et. al. (2000) indicate, increasingly many areas do not include crosswalks or controls for stopping traffic at all, making the traffic zone a no-person's land by design, and sometimes by law. Where a crosswalk is present, the pedestrian is valued at least to some extent. Where one is not, the pedestrian does not appear to be valued at all.

Housing zones

The built environment also contains expression of sectorization through the indication of housing subdivisions or "additions," or apartment areas. These zones are usually indicated by some kind of sign or gate-like element placed at intersections that permit entry into the area. The names of these areas are usually arbitrary and may not be connected to anything unique to the area (Kuntsler, 1993) and the name of the area may not carry any meaning beyond the sound of the name. Examples of such names found in this study were "High Place," placed in a completely flat area; "Stone Meadows;" "Sicilian Circle," in Texas; "Westmoor;" Arbor Lake;" "Bar Harbor," in a landlocked location; "Salerno Circle;" and "Brookhaven," among many others. The apparent lack of connection between physical characteristics of the geographical area and the name of the housing zone asserted by many authors was confirmed in this study. In the area called "Deer Park," one can find neither Deer not parks in which deer might be found.

This phenomenon demonstrates the marketing aspect of this naming process. The virtual or signalic name is given primacy. The lack of connection between the name and the area, the inclusion of a water indication where no river, stream, spring, lake, or anything of the kind may be found, for example shows the emphasis on the signalic in

this behavior. The author of this study grew up in "The Meadows," an area that included no meadows. The name simply indicates division. Its purpose is simply to de-*sign*-ate a spatial division. Of course, indications of the economic level of division may be read in the construction of the sign. The emphasis is on the level of housing one may expect rather than on anything connected to the area. For example, the sign for the area called "Preston Springs" includes expensive design elements.

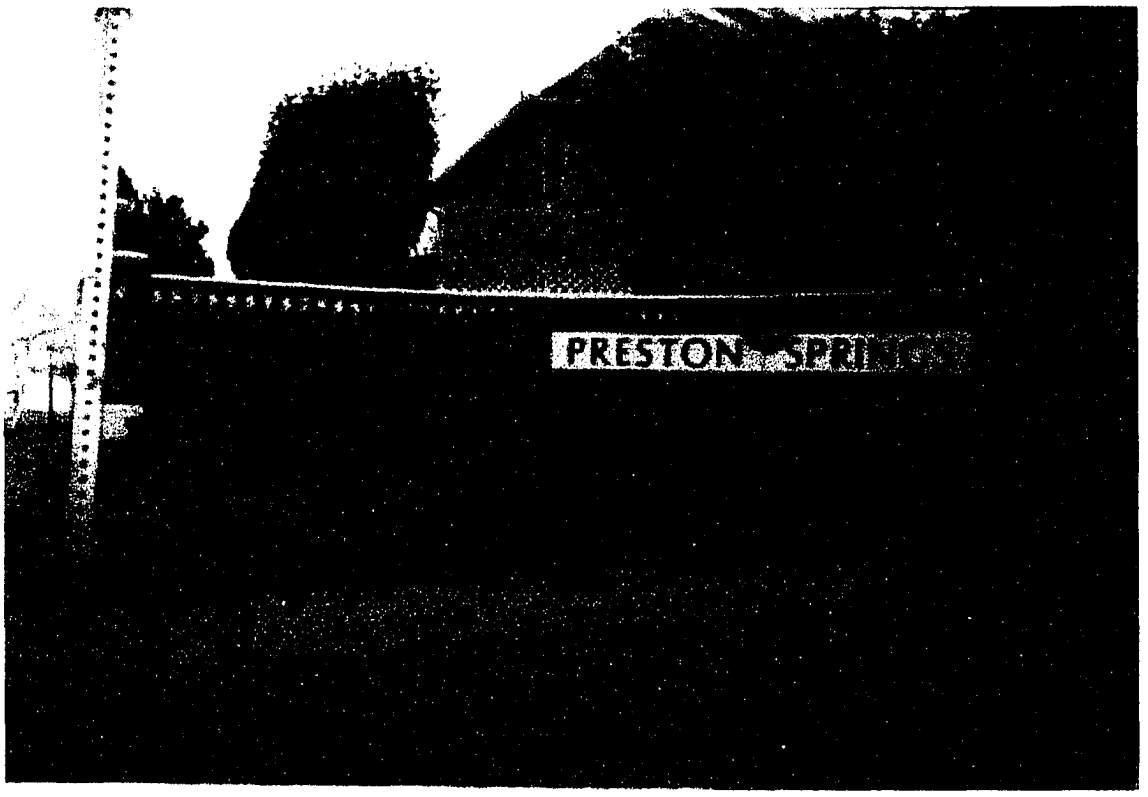

Figure 29. Not a HUD area.

This entrance marker includes sings indicating the type of area one expects to find and messages indicating that the area values wealth and order. This marker includes expensive brick and landscaped construction, with flowerbeds that require maintenance. The concave design costs more in terms of labor to build. The well-defined hedge indicates order. This is a message of the kind studied in Los Angeles by Davis (1990); it

indicates what kind of person belongs in this place and what kind does not. Wealth is valued here.

"High Place," on the other hand, does not appear to be quite as well off. This sign is constructed of cheaper materials and includes a bed requiring less maintenance. The area includes property of lower value, while still being wealthy relative to other areas.

Figure 30. Cheaper construction communicates the level of the area.

The entrance marker is less ordered in this example and is not as materially substantial as the previous example. This entrance marker may be read as indicating a less wealthy division. The guidelines for construction in this area were or are of a different kind than in the previous area. One may not expect as much "value" here.

From the perspective of this study, these examples express the same outlook. An economic analysis (Soja, 2000, for example) might read these examples for the communicated wealth meaning. As expression of sectorization, however, these signs

express the same outlook: division of space into further division of space. A suburb, already a sectorized space, is further divided into these areas. This impulse to division is part of the spatialization of lived space. To indicate where in the city one lives in terms of this kind of area is to make an economic statement, but also to physically locate one's habitation area. Different zones may invoke different building code or deed restrictions. This kind of segregation along economic levels has been well documented. What these kinds of analyses fail to notice is the basic impulse to divide, evidenced in these phenomena, expressed by these divisions. Difference and preference are functions of the dualism that characterizes mental rationality. One *should* strive for the better spaces, from the perspective of this outlook. This indication of economic inducement is a function of division. The demarcation of different housing spaces expresses power in terms of who is allowed to be in these areas, as pointed out again by Davis (1990). In this study, differences in the kind of marker were observed, but more notable is the simple expression of division. Signalic definition prevails in these phenomena rather than mythic or magical expression. Part of definition is a function of simple spatial placement and economic (quantitative) statement as a part of identity connection. The signalic reduces identity to location. This division segregates by location.

Thus the signalic form of communication, elaborated by Kramer (1997), enforces the atomization and sectorization described by Gebser (1991). While something like a school zone appears to make a lot of sense and seems relatively simple, we must remember that the typical daily experience is systematically directed by this most overt form of sectorization. We spend a great deal of time in this communication ecology. Time spent commuting tends to be the most commonly reported statistic regarding

driving, but, as Kay (1997) reports, travel to and from work accounts for only about 22. 5% of time spent driving. Most of it is spent making short trips required of a fragmented habitation mode that requires running several errands a day, achievable most easily by car, accounting for the many hours spent in her car each day. Most of our communication experience each day is spent in communication that is one-way and heavily signalic, as the data in this study appear to indicate. This form of control expresses what Duany, et. al. (2000) described as a motivation for the design of sprawl: The ease of statistical analysis and scientific design . Social scientific definition of the human agent as technological and as a unit in a system makes hegemonic control easier. Measurement is "useful" for control and reproduction of actions. As a node of exchange, a human agent is technologized into a tool for technological activity.

This code and these two elements indicate the valuing of motion and order. The traffic system exists in order to allow easy travel (flow) from sector to sector, necessitated by zoning and economic forces, but the system must be regulated. The job of regulation is achieved through communication elements. Signalic communication allows the system autonomy from the designers and users of the system. One does not need a traffic cop when one has a traffic signal. As a result, human action becomes directed, for a significant amount of time, by abstract signs that belong to the code of the traffic system. The logic of the system must not be ignored; lives will be lost and injury can occur. The system does not protect from the non-systemic. Thus following the signs becomes very important. Behavior *must* conform or risk injury and the effects of another major system: the legal system.

Space and Power: Lines in the Air and the Mechanical Environment

In the modern mode of habitation, electrical power is transferred through a power "grid." Being on the grid or somehow connected to it is critical to life in the built environment. Power in this case is both electrical power and power in a more general sense. Those without electricity or a semi-permanent place on the grid (the homeless) are dis-empowered, literally, and figuratively, forced to find ways to "steal" power when necessary from publicly accessible outlets. Making inaccessible water and power outlets, along with the elimination of publicly accessible restrooms, are among some of the primary methods for driving the homeless out of an area (Davis, 1990). To loiter is to be idle (and, presumably, to be the idle hands that makes the devil's work) and not in flow. Access to the system, to the *flow* of services and power is a requirement of life in the contemporary built environment. Accordingly, systemic elements that indicate this value were found in this study in the form of power lines and elements associated with the electrical system.

One of the most evident features of the built environment observed in this study was the presence of power and communication lines. These lines tend to run along roads and especially they may be found along major roads. In some neighborhoods, these lines extend to the residential streets above ground, while in others they continue below ground. Even where the lines have continued below ground, the lines above ground are visible at the end of the block or along larger roads. The built environment displays these lines in easy view, whether in the form of smaller configurations or larger structures. In addition to the lines, there is clear presence of other elements related to the flow of

electricity and telephony. Transformers and other power structures were observed in the built environment along with mobile telephony towers.

Geometry and flow

What do these elements communicate? To begin with a basic sense, presence of a power "grid" expresses an outlook that values systemization and geometric order. An electrical circuit is necessarily a closed system. It is a totality. Whatever is not on the circuit is not included and cannot be part of the system. To be "plugged in" means to be connected to the power, literally and figuratively, whether it be to the electrical system or the information system. In urban and suburban areas, code demands that structures be connected to the system. In these areas, one cannot live outside of this systematization of human life. That this is an important value is evidenced by the ubiquitous presence of elements related to electrical power in the built environment. Power lines connect each structure and thereby connect everyone on the power grid, making each structure a node on the grid or a point in the spatial arrangement of the power system. Again we see the emphasis on the unitization that characterizes the built environment within the mental rational outlook. Just as houses have addresses that locate them on the grid of streets, they also have a nodal status on the power grid.

Connection to the "power" grid is important. Loss of electrical power is among the most serious things that can happen and resources are generally immediately devoted to the restoration of power once it has been interrupted. Power "interruption" and other kinds of "interruption of service" that may result from lack of payment or other events are clearly things to be avoided in our society. The interruption of flow, of the systematic delivery of power, is generally considered something to be avoided. Bills must be paid

"on time" in order to avoid loss of service. Again we see here the emphasis of the megamachine (Mumford, 1970) on algorithmic motion that is not action, to use Burke's (1969) distinction. The power system is a case of motion, of flow, but also of stillness. Motion occurs in the abstract. Electrons move through wires and through flow keep the system operating. Their movement is automatic and mindless. They move according to established patterns and go nowhere (Utopia means "nowhere").

The emphasis, revealed in many places, appears to be on maintaining movement but a kind of stasis in movement and extends to the human agent through the use of many technological elements. One must be connected to the power system in order to remain a part of this flow of power or this culture. An example can be found in the emphasis on computing. Microsoft asks, "Where do you want to go today?" meaning, presumably, "What do you want to do with your computer?" In a material sense, one does not actually "go" anywhere. The computer, as a point of access for the internet, allows one to conduct a great deal of "activity" while never leaving the desk. This is hailed as an extension in ability, allowing a person to "do" all kinds of things that are doable only within the system, as well as some things that have a correlate outside the system. I can pay bills online, for example. This has a correlate outside the system. This kind of action emphasizes stillness on the part of the person using the computer and emphasizes visio-centrism (Kramer, 1994; 1992), compelling the "user" to stare in the same direction for all of the time one is engaged in this kind of activity. This is also an example of the atomization of the individual. In addition, this technological extension of power, of human abilities represents a far-reaching extension of Freud's concept of the prosthetic god (1961), in which the prosthetic has extended to an entire system encompassing other

people as well in an algorithmic system. The use of the electrical system has many other expressions as well. Here I emphasize the use of a computer as an example because it emphasizes the human agent as a user of the electrical and communication system that creates the need for the wires seen to be so prevalent in the built environment.

Rhythm and symmetry

Power and telephone lines were observed to express rhythm and symmetry in the built environment perhaps more than any other element. When taken together, houses express regularity, unitization, and rhythm to some extent, many cannot be said to express symmetry in the architectural sense. This is especially true for houses with front-facing garages, which tend to destroy symmetry with the wide face of the garage door. The regular spacing of poles supporting telephone and power is an element of regularity in the built environment that can be observed along roads almost universally. All areas observed in this study contained this element of the built environment. The poles are uniform and regularly repeated elements. Poles spaced to minimize the number necessary to support the lines create an ordered border for many roadways and other areas of suburban and urban spaces.

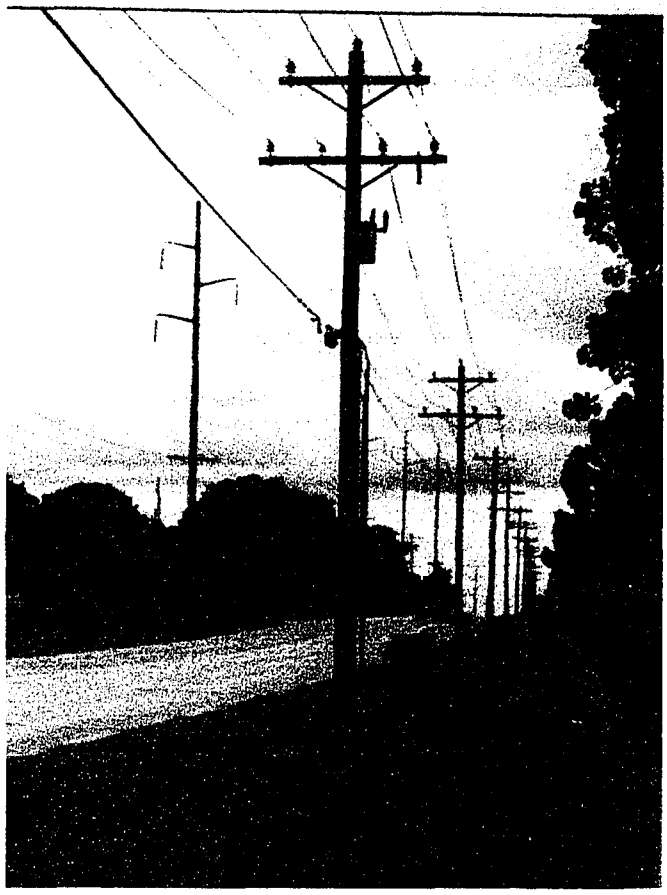

Figure 31. Evenly spaced poles create regularity as a backdrop and form a corridor.

In the picture above, the road is lined with evenly spaced poles stretching off into the distance. This configuration, while simple here, is found throughout the built environment in many variations. In this picture, on one side of the road are taller poles also spaced evenly. Each side expresses rhythm and regularity through uniform height and redundancy.

This picture also demonstrates another feature of poles and power lines. These lines often contribute to the creation of corridors along roadways. This phenomenon has been discussed in this study in the section on lighting. These elements contribute to the systematic expression of the traffic system by creating regular borders for the corridors. The power system as an element of flow in the built environment is expressed along with

the transportation system. Here we see two expressions of algorithmic motion. One expresses the flow of energy, the other of automobiles. The definition of corridors emphasizes flow. Stopping along a road, especially, a highway produces an odd feeling of lack of speed and eerie quiet. The corridors are channels for motion. In the case of roads, it is motion of automobiles. In power and communication lines, those two phenomena are understood as flowing through the lines. This description in itself expresses a geometric and mechanized outlook. Power and exchange (the signalic understanding of communication) flow along lines in our habitat. They move in an orderly fashion and at speeds far in excess of human abilities. The use of lines to overcome distance expresses their quality of creating both distance and the desire to overcome it. Here again the prosthetic has created its imperative.

In addition to smaller standard poles, this study also found larger structures present that expressed similar rhythm and valuing of the flow of information and power. These larger structures often cut across green areas and are sometimes found to have more latitude in placement, sometimes crossing roadways and other features of the built environment. This appears to indicate that the larger power and communication lines have value above the smaller lines, as the larger roadways have status over smaller ones. This may also be interpreted through the height of these structures, which was observed to be greater, as in the picture below.

Figure 32. This very large structure appears to disregard lesser geometric plans in favor of its own geometry.

In this picture, we see a very tall structure (compared to a human or automobile scale) that does not run along the roadway, but rather cuts across it. Its order is not identical with the order of roads. These larger units in the built environment also cut across green spaces and are sometimes used to create green spaces that contain walkways or park-like areas, as in the picture below.

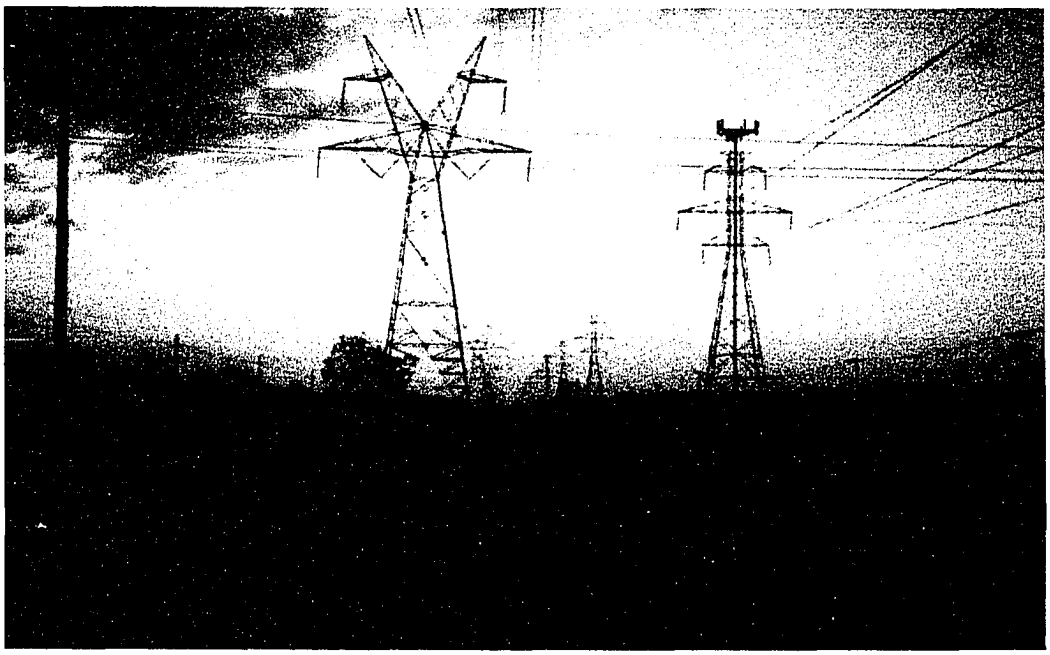

Figure 33. This corridor is not for automobiles but is not a human space either.

In this example, the major power corridor both cuts across a road and also dominates the space under it. Housing was observed on either side of this corridor, but not under the lines. In addition, one of these towers also contains a communication element for mobile telephony. While a minimal walking path has been arranged below these lines, this corridor appears to emphasize almost primarily the value of power. This valuable real estate has been reserved only for the containing of mechanically themed elements that facilitate the flow of electricity and communication. These structures are not built at a scale commensurate with human scale. They further express rhythm in their march off into the distance. An encounter with this environment barely invites one to walk along the pathway, and does not invite one to do much else. It incorporates almost nothing of park design save the pathway, which seems to be added as an afterthought. This space is clearly for the structures. It is not a human-centered space. In terms of figure and ground here, a human would barely be visible in the frame of scale established by the structures. Activity under these structures is clearly limited to area below a certain height.

The picture above also displays crossing lines at a lower level. This points out another geometric emphasis that the lines of the power system express. These elements create a further rendering of space that is a real delimitation. Intersections in the power and communication lines create points and intersections in spatial conceptualization. Lines intersect in the air and define a visible ceiling for the activity below and also levels of definition for the power lines above. In the picture below, several planes are defined and a point in the space is defined by the intersection of several sets of lines. The need to overcome space has lead to the construction of these lines, and their presence outlines the space conceptualized as part of their necessity.

Figure 34. Intersections outlined on several planes.

Power lines create a height limit, an outline in space of our habitat. In the picture below, the poles display several levels of lines. A bracketed approach to these phenomena sees these as lines in the air that outline space above the human scale. One might imagine a

three dimensional grid being formed out of the elements of the built environment. Lines in the form of roads, power lines, and designation through street signs combine to create spatialization above and below the human agent. These are limitations on the agent and also define space that is not human at all in the upper regions. Both of these aspects may be seen in the picture below.

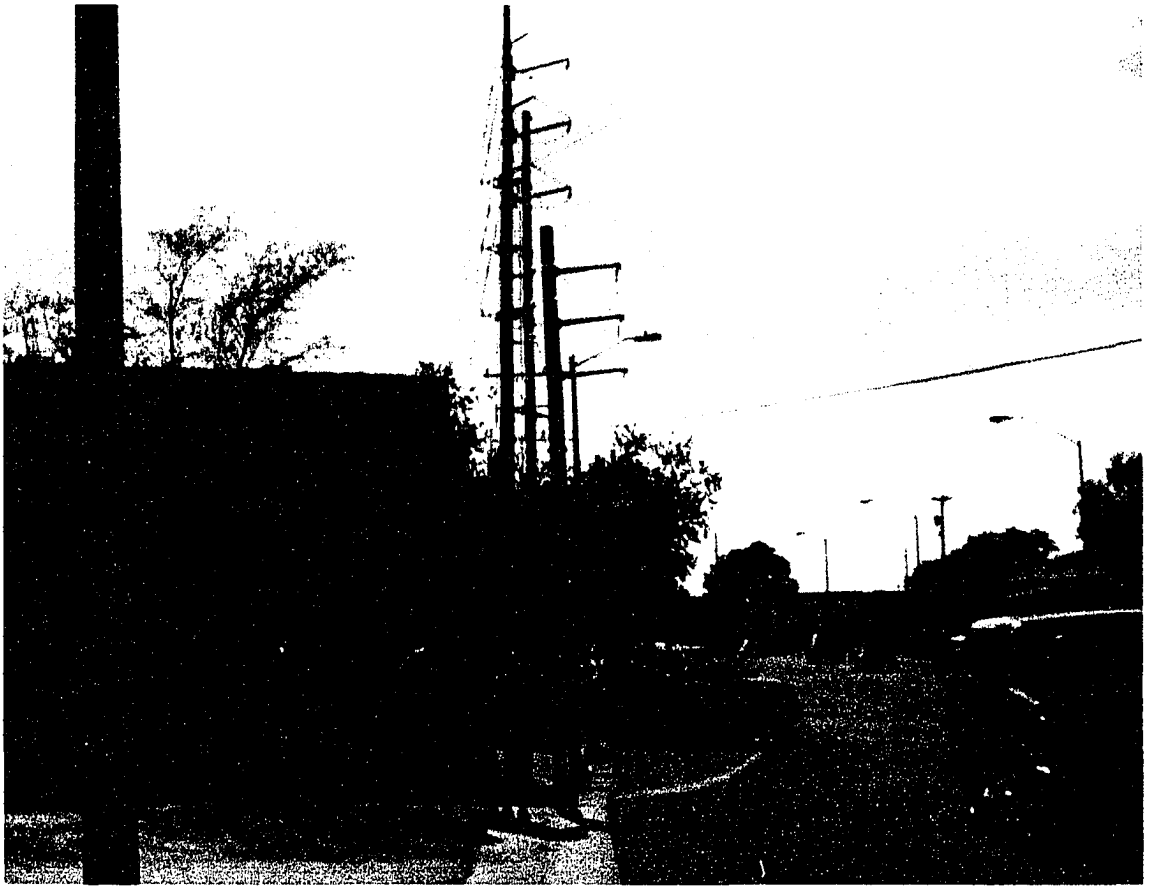

Figure 35. Lines in space designed without the human in mind.

Combined with the lighting elements that help form the flow corridor of this setting, we can compare the human figures to the scale of the light elements and power elements. These people are walking through a foreign environment. Power for the larger structure of society and corridors for the flow of automobile traffic dominate this space. Here a geometric outlook predominates that does not accommodate the non-enhanced human

individual or the systemically supported human city as a unit. The individual human agent is confronted by a setting that does not value her.

Mechanical themes in elements of the built environment

This definition of space, these lines that define and create a space, are made in forms that appear to be mechanical in theme. In the above examples, the shapes of the structures supporting the cables were regular and rigid. In the larger power structures, symmetry in design and metallic order are especially expressed. As Giedion (1969) points out, the mechanical can only conform in shape to itself. Only the organic has the ability to conform to the mechanical. In a moment of confrontation with the built environment, an individual is more adaptable than the environment and therefore does the adapting. The mechanical remains rigid; the organic conforms, as weeds grow through cracks in sidewalks. The mechanical theme asserts itself in the built environment and the organic adapts, in the form of human adaptation and adaptation of natural elements such as soil and plant life.

The "power" "lines" appear to represent the ability to be connected to this *system*, as do the telephone lines. Semiotically, these sets of cable seem to express similar, if not identical things as the concept outlined above. Both appear to represent the connection to the system. Each is in turn related to the other. These systemic connections appear in the built environment as mechanistic elements. There is no mistaking a telephone pole for a tree, even where the occasional mobile telephony tower has been painted green or otherwise camouflaged. In addition, many poles are supported by cables anchored to the ground. These cables appear to the viewer as mechanical elements rising from the ground and clearly evince a mechanistic visual environment, as in the picture below.

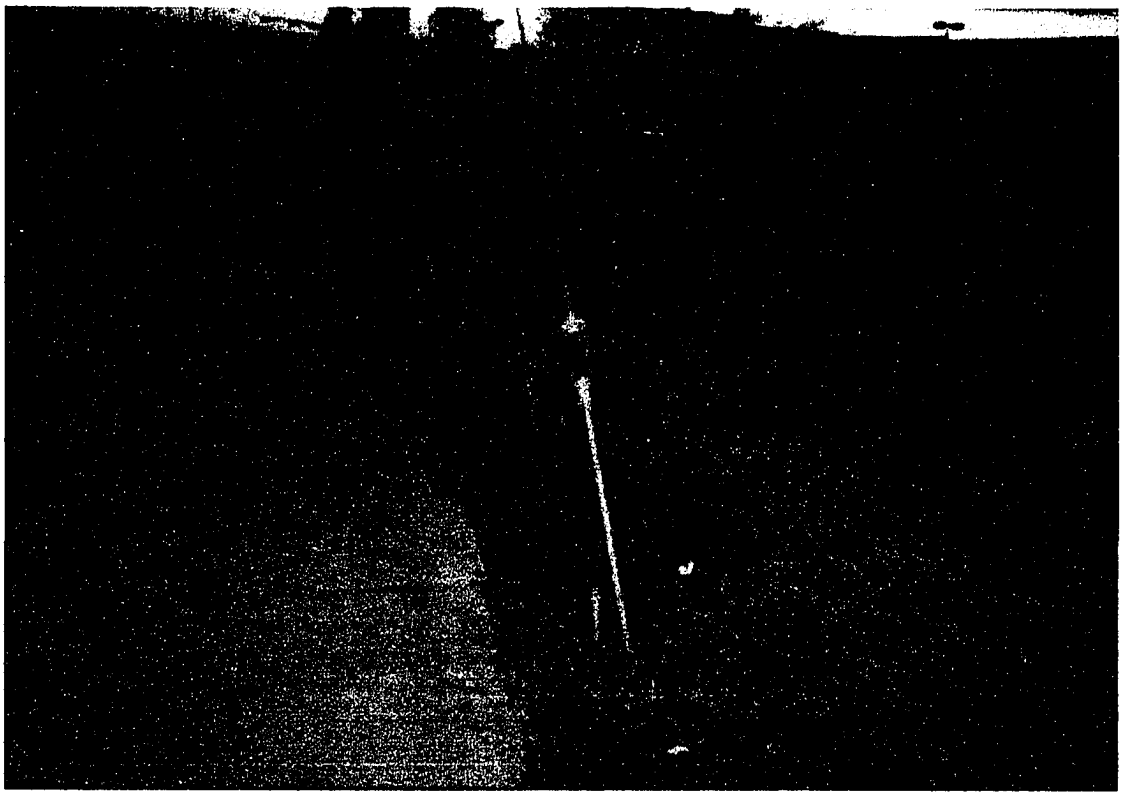

Figure 36. The mechanical rises out of the organic.

A mechanical element has been used to modify the organic environment here. Tension is created by a cable and supports the pole. The anchoring of the pole is secured by the tightening of the cable via the bolts. These are mechanical elements and are part of the everyday setting in which human agents live. Additionally, common mechanical elements that were observed to be literally sticking up out of the ground included water meters and various objects connected to the power system. These items express emphasis on a connection to a system. They are nodal points that allow measurement of flow (as in the case of a water *meter*) or other facilitation of systemic flow.

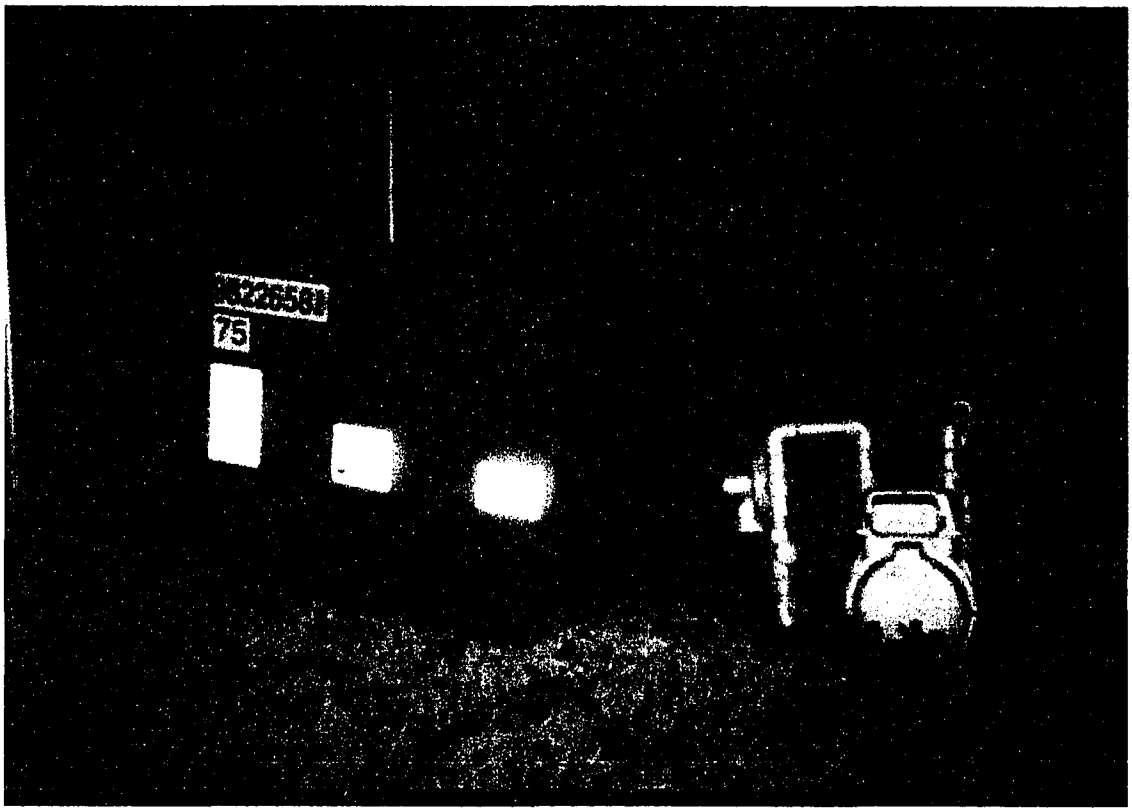

Figure 37. Mechanical systemic elements of the water and power system.

In the above picture these elements express a mechanical theme and rise out of the ground. They are regularly angled metallic items. Quantification is expressed here as well as mechanical order. A water meter expresses quantification of water use. The items on the electrical box designate, through various signalic elements, its status as a node in the power system. Independent of the purpose of the items, these exemplify the presence of mechanistic and quantified values in the built environment.

Here we again see the mechanistic interacting with and defining the organic. The addition of mechanical elements of the built environment to the organic environment also expresses values that have become increasingly prevalent in this last one hundred years. In this case it is instructive to consider the transformer box and other electrical system elements that may be seen sticking up out of the ground. These elements are observable and frequent in any built environment. Such a box represents a connection to an unseen

power gird below. It usually has a designation (a set of numbers) and some warnings. While it is materially dangerous, such an object tends to be avoided. These power objects are dangerous and are often marked as such, especially in the case of larger stations of the system, observed in all areas in this study.

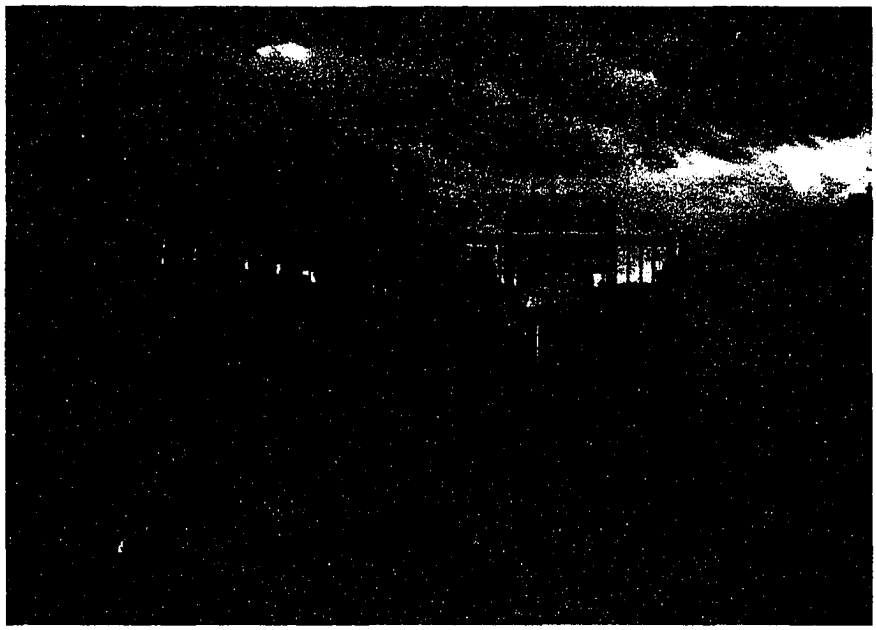

Figure 38. This is an area for experts only.

In this picture, the area containing many mechanistic elements of the power system is labeled as dangerous and the human agent is instructed explicitly to "keep away." Such a space is not accessible to (is forbidden to) most people. Only experts who understand this danger may enter this space. Here we see the expression of the technological religious expression studied by Mumford (1970), who argued that the roots of the megamachine were the religious (magical and mythic, in Gebserian terms) organization of human agents into experts and non-experts or into those with access to sacred spaces and those without it. Is this station a sacred space? In some ways yes, for the reason cited above. In the discussion section of this study I will argue that the design of and living within the built environment may be interpreted as religious acts. Also notable in

this picture is the emphasis on the mechanical, the rhythmic, and on order. The elements of the objects on the other side of the gate are clearly ordered. They are clearly not organic. Their presence expresses a valuing of machine order.

The skeleton of mechanical space can be seen in many such items of the built environment, where the power system is expressed in larger configurations. In the picture below, the right angle dominates. The support for the lines in the air takes the form of symmetric mechanical structures.

Figure 39. Regularity and mechanical expression.

In this example, lines extend into space and the mechanical and the geometric are expressed together as part of the same system. Flow is expressed in the point and line. In addition, space is outlined as in the earlier examples of lines in the air. In this case a wall separates the space and distinguishes it as partly hidden. In some of the spaces similar to this one that were observed in this study, fences rather walls were used to separate the spaces but left the area visible, as in the example below.

Figure 40. Forbidden but visible.

Here the mechanical theme, facilitating the power system in plain view as an element of the built environment. Again levels of height are defined and connection to the system is expressed.

The power and communication systems, especially through the use of elevated lines formed by poles and cable outline an upper limit to the immediate built environment in the spaces observed in this study. Present were expressions of corridor formation and channels for flow of motion of various kinds both seen and unseen. The mechanical expression observed were not accommodating to the organic and often not accommodating to the human scale. They emphasized motion and flow, regularity and rhythm.

Houses as Units of Meaning in the Built Environment

Mickunas (2000) writes that a dominating literature may overtake another and may then end up expressing elements of the previous literature as basic or central to its literature. If one takes expression through architecture as a kind of literature, then this theory applies to modernism and city planning. This outlook incorporates previously held beliefs about home and community even while it has conquered them (for the moment, at least). The advent of the signalic in human habitation leads to a further distancing between the representation of homes and the represented of homes. The ranchette model recalls a kind of home that could not exist in the suburbs (Kuntsler, 1993). Similarly, the "McMansion" incorporates one or more architectural vocabularies in order to create its trademark façade (Duany, et. al, 2000). Even while it may violate traditional architectural preferences such as symmetry, it may communicate a kind of traditionalism. The problem is that it does not quite ring true. Representation is not expression. My little ranch house in the suburbs is *not* a ranch house. Thus the sign for "ranch house" exists along countless other signs of the same or similar kind, but all are out of context.

The conquering discourse of planning has incorporated the discourse of home ownership and self-reliance that was a dominant theme during the expansion of the American west. This theme of independent living in single-family dwelling set in a rural setting was used to sell the first planned housing areas and continues to be used to sell houses. The problem is that the discourse undermines itself and creates its own crisis, as Mickunas indicates is characteristic of this hermeneutic. The suburban dweller does not

spend his or her time home on the range, but rather spends it in a systematized setting of automobile traffic, in office parks, or in the McMansion. The conquering discourse, the hermeneutic of scientific planning, applied to habitation, overwhelms the previous discourse in terms of its demands for living. When planning borrows the discursive power of other traditions, it creates tensions that undermine it.

The redundancy of house design in the contemporary built environment has been well documented, as detailed in the review of literature section of this study. This is agreed upon by many authors, researchers, and planners to be the result of the emphasis on scientific planning that created much of the built environment described in this study. Kay (1997) has noted that planning has been driven by the desire for a "house at the end of the road," (p. 21), and the relationship between desire for life in the suburbs, the McMansion, and the automobile is well documented.

This study found little to add to the conversation about the uniformity of houses. While houses are a meaningful element in the built environment, their main contribution seems to be sheer uniformity that makes the spaces address mostly the houses as units of meaning and do little toward inviting the human agent alone. Again, the human as a part of a larger unit, as a part of the house unit, for example, appears to be accommodated by these spaces, but not the human agent alone. Motion-enhanced humans are accommodated by the streets of residential zones, but not pedestrians. As Duany, et. al. (2000), and Kuntsler (1993) note, in many such areas, sidewalks are placed as elements of the built environment, but pedestrians are not accommodated with anywhere as a destination for walking. Observations in this study found few, if any pedestrians in

residential areas. The front space of the street, set back from the road, and sometimes not including driveways, was observed usually to be vacant.

As mentioned earlier, the emphasis on the signalic may be observed in contemporary house design and codes. These codes stress uniformity. Difference is minimized. Again we see a case of totality. These codes are intended to preserve order, in the sense explicated by Murphy (1992) and to preserve and promote market value. The suppression of individualism occurs for the supposed good of everyone else in the area. Thus the individual is alienated to some extent by law from her own home. A closed system that emphasizes systemic rule and lack of openness in addressing an agent is a totality (Levinas, 1969). As communication codes address homeowners as the other, the homeowner must conform to the code. Opportunity for difference (meaning) is closed off as the buyer gives up freedom for security.

This emphasis on uniformity is an emphasis on the signalic. Market value is protected when there is less difference. A house should be identifiable as a house and not individually too different so that the potential market for the house is broad. The result is what was observed in this study: Within housing areas, houses look alike. As a semiotic element of the built environment, they are the sign for a house, and may be called homes in the advertising literature, but are clearly standardized. The space created by the houses creates a semiotically uniform space. The streets and houses observed in this study generally did not afford outdoor enclosure as a feeling. Lack of trees along roadways, commonly enacted in city codes, was found in these streets. Additionally, streets were observed to stretch off into a linear distance or wind into curve, giving a feeling of continuation while failing to provide reference, creating a feeling of enclosure

and thereby coherence. The blind curve is pervasive feature of contemporary street design originally used to conform to topographic features but now serving to confuse the traveler (Duany, et. al., 2000) and was observed to be pervasive in this study. In the picture below, the blind curve combines with uniformity in the houses.

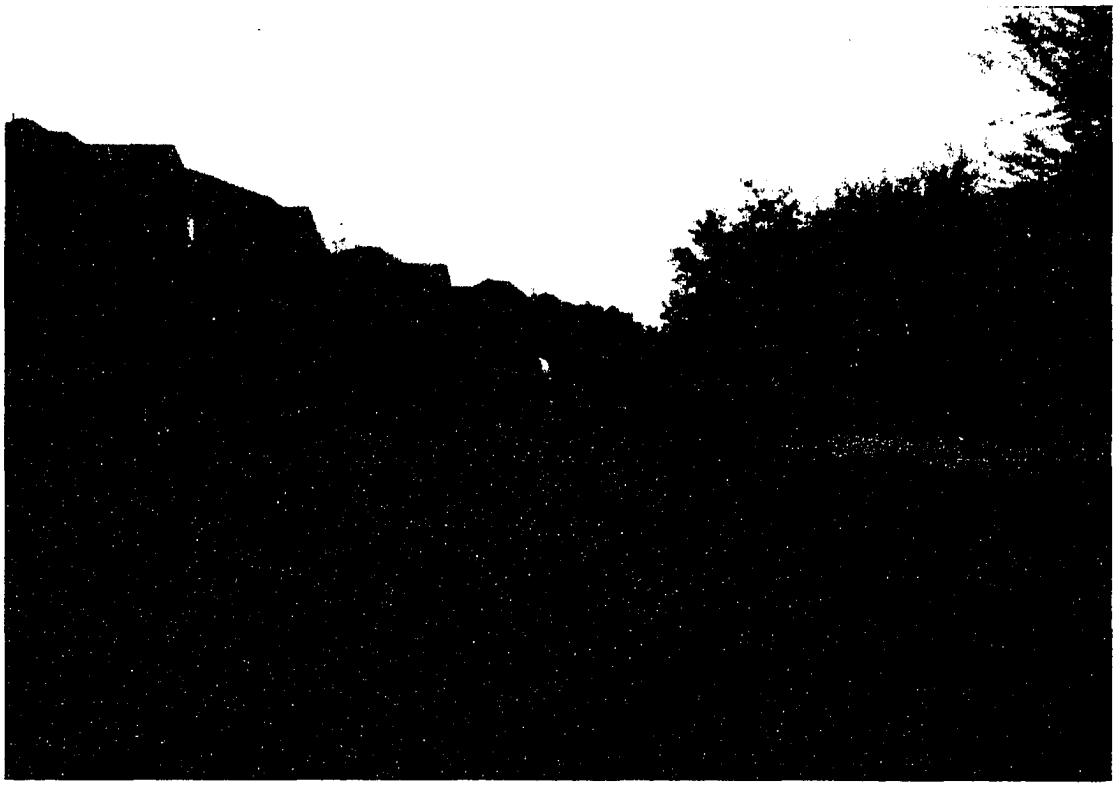

Figure 41. Blind curve with McMansions.

In addition, this neighborhood uses driveways accessed through the alley, so the street contains few parked cars.

Differences were noted in type of house, but varied with area, rather than with each house. Wealthy areas were observed to have large houses that were uniform in many ways. Moderately wealthy areas had slightly smaller houses that shared design characteristics. Regional differences were observed. What was observed throughout all areas, however, was that houses in a given area looked very similar.

Mythic expression: Holiday decoration

What is not widely addressed by the literature is the added expression of mythic and magical expression that was observed in this study. Predominantly two kinds of added expression were observed. These were seasonal additions and expressions of identity. Seasonal expressions included traditionally associated objects with holidays such as Halloween, Thanksgiving, and Christmas. These items express mythic consciousness as well as the signalic. They express the mythic by referencing stories and traditions. Thanksgiving, for example, is part of a larger justifying story for expansion in North America. Objects placed in lawns referring to this story express this traditional justification or myth. Similarly, Christmas is a complex mythic phenomenon, containing civilizational mythos heavily tied to European culture and the Judeo-Christian worldview. Objects placed in a lawn at Christmas time express this mythic story and may express religious or secular stories, focusing on the birth of Jesus, in the case of nativity scenes, or displaying images of Santa Claus. Christmas decoration was observed to be most prevalent in house decoration. In this form of expression, the preference for light was again observed. In addition to images of various figures from myth, the practice of placing (at appropriate times) electric lights on the house and adjoining objects such as trees was observed frequently in this study.

While mythic, these phenomena also express a signalic dimension. Most of the decorations observed were commercially produced and indicated referents that were not present. Emphasis on the "cartoon" representation of ideas in the sense discussed by Kuntsler (1996) was observed. In this emphasis, signs express scale out of proportion to the surrounding setting, colors that are not concomitant with the represented idea or

object, and material that is obviously artificial and may contribute to caricature. Christmas decorations observed in this study expressed these qualities. In the example below, representations of candy canes and the outline of a tree signal the abstract ideas of candy canes and Christmas trees.

Figure 42. Holiday decorations.

In addition, other signalic elements of the built environment studied here are present in this frame. Power lines may be seen at the top of the picture and mechanically themed items, a fire hydrant, and element of the electrical system, are visible.

Similarly, in this example toy soldiers are out of scale for both toys and real soldiers. Again, Santa Claus is included as part of the expression.

Figure 43. Cartoonism.

In both examples, colors are bright, materials cheap, and ideas merely signaled. Identical decorations appear in other lawns. Christmas expression is uniform. This study found such decorations to be predominantly uniform and commercially produced.

Magical identity expressed in housing areas

The other noted addition to the uniformity of the houses found in this study was the expression of identity through flag display or some other element indicating group membership. Examples of the latter include signs indicating a student's membership in a school's athletic team. Such objects express identity. From a Gebserian perspective, this expression indicates expressed interchangeability between members of a group and lack of distinction as individuals. Here multiple levels of meaning are expressed. The display of a flag in such spaces can be argued to indicate support for the larger group and to distinguish an individual or family as supportive of the larger group represented by the object. Such a message is also a distinction from those who are not supportive. The same expression communicates belonging and distinction. In the picture below, an American flag is displayed.

Figure 44. Magic and mythic expression.

Perhaps because data for this study were collected in the year following September 11, 2001 such flags were observed frequently. Additionally, such flags were displayed on several holidays, expressing what may be seen as both mythic and magical. Displaying the flag on the Fourth of July, for example, expresses the myth surrounding the formation of the United States as well as identity (magical interchangeability) in a group defined by a signalic abstract concept (citizenship). While citizenship may be the result of birth within an area, a magical phenomenon, it may also be accorded officially to someone meeting appropriate abstractly defined requirements. Expression of identity may be discursively complex in terms of expressed meaning.

Observation of housing areas in this study revealed signalic as well as mythic and magical expressions. Uniformity was emphasized in the design of the houses, as has been well documented by other authors. Additionally, the emphasis on the automobile was displayed. Both of the predominant observations in this study were well within what has been noted at length elsewhere. Accordingly, this section has focused on the expression not as well documented, exploring the display of identity and myth on and in front of the houses.

CHAPTER SEVEN

DISCUSSION

The research questions posed earlier in this work concern the kind of values expressed in the built environment and the form with which they are expressed, particularly in the form of alterity, dissociation, and the signalic. Some of the answers to these questions were necessarily presented in the data section because the interpretation of the data lent itself to placement proximate to the description. The synthetic interpretation of the findings presented here attempts to answer the questions as well.

Motion, Vision, Spatialization

The data reported in this study demonstrate three major aspects of modernity outlined by the authors that influence this study and a host of values that may be observed in the built environment. In particular, the data express a totality, in the sense outlined by Levinas (1969). A totality is a closed system that does not allow openness toward an Other. According to Levinas, ethical responsibility is toward the Other in an exchange. In a communicative situation, this means that in the moment of exchange between communicators each should value the Other and view her as open in possibility, not closing off her options. In this study, the built environment has been treated as an interlocutor in such an exchange, as outlined earlier. The built environment is communication in a long-term conversation, conducted on the cultural and civilizational levels, among other levels. This study interprets this communicative situation as expressing a totality that closes off possibility for the Other in the conversation. This Other is anyone who dwells in the built environment. The data express a preference for

closing possibility, perhaps to preserve societal order, through the use of an objectivity that intercedes between human agent and world.

This objectivity is expressed in many phenomena and is by no means a coherent or completely discrete "structure" that has been "discovered" in this study. Importantly, the data in this study has been interpreted from a perspective derived from the work of several authors and has been conducted in the spirit of deconstruction, looking for expressions both coherent and contradictory. The data appear to confirm several of the ideas outlined earlier in the theoretical outlook section of this document.

The phenomena studied and interpreted in this study appear to express a totality that exhibits three primary characteristics of modernity, or the mental rational outlook (Gebser, 1991) and in particular the deficient mode of this outlook. The heavy use of signalic communication, as described by Kramer (1997), a self-fueling capacity described by Mickunas (1992) and Mumford (1963), an emphasis on motion and stillness outlined by Mumford (1970), an emphasis on vision outlined by Gebser (1991) and Kramer (1994, 1992) combine with an obsession with division and spatialization theorized by Gebser (1991) to express a totality theorized by Levinas (1969) that expresses alterity (Merleau-Ponty, 1968) to the human agent. This section of the study theorizes an interpretation of the data that sees an order when viewed from a perspective based in the theorists mentioned above, among others. To be fair, this theorizing and that done in the data section are an interpretation from a perspective that is derived from other perspectives. Thus the order theorized is not an attempt at a metaphysical description, but rather offers a reading from a contingent perspective, as described by Husserl (1993). The

interpretation is limited by its own situation in the late mental rational even in its own language which is heavily spatial in description.

Gebser outlines many aspects of the mental rational outlook. Among these are preferences for motion (directed movement), vision, and spatialization. The data observed in this study may be read as expressing themes that fall into each of these three qualities. The three qualities may be read as contributing to a totality, a closed dominating order. To begin, the emphasis on division, on ratio, creates a rift between human agent and world. Divorced from the world, the human agent seeks a means for relating to it and asserting power over it, or at least freedom from harm by it, since it is no longer in polar relation to humans. This division leads to further division that spatializes the world. This emphasis on spatial arrangement takes on a geometric order in addition to other mathematized interpretations. Sectorization observed in this study expresses this geometric outlook. The divisions created by streets, lighting corridors, intersections, and other elements both visible and invisible (as in the case of a "line" signaled by an arrow on a sign). Here points and lines combine to create a geometry that is abstract from the world, because it is the result of mentalized application of a form that does not exist outside of its positing and intersubjective enactment. Streets create a grid or other measured geometric form such as the curve of a street or a turning radius that is an application of a mathematized order. This geometric form creates border areas for zones defined in many ways such as housing zones, speed zones, school zones, and the like. These zones also express an emphasis on speed, since many of them are defined by the maximum speed allowed while inside them.

Spatialization is also expressed. The built environment accommodates a systemic motion arrangement. Flow is facilitated in the form of efficient orderly and predictable motion. Traffic is the primary means of transportation and is the greatest element of flow in the system. The traffic is managed by an instruction set that consists of traffic laws and the signs that direct drivers in their travels. These elements are simple communication that directs, literally, human action according to planned instructions. Motion is managed through formulas and direction. This flow is achieved through the use of prosthetic enhancement that qualifies the human agent for participation in the flow system and therefore for access to the super-human means of motion. This motion is accomplished as a unit within a flow system. The automobile must be within specifications in order to operate within the system. This flow occurs within corridors that facilitate it through the use of pavement and lighting.

Light is also expressed in the data. A preference for vision is in evidence. The emphasis on lighting and height combine to create a preference for super-vision. Lighting elements tower over the activity below. This preference is a starting point for a consideration of the built environment as expression of a totality characteristic of the mental rational. The abstract and form-obsessed built environment described in the data section expresses a forced intercession of a planned abstract form on the mode of human habitation.

Permanence and Flux

The elements explored in this study express a modification of permanence and flux discussed by Mickunas (1998), who maintains that symbolic designs that vary with culture and civilizational outlook express an understanding of permanence and flux and

are appropriately understood only from within the content of each design or each version of a lived world. Mickunas notes that the mode of discourse expressing permanence in the West "exhibits something Platonic-scientific, with something 'puritan' about it; it is bounded and circumscribed, delimiting a presumed order which can be expressed either theoretically or practically" (p. 258). In particular, the symbolic design explored here expresses at least two of the modifications of the basic qualities of permanence and flux outlined by Mickunas. First, it expresses the mechanistic modification, which Mickunas (1998) describes on page 262:

> Mechanistic designs are constructed to signify an indifferent, lifeless, and simultaneously a deterministic cosmos. Such symbolic designs range from a meaningless and purposeless clash of forces, operating by attraction or repulsion, whether in Greek atomism, and/or the conception of a battle among psychic cosmic forces through modern physics, empiricist associational and behavioral psychology, market forces, and logico-mathematical systems, to such notions as the stern face of predestination and destiny, and their impositions on nature.

In the built environment, the imposition of the third term (planning) is an attempt at reintegration and also a symbolic design modifying permanence and flux in the built environment. The attempt is to flatten the difference between them. Flux is made permanent through the preference toward algorithmic motion and flow. Flow is incorporated into the grip of stasis, into the grip of death as a journey and a state, to speak with Mumford (1970). The basic media of permanence and flux are flattened in this symbolic design. The attempt is to make difference and sameness into one, in a totality that defines them as such. It is an attempt to arrest time or to overcome it. Redundancy

in the built environment expresses a preference for or valuing of difference through similarity, as in the case of unitization. Life and death as well as motion and stasis are collapsed in this discourse. Moving and remaining still are fused in the ride of the car and in the larger behavior of moving along corridors of flow.

The interposition of the planning element that assumes a transcendent and superior perspective and comprehension of the world also expresses another of the modifications of permanence and flux, the superiority of the an external look:

> While mainly masculine and partially monastic, certain energies can become all pervasive preoccupations oriented toward transcending the immediate solicitations of the world, with the goal of returning to the extra-worldly paternal home, so prevalent in chiliastic and eschatological movements and, in another sense, in the detachment of sciences. Such "transcendentalizing" is usually expressed by attitudes of uninvolvement or non-participation in the states of affairs of one's world. It may be regarded as an external look with an attendant longing for something else, for the source of this transcendence and detachment, regardless whether the source is known or unknown. This transcendentalizing at time assumes a pacific fusion either with something extra worldly, or something that is deemed to be pure and ultimate, such as the pacific surrender to the impeccable laws of nature or a divine will. (Mickunas, 1998, p. 263)

Mickunas notes that symbolic designs can express several modifications of permanence and flux simultaneously. In the built environment, this study found this to be the case, with the symbolic design of the contemporary American mode of habitation expressing both the lifeless mechanistic version of permanence/flux and the transcendentalizing

version outlined immediately above. It appears that the lifeless mechanistic outlook is regarded as the transcendent, extra worldly, impeccable, and superior. The emphasis on algorithmic motion observed in this study expresses an outlook that prefers to understand flow as a mode of permanence. This combination is noted by Mickunas as a morphology that has been observed across cultures as a morphology of permanence that places it as external to flow, and therefore privileges it:

> The first, and well known, interpretation of permanence is manifest in terms of a stabilizing and directing container *which preserves the flow without escape* [emphasis added]. It might become an iron cage or a prison house for the becoming within it, leading to the conception of an empty shell of mechanical process devoid of any life and working in accordance with non-transgressable laws. *This permanence is seen as extrinsic to flow, it has to be dealt with by artificial-technical means* [emphasis mine]. The modern mechanistic universe requires no energy; everything that does not conform to such a universe must be "conditioned" to attain the status of a mechanism—e.g., behavioral, economic, and social conditioning. This is also expressed in the Platonic separation of permanence and flow, where flow must conform to and be contained by the "forms." *The same can be said of "formal" sciences which can be "applied" to control or to categorize becoming* [again emphasis added]. The controversies among various ontologies may locate formal and categorical constructs in accordance with already accepted symbolic designs of the modern life-world, such as subjective, objective, rational, empirical; nonetheless they all assume the prerequisite of application. (267)

This morphology appears to be in evidence in this study of the built environment. The planning of the built environment expresses a valuing of flow in a planned and systemic manner. Instruction sets govern behavior. Flow is treated as a mechanical-technical problem, as Heidegger (1954) argued, technical problems are seen as solvable only through technical means. The prosthetic enhancement of the automobile renders the problem of flow as a technical one. As a result, the application of the "superior" and externally attained form must be applied to control flow.

This is the imposition of a third term to the integration of the binaristically understood relationship between human agent and world that has been expressed in the data observed in this study. The mental-rational structure of consciousness requires abstraction. It requires synthetic thought because it approaches world as alien. World and human are no longer understood as related in a polar relationship but rather are a disconnected duality. Because the world is alien now, it is to be conquered, subdued, and overcome. Humans now exist in a confrontational situation to world rather than a complementary relationship with the world. In this kind of relationship, the mentalization of life counts as life. In this deficient form of consciousness, thinking is being. The abstract then is given primacy. Thus the mentalized abstract world is "real." (Gebser, 1991). The alienness of the world now calls for an external "solution" that is formalistic "in nature." If the world is understood as technical, then only technical solutions can be appropriate to its problems. Thus formalistic application allows for the control of flow and its transformation into a kind of permanence.

Permanence as Control of Flow: Totality

It is the control by an external that marks the alterity of the built environment and it as an expression of a particular outlook. Nietzsche (1974) argues that it is the search, the play, the idea of possibility that is unbounded that marks the human outlook. In the *Gay Science* he argues that we seek not to know things but to know that we do not know things, that there is exploration to be done. The application of form that controls flow expresses a preference for control, for totality, for a closed interpretation of the I and the Other. As argued throughout this study, in this case, "we," whatever that means, are both. This openness is the infinity Levinas (1969) describes as the openness that is an ethical obligation given our difference as mutually defining. The application of an external "truth" on an interaction with an Other denies the openness of possibility for the person, therefore denying him or her agency.

The emphasis on logical clarity seeks as a state a bounded condition that defines all clearly. Logical relationships are by definition bounded by rules. The closed system of meaning, the self-defining system is the unethical totality and Levinas might argue there that such a system is unethical because it denies that which is most human, openness to possibility, as expressed by Nietzsche. We might also argue that it denies the possibility of the invisible, as Merleau-Ponty would put it. It denies difference and the valuation of difference. This difference may be in the form of seeking different modes of living, different modes of expression, different preferences for consciousness, or any other difference one may think of. The reduction of flow to permanence, this impulse to "clarity" is among the first of the mental rational, and is intimately connected to the spatialization and mentalization of experience, a primary characteristic of the Western approach to permanence and flux, as Gebser notes:

> This far-reaching and extremely complex question as to the connection between thinking, being, and space. . . led Zeno to those arguments that mark him as being the first relativist. They prompt him to the incisive formulations that give rise to dialectics, which in turn lead via Socrates to logic just one generation later; and with logic, we step out into the clarity of thought where we can breathe freely after having been only too long devoted to magic darkness and mythical twilight.
>
> To be sure, we cannot yet speak of complete mental clarity at the moment when Plato becomes a pupil of Socrates and makes his indelible impression on the Athenian Academy. Clarity is where there is no further search; yet it is precisely this search for truth itself that was characteristic of Socrates and even of Pythagoras. One of Plato's maxims derives from Pythagoras, the first "measurer" of Western civilization. (83-84)

Measurement fixes experience and attempts to control flux. *Form*-ulations categorize and control. Levinas (1969) agrees, arguing that the Western outlook has been a reduction to the same, a denial of difference:

> Western philosophy has most often been an ontology: a reduction of the other to the same interposition of a middle and neutral term that ensures the comprehension of being... This primacy of the same was Socrates' teaching... (43)

Difference and strangeness of the Other allows for spontaneity, the openness Levinas refers to in the form of infinity and the open search of play and difference Nietzsche describes. The ability to perceive difference allows for spontaneity, for openness rather

that closed, bound existence. It is liberation rather than de-liberation, or logical planning (Kramer, 2000). It is unbound rather than bound:

> A calling into question of the same—which cannot occur within the egoist spontaneity of the same—is brought about by the Other. We name this calling into question of my spontaneity by the presence of the Other ethics. The strangeness of the Other, his irreducibility to the I, to my thoughts and possessions is precisely accomplished as a calling into question of my spontaneity, as ethics. (43)

The emphasis on the visible is a reduction of the other into the same. It is the enforcement of totality:

> The neutralization of the other who becomes a theme or object—appearing, that is, taking its place in the light—is precisely his reduction to the same. (43)

The reduction to the same, the giving of primacy to the third term of the synthetic interposed mentalized term that is taken as "real" or somehow superior allows for domination of one person over another. In addition, it allows for the domination of both by the third term, by the deductive form. The form, truistic and self-referential, presents us with a closed universe where all phenomena must fit into one of its forms. The impulse to classification, motivated by the need to preserve the form, forces compliance.

This motivation comes from the boredom of the alien world. A dualistic relationship between human and world means that it is a *not-human* thing. In the logical form, a *not-human* cannot coexist with a human, and is therefore hostile to it, expressing a kind of anxiety that the mental-rational creates. Who can blame the subject of modus ponens? What *p* wants to be annihilated by a *not-p*? Once the duality step is taken by the mental-rational outlook, based in division, in separation, then distance between human

and world is infinite. Once human is *not-world*, then there is no bridging the gap within the mentalized, and more, specifically, the *rationalized* outlook. For the outlook, the two are discrete things. They are not each other. The imposition of a middle term, an abstract synthetic concept of the world is an attempt to reduce the distance between the terms in the hope of bringing them together in the way that the mythological once did. A demythologized landscape is empty of spiritual relevance. There is no heroic action to be taken in a strip mall, save the possibility of stopping a robbery or something similar. The destruction of myth destroys the possibility of heroism (Nietzsche, 1999). Hence the name *middle term* applies to the integrating application of form. The middle term is the only hope for connection between the two as long as the game is mental rationality (Mickunas, 1992). Thus the middle term gets primacy, and its power grows exponentially. This is because the more primacy it gets, the more it will fail to bring human and world closer. Levinas (1969) explains that a middle term must remain always between. It can never be at the two points that define it as the middle:

> Mediation (characteristic of Western philosophy) is meaningful only if it is not limited to reducing distances. For how could intermediaries reduce the intervals between terms infinitely distant? Will not the intervals between the midpoints progressively staked out ad infinitum appear always equally untraversable? If an exterior and foreign being is to surrender itself to intermediaries there must be produced somewhere a great "betrayal." As far as the things are concerned, a surrender is carried out in their conceptualization. As for man, it can be obtained by the terror that brings a free man under the domination of another. For the things the work of ontology consists in apprehending the individual (which alone

> exists) not in its individuality but in its generality (of which alone there is science). The relation with the other is here accomplished only through a third term which I find in myself. The ideal of Socratic truth thus rests on the essential self-sufficiency of the same, its identification in ipseity, its egoism. (44)

So the assignment of such importance to The Same gives the abstract a self-fueling power. Surrender to the Same is nihilistic, because security is lack of difference. One is secure by being secured. This power has been noted to be the self-fueling power of technology as continually changing rendition of the ideal (Mumford, 1963) and magically motivated vital desire for interchangeability (Mickunas, 1998; 1992). Thus, when one claims that technology has a life of its own, he is, in a way, correct. Its ipseity is given by the agents who assent to its power. It is no mistake that Levinas refers to "a surrender" in the above quotation. The simple act of looking up for the traffic signal, as noted in the description of data, is a surrender to an applied form. The turning of oneself into a unit of exchange each day is such a surrender. The willful following of traffic signs is such a surrender. The assignment of primacy to the middle term, to the abstract mentalization and then rationalization, is an assent to power. The idea of the impersonal as truth, the objective eye that sees all, but not from any particular perspective, is the enforcement of The Same, and is therefore an anonymous truth:

> Ontology as first philosophy is a philosophy of power. It issues in the State and in the non-violence of the totality, without securing itself against the violence from which this non-violence lives, and which appears in the tyranny of the State. Truth, which should reconcile persons, here exists anonymously. Universality presents itself as impersonal; and this is another inhumanity. (46)

It is a philosophy of power because it eliminates the human in favor of the ability to level all to the same. In this philosophy, the im-personal is a denial of personhood, a denial of agency. This denial of agency is the application of technology to human as tool for systemization. The magical desire for interchangeability shows itself in the mental-rationalized version to be the desire for interchangeable human beings, where one is no more, or less, useful than another. Quantity replaces qualitative difference. Submission to form is submission to tyranny, an emptying of quality. The questionability of such an approach is demonstrated in Gebser's (1991) reference to the "fall" taken into "mere empty formalism" (p. 83) refers to Heidegger, who is accused of "rationalizing. . . into formulas devoid of any content. . . itself evidence of the inhumanity of his philosophy. . . Heidegger's philosophy is a clear example of the consequences of such psychistic deficiency. . ." (p. 180); this fall is into a nullification, literally, of the human in favor of the formal, in favor of the preferred form, which is a function of the dominant interpretation of the day. As Gebser and Levinas argue, the dominant interpretation of the Western outlook has been the imposition of The Same—the imposition of boredom.

The imposition of the middle term meant to provide a logical technological interchangeability between human and world. Thus the desire for interchangeability is a desire for control, and in the technological outlook of the mental-rational, it is a desire for tyranny. This outlook twists the idea of an open and infinite freedom into a bounded "freedom" of movement that is enabled only within the logical system; the obligation, the "right" and "legal" obligation is to the form, not to the Other as a human agent. Levinas' problem with this idea is that our obligation is to the other, not to an external justice, to Being. Emphasis on ontology is denial of the human and emphasis on tyranny:

> A philosophy of power, ontology is, as first philosophy which does not call into question the same, a philosophy of injustice. Even though it opposes the technological passion issued forth from the forgetting of Being hidden by existents, Heideggerian ontology, which subordinates the relationship with the Other to the relation with Being in general, remains under obedience to the anonymous, and leads inevitably to another power, to imperialist domination, to tyranny. Tyranny is not the pure and simple extension of technology to reified men, its origin lies back in the pagan "moods," in the enrootedness in the earth, in the adoration that enslaved men can devote to their masters. *Being* before the *existent*, ontology before metaphysics, is freedom (be it freedom of theory) before justice. It is a movement within the same before obligation to the other. (46-47).

Here Levinas acknowledges the multiplicity of the impulse to power, that is explained by the magical motivation of technology. The desire for interchangeability motivates the technological. When applied to objects, the result has been science, which has had some success in alchemistically changing things into other things. Ontology as first philosophy, however, applies this outlook to human agents and generates an obligation to the system, to the form, that comes prior to the obligation to the Other. This outlook is the basis for the utilitarian concern that the good of the many must outweigh the good of the one, which always subjugates the one to the many, empowering the mass of unitized individuals over the unique individual.

In this we can see that what is in one form in the magical appears in another form in the mental-rational. In the magical, all things are simply interchangeable. This does not mean they have equal "value," for a system. It means that there is only identity.

There is no difference. In the mythic world, all things have meaning and purpose, but in the divided mental-rational world, only the systemically sanctioned has meaning, and only then in quantity. It is a reduction to form, as in the decay or "ruins," which are lumped together, but were once distinct. The reduction of difference to the Same, is a form of violence according to Levinas. Theory, or the emphasis on abstraction, is the means of resolving conflict, of literally "resolving differences." The philosophical reduction to the same is violence:

> For the philosophical tradition the *conflicts* between the same and the other are resolved by theory whereby the other is reduced to the same—or, concretely, by the community of the State, where beneath anonymous power, though it be intelligible, the I rediscovers war in the tyrannic oppression it undergoes from the totality. Ethics, where the same takes the irreducible Other into account, would belong to opinion. The effort of this book is directed toward apperceiving in a discourse a non-allergic relation with alterity, toward apperceiveing Desire—where power, by essence murderous of the other, becomes, faced with the other and "against all good sense," the impossibility of murder, the consideration of the other, or justice. Concretely our effort consists in maintaining, within anonymous community, the society of the I with the Other—language and goodness. (47)

Thus Levinas' goal in *Totality and Infinity* is to find a way to value the individual's interaction with the other in the face of the anonymous power that seeks to eliminate individuality for each. This position acknowledges the inescapability of perspective, the mental element of the outlook, the emergence of the ego by acknowledging the infinity of

the distance between individuals. The other can no longer be identical or interchangeable with me since we are not in the magic world any more. We are bound by experience to the ego. Once experience is gained, one cannot return to the previous outlook completely. The implication is that the individual must be valued, since he is human and distinct. The balancing act is to preserve the uniqueness of the mental aspect of individuality without stepping into the dehumanizing realm of the rationalized conception of the human, where quantified difference is all that may distinguish a person, rather than the qualitative difference expressed by ego. A holding fast of the individual occurs when this step is taken, replacing communion as a communicative mode with nodal transfer of information. Levinas approaches this argument:

> And to have substituted for the magical communion of species and the confusion of distinct orders a spiritual relation in which beings remain at their post but communicate among themselves will have been the imperishable merit of the "admirable Greek people," and the very institution of philosophy. (48)

One should remain at one's post (node?) and allow the middle term—the abstract mental-rationalized application of form to lived world—to mediate meaning. This outlook fixes individuals in points (spatio-temporal location) and asks them—demands of them—to communicate via the system and to continually perform the reduction to the Same. This is a functionalization of the human's being. Meaning is no longer a function of the interaction between or the co-constructed interrelationship between human and human. It is now the interaction between the I, the Other, and the Same, with the Same taking the dominant role. Interpretation by the human agent submits to interpretation by The Same,

as in the case of government mediation of disputes. We may take Levinas' apparent sarcasm in the above passage as evidence his opinion of this outlook as unethical.

For Gebser, this functionalization is the quantification of humans for the utility of the system. The "third element" (Gebser, 1991, p. 86) of the relationship, the attempt to rejoin world and human results only in an unstable and momentary relationship. The middle term is only applicable for the frozen moment in which it is applied. It is unstable because it does not have a meaning outside of quantified time, outside of the logic system in which it applies. It is stable only if flux is brought under the control of permanence. Only when flow is understood as successive frames of permanence, definable and systematic, is it stable as a morphology. Gebser explains this instability:

> Here we encounter again the relation of the mental to the magic structure inasmuch as the mediating or reconciling (*ver*söhn*end*!) third aspect aspires to a *unification*. This unstable form of unity is expressed by the fact that the antithesis or contraries are only able to beget a third element in a temporary or for-better-or-for-worse union, a *tertium* which is again separated at the moment of its birth. Accordingly, it does not represent a new unity but merely a quantity that becomes more dependent on its antithesis or opposite, which it in turn creates once more a momentarily unifying *tertium*. In this we see a further characteristic of our civilization: quantification—for the unification or synthesis via a third element can never be completed in time, only in the moment. The third element, freeing itself, becomes the procreator and carrier of the contraries able to engender a new unification and synthesis. (86)

Here Gebser specifically argues that the impulse to quantification gives the third term a power to self-reproduce, contributing to technology's self-fueling capacity. Arresting flux gives permanence the power of definition. The middle term takes on a life of its own, especially in the case of the abstract quantitative, which can never be truly a part of the severed polarity of the mythical world. Defined by duality (literally), the quantified attempt to re-enmesh human and world will always be unstable and limited, evincing flux even as the attempt is made to arrest it.

The Built Environment as Religious Expression

The joining of human agent and world through a middle term is the giving of primacy to the abstract (Kramer, 2000) and the giving of auto-matic power to the abstract (Mickunas, 1992). Murphy and Choi (1992) interprets Gebser as pointing out that the giving of primacy to the external is a form of self-denial in favor of faith in external method. It is a devaluing and attempt to eliminate the role of individual perspective:

> What is the thrust of this cognitive schism? As Gebser illustrated, experience is divided into two opposing realms, usually referred to as subjectivity and objectivity. This is a more complete separation than was proposed by Locke, for example, for subjectivity does not add anything to objectivity. Similar to the fact-value distinction mentioned earlier, subjectivity is believed to be irrational and to stifle the revelation of true knowledge.
>
> Therefore, according to Gebser, access to reality is achieved only subsequent to engaging in self-denial... The human element or interpretation must be removed from the process of acquiring knowledge so that facts can be directly encountered, controlling interpretation is accomplished through various means,

such as experimentation, quantification, and computerization. In each case, the purpose is to convince persons that the human presence is ancillary to the discovery of objective knowledge. Be mechanizing the research act, an omnipotent reality can finally be reached. The "other side," as Gebser called it, can be entered. (205)

The language here ("omnipotent") coincides with the conclusion of this discussion below. It is the devaluing of the human presence in favor of an external superiority that has been noticed again and again in the data of this study. The mechanistic characterizes the planning process and accordingly is evident in the result. The built environment is mechanical and, more specifically, automatic. The auto-matic stresses the self-fueling capacity of the built environment. Traffic systems operate without attention from human operators, for example. From a communication perspective, one can argue that the built environment is a speech act. Its doing is its being. Its emphasis is on making its form present. The form is normalized in its enactment. Murphy and Choi further elaborate Gebser's argument, explaining the normalization of the primacy of the external:

> Gebser declared that this leap beyond experience is impossible. The prospect of such a course of action is the result of perverting experience. Gebser claimed that the influence of interpretation can never be concealed, although it can be distorted to such an extent that the world is reified. In other words, persons may begin to believe that knowledge, unmediated by the human element, can be acquired. Gebser claimed that if such self-denial is successful, the "externalization" of knowledge may become recognized as normative. Karl Marx referred to this unfortunate condition as alienation. A society is clearly in trouble

when insight is considered antagonistic to personal or collective existence. (204-205).

The alterity observed in the built environment expresses a belief in an omnipotent externality that is superior to the human insight. The built environment is the application of this belief to the mode of habitation. The observations here confirm the ideas of several thinkers, as has been argued in this chapter as well as in the previous chapter. The middle term is viewed as omnipotent, as Murphy and Choi argue. Omnipotence as a concept has been worshipped throughout history, as Mumford and others have argued. Science is aimed at omnipotence and as such falls into the category. Mumford notes that arrangement of human agents and space into a built environment was one of the earliest and has remained the substance of what he terms the "megamachine." This arrangement may be read as religious in nature in one of its modes of expression. Mickunas (1992) argues this and his argument has appeared in many places in this study.

The current obsession with planned space is only the latest expression of the old impulse toward arranging space in accordance with religion. Some Muslims, for example, orient themselves toward Mecca, literally, several times each day. Church spires point up in indication of a belief in a "higher" power. Feng Shui posits that energy must be allowed to flow freely, unblocked by sharp corners, which send "arrows" toward the occupants of a house, and that the energy should not be directed away from the house through improper arrangement. Clearly, the arrangement of space as a faith-act pervades human habitation and has been present historically.

Planning is an expression of the religion of science, which seeks omnipotence via transcendentalism. Briefly, science consists of utterances and incantations such as the

formulae that guide planning, as well as rituals that result in outcomes posited by scientists who perform these activities in the faith that the proper outcome will obtain. Science has been the most successful of activities that seek to interchange substances and control the material world. Because it has been more successful than previous incantation and ritual activities, we have approached it religiously with more energy than any other. We have emphasized the role of the priests of science.

Its emphasis on interchangeability marks it as a magical as well as a mental-rational activity. Its emphases on mystery as well as utterance and symbol mark it as mythic. The main activity of science is the manipulation of symbols with the stated goal of transforming or interchanging elements of the material world. Mathematics, chemistry, physics, and the like all emphasize the manipulation of symbols. Planning is the manipulation of symbols of statistics and other measurements meant to produce an outcome. In the social sciences, the interchangeability of *pars pro toto* is attempted through statistical utterances and symbol manipulation. The activity is an exercise in the attempt to transform populations into a standard form. In this way, the activity is religious. It is magical, mythic, and mental-rational in that it attempts to remake humans through utterance into unitized phenomena. The minimization of difference is an expression of both the identity of magic and the quantitative duality of the mental-rational.

Perhaps this explains the impulse to order that lies behind any architectural enterprise, especially planning. Such a point allows us to admit an efficient and deficient mode for planning. An argument may be made for benefit, both in terms of what counts

as good within the planning mentality and outside of it. There are also costs within and outside of the paradigm.

Science is looking for God (Hawking, 1990, argues that the search for unifying order in the universe is a search for an order that can be thought of as "god.") and the drive to obtain visio-centric external objectivity—to be "over" and all-seeing of the world--is inherent in science (Merleau-Ponty, 1968). The activity of seeking total power over time and space is the seeking of God, which has been understood by many religions as having definitive power over time (omnitemporality) and space (omnipresence). *Omni-potence* describes God and also the goal of science: Having all *power*. Activities that accord with the goals of science are those that seek to contribute to the overall understanding of temporal and spatial omnipotence. Other cultures and civilizations, past and present, have practiced the arrangement of space aimed at expressing faith and therefore pleasing a god who possesses these powers. Scientific planning of space also seeks to please the gods of order and efficiency. This planning is carried out and then lived in the faith that order and efficiency will then obtain and will bestow blessings on those that have accorded with their ways. This is in service to the market-god or market-religion (Frank, 2000, explores considerations of the religiosity of "The Market"), which we seek not to "upset," and whose reaction we monitor with obsessive interest. How the "Market will react" is one of our greatest concerns. The mechanization of lived space is an expression of the this belief. We seek to integrate the ritual of mechanized living into our lived experience with the faith that god will bless us. It is a similar expression to the sacrifices that used to ensure good harvests.

The progression from origin has been the dissociation from the world and from each other (Gebser, 1991; Kramer, 1997). The impulse to external justice (formalistic convention) is an attempt at understanding ourselves by inventing the Other as perfection. Thus, God is about the self. Animals have no gods (as far as we can tell, at least) because they do not have such an extensive sense of separation from the world. We split ourselves into the duality of Other/Self-as-perfection and Self-as-is-in-the-world to better understand and "make sense," literally, out of our difference from world. There is no sense organ that is separate from the material world, so we need a mechanism for sensing that which is separate from the world, once we have posited the secondary, abstract world. Religion gives a sense making mechanism (method) for understanding our difference from the world. It is technological and also vital in its motivation (Mickunas, 1992). The metaphysics of presence and difference are more important than we realize because they are our guiding motives. Knowledge of death creates the metaphysics of presence and our dissociation from world creates the metaphysics of difference. Our existence is our problem (in the sense of meaning). Thus Nietzsche's (1974) assertion that we seek the unknown to give ourselves significance is about our quest to account for dissociation. The finding of otherness in the examination of self is the finding of the external as shaper of the internal. As Madison (1990) notes, historically thinkers have posited an external world (objectivity) and then have tried to reach it or at least recreate it:

> In Augustine, there is yet—nota bene—nothing "subjectivistic" about this turn to subjectivity. For what Augustine discovered by going "inside," into his innermost self, was nothing other than Otherness itself: the truth (the presence) of that which

> is most real, the reality (presence) of other (human) selves and, above all, the reality of that supremely Other Self, that *Alter ego* which is "more me than myself," the *ens realissimum*, God. The Supremely Other (le Tout Autre) is discovered in the innermost reaches of the presence of the self to itself: it is, quite simply, *intimior intimo meo* ("deeper than my inmost understanding"). (29)

We divorce from world and try to rejoin it. In this sense, religion can clearly be seen as contempt for and also emphasis on self and the possibility of enframing (Heidegger, 1954) presents the possibility of denial of mystery and therefore self—the greatest danger in technology, according to Heidegger.

This helps to explain the dissociation of planned built environments that has been observed in this study. Our sacred is the signalic. We are doing our religion (science and ratio) with our spatial arrangement, just as all civilizations have. Our sacred is self-estrangement in the sense of identity destruction and the assault of the mental-rational technological on the magical vital soul and spirit. The imposition of the signalic on the magical and symbolic is self-estrangement. We do self-examination through self-estrangement in all of our religious quests. Space planning is no different. They are at odds. We make religious war in ourselves, just as we always have, only through spatialization now. So, there is no absence of the sacred in contemporary lived space. It is, rather, a sacred dissociation. We live profane lives that implicate the sacred as absent. This is a qualitative flattening of the sacred and profane. The abstraction in the built environment is as taken for granted as other cosmologies have been in planning. Modern capital and measurement stress unitization and exchange. They stress the erasing of difference, the erasing of self, as argued above. This erasing is treated as "real" in the

same sense that sacrifices were treated as "real" in other cosmologies throughout history. We deny self for God. We live in penitentiaries, literally, as the penitent. We honor our gods through planning. Improper planning will harm the economy, in which we must "have confidence" and which we must protect. The incorrect arrangement of space will fail to protect (adore) the economy, so we must build accordingly. God and order become one as the structuring element of planning. That this is religious seems apparent based on the observations made here. The truth of a religion is taken as self-evident. We have enacted a belief: That planning will bring blessing is as clear to us as is God's existence to the truly religious. Neither is questioned by the true believer.

Limitations and Directions for Future Research

To point out the limitations of a study surveying such a broad set of phenomena and making what are admittedly very broad claims seems almost pointless. The limitations are as many as perspectives that may be imagined. As argued earlier, an interpretive study is limited to the perspective of the interpreter and his or her influences. This study is a result of my observation of the built environment in various but redundant settings. Before everything else, I must offer that it is most fundamentally limited to my perspective. Beyond that there are elements that could have strengthened such a study and some indications for future research.

To begin, this study attempts to respond to and interpret architecture and planning in the form of categorical classification thought logical ordering and writing. While both are symbolic designs, each has unique qualities as a kind of communication. Writing about architecture and material design is akin to building a house about an essay. There are correspondences, but they are expressed very differently. Architectural response to

modernism, for example, is a case of response within a mode of communication that may more directly comment on the object of its interpretation.

Similarly, this study began with categories and classification as a goal. It enacts much of the very outlook it has observed in the built environment and has critiqued in this chapter. This is a result of the necessity of form. A dissertation is a written document that enacts a design based in rhetoric and logic. As a piece of rhetoric, it attempts to communicate to the audience about a probable interpretation through writing. Its place in a field, in this case social science, human science, or even as a part of humanities research calls for it to divide and classify its subject according to pattern or to isolate it as distinct and describe as unique. Regardless of the regional ontology form which it approached, it is inherently classificatory, and therefore also a mental rational expression, and perhaps subject to all of the appropriate criticisms.

Third, such a study is limited by the nature of its subject. The built environment is so pervasive as to be endlessly definable. Whether one approached the topic morphologically or situationally, the built environment offers much more than can be addressed in one study. Units of meaning must be chosen for study from among many candidates. Even within the boundaries drawn for this study, numerous objects were not reported here and deserve extensive study on their own. Churches, for example, are ubiquitous elements of the built environment in America that were not addressed here. Future research could certainly explore the multidiscursive expressions of their architecture.

Schools are another element of the built environment that could be fruitful for study. The naming of schools presents a mythic expression while the architecture of

most schools is very modern and administrative, as Kuntsler (1993) has pointed out. This is another case of multidiscursivity in the built environment that may be found in any American town or city. Similarly, hospitals and government buildings offer like cases for future research efforts.

In terms of the claims about mechanization, future research could (and probably should) address the role of algorithmic instruction sets in the structuring of contemporary individual lived experience. In particular, ethnographic and phenomenological study of the everyday life of occupants of the built environment might further elaborate the motion/stasis quality outlined here as expressed in the built environment. The application of formalism to unitized human agents should be studied by following people through their days and observing them as they are directed through form. This study focused on the forms. Other studies could focus on the directed. In particular, this would explore the confluence of the mechanization of indoor life, especially in the home, as documented by Giedion (1967) and the mechanization of life outside the home.

One can also argue that more data could have been collected. There are thousands of cities that were not observed. While much of the built environment appears similar to me, and has been argued to be very redundant by many authors, we must admit that from an inductive standpoint, this sample is hardly significant and may not be representative. Qualitatively, the argument was made earlier for the acceptability of a study like this. From a pseudo-quantitative standpoint, there are simply a lot of cities that were not observed, leaving a lot of the subject of study unaccounted for. Accordingly, one could restrict the findings of this study to just the built environment observed in this

study. Any generalizability claimed here is made on the basis of other studies and an argument. This justification is made in the method section of this study.

Finally, we should address the possibility that this argument has fallen victim to a seductive metaphor. Dohrn van-Rossum (1996) faults Mumford for falling into the "seductive" metaphor of "the machine," for example, and this metaphor figures heavily into this study. This limitation or problem is addressed in much of this study and interpretation. The built environment expresses the machine outlook. Evidence for this is the main activity of the study. Still the objection could be made that the categories outlined by various thinkers led to a case of seeing what was already outlined. One posits a machine, so one sees a machine. As argued in this chapter, this is the process that may be read as constituting the built environment. Control of flux through permanence is a kind of technics. A categorical treatment of a lived process is similar.

While we may acknowledge that this study is an interpretation of some of the elements of the built environment, and, in fact, some of the most obvious of them, we may also recognize that the communication of interpretation has been a basic element of all technics, including that described in this study. As noted earlier, the built environment arose as a result, in part, of the ability to reflect in seclusion and in leisure. As Mumford (1967), Giedion (1969), and Levinas (1969), among others have pointed out, the built external world begins with the internal imagination. Accordingly, this effort may be seen as a communication of an interpretation from a perspective, but as having value since it enacts part of our basic method for creating the built environment: Reflection. Mumford (1944) notes that this ability to communicate the inner experience through representation is in fact our greatest tool:

> The social division of labor found in some degree in all human societies was made possible by an even earlier human advance: the invention of symbolization and the development of language. This is the most specifically human characteristic; and it has given a special kind of cohesion to the human community: that which results form a common response to a common group of symbols. Man's natural environment is complemented by his *idolum*: and by idolum I mean a symbolic milieu composed of images, sounds, words, fabrications, and even natural objects to which man has attached a representative value. Symbolic representation makes possible an interchange of experiences without respect to immediate limitations of time and space. As man found ways of creating "permanent" symbols in stone or reproducing his symbols by manifolding and copying, he has been able to make larger and larger areas of his otherwise private experience available to other men, though they are separated from him by birth or distance. (8)

Mumford continues on to say on page 9 that representation of inner reflection is "a more miraculous tool than the fire that Prometheus stole from heaven." This study does enact a language activity that relies on categories and difference. This is a result of the inescapability of perspective, which this study admits and celebrates. In the spirit of deconstruction, accordingly, this limitation is also its strength.

References

Al-Khalil, S. (1991). *The monument: Art, vulgarity and responsibility in Iraq.* Berkeley: University of California Press.

Altman, I. (1993). Dialectics, physical environments, and personal relationships. *Communication Monographs, 60*, 26-34.

Bardini, T., & Horvath, A. T. (1995). The social construction of the personal computer user. *Journal of Communication, 45*, 40-63.

Barthes, R. (1988). *The semiotic challenge.* New York: Hill and Wang.

Becker, S. W. (2000). The rhetoric of architecture: Civic republican space in early Boston. *Dissertation Abstracts International, 61*, (06A), 2101.

Benford, G. (1999). *Deep Time: How humanity communicates across millennia.* New York: Avon.

Bentham, J. (1995). *The panopticon and other prison writings.* New York: Verso.

Berlinski, D. (1995). *A tour of the calculus.* London: Heinemann.

Bernstein, R. J. (1983). *Beyond objectivism and relativism: Science, hermeneutics, and praxis.* Philadelphia: University of Pennsylvania Press.

Birmingham, E. (1999). Reframing the ruins: Pruitt-Igoe, structural racism, and African-American rhetoric as a space for cultural critique. *Western Journal of Communication, 63*, 291-309.

Black, M. (1962). *Models and metaphors.* Ithaca, NY: Cornell University Press.

Blair, C., Jeppeson, M.S., & Pucci, E., Jr. (1991). Public memorializing in postmodernity: The Vietnam Veterans Memorial as prototype. *The Quarterly Journal of Speech*, *77*, 263-288.

Burke, K. (1969). *A rhetoric of motives.* Berkeley: University of California Press.

Burke, K. (1966). *Language as symbolic action: Essays on life, literature, and method.* Berkeley: University of California Press.

Broadbent, G. (1980). The deep structures of architecture. In G. Broadbent, R. Bunt, R. & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp.119-168). New York: John Wiley and Sons.

Broadbent, G., Bunt, R., & Jencks, C. (Eds.). (1980). *Signs, symbols, and architecture.* New York: John Wiley and Sons.

Campbell, J. (1988). *The power of myth.* New York: Anchor Books.

Carbaugh, D. (1999). "Just listen": "Listening" and landscape among the Blackfeet. *Western Journal of Communication, 63*, 250-270.

Carlson, A.C., & Hocking, J E. (1988). Strategies of redemption at the Vietnam Veterans' Memorial. *Western Journal of Speech Communication, 52*, 203-215.

Cassirer, E. (1944). *An essay on man.* New Haven, CT: Yale University Press.

Chomsky, N. (1975). *Reflections on language.* New York: Pantheon.

Clarke, A. C. (1987). *The city and the stars.* New York: Signet.

Collier, J. & Collier, M. (1986). *Visual anthropology: Photography as a research method.* Albuquerque: University of New Mexico Press.

Croft, S.E. (1999). Creating locales through storytelling: An ethnography of a group home for men with mental retardation. *Western Journal of Communication, 63*, 329-347.

Culler, J. (1982). *On deconstruction: Theory and criticism after structuralism.* Ithaca, NY: Cornell University Press.

Davis, K. (1965). The urbanization of the human population. *Scientific American,* 213 (3), 41-53.

Davis, M. (1990). *City of quartz: Excavating the future in Los Angeles.* New York: Vintage.

Davis, O.I. (1999). In the kitchen: Transforming the academy through safe spaces of resistance. *Western Journal of Communication, 63,* 364-381.

Derrida, J. (1978a). *Edmund Husserl's Origin of Geometry: An introduction.* Stony Brook, NY: Nicholas Hays.

Derrida, J. (1978b). *Writing and difference.* Chicago: University of Chicago Press.

Derrida, J. (1976). *Of grammatology.* Baltimore: Johns Hopkins University Press.

Derrida, J. (1973). *Speech and phenomena.* Evanston, IL: Northwestern University Press.

Deutsche, R. (1997). *Evictions: Contemporary art, urbanism, and spatial politics.* Dissertation Abstracts International, 58, (05A), 1476. (University Microfilms No. 9732912)

Dillon, M. C. (1990). Écart: Reply to Lefort's "Flesh and otherness." In G. Johnson & M. Smith (Eds.), *Ontology and alterity in Merleau-Ponty* (pp. 14-26). Evanston, IL: Northwestern University Press.

Dohrn-van Rossum, G. (1996). *History of the hour: Clocks and modern temporal orders.* Chicago: University of Chicago Press.

Dreyfus, H. L. (1999). *What computers still can't do.* Cambridge, MA: MIT Press.

Duany, A., Plater-Zyberk, E., & Speck, J. (2000). *Suburban Nation: The rise of sprawl and the decline of the American dream.* New York: North Point Press.

Eaves, M.H., & Leathers, D.G. (1991). Context as communication: McDonald's vs. Burger King. *Journal of Applied Communication Research, 19*, 263-289.

Eco, U. (1980). Function and sign: The semiotics of architecture. In G. Broadbent, R. Bunt, & C. Jencks (Eds.), *Signs, symbols, and architecture* (pp. 11-69). New York: John Wiley and Sons.

Eco, U. (1976). *A theory of semiotics.* Bloomington: Indiana University Press.

Ehrenhaus, P. (1988a). Silence and symbolic expression. *Communication Monographs, 55*, 41-57.

Ehrenhaus, P. (1988b). The Vietnam Veterans Memorial: An invitation to argument. *Journal of the American Forensics Association, 25*, 54-64.

Ellul, J. (1964). *The technological society.* New York: Vintage.

Festinger, L. (1962). *A theory of cognitive dissonance.* Stanford: Stanford University Press.

Fischer-Lichte, E. (1992). *The semiotics of theatre.* Bloomington, IL: University of Indiana Press.

Fisher, V., Gleiniger-Neumann, A., Klotz, H., & Schwartz, H. (Eds.). (1985). *Postmodern visions: Drawings, paintings, and models by contemporary architects.* New York: Abbeville.

Foss, S.K. (1986). Ambiguity as persuasion: The Vietnam Veterans Memorial. *Communication Quarterly, 34*, 326-40.

Foucault, M. (1977). *Discipline and punish: The birth of the prison.* New York : Pantheon Books.

Frank, T. (2000). *One market under God.* New York: Doubleday.

Freud, S. (1961). *Civilization and its discontents.* New York: W.W. Norton and Company.

Gadamer, H. (1989). *Truth and method.* New York: Continuum.

Gallagher, V.J. (1994). Remembering together? Rhetorical integration and the case of the Martin Luther King, Jr. Memorial. *The Southern Communication Journal, 60,* 109-119.

Gallagher, W. (1993). *The power of place.* New York: Poseidon.

Gandelsonas, M. (1972). On reading architecture. *Progressive Architecture, 53* (March), 68-88.

Gebser, J. (1991). *The ever-present origin.* Athens, OH: Ohio University Press.

Gebser, J. (1940). *Abendländische wandlung.* Zurich: Oprecht.

Gleick, J. (1999). *Faster: The acceleration of just about everything.* New York: Pantheon.

Giedion, S. (1969). *Mechanization takes command.* New York: W. W. Norton & Company.

Giedion, S. (1967). *Space, time, and architecture.* Cambridge, MA: Harvard University Press.

Giedion, S. (1958). *Architecture you and me: The diary of a development.* Cambridge, MA: Harvard University Press.

Goffman, E. (1963). *Behavior in public places: Notes on the social organization of gatherings.* New York: Free Press of Glencoe.

Goffman, E. (1956). *The presentation of the self in everyday life.* New York: Doubleday.

Goodsell, C.T. (1988). *The social meaning of civic space: Studying political authority through architecture.* Lawrence, KS: University Press of Kansas.

Goss, B. (1982). *Processing communication.* Belmont, CA: Wadsworth.

Guillerme, J. (1977). The idea of architectural language: A critical inquiry. *Oppositions, 10(Fall)*, 21-26.

Gumpert, G., & Drucker, S.J. (1992). From the agora to the electric shopping mall. *Critical Studies in Mass Communication, 9*, 186-200.

Haines, H.W. (1986). What kind of war: An analysis of the Vietnam Veterans Memorial. *Critical Studies in Mass Communication, 3*, 1-20.

Hall, E.T. (1966). *The hidden dimension.* New York: Doubleday.

Harlow, A. F. (1928). *Old post bags: The story of sending a letter in ancient and modern times.* New York: D. Appleton & Co.

Hattenhauer, D. (1984). The rhetoric of architecture: A semiotic approach. *Communication Quarterly, 32*, 71-7.

Hawking, S. (1990). *A brief history of time.* New York: Bantam.

Heidegger, M. (1954). *The question concerning technology and other essays.* New York: Harper & Row.

Hiss, T. (1990). *The experience of place.* New York: Vintage.

Howe, G. (1944). Monuments, memorials and modern design—an exchange of letters. *Magazine of Art, 37*, 202-207.

Husserl, E. (1997). *Thing and space: Lectures of 1907.* Dorcrecht: Kluwer.

Husserl, E. (1993). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy, second book.* Dordrecht: Kluwer.

Husserl, E, (1970). *The crisis of European sciences and transcendental phenomenology.* Evanston, IL: Northwestern University Press.

Innis, H. A. (1986). *Empire and communications.* Victoria, B.C.: Press Porcepic.

Innis, H. A. (1964). *The bias of communication.* Toronto: Univerity of Toronto Press.

Jakobson, R. (1980). *The framework of language* Ann Arbor, MI: University of Michigan Press.

Jencks, C. (1981). *The language of post-modern architecture.* London: Academy Editions.

Jencks, C. (1972). Rhetoric and architecture. *Architectural Association Quarterly, 4*, 4-17.

Johnson, G. (1990). Introduction: Alterity as reversibility. In G. Johnson & M. Smith (Eds.), *Ontology and alterity in Merleau-Ponty* (pp. xvii-xxxiv). Evanston, IL: Northwestern University Press.

Kay, J. H. (1997). *Asphalt nation.* New York: Crown.

Konar, E., & Sundstrom, E. (1986). Status demarcation and office design. In J.D. Wineman, (Ed.). *Behavioral issues in office design.* New York: Von Nostrand Reinhold.

Kramer, E. M. (2000). Contemptus mundi: Reality as disease. In V. Berdayes and J.

Murphy (Eds.), *Computers, Human Interaction, and Organization: Critical Issues* (pp. 31-53). Westport, CT.: Praeger.

Kramer, E.M. (1997). *Modern/postmodern: Off the beaten path of postmodernism.* Westport, CT: Praeger.

Kramer, E. M. (1994). Making love alone: Videocentrism and the case of modern pornography. In K. Callghan, (Ed.). *Ideals of feminine beauty* (pp.79-98). Westport, CT: Greenwood.

Kramer, E. M. (1993). Understanding co-constitutional genesis. *Integrative Explorations, 1*(1), 41-47.

Kramer, E. M. (1992). Gebser and culture. In E. Kramer (Ed.), *Consciousness and culture: An introduction to the thought of Jean Gebser* (pp. 1-60). Westport, CT: Greenwood.

Kramer, E. M., & Ikeda, R. (2001). Japanese clocks: Semiotic evidence of the perspectival mutation. *The American Journal of Semiotics, 17*, 71-137.

Kuntsler, J. (1996). *Home from nowhere.* New York: Simon & Schuster.

Kunstler, J. (1993). *The geography of nowhere.* New York: Touchstone.

Lakoff, G., & Johnson, (1980). *Metaphors we live by.* Chicago: University of Chicago Press.

Langer, M. (1990). Merleau-Ponty and Deep-Ecology. In G. Johnson & M. Smith (Eds.), *Ontology and alterity in Merleau-Ponty* (pp. 1145-129). Evanston, IL: Northwestern University Press.

Leathers, D.G. (1976). *Nonverbal message systems.* Boston: Allyn & Bacon.

Leeds-Hurwitz, W. (1993). *Semiotics and communication.* Hillsdale, NJ: Lawrence Erlbaum.

Levinas, E. (1969). *Totality and infinity.* Pittsburgh: Duquesne University Press.

London, B., & Palen, J. (1984). *Gentrification, displacement, and neighborhood revitalization.* Albany, NY: State University of New York Press.

Los Angeles Municipal Code, fifth edition, (1997).

Lynd, R. S., & Lynd, H. M. (1929). *Middletown: A study in American culture.* New York: Harcourt Brace Javanovich.

Madison, G. B. (1991). Flesh as otherness. In G. Johnson & M. Smith (Eds.), *Ontology and alterity in Merleau-Ponty* (pp. 27-34). Evanston, IL: Northwestern University Press.

Manning, P. K. (1987). *Semiotics and fieldwork.* Newberry Park: Sage.

McKerrow, R.E. (1999). Space and time in the postmodern polity. *Western Journal of Communication, 63*, 271-290.

McLeod, M. (1985). Architecture. In S. Trachtenberg (Ed.), *The postmodern movement: A handbook of contemporary innovation in the arts* (pp. 19-52). Westport, CT: Greenwood.

Mehrabian, A., & Diamond, S.G. (1971). Effects of furniture arrangement, props, and personality on social interaction. *Journal of Personality and Social Psychology, 20*, 18-30.

Merleau-Ponty, M. (1968). *The visible and the invisible.* Evanston, IL: Northwestern University Press.

Meyrowitz, J. (1997). Shifting worlds of strangers: medium theory and changes in "them" versus "us". *Sociological Inquiry, 67*, 59-71.

Mickunas, A. (2000). The thirteenth hermeneutic: Destruction and the borrowed power. *Integrative Explorations: Journal of Culture and Consciousness, 6* (1), 41-52.

Mickunas, A. (1998). Permanence and flux. In B. Hopkins, (Ed.), *Phenomenology: Japanese and American perspectives* (pp. 253-272). Dordrecht: Kluwer

Mickunas, A. (1997). Dialogue and race. In. E. Kramer, (Ed.), *Postmodernism and race* (pp. 51-64). Westport, CT: Praeger.

Mickunas, A. (1992). Magic and technological culture. In E. Kramer (Ed.), *Consciousness and culture: An introduction to the thought of Jean Gebser* (pp. 125-145). Westport, CT: Greenwood.

Miles, E.W., & Leathers, D.G. (1984). The impact of aesthetic and professionally related objects on credibility in the office setting. *The Southern Speech Communication Journal, 49*, 361-379.

Mlodinow, L. (2001). *Euclid's window: The story of geometry from parallel lines to hyperspace.* New York: Touchstone.

Montgomery, R. (1985). Pruitt-Igoe: Policy failure or societal symptom. In B. Checkoway & C. Patton (Eds.), *The metropolitan Midwest* (pp. 229-243). Chicago: University of Illinois Press.

Mumford, L. (1967). *Technics and human development: The myth of the machine volume one.* New York: Harcourt, Brace, Javanovich.

Mumford, L. (1964). *The highway and the city.* New York: Mentor.

Mumford, L. (1963). *Technics and civilization.* New York: Harcourt, Brace, Javanovich.

Mumford, L. (1961). *The city in history.* New York: Harcourt, Brace, and World.

Mumford, L. (1955). *Sticks and stones: A study of American architecture and civilization.* New York: Dover.

Mumford, L. (1949). Monumentalism, symbolism, and style. *Architectural Review, 55,* 173-180.

Mumford, L. (1944). *The condition of man.* New York: Harcourt, Brace and Co.

Murphy, J. & Choi, J. M. (1992). Jean Gebser, the commonweal, and the politics of difference. In E. Kramer (Ed.), *Consciousness and culture: An introduction to the thought of Jean Gebser* (pp. 201-215). Westport, CT: Greenwood.

Newman, O. (1972). *Defensible space.* New York: McMillan.

Nietzsche, (1999). *The birth of tragedy and other writings.* Cambridge: Cambridge University Press.

Nietzsche, F. (1974). *The gay science.* New York: Vintage.

O'Sullivan, T., Hartley, J., Saunders, D., & Fiske, J. (Eds.). (1983). *Key concepts in communication.* London: Metheun.

Peirce, C. S. (1985). Logic as semiotic: The theory of signs. In R. E. Innis (Ed.), *Semiotics: An introductory anthology* (pp. 4-27). Bloomington: Indiana University Press.

Peirce, C. S. (1931-1958). *Collected papers.* (C. Hartshorne & P. Wiess, Eds. [Vols. 1-6] & A. W. Banks, Ed. [Vols. 7-8]). Cambridge, MA: Harvard University Press.

Peperzak, A. (1993). *To the other: An introduction to the philosophy of Emmanuel Levinas.* West Lafayette, IN: Purdue University Press.

Petty, R.E., & Cacioppo, J.T. (1981). *Attitudes and persuasion: Classic and contemporary approaches.* Dubuque, IA: Wm. C. Brown Company.

Philipsen, G. (1975). Speaking "like a man" in Teamsterville: Culture patterns of role enactment in an urban neighborhood. *Quarterly Journal of Speech, 61*, 13-22.

Postman, N. (1993). *Technopoly.* New York: Vintage Books.

Postman, N. (1985). *Amusing ourselves to death: Public discourse in the age of show business.* New York: Penguin.

Portughesi, P. (1980). *After modern architecture.* New York: Rizzoli.

Rainwater, L. (1970). *Behind ghetto walls.* Chicago: Aldine.

Rapoport, A. (1982). *The meaning of the built environment: A nonverbal communication approach.* Beverly Hills, CA: Sage.

Ricoeur, P. (1998). *Hermeneutics and the human sciences.* Cambridge: Cambridge University Press.

Ricoeur, P. (1970). *Freud and philosophy: An essay on interpretation.* New Haven: Yale University Press.

Rosenblatt, J.H. (1996). *Space on Earth: The story of urban mountain.* New York: Vantage Press.

Saussure, F. de (1969). *Course in general linguistics.* New York: McGraw-Hill.

Schopenhauer, A. (1969). *The world as will and representation, Vols. I and II.* New York: Dover.

Shannon, C.E., & Weaver, W. (1949). *The mathematical theory of communication.* Urbana: University of Illinois Press.

Simmel, G. (1969). The metropolis and mental life. In R. Sennett (Ed.), *Classic essays on the culture of cities* (pp.47-60). New York: Appleton-Century-Crofts.

Simpson, T.A. (1999). Recycling urban spaces. *Western Journal of Communication, 63*, 310-328.

Soja, E. (2000). *Postmetropolis: Critical studies of cities and regions.* Malden, MA: Blackwell.

Spenlger, O. (1991). *The decline of the West.* New York: Oxford University Press.

Stacks, D.W., & Burgoon, J.K. (1981). The role of nonverbal behaviors as distracters in resistance to persuasion in interpersonal contexts. *Central States Speech Journal, 32*, 61-73.

Statistical Abstract of the United States. (2000).

Strate, L. (1999). The varieties of cyberspace: Problems in definition and delimitation. *Western Journal of Communication, 63*, 382-412.

Stuart, C.L. (1973). Architecture in Nazi Germany: A rhetorical perspective. *Western Speech, 37*, 253-63.

Sundstrom, E., & Sundstrom, M.S. (1986). *Workplaces: The psychology of the physical environment in offices and factories.* Cambridge: Cambridge University Press.

Tegg, W. (1878). *Posts and telegraphs, past and present: With an account of the telephone and phonograph.* London: W. Tegg &Co.

Thompson, J. B. (1998). Editor's introduction. In Ricoeur, P. (1998), *Hermeneutics and the human sciences* (pp. 1-26). Cambridge: Cambridge University Press.

Thoreau, H. D. (1960). *Walden.* New York: Signet Classic.

Tu, C. (1999). Valuing New Urbanism: An empirical examination of traditional neighborhood developments. *Dissertation Abstracts International, 60* (04A), 1358. (University Microfilms No. 9925498)

Vitale, R. (1992). The significance of aperspectival art in light of Gebser's work. In E. Kramer (Ed.), *Consciousness and culture: An introduction to the thought of Jean Gebser* (pp. 103-124). Westport, CT: Greenwood.

Vitruvius. (1960). *The ten books on architecture* (M. H. Morgan, Trans.). New York: Dover.

Von Hoffman, A. (2000). Why they built Priutt-Igoe. In J. Bauman, R. Biles, & K. Szylvian, (Eds.), *From tenements to the Taylor homes* (pp. 180-205). University Park, PA: The Pennsylvania State University Press.

Walther, J. B. (1994). Anticipated ongoing interaction versus channel effects on relational communication in computer-mediated interaction. *Human Communication Research, 20*, 473-501

Walther, J. B. (1993). Impression development in computer-mediated interaction. *Western Journal of Communication, 57*, 381-398.

Winter, F. (1992). The physical sciences and their socio-cultural impact. In E. Kramer (Ed.), *Consciousness and culture: An introduction to the thought of Jean Gebser* (pp. 61-78). Westport, CT: Greenwood.

Wittgenstein, L. (1953). *Philosophical investigations.* New York: McMillan.