IDENTIFYING PERCEPTIONS OF THE CREATIVE CLASS REGARDING LOST SPACE IN DOWNTOWN DALLAS

by

YAO LIN

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ABSTRACT

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Yao Lin, MLA

The University of Texas at Arlington, 2012

Supervising Professor: Pat D. Taylor

This thesis deals with perceptions held by members of the “creative class” (Florida 2004) regarding lost space (Trancik 1986) in downtown Dallas, Texas. Data from this study come from face-to-face interviews with end-users (the creative class) of lost space, and the results of the study offer insight on design and use of these spaces, so common to contemporary human communities.

Trancik (1986) argues that lost space consists of undesirable and seemingly useless urban spaces, which because they are problematic, need to be redesigned. Trancik contrasts the urban voids of lost space with positive urban spaces which he defines as those with “traditional values and meaning” (p. vii). However, Trancik’s examples of what constitutes “undesirable” and “useless” space, such as a parking lot, are not consistent with the perceptions of end-users in a contemporary urban environment (Visser 2010), meaning that which specific urban areas are “lost” and which are “positive” is not clear. In fact, Trancik projects his personal values and meanings into the definition of lost space, which in this research is considered to be *prescriptive lost space*, rather than seeking an understanding of positive urban space from the perspective of end-users, which in this research is considered to be *descriptive lost space*. Past

research on lost space suggests that it is important to consider end-users' perceptions of their environment because space only becomes place when it is given contextual meaning by end-users (Jacobs 1961; Trancik 1986; Whyte 1988; Fields 2005). However, little of this past research includes interviews with end-users, leaving the characteristics of descriptive lost space poorly defined.

Indeed, having a more complete understanding of the characteristics of descriptive lost space is important to design a world in which end-users perceive their own values and meanings in urban areas. Therefore, this research investigates the characteristics of lost space according to end-users' experiences by searching for distinctions between prescriptive and descriptive lost space. Because the most insightful characteristics of descriptive lost space come from end-users who are highly involved in a city's economic, technological, and social structures, whom Florida (2004) calls the creative class, this research focuses on creative class' perceptions of lost space. According to Boden (2004), creativity creates a heightened ability to sense unique patterns in the environment; therefore, Florida suggests the creative class has more opportunity to drive positive changes in its surroundings, meaning that urban designers can benefit from the perceptions held by these end-users. While knowing end-users' perceptions of lost space is not a cure-all to the problem of urban lost space, it can nonetheless provide planners and designers with new insights to better capture the essence of urban space when filling holes in the urban fabric.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This study focuses on the end users' perceptions of lost space, and how these may contrast with prescriptive lost space. The focus of this study is on downtown spaces of American metropolitan areas because of the major transformations they have undergone, which have threatened their traditional roles and functions (Loukaitou-Sideris 1998). Data gathered from interviews with selected members of the creative class of a major American city are used to identify the characteristics of descriptive lost space. The results provide designers with new insight to create positive urban space that incorporates end users' values and meanings.

1.2 Problem Statement

This paper works to establish an understanding of the perceptions of the Creative Class regarding lost space in urban downtown areas. Lost space in downtown areas can be perceived in a variety of ways. As shown in Figure 1.1, these primary points regarding lost space are discussed below.

- *Identifying Lost Space*: What is lost space?
- *Prescriptive Lost Space versus Descriptive Lost Space*: How a theoretical understanding of lost space differs from the end users' perception of lost space.
- *Eras and Users' Needs*: How can contemporary end users' perceptions of lost space better influence the design of the urban environment?

1.2.1 Identifying Lost Space

Trancik (1986) notes that lost space can be exemplified by outdoor environments that make no positive contribution to the users. He also argues that every modern American city has an amount of vacant, unused land in its downtown, meaning lost space is pervasive. In

addition, radically changing economic, industrial, and employment patterns have further exacerbated the problem of lost space in the urban core over the past few years, meaning lost space is increasing (Trancik 1986). It is therefore important to first identify the lost space, and then transform it to positive space by imbuing it with value and meaning so that the sense of community is enhanced.

1.2.2 Prescriptive Lost Space versus Descriptive Lost Space

1.2.1.1 Prescriptive Lost Space

The concept of prescriptive lost space originated with Trancik's *Finding Lost Space* (1986) in which he suggests that lost spaces are those undesirable and useless areas devoid of community. Trancik's book provides for an evaluation of lost space by listing its major characteristics, along with recommendations for future design. Trancik also discusses place theory, in which he contrasts *space* as a "purposeful void with the potential of physically linking things" with *place*, that what becomes of *space* when enhanced with the cultural context of its surroundings (pp.112-113). Because this cultural context is clearly associated with the character of the people living there, it is important, according to Trancik, to understand their perceptions of *space* and *place*. However, even though he discusses the importance of this understanding, he did not conduct any interviews with any users to better inform his personal perception of space or place, lost or not.

1.2.1.2 Descriptive Lost Space

Moudon (2003) points out the predicament of the urban design discipline, the dichotomy between its prescriptive and descriptive nature, in which she suggest the first is emphasizing the "what should be" while the latter is emphasizing the "what is" (p. 363). Urban design is as much about "what should be" as understanding "what is," and one of her consistent criticisms of this dichotomy is the way in which urban designers often overly consider the prescriptive "should be" without a solid understanding of the descriptive "what is" (Moudon 2003). According to Moudon (p. 364) "It is disturbing to find that many prescriptive theories use research to justify

or substantiate a priori beliefs when, in fact, the reverse should take place, and research results should be interpreted to develop theories."

1.2.1.3 Importance of Finding Descriptive Lost Space

In this research, Trancik's definition of lost space represents the prescriptive view while the end users' perception of lost space represents the descriptive view. Descriptive information needs to be understood much more so than prescriptive information so that a more complete and true picture of lost space may emerge. In other words, urban designers need to pay more attention to the descriptive side of research and to refrain from making decisions solely based on prescriptive inferences (Moudon 2003). This is not to say that description information is always "true" or useful, but they certainly can provide new ideas and direction for urban design (Moudon 2003).

1.2.3 Eras and Users' needs

In 1960, Lynch asked "What does the city's form actually mean to the people who live there?" (p. cover), meaning the users of the city. This led to a new paradigm of urban design. However, the answers to this question change with the changing periods as users' values and meanings change. Therefore, urban designers face unique challenges in identifying descriptive lost space as its characteristics have changed from the modern era, to the postmodern era, and finally to contemporary society.

1.2.3.1 Modern Era to Postmodern Era

After World War II, the Modern era began, characterized by rigid and homogenous planning. Designs in this era were not concerned with a broader cultural or community context. During the Modern era, users were distanced from communal interaction due to the standardized designs, and focused on commodity consumption and basic living arrangements. It was, according to Trancik (1986), because of these isolated and mass produced designs (see for example LeCorbusier), that lost space was created, as the standardized designs trumped concerns for user values and community, eroding traditional forms of urban space. As the

traditional forms of urban space eroded, so did the sense of place. Therefore, the Postmodern era began, marked by an increased flexibility of design and with more input from the users of the cities, especially concerning their socio-cultural preferences.

1.2.3.2 Contemporary Society

As Anderson (1992, p.29) notes “For centuries the human species has been discovering that it is the creator of its own reality; making the discovery and retreating from it in disappointment.” Also, according to Florida (2011), contemporary US society has economic and social systems that tap human creativity and make use of it as never before (Florida 2012). Florida also says “this in turn creates an unparalleled opportunity to raise people’s living standards, build a more humane and sustainable economy, and make people’s lives more complete” (p. xiii). According to Florida, this rise in economic opportunity and living standards has led to what he refers to as the creative class, which covers people involved in complex decision making careers such as engineering and architecture, business and law, and arts and entertainment. It is this class of people who are responsible for steering contemporary society, driving the 21st century’s economy, technologies, and social structures (Florida 2011). In fact, according to Florida (2004, p. xxvii), “with 38 million members and more than 30 percent of the nation’s workforce”, the entirety of the American culture, including the meaning of work, values, and desires, are being influenced by the creative class. Therefore, to understand how the creative class perceives their surrounding urban environment in terms of the unique set of characteristics that define a place and make it attractive should be a significant concern for urban designers. In other words, designers need a complete picture of the nature of descriptive space as perceived by the creative class.

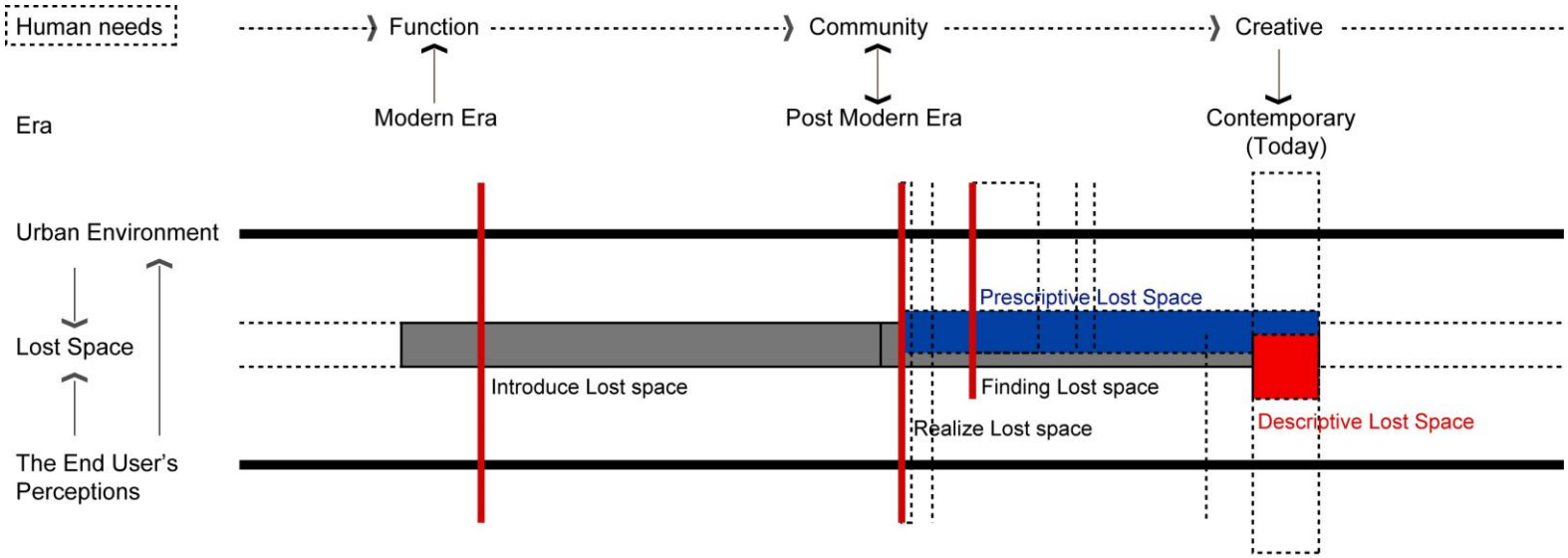

Figure 1.1 Problem Statements

1.3 Research Objectives

The objective of this study is to define the characteristics of descriptive lost space as perceived by the creative class, and show how they differ from prescriptive lost space. The specific objectives of this research are:

- To identify how creative class users perceive lost space
- To determine the validity of lost space as a physical element in contemporary downtowns.

1.4 Research Questions

Three primary research questions guide this study:

- What areas do selected members of the creative class perceive as lost space?
- What are the defining characteristics of these areas; that is, what is descriptive lost space?
- What specific differences exist between the defining characteristics of prescriptive and descriptive lost space?

1.5 Definition of Terms

The following terms are found within this thesis and are defined to fit the context of this study:

Lost Space: "Lost spaces are the undesirable urban areas that are in need of redesign-antispaces, making no positive contribution to the surroundings or users. They are ill-defined, without measurable boundaries, and fail to connect elements in a coherent way" (Trancik 1986, p. 3).

Place: When society ascribes meanings to geographic locations, places arrive (Tuan 1977). Thiel (1997) suggests space become place with the added component of perceptual qualification. The usefulness of this distinction, according to Zeisel (2006), is that it allows designers to identify the particular elements within places that are special for

users. “Space becomes place when it is given a contextual meaning derived from cultural or regional conent” (Trancik 1986, p. 112).

Urban space: Krier (1979) mentioned that urban spaces are “all types of spaces between buildings in towns and other localities” (p. 15).

Environment: “The physical environments is a sequence of physical stimuli available at the user’s sensing envelope over a given interval of time and at a specific point or along a sequence of points in space” (Thiel 1997, p. 131).

Perception: The mental process of filtering incoming stimuli is perception (Rapoport 1977). This process helps individuals evaluate stimuli by selecting out of the environment what is relevant, organizing it into useful categories, and interpreting it against predefined schemata (Krupat 1985). In addition, perception refers not only to the process of filtering incoming stimuli, but also to the outcomes of this process.

Downtown-User Respondents: People who live, work, and otherwise interact in downtown environments are downtown users. Downtown-user respondents are downtown users selected for an interview process concerning their understandings and perceptions of their downtown environments. “Because the experiences and responses of those who will in fact actually use the environment are our proper ultimate concern and because significant differences may exist between these users, the sponsors, and ourselves the designers, we recognize a pressing need to contextually identify, experientially characterize, and operationally integrate them in the programming, design, and management process” (Thiel 1997, p. 105).

Creative Class: The creative class is a group of people who are a key force of economic growth and are becoming the dominant class in society (Florida 2004). The creative class is made up of persons who are involved in the high-value-added process of converting ideas into new products. The creative class includes landscape architects, designers, scientists, engineers, software developers, lawyers, and physicians. This group values

experiences full of adventure, individual challenges, and leisure activities. They continuously and simultaneously engage in several activities, such as relaxing, enjoying an outdoor environment, watching people, and exercising (Florida 2004).

Prescriptive Nature: It gives guidelines or principles that can be followed in practice and emphasizes the "what should be" (Moudon 2003).

Descriptive Nature: It is a view that is always tempered in practice and emphasizes the "what is" and perhaps also the "why" (Herson 1984; Moudon 2003).

1.6 Methodology

This qualitative research examines the end users' perceptions of lost space within downtown spaces. Semi-structured interviews are used to collect data for this study. The creative class and downtown Dallas are selected as respondents and research site for this study, respectively. Data are analyzed using ground theory to identify characteristics of lost space from selected respondents in this research, and these results are compared with characteristics of prescriptive lost space.

1.7 Significance and Limitations

This study offers valuable contributions to the field of landscape architecture and urban design. However, the study has some limitations. These limitations include the difficulty of drawing meaningful conclusions from a diverse group of people.

1.7.1 Significance

Although many researchers (Jacobs 1961; Newman 1972; Coleman 1985; Alexander 1966) have attacked Modern Era urban design theory, cities around the United States continue to struggle with the legacy of modernist interventions, specifically the heavy focus on function over community, that dramatically altered the historic urban form and culture of their downtowns (Fields 2005). An overabundance of lost space is the direct result of these dramatic alterations. Therefore, one of the most significant challenges of urban planners and designers today is to find and reintegrate these lost spaces into the urban fabric (Fields 2005). Because the creative

class has become the dominant class in society by being the driving force of economic growth, Florida (2004, p. xxvii) suggests that "Only by understanding the rise of this [creative class] and its values can we begin to understand the sweeping and seemingly disjointed changes in our society and begin to shape our future more intelligently."

There is a disconnect between the designer's intent and the public's perception, and there is much diversity in the specific interpretations any person may have of any design intent (Marton 1981). Because of this disconnect, current research calls for overlaying descriptive perceptions into the traditional prescriptive guidelines for avoiding lost space, thereby more fully expressing the naturally creative relationships between people and space (Kallus 2001; Moudon 2003; Boden 2004). This integration of descriptive perceptions and prescriptive guidelines is necessary in order to make urban design relevant in current urban environments by reframing prescriptive lost space with more contemporary values and meaning. Finally, the purpose of this research is to show that identifying the characteristics of descriptive perceptions may lead to creating a city that can be fully enjoyed with a sense of community.

1.7.2 Limitations

One limitation in the current research is that although user studies offer valuable insight, the nature of diverse individual responses makes finding meaningful correlations difficult; in fact, Kallus (2001) argues "the information derived from environment-behavior research is often fragmented, isolated and relating to independent physical elements, circumstances and situations" (p.135). Age, gender, ethnicity, and cultural differences are likely to influence the opinions of the respondents in this study (Wood 1969). As Rapoport (1977) says, people have different evaluations and preferences.

A second limitation has to do with the city of Dallas, Texas. Dallas is a new city, unlike New York or Chicago, and thus has a short history. As such, research on prescriptive and descriptive perceptions of space in Dallas may only represent the opinions of those who work and/or live there, and may not be representative of older cities. Also, the specific hot and dry

climate in Dallas may inhibit those who work and/or live there from participating in outdoor activities.

1.8 Summary

The purpose of this research is to identify the creative class' perceptions of the characteristics of downtown lost space through interviews. This is done to clarify the differences, if any, between prescriptive and descriptive perceptions of lost space.

This research includes five chapters. Chapter one frames the problem of lost space, including the end users' perception of urban lost space. Chapter one includes the study objectives and research questions. Chapter two is a literature review of lost space and identity of place. Chapter three is methodology; in this chapter the research design and respondents are discussed. Chapter four is results and summary of findings. Chapter five is a discussion of results and implications, and suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature that discusses four major aspects affecting contemporary urban lost space:

1. The defining characteristics of space and what makes it lost;
2. The three components of place identity;
3. The differences in prescriptive and descriptive perceptions; and
4. What specific characteristics are important to consider when unmasking descriptive perceptions, and from whom to take them from.

Section 2.2 defines the characteristics of urban space that help to establish a theoretical basis of lost space. Section 2.3 discusses place identity, and outlines how changes in urban forms are reflected in changes in human needs. Section 2.4 details the differences in prescriptive and descriptive approaches to perceiving the environment. Section 2.5 explores the different types of descriptive perceptions available from the totality of humanity, and explains why taking descriptive perceptions from members of the creative class is important to urban design.

2.2 From Space to Place

This section presents an overview of the literature related to lost space. Krier (1979) argues that urban spaces include all space in any urban environment. Also, according to Trancik, “Space becomes place when it is given a contextual meaning derived from cultural or regional content” (1986, p. 112). Therefore, space becomes lost when it is devoid of meaning and value. Literature from Jacobs (1961), Trancik (1986), Ford (2000), and others show how

the concept of lost space and its corollary problems evolved. The following timeline adapted from Fields (2005) shows the relevant authors involved in lost space (Figure 2.1).

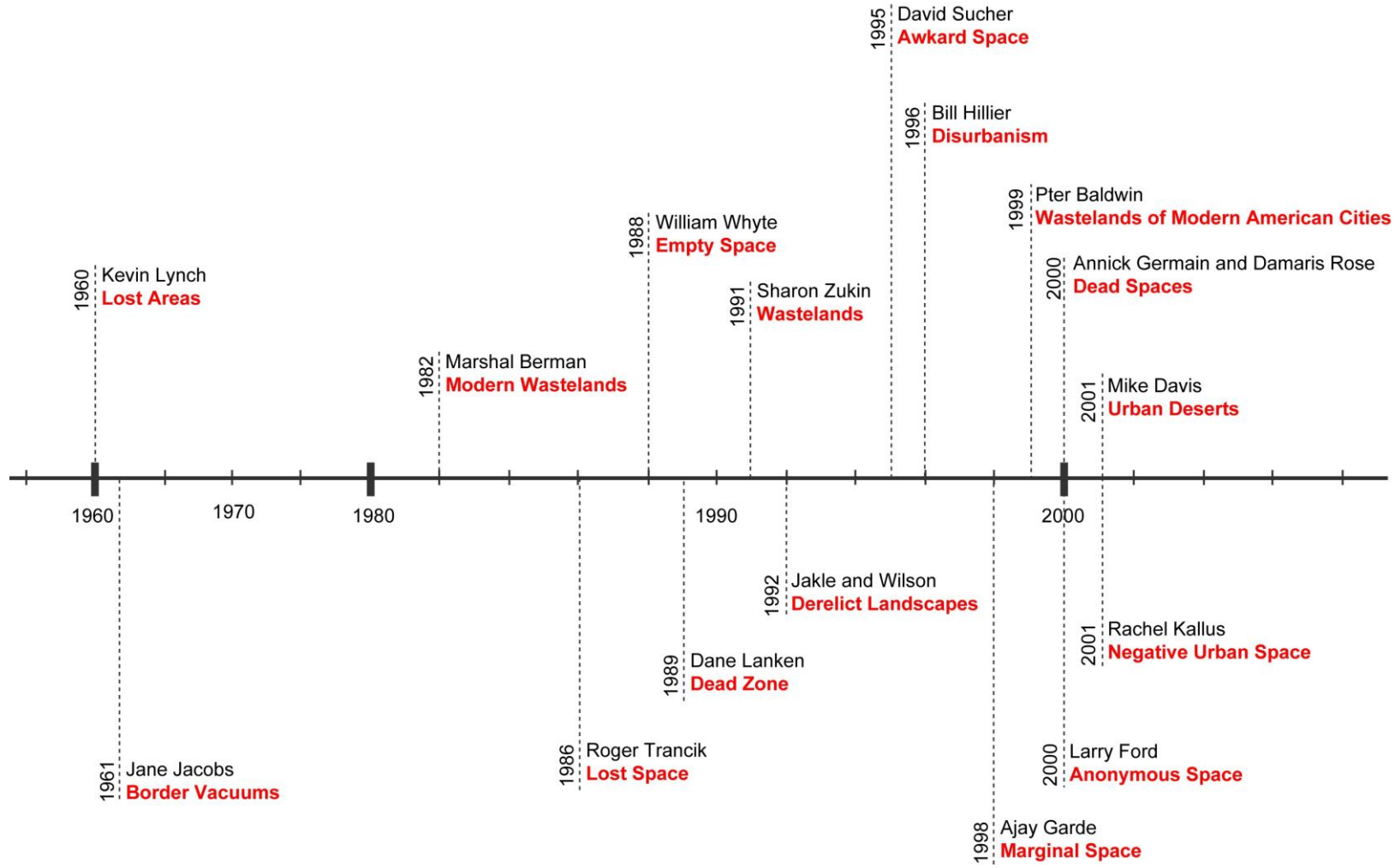

Figure 2.1 Relevant Authors Involved in Lost Space (Fields 2005)

2.2.1 *Jacobs (1961) and Dead Place*

Jacobs (1961) exposes how city planners have failed to create viable communities and argues that single-use places are mostly responsible for this failure. She argues that single-use places are "dead places" with few users. Jacobs suggests these dead places decrease the use of the city in their locations, for example, a monument or parking lot not often used, or a bank with few customers in the afternoon (p. 263). Jacobs (p. 259) discusses how separate single-use districts create dead places from border vacuums:

> Borders can thus tend to form vacuums of use adjoining them. Or to put it another way, by oversimplifying the use of the city at one place, on a large scale, they tend to simplify the use which people give to the adjoining territory too, and this simplification of use—meaning fewer users, with fewer different purposes and destinations at hand—feeds upon itself.

Even though these borders are not designed with the users in mind (Ford 2000), in fact, Jacobs (1961) argues that border vacuums gradually sap the vitality from their inside districts, best expressed in the words of John Cheever in *The Wapshot Chronicle*: "North of the park you come into a neighborhood that seems blighted—not persecuted, but only unpopular, as if it suffered acne or bad breath, and it has a bad complexion—colorless and seamed and missing a feature here and there" (as cited in Jacobs, p. 261).

Jacobs (1961) classifies borders into four types: (1) housing projects, (2) railroad tracks, expressways, and water barriers, (3) large parks, and (4) civic centers and other massive single-use buildings. Jacobs argues that housing project borders create dead space by reducing travel through them, especially as people living in one district rarely enter another. The second type of borders cut into the landscape and severely limit cross-traffic. In the third type of borders, such as large parks, cross-use is not halted but rather more limited if users are reticent or fearful to walk across them. Finally, Jacobs suggests that large areas with little relative land use, as in the fourth category, create borders when people seldom use them.

Although Jacobs (1961) and Ford (2000) argue that districts isolated by these borders may decay through stagnation, she notes that cities can not function without railroads and

expressways, large medical centers and universities, and that large parks and water attractions are clearly desirable. It is better then, according to Jacobs, for planners to focus on how to use these borders, such as parks, in a more mixed-use way instead of eliminating them. More to her point, she suggests borders naturally encourage mixed use when their perimeters invite offer a wide range of activities. Jacobs cites Central Park in New York City as an example of such a border. According to Jacobs, for example, much of the intensive park use on the east side of the park, such as a zoo and a boat pond, invite a "curious penetration of the perimeter" (p. 265) that creates a link between the park and its surroundings. Jacobs concludes that well-intentioned planning that leads to discontinuities of use and discourages perimeter penetration is in fact harmful. She therefore points out that planners must take care to create physical places that encourage mixed use.

2.2.2 Trancik (1986) and Lost Space

Trancik (1986) also explores how poor urban planning has deconstructed positive urban space, that space which is desirable and useful. Paralleling Jacob's (1961) idea of dead space, Trancik suggests that marginally used, loosely organized, and deteriorating space is lost. Trancik offers as examples of lost space such areas as "leftover unstructured landscape at the base of high-rise towers or the unused sunken plaza away from the flow of pedestrian activity in the city" (p. 3). According to Trancik, surface parking lots, the edges of freeways, and abandoned structures such as waterfronts and train yards are also examples of lost space. Similar to Jacob's idea of borders creating vacuum areas, Trancik suggests that lost space functions to isolate commercial from residential areas, which fragments the leftover spaces (Ford 2000). In Trancik's opinion, lost space is ill-defined but is most of that space which needs to be redeveloped, rebuilt, or redesigned.

According to Trancik (1986) there are five major factors that have contributed to lost space in American cities:

> (1) an increased dependence on the automobile; (2) the attitude of architects of the Modern movement toward open space; (3) zoning and land-use policies of the urban-

> renewal period that divided the city; (4) an unwillingness on the part of contemporary institutions-public and private- to assume responsibility for the public urban environment; and (5) an abandonment of industrial, military, or transportation sites in the inner core of the city (Trancik,1986, p.4).

In addition, the majority of lost space is the result of the automobile and especially its appendages: roads, highways, and surface parking lots (Trancik 1986; Gratz 2000; Ford 2000). In fact, according to Trancik, in large cities like Los Angeles and Detroit, up to 80 percent of the land concerns automobile use (p. 5). Gratz (2000) also agrees that the automobile has eroded positive urban space. In Gratz's estimation, parking alone subsumes 40 to 60 percent of downtown space. Both Trancik and Gratz agree that this is an overt part of part of American culture:

> It is no mystery why people today stay away from downtown or merely pass through it. In small ways and large, people have been chased. Cars have been welcomed. Traffic has been pampered, pedestrians hindered. Parking robs the street of commercial uses, especially retail, and allows cars to cross over the sidewalk to enter or exit. The walking experience is made boring and unsafe (Gratz 2000, p.94).

Another factor implicated in creating lost space, according to Trancik (1986), includes the often abstract design of architecture coming from the Modern Movement. Tibbalds (1992) supports this point and argues that the large spaces in between these buildings become lost space when they overlook pedestrian needs and desires. Finally, ill-conceived zoning policies, private organizations that segregate discrete elements in a city, and shuttered factories from relocated industries marginalize mixed-use and isolate pedestrians, all of which cultivate lost space.

One way to reduce or reform lost space, according to Trancik (1986), is to consider combining three modern space theories: figure-ground, linkage, and place. Figure-ground theory is a mere two-dimensional description of the ratio between solids and voids, and their geometrical relationships. Linkage theory adds to this idea by analyzing how these solids and voids are connected in three-dimensional space. Finally, place theory combines the previous two but includes users' values and perceptions in order to bring life to the physical space.

Therefore, although lost space is undesirable, within lost space is the potential for designers to rehabilitate and reform the city core by injecting sense of place that can develop a vibrant downtown.

2.2.3 *Whyte (1988) and Sense of Place*

According to Whyte (1988), there are many unused urban spaces that lack a sense of place. Whyte suggests that space has a sense of place when it takes on the flavor of its surroundings: the values, a sense of continuity, and especially historical links and landmarks. In other words, a sense of place excites the senses and gives users insight into their environment.

In Whyte's (1988) view, being connected to the street is primary for users to create a sense of place. However, he argues, megastructures such as large shopping malls and hotels, following a self-contained, city-in-a-city model, sever important ties with their streets and disorient their users. Whyte (1988) offers the Bonaventure Hotel in Los Angeles as an example of a megastructure. This hotel design consists of inward facing shops at the base topped with eight stories of concrete and no windows. Visitors to the Bonaventure often become lost simply trying to find their room because from the inside it is nearly impossible to sense one's surroundings:

> This is the question the megastructures cannot answer. They borrow a sense of place from their surroundings; they deny it from within. Where, indeed, is *here*? And when? Is it night? Or day? Is it spring? Or winter? You cannot see out. You do not know what city you are in, or if you are in a city at all. Perhaps it is a complex out by the airport or at a new interchange . . . The piped music gives no clue. It is the same music everywhere. It is the same place everywhere. You are in the universal controlled environment" (p. 221).

Another design challenge megastructures present, according to Whyte (1988), is that with their massive faces, they often are accompanied by large blank walls. In fact, he argues that when these blank walls face the street, they cut the sense of the district's retail continuity and create lost space. Finally, Whyte suggests that the worst cut in sense of place is parking lots, especially due to their lack of people, activity, and function. Also, although most downtown city space is devoted to parking, numerous studies suggest that there is not enough of it, at

least in the view of many city residents, For example, in Whyte's own interviews with people in Dallas, most respondent's to his questions about parking said that there was not enough of it, and what was there was too expensive. This means there is a gap between what designers perceive as problematic and what users perceive as necessary.

2.2.4 Summary

Each of the authors in this section explores the relationship between space and place, identifies the notable culprits of lost space, and discusses ways to enhance the sense of place. As Ford (2000) indicates, even though there are numerous instances of well-designed buildings and well-maintained space, the problem of lost space remains pervasive. Therefore, in effort to recapture the lost space and imbue it with a sense of place, designers need to focus on the needs and wants of the users, especially by adding places to eat and shop at the street level. In sum, this means that while design of space is important, a fundamental understanding of the connections between spaces and how they foster community interaction through a sense of place is more important. The next section explores the transformation from space to place in more detail.

2.3 Identity of Place

This section presents an overview of place, a discussion of place theory, and how urban forms have changed through time and have been influenced by users' perceptions. Place is, as described by Harrison (1996), the relevant issue in urban design, and as Relph (1976), Trancik (1986), Eriksson (2007), and many others have argued, place is nothing without people. This means an examination of place starts with an understanding of how people are attached to it, and finishes with how a better place is derived from users' values.

2.3.1 Places

Carmona (2003) defines physical space as the entirety of the infrastructure that contains and supports users. Carmona and Tiesdell (2007) suggest space become place when attached to human meanings, and this subsumes social, personal, and cultural values. People

and their myriad interactions, according to Relph (1976) and Trancik (1986), are the sources of identity for a place. Whyte (1988) adds that places are where people want to be, and Harrison (1996) reminds designers to not overly focus on the physical environment while neglecting the daily activities that occur there.

Places, according to Carr (1992), are freely accessible spaces in which people can congregate, socialize, conduct business, and overall enjoy themselves. These interactions create the identity of a place, and this identity is comprised of three parts: the physical setting, the activities that occur there, and the meanings derived from those activities (Relph 1976). Of these three components, Relph argues that the last two play the central role in defining the identity of a place. In fact, according to Relph (1976, p. 141) places are the "significant centres of our immediate experiences of the world." The following three sections explicate these three components in more detail.

2.3.1.1 Physical Setting

By observing a place from the air, one can easily notice the subdivisions of a physical setting such as buildings and objects, the spaces between, and impact from geography and climate (Relph 1976). For example, the geography may be a desert, beach, or mountaintop, the objects may be an office building, factory, or megastructure, and the spaces between may be streets, parks, or civic plazas. This understanding of physical setting is similar to figure-ground theory discussed by Trancik (1986). Figure-ground theory expresses the geometrical patterns and ratio of buildings and space. According to Carmona, Heath, Oc, and Tiesdell (2003), positive space results from distinctive and conceivable geometrical patterns, while negative space results from non-distinctive and amorphous patterns. Finally, according to White (1999), the physical setting is defined by paths between buildings and space, portals to buildings and space, and the spaces enclosed by buildings and paths. Lynch also identified different elements that contribute to one's understanding of place. They include landmarks, districts, nodes, edges, and paths (Lynch 1960).

Also, inasmuch as observing from the air one can identify the physical setting, on closer inspection one can also notice the activities therein (Relph 1976).

2.3.1.2 Activities

The physical infrastructure of places support a variety of observable activities and functions (Carmona 2003; Carr 1992; Jacobs 1989). These functions may be economic or social (Relph 1976). For example, according to Carr, streets transport objects and people for the economic functions of taking users to work, but also share in social functions by bringing users together. In addition, the restaurants and retail stores surrounding a civic plaza serve economic functions, while rallies, public speeches, and concerts in a civic plaza can serve a social function.

Gehl (1971) divides activities into three categories based on their relationship with the physical setting: necessary, optional, and social. Examples of necessary activities, according to Gehl, are driving to work and finding a place to park, taking a bus to school, shopping for food, or buying household items. These are the everyday tasks and activities that cannot be avoided. Examples of optional activities include taking a walk in a park, enjoying lunch outside, and watching passersby. These are the activities that people choose to do at their leisure and for their pleasure. Finally, examples of social activities include children playing outside, business people meeting and conversing, and strangers making connections on the street. These are the activities that cannot be done alone.

It is also important, according to Gehl (1971), to examine the relationship between these three categories of activities and their physical setting. As necessary activities are unavoidable, their relationship with the physical setting is minimal. Because people must go to work and school, they drive on necessary streets regardless of their physical condition or aesthetic beauty. Gehl argues, however, that whereas necessary activities are somewhat independent of the physical setting, optional activities occur mostly and more often when the physical setting is optimal. This means that the frequency of necessary activities remains

relatively the same in welcoming conditions, but the frequency of optional activities increases in these same conditions. The corollary of this, in Gehl's view, is that when the physical setting is of poor quality, once the necessary activities are complete, people simply go home. Thus, with welcoming conditions and increased optional activities, more social activities can occur. In fact, Gehl considers social activities resultant activities in that they naturally develop when people pursue the other two categories and are fostered by optimal physical settings. In all, Gehl concludes these relationships point to the need for high-quality urban planning:

> Although the physical framework does not have a direct influence on the quality, content, and intensity of social contacts, architects and planners can affect the possibilities of meeting, seeing, and hearing people – possibilities that both take on a quality of their own and become important as background and starting point for other points of contact (p. 144).

In addition, while urban planners should be concerned with aesthetic beauty, according to White (1999), elegance alone is not enough to create activity or spark aliveness. In White's view, if people are present but without purpose, places are not alive. This does not mean, though, that all purposeful activities are created equal. They can be either a high-intensity party atmosphere, or it may be a funeral procession. Either way, insofar as there is intention and meaning in the actions of people, places are alive. Finally, this point more closely speaks to the identity of a place. Relph (1976) emphasizes that the activities of a place may be either "creative or destructive or passive . . . communal or individual" (p. 105). In other words, in the process of shaping the identity of a place, urban designers must not only consider how the physical setting influences the types of activities that occur within, but also consider the meanings and intentions that inform those activities.

2.3.1.3 Meanings

Seamon (2008) recognizes that the identity of a place cannot be fully realized without considering the intentions and meanings that infuse the activities attached to space. Norberg-Shulz (2007) supports this point by arguing that place is space with character and atmosphere. Carmona, Heath, Oc, and Tiesdell (2003) includes time in this discussion, suggesting that a

person's relationship with a place both evolves meaning in the individual's perceptions of the place and reflects that individual's personality in the place. In addition, as noted by Relph (1976) above, the identity of a place is best understood through a combination of physical setting, activities, and meanings. In discussing meanings, Relph argues that they "may be rooted in the physical setting and objects and activities, but they are not a property of them – rather they are a property of human intentions and experiences" (p. 105). This suggests that individuals may feel a place to exciting or boring, innocent or dangerous, useful or a waste of time, and that these emotions are projected onto the physical setting and activities in relatively different amounts by different people at different times.

The crux of Relph's (1976) argument is that these three elements of place are not only irreducible and inseparable, but also offer up an incredible amount of place diversity. In other words, because there is an infinite variety of physical settings, an infinite number of activities that may take place there, and an infinite variety of meanings that can be derived from these activities, there are an infinite number of ways these elements can combine. In short, there is a remarkable diversity of identity.

Tibbalds (1992) points out that this diversity of identity brings joy to towns and cities. For Tibbalds, diversity is an important characteristic in the sense of place and an important need for people, and therefore important for designers to consider when creating ways to enhance a sense of place to create a meaningful space.

2.3.1.4 Enhancing Sense of Place

According to Sircus (2001), place is not passive, and according to Carmona et al. (2003), neither are people. This means that place and people must interact with and influence each other. Sircus also argues, though, that the more a place engages its people in meaningful activities, the more a place is successful. There must be, then, ways in which designers can design a place that fully supports meaningful activities in effort to create successful places, or in Rudofsky's words "awaken love, affection, interest" (p. 16).

In Relph's (1976) estimation, this process starts with designing an environment that orients a person in a place through useful physical elements and intangible meanings. Because the identity of a place starts with the physical setting, to be successful this setting must consider the elements of lights, colors, materials, smells, and sounds, and how they ultimately influence people and their activities (Day 2002; White 1999). White also points out that a successful place is inviting, unique, and offers connectedness.

The common thread that holds these elements together is the people of a place because without people there is no activity and without activity there is no meaning. In fact, according to Jacobs (1961), places become animated when they invite people into street life. Successful urban places do so by enhancing comfort and image, increasing access and linkage, supporting uses and activities, and fostering sociability (Carmona et al. 2003). Carr, Francis, Rivlin, and Stone (1992) also argue that a successful place must be created in a way that serves people's needs such as comfort, engagement, and discovery. The ability of a space to bring a sense of belonging to people and connect them to both each other and their physical environment creates a meaningful place.

Carmona et al. (2003) argue that because people need a sense of belonging and because places provide deep attachments to shared experience, planners must design strategies that enhance and emphasize these elements that contribute to a sense of place. This is what Bentley et al. (1985) refer to as a responsive design, which means it is legible, flexible, and detailed, and offers meaningful experiences.

2.3.2 Place Theory

Trancik (1986) explains that place theory connects physical space with the culture and meanings of users. In a city, spaces are the voids between buildings, but "place is about joining, being, belonging (White 1999, p. 192). Eriksson (2007) agrees and adds that places include social, personal, and cultural meanings. According to Seamon (2008), places are best

when directly experienced. Finally, Relph suggests that places offer emotional anchors for identity.

Tibbalds (1992) points out that places come with a variety of settings and uses, but these belong to the people. According to Tibbalds, places exist for people's enjoyment, and designers must create strong ties between buildings, environments, and people. In fact, Seamon (2008) asks "How could one study place attachment, sense of place, or place identity without a clear understanding of the depth and complexity of place as it is experienced and fashioned by real people in real places?"

Finally, Day (2002) acknowledges that places affect people and their behavior, and vice-versa. Therefore, understanding sense of place is important to this research because this study aims to better understand how people perceive their environment, especially in terms of what is positive and what is negative, in urban settings.

2.3.3 Urban Form

Urban forms have been constantly evolving throughout time due to planners' understanding of societal needs (Mumford 1961). By studying urban morphology, planners can better implement their designs. Urban morphology, according to Conzen (1960) has four key elements: land uses, building structures, the plot pattern, and the cadastral or street pattern. Of these elements, Conzen argues that the cadastral pattern is the most resistant to change while the land uses and building structures are the least resistant to change. The amount of change experienced by the plot pattern lies somewhere in between these two.

The relative combinations of and specific societal-development transformations in these four key elements of urban morphology have resulted in three distinct eras of city form. According to Carmona et al. (2003), these three eras of urban form are the traditional, the industrial, and post-industrial or the informational age. In the first era of urban form, the traditional city, the marketplace was the centralizing feature. At first, needs for security, trade, and communication brought people together as they realized that living better was facilitated by

being in the same place with others. In the second era, which occurred post World War II, the shape of urban form, informed by concerns for social welfare, adopted a more rational and functional tone (Loukaitou-Sideris and Banerjee 1998). During the time of the industrial era, Carmona et al. argue that the downtown became a locale more for factories and less for workers. Towards the end of the industrial era, in response to overcrowding, people and many shops left downtown for suburbia, creating much lost space alongside urban sprawl.

The post-industrial era is characterized by a decentralized form and increased automobile dependence (Carmona et al. 2003). During this era, in an effort to fill in the gaps left by the machine city, planners created ways to lure residents back downtown, especially via stimulating its commerce and emphasizing its social nature (Loukaitou-Sideris and Banerjee 1998). Carmona et al. suggest that downtowns are entering a fourth era, one they call the information age, characterized by heightened exchange of ideas. Finally, Glaeser (2011) argues that the heightened exchange of ideas combined with increased density fuel creativity.

2.3.4 Summary

This section identifies the elements of a city's identity, reveals how to enhance a sense of place, and discusses the major changes in urban form since the traditional city. Moudon (1997) points out that changes in the urban form reflect changes in societal values and interests, and vice-versa. This means that societal values can be deduced by studying changes in urban form, and, more importantly, this means that identifying societal values is necessary for better creating new urban forms. This final point is relevant to planners who must be sensitive to evolving values, needs, and perceptions.

2.4 Perception

This section presents an overview of the literature related to perception, emphasizes the dichotomy between prescriptive and descriptive reasons for perceiving space as lost or not, and concludes with special focus on how users perceive the urban environment. Understanding *why* prescriptivists perceive space differently than descriptivists is valuable to this study

because this may lead to differences in *what* these two groups perceive as lost space. That is to say, the outcome of perception is influenced by the constraining schemata of the mind.

2.4.1 Prescriptive and Descriptive Perception

Carmona et al. (2003) point out that urban forms have changed over time in response to human needs, and Moudon (1997) argues that these changes mirror the values of the community in which they are created. Rapoport (1977) offers that differences exist in how users perceive environmental quality; for example, some cultures view the ocean negatively, such as in traditional Bali, while many modern cultures place a positive emphasis on ocean front property. Similarly, Buhyoff (1983) notes that while many Americans prefer forest and mountain landscapes, many Dutch prefer ones more flat and open, and Sonnenfeld (1966) demonstrates gender differences in landscape preferences. In addition, according to Rapoport, differences in perception of environmental quality are not limited to culture or gender. In fact, he argues that users and planners from the same culture also perceive quality urban environments differently. Rapoport discusses previous research (for example, Michelson 1966) in which users were asked to identify their ideal environments. What is striking about these studies is that most often designers disapprove of what users regard as ideal (for example, Timms 1971; de Wolfe 1971). Rapoport concludes these varying images of environmental quality make designing a quality environment difficult, if not impossible, especially in the absence of input from users.

Lynch (1960) was one of the first designers to interview users for their input on urban design. He was especially interested in how users form images of a city, how users mentally structure these images, and what meanings, if any, users attach to these images. To these ends, Lynch notes the variety of ways in which users establish and assess images. For example, a music teacher may immediately recognize a tuning fork within a jumbled picture, and a child viewing the ocean for the first time may be consumed with the strikingly new features it possesses. More importantly, as Lynch emphasizes, a person may identify a new object not through long familiarity or striking newness, but rather through placing it within an

already existing framework of knowledge, as if one is confirming a stereotype. For example, a regular bar patron will notice the signature markings of a bar in any city; however, these signs go unnoticed by those who never frequent such establishments.

Thus, according to Lynch (1960), perceiving images is a variable concept, and according to Rapoport (1977), environmental quality is a variable concept; this leads to the concept of environmental perception. Environmental perception is formed through three types of information: present stimulus information, present context information, and stored stimulus information (Warr and Knapper 1968). Rapoport concludes that, from a designer's standpoint, actions are based first on perceiving an environmental problem or an opportunity, and then matching these against the designer's ideal or schemata. For Rapoport, the perceived environment and the schemata with which it is interpreted are infrangible in the designer's mind.

Therefore, during the process of environmental perception, the perceiver selects relevant images and meanings from the totality of the environment and structures them according to predefined constructs of the mind (Rapoport 1977). The outcomes of this process, then, could naturally be as diverse as the human population, but as Rapoport argues, there seem to be some universal predefined categories of quality that help the human community coexist. In addition, within the universal categories, there seem to exist some common sub-groupings of quality, for example, the preconceived notions of quality shared by designers that may predispose them to quick judgments of right and wrong. As Kelly (1955) points out, these preconceived notions are often based not on a reaction to true stimuli, but rather to expected stimuli.

Indeed, Rapoport (1977) points out that designers and users have different perceptions of environmental quality, and Lynch (1960) notes that there are a variety of ways in which people form meaningful images. Therefore, there must be a difference in the ways in which designers and users are forming images and/or perceiving their environment. Moudon (1992) clarifies the distinction by establishing two categories of knowledge perception: normative or

prescriptive and substantive or descriptive. For Moudon, prescriptive knowledge refers to "what should be" while descriptive knowledge refers to "what is." In addition, Moudon argues that design is naturally a prescriptive field, meaning that designers are often more focused on creating the future instead of describing the present. Moudon does not consider this to be immediately negative, however. She does suggest that although prescriptive information enhances the creativity of design and is part of a continuum with descriptive information, the distinction between the two are not given enough mention in planning and design literature.

In summary, while Moudon (1992) contends the prescriptive side of design is a necessary component, Rapoport (1977) notes the potential in being overly prescriptive. According to him, in that designers share a similar schema of environmental perception, there exists the possibility that "this exerts pressure for conformity" (p. 41), which may lead to a self-perpetuating system in which designers are socialized by their peers and relevant texts.

The distinction between the prescriptive and descriptive side of design is important to this research because this study intends to clarify if the process of perception affects the outcome of perception. Therefore, for the purposes of this research, a prescriptivist is most likely a designer who has a predefined notion of lost space and can thus easily notice or not notice it. A descriptivist, on the other hand, describes a user with a less predefined notion of lost space. The prescriptive approach to defining lost space implies matching perceptions of the urban environment to specific rule-based schemata that enforce judgment of right or wrong, lost or not. This means that from the prescriptive approach, perceivers will notice and judge only what their minds will let them notice, and then judge accordingly. A descriptive approach, however, assigns quality to what exists without restricting perceptions to specific classes of so-called inherent goodness. Finally, prescriptive lost space, the outcome of the prescriptive approach, refers to elements in the physical environment that fit cleanly into scholarly opinion of what constitutes lost space, most notably exemplified by Trancik (1986). Conversely,

descriptive lost space, the outcome of a descriptive approach, refers to elements in the physical environment that users perceive as lost.

2.4.2 Human Perception

Rapoport (1977) points out that the term “perception” is used differently in different disciplines. In fact, Rapoport argues that due to the many distinctions in the use of “perception,” breaking this term down into three sub-elements is beneficial. These three sub-elements, according to him, are the sensory experience of the environment, comprehension and knowledge, and evaluation. Rapoport uses the phrase “environmental perception” to refer to the sensory experience of, for example, seeing a street. This is the least abstract and the most direct type of information gathering. In addition, Rapoport uses the phrase “environmental cognition” to refer to the ways in which users understand and structure their environment. In this type of perception, information is organized and layered against schema, for example, knowing that a particular street is the quickest route downtown. The final category of perception according to Rapoport is “environmental evaluation.” This category is extremely variable in that it deals with values and preferences, for example, knowing that a particular street is the quickest route downtown but taking a lengthier, more scenic route, instead.

2.4.3 Summary

Moudon (2003) argues that urban designers cannot simply ignore descriptive perceptions of space and overly rely on prescriptive judgments while pursuing the next generation of urban design theory. Designers, according to her, must recognize the differences in outcomes from prescriptive and descriptive approaches, and create a means for incorporating both views into a comprehensive theory of design. She insists, though, that neither approach is inherently better or understands the “true” nature of reality. In fact, Relph (1984) points out that description reflects the sensitivities, hopes, and desires of the person doing it as much as prescription does. Because of this, it is important to note that although designers must pay

attention to descriptive perceptions, and they should play a role in urban decisions, they should not be the only factor directing urban decisions.

2.5 Creativity

As Rapoport (1977) points out, variability in perception increases as one moves from agreeing on what is seen to agreeing about its meaningful aspects. For example, all perceivers can agree upon seeing a building; however, whereas one may see just a building, another may see a government office, and another may see a landmark. In addition, it is important to recognize that this variability exists not only between planners and users (Coing 1966; Fried 1973; Pahl 1971; Rapoport 1977), but also between different users (Ford 2000). As mentioned above, urban forms have changed along with human needs, and designers hoping to better reflect those needs in their creations should focus on differences in perceptions among users, especially those users who better reflect contemporary human needs. In fact, Ford argues that because space has a diversity of potential uses and a diversity of meanings to different users, there is a risk in designers overly prescribing uses and meanings to spaces. For this critical reason, it is important for designers to pay close attention to those users who can offer perceptions of spaces that evolve along with evolving urban forms. This research refers to this group of users as the creative class.

2.5.1 Creative Mind

Boden (2004) suggests that one reason to value the creative ideas from the creative class is that they are unpredictable; in other words, they probably do not fall in line with a prescriptivist mentality. Creativity, according to Boden, refers to the ability to effervesce surprising and novel ideas.

Flowers and Garbin (1989) point out that the process of perception is important in creative human behavior. For them, most creative scientific discoveries share the ability to "see relationships among elements" (p. 147). Indeed, they emphasize the nature of visual imagery in the creative process. However, Flowers and Garbin also note that society can only evaluate the

creativity of individuals through their outcomes, and not their processes. This means that oftentimes society assesses creativity based on some collective criteria of "novelty and worthwhileness" and do not have a sense of the mental activity involved in the act.

Finally, according to Flowers and Garbin (1989), creativity results from: (1) novel perceptions that naturally deviate from normative ideas, (2) a metacognitive ability to understand and generate those novel perceptions, and (3) a spontaneous ability to do so. Understanding these abilities and their originations are important here because this research seeks to discover not only the differences between creative and normative/prescriptive perceptions, but also aims to understand how these differences possibly affect the outcomes of understanding lost space.

2.5.2 Creative Class

An increased understanding of the functions of cities, and how people behave in them, can be derived from the cultures and values that direct those functions (Michelson and Reed 1970; Feldman and Tilly 1960). These functions, according to Rapoport (1977), host activities that reflect the lifestyles important to the physical built environment. In fact, Rapoport argues that understanding lifestyles is critical to understanding the interplay of setting, activity, and meaning. For him, the investigation into how different lifestyles cluster around their defining variables, such as race, religion, income, or class, leads to a deeper and richer understanding of meanings homogenous groups associate with their environment. This means, for example, that one group of people may associate status with place, and may draw or even define their identity from the locations they regularly habituate. This point suggests that any space means more to its denizens than simply the activity it supports; not that activity is unimportant, but devoid of meanings, activity by itself is not necessarily a way to cluster important lifestyles.

Florida (2004) cites the creative class as an important lifestyle group to follow and understand. For him, the creative class is valuable to study because they create and use new technologies necessary to drive the contemporary economy. As such, according to Florida,

contemporary society resonates with what he calls the “creative ethos” (p. 21). In addition, Florida argues that the creative class seeks to live a life full of passionate experience and intense relationships. Indeed, Florida emphasizes that members of the creative class hope the spaces they inhabit reflect and reinforce their intra-group associations. According to him, “they like indigenous street-level culture – a teeming blend of cafes, sidewalk musicians, and small galleries and bistros, where it is hard to draw the line between participant and observer, or between creativity and its creators” (p. 166). In fact, Florida argues that because these desires are so strong in members of the creative class, they not only actively seek environments that offer a variety of social choices, they also purposely avoid places lacking in music, art, and/or sport opportunity. This point suggests that members of the creative class place high expectations on the places they live, work, and play.

2.5.3 Summary

Social interaction is naturally important, and for members of the creative class, finding communities that facilitate social interaction is highly important. Oldenburg (1989) discusses “third places.” These places, according to him, are neither work nor home, but coffee shops, cafés, bars, or other diverse locations where people intermingle and form new acquaintances and memories. These are the types of places that Relph (1981) investigates in his study of place identity. According to Relph, understanding why these places are favored by members of key lifestyle groups is central to maintaining and restoring existing places, and making new places. Therefore, as the creative class is seen as a key lifestyle group, a deeper understanding of their perceptions may provide deeper insight into lost space. Indeed, this research argues that the creative class offers novel perceptions into the character of lost space, for example, by suggesting examples of what lost space is or how lost space can be prevented. This point suggests that without the ability to properly describe the meanings the creative class ascribe to a particular place, it is impossible to identify spaces that are perceived as lost.

Indeed, as noted by Seamon (2008), before designers can prescribe concepts for redesign, they must first learn how to properly describe the places they are investigating.

CHAPTER 3

RESEARCH METHODS

3.1 Introduction

This empirical research examines the end users' perceptions of lost space and compares these perceptions with the characteristics of prescriptive lost space in order to improve downtown urban design. Interviews are used to collect data for this study. The interview process is a non-directive dialogue in which the focus is on the respondents' experiences with urban space. Additions-to-base maps are used to collect visual presentation data about respondents' perceptions of lost space (Zeisel 1981). The creative class in downtown Dallas is selected as respondents in this study. Data are analyzed by using ground theory to identify characteristics of lost space from selected participated in this research, and then compared with characteristics of prescriptive lost space. Individual responses are not independently analyzed; instead, they are analyzed in the aggregate in order to notice trends and define characteristics.

3.2 The Creative Class

In 1956, Whyte documented the stifling effect of organization and bureaucracy on the individuality and creativity skills of people who lost themselves in their highly repetitive everyday routines. However, when people are given the opportunity to have flexibility and diversity in their work and living environment, they can also enhance their creativity skills. In fact, Jacobs (1961) gives the example of the North End in Boston, an area of "wasted space" defined by poorly designed and disconnected districts with very small blocks, to support this point. For more than twenty years, this area was considered a slum, and the bureaucrats in charge of the area's rehabilitation did nothing to reform it. Therefore, the denizens took it upon themselves to rehabilitate the North End, proving users can build community and thereby enhance their

creative skills. According to Florida (2004), rehabilitating urban areas requires an active community of users with a creative intent to generate ideas and spur innovation. In addition, Florida (2004, p.15) argues “such communities provide the stimulation, diversity and a richness of experiences that are the wellsprings of creativity.” Indeed, the transformation to a more user-friendly urban environment began with rise of the creative class.

The numbers of people doing creative work has rapidly increased over the past century and especially over the past two decades (Florida 2004). With more than 30 percent of the American workforce, the creative class has influenced the people’s lives, especially their values and desires (Florida 2004). In addition, Boden (2004) argues that creative people can exploit their mental resources to generate more possibilities than others can imagine. Because creative people have a heightened ability to sense unique patterns in their environment unbounded by traditional ideology, they have more opportunity to drive positive changes in their surroundings.

Florida (2004) argues that the creative class consists of two groups: the super creative core and creative professionals. According to Florida, the super creative Core includes “people in science and engineering, architecture and design, education, arts, music and entertainment, whose economic function is to create new ideas, new technology and/or new creative content” (p. 8). Around the core, the creative class also includes a broader group of creative professionals in business and finance, law, health care, and related fields (Florida 2004). These people engage in complex problem solving that involve independent judgment to “create meaningful new forms” and requires high levels of education (Florida 2004, p. 68).

3.3 Site Selection

The site used in this study is downtown Dallas, Texas. The area in Dallas termed "Downtown" has traditionally been defined as bounded by the downtown freeway loop (Figure 3.1). It is bounded on the east by US 75 (Central Expressway), on the west by I-35E

(Stemmons Freeway), on the south by I-30 (E R L Thornton Freeway), and on the north by Spur 366 (Woodall Rodgers Freeway).

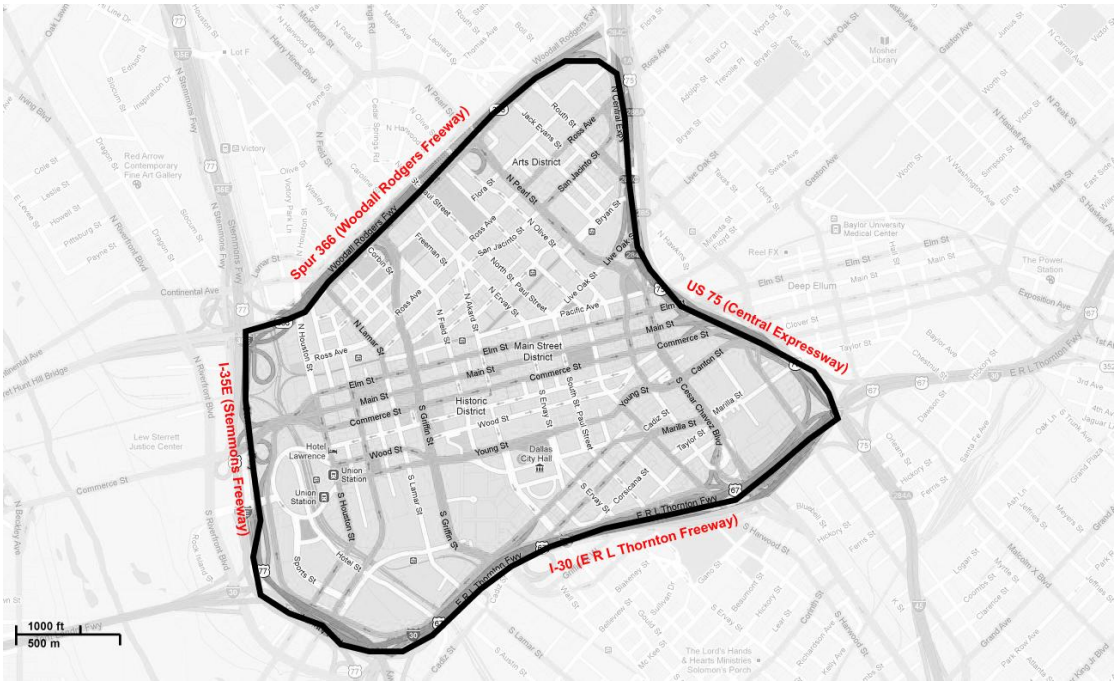

Figure 3.1 Downtown Dallas

Downtown Dallas is often defined by eight districts, each having unique features and venues. These districts include the West End Historic District, Government/Civic district, Convention Center district, Farmers Market district, Arts district, City Center district, Reunion district, and the Main Street district.

3.3.1. Creativity and Dallas

Dallas was founded in November 1841 by John Neely Bryan as 640 acres on a bluff overlooking the “three forks” area of the Trinity River (Organ 2000). Dallas is the third largest metropolitan area in Texas and the ninth largest in the United States (Baylor 2012). As of 2009, the population of Dallas was 1.3 million, according to the US Census Bureau. As shown in Figure 3.2, the city is the largest economic center of the 12-county, Dallas–Fort Worth–Arlington metropolitan area, according to the March 2010 U.S. Census Bureau release.

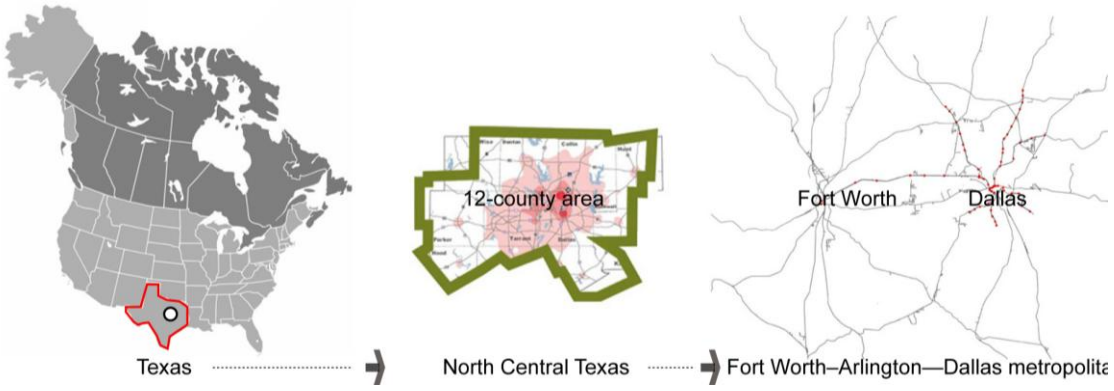

Figure 3.2 Location of Dallas

To date, as one of the largest cities in America, Dallas has embarked upon an aggressive economic redevelopment effort in the downtown area (Lively 2007). Also, as shown in Figure 3.3 (Florida 2002), Dallas is one of the top ten most creative American cities for regions with over a million people, noted especially for high-tech (ranked 6th) and diversity (ranked 9th). In addition, as shown in Figure 3.2, creative workers constitute 30.2% of the total workers in Dallas. In sum, Dallas is representative of a tolerant, diverse, and creative American city.

City	Creativity Index	%Creative Workers	Creative Rank	High-Tech Rank	Innovation Rank	Diversity Rank
1. San Francisco	1057	34.8	5	1	2	1
2. Austin	1028	36.4	4	11	3	16
3. San Diego	1015	32.1	15	12	7	3
3. Boston	1015	38.0	3	2	6	22
5. Seattle	1008	32.7	9	3	12	8
6. Chapel Hill	996	38.2	2	14	4	28
7. Houston	980	32.5	10	16	16	10
8. Washington	964	38.4	1	5	30	12
9. New York	962	32.3	12	13	24	14
10. Dallas	960	**30.2**	23	6	17	9
10. Minneapolis	960	33.9	7	21	5	29

Figure 3.3 Top Ten Cities of Large Cities Creativity Rankings (Florida 2002)

3.3.2. Downtown

The focus of this study is on downtown Dallas because this city, like many other traditional American metropolitan areas, is experiencing the transformation from the Modern era to the Postmodern era. This transformation is marked by the shift from Modern era urban downtown environments, noted by functional segments constituting a coherent whole, to a collage of unrelated settings and spaces, creating the disjointed, episodic, and fragmented design of the Postmodern era (Rowe and Koetter, 1984; Tiesdell and Carmona, 2007). These disjointed and fragmented open spaces between buildings, districts, and neighborhoods belong to the definition of prescriptive lost space as noted by Trancik (1986). As mentioned, Dallas is experiencing the shift to Postmodern era design; therefore, Dallas also has much prescriptive lost space and as such is a promising urban laboratory in which to identify lost space and change it to a positive urban area. For example, as shown in Figure 3.4, the predominant types of open space in downtown Dallas are highways, thoroughfares, and parking lots.

Figure 3.4 Vacant Land and Surface Parking Lots (Kennedy 2012)

Specifically, in 2004, according to Carter and Burgess, only about 5% of the current land area in downtown Dallas includes parks and open space; by comparison, 12% of downtown is covered with surface parking lots, most of which are visually unattractive. In addition, according to DowntownDallas360 (2012), the total land area within the Downtown freeway loop has grown to approximately 955 acres, and the total amount of that land currently dedicated to parking is approximately 257 acres, 27% of the total. Of the total land area dedicated to parking, approximately 125 acres (13%) is currently utilized by surface parking, while structured parking accounts for approximately 132 acres (14%). In contrast, the parks and open spaces in downtown Dallas are disconnected with no sense of order or hierarchy, and with no clear connectivity; there is rarely pedestrian movement from one site to another (Carter and Burgess 2004). All of this means that the City of Dallas provides much prescriptive lost space for the creative class to identify and re-imagine in a more positive way.

3.4 Research Design

This research investigates the perceptions of lost space according to the creative class' experiences in downtown Dallas. Data are gathered from face-to-face interviews with the creative class who live and/or work in downtown Dallas. The results provide designers with new insight to create positive urban space that incorporates end users' values and meanings.

3.4.1. Interview Questions

These key questions are asked for each interview:

1. Does the term lost space mean anything to you?
2. Please tell me if there is lost space in downtown Dallas.
3. What are the characteristics of lost space in downtown Dallas?

These possible follow up questions may also be asked for each interview:

4. Please describe the details about those lost spaces.
5. Why are they lost spaces to you?
6. Do those lost spaces need to be changed (re-designed or re-used)?

7. If so, how do you want those spaces to be changed?

The interview questions are non-directive, meaning the respondents are not given a definition of prescriptive lost space. The respondents are invited to explain their understanding of and possible experience with lost space.

3.4.2. Additions-to-Base-Maps

During the interview process, this study utilizes additions-to-base-maps while asking the question "Please tell me if there is lost space in downtown Dallas." The additions-to-base-map is a method of capturing respondents' feelings or perceptions of lost space (Zeisel 1981). In this method, a transparency is overlaid on a base map of downtown Dallas, and the respondents are asked to mark locations of lost space. Using additions-to-base-maps to solicit data is an efficient and clear method for determining how respondents feel about lost spaces within specific place, making data more reliable, accurate, and expressive of the research (Zeisel 1981).

3.5 Research Respondents

Respondents are selected based on recommendations from the thesis committee, who are knowledgeable of both the subject matter and the profile of the respondents. Twelve respondents are selected, and all profiles match that of the creative class. One respondent is selected from each category of the creative class occupations to ensure balance among responses. All respondents conform to the following criteria:

1. Come from the creative class occupations (see Table 3.1)
2. Work and/or live in downtown Dallas

Table 3.1 The Creative Class Occupations (Florida 2004)

The Creative Class
Super Creative Core
Computer and mathematical occupations
Architecture and engineering occupations
Life, physical, and social science occupations
Education, training, and library occupations
Arts, design, entertainment, sports, and media occupations
Creative Professionals
Management occupations
Business and financial operations occupations
Legal occupations
Healthcare practitioners and technical occupations
High-end sales and sales management

3.6 Research Procedure

The first step in this research is to obtain permission from the Institutional Review Board (IRB) to protect the safety and welfare of human subjects participating in this research. Then, after contact with the selected respondents, appointments are made and an interview schedule is developed.

The study commences by using face-to-face semi-structured interviews with respondents about their understanding of lost space. After identifying these basic understandings using the predetermined open-ended questions, color additions-to-base-maps with a transparent overlay are shown to each respondent. Using markers, respondents indicate the locations of their lost spaces on the transparency, in addition to giving a verbal description of each lost space. At the same time, respondents are asked to explain the characteristics of those lost spaces they have identified. The interview and additions-to-base-maps process takes about 30 minutes. Respondents are allowed to freely discuss their understanding of descriptive lost space. The verbal descriptions are digitally recorded and transcribed.

3.7 Summary

This study examines the creative class' perceptions of lost space, which is descriptive lost space, and contrasts this with prescriptive lost space. It is important to determine if

descriptive lost space in contemporary society is different from prescriptive lost space from the Modern era as defined by Trancik because the differences in perceptions can lead to differences in urban design decisions. It is also important to include the contemporary creative class' meanings and values in the characteristics of descriptive lost space. This is important because the creative class contains the key drivers of the American economy, and their meanings and values should be reflected in urban design decisions (Florida 2004).

Interviews are used to obtain various perceptions of lost space from selected respondents who report on their personal experience with lost space in downtown Dallas. Interview responses are analyzed using grounded theory for trends and the defining characteristics of descriptive lost space. These trends and defining characteristics of descriptive lost space are compared and contrasted with prescriptive lost space.

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CHAPTER 4

ANALYSIS AND FINDINGS

4.1 Introduction

This chapter contains data analysis and a discussion of key findings. In section 4.2, the demographics of the respondents were introduced for a more complete interpretation of the data. Next, in section 4.3, the respondents' descriptive perceptions of lost space were indentified from the interview data. From these descriptive perceptions of lost space, the definitions, characteristics, and examples of descriptive lost space were identified. Finally, these definitions, characteristics, and examples of descriptive lost space were compared and contrasted with the definition, characteristics, and examples of prescriptive lost space, which have been taken from the literature. In this section, the data were analyzed in four steps:

1. Frequently used key words related to downtown physical settings from all twelve respondents were identified;
2. Key reasons for describing elements from step one as lost space from individual respondents were identified and summarized into characteristics of descriptive lost space;
3. The definitions and characteristics of descriptive lost space were compared and contrasted with the definitions and characteristics of prescriptive lost space; and
4. Examples of descriptive lost space were compared and contrasted with examples of prescriptive lost space.

After these steps were completed, key points from these findings were highlighted and briefly discussed in section 4.4.

4.2 Demographics

Twelve respondents from the creative class who work and/or live in downtown Dallas were selected. These respondents consisted of seven males and five females. Seven respondents only work in downtown Dallas and five respondents only live there. Each category

of the creative class was represented by at least one respondent to ensure balance among their perceptions. Figure 4.1 matches respondents to their creative class categories as described on page 41.

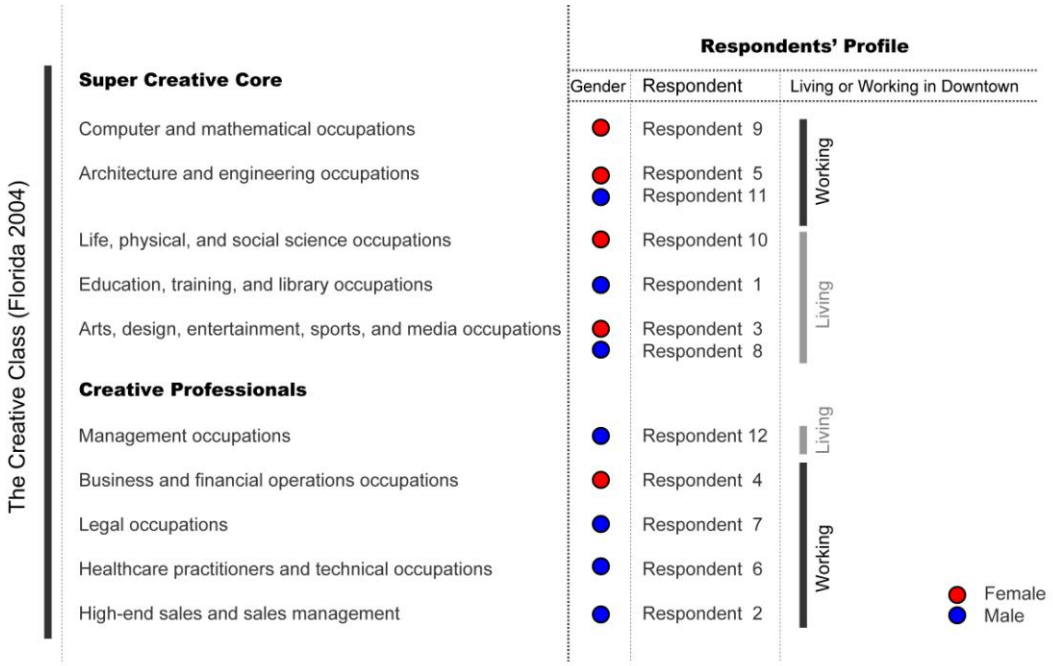

Figure 4.1 Demographics

4.3 Data Analysis

This section summarizes the four steps of data analysis. The definitions, characteristics, and examples of descriptive lost space were identified and compared and contrasted with the definitions, characteristics, and examples of prescriptive lost space.

4.3.1 Step 1: Frequently Used Key Words Related to Downtown Physical Settings

In this section, frequently used key words are presented that relate to downtown physical settings from all twelve respondents. Word repetitions were used because, as Gery and Bernhard (2003) point out, people more frequently use words that are more important to their perceptions of the world around them. Similarly, D'Andrade (1991) argues that "perhaps the simplest and most direct indication of schematic organization in naturalistic discourse is the repetition of associative linkages" (p. 294). The information gleaned from identifying frequently used words can be used to describe themes that groups of people find important, and, indeed, it proved useful to this research. As indicated in the literature review, there are three elements that constitute the identity of a place, and the first of these is the physical setting (Relph 1977). Therefore, it was important to identify which specific elements in the physical setting are relevant to the creative class when discussing lost space.

Gery and Bernard (2003) also suggest using computer programs such as NUD.IST are helpful to identify frequently used words in a large corpus of linguistic data. In fact, NUD.IST is cited as premier software for coding qualitative linguistic analysis in many texts (for example, Lee and Fielding 2004; Taylor and Bogdan 1998). Therefore, NUD.IST was used to analyze the data collected from the creative class.

Figure 4.2 shows the frequently used words from all twelve respondents when discussing perceptions of lost space. The size of the word in Figure 4.2 reflects the relative frequency of mentions. The six words highlighted in red indicate elements in the physical setting: building; downtown; park; parking; space; and, street. These words are important

because they are used in step two in which the key reasons for describing elements in the physical setting as lost space are identified.

Figure 4.2 The Frequently Used Words from All Twelve Respondents when Discussing Perceptions of Lost Space

4.3.2 Step 2: Common Characteristics of Lost Space

Step 2 is divided into two parts. In step 2a, individual reasons for perceiving elements in the physical setting as lost space are identified for each of the twelve respondents. In step 2b, these reasons are summarized into common characteristics of lost space. This approach draws on research that supports a careful analysis of words and phrases to more clearly indicate relationships among things (Gery and Bernard 2003).

Step 2a was a continuation of step 1. The purpose of step 1 was to identify common focal points in downtown Dallas' physical setting. In step 2a, important comments from each of the twelve respondents related to activity and meaning were selected to highlight descriptive perceptions of lost space. These comments, the remaining components of place identity (Relph 1977) were connected to common focal points selected in step 1. Then, for each participant, specific individual meanings associated with descriptive lost space were extracted and presented in Figures 4.3 – 4.14.

In step 2b, by summarizing the extracted individual meanings associated with descriptive lost space in the aggregate, common characteristics of descriptive lost space were identified. As seen in Figure 4.15, descriptive perceptions of lost space result from applying any of these common characteristics to elements in the physical setting of downtown Dallas. These common characteristics of descriptive lost space are important because they are compared in step 3 to the characteristics of prescriptive lost space.

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	We have big density, but [there is] nothing [to do].	
	This is typical of downtown, parking lots, ugly streets.	
	There's a lack of retail in downtown Dallas and therefore nobody walks the street.	lack of retail
	So all of this stuff is very, very active, all these cafes and street trees and everything, all kinds of people here, downtown nobody.	no cafes
	Not open space that makes the difference, it's how it's used.	
	That's the retail area, right? That's the most important. Not the open space.	
Regarding **Streets**	There's no retail and therefore there's no street activity.	nothing to do no street activity
	Sidewalk that is too wide that has nothing else.	
	It is much too wide for humans and it doesn't have street trees.	no street trees
	The streets themselves are not very friendly.	
	It is the street trees, the nice character and feeling of the shops overlooking, the cafes overlooking.	no nice character
Regarding **Parks**	These are much more green, there's less paving, there are more green, they're using water features, they're using lots of trees, there's much more friendly towards people.	too much paving less green
	It has green, a place to sit, a place to watch the fountains, café.	
Regarding **Plazas**	No human beings feel comfortable [in City Hall Plaza]. [City Hall Plaza] is too big, too much sun, and it doesn't have any relationship to the pedestrian, and it's never been used.	too much sun no relationship to surroundings
	There's no café over at the City Hall Plaza.	
	We made the [City Hall] plaza for the building and not for the people.	
	[Comfortable plaza should has] nice interesting walks, the gardens, the retail pavilion or the food service pavilion, the use of water.	water feature
Regarding **Parking**	There's nothing for people to do.	lack of diversity of activities
	A lot of parking lots are definitely lost space.	
Regarding **Buildings**	It does not have any more retail on the ground floor.	lack of shops
	It was supposed to be laid out with all these shops and things, but did not happen.	no all kinds of people
	There are some people sitting out there, but there's not the action that you see on the other one.	no sitting area no people watching

Figure 4.3 Important Comments of Descriptive Lost Space from Respondent 1

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	There's no place to walk around or to see well.	nothing to do
	That's no place for people to talk or walk.	
	In Dallas in the summer, three or four months is really hot so nobody wants to sit outside on the bench.	hot summer
	Retails will keep more people around because you can go to buy stuff outside of downtown.	no retail
	Dallas is built for functionality, convenience and living standard.	not convenience
	I would have more activities in downtown, more retail spaces.	no activity
	Everything is so big and so far away, you cannot walk anywhere.	
	Downtown is not a place to really go and enjoy. There's not many places to visit.	
	As people are starting to live here, they could have more use of the space.	no different groups of people
Regarding **Streets**	There's different things in the street.	
	There's little shops everywhere you live.	
	You walk downstairs and there's a grocery store, there's a café, there's local businesses such as couple of restaurants you can walk through.	no cafe
	People are not on the street that much because really there's no use.	
	On main street there's some more buildings but I don't go there that much because you go there and you only have three or four places you can visit. It's not even stores.	
	Dallas has one of the best organized traffic systems in the United States, so you know like if you go to Houston or New York or you know LA, it's way worse.	
Regarding **Parks**	It's nicer to have more parks.	few parks
	It's designed very nice, functionally, you know, it's a little small,	
	You look from one corner and you can see the person.	no people watching
	If you come sometimes there's food taxi here during lunch hour, these guys that maintain the park, they bring out chairs and tables and you'll see 30, 40 people eating lunch here.	
	There's a little park over there nobody goes to because it's not close to anything.	
Regarding **Plazas**		
Regarding **Parking**	We need a lot of parking lots. I think they are necessary -- maybe they can consolidate them.	
Regarding **Buildings**	It serves a purpose, but you know the crew is different.	
	There's nothing you can find. There's really limited options.	limited options
	90% of the business that sell food are underground. I think it's more depressing than anything, it's nicer to be outside	
	Going to the windows look dirty and old.	outdated
	They're just too outdated.	

Figure 4.4 Important Comments of Descriptive Lost Space from Respondent 2

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	The truth is I don't really hang out downtown.	
	I don't like [homeless] at all and avoid them if I can, being as single girl.	
	I don't really do anything downtown. I just go straight to uptown for anything. It's more friendly and polished.	
	On the weekends, for example, there is nothing out here, everything is closed even restaurants.	nothing to do
	I feel it's a safer feeling, I guess because much more people like of peers type of people. Downtown here is more business.	lack of safty no peers type of people
	There's nowhere to go, no patios.	no patios
Regarding **Streets**	Again, on the weekends there's nothing - there's nobody down here.	
	They don't have is patios -- restaurant patios. That's a really big thing in the social scene in Dallas especially when you go uptown, it's all patios.	
	If you don't have a patio, you're in trouble. That's where everyone goes and spends their money.	
Regarding **Parks**	It's an outdoor space for the dog.	lack of place for dog
	I do like that it's under a bit, so you don't have the street traffic right at eye level in a way.	traffic noisy
	I like the more parks.	
	They've been building a bunch of parks. That's nice.	
Regarding **Plazas**		
Regarding **Parking**	Surprisingly parking isn't bad.	
	We need parking lots in downtown.	
Regarding **Buildings**	So many of the buildings are old and run down like this one is not attractive at all. It's dirty, it's dusty, it's been there since I've lived here.	outdated dirty
	Downtown feels a bit abandoned in some areas like these buildings. That's a waste of space.	

Figure 4.5 Important Comments of Descriptive Lost Space from Respondent 3

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	I think downtown Dallas could be a really great place if they would utilize or put some kind of economic development back into the area.	not utilized economic development
	Only there in lunch time people go outside because there's not that much retail downtown. There's only buildings like you know corporations and restaurants.	single use
	I think an urban environment is modern, sexy, you know that a really cool design, modern design.	too old
	Maybe like more restaurants and have like an outdoor patio instead of like a restaurant like this that has the music are part of the culture.	no outdoor patio no music
	I think if they had more retail, more people would come out because the buildings, they're not full -- the high rise buildings, but there's enough people in them to support businesses.	lack of retail
	I think we're like the only downtown in the metropolitan city that doesn't have any retail.	
	I think people are proud of being from Texas, you know they might have on like a Texas flag, a t-shirt or that sort of thing, but as far as like culture to say that you know things outside of maybe in Forth Worth where they have the rodeos and that kind of thing, I just don't think there's that much to do around town.	no events and activity
	I just think that there's not that much culture in Dallas, more so events.	
Regarding **Streets**	I would really like to go to a place that maybe have like some live jazz music and I mean maybe you could eat there too, that would be good.	
	You can't go in the summer, it's too hot.	too hot in summer
	In Dallas, even if they had trees, it'd still be too hot.	
Regarding **Parks**	You just want to sit down and enjoy the scenery, the landscaping.	
Regarding **Plazas**	If they didn't have a bunch of pigeons and dog poop from people walking their dogs, thanks giving plaza would be okay.	not clean
	[Fountain Plaza] is nice and calm and serene.	
Regarding **Parking**	There's enough parking around downtown Dallas that you can get around just fine and you know you don't have to worry about not finding a place not like New York and it's affordable.	
	Because I don't think that we're mass transit dependent enough to not have parking lots, so, I think [parking space] is necessary.	
	Parking lot is being used. It's being use for parking. Parking is necessary, otherwise where should I park?	
Regarding **Buildings**	Dual living and work space, so a building that people live in, but maybe they also have an office in as well.	lack of divisity of activities
	Modern like, you know just not -- just not antique like really clean lines and design and architecture and trendy, that's a better word -- trendy.	
	Companies and businesses are using the walls for advertising.	
	Even though [City Hall] is really big, it might be part of the beautification process-- project where they want to make the city beautiful. That's a landmark here in Dallas. Everybody knows about that.	

Figure 4.6 Important Comments of Descriptive Lost Space from Respondent 4

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	It's very important to have a vibrant downtown.	lack of vibrant
	There's nothing going on you know and it's just it's not nearly as interesting or pleasant to be there.	boring
Regarding **Streets**	Space here is lost and not very healthy 'cause you feel like you're in a tunnel.	
	You're bringing in more sunlight and you don't make it feel like you're in a tunnel.	
	You can look out and still see the street life.	no street life
	There weren't nearly enough businesses and especially at night time it was just dead.	not enough businesses
	Having a band over here and some artists over here can make a space more interesting -- make the street life more interesting.	no event
	If it's 105 degrees, I'm going to get into the tunnel as soon as I can.	hot summer
Regarding **Parks**	You got the berm hill of grass and then I think that brings a lot of visual interest to it and when you're behind that, even though, you're still off of main street you still feel a little bit removed from main street which is nice.	lack of visual interest
	We could bring in food trucks, we could create shading structures, you know we can have musicians.	lack of food outside
	That's aesthetically is very pleasing, but then when you're actually down in that space, it just doesn't seem very pleasant. There's nothing special about it.	nothing to do
Regarding **Plazas**	The plaza in front of city hall is not great. There's nothing like going on there.	
	There are a couple of people I know at the city of Dallas, they're doing this living plaza every month and that's kind of fun. It's all about trying to bring life to that plaza.	no activity
	I think it's nice and I mean even though it hides from the street in a way, you know, because it's set in and so where you're inside Thanks-Giving Square, you feel almost like you're move slightly from downtown and you look up and you can see the blue sky, and the trees and everything kind of intermingles together.	
	There's some very cool benches there and they're integrated into the landscaping and yeah, this looks nice, but when you're in that plaza, it doesn't seem interesting.	
Regarding **Parking**	Parking lot which to me are a negative thing.	
	They create a parking garage and the building with it and that's a positive thing.	
Regarding **Buildings**		

Figure 4.7 Important Comments of Descriptive Lost Space from Respondent 5

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	■ It depends on how hot it is. Lost space in Dallas is any space outside in the summer.	■ hot summer
	■ There's not much you can do [in downtown].	■ nothing to do
	■ There's a big open field, you can't really do much with it because there's highways all around it, but they've tried to plant trees and that hasn't worked and there's just nothing you can do with it.	■ bad surrounding environment
	■ You know I've lived in the New York City, I've lived in Chicago, neither one is as hot as Dallas, but there's more life downtown.	■ lack of downtown life
	■ There's night clubs and some restaurants and some bars and some tattoo parlors, and ten years ago it was coming back and we'd go over there, we still go down here once a while and eat, but I would never go down there late at night.	
	■ [It could] has a lot of things to do with [downtown], but here in the summer time, it's just not possible [for people to go outside].	
	■ They've got a pretty good downtown area 'cause they've got the river Mississippi River, there's a lot of life along the river. We got a dried up Trinity River. It's either dried up or it's flooding.	■ natural resources
	■ I mean we don't have any natural resources that will draw people downtown.	
	■ [Downtown] had a lot of restaurants, a lot of activity.	■ lack of restaurants
	■ I think the liveliness of the streets in terms of landscape, places to sit, places for people to congregate. I think it would have to basically rely on retail establishments especially restaurant, bars, bookstores.	■ no place for people to congregate ■ lack of bars ■ lack of bookstores
	■ Non-threatening, not too loud, clean, you want to be there instead of wanting to get away from there.	■ clean ■ Non-threatening
Regarding **Streets**	■ A lot of people walking around, sitting outside, eating, a lot of shops opened up where you can go in and out of shops, vendors on the street.	■ lack of shops
Regarding **Parks**	■ It's there, but it's not as active.	
	■ The Arts District is beautiful, but there aren't enough restaurants to draw a lot of crowds, there's a few, but you don't see a lot of walking traffic in there.	
Regarding **Plazas**	■ I think one example would be the Dealey Plaza which is unlike any place else in the world because of the historical meaning of it.	■ historical meaning
	■ It's a rather plain artistically, but [Thanksgiving Square] fits Dallas. Dallas has very brash, bold, and bright buildings and architecture and that fits Dallas.	■ plain artistically
	■ I might if I had to meet with a couple of people, I might go out [One Main Plaza] and have a meeting.	
Regarding **Parking**	■ I don't much like them. They got a garage I can park and very expensive. That's a problem. It's difficult finding parking. It can be an inconvenient and expensive.	
	■ This is Texas, everybody has their own horse.	
Regarding **Buildings**		

Figure 4.8 Important Comments of Descriptive Lost Space from Respondent 6

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	■ You could walk for mile and mile and a half underground without ever coming out for air because of the extensive tunnel system.	
	■ I think that took a lot of people off the street because Dallas is quite hot in the summer and people like to be where it's cool.	■ hot summer
	■ There's not a lot of trees in downtown Dallas and when it's 105, it's still hot whether there's trees or not.	
	■ it's nice if it's 80, sure I would walk outside more, but there were more restaurants and stores and things like that in the underground tunnel than there were above ground.	■ lack of restaurants above ground
	■ You know there's really not a lot of eating places around here and there's no retail around here except 7-Eleven and so there's just not -- not much reason to go walking around here right now.	■ no retail
Regarding **Streets**	■ This is Flora St., in front of here is very nice, nice wide street with trees. But there's really no retail and there's no restaurants to walk to from here.	■ no connection
Regarding **Parks**	■ There's not much reason to go there. There is no stores, there is restaurants, it's just a nice very small little park in downtown Dallas.	■ no stores
Regarding **Plazas**	■ I would sometimes go there after work and he and I go to the baseball game or something like that when he was alive and there used to be you know more nice retail out here now. It's just some kind fast food joints and places like that.	
	■ We all wished that -- the one drawback with this building is that there's not much else over here except the arts -- the performing arts and that's very nice, but there are no -- there's a couple of restaurants down in the courtyard here.	■ nothing to do
	■ When it was new, I'd walked through there during lunch because it was a place we would eat over on the other side of it, but that place went out of business and the last ten years, I probably never went in the place.	
	■ Thanks-Giving Plaza was not well-maintained and you know because it had those walls around it only I guess two places to go in it. It's just wasn't a very welcoming inviting place to go. it's really not a very people-friendly place with the walls that surround it and there's nothing there.	■ not accessible ■ not well-maintained
Regarding **Parking**	■ Dallas is a city of cars and there's no way to get from here to there.	
	■ [Government] did take away some parking space that was useful.	
	■ We need parking lots too because Dallas is still a city of cars.	
	■ A lot of places I used to park are now buildings or parks. This building has a parking garage in the back. And that's much better than some of the buildings that don't have many parking in the old buildings they have no parking.	■ not convenient
Regarding **Buildings**	■ I've been in this building for four years and in this building, there is not very much to walk to except my wife and I will come to some of the concerts and performances in the Arts District in the evening.	■ no relationship to surroundings
	■ That building was part of the tunnel system.	
	■ This building [One Main Building] was not well-maintained and this plaza [One Main Plaza].	

Figure 4.9 Important Comments of Descriptive Lost Space from Respondent 7

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	I'd always wish were in downtown just like even the occasional Subway, there's already enough on the street level and there's even more down there. There's Cobbler, there's a hairstylist, there's a travel agent, and they're all open and it's like 8:30 in the morning that "downtown" and these retail spaces, you know, kind of blue collar shop keeper retail spaces are open.	lack of street life lack of shops
	On the east side of downtown, aside from the 7-Eleven and the Metropolitan Café which is on Main St. down past the courthouse, there's really nothing open and there's nobody using any other spaces on the street.	nothing to do
	It definitely needs more diversity in its activities downtown Dallas. There are bands that play in some of these bars so there's a little bit of a music scene. It's not really much of a music scene, but I guess there's enough where you could go hear some music if you wanted to but most of the time you go out other places for that.	more activites music scene
	[There] is no permanently lost space. I just think it would take a little bit of user activity around it to make it better.	
Regarding **Streets**	It's a pretty uninviting and there's not a lot of there's also not a lot of access because of fencing.	bad access
	Sidewalks are pretty empty.	
	Every business is catered to this experience and so there's a lot more walkability there because there's a lot more retails.	lack of retail
	There's really nothing to walk to up and down Flora St. and when we walked to the Arts District, we had to cross a couple of parking lots.	
Regarding **Parks**	We live at St. Paul and in between Elm St. and Main St. and there's a great park right outside of our building that's pretty much one of the only, you know, I guess in contrasting found spaces.	no relationship to surroundings
Regarding **Plazas**	Thanksgiving Plaza is pretty bad. It's a park with a wall, so nobody sees if there's any activity ever happening inside.	
	I mean there's not really much of a reason that I can think of to go [City Hall Plaza].	
	There's some places in Arts Plaza, but those are pretty upscale I guess just in general. I think it's like anyone couldn't afford it for lunch or business lunch or a date or something like that at night, but in general that's pretty place but nothing [to do].	no affordble business
Regarding **Parking**		
Regarding **Buildings**		

Figure 4.10 Important Comments of Descriptive Lost Space from Respondent 8

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	■ I go to the West End area because they have like -- it's a food area -- it's a restaurant area. ■ I think Dallas has a lot bigger problems with downtown than jut placement of trees. If it's not going to work, then don't do it. They spend millions of dollars watering those trees during the summer because it's hot.	■ no restaurant
Regarding **Streets**	■ Some of [streets] are narrow. ■ There is nothing in the streets. ■ I mean people don't want to walk four blocks in a hundred degree heat and I understand that. I, one hundred percent understand that.	■ nothing to do ■ hot summer
Regarding **Parks**	■ So there is maybe even a band play music there maybe I think people will go there.	■ no music
Regarding **Plazas**	■ Maybe the plaza would be more useful. ■ I can see some people but most of the time there's no function (activity). ■ [Thanksgiving Square] is more like a passing area. We pass that but never use that. ■ There's nothing for people to do.	■ no activity
Regarding **Parking**	■ Because parking lot is use like if there's people going to work, like for example building, there's offices in the building then you would require a parking lots. ■ You can already see like some of the parkings are not populated because there's not a lot of people going there like this one in this area.	
Regarding **Buildings**	■ Because most of [buildings] are offices, so if you go on a weekend downtown Dallas there's not a lot of people going within this area.	■ single use

Figure 4.11 Important Comments of Descriptive Lost Space from Respondent 9

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	you can't really walk in downtown Dallas, that's number one. Number two, there's a lot of -- there's just a lot of office buildings there and it's not really when you think of downtown you think of something that people go to like you know to go see in an event or to go hang out go to a restaurant and downtown Dallas is really not like that.	lack of restaurant nothing to do
	Everything is closed that night and it was a Saturday and it was like, wait a second, this is supposed to be a lively place, so that's why I guess a lost space would be something not being used or utilized.	no activity
	It's empty- completely empty city during night.	
Regarding **Streets**	it has more of a culture because of the street, you know, you got a bar here, a restaurant here, a bar here, you know, you can walk one block and have five options versus here walking like you know five blocks and only one option, you know what I mean?	no street activity lack of diversity of activities
	I like things with live music, people -- just more of a -- yeah more of a like just more of a like people, you know, things that are going on, that's really cool, like, have you ever been to 6th St. in Austin?	no people watching no music
	what's cool is that people are just sitting there and talking but you also get the music from the bars, even though you don't have to be in the bar, but you can still hear the music, like I think that's really interactive and that's just a place that I can go out and like really just you know have a piece of mind I just enjoy the moment. And I don't really see that in downtown Dallas.	no interactive
Regarding **Parks**	it's very pretty, but for you to sit out there and enjoy it in the summer, it's just not realistic.	too hot in summer
Regarding **Plazas**	[The AA Center] is really flashy it's like New York Times. They have like a huge TV and that's where they do the New Year's Eve thing.	no events
Regarding **Parking**	it would be just more if they had built like you know a more centralized locations within downtown Dallas parking garages versus a lot of surface parking.	
Regarding **Buildings**		

Figure 4.12 Important Comments of Descriptive Lost Space from Respondent 10

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	■ Downtown is still very, very young as far as the age of its idea.	
	■ It's a ghost town sometimes. And during the week it is -- walking down the street and seeing no one.	■ no people
	■ [Tunnel system] is the worse idea Dallas ever had.	
	■ [New York] is an awesome place and the reason is because there's a lot going on.	■ nothing to do
Regarding **Streets**	■ as far as activating a street is concerned, it doesn't matter what is playing if you hear that, it is an attractive thing people are attractive to it.	
	■ We don't have a lot of music on the street in downtown Dallas.	■ no music
Regarding **Parks**	■ When I walk around downtown, I noticed that really the only parks that function well and plazas are the ones where there are residents obviously because we like things to be close and within proximities.	■ no connection
	■ There's better light in Belo Garden.	
	■ They have a restaurant at the Main Street Garden, but that one -- that one is always used and it's great because people always walk on the outside of it and there's a large grass field in the middle and that's what an urban area needs, it needs a field for people to run in, for dogs to run in.	■ no restaurant
Regarding **Plazas**	■ Some of the older ones aren't as successful. I don't think Thanks-Giving Square which is just down the street is as successful because there's no one there to occupy it during the weekend hours.	
	■ They had Parking Day in Dallas and they had the thing down there and I stopped down there for a while and it was really cool, there were lot of people and it was -- it was what that plaza was meant for.	■ no events
	■ I think that [City Hall Plaza] fits [City Hall] well because the idea of the building is to be as powerful as it possibly can and I think that they achieved it through the use of -- with the landscape dimension of that project. I think I really like this one a lot. It's not a place that I go and hang out a lot, it's not going to occupy a lot of people, but it does -- it does what the idea is supposed to be.	
Regarding **Parking**	■ They've done a really good job with parking garages I feel like.	
Regarding **Buildings**	■ [City Hall] is probably one of my favorites and the reason is because the building is so big. I think that modern architecture came from landscape painting and it sort of has its derivatives in the sublime in the picturesque.	■ no characteristic ■ no meaning
	■ And I think that this building has such a sublime and overwhelming feeling to it that it's not the plaza itself that you think you're experiencing, but the idea of seeing this building and almost feeling it because it's very powerful. I think that that makes -- it makes sense that the plaza doesn't look like and English garden for example.	

Figure 4.13 Important Comments of Descriptive Lost Space from Respondent 11

Physical Setting	Respondent's Description about Physical Setting	Key Reasons for Lost Space Identified From Respondent
Regarding **Downtown**	■ Dallas did not have a lot of great open spaces inside the freeway loop that defines downtown historically we haven't.	■ no history
Regarding **Streets**		
Regarding **Parks**	■ There were perhaps five parks that you would characterize as being significant from an urban standpoint. We now have ten at least and we have a master plan that will identify the location of another five to go from less than ten probably legitimately five to fifteen or twenty over time, so very significant change.	
	■ As an urban experience, you have to walk into it to take full advantage of it. You're not going to notice it and be drawn to it walking down the street and of course it too is surrounded by a challenging transportation or a set of factors that are challenging mode of transportations.	■ bad access
Regarding **Plazas**	■ it's not about number, it's about the quality of design, it's about choosing the location, the sites for these parks. It's about matching the uses of the park -- park or parks to the immediately surrounding neighborhoods whether they'd be residential office commercial combination of the three.	■ bad location ■ no relationship to surroundings
	■ [City Hall Plaza] is a great space. It's not a lost space, but it's underutilized because it doesn't have -- unfortunately, the pedestrian traffic around it from either other development or attractions that bring a lot of people in.	■ no connection
	■ Government Center in Boston, you know, there's a very large plaza there. It's constantly full of people because there are fairly large number of office buildings and restaurants and venues around it that just naturally draw traffic through.	■ no restaurants
	■ [Thanksgiving Square] is an isolated space.	■ isolated space
Regarding **Parking**	■ We need parking, we all know that. It is a important issue for every center city in the world.	
	■ We have a long way to go before people abandon their cars and therefore the planning and the execution of urban concepts in center cities is going to have to evolve with that overtime. Look at Dallas we had no light rail or mass transportation system other than buses as recently as 1990.	
	■ I would say they are not so much lost spaces as they are underutilized from the standpoint of density.	
Regarding **Buildings**		

Figure 4.14 Important Comments of Descriptive Lost Space from Respondent 12

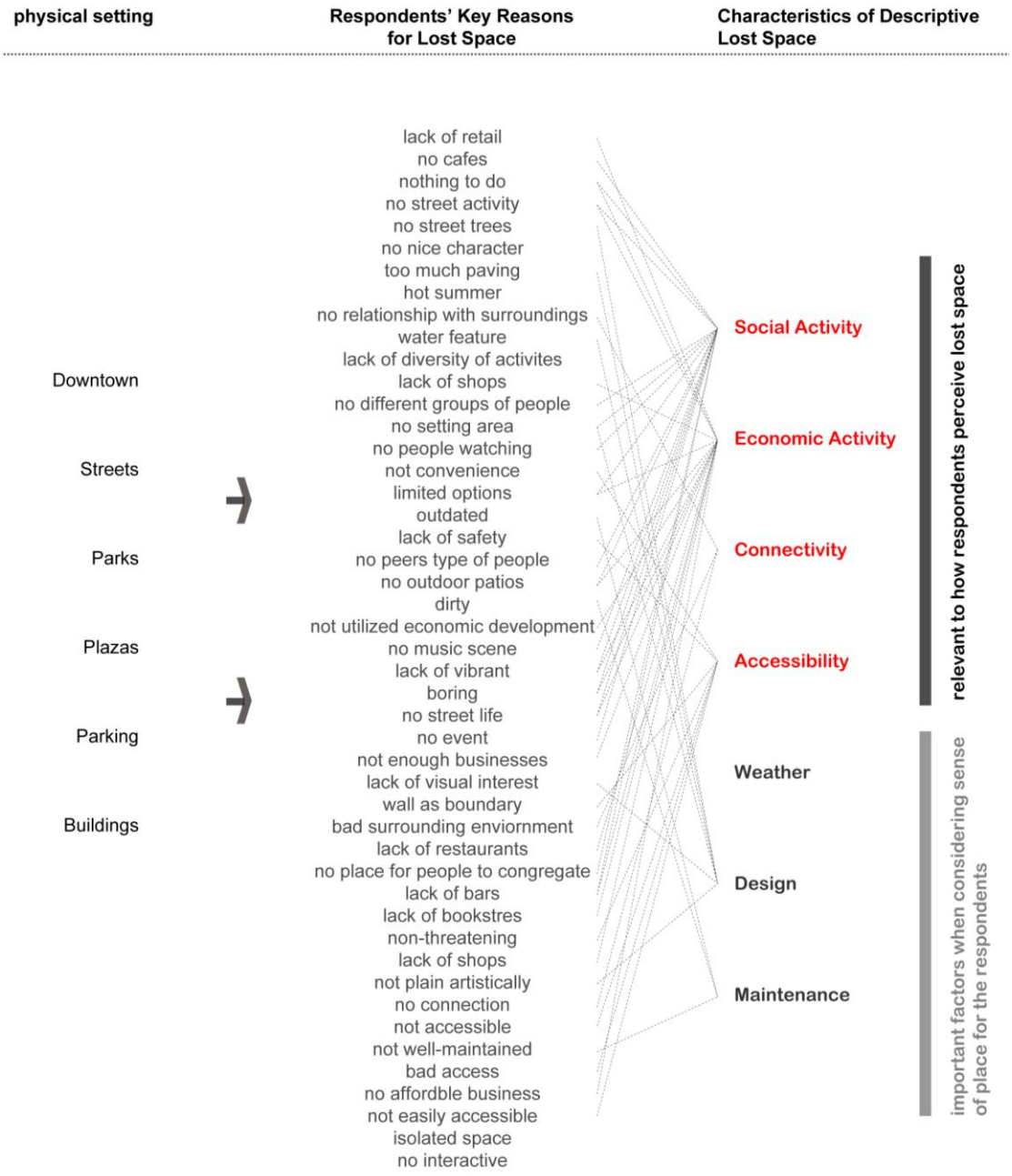

Figure 4.15 Characteristics of Descriptive Lost Space

4.3.3 Step 3: Definitions and Characteristics of Lost Space: Prescriptive versus Descriptive

Step 3 was divided into three parts. In step 3a, the twelve respondents' descriptive definitions of lost space were compared with Trancik's (1986) prescriptive definition of lost space. Figure 4.16 is a graphical representation of this step. In step 3b, the common characteristics of descriptive lost space as identified in step 2b were compared with characteristics of prescriptive lost space as identified in Chapter 2.2. These differences are shown in Figure 4.17.

Trancik (1986)	Lost spaces are the undesirable urban areas that are in need of redesign-antispaces, making no positive contribution to the surroundings or users.
Respondent 1	Lost space is "something that could be used better."
Respondent 2	Lost space is any space "not being utilized."
Respondent 3	Lost space is "wasted space."
Respondent 4	Lost space is "unusable space."
Respondent 5	Lost space is "negative space that could be made better for an urban environment."
Respondent 6	Lost space is space "that is not optimally used to benefit either the aesthetics of the surroundings or the utility of the surroundings."
Respondent 7	Lost space is "space that could be used for something either useful or beautiful, and it is not."
Respondent 8	Lost space as "wherever you find that there is nobody around and nothing's been really taken care of."
Respondent 9	Lost space is "abandoned space."
Respondent 10	Lost space is "unused space, like unnecessary space, like space that there could be something there, but there's not, it could be utilized but it's not."
Respondent 11	"if something is lost it hasn't been found or it possibly will be found. So the fact that it's lost to me seems that it just has not been used."
Respondent 12	Lost space is "lost in the sense of underutilized".

Figure 4.16 Definitions of Lost Space: Prescriptive versus Descriptive

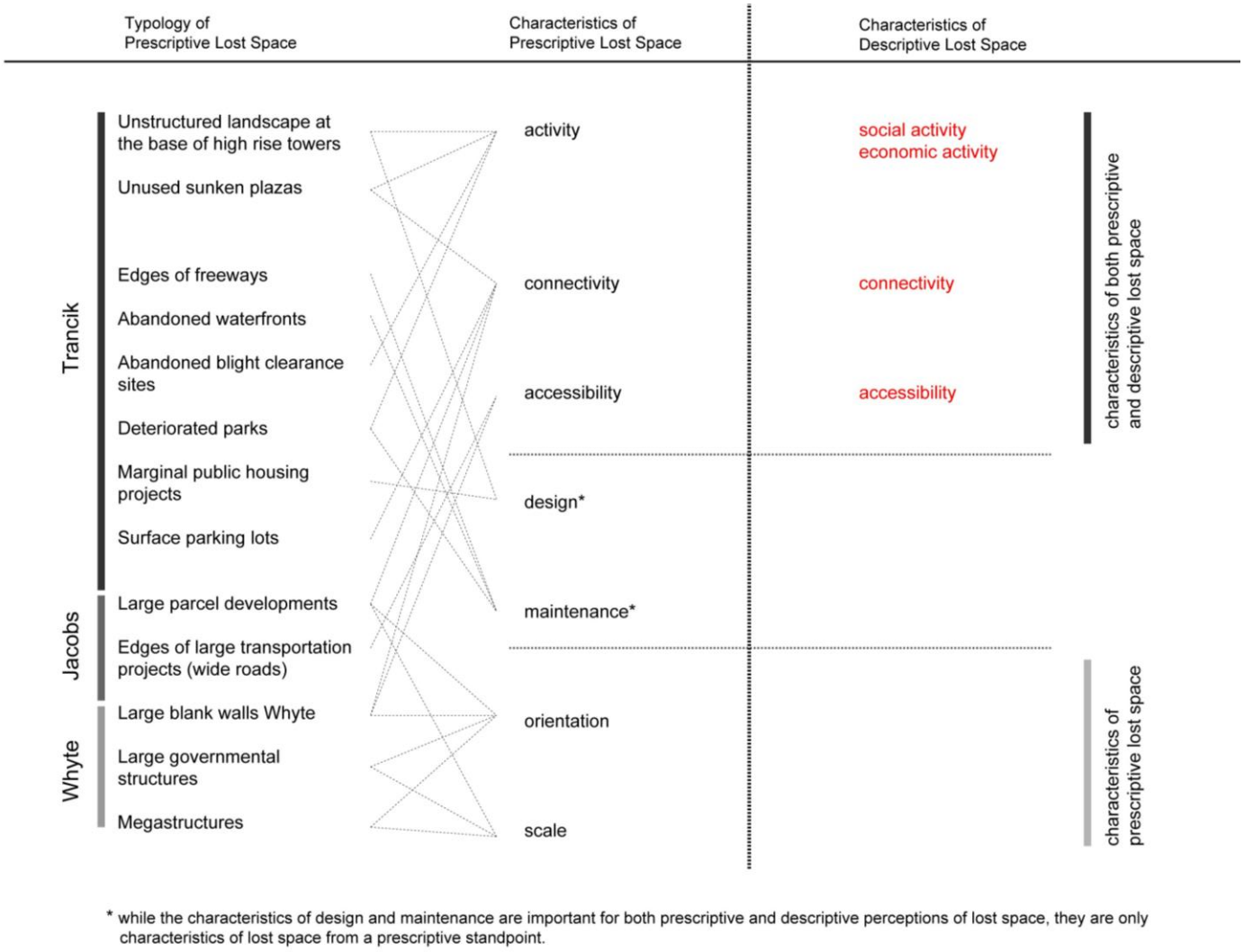

Figure 4.17 Characteristics of Lost Space: Prescriptive versus Descriptive

4.3.4 Step 4: Examples of Lost Space: Prescriptive versus Descriptive

In step 4, specific places mentioned in downtown Dallas by the respondents were matched with the typologies of prescriptive lost space as identified in Chapter 2.2. These matches indicated examples of prescriptive lost space. Then, specific comments from the respondents were also matched to the same specific places to determine examples of descriptive lost space. Figure 4.18 summarizes the key findings of step 4.

	Typology of Prescriptive Lost Space	Places Mention by the creative class	Prescriptive Lost Space	Prescriptive Characteristics	Descriptive Lost Space	Descriptive Characteristics
	Unstructured landscape at the base of high rise towers				○	
	Unused sunken plazas	One Main plaza	●	activity,connectivity, accessibility	●	activity,connectivity, accessibility
	Edges of freeways				○	
Trancik	Abandoned waterfronts				○	
Trancik	**Abandoned blight clearance sites**	old and abandoned office buildings	●	activity, connectivity	●	activity, connectivity
	Deteriorated parks	Thanksgiving Square	●	activity, accessibility, maintenance	●	activity, accessibility
	Marginal public housing projects				○	
	Surface parking lots	parking lots	●	connectivity	●	1*
Jacobs	Large parcel developments				○	
Jacobs	**Edges of large transportation projects (wide roads)**	streets	●	activity, accessibility, scale	●	activity, accessibility
Whyte	Large blank walls				○	
Whyte	**Large governmental structures**	City Hall	●	orientation, scale	●	2*
Whyte	Megastructures				○	

1* None of the selected members of the creative class report that the parking lots in downtown Dallas lack connectivity or any of the other characteristics of descriptive lost space. In fact, most of the respondents in this study indicate that parking lots are not lost because they are necessary and convenient, and facilitate life in downtown Dallas

2* One respondent in this research reports that City Hall cannot be lost space because it is an important landmark in downtown Dallas.

● Yes
● No
○ Not Mention

Figure 4.18 Examples of Lost Space: Prescriptive versus Descriptive

4.4 Summary of Key Findings from Steps 2 through 4

This section highlights important comments from the respondents. Key points from the data were analyzed for patterns in perceptions from the creative class and new insights into the defining characteristics of descriptive lost space are presented and contrasted with the characteristics of prescriptive lost space. Finally, the validity of descriptive lost space as an important construct is discussed.

4.4.1 Summary of Key Findings from Step 2

In this section, relevant comments from each respondent are summarized. These comments represent the definitions and characteristics of descriptive lost space. These descriptive definitions and characteristics are compared against prescriptive ones.

Respondent 1: This respondent's definition of lost space is "something that could be used better." He indicates that retail is the most important element related to lost space, and the lack of trees and retail, such as cafes in downtown Dallas, diminishes street activities. Also, for respondent 1, it is not the open space but rather how it is used that is important. This respondent focuses mostly on social and economic activity.

Respondent 2: This respondent's definition of lost space is any space "not being utilized." He indicates that more retail spaces such as grocery stores and cafes are the significant element affecting people's desire to go outside and use space or not. He also suggests that weather plays a critical role in people's decisions to go outside: "In Dallas, in the summer, three or four months is really hot so nobody wants to sit outside." In his opinion, Dallas is built for functionality. However, according to respondent 2, it would be nice to be outside, but there is little to do on the street. He also points out a park that is underutilized because "it's not close to anything." This respondent focuses on economic activity, connectivity, and weather.

Respondent 3: This respondent's definition of lost space is "wasted space." She emphasizes that downtown Dallas feels a bit abandoned in some areas, and there is nowhere

to go. She points out that patios are the "big thing in the social scene" because they are where everyone goes, but downtown Dallas has none. For this reason, she thinks downtown Dallas lacks a friendly feeling, and she points out that she feels safer when she is with groups of friends. This respondent focuses on social activity, connectivity, and accessibility.

Respondent 4: This respondent's definition of lost space is "unusable space." She says all space has purpose and downtown Dallas has plenty of it, just not used. She thinks that parking lots are necessary in downtown Dallas. However, she would like to have more retail, outdoor patios, and live music on the street so that more people would come out. She argues that because of extreme heat, people do not want to go outside in the summer, and that even more trees would not be helpful. Respondent 4 believes that downtown Dallas has beautiful plazas but nothing else to bring people in. For her, City Hall in Dallas is an important landmark. This respondent focuses on economic activity, weather, and design.

Respondent 5: This respondent's definition of lost space is "negative space that could be made better for an urban environment." She suggests that more events and activities such as having bands and artists around the street could bring more life to downtown Dallas. She also reports "if it's 105 degrees, I'm going to get into the tunnel as soon as I can." She considers lost space "not so much in the physical sense," but as "a breakdown I guess in communication between that space." She points out downtown Dallas has "a beautiful garden or a plaza that's connected by streets and by buildings, but then there are areas of downtown that could somehow—sometimes be lost from the rest of it when you don't have good businesses, good pedestrian access that sort of thing." This respondent focuses on social activity, connectivity, and weather.

Respondent 6: This respondent's definition of lost space is space "that is not optimally used to benefit either the aesthetics of the surroundings or the utility of the surroundings." He points out that "lost space in Dallas is any space outside in the summer." He indicates positive space consists of "a lot of people walking around, sitting outside, eating, a lot of shops opened

up where you can go in and out of shops, vendors on the street." He also believes that the Arts District in downtown Dallas is beautiful, but "there aren't enough restaurants to draw a lot of crowds" so there is not a lot of walking traffic there. According to him, "in Texas, everybody has their own horse," meaning the automobile is vital to life in Texas. This respondent focuses on social and economic activity, weather, and design.

Respondent 7: This respondent's definition of lost space is "space that could be used for something either useful or beautiful, and it is not." He says parking lots are not "very attractive" and "they kind of break up the flow of downtown." However, he believes "[government officials] did take away some parking space that was useful". For respondent 7, in downtown Dallas, "there's really no good place to walk" even if the place is "very nice" because there is nothing to do. According to him, during the summer "when it's 105, it's still hot whether there's trees or not." He points out "when [Thanksgiving Plaza] was new, I'd walk through there during lunch because there was a place we would eat over on the other side of it, but that place went out of business and for the last ten years, I probably never went in the place." For respondent 7, downtown Dallas has "very nice wide streets with trees" but the lack of retail and restaurants dampens a person's desire to walk around. He suggests that this creates areas as "islands not connected together." This respondent focuses on economic activity, connectivity, weather, and maintenance.

Respondent 8: This respondent defines lost space as "wherever you find that there is nobody around and nothing's been really taken care of." He says of downtown Dallas, "there is nothing open and there is nobody using any other spaces on the street" and "sidewalks are pretty empty." He argues more shops and businesses should open in downtown Dallas. He suggests that if the underground office park were closer to the Convention Center, both would be used more. In addition, he believes parts of downtown Dallas are "pretty unfriendly," meaning that they do not feel physically safe, comfortable, or enticing. This respondent focuses on economic activity, connectivity, accessibility, and maintenance.

Respondent 9: This respondent's definition of lost space is "abandoned space." According to her, some parking lots are lost space because not many people use them. She points out the unused parking lots are not close to any points of interest, or are especially unused on the weekends if they are only near office buildings. She also explains she avoids plazas without food or retail nearby. She reports feelings of claustrophobia among high-rise buildings. This respondent focuses on economic activity, connectivity, and accessibility.

Respondent 10: This respondent's definition of lost space is "unused space, like unnecessary space, like space that there could be something there, but there's not, it could be utilized but it's not." According to her, "there is really not that much open space in downtown Dallas." She does not like downtown Dallas because of difficulty walking around, too many office buildings, and lack of events. For her, she would spend more time in downtown Dallas if more bands played music there she had more shopping and retail opportunities. She believes downtown Dallas is pretty, but offers limited enjoyment especially on a hot summer day. This respondent focuses on social activity, connectivity, accessibility, and weather.

Respondent 11: According to this respondent, "if something is lost it hasn't been found or it possibly will be found. So the fact that it's lost to me seems that it just has not been used." Respondent 11 suggests lost space occurs when "there's a utility that hasn't been discovered or a beauty that hasn't been discovered and a necessity that hasn't been sort of formulated yet." For respondent 11, parks and plazas only function well when there are residents living in close proximity. For example, according to him, Thanksgiving Square is not so successful because it is close mostly to businesses, making it static on the weekends. However, he emphasizes Main Street Garden is successful and dynamic because of close residences and restaurants. This respondent focuses on economic activity, connectivity, and design.

Respondent 12: According to respondent 12, lost space is "lost in the sense of underutilized." In his opinion, while parking is necessary, especially in downtown Dallas, as parking lots are not properly developed, underutilized, and somewhat ugly, they represent a

kind of lost space. In addition, he argues that the location of parks and matching their uses to their immediately surrounding neighborhoods is more important than their sheer quantity or mere quality. He compares the Park Plaza in front of City Hall to Boston's City Hall Plaza. For him, whereas Boston's City Hall Plaza is teeming with life, the Park Plaza in Dallas, while not lost space, is underutilized because of a lack of office buildings and restaurants around it. In addition, according to him, the six-lane thoroughfare in front of the Park Plaza impedes pedestrian traffic, limiting the activity within. This respondent focuses on economic activity, connectivity, accessibility, design, and maintenance.

Summary of Responses: All respondents agreed that social activity, economic activity, connectivity, accessibility, weather, design, and maintenance were important factors when considering sense of place. However, for these members of the creative class only social activity, economic activity, connectivity, and accessibility were relevant to how they perceived lost space in downtown Dallas. Therefore, these common themes represent the four characteristics of descriptive lost space.

The first characteristic of descriptive lost space as perceived by the selected members of the creative class is social activities. Outdoor patios for people watching, cafés, outdoor artists, bars with bands playing, music festivals, and other events were types of social activities identified by the respondents in this research. The second characteristic of descriptive lost space as perceived by the selected members of the creative class is economic activities. Retail locations, restaurants, and movie theaters were types of economic activities identified by the respondents in this research. The third characteristic of descriptive lost space as perceived by the selected members of the creative class is connectivity. Connectivity, according to the respondents in this research, referred to the relative location and types of elements in the physical setting. The fourth characteristic of descriptive lost space as perceived by the selected members of the creative class is accessibility. Accessibility, according to the respondents in this research, referred to safety, convenience, and permeability.

Weather, design, and maintenance were important factors when considering sense of place for the respondents in this research. However, for the selected members of the creative class, these factors did not necessarily predict or preclude lost space, meaning, for example, that a well-designed space may only be perceived as lost by the respondents in this research if it lacked one of the four common characteristics of descriptive lost space described above. For the respondents in this research, weather specifically referred to the extreme hot temperature experienced in the summer in downtown Dallas. Design, according to the respondents in this research, included trees, benches, water features, and aesthetics. Finally, the respondents in this research associated ideas of dirty, dusty, and outdated with the factor of maintenance.

4.4.2 Summary of Key Findings from Step 3

This section compares and contrasts the prescriptive definition of lost space with a descriptive definition of lost space. Also, this section compares and contrasts the characteristics of prescriptive lost space with the characteristics of descriptive lost space.

This research uses Trancik's (1986) definition of lost space to specifically refer to prescriptive lost space. According to Trancik (pp. 3 - 4), prescriptive lost spaces are "the undesirable urban areas that are in need of redesign-antispaces, making no positive contribution to the surroundings or the users. They are ill-defined, without measurable boundaries, and fail to connect elements in a coherent way." In addition, for a descriptive definition of lost space, this research synthesized the key themes discussed by selected members of the creative class when asked to define their individual perceptions of lost space. For the respondents, descriptive lost space is underutilized, abandoned, wasted, or unused space. Descriptive lost space, however, has the potential to become positive space if it benefits either the aesthetics of the surroundings or the utility of the surroundings. Both the prescriptive and descriptive definitions of lost space suggest that the connection between space and users is undesirable, and both contrast lost space with the possibility of positive uses. However, the prescriptive definition of lost space also includes the concept of "redesign," which is noticeably

missing from the descriptive definition of lost space. The significance of this distinction is discussed in Chapter 5.

The characteristics of prescriptive lost space are taken from Trancik (1986), Jacobs (1961), and Whyte (1988). The characteristics of prescriptive lost space are activity; connectivity; accessibility; design; maintenance; orientation; and, scale. From a prescriptive perspective, activity refers to unused sunken plazas, abandoned waterfronts, and the edges of freeways. Connectivity, for a prescriptivist, mostly refers to parking lots when they cut the city fabric, and accessibility mostly refers to wide roads if they limit access to surrounding districts. From a prescriptive perspective, design refers to unstructured landscape at the base of high-rise towers and marginal public housing, and maintenance includes the edges of freeways and deteriorated parks. Finally, for a prescriptivist, orientation and scale refer to large parcel developments, large blank walls, large government structures, and megastructures. When spaces in the physical setting lack a characteristic such as activity or design, they are considered by prescriptivists to be lost space.

The characteristics of descriptive lost space as perceived by the selected members of the creative class in this research are social activity; economic activity; connectivity; and, accessibility. Activity; connectivity; and, accessibility are characteristics of both prescriptive and descriptive lost space; however, the descriptive perceptions in this research separate social from economic activity. Also, the characteristics of scale and orientation are included in prescriptive but not descriptive perceptions of lost space. Finally, while the characteristics of design and maintenance are important for both prescriptive and descriptive perceptions of lost space, they are only characteristics of lost space from a prescriptive standpoint. This distinction and its importance are discussed in Chapter 5.

In totality, descriptive lost space results by combining the descriptive definition and characteristics of lost space, meaning that for a place to be labeled descriptive lost space, it must lack at least one of the four common characteristics of descriptive lost space. For

example, if a plaza is labeled descriptive lost space, it must lack social activity, economic activity, connectivity, and/or accessibility. However, from the reverse standpoint, if a place lacks one or more of the common characteristics of descriptive lost space, it only *may be* labeled descriptive lost space. This means, that even if the same plaza lacks social activity, economic activity, connectivity, and/or accessibility, it may not be perceived as lost space from a descriptive viewpoint. Also, from a prescriptive perspective, for a place to be labeled prescriptive lost space, it must lack at least one of the characteristics of prescriptive lost space. However, an important distinction with descriptive lost space can be made when considering the reverse standpoint, meaning that if a place lacks even or only one of the characteristics of prescriptive lost space, it *must be* labeled prescriptive lost space.

4.4.3 Summary of Key Findings from Step 4

According to Trancik (1986), Jacobs (1961), and Whyte (1988), the typologies of lost space from which the prescriptive characteristics of lost space are extracted are: Unstructured landscape at the base of high rise towers; unused sunken plazas; edges of freeways; abandoned waterfronts; vacant blight-clearance sites; deteriorated parks; surface parking lots; large parcel developments; edges of large transportation projects; large blank walls; large governmental structures; and, megastructures.

When discussing lost space in downtown Dallas, respondents in this research specifically mentioned One Main Plaza, old and abandoned office buildings, Thanksgiving Square, streets, City Hall, and parking lots. For the purposes of determining whether an exact location conforms to the characteristics of prescriptive and/or descriptive lost space, these specific areas of downtown Dallas mentioned by the selected members of the creative class were fit into the typologies of prescriptive lost space.

For example, One Main Plaza in downtown Dallas was fit into the prescriptive typology of unused sunken plazas (Figure 4.19). Only one of the twelve respondents in this research used One Main Plaza, and all respondents reported that they only saw a few people ever using

One Main Plaza. The respondents in this research reported that this Plaza lacks activity, connectivity, and accessibility, which are characteristics of both prescriptive and descriptive lost space. Therefore, One Main Plaza is an example of prescriptive lost space and an example of descriptive lost space.

Figure 4.19 One Main Plaza in Downtown Dallas

The second example mentioned by the respondents in this research is old and abandoned office buildings; these were fit into the prescriptive typology of vacant blight-clearance sites (Figure 4.20). Many of the respondents in this research pointed out that these ugly buildings could be better used for retail. The selected members of the creative class reported that these buildings lack activity and connectivity, which are characteristics of both prescriptive and descriptive lost space, and maintenance, which is specific to prescriptive lost

space. Therefore, the old and abandoned office buildings in downtown Dallas are examples of prescriptive and descriptive lost space.

Figure 4.20 Old and Abandoned Office Building in Elm Street (Picdiary 2009)

The third example mentioned by the respondents in this research is Thanksgiving Square, which was fit into the prescriptive typology of deteriorated parks (Figure 4.21 and Figure 4.22). Several respondents in this research reported they have used Thanksgiving Square in the past, but rarely use it now. One respondent reported that Thanksgiving Square suffers from too many pigeons, and another reported that it lacks benches. The selected members of the creative class reported that Thanksgiving Square lacks activity and accessibility, which are characteristics of both prescriptive and descriptive lost space, and maintenance, which is specific to prescriptive lost space. Therefore, Thanksgiving Square is an example of prescriptive and descriptive lost space.

Figure 4.21 Thanksgiving Square in Downtown Dallas (Jeppson 2012)

Figure 4.22 The Walled Entrances as a Challenge for Accessibility (Jeppson 2012)

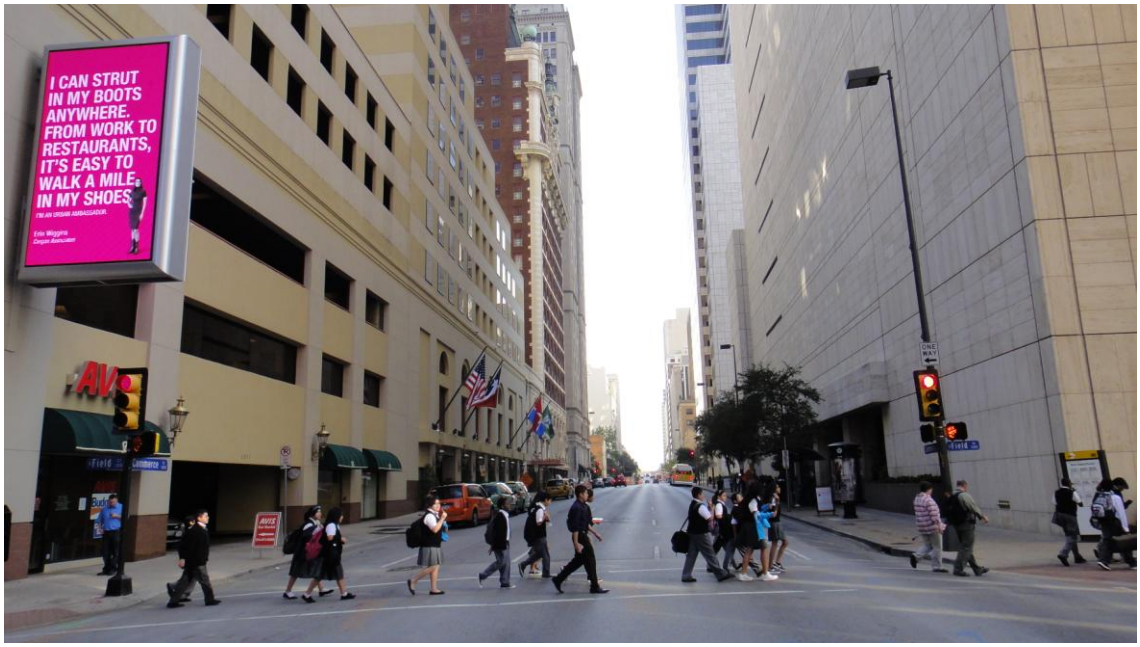

Figure 4.23 A Cross Road of Field Street and Commerce Street (Auriyuka 2011)

The fourth example mentioned by the respondents in this research is streets. All of the respondents in this research reported that the streets of downtown Dallas lack retail and events (Figure 4.23 and Figure 4.24). The selected members of the creative class reported that the streets of downtown Dallas lack activity and accessibility, which are characteristics of both prescriptive and descriptive lost space, and scale, which is specific to prescriptive lost space. Therefore, the streets of downtown Dallas are examples of both prescriptive and descriptive lost space.

The fifth example mentioned by the respondents in this research is City Hall in downtown Dallas, which was fit into the prescriptive typology of large government structures (Figure 4.24). For a prescriptivist, City Hall is an example of prescriptive lost space because it lacks the prescriptive characteristics of orientation and scale. However, orientation and scale are not descriptive characteristics of lost space, which means City Hall is not an example of descriptive lost space. In fact, one respondent in this research reported that City Hall cannot be lost space because it is an important landmark in downtown Dallas.

Figure 4.24 City Hall in Downtown Dallas

The sixth example mentioned by the respondents in this research is parking lots (Figure 4.25). For a prescriptivist, surface parking lots fail to connect elements in a coherent way and cut the urban fabric, so they lack the prescriptive characteristic of connectivity. This means that parking lots are examples of prescriptive lost space. However, none of the selected members of the creative class reported that the parking lots in downtown Dallas lack connectivity or any of the other characteristics of descriptive lost space. Therefore, parking lots are not examples of descriptive lost space. In fact, most of the respondents in this study indicated that parking lots are not lost because they are necessary and convenient, and facilitate life in downtown Dallas.

Figure 4.25 Surface Parking Lots in Downtown Dallas

4.5 Summary

In this research, the interview data were analyzed and summarized to identify the descriptive perceptions of the creative class regarding lost space in downtown Dallas. These

perceptions were grouped into four common characteristics of descriptive lost space: Social activity; economic activity; connectivity; and, accessibility. These characteristics of descriptive lost space were compared and contrasted with characteristics of prescriptive lost space as identified in the literature.

This research showed that the prescriptive definition of lost space identified in the literature is similar to a synthesis of twelve descriptive definitions of lost space from the selected members of the creative class. In addition, there is much overlap between the characteristics of prescriptive lost space and the characteristics of descriptive lost space, with a few minor exceptions. This research concluded that the selected members of the creative class respondents in this research focused more on activity and connectivity when perceiving lost space than the space itself. This was contrasted with prescriptive perceptions of lost space, which focus more on space and design than other characteristics of lost space. Finally, all of the respondents in this research reported that many areas in downtown Dallas are in danger of becoming lost because they lack activity, connectivity, and accessibility.

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CHAPTER 5

CONCLUSION

5.1 Introduction

In this research, the problem of lost space in urban downtown environments is addressed. Because lost space is an ambiguous and amorphous concept, however, it is not only a problem of space, it is also a problem of perception. Moudon (1992) distinguishes between prescriptive perception, meaning "what should be" and descriptive perception, meaning "what is." According to this dichotomy, a designer with training in identifying specific examples of lost space would fall under the prescriptive category. A user with no specific training in urban design would fall under the descriptive category. In this research, members of the creative class were chosen as representatives of the descriptive category because they are the key force driving the economy of contemporary society (Florida 2004).

Interviews with twelve members of the creative class working and/or living in downtown Dallas were used to gather data for this study, and these are considered descriptive perceptions of lost space. These descriptive perceptions were synthesized into one descriptive definition of lost space. This descriptive definition of lost space was compared and contrasted with the prescriptive definition of lost space, which is taken from the literature. Also, four common characteristics of descriptive lost space were identified from respondents' comments regarding lost space in downtown Dallas and compared against the characteristics of prescriptive lost space. Finally, specific areas in downtown Dallas were identified as being either examples of descriptive or prescriptive lost space.

Findings reveal that the descriptive and prescriptive definitions of lost space differ mostly in the aspect of redesign which is included only in the prescriptive definition of lost

space. In addition, findings reveal that the characteristics of descriptive and prescriptive lost space differ in the aspects of design and maintenance.

Finally, according to these results, while parking lots and government structures are examples of prescriptive lost space, they are not examples of descriptive lost space. The remainder of this chapter summarizes and evaluates important findings, discusses design implications and the importance to landscape architecture, and concludes with suggestions for future research.

5.2 Summary and Evaluation of Concepts

This section discusses the validity of prescriptive lost space, explores reasons for the difference in prescriptive and descriptive perceptions of lost space, and highlights important conclusions that can be drawn from the results of this research.

5.2.1 The Validity of Prescriptive Lost Space

Trancik's (1986) *Finding Lost Space* is critical to urban design as it is the first book to deeply explore the issue of lost space. According to Trancik, "Generally speaking, lost spaces are the undesirable urban areas that are in need of redesign—antispaces, making no positive contribution to the surroundings or users." However, his definition of lost space is not entirely clear, making it difficult to immediately translate into design opportunities. Also, one fundamental drawback of Trancik's understanding of lost space is, although it tangentially concerns users' connections with space, it fails to include specific users' perceptions of space, from interviews or otherwise. This lack of individual user input potentially confuses what is undesirable and what is desirable in terms of space, and creates a possible gap in the understanding of positive and negative from a designer's or user's perspective. This means designers who overly adhere to a possibly limiting definition of lost space risk alienating those users who may disagree with the outcomes of this definition.

Therefore, if designers and users have different definitions of positive and negative space, there may be differences in the ways in which the two groups perceive their

environment. For Moudon (1992), the difference between these two groups is best described by the terms prescriptive perception and descriptive perception. According to Moudon, a prescriptive approach refers to "what should be" while a descriptive approach refers more generally to "what is." Moudon believes that as design is a naturally prescriptive field, most designers perceive their environments through prescriptive lenses.

This research considers Trancik's (1986) definition of lost space to represent prescriptive lost space. The perceptions of space by users with no specific training in urban design represent descriptive lost space. As these perceptions may be different, this research compares prescriptive and descriptive perceptions of lost space to see if designers' intents truly match users' desires. Finally, as members of the creative class are the driving force of the economy of contemporary society, their perceptions were especially selected to represent users' desires.

For example, in Trancik's perception of lost space, parking lots are considered lost space because they break the coherence of the urban fabric. However, parking lots may be quite meaningful to members of the creative class. Also, while Trancik perceives the edges of freeways as lost, they in fact serve the clear purpose of separating and buffering. In addition, unused sunken plazas and abandoned structures are perceived by Trancik to be lost in that they are putatively vacated, but what counts as unused is not clear. Unused may be perceived as being used by none, one, or only ten people.

5.2.2 Discussion of Key Findings

The key findings of this research indicate significant overlap between prescriptive and descriptive definitions, characteristics, and specific examples of lost space. Both prescriptivists and descriptivists perceive lost space as unused space that lack activity, connectivity, and accessibility. Of these characteristics, activity seems to be the most important factor in both prescriptive and descriptive lost space.

The similarities between prescriptive and descriptive perceptions of lost space are not too revealing. Therefore, for a better understanding of lost space, the differences between prescriptive and descriptive lost space must be carefully evaluated.

5.2.2.1 Space versus Activity

The biggest difference between prescriptive and descriptive lost space is the focus point. Prescriptive lost space focuses on space itself whereas descriptive lost space focuses on activity. In addition, as noted in Chapter 2, place identity is comprised of physical setting, activity, and meanings (Relph, 1976). Activity refers to how people interact with elements in the physical setting, and for the respondents of this research, activity is more important than space. For example, respondent 5 reports that although One Main Plaza has "very cool benches" that are "integrated into the landscaping" and "looks nice," unfortunately "it doesn't seem interesting." Also, when discussing streets in downtown Dallas, respondent 1 says "There's no retail and therefore there's no street activity." Therefore, for the respondents of this research, well-designed space does not automatically translate into increased activity or satisfaction, and in fact may be lost space.

In fact, Rapoport (1977) questions whether the physical built environment has a relationship with the social and economic activities important to the satisfaction of people. According to him, traditional theories in planning and design support what he calls environmental determinism, a belief that the physical built environment determines human behavior. However, the view espoused by the respondents in this research, and Rapoport himself, is that while the physical built environment provides opportunities and constraints within which people make choices, the setting can facilitate or inhibit behavior, but not determine or generate behavior.

Prescriptivists who subscribe to the belief of environmental determinism, like Trancik, focus on design and redesign instead of the more important issue of how to increase activity to

avoid lost space. Indeed, this investigation into the ways to prevent lost space in downtown Dallas starts with a look at the potential reasons for a dearth of activity in downtown Dallas.

5.2.2.2 Reasons for a Lack of Activity in Downtown Dallas

All of the respondents place heavier emphasis on activities that places do or do not offer rather than the space itself. In addition, as discussed by Gehl (1971), activities can be categorized into necessary, optional, and social. According to Gehl, examples of necessary activities are driving to work, finding a place to park, and walking to a business appointment. These are the activities that cannot be avoided. Examples of optional activities include taking a walk in a park, enjoying lunch in a café, and browsing through a gallery. These are the activities that people do at their leisure and for their pleasure. Both necessary and optional activities, though, can be done individually whereas social activities are those that must occur in groups of people, such as meeting people in an outdoor patio or at a music festival.

Gehl (1971) also points out that as necessary activities are unavoidable, their relationship with their physical setting is minimal, meaning that people who work in downtown Dallas must drive there, find a place to park, and walk to their offices regardless of their perceptions of the surrounding environment. However, optional activities occur mostly and more often when the physical setting is optimal, meaning that the frequency of optional activities increases in more comfortable, safe, and accessible environments. This means that for people who live and/or work in downtown Dallas, when they perceive the physical setting to be uncomfortable, unsafe, or inconvenient, they find other places to pursue optional activities.

5.2.2.3 Guiding Principles to Increase Activity in Downtown Dallas

When a place offers more opportunities for optional activities, more social interactions result. The respondents of this research see downtown Dallas as a city of mostly necessary activities, with little to draw or keep people after necessary activities are completed. If increased optional and social activities result from a better relationship with the physical environment, and if increased activity is the optimal way to prevent lost space, how to improve

the relationships in the physical setting must be investigated. According to the respondents of the research, the four important characteristics of descriptive lost space are social and economic activity, connectivity, and accessibility. These are the specific characteristics of the physical setting as identified by the respondents in this research that should be manipulated to facilitate activity and prevent lost space. In addition, the descriptive characteristics of connectivity and accessibility seem to more closely associate with the elements in the physical setting, almost as if they are the managers of those elements. Connectivity, as discussed in Chapter 4, refers to the relative location and types of elements in the physical setting, and accessibility refers to the safety, convenience, and permeability those elements provide. These two super-characteristics seem to direct the descriptive characteristics of social and economic activity. These latter characteristics include opportunities that specific elements in the physical setting may support, such as people watching in an outdoor patio or shopping in a retail location.

The reason that the descriptive characteristics of connectivity and accessibility direct the descriptive characteristics of social and economic activity, and therefore deserve more attention, according to the respondents in this research, stems from the idea that although downtown Dallas has some retail locations, restaurants, and cafes, the entirety of the area seems to be lost. This means that having retail and restaurants is not enough to avoid lost space. In other words, even if the physical environment has the descriptive characteristics of social and economic activity, if it lacks the descriptive characteristics of connectivity and accessibility, lost space may result. Therefore, to facilitate social and economic activity in downtown Dallas, the directing characteristics of connectivity and accessibility must be fine-tuned to the needs of its residents. This research seeks to fine-tune the descriptive characteristics of connectivity and accessibility according to the perceptions of the selected members of the creative class.

The Importance of Connectivity: As mentioned above, descriptive lost space may result when areas lack any of the four descriptive characteristics of lost space. Therefore, the starting point for identifying descriptive lost space in downtown Dallas is identifying specific instances where it lacks connectivity and/or accessibility. For example, in terms of connectivity, respondent 7 says of One Main Plaza "When it was new, I'd walk through there during lunch because there was a place we would eat over on the other side of it, but that place went out of business, and [for] the last ten years, I probably never went in [One Main Plaza]." Because One Main Plaza lost the connectivity between itself and a restaurant he used to frequent, according to his perceptions, One Main Plaza started to become lost space. This example can be contrasted with respondent 12's perceptions of the Boston's Government Center, which according to him was not lost: "it's constantly full of people because there are fairly large number of office buildings and restaurants and venues around it that just naturally draw traffic through." According to respondent 12, whereas Boston's Government Center has strong connectivity and therefore increased activity, City Hall in downtown Dallas is "great space" but is "underutilized because it doesn't have – unfortunately, the pedestrian traffic around it from either other developments or attractions that bring a lot of people in." Finally, respondent 11 sums up the importance of the descriptive characteristic of connectivity by saying "I noticed that really the only parks that function well and plazas are the ones where there are residents, obviously because we like things to be close and within proximities."

The Importance of Accessibility: In addition, in terms of accessibility, both respondents 7 and 8 cite the walls around Thanksgiving Plaza in downtown Dallas as limiting its accessibility and therefore activity. Respondent 7 argues that "[Thanksgiving Plaza] had those walls around it, only two places to go in it. It's just not a very welcoming, inviting place to go, it's not a very people-friendly place." Respondent 8 agrees with this point when speaking of Thanksgiving Plaza: "There's fountains and grass and stuff and they're all boarded, bounded by walls, so the park is bounded by walls, the grass is bounded by walls, the water is bounded by walls, so

really the idea is that it's walled off, everything is walled off you know so it's pretty uninviting, unless your purpose is simply just to go there and get away from other people. But you know a lot of time people go to parks not to get away from other people, but just to get away from the indoors, and you know my wife doesn't feel safe there alone in the middle of the day, not because it's particularly dangerous . . . but because if something would happen nobody else would be able to see that." Finally, when speaking of Park Plaza, respondent 12 points out "it's not easily accessible in the sense that it has a six-lane divided thoroughfare in front of it."

5.3 Design Implications

It is apparent that the respondents in this research perceive downtown Dallas to be lacking in connectivity and accessibility, and therefore has descriptive lost space potential. The respondents also perceive that more social and economic activity would help prevent descriptive lost space, especially if those activities had better connectivity and accessibility. There are many design concepts that could be implemented to prevent lost space in a downtown environment, and this research suggests using one that focuses on enhancing edge interactivity. Lynch (1960, p. 62) defines edges as "the linear elements not considered as paths: they are usually, but not quite always, the boundaries between two kinds of areas. They act as lateral references." Edges are considered in this research as an element that can connect the four characteristics of descriptive lost space, and therefore are integral to preventing lost space. As noted by Jacobs (1961), to prevent lost space, planners must focus on enhancing edge interactivity through increased connectivity and accessibility. She offers Central Park in New York City as an example of an edge that encourages mixed-use to prevent lost space. According to Jacobs, the intensive use on the east side of the park, for example the zoo and boat pond, enhances edge interactivity by creating links between the park and its surroundings. For Jacobs, to enhance edge interactivity, planners must focus on designs that avoid discontinuities of use, increase suitable mixed-use, and invite perimeter penetration.

The concept of enhancing edge interactivity is also discussed by respondent 10. She cites 6th Street in Austin as a place designed with continuity of use, suitable mixed-use, and perimeter penetration in mind: “They shut the streets down, but what’s cool is that people are just sitting there and talking but you also get the music from the bars, you know, even though you don’t have to be in a bar, but you can still hear that music, like I think that’s really interactive and that’s just a place that I can go out and like really just you know have piece of mind. I just enjoy the moment, and I don’t really see that in downtown Dallas. I don’t see that at all.”

Edges must be considered more than just boundaries. Edges are spaces that include the four characteristics of descriptive lost space, and enhancing their interactivity is a key element in preventing lost space.

5.4 Importance to the Field of Landscape Architecture

There are differences between prescriptive and descriptive perceptions, and designers should not be constrained by their training especially in situations they do not include user perceptions in their actions. As Rapoport (1977) points out, actions for a prescriptivist are based on perceiving an environmental problem or an opportunity, and then matching these against the designer’s ideal or schemata. In addition, according to Rapoport, designers too often subscribe to the specious belief that the physical built environment determines human behavior. However, because change is constant, designers should consider the needs of contemporary society along with textbook knowledge because they must not only contribute to but also react to evolving trends in use (Carmona 2003; Moudon 1997).

This research identifies creative class descriptive perceptions of lost space and contrast them with prescriptive perceptions of lost space in effort to prevent lost space in downtown Dallas. It is important for designers to notice and believe in this distinction between descriptive and prescriptive perceptions, especially if they harbor more prescriptive tendencies, so that their design outcomes better reflect the needs, hopes, and desires of the people who will be ultimately using their built environments. Because the changes in the physical setting can be

the catalyst to increased activity and user satisfaction, this research hopes to encourage future designers to consider the four common characteristics of descriptive lost space, social and economic activity, connectivity, and accessibility, when identifying holes in the urban fabric.

5.5 Discoveries

Most of respondents report they would not go outside during the summer in downtown Dallas. One respondent believes all of downtown Dallas is lost space in the summer. The perceptions of lost space from respondents with an urban design or related background closely match to prescriptive perceptions. The perceptions of lost space from respondents without an urban design or related background are different from prescriptive perceptions. Prescriptive perceptions focus on problems while descriptive perceptions focus on opportunities. Respondent 8 believes “there is no permanent lost space.”

5.6 Future Research

The results of this research suggest avenues for future investigations. For example, future researchers could interview more respondents from the creative class to solidify their perceptions of descriptive lost space. Also, future research should interview respondents from different professional backgrounds, such as post-office deliver workers, police officers, and blue-collar workers, and from different classes, such as the homeless. If future researchers interview more and different users, more and different characteristics of descriptive lost space, such as safety, may be identified.

In addition, future designers should work on identifying more design concepts related to preventing lost space. Future planners should investigate ways to increase social activity, economic activity, connectivity, and accessibility in downtown environments. Furthermore, future designers should test the concept of enhancing edge interactivity, for example by adding cafés on the edges of parks and across from retail locations, as a means of filling holes in the urban fabric.

Finally, future researchers should take field observations of users in downtown urban environments to clarify that users' perceptions of any place are matched with the actual usage patterns of that place. Observational research is another powerful method to test the validity of lost space.

5.7 Summary

In this research it is found that there are similarities and differences between prescriptive and descriptive perceptions of lost space. While the similarities are interesting, the differences are revealing. For example, from a descriptive standpoint, a well-designed space could be lost space if it lacks one of the four common descriptive characteristics of lost space: social activity, economic activity, connectivity, and accessibility. The respondents in this research focus not on lost space itself, but on ways to prevent spaces from becoming lost. This descriptive approach to perceiving space should be adopted by designers if they hope to create design outcomes that can facilitate activity and enhance satisfaction.

APPENDIX A

IRB APPROVAL LETTER

Office of Research Administration
Regulatory Services
817-272-3723
regulatoryservices@uta.edu
http://www.uta.edu/ra/oric/

Institutional Review Board
Notification of Exemption

September 11, 2012

Yao Lin
Dr. Pat Taylor
School of Architecture
Box 19108

Protocol Number: 2012-0843

Protocol Title: *IDENTIFYING PERCEPTIONS OF THE CREATIVE CLASS REGARDING LOST SPACE IN DOWNTOWN DALLAS*

Type of Review: **Exemption Determination**

The UT Arlington Institutional Review Board (IRB) Chair, or designee, has reviewed the above referenced study and found that it qualified for exemption under the federal guidelines for the protection of human subjects as referenced at Title 45 Part 46.101(b)(2). You are therefore authorized to begin the research as of September 9, 2012.

Pursuant to Title 45 CFR 46.103(b)(4)(iii), investigators are required to, "promptly report to the IRB ***any*** proposed changes in the research activity, and to ensure that such changes in approved research, during the period for which IRB approval has already been given, are **not initiated without prior IRB review and approval** except when necessary to eliminate apparent immediate hazards to the subject." Please be advised that as the principal investigator, you are required to report local adverse (unanticipated) events to the Office of Research Administration; Regulatory Services within 24 hours of the occurrence or upon acknowledgement of the occurrence.

All investigators and key personnel identified in the protocol must have documented Human Subject Protection (HSP) Training on file with this office. Completion certificates are valid for 2 years from completion date.

The UT Arlington Office of Research Administration; Regulatory Services appreciates your continuing commitment to the protection of human subjects in research. Should you have questions, or need to report completion of study procedures, please contact Robin Dickey at 817-272-9329 or robind@uta.edu. You may also contact Regulatory Services at 817-272-3723 or regulatoryservices@uta.edu.

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BIOGRAPHICAL INFORMATION

Yao Lin was born in Jiangsu, China. She has always had an interest in fine arts and design. The more than 10 years of studying fine arts has had a great influence on her life.

In 2008, Miss Lin received her bachelor degree in Architecture from the School of Architecture at the Central Academy of Fine Arts in Beijing, China. After a year's experience working in architecture and urban design firms in China, she joined the School of Architecture at The University of Texas at Arlington in 2009 to pursue her master degree of Landscape Architecture. She is excited to continue to explore the field of landscape architecture and urban design in the future.