THE PUBLIC REALM AS A PLACE OF EVERYDAY URBANISM:
LEARNING FROM FOUR COLLEGE TOWNS

by

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"…of the people, by the people, for the people…" (Abraham Lincoln, Nov 19, 1863)

Dedication

To my parents

Acknowledgements

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Chapter 1

INTRODUCTION

1.1 The topic

This dissertation undertakes an empirical study of American public places. This study of the public realm investigates multiple forms in which public places are manifested, different ways in which public places are understood, and various ways in which public places are used. Contemporary theories and practices of urban design (Lofland, 1998; Warner, 2002; Project for Public Places, 2008) often posit a notion of publicness that is conceived as an undifferentiated and a universally accessible space. In contrast to such universal understanding of publicness, the current research examines a group of public places in each of the four college towns: Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI.

The dissertation focuses on college towns because these towns represent a distinct urban condition, with their diversity, educated population, and robust infrastructure, showcase many qualities to which cities aspire. At the same time, college towns share many conditions and interests with small-sized and medium-sized cities. Like many other cities these places are subjected to dynamic power relationships of society and economy, and they face similar challenges of sustaining a public culture, in the context of privatization and consumerism.

1.2 The city and the public realm

There is a growing body of literature that expresses a common concern about the developing complexity of the urban condition. The motivation for conducting this study is to address the problems of adapting to the evolving nature of the city and the public realm. Research on public spaces can be assigned to five broad categories: (1) theoretical research studying the underlying values and philosophy of publicness (Arendt, 1958;

Sennett, 1974; Berman, 1982; Lefebvre, 1974) and historic research tracing the structural evolution of the public sphere (Habermas, 1962), (2) environment behavior studies measuring human perception, behavior, and activities in public space (Whyte, 1980; Nasar, 1998; Groat, 1999; Low, 2000), (3) architecture and urban design studies addressing the physical nature of the city and the urban spaces (Sitte, 1889; Mumford, 1938; Lyndon, 1987), (4) urban planning and social science studies documenting agencies and highlighting the diversity of the contemporary urban condition (Harvey, 2001; Sandercock, 2003; Amin, 1995; Loukaitou-Sideris & Banerjee, 1998), and (5) recent urban geography and information technology research on flow of information in the virtual or digital public realm (Townsend, 2001; Castells, 1997). These studies, each from different disciplines, offer critical insights into multiple dimensions of the public realm. Though philosophy, history, economics, politics, and geography of the public sphere have been well documented and analyzed, the human connection—an important aspect of the public realm—has often been ignored or less carefully studied. This dissertation focuses on examining what people experience in the public realm—on a local and daily basis.

In a recent conference, "Michigan Debates Urbanism," conducted at the University of Michigan, the current state of the urban condition is analyzed. The participants deliberated the urban problem through three contemporary urban design paradigms: New Urbanism, Everyday Urbanism, and Post Urbanism & Re-Urbanism. While addressing the differences and conflicts in the urban environment, the debates revealed a twofold problem. First, within the context of capitalist production and consumption of urban space, a contradiction exists between what Lefebvre (1991) has

termed the designed "conceived space" and the everyday "lived space" of the city. Second, the nature, role, and relevance of the physical public realm are contested. This understanding is particularly critical in the face of increasing privatization of public places and the surge of the virtual public realm resulting from new forms of information and technology.

It is this contemporary debate and critique of the discourse on the public sphere that has inspired this dissertation and has framed a series of questions: What is the spatial distribution of public places in a city? What does the public realm mean to people? How is publicness defined? How are the public places used?

To address these questions, this research examines specific public places, as used, experienced, and expressed, in the four cities. A comprehensive examination of the public sphere is conducted through an intensively empirical mixed modal case study research design. The research agenda includes: (1) space syntax techniques to analyze the historic-morphological evolution of public places in the college towns, (2) multiple sorting task coupled with open-ended interviews (Canter et al, 1985; Groat, 1985) applied to investigate the nature and organization of people's conceptual constructs related to publicness, (3) observation of people's activities undertaken in exemplar public places (four per case study) to reveal how people, individually and in groups, appropriate these spaces. This integrative model is replicated in the four case studies.

1.3 Primary goals of this research

This research measures the everyday forms, everyday meanings, and everyday functions of publicness with respect to people's experience. By simultaneously learning the spatial distribution, underlying concepts, and actions of the public realm, this analysis

will produce a comprehensive understanding of the public realm in American cities. This approach is consistent with the three primary goals of this research.

Using a pragmatic approach, the first and foremost goal of this dissertation is to provide guidelines, based on an empirical study of the human experience. These guidelines can be used by designers concerned with current problems of public realm such as the perceived loss of publicness in the face of privatization of the public space. By achieving a clearer understanding of publicness, designers will be better able to produce effective and relevant types of places that meet people's needs.

Using a practical approach, the second goal of the dissertation is to generate an evaluative framework regarding the spatial organization and design of the campus-downtown relationship. By understanding different natures of campus-downtown relationships in the four cities, designers and planners will be better able to develop a keener appreciation for how the organization of campus-downtown form influences publicness in a college town.

Using a theoretical approach, the third goal of this dissertation is to clarify the dynamic relationship between spatial configuration and the experience of urban spaces in order to highlight the role of the public sphere as a whole. By highlighting the importance of physical public places, this study will bring the debate and discussion regarding the relevance of on-the-ground everyday places into the public discourse of American cities.

1.4 Three research objectives

An analysis of some of the most notable discussions and debates on the public realm discloses three important themes that may form an appropriate basis for a set of research questions. These research questions are then elaborated with reference to the

most pertinent aspects of both the theoretical and empirical literature on the public realm (see Chapter 2 and Chapter 3). Central to this research framework are three specific research objectives and related sets of questions that are addressed throughout this dissertation (See Figure 1-1).

The first research objective is to evaluate the relationship of the urban spatial configuration to the experiences and understandings of specific public places. The concept of "configuration" is central in current developments of spatial analysis (Hillier, 1998). Configuration is defined as relations taking into account other relations in the urban system. In my research, the specific object of interest in terms of spatial configuration is the morphological interrelationships between the campus and the downtown. This objective addresses how the physical pattern and organization of the campus and downtown within a city influences perception and understanding of public places. This objective can be expressed in terms of the following set of questions:

(a) To what extent does the spatial configuration (campus-downtown relationship) relate to human experience and understanding of places?

The second research objective is to seek an understanding of different ways in which people understand places. The intention is to analyze the various conceptual constructs that people use to evaluate and understand places. Human understanding of places, according to the purposive model of place (Canter, 1977), varies from person to person depending on the person's role in that environment. In this study of college towns, people's environmental role is specifically defined by their association with the university and the town. This objective can be expressed in terms of the following set of questions:

(b) In what ways do people conceptualize publicness? In what ways does people's conceptual understanding of places vary based on their environmental role (nature of association with the university and the town)?

The third research objective is to highlight the range of activities observed in different types of public places. Specifically, the intention is to study the variation of activities and people's use of places between weekends and weekdays (time), between downtown sites and far away sites (location), between indoor and outdoor places (spatial quality), and between publicly owned places such as streets and privately owned places such as shopping malls (ownership). This objective can be expressed in terms of the following question:

(c) In what ways do people's activities vary with time, location, and across different types of public places?

Research questions

HUMAN EXPERIENCE OF THE PUBLIC REALM

(1) To what extent does the spatial organization (campus-town configuration) relate to people's experience and understanding of publicness?

(2) In what ways do people conceptualize publicness?

(3) In what ways do people's activities vary with time and location across different types of public places?
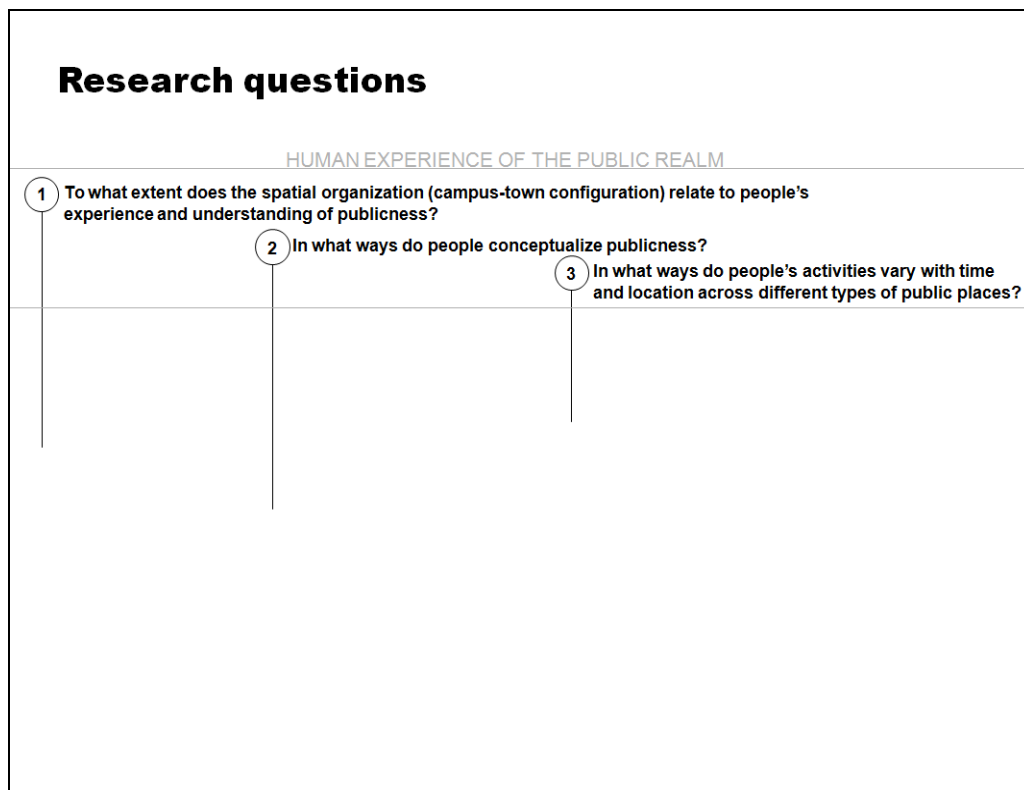
Figure 1-1: The three research questions framing the dissertation.

1.5 Research outline

        The structure of this dissertation explains the research methods and research design in a linear fashion with an interwoven set of four case studies. As a result, the outline follows a looping path in which each technique is described using the findings from the four cities analyzed. This integrated research design is reflected in the way the analyses are illustrated and the conclusions are drawn.

        This dissertation consists of ten chapters, which can be divided thematically into three parts. In Part One, *the research framework* (Chapters 1 – 4), the research questions are introduced, the theoretical underpinning is established, and the research premise is identified, and the related research design is explained. Chapter 1 (Introduction) frames the urban problem related to the evolution of the public realm. It also defines the boundaries of the research, highlighting the everyday human connection of the public realm. Chapter 2 (Theoretical bases for the research on the public realm) discusses important theoretical perspectives on the public realm that are relevant to this study from a variety of disciplines. Analysis of relevant models for understanding the public sphere creates a theoretical position for this dissertation through the model of place—the public realm as a place of everyday urbanism. Following the platform for theoretical discussion of publicness in Chapter 2, Chapter 3 (Precedents of empirical research on the public realm) describes critical empirical studies to measure and evaluate different dimensions of the public realm. Dissection of these empirical studies of the public realm has critical implications for this research towards developing and framing specific research questions. The research questions developed in Chapter 3 are crucial instruments for delineating the research methodology that is explained in detail in Chapter 4 (Research

design). The chapter 4 highlights the case study approach and explains the case study selection of college towns. Justification for the case study towns and associated opportunities and limitations are also discussed in this chapter. The chapter then explains each of the specific research techniques (historic morphological study, space syntax analysis, multiple sorting tasks and interviews, and naturalistic observations) involved in the mixed-method study. Chapter 4 sets up the data and explains the sample selection as a background for the following section on findings.

Part Two, *research findings* (Chapters 5 – 8), outlines the empirical knowledge derived from the findings of each research technique which was then replicated in the four case studies. By analyzing the outcomes, this section illustrates the primary data and their analyses for addressing the research questions described in Part One and in support of the arguments to be made in Part Three. Chapter 5 (Four cities – four stories) describes the four cities (Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI) through a historic morphological description. The morphological study continues in Chapter 6 (Spatial configuration of the public realm). This chapter presents a numeric characterization and analysis of the physical urban environment of the four cities derived from a computer-based program. This chapter also includes a comparison of the syntactic properties and related measures of connectivity and accessibility of specific public places evaluated in each case and across the four cities. Chapter 7 (Meanings of the public realm) describes the multiple sorting tasks and interviews conducted to evaluate human perception associated with places in general and publicness in specific. In Chapter 8 (Everyday experience of the public realm), people's behavior and everyday functions of specific sites are studied. Chapter 9 (Construction and appropriation of publicness)

synthesizes the findings of individual research tactics and focuses on the

interrelationships between the multiple meanings, actions, and forms of the public realm.

Finally, Part Three, *research conclusions* (Chapter 9 – 10), summarizes the

findings and generalizes them into broader conclusions: that the spatial configuration of a

city is highly formative, that the public realm is a human construction, and that different

public places are public in different ways. Overall, the dissertation demonstrates the

relevance of the on-ground everyday public places for American cities.

This research draws on four major sets of literature (1) the changing role and meaning of

the public sphere, (2) post-modern urban planning and urban design theories addressing

continually growing diversity and heterogeneity of the urban condition, (3) everyday

urbanism, and (4) a place-oriented approach for examining the human experience of the

public realm. Each of these sets of literature will be reviewed in the following two

chapters.

Chapter 2

THEORETICAL BASES FOR RESEARCH ON THE PUBLIC REALM:
A Review of Models of the Public Sphere

2.1   Defining public

2.2   Changing role and meaning of the public realm
2.2.1   Dualism of the public and the private
2.2.2   Development of "Third Places"
2.2.3   The public realm and the relevance of everyday life

2.3   Post-modern city and the micro-publics

2.4   Everyday urbanism – a functional notion of publicness

2.5   A model of place

2.6   Urban configuration and the theory of natural movement

2.7   The theoretical approach: a place-oriented approach to publicness

2.1 Defining public

The term "public place" is characterized by the word "public." The word "public" means public means "of, concerning, or open to the people as a whole; involved in the affairs of the community, especially in government or entertainment; done, perceived, or existing in open view; and of or provided by the state rather than by an independent commercial company" (Oxford English Dictionary 11th ed., 2004). This definition establishes the relationship of the term "public" with people and their concern.

Public life traditionally combined a number of facets: it was directed towards some common benefit; it was open and accessible to everyone for observation or participation; it was shared by a diverse group of people and thus required tolerance of different interests and behaviors (Sennett, 1974; Brill, 1989). Furthermore, the public life was characterized by common tradition, coherence, and continuity; these transcended an individual's life span (Arendt, 1959). Private life is intimate, familiar, shielded, controlled by the individual, and shared only with family and friends. Public life involves relatively open and universal social contexts, in contrast to private life (Warner, 2002).

The current research recognizes these multiple dimensions of publicness. It also emphasizes the importance of the original roots of the word "public," coming from the Old French and Latin term *publicus* which derives its meaning from *poplicus* (of the people). Thus the focus of this dissertation is on the everyday human experience of the public realm. The human connection is studied in the following section through study of the evolving character and meaning of the public realm. In this process, the public realm as a place of everyday urbanism is established as the main theoretical position assumed in the current research.

Human understanding, human use, and human expression of the public realm are

the focus of my research. This chapter presents a review of four theoretical themes

related to the people-oriented study of the public realm: (1) the changing role and

meaning of the public sphere, (2) postmodern urban theories addressing growing

diversity and differences in the city, (3) everyday urbanism, and (4) a model of place. By

borrowing each theme, the important connection of the public realm with people's

everyday experience and use of public places is reinforced.

2.2   Changing role and meaning of the public sphere

Different ways of defining publicness are rooted in the changing role and meaning

of the public sphere. In this section, the evolution of the notion of publicness is assessed

through the lens of two literary works by Habermas and Arendt. In *The Structural

Transformation of the Public Sphere* (1962), Habermas examined the evolution of the

public realm. He traced the transformation of publicness from an idea of "representative

public realm" in the medieval period to a concept of "publicity" that originated in the

eighteenth century. Habermas followed the evolution into a bourgeois literary public

sphere and then expanded it into the political public sphere. His exploration culminates in

the notion of public space of modern relevance. In her work, *The Human Condition*

(1958)*,* Arendt studied the interaction of power, politics, authority, and totalitarianism. In

her analysis of labor, work, and action, she has theorized the public and associative

nature of freedom and democracy. Arendt draws examples from the Greek "polis," the

Parisian "communes," and the American "towns" and the American civil rights

movement. Both Habermas and Arendt underscore two factors critical to the changing

role and meaning of publicness: (1) the evolution of the social realm along with the

public and the private and (2) the relevance of everyday life in the public sphere. Using these two aspects of the public sphere, the public realm acts as an overarching discourse within which multiple realms of the private and the social forces function. Another premise of my research is that the public discourse is constructed, contested, and appropriated as a dialogic space through people's everyday experiences, actions, and spatial expressions.

2.2.1 Dualism of the public and the private

"Publicness" and "privateness" are concepts by which the Western liberal society organizes areas of social life that involve ascriptions of access, agency, and interest (Benn & Gaus, 1983, p. 25). Distinction of the public and private is common in the discussions of the public sphere. Loukaitou-Sideris and Banerjee (1998), in their analysis of the poetics and politics of urban form, have postulated that the sharp contrast between the private and public realms is an important dimension characterizing the dualism in the social ecology of the city.

This dualism of the public and the private is a key element in Habermas's demarcation of the origin of the public life in the bourgeois public sphere. He defines the public sphere as the sphere of private people who join together to form a "public." In the structural transformation of the public sphere, a central historic concept is the dynamic and complex relationship between the public and the private. According to both Habermas (1962) and Arendt (1958), public and private assume their currently recognized form only with the development of a modern nation-state and economy. Examination of the blurred division between the household and the city realm, which is a

key shift in the modern world, is also integral to my study of the public realm. This notion of publicness reinforces the assertion that publicness is a shifting idea.

2.2.2 Development of "Third Place"

The debate of how to define publicness is important. It has traditionally been done only in terms of ownership and accessibility. In this dissertation, a broader set of criteria for understanding publicness is offered. To examine some non-traditional public settings, this section analyses the nature of privately-owned places that have become important locations for public activities such as informal gathering, people watching, and accidental encounters. According to Ray Oldenberg (1991), informal gathering places, also termed as "third places," are essential to community and public life. He argues that bars, coffee shops, general stores, and other "third places" are central to local democracy and community vitality. In contrast to first places (home) and second places (work), third places allow people to put aside their concerns and simply enjoy the company and conversation around them. Third places "host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work." These opportunities and allowances provided by third places reinforce the value of everyday urban life in the examination of the public realm. The important role played by third places inspired me to consider a range of public places for detailed inquiry. The specific public places considered in my research vary in terms of ownership (publicly owned, privately owned), location (in downtown, away from downtown), typology (parks, plazas, streets, public buildings, shopping mall, etc.), and spatial characteristics (open, semi-open, closed). Selection of the places used in different stages of the research is explained in detail in chapter 4 (Research Design), section 4.4.

2.2.3 Relevance of everyday life in evolution of the public realm

Everyday life and human experiences are commonly associated with the private realm. In the Greek "polis," Arendt described the driving force of private life as people's everyday needs. The polis, according to Arendt, was the sphere of political freedom. This dissertation challenges Arendt's association of everyday relevance exclusively to the private realm. This study argues that the everyday life is also relevant to the public realm. Actions of men in the private realm established their mark and validated their entrance to the public realm. The composition of the public domain thus was indirectly influenced by the structure of the private life. The political realm was established for the purpose of good governance and administration. Everyday life of the political realm was structured around the public discourse of debate, discussion, and political freedom.

From studying Habermas and Arendt, it is evident that the public sphere takes a variety of forms. From the Greek agora to Roman forum, from the Victorian theatres to Parisian cafes, from the medieval commons to Italian plazas, it is the connection of these public places to everyday life, which make these places meaningful. This dissertation asserts that whatever the form and role of the public realm, it is constructed and appropriated based on the everyday needs and wants of users. While underscoring the role of users and their everyday needs, everyday life that includes human experiences, actions, and expressions is the emphasis of the current study,

2.3   Post-modern city and micro-publics

The current urban condition is complex and heterogeneous. The world is becoming more urbanized. There are pressing issues of migration, diversity, and multi-culturalism. As David Harvey (2001) sketches imagery of class and cultural conflict

between global forces of capital and local forces of community, urban public places embody the resulting political and social differences.

In this post-modern urban context, authors like Leonie Sandercock (2002) and Ash Amin (1995) questioned the motive of engineered public policies and utopian public spaces imposed on city life. Amin and Sandercock referred to Lefebvre in understanding the public realm as "right to differences" and "right to the city" (Sandercock, 2003; Lefebvre, 1991). In reference to Lefebvre's call for heterogeneity in cities, they argue for "micro-publics," which allow differences to coexist in the everyday experience, functioning, and analyses of publicness. Similarly, Dolores Hayden (1995) has pointed out that the power of a place is embedded in everyday stories of people who continuously work to create place. The public realm, postulated in my research, underscores the value of micro-publics that is characterized by everyday experiences of people and the spontaneity of their daily life. The selection of four sample sites of observation in each university town demonstrates this attitude towards small everyday places (See Chapter 4, section 4.4.3). The sites of observation are selected as locales of publicness in terms of people's use and activities, rather than as large settings or continuous urban space. This technique of observing small spots of activities captures human behavior in a very specific and grounded local context.

2.4 Everyday urbanism—a functional notion of publicness

Everyday urbanism is "an approach to urbanism that finds its meanings in everyday life" and its experiences (Mehrotra, 2004). Inspired by the writings of French philosophers Henri Lefebvre and Michel de Certeau, everyday urbanists find rich meanings and extraordinary actions in otherwise ordinary and often mundane routines of

everyday life. The role of the public realm in evolution of the urban is a major focus in Henri Lefebvre's writings. Lefebvre (1980) describes the city as a place where different groups can meet, where they may be in conflict but can also form alliances, and where they participate in a collective oeuvre. In the city, he noted, public life orders itself principally around exchanges of all kinds: material and non-material, objects and words, signs and products. According to Lefebvre, the urban and its qualities occur in everyday activities that are often unseen, and in the day-to-day common places that are often unnoticed.

Both Lefebvre and Crawford emphasize the importance of the public realm as a place of everyday activities. Connection between everyday life and urban design is established through an everyday space: a space that is constructed spontaneously between defined and undefined realms of home (private or first places), institutions (public or second places), and workplace (third places) (Crawford, 2004). The assumption behind such a space is the vitality of everyday public activities, which Michel de Certeau (1984) has called the "practice of everyday life." Through the notion of everyday space, studies in everyday urbanism attempt to reestablish the neglected connection between the human meaning of everyday urban environments and the public realm

Everyday urbanists regard everyday functional spaces as a zone of possibility and potential transformation of publicness. Though the everyday space is descriptive and generic, close observation highlights inhabitation, action, and appropriation. Situational and specific qualities of the everyday experience can be recorded through naturalistic observation of people – a strategy employed in my research. The users' point of view is vital in such a public realm to addresses informal and spontaneous utilization of space

together with the formal and designated functions. My research utilizes multiple sorting

tasks and interviews to measure the users' perception of places.

Formal public places such as squares, plazas, streets, markets, and parks have

often been subjected to historic and anthropological study as places providing

opportunities for democratic practices. But, informal activities in everyday places that

construct multiple forms of publicness are less recognized. In this dissertation, human

appropriation and interpretation of publicness in different types of public places are

examined. Such an empirical approach builds on the daily life and the everyday practices.

2.5   A model of place

The discussions in the previous sections argue for a less dogmatic approach

toward the public realm with an emphasis on the everyday experience, uses, and forms of

publicness. The focus on people and their everyday functioning requires a comprehensive

model to examine and understand the public realm as a place. This section presents a

discussion of Place Model as analyzed by David Canter (1977) and a critique of the

model through the interpretive lens of Urban Orders developed by N.J. Habraken (1998).

In his seminal book *Psychology of Place*, David Canter (1977) describes a "place"

as the juxtaposition of three major constituent elements: "conceptions, activities, and

physical attributes" (Figure 2.1.). This analysis demonstrates that we have not fully

identified the place until we know (1) what are the physical parameters of that setting, (2)

what conceptions people have about behavior in a physical environment, and (3) what are

the activities associated with or anticipated in that place. My research considers the

public realm as a place of everyday urbanism, which shapes the inherent structure of

everyday urban life. In this dissertation, the public realm is understood in terms of urban

meanings (people's perceptions), urban activities (people's activities), and urban forms (spatial configuration). Specifically, this understanding of the public realm is related to the multiple meanings and values that people attach to public places. Actions in the public realm could be analyzed by examining activities of people in these public places. The physical attributes of the public realm are the parameters associated with the spatial configuration or the distribution of the public places within an urban system. Using a specific strategy, as elaborated in Chapter 4 (Research Design), each of the constituent elements of the public sphere is evaluated in order to have a comprehensive understanding of the public realm.

A further implication of the model is the interrelationships among the three constituent elements (Figure 2-1). The overlapping areas of action – environment, meaning – action, and environment – meaning highlight advanced ways of evaluating the everyday dynamics of the public realm. These interrelationships within the public realm are the primary object of interest and are analyzed in chapter 9 based on the findings of the individual elements (explained in chapters 5, 6, 7, and 8).
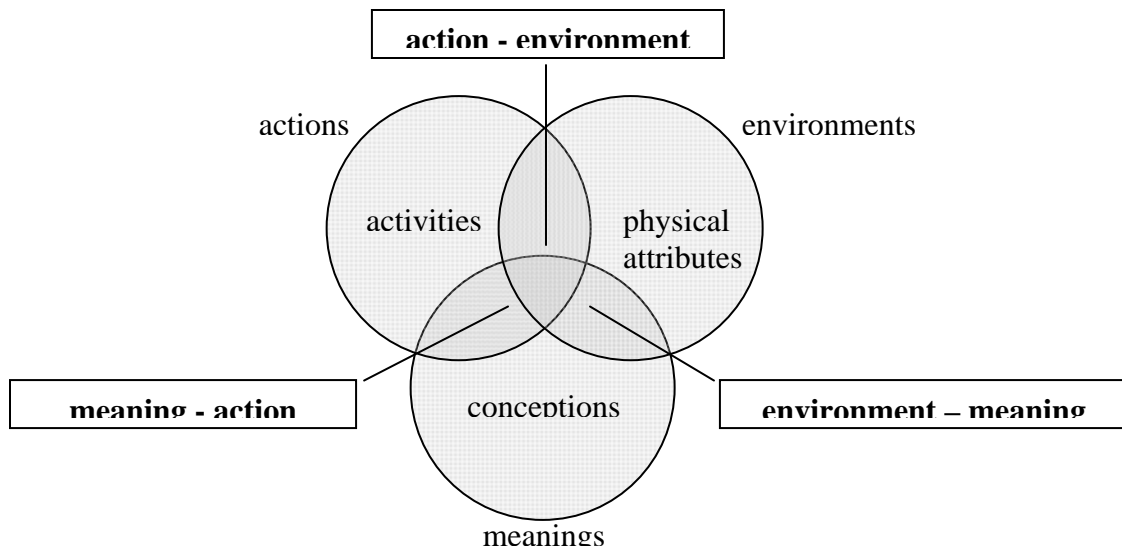
Figure 2-1: A visual metaphor for the nature of places as portrayed by Canter (1977).

The Place Model as developed by David Canter in 1970's has been used and applied in many studies as an underlying theme. Authors such as Montgomery and Groat, while writing on the urban environment, adhere to this concept of place. They use this model to explain the urban structure and the various processes involved in the urban experience. J. Montgomery (1998) uses the Place Model as "a visual metaphor for the nature of places" illustrating how successful urban places combine physical attributes with sensory or experiential qualities. Using the framework of Place, Montgomery "argues that the city is a phenomenon of structured complexity" (Montgomery, 1998, p.93). He contributes to the debate of good city form by providing an extensive list of 12 conditions (intensity, mixed use, fine grain, adaptability, human scale, permeability, streets, movement, green space, landmarks, architectural image, and the public realm), that is necessary to provide a reasoned rationale and exposition to good practice of urban design. Through his analysis of Place and Placemaking, Montgomery demonstrates the need for a balance of an ordered city form (legibility, imageability, and knowledgeability) and places of diverse activities, interactions, and transactions (complexity, diversity of uses, and myriad patterns of movement). He derives a "fit" for a good urban place based on such informing principles of order and activities. The resultant conditions developed by Montgomery for good urban design can be critical in the context of planned and market-driven decentralization of cities and metropolitan regions. The public realm is identified as one of the 12 critical conditions to develop a sense of place in the urban environment.

L.N. Groat (1989) employs the theory of the Place Model to understand the role of physical form in relation to that of civic meaning and how people aspire to use places

with civic quality. Groat's study may be seen as an analysis of the "meanings" with relation to "uses" derived from individual and community needs in urban environments. In each of the empirical studies, the relationship between conceptions and physical attributes is evaluated, measured, and analyzed. The current study develops a robust framework for the different interrelationships possible among the three primary elements of place.

Similarly, in his analytical work, *The Structure of the Ordinary* (1998), N.J. Habraken describes "physical form, territorial control, and cultural understanding" (Figure 2-2.) as the three underlying orders in any urban structure. According to Habraken, the first order is formed by the crude physical form of the urban environment. Transformation of the morphological structure of a city depicts a hierarchical system of human intervention and actions. In this dissertation, the pattern of physical organization of the campus and the downtown is studied. Relationships among various agencies explain the second order of territorial control. The territorial order reflects a continuous process of control of not just the abstract built forms but that of space and behaviors contained in the space as well. The current work studies the everyday pattern of people's activities and behavior in specific public places. Habraken posits that the interrelationship of the first two orders is the result of the third order of common cultural understanding. This interrelationship constructs several themes and variations in different urban patterns, types, and systems. These three orders establish a public realm that is heterogeneous, complex and contested. In relation to the physical pattern of the campus – downtown organization and people's everyday activities mentioned above, the interrelationship between the spatial configuration and the environmental role of people is an important

component of this dissertation. People's nature of association with the university and the town presents a strong case to study the environmental role in college towns. The interrelationship of environmental role and spatial configuration is discussed in detail along with some other interrelationship analyses in chapter 9.
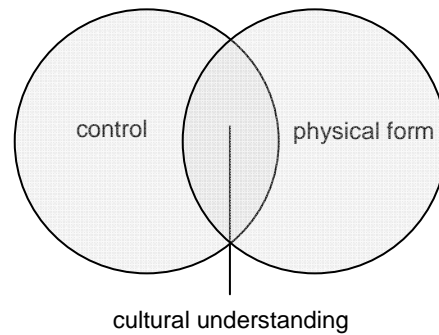
Figure 2-2: A visual metaphor for the nature of places as portrayed by Habraken (1998).

2.6 Urban configuration and the theory of natural movement

In their pioneering research, *The Social Logic of Space* (1984) and advanced studies in computational analysis of the urban form (1993, 1996), Bill Hillier and his colleagues at University College London conducted research on how organization of space impacts the form and functioning of cities. A key outcome is the concept of "spatial configuration" that is defined as "relations which take account of other relations within a complex system" (Hillier, 1996, p.3). New techniques have been developed and applied to a wide range of urban problems. This section demonstrates how the spatial analysis is connected to important characteristics of the everyday human experiences of the public realm.

The theory of natural movement (Hillier et al, 1993) argued that the urban configuration is the primary generator of pedestrian movement patterns, an important characteristic of public space. According to this theory, the configuration of the physical layout of an environment is important in order to study, characterize, and understand

movements and encounters in that environment. The movements generated by the basic physical feature of an urban system—the grid—are so fundamental that it is termed "natural movement" (Hillier et al, 1993). The theory holds that the structure of the urban grids creates a pattern of encounters among people by generating and directing movement. Irrespective of cultural variation and various "social logic of space," the theory of natural movement links the spatial configuration to movement. The theory of natural movement calls to mind the classical debate between the physical form and the social cultural forces in the urban system. It argues that the spatial configuration of the urban grid generates aspects of movement, visibility, and encounters that are directly associated with publicness. The present research demonstrates that the natural movement generated by the spatial configuration is a key concept related to human actions and behaviors in public places.

Natural movement has been highlighted as a morphological and empirical phenomenon through the application of sophisticated computer-based techniques in configurational analysis known as "space syntax" (Hillier, Penn, Hanson, Grajewski & Xu, 1993). These techniques, designed to characterize and measure the logic and pattern of the urban grid, enable to evaluate the local and global configuration of movement. Through the basic techniques of space syntax, several case studies, and statistical analyses, Hillier et al (1993) established that formal properties of the urban environment are closely connected to movement within the urban system. Specific correlation studies demonstrated that the integration value (a measure of accessibility) is directly related to movement rates in an urban environment.

The theory of natural movement emphasizes the general role of the spatial configuration of an environment in determining movement and hence influencing activities and behavior towards publicness. The theory also provides insight for this dissertation to apply specific space syntax measures such as integration. Integration, as a measuring tool, is used in the current project to evaluate the properties of overall connections and accessibility of a place in an urban environment.

Through the study of the conceptions (understanding), activities (control), and physical attributes (form) of public places, a place oriented approach for the everyday humane study of the public realm is established. The next section focuses on synthesizing different theoretical arguments into a comprehensive theoretical underpinning for this dissertation.

2.7   The theoretical approach: a place oriented-approach to publicness

The preceding review of the four theoretical themes introduces, defines, and shapes the discussion of the public realm in this dissertation. The areas of inquiry, the significant issues, and the implications of these theoretical positions are summarized below in Table 2.1. The evolution of the public sphere emphasizes the shifting meanings and uses of publicness. This study tests to what extent people and their everyday lives shape the public realm. This human connection of publicness is reinforced by the theoretical concept of micro-publics. This investigation demonstrates that these specific spots of everyday life allow different human experiences, actions, and expressions to co-exist in the public realm. The possibilities and opportunities associated with the presence and awareness of differences in everyday urban life are examined through the lens of everyday urbanism. Synthesis of this body of work reinforces the primary goal of the

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dissertation to examine people's understanding, actions, and expressions in the context of

everyday urban life. The everyday urbanism provides us with essential insights and

theoretical perspectives to understand, consider, and evaluate public places.

Overview of literature relevant to analysis of public realm			
Theoretical framework	Area(s) of inquiry	Key terms and focus of debate	Implications for this research
Public sphere (Urban Planning and Social Science) Habermas, Arendt, Sandercock	1. Transformation of public realm in the evolution of cities. 2. Understanding global and local forces that play critical role in the evolving complexity of cities. 3. Formation of new forms and practices towards changing roles of public realm.	1. Mongrel cities: a cosmopolitan public culture where different groups of people strive to living together 2. Micro-publics: local everyday places where differences are contested and tolerated.	1. Defines the public realm in multiple ways that is sensitive to growing diversity and differences in cities. 2. Situates the public realm in the context of evolving meanings and understanding. Highlights the relevance of the public sphere to the everyday life of people.
Everyday urbanism (Urban Design) Lefebvre, De Certeau, Crawford	1. Relationship between the public space and day to day functions. 2. Subversion of the dominant discourse of formal public places into informal and unconscious public places.	1. Lived space: a space that is lived in images and social actions. 2. Differential space: a new space that actuates differences and generates an empowering notion of publicness	1. Illustrates the importance of the role of public realm in people's everyday lives. 2. Underscores the possibility of "various profiles of publicness" from the perspective of everyday life.
Place model (Environment and Behavior) Canter, Habraken	1. Study of the public realm from cultural, behavioral, and physical perspectives. 2. The majority of the debate focuses around exploring the various components of the public realm.	1. Meaning, action, and form indicating the cultural, behavioral and physical aspects of a place. 2. Interrelationships among the various elements of place producing a contested public realm.	1. Provides a comprehensive framework of research. Reinforces the heterogeneity and complexity of the public realm. 2. Posits interrelationships as the cause of differential manifestations of human experience, activities, and expressions.
Theory of natural movement (Space Syntax) Hillier, Penn, Hanson	1. The urban grid as the generator of movements and attractor of activities 2. Rigorous and consistent characterization of the physical form	1. Spatial configuration: system of spatial relationships with respect to other relationships. 2. Integration: measure of accessibility	1. Brings the spatial-perceptual and spatial-behavioral debate into the research framework. 2. Publicness is also a formal issue

Table 2.1: Matrix showing the organization of the theoretical framework.

The theoretical themes discussed in this chapter were selected based on their relevance to the primary goal of this dissertation and the three research objectives framed in Chapter 1. The main theoretical position developed through the literature review—the public realm is a place of everyday urbanism—has important implications for the three research objectives. This section will discuss the implications and relevance of the place-oriented approach to the research objectives.

In the theoretical framework of place, physical attribute of the urban form is an important parameter. Critical forces and agencies within a city influence urban form and historic morphological evolution of a city. The physical attribute, in turn, influences the activities and social interaction. The place-oriented approach of the public realm provides an opportunity to examine the interrelationships among the spatial configuration, conceptual constructs, and behavioral actions. The evaluation of publicness in cities provides a platform to study the correlation of different meanings of publicness and everyday experiences of publicness to the spatial and morphological properties of the urban environment. In other words, the challenge is to find if there is a common pattern of spatial configuration of the public places in cities. The relationship between the physical organization of the city and people's perception and experience of publicness defines the first research question: to what extent does the spatial organization affect people's understanding and experience of publicness?

Considering one's understanding and experience of publicness, the multiple roles and meanings associated with the public realm are more relevant in the heterogeneous and diverse urban context. Differences present in the urban environments and distinct values adhered to the urban condition make public realm a hotly debated topic. This

dissertation examines the intent behind the homogeneous notion of publicness and standardized design practices. This research seeks to develop a comprehensive understanding of publicness based on the preceding discussions of micro-publics and everyday urbanism. The place-oriented approach recognizes that people understand publicness in different ways. This notion also shapes the second research question: in what ways do people conceptualize publicness?

If the cultural understanding of the public realm is important, expression of these social positions and cultural values is evident in the various actions, reactions, and interactions that happen in the public realm. Daphne Spain (1992), in the context of gendered spaces, correctly asserts that differences are not just created in the public sphere of a society, but are also controlled and maintained in these very places. Setha Low (2000), in her study of the transformation of public spaces in Latin American cities, underlines the gap between the artistic and economic goals of the designers and the functional needs of plaza users. An empirical place-oriented approach to the public realm thus provides a utilitarian platform to understand publicness from the users' perspective within public places. This analysis is integral to the third research question: in what ways do people's activities vary with time, across different types of public places?

Foundational to this research, studies of the public realm in theory and practice discloses some powerful characteristics of the public realm. It was important to study the realm differences addressing current issues as discussed in theory and practice. The literature emphasizes the idea that there is no single definition or description of the public realm, but a plethora of ideas and thoughts associated with it. Though we have ideas about urban life,

they are different according to person and the context. It needs a closer examination to learn how these vary from people to people, place to place, and culture to culture.

The place-oriented approach framed in this Chapter 2 provides two valuable implications for this research. One emphasis is on the framework of the research – a comprehensive and adaptive theory that enables one to describe and understand the human nature of the public realm. The second emphasis is methodological towards application of specific techniques to measure the human experience, actions, and expressions in the public realm. The methodological implications are described and discussed in framing Chapter 4—Research Design.   Through the theoretical framework of the Place Model, an understanding the public realm is achieved using identification, clarification, and evaluation of the conception of publicness. Such an evaluative framework is sensitive to the post-modern plurality associated with publicness. At the same time, the action oriented framework emphasizes the human connection of the public sphere and recognizes the inherent opportunities of dynamic processes of construction, appropriation, control, and sustenance embedded in everyday urban environments.

Chapter 3

PRECEDENTS FOR EMPIRICAL RESEARCH ON THE PUBLIC REALM:
A Review of Relevant Literature, Research, and Design

3.1   Empirically-based research approaches in relation to the theoretical framework

3.2   Characterizing the physical attributes of the public realm
3.2.1   Review of research precedents
3.2.2   Implications for the present research

3.3   Evaluating multiple meanings of the public realm
3.3.1   Review of research precedents
3.3.2   Implications for the present research

3.4   Measuring activities in the public realm
3.4.1   Review of research precedents
3.4.2   Implications for the present research

3.5   Summary

3.1 Empirically-based research approaches in relation to the theoretical framework

The literature on theoretical themes relevant to the public sphere is discussed in Chapter 2. These theoretical themes are derived from the work of philosophers, sociologists, political theorists, and urban design and planning theorists. The overall theoretical framework, in Chapter 2, provides a system of inquiry to explore the public sphere from the perspective of human understanding, actions, and expressions. Empirical research, however, is critical to understanding how this theoretical framework can be objectively applied to evaluate people's experiences of publicness, to record people's activities in the public space, and to measure the spatial configuration of the public realm. Regarding the theoretical aspect of this dissertation—the public realm as a place of everyday urbanism—some empirically-based studies are reviewed in this chapter. The discussion of these empirical studies are organized around three themes, conceptually connected to the theoretical framework of this dissertation: (1) evaluating multiple meanings of the public realm, (2) measuring activities in the public realm, and (3) characterizing the physical attributes of the public realm. The studies discussed in this chapter serve as (1) examples of applying the theoretical constructs and (2) precedents for selecting suitable research design; overall methodology and strategies; and specific research tactics. Strengths and weaknesses of the empirical studies are also discussed in examining multiple facets of the public realm.

3.2 Characterizing the physical attributes of the public realm

3.2.1 Review of research precedents

Morphological evaluation based on accurate measurement and rigorous description of the physical form is difficult and relatively new. Many studies investigate

the nature of the spatial configuration of the city and its relationship with other social, perceptual, and behavioral aspects of the urban environment. Two contemporary studies, both of which explore the relationship of spatial organization and identity, are described below.

The first study, by Gospodini (2004), is concerned with the issue of place identity as a local-global construct. The research examines to what extent specific aspects of urban morphology (such as built heritage and innovative design of space) contribute to place identity in European cities. The study also investigates how residents and tourists, with their different role and purpose in the urban environment, identify places. The hypothesis is that within the framework of multi-ethnic and multi-cultural societies, innovative designs of space and built heritages work as identity generators for different groups of people in modern culturally-bounded European cities. The theory is then tested by research in the city of Bilbao, Spain by interviewing residents and tourists as respondents with two distinct environmental role and propinquity. The comparative analysis demonstrated that innovative design and built heritage work together to create a sense of identity, attachment, and belonging. It was also noted that visitors preferred the innovative design whereas local inhabitants preferred to identify their places with traditional historic structures.

Gospodini's findings underline the importance of environmental role (residents and tourists) towards perception of place and place identity. The analytical results identified the primary rationale behind preference of innovative designs in cities. It was the opportunity of individual interpretation of an innovatively designed setting that stands in contrast to the surrounding historic urban fabric. Contrasting designs were found to be

neutral in some sense that does not impose the values and meanings of the dominant group on everyone in general. This emphasized the relevance of creative and new ways of designing public settings within the context of theory of political legitimization, thesis of dominant ideology, and concept of cultural capital.

The second study, a dissertation by Sezer (2006), attempts to identify the underlying spatial configuration that influences the perceptual relationships in the urban ecology. This study sought to investigate the way the public space of the city makes different social groups visible to each other. It was particularly focused on the ways urban immigrants of Anatolian-Turkish origin become visible in public spaces, in Amsterdam and Istanbul. The study investigates the everyday use of streets, markets, parks, or specific gathering places (such as mosques, tea houses) by the immigrants. It also examined the public space configurations by which these activities become visible to a broader public.

3.2.2 Implications for the present research

Analyzing the preceding two studies, it is evident that the spatial structure of the city is strongly related to people's perception and actions. Following are some important implications flowing from this research:

1.   The connection between spatial structure of the city and levels of visibility (publicness / privateness) is a powerful way of identifying the spatial-social dialectic.

2.   Through mapping the spatial configuration of publicness, recommendations to urban designers and planners can be made for the possible spatial conditions which might affect visibility between different urban groups.

3.   The two studies illustrate two innovative means of measuring the complexities

        and contradictions of the city. Creative ways of understanding how public place

        are used and how civic meanings are constructed are crucial in understanding the

        present urban condition. While Gospodini demonstrated innovative forms of

        interviewing and surveying, Sezer applied the sophisticated computer-based

        analytical method of space syntax.

3.3   Evaluating multiple meanings of the public realm

3.3.1 Review of research precedents

Urban form is constantly changing as a result of multiple variables such as regulations, design reviews, and individual development decisions. These changes affect many ordinary people in their daily activities. Contemporary studies in environmental psychology have investigated the issue of multiple meanings associated with the daily life of the city. Three specific studies are discussed in this section. Each study evaluates people's conceptual understanding of the different dimensions of the city.

The first study is Nasar's work on the *Evaluative Image of the City* (1990). Nasar examined city appearance and whether appearance of the city matters for the inhabitants and visitors. Appearance, Nasar wrote, is not just important for the visual sense of delight and pleasure. It is also critical to improving the community's meaning, in enhancing people's experience in public spaces, and in shaping their behavior in these places. Nasar posited that urban appearance must satisfy the broader public, which regularly experiences the urban environment. He argued for the importance of measuring people's responses. In considering community appearance, his study compared resident and visitor evaluations of the visual form of two American cities: Knoxville and Chatanooga,

Tennessee. Respondents were asked to identify city areas they considered visually pleasant (as well as unpleasant) and to name physical attributes in these areas that produced positive and negative evaluations. Responses were represented in maps and individual maps were overlaid to construct composite maps that served as the evaluative images of the cities. The evaluative maps suggest the effect of city structure and experience, and they indicate five common desirable features: naturalness, upkeep, openness, order, and historic significance

The second study, which aims to identify how a city can be understood as a "place" for its inhabitants is a study of "place-specific nature" of human behavior (Bonnes, Mannetti, Secchiroli, & Tanucci, 1995). This study refers to the kind of activities performed by the inhabitants within and among "sub-places" of various scales – the neighborhood, the city center and the periphery. It focused on the hierarchical connection among environments of various scales (immediate and distant, small and large) forming a complex of multiple places. Data regarding activities of people and their settings were collected from the respondents in a Roman neighborhood using self-reports and free-interviews and then used in a multivariate analysis. The study demonstrated that various types of activities exist within and among the various urban places considered. It also shows how in an environment, human roles are associated with different activity patterns. This environment-activity connection creates multiple experiences of the city and demonstrates varied understandings of the urban environment.

The third study examines the gap between normative notions of public space professed by the professionals and perceptions of public space held by actual neighborhood constituents (Schaller & Modan, 2005). Through a participatory mapping

project in Mount Pleasant, District of Columbia, Schaller and Modan's study asked various groups of people to map their neighborhood boundaries and important public spaces. These mental maps were then compared with government maps identified Neighborhood Business Improvement District (NBID). A comparative study of the maps reveals a disparity between the two mapping groups in terms of their understanding of neighborhood boundaries, public space usage, perception of safety and public behavior. In each case, the neighborhood boundaries and various perceptions are identified with how each group uses these spaces and which spaces are relevant to their day-to-day activities. Attention to how spaces are used by different groups and the importance of everyday spaces in the social network are vital for success of places and day-to-day functioning.

3.3.2 Implications for the present research

Though the three studies primarily examine the physical characters of cities, the underlying rationale of human preferences compares the relationship of physical form with spatial activities and experiences. The three important themes are as follows:

1. The experience of the city arises from the evolving interaction of humans with their urban environment. This represents a psychological construct that involves subjective assessments of feelings about the environment.

2. The studies establish the public realm as a contested terrain of interaction between groups with different environmental role and propinquity. Further, the research stresses the importance of everyday urban spaces by demonstrating problems in urban development resulting from insensitivity on the part of agencies and

process to marginal forces. People and function, as the researches illustrate, are embedded in the discourses of public space.

3.   These studies emphasize the role of micro-politics. Like Amin's (1995) notion of "micro-publics," micro-politics allude to diverse constituents creating a particularly local dynamic through their everyday practices. This dynamic produces alternative space of representation that can counteract dominant spatial practices.

3.4   Measuring activities in the public realm

3.4.1 Review of research precedents

Different dimensions of the public sphere have been studied from time to time. One particular type of research that has often been ignored is the study of public space from the users' perspective. The three research works described below are pioneering studies of human behavior and activities in public places.

In his landmark study of plazas and street life, Whyte (1980) explored human behavior in small urban spaces. He tried to identify what made some public plazas vital places and others dead places. He recorded, analyzed, and explored the functioning of metropolitan environments in squares and plazas of New York City using time-lapse film, ethnological diagrams and empathic observation. His urban ethnographic and behavioral study emphasized street corners, seating features, blank walls, sun and wind patterns, food vendors, pedestrian behaviors, ordinary encounters, and street entertainment.

Cultural and political significance of public space has been examined by many authors (Arendt, 1958; Habermas, 1962, Loukaitou-Sideris & Banerjee, 1998; Fraser,

1989). In a contemporary anthropological study of the design and meanings of Costa Rican plazas, Low (2000) investigated the cultural and political significance of public space. She illustrated how the different aspects of everyday life, such as friendly gossip, political rallies, outdoor concerts, drugs, shoeshines, and sex-for-sale, have its place and time in the public plaza. In this wide-ranging, multi-disciplinary study, Low explored the interplay of space and culture in the plaza, demonstrating how culture acts to shape public spaces and how the physical form of the plaza encodes the social and economic relations within its city.

Low centered her study on two plazas in San Jose, Costa Rica, with comparisons to public plazas in the United States, Europe, and elsewhere. She interweaves ethnography, history, literature, and personal narrative to capture the ambiance and meaning of the plaza. She also uncovers the contradictory ethno-histories of the European and indigenous origins of the Latin American plaza and explains why the plaza is often a politically contested space.

Parks and plazas are common subjects of design and research related to the public realm, whereas greenways and trails are not. Though greenways and multipurpose bicycle paths have been built since the 1890s, little systematic research has been conducted on greenway designs and people's preferences in using them. In her dissertation, *Guidelines for Greenways* (2002), at the University of Michigan, Anne Lusk provided evidence to demonstrate how new or under-utilized greenways and sidewalks, parks and streets might be improved. Within the framework of destination theory, Lusk's primary hypothesis was that highly frequented greenways have destinations that serve human needs.

Lusk conducted extensive investigation of six preferred greenways. Her overall investigation found that when people are engaged in activities like walking, jogging, in-line skating or bicycling on the greenways, they identify three to four places along the route. These places are perceived by the people as destinations, where they stop or pass by. According to her, this Theory of Destinations has been underutilized in urban design. Lusk has synthesized her findings in a set of 23 guidelines, focusing on the trail users and their needs, for greenway development. For example, Lusk elaborated that social bridges or design elements at destinations can promote interaction between strangers using the same trail or greenway.

3.4.2 Implications for the present research

Summarizing the three studies described above, the vitality of everyday urban space, spontaneous human behavior, and defining public places as destinations serving human needs are evident. The following are some important implications flowing from this research:

1.   The three studies discussed above highlight the importance of the everyday life of people and emphasize the need to address human needs. Whyte, Low, and Lusk recognize that public places (plazas, parks, and greenways) attain their meaning and value depending on how they are used by people.

2.   Whyte's study underscores the importance of small urban spaces and highlights the relevance of leftovers, niches, and incidental spaces in cities. Identification of opportunities for small urban spaces in city centers is pragmatic (from the perspective of urban design) and is sensitive to how spaces are used in people's daily life.

3.	Both Low and Lusk provide extensive documentation to illustrate that public places are for people. Low's observations reveal that publicness is created and contested by people through their actions and through interpretations of others' behaviors. Lusk's investigation demonstrates that people prefer to use certain spaces if the settings are useful to their needs. Both Low and Lusk underscore the value of overlapping uses and multiple interests in successful public places. According to them, the presence of destinations and the co-presence of multiple interests are valuable for visibility, interaction, spontaneous behavior, and other features for a successful public place.

4.	Regarding research methodology, both studies emphasize the value of human perception and naturalistic observation in noting people's activities and behaviors in places. While Whyte used video cameras and manual observations for documentation of human behaviors without any intervention, Low employed empathetic observation and participatory anthropological methods for examination of human interactions. Low's approach is an embedded anthropological study through which she narrates the story of each of the participating users. Lusk, on the other hand, relies on a Path Destination Survey that systematically identifies distance between destination and their constituent features.

## 3.5	Summary

Major themes of potential significance for the present research are discussed in detail in the previous sections of this chapter. As they have been elaborated, they are summarized below in support of the matrix presented in Table 3.1:

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1. Human experience is a product of evolving human interaction with environments.

2. People with different environmental roles are associated with different activity patterns, thus creating multiple experiences within a city.

3. Residents' perceptions of a place are associated with use and everyday activities, whereas professional perception is based on power relationship and interest.

4. Successful public places are intertwined with the needs and wants of daily life.

5. Roles of destination in relation to human needs are critical to successful use of a public place.

6. Different physical attributes appeal to different groups of people.

7. Spatial configuration is integrally connected to visibility and encounter patterns among different groups within an urban system.

Empirically-based study	Strengths of the study	Limitations of the study
Nasar (1990)	1. Develops usable criteria for evaluation of built forms. 2. Attempts to uncover the underlying elements for human preference for certain places.	1. Primarily focused on people's experiences in places. 2. Lacks information about how these spaces are really used irrespective of their perceived aesthetic value.
Bonnes et al. (1995)	1. Develops the Place model adding dimension of interrelationships and socio-cultural aspects of people 2. Emphasizes scale and hierarchy in people-place relations	1. May vary with the different center – neighborhood – periphery dynamics. 2. Detailed observation of people's activities in places is necessary to legitimize self-reported responses
Schaller & Modan (2005)	1. Highlights the power relations embedded in everyday spaces. 2. Emphasizes on the interaction of public and counter-public forces.	1. Focuses on the negative interaction among various groups. 2. Does not explore the prospective common grounds within conflicts
Whyte (1980)	1. First hand observation of human behavior to find how spaces are really used. 2. Scopes and relevance of small everyday spaces in the urban life	1. Didn't involve detailed understanding of people's experience or their perception behind certain actions. 2. Specific to a large metro city.
Low (2000)	1. Detailed anthropological study and embedded observation and data collection. 2. Idea of connecting politics and culture to their expression in the daily life of the plaza	1. Specific to a specific typology of plaza—open public place 2. Implications of design can be further explored.
Gospodini et al. (2004)	1. Explores the transforming role of public space within the context of local-global dynamic in cities. 2. Highlights criticality of individual interpretation of places by people 3. Demonstrates the importance of environmental role in shaping people's perception and image of places	1. Emphasis on comparison of built heritage and innovative design rather than success of their combination. 2. Doesn't count the negative effects of many new urban projects in cities
Sezar (2006)	1. Focus on the spatial configuration of publicness 2. Highlights the structure of the city form itself	1. The spatial-perceptual connection could be further explored in terms of people's perception of the public places

Table 3.1: Matrix summarizing the lessons learnt from the review of the empirical research.

Finally, it is also important to consider the overall contribution of the research reviewed here in relation to the broader theoretical questions outlined in the previous chapter. In this regard, two interrelated points are worth noting. First, taken altogether, these studies investigated a range of interrelationships integral to the Place Model (Canter, 1977; Habraken, 1992) that includes: spatial configuration in relation to visibility and perception, human experiences in relation to people's interaction with the environment, people's perception in relation to their purpose and actions in the environment, culture and politics in relation to everyday wants and needs. All the studies have, however, concentrated only on one type of interrelationship. The complexity and heterogeneity of the urban environment suggests that a multidimensional approach addressing a range of possible interrelationships may be needed to conduct a comprehensive study of the public realm. We now turn to Chapter 4, which describes a suitable research design for this comprehensive examination of the public realm.

Chapter 4

METHODOLOGY

4.1   Case study as research design

4.2   College towns as case studies: relevance of studying college towns

4.3   Implications of a multiple case study design

4.4   Sample selection of settings
4.4.1   Selecting the exemplar settings for sorting tasks and interviews
4.4.2   Selecting four specific sites for data collection in each city

4.5   Sample selection of respondents

4.6   Sequence of research procedures
4.6.1   Historic morphological study
4.6.2   Space syntax analysis
4.6.3   Multiple sorting tasks and interviews
4.6.4   Naturalistic observation

4.1 Case study as research design

The research questions—identified in Chapter 1 and supported through the literature reviews in Chapters 2 and 3—establish a research design, framed by the Place Model: physical attributes, meanings, and actions. Questions pertaining to spatial attributes of the public realm are examined through the lens of theories of spatial syntax and spatial configuration. Questions of meanings of publicness are supported through post-modern theories of public sphere. Questions of activities in the public realm are addressed by the everyday urbanism. The research questions connected to the relevant theoretical background forms the basis of an empirical multi-tactic case study research design.

The case study is defined as "an empirical inquiry that investigates a phenomenon or setting" (Groat & Wang, 2002, p.346). The authors describe five salient features of the case study research design: (1) focus on cases in their contexts, (2) patterns of relationships, (3) theory development, (4) use of multiple sources of evidence, and (5) the potential generalization to theory. From the perspective of these characteristics, a case study research design can be employed in this dissertation to: (1) examine the everyday context of the public realm, (2) focus on the relationships between multiple facets of the public realm, (3) develop theoretical constructs of publicness, (4) apply multiple data collection tactics from different sources focusing on people, their activities, and specific urban settings, and (5) empirically evaluate the general theories of everyday urbanism.

This dissertation focuses on college towns as enhanced settings for examining publicness. Specifically, four college towns are considered: Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI (Figure 4-1). College towns are natural settings

associated with strong public culture, greater public activities, and quality public places (Lyndon, 2005). The research design uses data from multiple resources including: (1) historic documents, archival studies, Sanborn maps, and photographs providing an in-depth and nuanced description of the cities; (2) the physical setting of public places in the college towns is analyzed using space syntax analysis to explore the urban pattern and to trace the morphological evolution; (3) people are interviewed using multiple sorting tasks and open-ended questions to identify various meanings of publicness in people's perception and to understand various factors associated with public places in people's cognition; (4) according to the theories of everyday urbanism, day to day activities in cities are central to the evolution of public places. Observation of human activities and behaviors in certain public places is also undertaken to identify how public places harbor different kinds of activities as a stage for exhibiting the human element. These procedures are replicated in individual college towns.
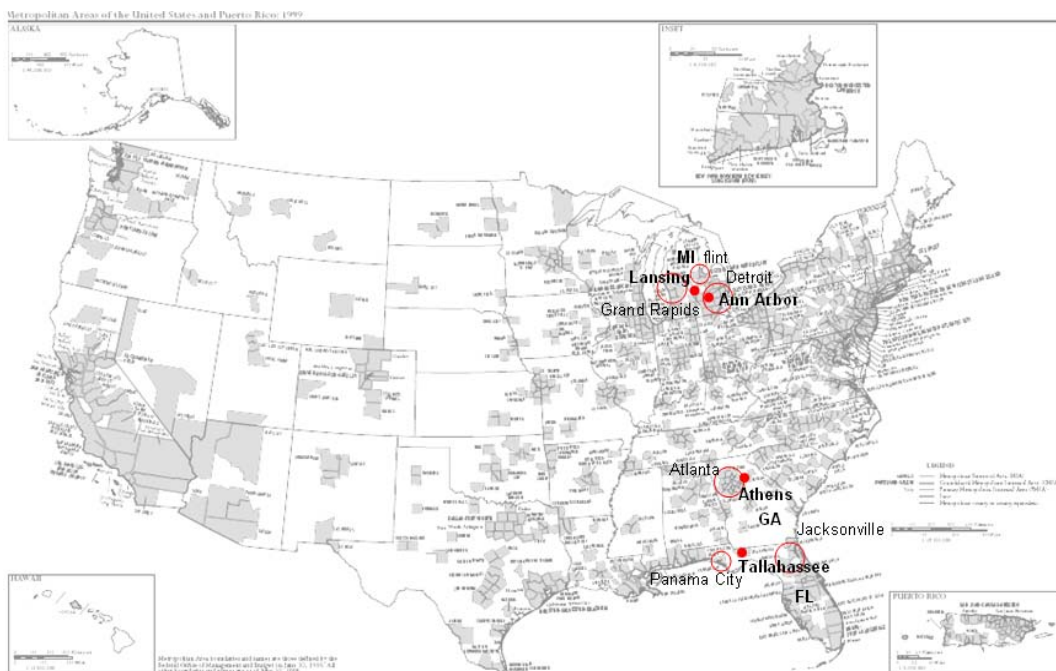
Figure 4-1: The four case studies in the context of the U.S. metropolitan areas in the United States (Source: Department of Commerce, Government of USA, 1999).

4.2   College towns as case studies

In a recent study of "healthy downtowns of small metropolitan regions," college towns were recognized as successful cases of downtowns in small metropolitan regions (Filion, Hoernig, Bunting & Sands, 2004). Through a survey of professional planners and other urban professionals, the study identifies small metropolitan regions considered to be vibrant. This forms an important investigation of limited North American metropolitan areas that remain successful in the face of increasing suburbanization and in the context of declining metropolitan regions. The study finds niche markets and specialized industries such as education, medical services, and tourism as specific success factors and as possible drivers of revitalization policies. The presence of "educational establishments" is identified as an important success factor along with related factors such as "pedestrian environments," "cultural activities," "employment," and "green space." Seven of the 19 successful cities in the region have a university in the downtown and 12 of the 19 cities have a university campus within two miles of the downtown. Five of the 19 cities are also state capital. Athens, Georgia, one of the four college towns in this research, figures among the 19 regionally known successful downtowns. Athens is an example of a university downtown as well as a county seat. The study further analyzes five nationally recognized downtowns. Four out of these five cities are university downtowns. Ann Arbor, MI, another selected case study in this research, is one of the five nationally known successful downtowns of a small metropolitan region. Like Athens, Ann Arbor is a university town and a county seat.

College towns and state capitals constitute more than 90% of the successful downtowns in the Fillion study. Donlyn Lyndon (2005), in his article "Considering the

Place of Campus," in the journal *Places*, demonstrated that the university campus settings are places where deliberate, purposeful construction of a "common realm" can be imagined and constructed; and where purpose and vision can trump expediency. College towns are catalysts of urban development because they assemble a large population, resulting in a dense and vibrant environment. The heterogeneity and diversity of university populations are also vital elements in promoting a rich environment. University campuses and towns have been places that have nurtured activist ideals and intellectual pursuits, that have promoted these values in actions, and that have embodied such shared values and actions in their buildings, settings, and public places. A comprehensive study of the public realm requires examination of different types of public settings. College towns are exemplar places that provide an opportunity to study a broad and complex range of public settings. The dynamic public environment of the college towns thus makes them strong case studies to examine multiple facets of the public realm.

Though deliberative public action makes college towns natural choices for the case study, these towns might illustrate a greater extent of public behavior and activities compared to other cities in general. Some other idiosyncratic features of college towns include the predominance of a young and educated population, an above average rate of employment, better economic stability, a large amount of active behavior, and a healthy life style. These have important implications on public activities and public places. The scopes and limitations of selecting college towns as case study are further discussed in detail in the concluding Chapter 10.

The four selected cases: Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI are prominent college towns as well as state capitals. Table 4.1 identifies various comparative features (multiple criteria of demographics, social statistics, and geographical variations) across these exemplar towns (Table 4.1). The four towns are also specifically compared using specific comparative features: ratio of student population and city population, time period of historic development of the university, relationship of the town with the nearest metro region, and demographic nature (Table 4.2).

Comparison features	Ann Arbor, MI	Athens, GA	Tallahassee, FL	Lansing, MI
Geographic location	Mid-West	South	South-East	Mid-West
City Population	115,092	112,760	168,979	161,201
City Area	27.7 sq miles	64.4 sq miles	98.2 sq miles	46.5 sq miles
White percentage	72.4	65.4	57.3	72.6
Black percentage	7.1	27.3	36.0	15.7
Hispanic percentage	3.3	6.4	4.2	8.6
Asian percentage	16.0	3.8	3.1	5.4
Others percentage	1.6	3.0	1.7	2.7
Male percentage	50.9	47.6	47.8	48.8
Female percentage	49.1	52.4	52.2	51.2
University	University of Michigan	University of Georgia	Florida State University	Michigan State University
University founded in	1817 (1836 in Ann Arbor)	1791 (built in 1801)	1851 (expanded1947)	1855 (expanded1925)
Student population	39,031	33,405	41,575	44,542
Nearest metro region	Detroit	Atlanta	Tallahassee* Jacksonville**	Lansing
Relationship with metro	Edge of metro	Edge of metro	Embedded* Distant**	Embedded

Table 4.1: Demographic characteristics of the four college towns.

A. The town-government relationship		
University town + County seat	Ann Arbor, Michigan*	Athens, Georgia*
University town + State capital	Lansing – East Lansing, Michigan	Tallahassee, Florida
B. Student-town population ratio		
1/3 ratio of student and city population	Ann Arbor, Michigan*	Athens, Georgia*
1/5 student and city population	Lansing – East Lansing, Michigan	Tallahassee, Florida
C. Historic development of the university		
University town with university developed in 1800s	Ann Arbor, Michigan*	Athens, Georgia*
University town with university developed in 1900s	Lansing – East Lansing, Michigan	Tallahassee, Florida

D. African-American population		
University town with 25% or more African-American population	Ann Arbor, Michigan*	Lansing, Michigan
University town with less than 25% African-American population	Athens, Georgia*	Tallahassee, Florida

Table 4.2: Matrices showing comparison of the case study selection of college towns based on a specific demographic feature.

4.3 Potential implications of a multiple case study design

Each university demonstrates distinct characteristics in relationship to its city and the spatial function of the urban environment. In his *Case Study Research: Design and Methods* (1994), Yin has defined two categories of replication with different underlying logic for multiple-case studies. With multi-case design, the researcher can select each case so that, according to Yin (1994),

> "It either (a) predicts similar results [across cases] (*a literal replication*) or (b) produces contrasting results [across cases] but for predictable reasons (*a theoretical replication*)" (p.46).

He argued that the nature of the theoretical framework and accompanying research questions determine the rationale for the types of replication selected.

This dissertation adopts a combination of literal and theoretical replication, thus providing an opportunity to generalize certain findings while at the same time maintaining sensitivity to any variation present in the context or to any aberrant or unique cases. This type of research design permits a robust set of comparisons despite the small number of college towns involved in the study. With reference to the four specific comparison criteria (Table 4.2 A, B, C, and D), different combinations of literal replication and theoretical replication can be developed:

1. With respect to the three criteria (A) town-government relationship, (B) student-town population ratio, and (C) historic development of the university, two pair of literal replication are: [Ann Arbor and Athens]; and [Tallahassee and Lansing].

2. With respect to the criterion (D) African-American population, the two pairs of literal replication are: [Ann Arbor and Lansing]; and [Athens and Tallahassee].

Overall, the case study selection of the four college towns represents multilayered comparative analyses that have both literal and theoretical qualities.

4.4 Sample selection of settings

In each of the case studies described above, three sample selections were conducted: (1) sample of 25 important places in each city to be sorted, (2) sample of 32 people in each city as respondents for interviews and multiple sorting tasks, and (3) four specific exemplar places out of the sample of 25 settings in each city for naturalistic observation.

4.4.1 Selection of 25 important places in each city to be sorted

A list of 25 settings is used as a critical sample of important places or settings, as perceived by residents in each city. This sample of 25 significant settings, in each city, was derived in the following way:

1. Informal interviews with five to ten participants in each city

The people selected for these interviews represented one of the following groups: residents of the city (town only); students, faculty, and staff of the university and who reside in the city (town and university); and students, faculty, and staff of the university and who do not reside in the city (university only). In addition, important architects and planners in the city administration were also interviewed. Three to five participants were selected based on snowball sampling with some limitations in terms of access to people, time, and scope of the research (see Appendix R, for details of the initial interview participants). Nevertheless, the initial group provided valuable information regarding the specific settings in each city. The informal interviews and discussions generated a list with a range of 50-85 settings in each city considered important by the respondents.

2. Identification of the 25 most significant settings

A final group of 25 settings was then identified based on the frequency with which these settings were mentioned in each interview and discussion. These 25 settings were then used in the multiple sorting tasks and open-ended interviews with 32 respondents in each city (see 4.6.3, p.54 and 4.6.3, p.56).

No.	Ann Arbor	Athens	Tallahassee	Lansing
1	Michigan Theater	College Ave and Broad St	Lake Ella	Barnes & Noble – Grand River
2	Bell Tower and plaza	UGA Entrance Quad	Governor's Sq Mall	Grand River Av. Strip
3	Nichol's Arboretum	UGA Library Quad	Kleman Plaza	Fergusson Park
4	Barton Park	UGA Fountain Plaza	Adams Street	Lansing Mall
5	Law School Quad	Tate Student Center	Science Museum	River Front Park
6	Nickel's Arcade	Sanford Stadium	City Hall	Michigan State Creamery
7	Hands on Museum	Athens County Office	Lewis Park	Spartan Stadium
8	City Hall	Athens Old City Hall	Park Av. chain of parks	Meridian Mall
9	DT Public Library	County Library	Tallahassee Public Library	State Capitol Building
10	UM Diag	Borders – Alps Road	Doak Campbell Stadium	Potter Park Zoo
11	Liberty Street	Dudley Park	Duval Street	MSU auditorium
12	Liberty Street PO	Nature Center	New Capitol	Kellog Center
13	Rackham Building	State Botanical Garden	College Av and Copeland St	Luis Adado Trail System
14	Espresso Royal	Founders' Garden	Borders	Holiday Lanes
15	Main Street	Jackson St Cemetery	Tal Community College	Frances Park
16	Michigan Stadium	DW Brooks Mall	State Recreation Area	Impression 5 Science Center
17	Michigan Union	The Grit	Cascades Park	Spotlight Theatre
18	Gallup Park	Georgia Square Mall	Old City Cemetery	Fenner Nature Center
19	Ice Cube	Seney-Stovall Chapel	County Civic Center	Michigan Historical Center
20	Gandy Dancer	Copper Creek Bar	Tallahassee Mall	Kresge Art Museum
21	Farmer's Market	N. Oconee Greenway	FSU Circus	Beaner's Gourmet Coffee
22	Regents' Plaza	Georgia Museum of Art	Fun Station	Abram's Planetarium
23	Arborland Mall	Skate Around USA	State Gardens	Cooley Gardens
24	Briarwood Mall	Taco Stand	Museum of Fine Arts	Courthouse Square
25	Borders	Espresso Royale	Jim and Mill's BBQ	Horticultural Demo Gardens

Table 4.3: List of 25 settings in the four case studies.

Table 4.3 presents the list of 25 settings selected in the four cities. The pictures of all the places used in the four case studies to conduct the multiple sorting tasks and interviews (see section 4.4.2) are included in Appendices A - D.

Table 4.4 presents a comparison of the composition of these 25 settings in each city, based on: nature of ownership, type of land use, and open space characteristics. With some minor variations, the 25 settings selected in the four cities are generally consistent in terms of their distribution across the different categories.

	Ann Arbor MI	Athens GA	Tallahassee FL	Lansing MI
Ownership				
Public	8	8	12	8
Semi-public[1]	10	10	8	9
Private	7	7	5	8
Landuse				
Educational	5	6	3	5
Recreational	4	3	4	4
Commercial	7	6	4	5
Residential	0	0	0	0
Gov/Public	3	4	5	2
Religious	0	2	0	0
Streets	2	1	3	1
Open space	4	3	6	8
Open space				
Open	7	9	9	7
Semi-open	6	5	5	4
Closed	12	11	11	14

Table 4.4: Comparison of composition of the 25 settings selected for sorting tasks and interviews in each of the four case studies.

4.4.2 *Selection of four exemplar places for naturalistic observation*

From the 25 settings used in the multiple sorting and interviews, four specific places are selected for detailed naturalistic observations. The selection is made based on their frequency of being named as important places in the city during the initial

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[1] Private entities having some features of a public institution (as defined by Sorkin & Zukin, 2002).

interviews and sorting tasks. In addition, criteria such as relative location of these settings

with respect to downtown (Downtown or Outside Downtown) and the enclosure

characteristics (outdoor or indoor) are taken into account. The selection also considered

coherence and similarity in terms of the typology of the place. In general, the four

exemplar places selected have (1) a street, (2) a park, (3) a bookstore, and (4) a shopping

mall. The two exceptions to this pattern are the county public library in Athens and the

Kleman Plaza in Tallahassee, which are indicated in Table 4.5, demonstrating the

idiosyncratic characteristic of these cities. Table 4.5 describes the composition of the four

exemplar places considered for naturalistic observation in the four case studies.

| | City | Site A | Site B | Site C | Site D |
		DT-outdoor	DT-indoor	Outside DT-outdoor	Outside DT-indoor
1	Ann Arbor, Michigan	Main St	Borders	Gallup Park	Briarwood Mall
2	Athens, Georgia	Broad St/ College Av	Borders	N Oconee River Gnwy	Athens county Lib
3	Tallahassee, Florida	Adams St	Kleman Plaza	Lake Ella	Governor's Sq Mall
4	Lansing, Michigan	Grand River Av strip	Barnes & Noble	Fergusson Park	Lansing Mall

Table 4.5: Matrix showing specific site selection for observation in the four case study cities based on location and type of space.

4.5   Sample selection of respondents

For interviews and multiple sorting tasks (devised to understand people's

constructs related to publicness), 32 respondents (n=32) were selected in each case study.

In each city, the 32 respondents were selected from four sites (eight respondents per site)

that were considered by the residents as the four most important public places in that city

(see further discussion of these selections in 4.4.2, p.56). The same four exemplar places

were also used for the naturalistic observation. The use of the same sites for the two

research tactics (interviews and observations) ensured compatibility between the people

interviewed and the people observed. In other words, both the people interviewed and the

people observed were users of the same four settings in each town. The interview

participants were selected using a stratified sample, using the following criteria: (1)

gender (equal distribution of male and female respondents); (2) age (equal distribution of

teens, young adults, middle-aged, and elderly); (3) resident status (at least two years of

residency in the respective city); and (4) familiarity with the city (user knowledge of the

25 important places in the list for sorting and interviews). These factors ensured that the

collected sample is representative sample of the average resident population in each city.

Moreover, this achieved elimination of certain groups of possible users such as tourists,

new comers, and uninformed users.

The model of place evaluation developed by Canter (1977, 1983) has also been

termed as a "purposive" model of place. This emphasizes the fact that in any

environment, a person will have a particular purpose, and that this purpose will influence

the particular "role" assumed by individual within the environment. In turn, the person's

"environmental role" will influence their conceptual construct and hence the evaluation

of that environment.

Based on this definition of "environmental role," the concept would directly

correspond with people's attachment to certain institutions in a city and with their

associative roles in a particular setting. The college towns, as noted by Donlyn Lyndon

(2005), provide an exciting test case to study three specific roles within the continually

town-gown relationship: (1) people who are associated with the university, but are not

residents of the town (university only), (2) people who are residents of the town, but are

not associated with the university (town only), and (3) people who are associated with

both the town and the university (university and town). These interrelated environmental roles of people in the college towns encourage vocal confrontations, conflicting interests, and interesting partnerships. For this dissertation, these three associative roles pertaining to the college towns are considered. So, the stratified sample was also undertaken based on the criterion of environmental role, in addition to gender and age.

Table 4.6 describes the sample distribution of 32 respondents in each of the four cities. In each city, 50% of the sample is male and 50% female. In terms of age distribution, the sample in each city contains equal proportion (25%) of respondents from the four age-groups. Sample in each city also consists of approximately one third of the sample from each of the three environmental role groups. Exact equal stratification could not be achieved for the environmental roles. There were practical limitations of response rate during the sorting task and less control over nature of the respondents' environmental association.

City		Gender		Age				town	town	univ
	n	m	f	14-25	26-35	36-60	>60	only	univ	only
Ann Arbor	32	16	16	8	8	8	8	12	9	11
Athens	32	16	16	8	8	8	8	12	9	11
Tallahassee	32	16	16	8	8	8	8	13	9	10
Lansing	32	16	16	8	8	8	8	12	7	13
Total	128	64	64	32	32	32	32	49	34	45

Table 4.6: Sample distribution of 32 respondents in each of the four case studies.

4.6 Sequence of research procedures

Four case studies are examined in this dissertation: Ann Arbor, MI; Athens, GA; Lansing, MI; and Tallahassee, FL. Understanding and analyzing public places using Canter's Place Model and Habraken's Urban Orders necessitates a comprehensive

research design that addresses enquiries of these three components of meaning, actions, and physical form (Figure 4-2).

Research design

HUMAN EXPERIENCE OF THE PUBLIC REALM

(1) To what extent does the spatial organization (campus-town configuration) relate to people's experience and understanding of publicness?
physical attributes

(2) In what ways do people conceptualize publicness?
meanings

PLACE MODEL

(3) In what ways do people's activities vary with time and location across different types of public places?
activities

COLLEGE TOWNS

Morphological analysis

Multiple sorting task and interviews

Naturalistic observations

Ann Arbor, MI
Athens, GA
Tallahassee, FL
Lansing, MI

Figure 4-2: The research design employed in this study in relation to the research questions, the overall theoretical framework, and the literature review.

In each of the four case studies, a sequence of multiple procedures was employed. First, the urban condition of the four cities is studied using a historic morphological analysis to examine the urban pattern and to trace the morphological evolution. Second, the physical properties of the four cities are analyzed using space syntax methods. Third, people were interviewed from the four case studies using multiple sorting tasks and open-ended questions to understand and identify perceptual constructs related to places in general and publicness in particular. Fourth, observation of everyday activities and behaviors of people in specific exemplar public places was undertaken to comprehend

how people contest, appropriate, and enact publicness in places. The four research procedures are illustrated in Figure 4-2 in relation to the research questions, overall theoretical framework, and the case study research design.

4.6.1 Historical background and morphological analysis

The historic morphological analysis includes formal techniques of studying the temporal, topological, geometric, geographic, and spatial properties of the urban environment. This analytical section provides the base information related to the people, the institutions, and the urban contexts. For each of the four college towns, the historic morphological analysis outlines (1) origin and development of the city, (2) foundation of the university, and (3) the spatial organization of the downtown-campus relationship.

The formal analysis is conducted using several resources. Primary historic information was obtained from historic maps such as the Sanborn fire insurance maps and other published historic maps. Existing master plan documents were used to document and illustrate current information regarding land use, infrastructure, open space, and built volume. Aerial photographs and Geographical Information System (GIS) based maps were used to generate current street layouts used later in the space syntax analysis. Information from archival research was instrumental in filling voids in the stories of each city. Through these narratives, the historic morphological evolution of each of the four cities is identified.

4.6.2 Measuring the physical properties—space syntax analysis

Space syntax is a set of analytical computer-based techniques used to analyze spatial configuration such as built spaces and urban environments. The space syntax theory is based on an understanding of the inherent interrelationships between spatial and

social systems (Hillier and Hanson, 1984). Specific syntax application centers on sophisticated computer-based analysis of physical form that provides rigorous characterization of the morphological organization and the spatial configuration of the city. The street layout (the basic unit of study) is explored by analyzing the urban grid. The analysis assigns specific quantitative values to each spatial unit and applies key quantitative measures to evaluate different spatial units of the city. These assigned values of physical properties compared with variations in other attributes like land use, observed activities, and measured behaviors. A common application of syntactic analysis in the overall urban environment (global measure) is to describe accessibility patterns, measured by global integration values (Hillier, 1984). Global Integration, being a measure of accessibility, demonstrates the depth of a location and its easiness to reach that location from all other points within the urban system. Another important global analytical measure is characterization of the central core of the urban system, also known as the "integration core" (Hillier, 1989). The integration core, consisting of the most integrated lines in a system, is related to natural movement and thus is a locus of local and global destinations (Hillier et al, 1993). As a space becomes more integrated either at the local or global level, or more connected to its local neighbors, one would expect increasing opportunities for interaction, co-presence, co-awareness and visibility of people. The present research will examine the correlation among the city's primary activities, important public activity areas, and the urban grid configuration. The following syntactic measures are used in this study:

1. *Connectivity* is a simple measure of the number of connections a space has to its immediate neighbors.

2. *Global Integration* is a measure of accessibility that indicates the depth of a location and easiness to reach that location from all other points within the urban system.

3. *Local integration* is a measure of integration or accessibility within a specific area or distance around a specific point or line.

4. *Integration Core,* constituted by the 10% of the most integrated lines of the urban system, illustrates the distribution of integration values and their relationships.

4.6.3 Understanding people's conceptual constructs—interviews and multiple sorting task

Environmental behavior research has established that people's understanding of place is structured in conceptual constructs (Canter, 1969). David Canter (1985) also proposes a multiple sorting procedure as a tool to explore the categories and construct systems that people use in a given context. The multiple sorting task is a categorizing procedure in which respondents are requested to sort elements (such as building photos or names of places) into categories based on some criteria of similarities and dissimilarities of the elements. Application of a multiple sorting task as an evaluative instrument of human construction of meanings is evident in Linda Groat's study on meaning in post-modern architecture (Groat, 1982; Groat, 1985). Groat demonstrated that (1) multiple sorting task analysis can be applied as both a verbal and non-verbal measure; (2) it is suitable for complex multi-attribute constructs; and (3) it is less time-consuming than other conventional interviews and rating systems (Groat, 1985). In the current research, multiple sorting task analysis is used to investigate the range of ways people understand

publicness and to demonstrate. Another objective of this research is to illustrate the multiple variations of human perception that makes certain places public.

The sorting task and interviews are conducted in stages at four exemplar settings within each city. These four places also correspond to the four important public settings marked for detailed observation (see 4.5.2). The various stages of sorting and interviews are described below (Table 4.7) delineating the entire process exploring common cultural understandings of public places.

No.	Process	Places assessed	Questions	Outcomes
1	Open sort	25 public places	Sort the 25 settings into groups based on participants' criteria of choice.	People's constructs and the constituent categories of these places are revealed.
2	Directed sort	25 public places	Sort the 25 settings into three designated categories of publicness.	Places are categorized based on the publicness construct into three categories: highly public, moderately public, and restricted public
3	Open ended questions and follow-ups	25 public places and some other additional places that came up during conversation	What is the basis of certain groupings? What was the thought process during the sorting? What are the various criteria for publicness?	Thought process of respondents while performing the tasks. Values, elements, and aspects respondents associate with publicness.

Table 4.7: Interview procedure and multiple sorting task sequence involved in the study.

The first and second stages of the interview were conducted together. This stage consisted of a combination of the multiple sorting task with some follow-up questions. Each completed survey comprising of steps 1, 2, and 3 (Table 4.7) took approximately 30-45 minutes. The respondents were provided with names of 25 commonly recognized

places. The sorting task asked them to sort these 25 settings into groups or categories based on a specific criterion. Places sorted in one group would be similar based on specific commonalities, whereas places categorized into separate groups would be categorically different.

Open sort

In the initial phase of sorting, which was an open sort; respondents were asked to generate their own categories. The objective of the free-sort is to identify how people think about places and what are the criteria on which people's perception of places are organized. This was also useful to determine if issues related to publicness in places are considered by respondents in their classification. The free-sort was a good platform for the respondents to become familiar with the process of multiple sorting tasks. This was helpful for the next stage of directed sort.

Directed sort

In the second phase of sorting, respondents were asked to sort using a pre-specified category. In this stage, the designated sorting categories were three different categories of publicness: "highly public," "moderately public," and "restricted public." The respondents were asked to categorize the 25 settings into these three groups based on their understanding of what kind of public places these given places are and what kind of public character they exhibit. The primary goal of the free sort was to assess the specific reasons or factors that influence the notion of publicness within the human mind.

Open-ended interviews

The follow-up questions were about the multiple sorting task process and respondents' thought processes. The respondents were asked about what thoughts and

ideas came to their minds while they were engaged in the tasks. The open-ended

questions also inquired about specific reasons for particular sorting by the respondents

through questions such as: What are some specific reasons behind categorizing this place

in this group? Questions were also asked regarding what factors the respondents think are

important for a place to be understood as public (see Appendix I, for details of the open-

ended questions).

4.6.4 Evaluating everyday actions – naturalistic observation

In this dissertation, observation techniques are used to understand how specific

public spaces are used; specifically, people's purposive actions in the four exemplar

settings selected in each city. The characteristics of the four specific sites in each city are

analyzed and presented in Table 4.8. In each city, a standard observation technique was

employed to collect data:

1. A spot of public activities and behavior was selected within each site.

2. Observation and data collection was conducted for 15 minutes in each site.

3. Observation was conducted on five weekdays and two weekend days.

	Weekends		Weekdays				
	Sat	Sun	Mon	Tue	Wed	Thu	Fri
Site A	3:00 PM	6:00 PM	10:00 AM	1:00 PM	3:00 PM	6:00 PM	1:00 PM
Site B	6:00 PM	10:00 AM	1:00 PM	3:00 PM	6:00 PM	10:00 AM	3:00 PM
Site C	10:00 AM	1:00 PM	3:00 PM	6:00 PM	10:00 AM	1:00 PM	6:00 PM
Site D	1:00 PM	3:00 PM	6:00 PM	10:00 AM	1:00 PM	3:00 PM	10:00 AM

Table 4.8: Distribution of observation time for all the sites in each case study.

The observation study focused on how these exemplar public settings support the wide range of purposive activities and behavior. The activity categories and subcategories used in the observations are described as follows:

1. Standing: Standing, walking, and shopping.

2. Sitting: Sitting, watching while seated, engaged in formal meetings, child-minding, eating, drinking, and dining.

3. Reading/ Working: Reading books or journals, doing homework and office-work.

4. Playing/ Recreation: Playing games, running, biking, skating, and exercising.

The research design and the constituent research procedures are replicated in each case study. Findings from each research procedure are elaborated in the next four chapters. Chapter 5 describes the historic morphological character of each city and the campus-downtown relationship in each of the urban settings; Chapter 6 presents the spatial configuration analysis of the four cities using space syntax methods; Chapter 7 analyzes the multiple meanings and people's conceptual constructs associated with publicness through multiple sorting tasks and interviews; and Chapter 8 documents the public purposive actions and behavior in exemplar public settings obtained from naturalistic observation.

The dynamic interaction between the spatial configuration (form), common understanding (meanings), and people's behavior (actions) continually shapes the growth of a city through the passage of time (Habraken, 2000). In addition to exploring the separate aspects of form, meanings, and actions, in Chapters 5-8, the research design also seeks to understand their interrelationships. Chapter 9 consolidates these analyses of critical interrelationships the earlier chapters.

Chapter 5

FOUR CITIES—FOUR STORIES:
Historic Morphological Evolution

5.1   Four cities—four stories

5.2   Ann Arbor—the city on the Huron

5.3   Athens—Georgia's columned city

5.4   Tallahassee—a capital city

5.5   Lansing—the city on the Grand

5.6   Historic morphological evolution of the city-campus relationship

5.1 Four cities—four stories

This research consists of case studies of four college towns: Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI. The historic morphology, a study of the transformation of the urban form, of the four college towns is described in this chapter. This study requires several aspects of the town studied: description of the town, development of the educational institution, and the everyday lives of people, all evolving together. This chapter illustrates this evolution, specifically highlighting the physical configuration of the town-campus organization.

The baseline information of the four cities is outlined in terms of (1) origin and development of the city, (2) foundation of the university, and (3) the city-campus and the downtown-campus relationship. The commonalities and distinctive characteristics of the cities and the pattern of city-campus relationships are also studied.

5.2 Ann Arbor—the city on the Huron

The city on the banks of the Huron River evolved from a small frontier town, *Annarbour,* established in 1824 to a bustling university town, Ann Arbor, of today. Ann Arbor is a prominent university town at the edge of the metropolitan area of Detroit with a population 115,092, spread around the 27.7 square miles of city limits (U.S. Census Bureau population estimates, 2007). The house of the University of Michigan has 39,031 students. No other city in the state of Michigan, besides Detroit, is so well known; no other city, including Detroit, has so completely fulfilled and maintained its identity (Marwil, 1987, p.xii). The City of Ann Arbor has evolved into a mature campus town with highly integrated town and gown life.

Ann Arbor was established as a new frontier village within the newly formed Washtenaw County at the western border of the Michigan Territory (now the State of Michigan). The 1824 plan of the Village of Ann Arbor illustrates the integration of public spaces such as the public square and the courthouse square within its central area (Figure 5-1). The squares represent a continued desire of the city to be a center of public culture.
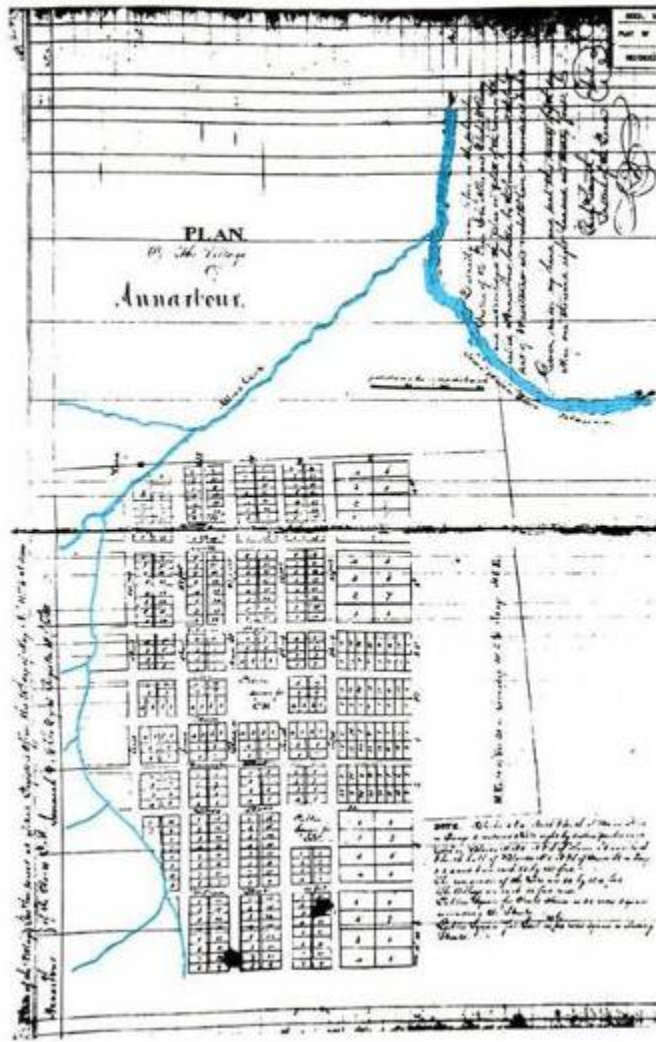
Figure 5-1: Map of the Village of Annarbour, MI (1824) (Source: Sanborn maps, University of Michigan Map Library).
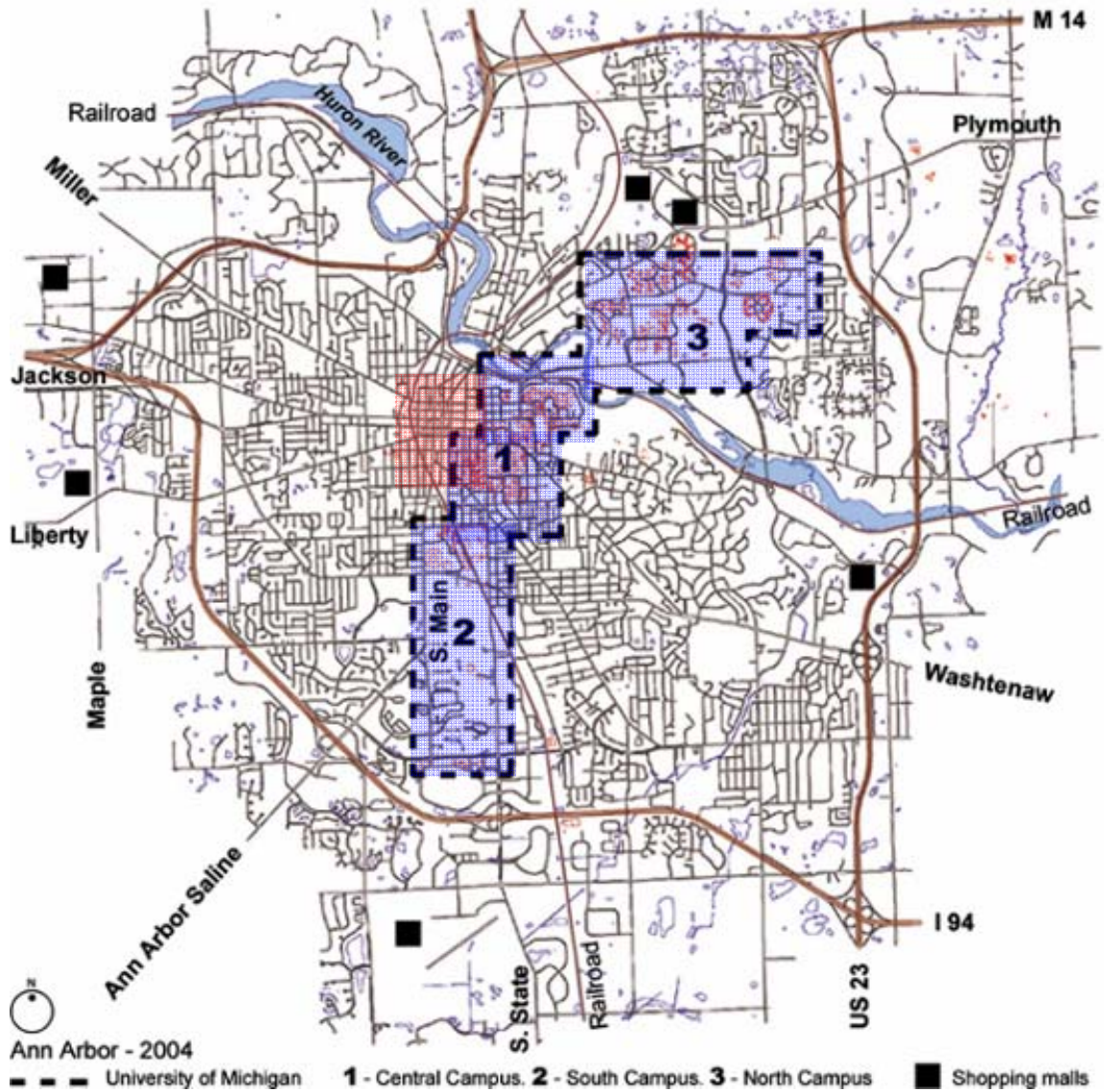
Figure 5-2: Map of the City Ann Arbor, MI (2004) (Source: UM Map Library GIS data).

The plan of Ann Arbor shows a complex configuration of regular and irregular grid patterns, occasionally cut across by steady diagonals. The street grid, the diagonals, and the highways had immense impact on the morphology of the city's edge. The street grid and the diagonals channeled the driving force of population and activities into the outer areas from the core through a process of extension. The highway ring facilitated a development process that consolidated the open areas at the fringe of the city through development of housing complexes, big box stores and malls in the outer ring (Figure

5.2). In spite of the forces of dispersion from the downtown and debasement of the driving forces of urban growth in the downtown, the city maintained a rigorous central core (elaborated in Chapter 6). This central core is now strongly connected to the peripheral highway through the street grid and the diagonals, making the downtown easily accessible from its outskirts. In Ann Arbor, the downtown has survived because of this subtle combination of high accessibility, powerful connection, and the catalytic power of the university.

Throughout the years, the university has remained an important agent in the city. The university is a fundamental attractor with several facilities and leisure activities that attract energized crowds. A diverse student population, highly educated workforce, and the extensive resources of the institution have nurtured public culture in the city. The city has also benefited from the stable flow of investment and development by the university, even during economic depressions. The social, cultural, and economic connection of the city and the university has been reinforced through different programs combining the two entities. This integration is evident in the physical configuration of the city and university spaces, particularly in the central core of the town (Figures 5-3 and 5-4). Ann Arbor thus presents a highly integrated experience of publicness in the spatial configuration.
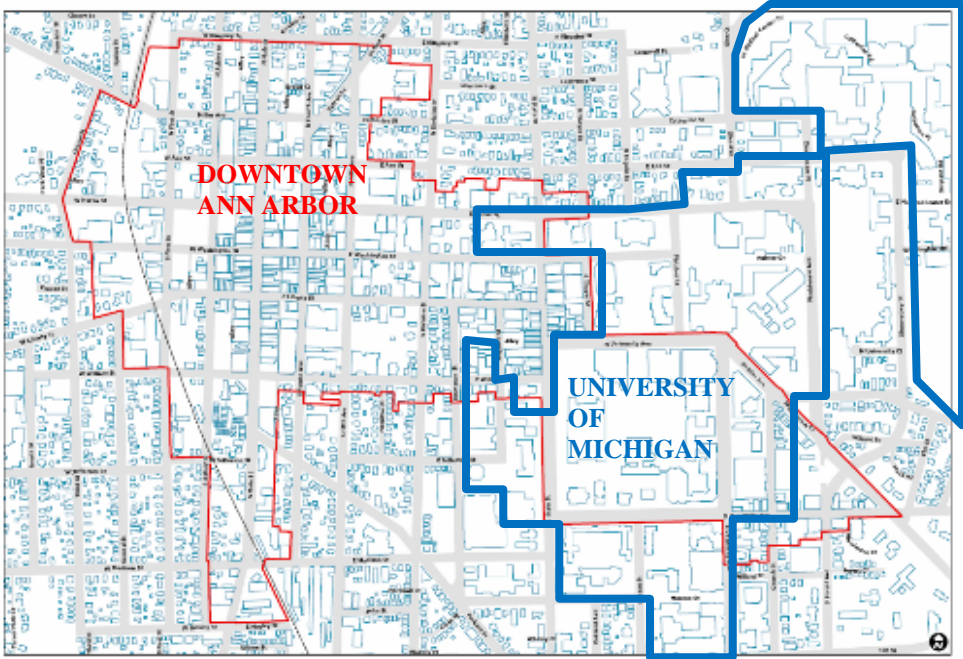
Figure 5-3: Partial map of the City Ann Arbor, MI (2008) the Downtown District boundary. (Source: City of Ann Arbor Downtown Development Authority)
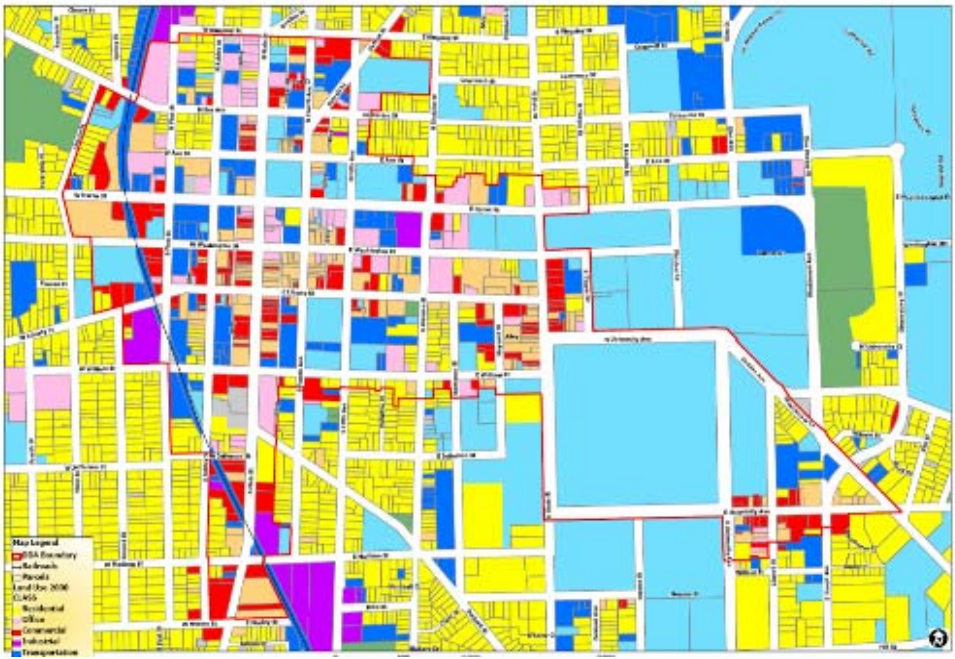
Residential   Commercial   University   Recreational   Transportation   Industrial

Figure 5-4: Partial map of the City Ann Arbor, MI (2008) showing existing landuse in downtown (Source: City of Ann Arbor Downtown Development Authority).

5.3 Athens—Georgia's columned city

The University of Georgia is the nation's oldest chartered state university (Hester et al, 1999) conceived in 1791 and established in 1801. It is currently a public institution of 33,405 students. The city has a history that is closely aligned with the development and growth of its university. Incorporated in 1806 as a small town around the school (Figure 5-5), named after the Greek center of culture and learning, Athens-Clarke County today is a vibrant unified city-county near Atlanta in the southeastern part of the United States. Athens has a population of 112,760 distributed over 64.4 square miles of area (U.S. Census Bureau population estimates, 2007).

The town evolved as a supporting system to the university. The town grew as lots adjacent to the college were sold to raise money for the additional construction of the school. The university continued to grow, as did the town. With cotton mills fueling the industrial and commercial development and new railroad, Athens became an important cotton distribution centre in the southern railroad route. Athens grew as a cotton manufacturing center and for a time became the "Manchester of the South" (Coleman, 1967). The University, businesses, and manufacturing companies continue to attract students and residents to the town even today.
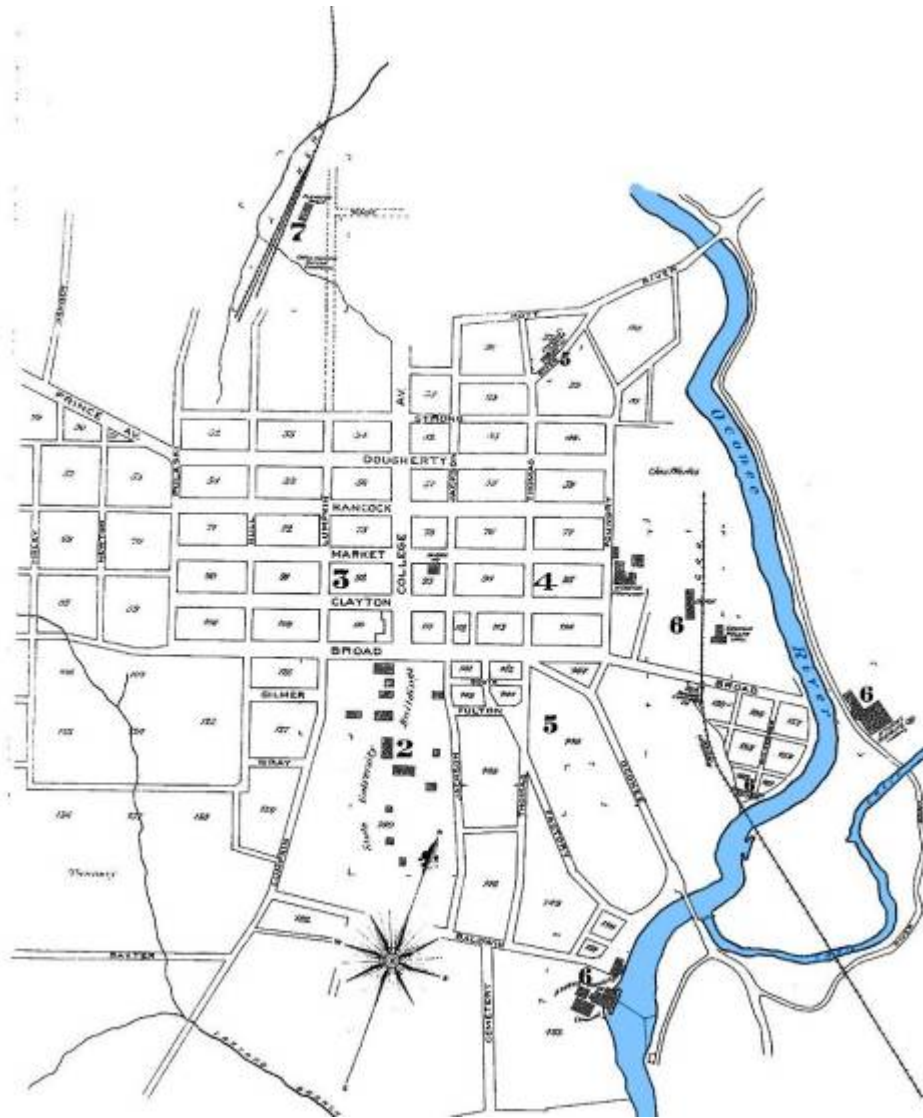
Figure 5-5: Map of Athens, Georgia, 1888 (University of Michigan Map Library, Sanborn map collection).

The first homes in Athens were on Front Street (now Broad Street), at the edge of the campus (Hester et al, 1999). Today, Broad Street is the interface between the university and the downtown forming the historic core of the city. Around the historic core of the campus and the historic neighborhoods, the city has continually expanded (Figure 5-7). Initial industrial development in the 1830s, streetcar suburban development in 1880s, post World War II suburban expansion in the 1950s, and recent expansion and

merger with the county in the 1990s, have shaped the spatial configuration of the city (Figure 5-6). Despite the dispersing forces of the economy and indiscriminate suburbanization in the metropolitan region, Athens has remained an attractive center for living, learning, and culture. The university and the downtown, framing the historic core, have helped sustain the physical and cultural relevance of the city. Athens' significant investment in culture, in collaboration with the university, has acted as a catalyst in creating an art scene, music scene and intellectual environment forming a public culture in the city. The integrated social, cultural, and economic environment of the city and the university has reinforced the historic connection of the two entities. This integration is evident in the physical proximity and symbiotic nature of development, particularly in the central core of the town (Figure 5-7). The spatial configuration reflects the shared experience of publicness in the City of Athens.
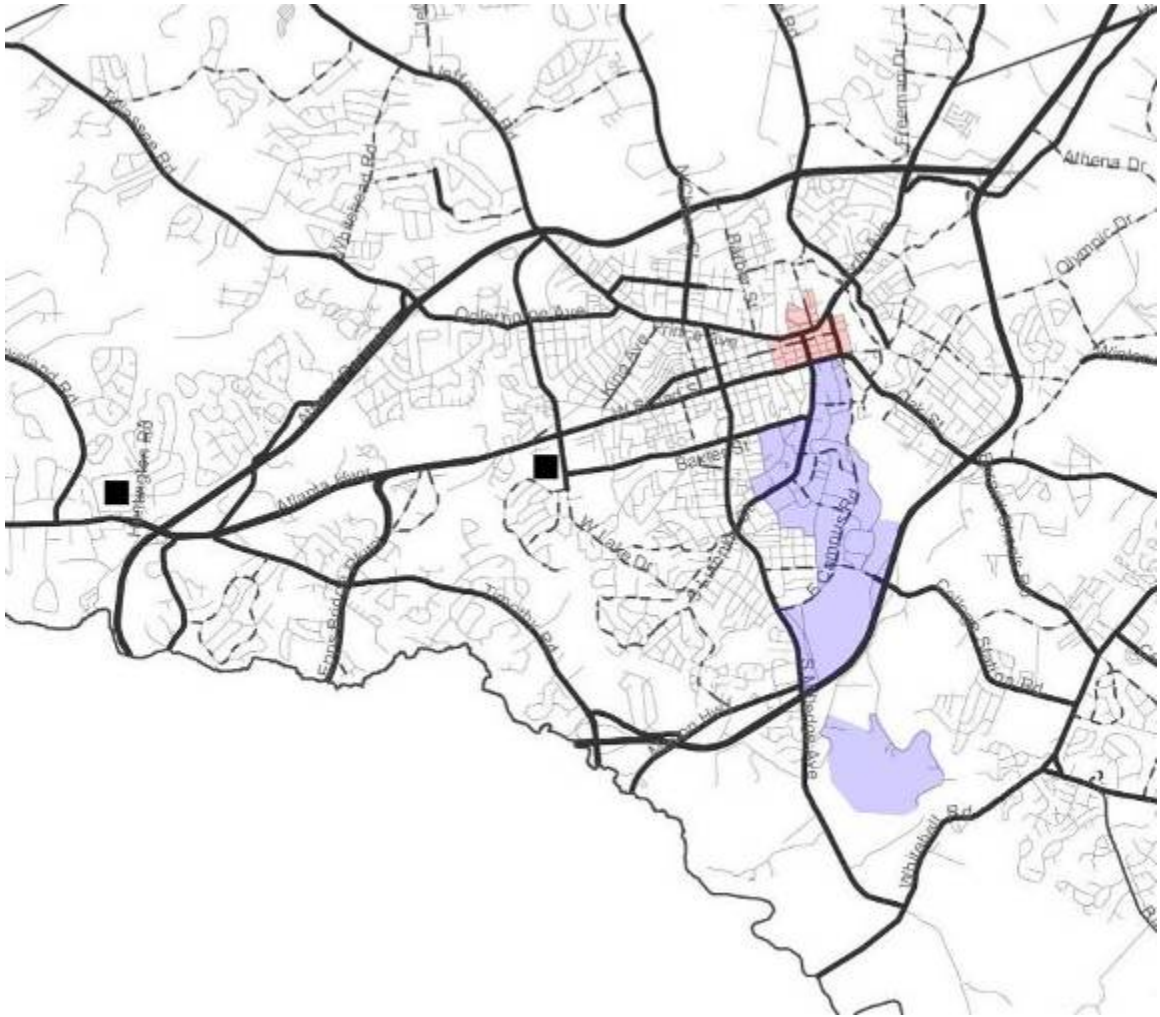
Figure 5-6: Map of the City Athens, MI (1998). (Source: Athens Clarke County GIS information service).
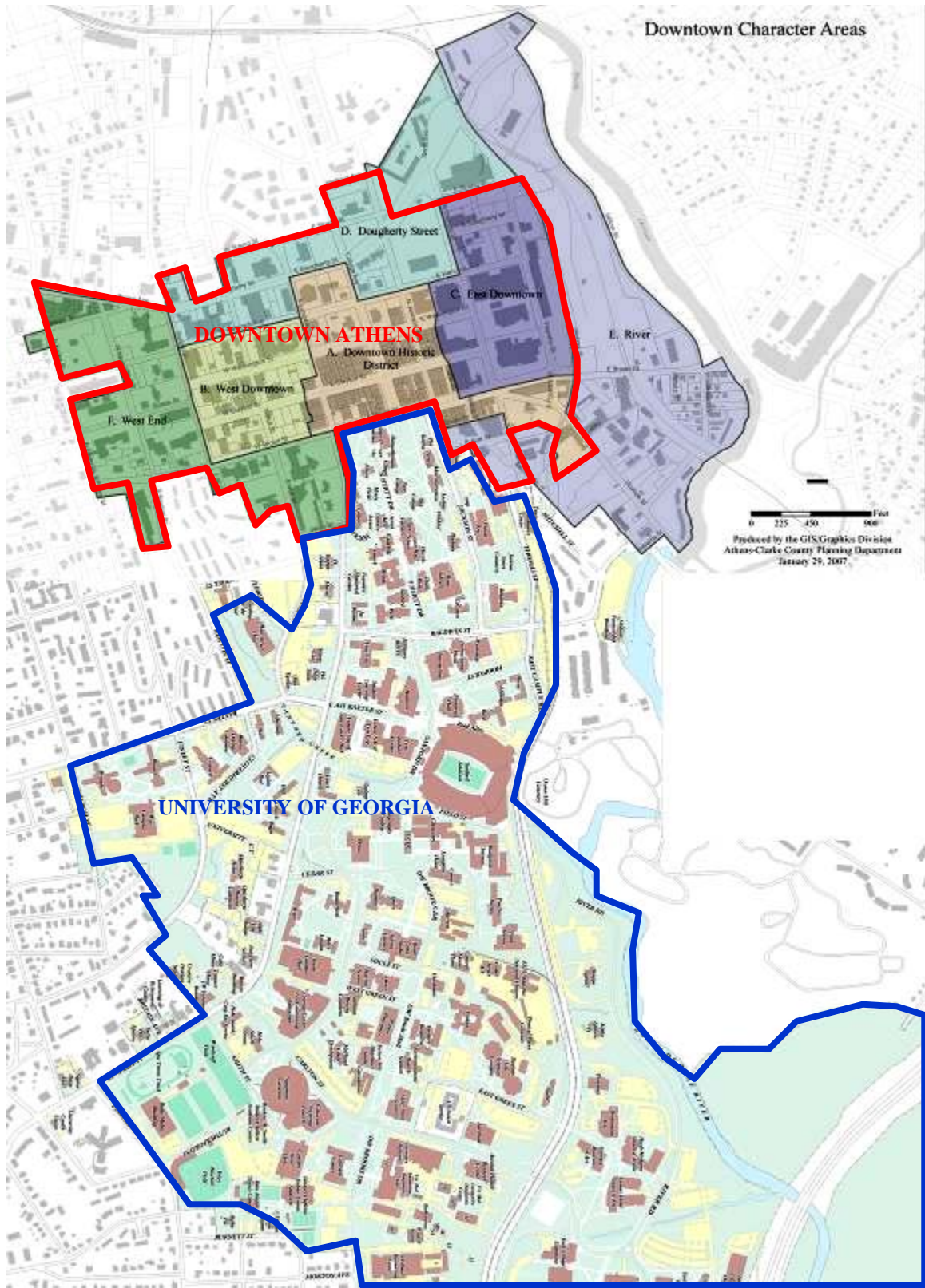
Figure 5-7: Map of the interface of the downtown and the campus (2008) (Source: Athens Clarke County Planning Department).

5.4 Tallahassee—a capital city

Tallahassee is the capital of the State of Florida and the county seat of Leon County. Tallahassee became the capital of Florida in 1824. According to the U.S. Census Bureau population estimates (2007), population of 168, 979 people in Tallahassee are living on an approximately 100 square mile land area. Tallahassee is the home of two large universities, Florida State University and Florida A&M University (Figure 5-8 and 5-9).
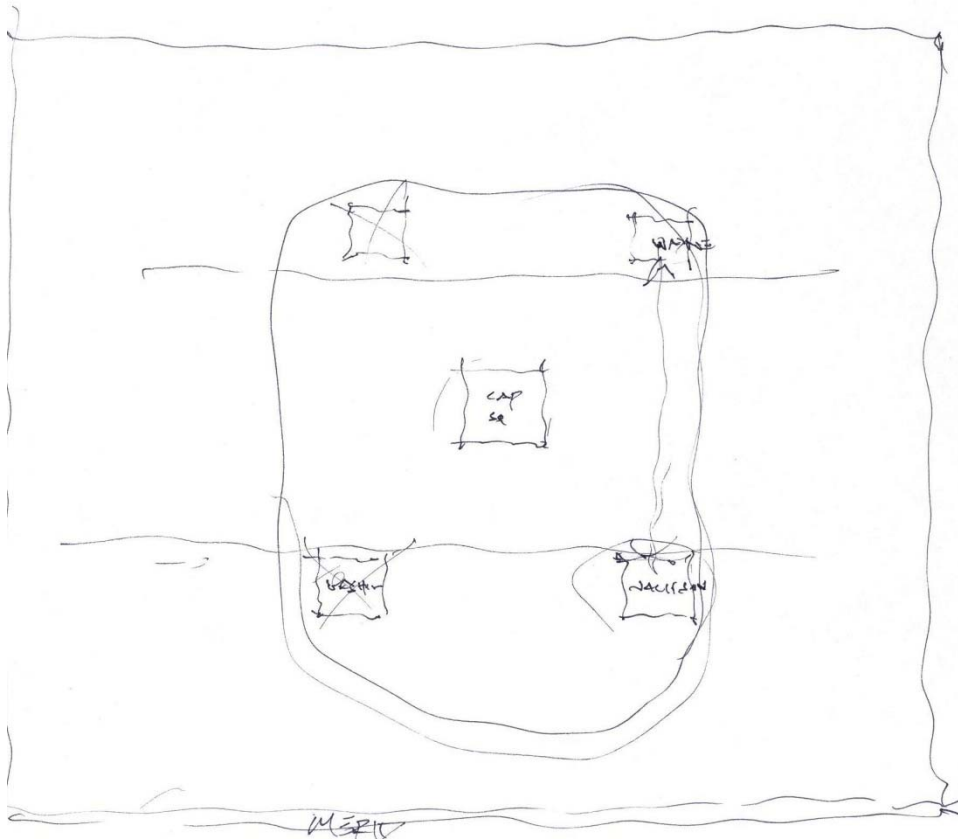
Figure 5-8: Schematic illustration of the historic settlement of Tallahassee around five public squares (Source: Sketch by Daniel Donovan, Senior Planner/Urban Design, City Hall, Tallahassee, FL).

Downtown Tallahassee has maintained its distance from the Florida State University (FSU) campus (Wills & Morris, 1987). The university, established in 1851 and expanded into the state university system in 1947, has largely developed on its own.

It has a current population of about 41,000 students, 2500 faculty, and more than 5,000 staffs. In spite of being a few blocks away from the downtown, the campus has remained isolated from city development. The physical distance has been reinforced by the downtown plan as well as the FSU master plan, which have done almost nothing to physically bridge the gap of three blocks. At the same time, FSU's notoriety as a party school and a reluctance in communication and between the university and campus administration have promptly allowed the two entities to grow away from one another (Figure 5-10).

It is significant that an entirely new and uninhabited site was chosen as the capital of Florida (Hare, 2002). Within the context of a heated debate for the location of the capital between St. Augustine (founded 1565) and Pensacola (founded 1698), the compromise was to locate the capital mid-way between the two cities. With the Florida compromise in 1823, the character, form, and future of Tallahassee were well established (Figure 5-8). Present day Tallahassee is a regional center for trade and agriculture. It is one of the fastest growing manufacturing and high tech economies in Florida.
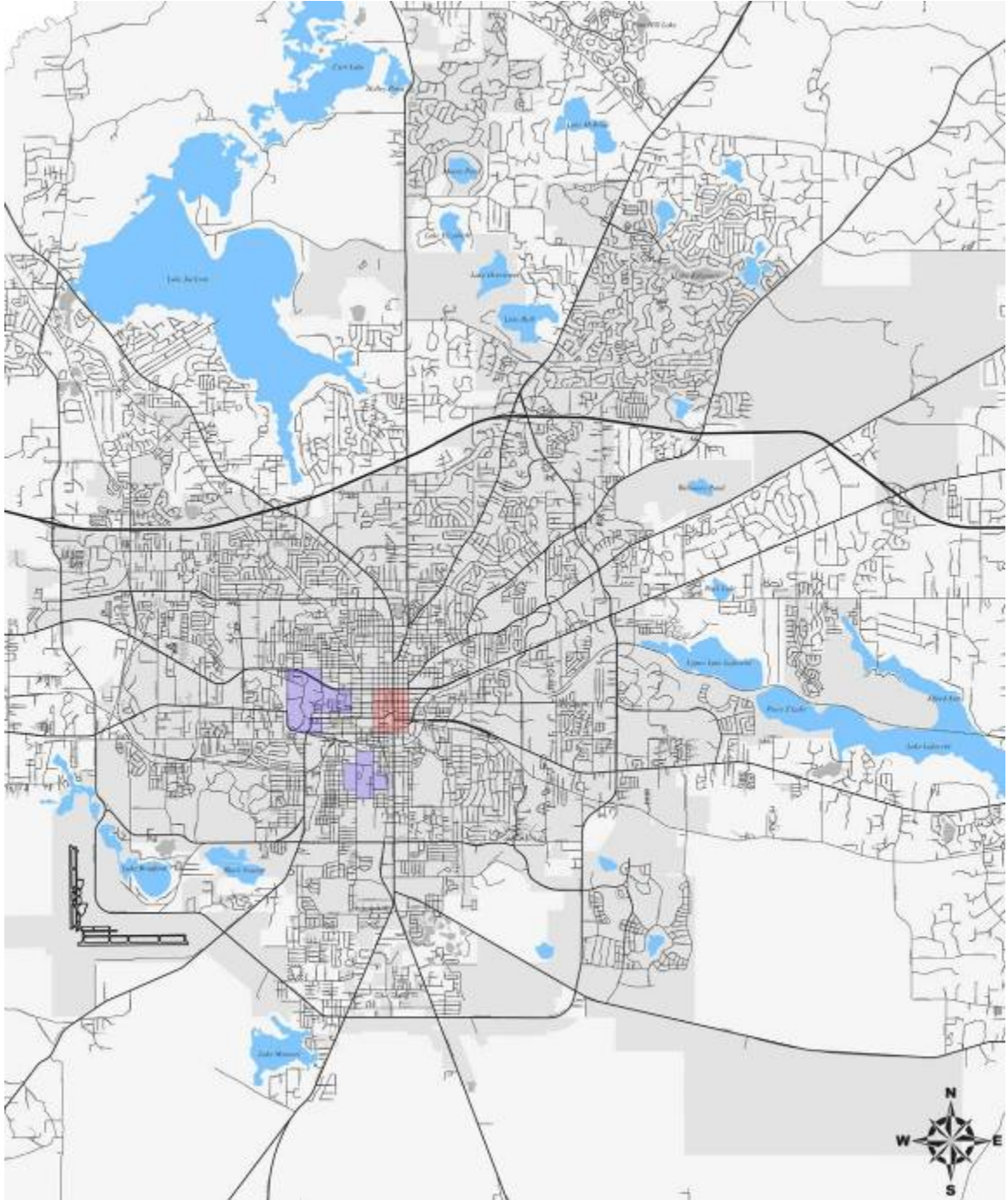
Figure 5-9: Map of the City of Tallahassee (2006) (Source: The City Tallahassee, Department of Planning maps and publications).

At first Tallahassee existed only to serve the government. Then it became a production and trade center for the cotton kingdom. After the Civil War the downtown

area simply drifted for a number of years until the people of the area had adopted a firm purpose; then it served once again as a trade area for a more diversified agriculture. Throughout most of the twentieth century, it functioned as the central business district of a proud southern town. Then with the exodus of merchants, professional offices, and service functions to the suburbs in the 1960s, the downtown began another transition.

Though a lot of changes took place over a century and a half, a number of factors remained constant. Most important, with all the other functional shifts, one of the city's primary functions has remained unchanged as government center. It is unlikely that the downtown will ever be the major shopping or commercial center in the metropolitan area of Tallahassee because of lack of available land in the downtown, suburban sprawl, development of major new housing and shopping districts in the outskirts, and changes in traffic patterns to accommodate them. Nevertheless, the central core of the city has adapted to the changing scenarios and maintained its vitality. The present identity of the city is a combination of an efficient administrative center, a well-preserved historic downtown, and a reluctant college town.
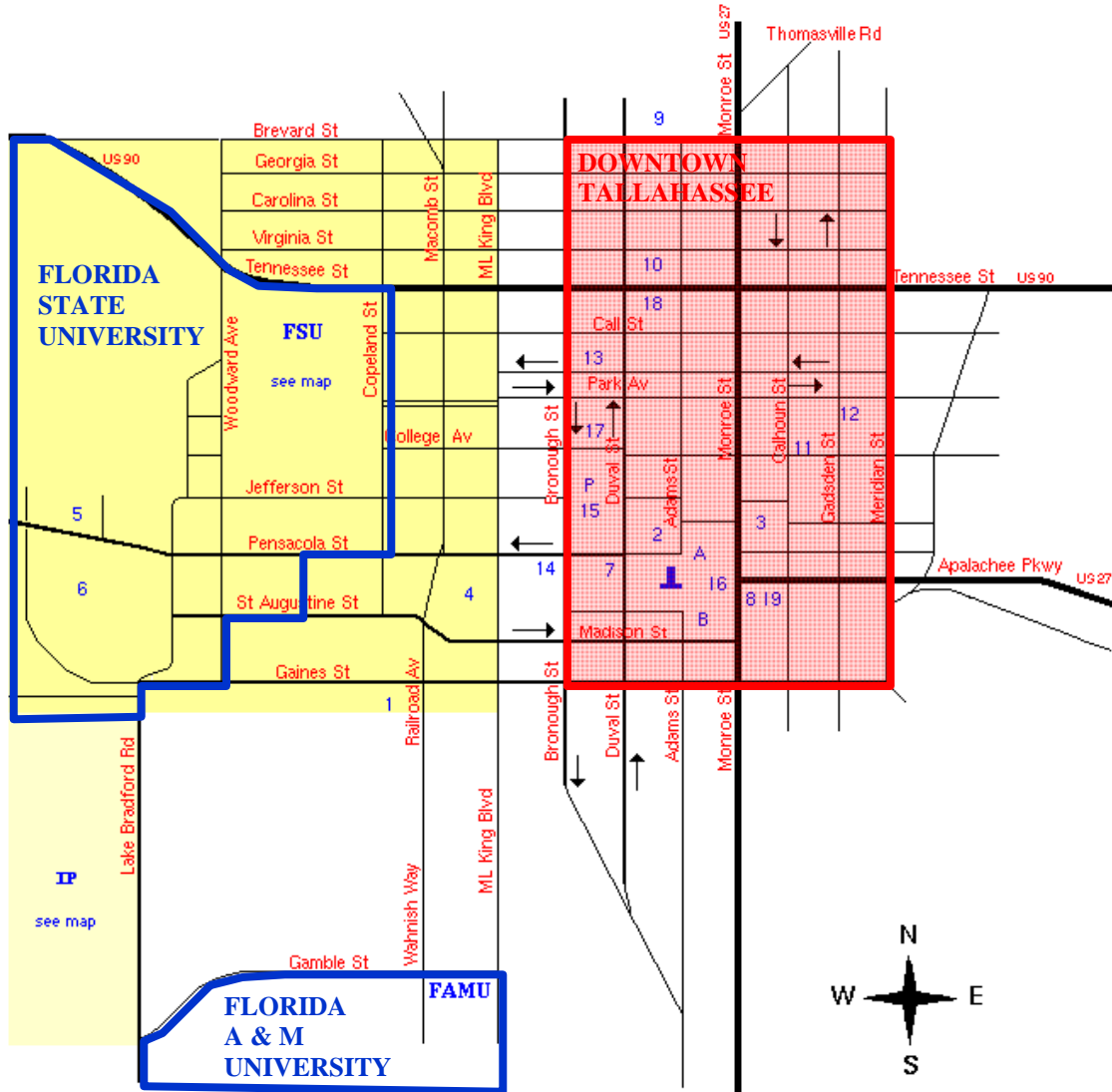
Figure 5-10: Map of the Florida State University Campus (2007-2008). (Source: Florida State University campus maps).

5.5 Lansing—the city on the Grand

The Lansing metropolitan area, colloquially referred to as "Mid-Michigan," is an important center for educational, cultural, governmental, business, and high-tech manufacturing institutions. It includes three medical schools, two nursing schools, a Big Ten Conference university (Michigan State), the state capital, the state Supreme Court a federal court, the Library of Michigan and Historical Center, and headquarters of four

national insurance companies. The Greater Lansing metropolitan area includes the City of East Lansing that houses the Michigan State University and City of Lansing (Greater Lansing Metropolitan Area Development Corporation, 2007).

Most of the original settlers of Lansing were from the village of Lansing, New York, and they decided to call the township established in 1825 on the banks of the River Grand as Lansing Township in honor of their former home (Jacobson & Wilson, 1975). The sleepy settlement of fewer than 20 people (Figure 5-11) would remain dormant until the winter of 1847 when the state constitution required that the capital be moved from Detroit to a more centralized and safer location in the interior of the state (MacLean & Whitford, 2003). Unable to publicly reach a consensus due to constant political wrangling among many other towns, the Township of Lansing was chosen out of frustration. Thus Lansing, a wilderness spot with one log house and one sawmill, became the new center of Michigan's government.

The capital was built in many stages through a long period of 40 years. Initial business settlements began around the new state capitol building at the point where Main Street and Washington Avenue now meet. Financial depression and lack of a transportation connection marred the development of the town, but the arrival of the railroad boosted the economy by linking Lansing with the rest of the state. The legislature appropriated funding for a new capitol, which was completed in 1878 on a 10-acre park near the Grand River in the center of the city, thus establishing Lansing firmly as the capital of the state.

Most of what is known as Lansing today is the direct result of the city becoming an industrial powerhouse which began when the Olds Motor Vehicle Company was

founded in August 1897. Over the next decades, the city transformed into a major

American industrial center for the manufacturing of automobiles.
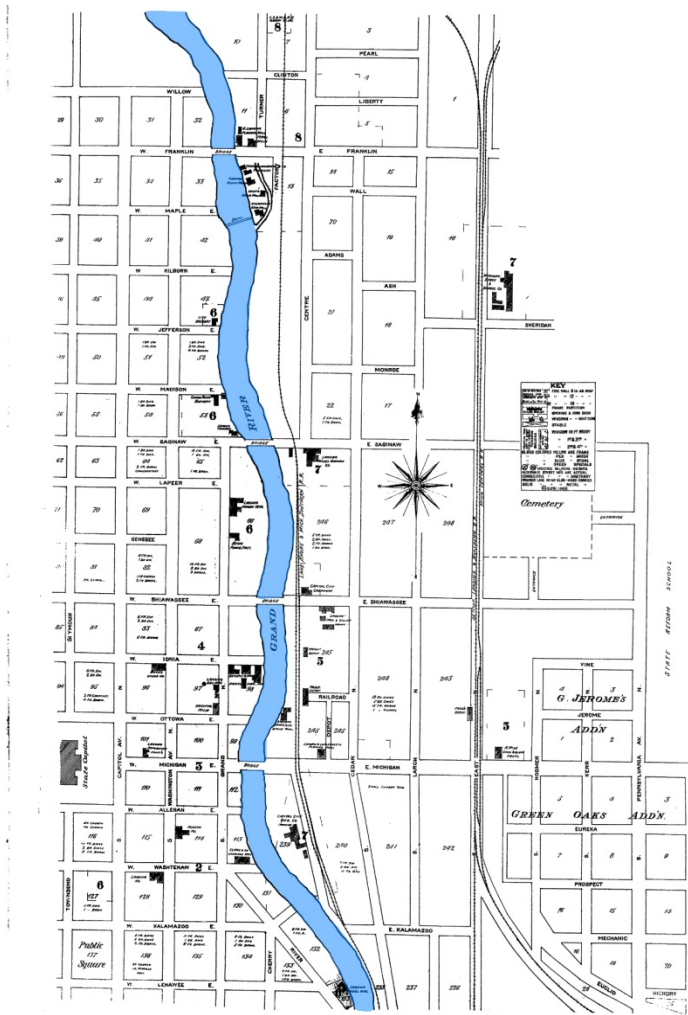
Figure 5-11: Map of Lansing, Michigan, 1885 (University of Michigan Map Library, Sanborn map collection
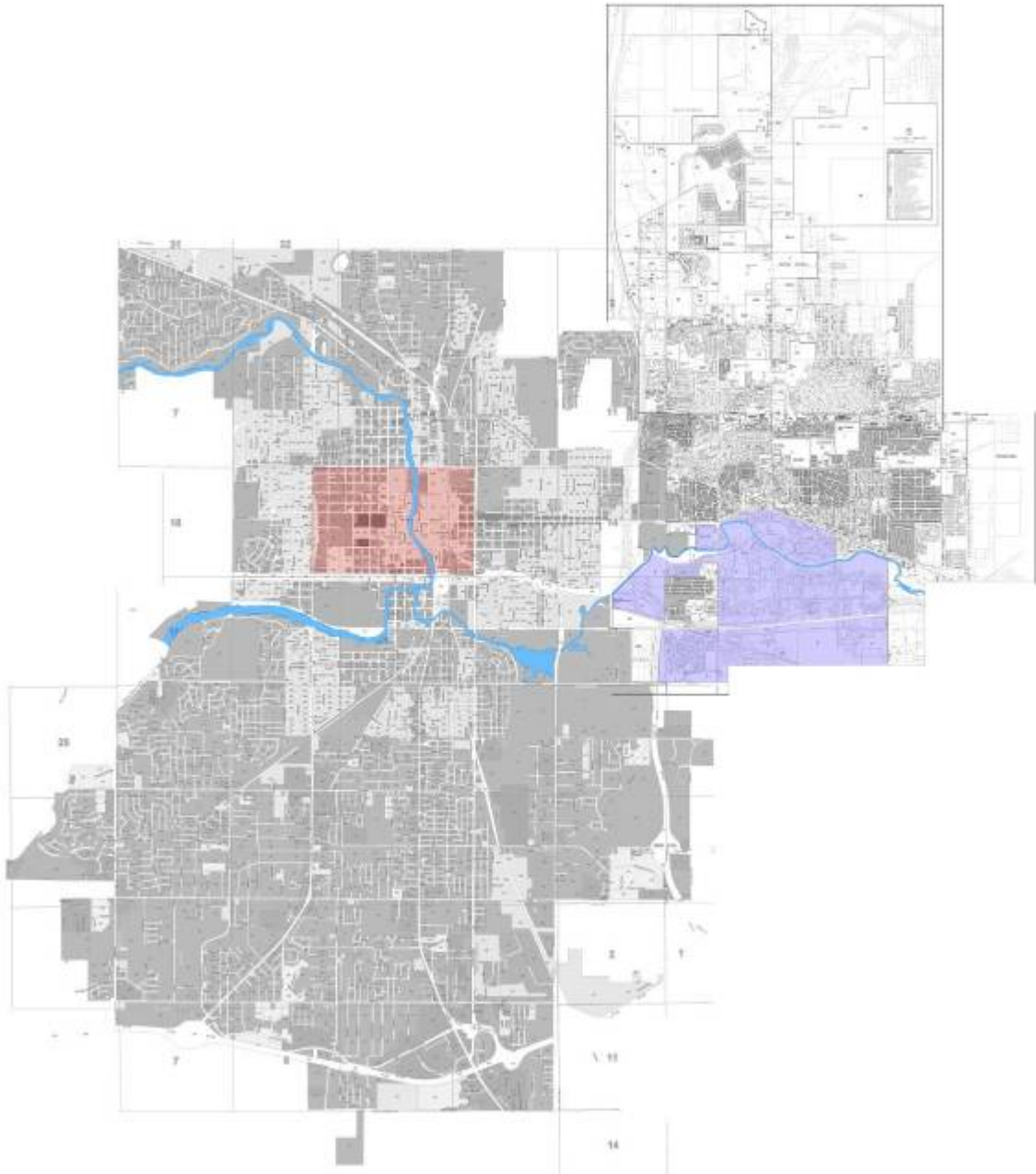
Figure 5-12: Map of the City of Lansing and the City of East Lansing, MI (2007).
(Source: The City of Lansing, Department of Planning and the City of East Lansing,
Department of Planning and Community Development).

Today, Lansing is a community of 114,276 people, where government, industry,

education, and culture thrive. Although the city has witnessed a population decrease of

6.4 percent, the population of Greater Lansing metropolitan area has increased by 3.5

percent. Lansing's residents enjoy the area for its economic stability and variety of

activities. The business climate is active and was recognized by *Entrepreneur* magazine in 2003 as number seven on its list of "Best Cities for Entrepreneurs: Top Midsize Cities in the Midwest" (Miller, 2002). The nearby residence of Michigan State University fosters an academia-minded atmosphere that contributed to the area's seventh place ranking as one of the "Top Ten Most Creative Small Cities" in Richard Florida's (2002) bestselling book "Rise of the Creative Class."

East Lansing, Michigan was incorporated as a city in 1907. But its true beginnings date back more than fifty years earlier, when the state legislature established the Michigan Agricultural College. It was founded on 676 acres in the woods three miles east of Lansing in present-day East Lansing. The name of the college was changed to Michigan State College of Agriculture and Applied Sciences in 1923, and it became a university upon its centennial celebration in 1955. Finally, in 1964, the name was shortened to Michigan State University.

Though downtown Lansing and the university have developed separately because of their distant location, timing, and nature of evolution, Michigan State University plays an important role in the metro region. Within East Lansing, the city and the university have grown in tandem into a beautiful college town with tree-lined neighborhoods and campus educating over 44,000 students (Figure 5-14).
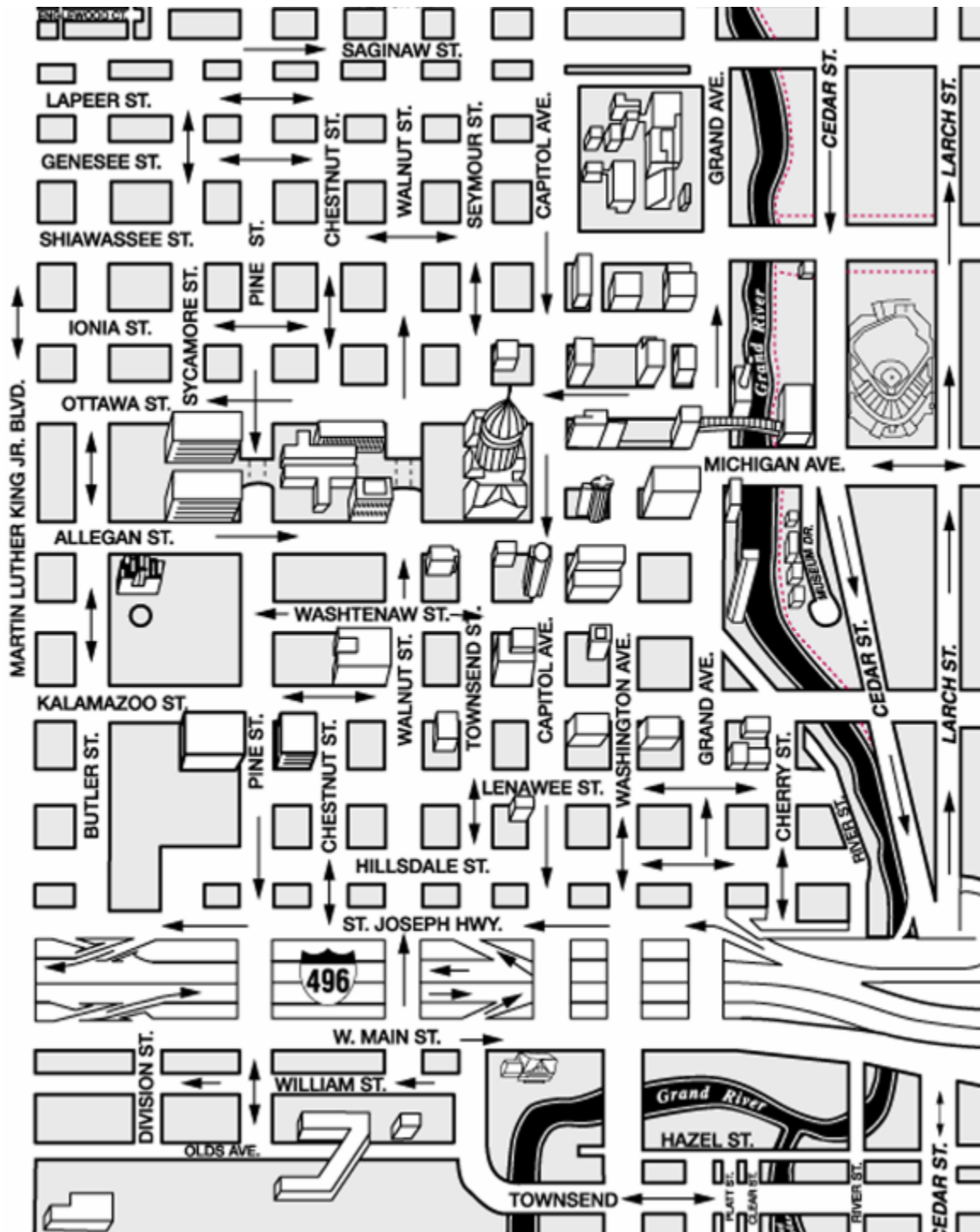
Figure 5-13: Map of Downtown Lansing area boundary (2007). (Source: The City of Lansing)
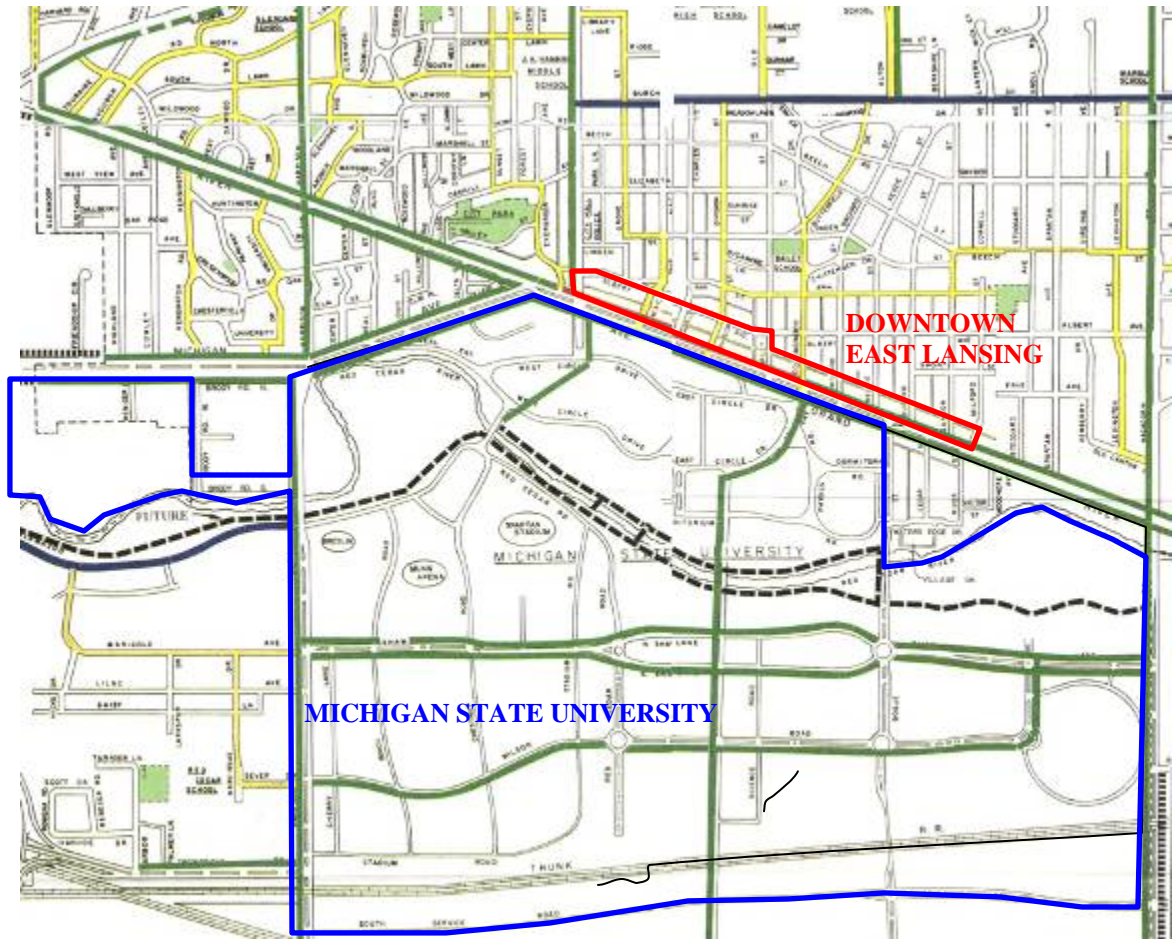
Figure 5-14: East Lansing downtown boundaries adjacent to the Michigan State University campus (2007). (Source: The City of East Lansing)

5.6 The historic morphological evolution of the campus-town relationship

The most difficult issues faced by universities are apparent at their perceived

edges (Halsband, 2005, 4). It is at this interface that the characteristic tension between the

university's desire to be both included and separated from the larger city plays out. The

pressure to increase the density and scale of buildings on campus often threatens the very

qualities of space and social interaction that make campuses memorable. But when

universities try to push outward, surrounding neighborhoods are likely to push back. As a

result of this tension between the university campus and the surrounding context, campus

edges are frequently flashpoints of bitter controversy. Faced with such strong opposition to external growth, universities and cities have evolved to find new ways to coexist, some of which are evident in the four case studies.

The morphological description of the cities highlights the distinctive downtown-campus relationship pattern within the urban framework. First, we have Ann Arbor, where the city and the university are intricately juxtaposed forming a closely integrated downtown-campus fabric. Second, Athens presents a picture of connection, where the downtown and the campus have coalesced into a strong and vibrant interface reinforcing the historic city-campus interrelationship. Third, Tallahassee illustrates an interesting case where the campus and the downtown, though not too far from each other, have maintained a historic separation. Difficult town-gown relationships, ill-concerns about rowdy student behavior, and political and administrative problems are some of the reasons behind the intended segregation. Finally, on the other end of the spectrum, there is Lansing where the historic downtown and the university have evolved as distinct and separate, remaining distant.

From the morphological study of these four towns, the pattern of the campus-downtown relationship is evident within the context of campus expansion and urban change. As universities face pressures for growth, they try to expand beyond their traditional edges (Halsband, 2005). Examined collectively, such efforts seem to indicate that different types of campuses exhibit different potentials for development. At the same time, different opportunities for physical relationship with the city and the central business district also exist. My research demonstrates that some edges seem to invite integrated evolution; some seek for incremental expansion, while others seem to demand

a more radical leapfrogging to distant sites or remaining distant and separate. This historic-morphological study thus highlights important question of boundaries between the city and the campus. The spectrum from Ann Arbor to Tallahassee reveals a pattern of increasing distance between the campus and the downtown and hence the resultant boundary condition between them.

The physical relationship of the boundary between the campus and the town presents a critical prospective factor in understanding the evolution of the public realm. Examination of this relationship is continued as a thread throughout the following chapters (Chapters 6, 7, and 8), which focus on the socio-spatial properties, the meanings of publicness, and the activities in the public places.

Chapter 6

SPATIAL CONFIGURATION OF THE PUBLIC REALM:
Space Syntax Analysis

6.1   Spatial complexity

6.2   Space syntax

6.3   Spatial pattern of the four cities
6.3.1   A strong historic core
6.3.2   Connection of the core to the periphery
6.3.3   Role of the university

6.4   Syntactic configuration of public places in the city—a common pattern

6.1 Spatial complexity

According to space syntax theory, the spatial configuration of places is characterized by formal properties of geometry, topology, location, orientation, and natural movement (Hillier & Hanson, 1984). The physical and spatial complexity of the built environment is directly addressed in this chapter. Space syntax methodology is applied to characterize the spatial configuration of each of the four cities.

6.2 Space syntax

The spatial structure of the city is complex. Space syntax research about cities seeks to describe this special complexity using rigorous analytical tools.

Space syntax applications analyze spatial representations of the physical layout of the city to understand their structure. An understanding of this structure is then related to observable function such as movement, land use patterns, social and economic performance, crime patterns, perceptions, and cognitive functions. Space syntax can be a general tool for investigating the relationship between the structure and function of cities.

Space syntax analysis: the technique

Space syntax examines the city as a system of spaces created by buildings and spatial interconnections. It assumes that space is the common language of cities, defining and shaping the urban form. Hence, space is the primary unit of analysis. More specifically, the object of interest is a convex space—a space where a line formed by any two points contained in the space is always entirely within that space.

In space syntax analysis, the urban environment is represented by the street network or the urban grid. The spatial configuration of the street network is represented by the fewest possible largest convex spaces. Then the set of fewest, longest lines, also

known as axial lines, are drawn such that they cover all possible spaces and street

network connection. This map of all the axial lines is called the axial map. The axial map

is then fed into a computer program (such as Depthmap,[2] Syntax2D[3], and Mindwalk[4]) to

conduct the quantitative analysis. The computer-based analysis produces a series of

analytical illustrative maps that assign different values (represented by colors) to different

properties of the physical structure. These physical properties and their relationships

constitute various measures of evaluation of complexity of the specific urban area in

question. In the following sections in this chapter, axial maps and analysis of the axial

maps of each of the four case studies are demonstrated. The specific focus of the analysis

are the measures of connectivity and integration, which represent the analysis of

connections and accessibility respectively, as described in Chapter 4 – research design.

In the spatial analysis conducted in this chapter, emphasis has been placed

understanding the overall sense of the city. The physical configuration of the four cities

are measured, evaluated, and analyzed. Common patterns that characterize the spatial

complexity in the four cities are also presented. The spatial properties of the four cities

are evaluated using three syntactic measures: connectivity, global integration, and local

integration (for definition and description, see section 4.6.2).

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[2] *UCL Depthmap* is spatial network analysis software developed by the Visual Resource (VR) Center at the Bartlett School of Graduate Studies, University College London (UCL, 2008).
[3] Syntax2D is a suite of tools for urban and architectural spatial analysis developed at the University of Michigan. It currently includes the basic space syntax measures of isovists, axial maps, and visibility graphs, along with some newer features such as path-based measures (University of Michigan, 2007).
[4] *mindwalk* is a new application to perform spatial analysis on buildings and cities over axial and continuity maps. These techniques have been proved to be successful to study social and cultural roles of space (Fugueiredo de Medeiros, 2005).

6.3 Spatial pattern of the four cities

The spatial analysis is illustrated in the axial maps of the four cities in Figure 6-1, 6-2, 6-3, and 6-4. These maps characterize the morphological configuration of the four college towns, indicating commonalities among them as well as variations.

6.3.1 A strong historic core

A common pattern that emerges in all the four cities is the presence of a strong center composed of highly integrated lines. The core is represented by the group of dark red lines on the maps (Figure 6-1, 6-2, 6-3, and 6-4). The presence of a concentrated core is prominent in Ann Arbor, Athens, and Tallahassee (dark red). Though the core is present in Lansing, it is dispersed and less integrated (less red, more orange and yellow). In all the cities, the integration core corresponds with the actual historic center of the city. The vitality of this historical center is evident as the core is also the central place for various public activities, such as art fairs, and music festivals.

6.3.2 Connection of the core with the periphery

Another pattern observed in the four cities is the strong connection between the historic core and the periphery. The plan of each city shows a complex configuration of regular and irregular grid patterns, occasionally cut across by steady diagonals. These highly integrated lines (red diagonal lines coming out of the red central core) form a powerful connection between the city core and the peripheral ring of highways. This makes the downtown core easily accessible from the outskirts. This center-periphery connection has helped to sustain the downtown in these cities as an attractive location for entertainment, retail, and other public amenities.

6.3.3 Role of the university

The location of the university campus is vital to the cities. The campus defines the urban form, attracts activities and people, and creates an identity for the city. The universities have played an important role in influencing the shape and direction of the urban expansions. University campuses are major generators of activities and movement, creating opportunities for enhanced public experience. In the four cities analyzed here, different patterns were observed regarding the role of the university in shaping the urban form of the city. The patterns are relative to the physical organization of the university campus and the downtown core in each city. Specific morphological attributes of the urban system of each city are discussed in Chapter 5.

High   Low
Global Integration—Accessibility
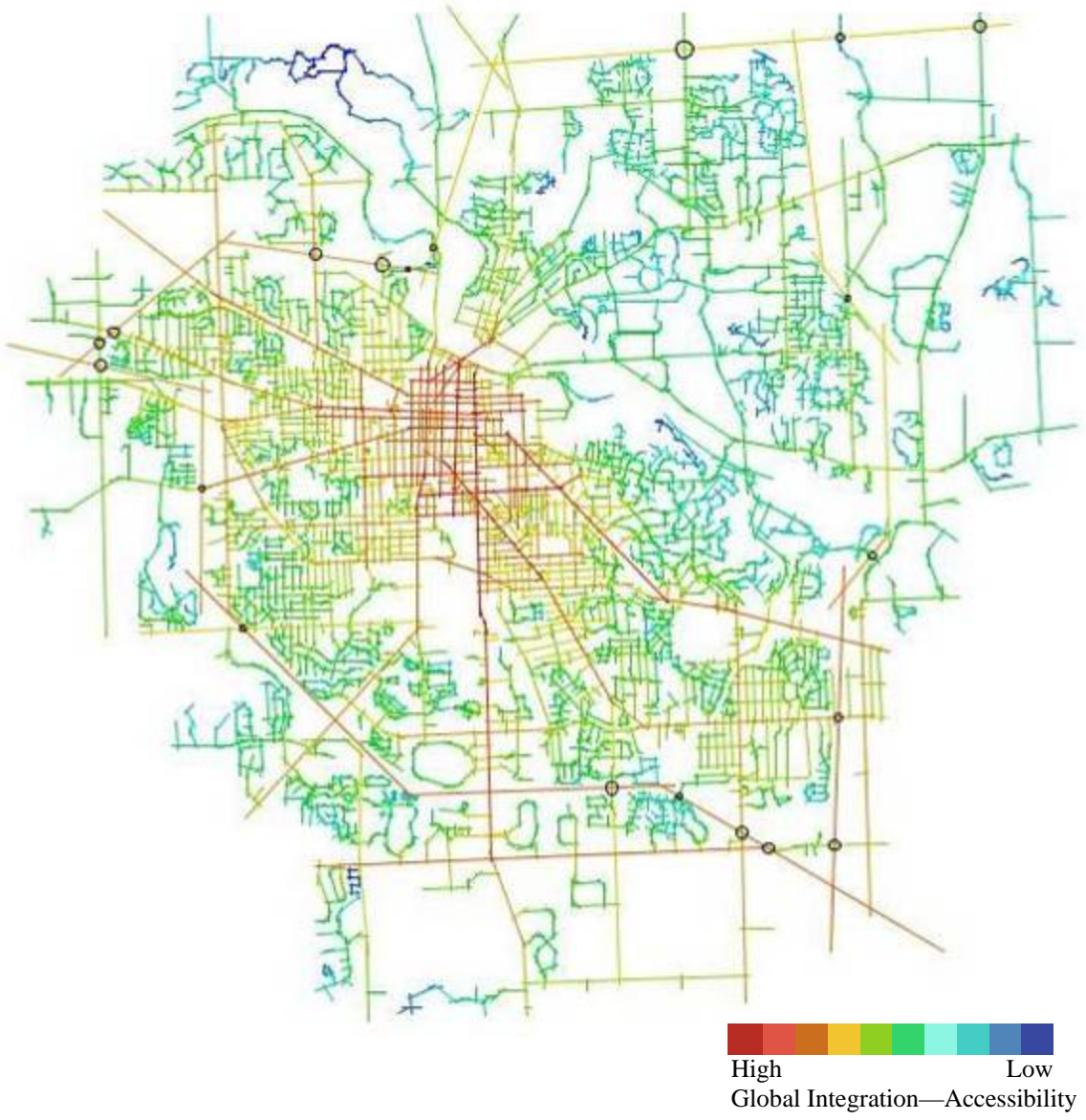
Figure 6-1: Axial map of Ann Arbor showing the global integration values.

High   Low
Global Integration—Accessibility
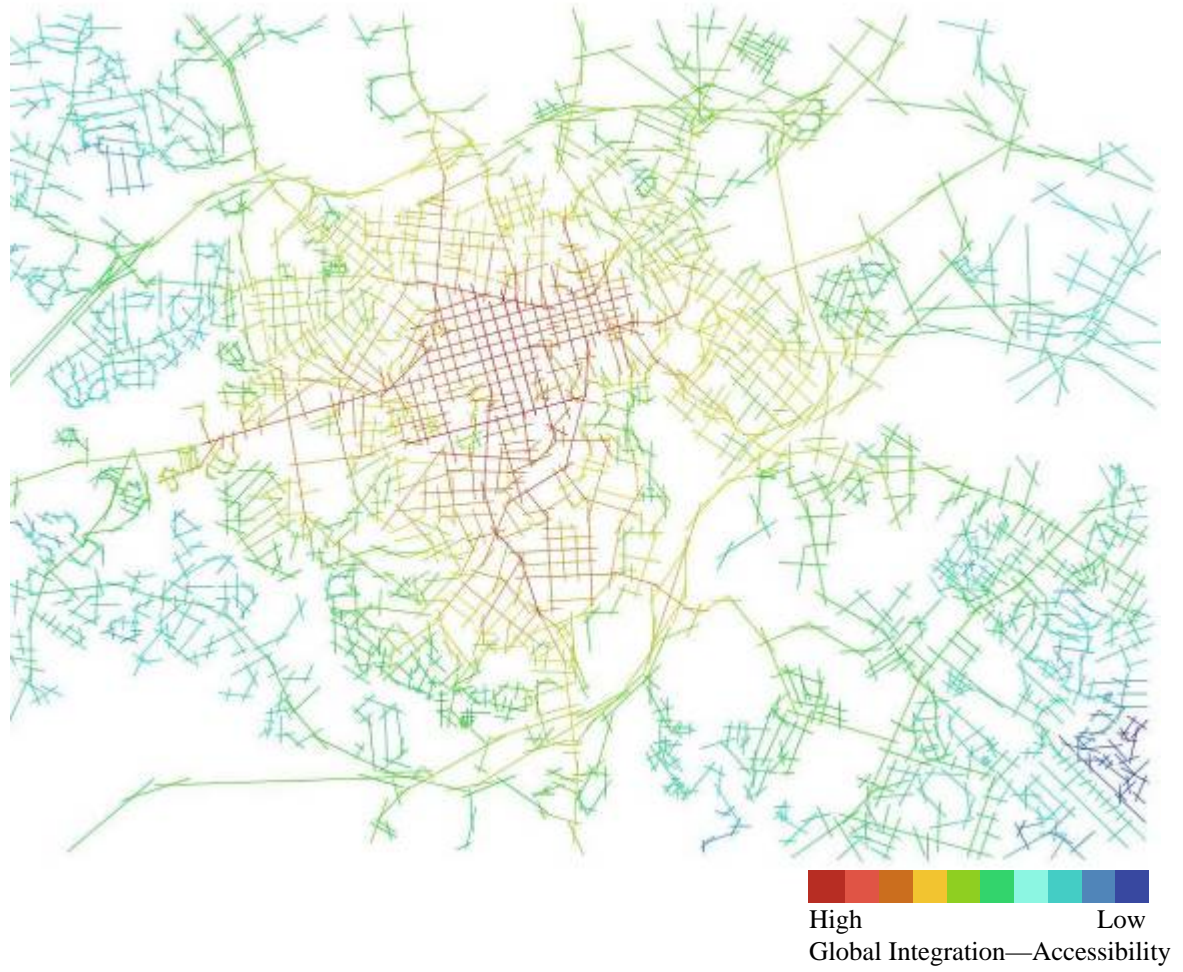
Figure 6-2: Axial map of Athens showing the global integration values.

High   Low

Global Integration—Accessibility
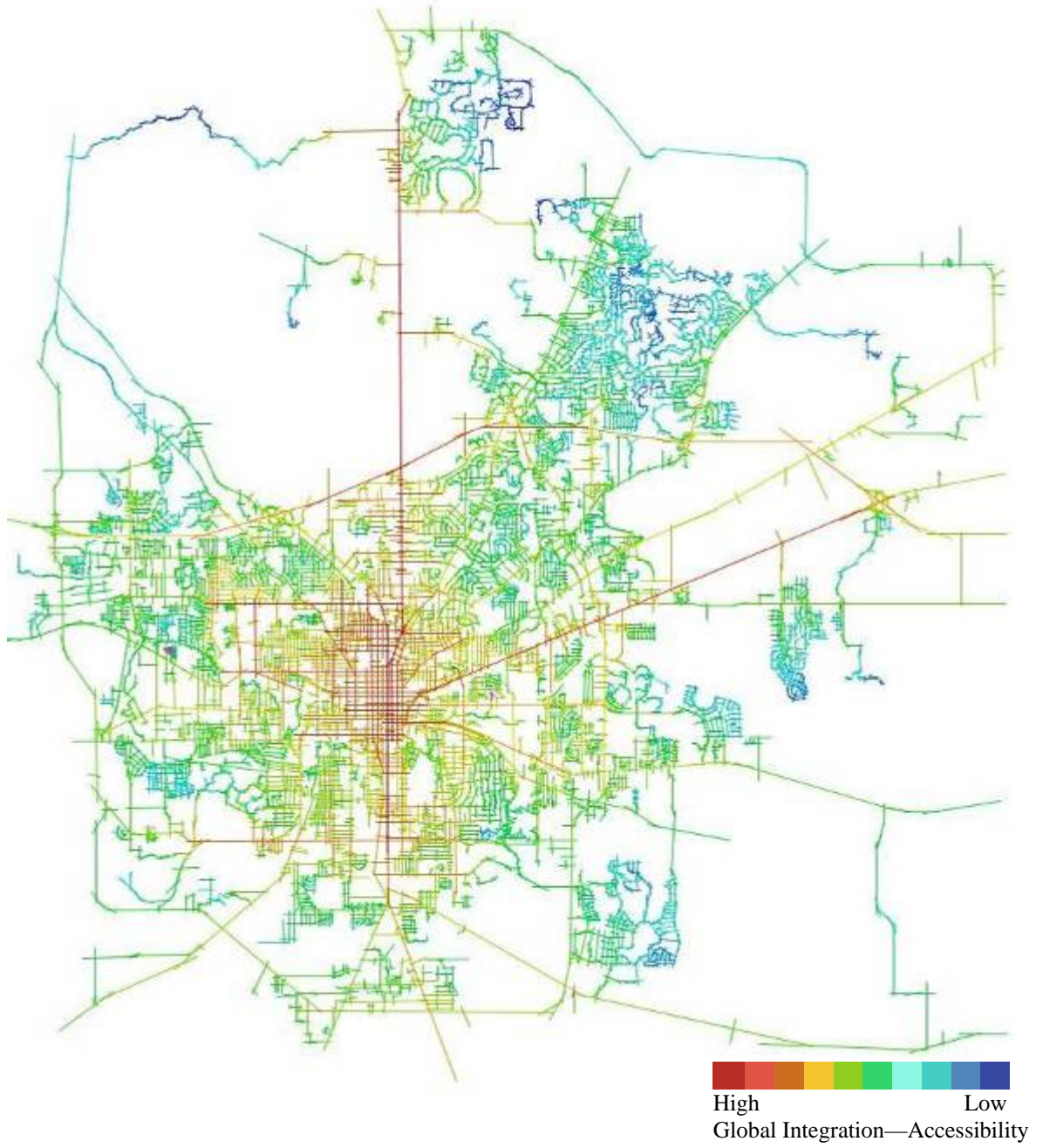
Figure 6-3: Axial map of Tallahassee showing the global integration values.

High ⸻ Low
Global Integration—Accessibility
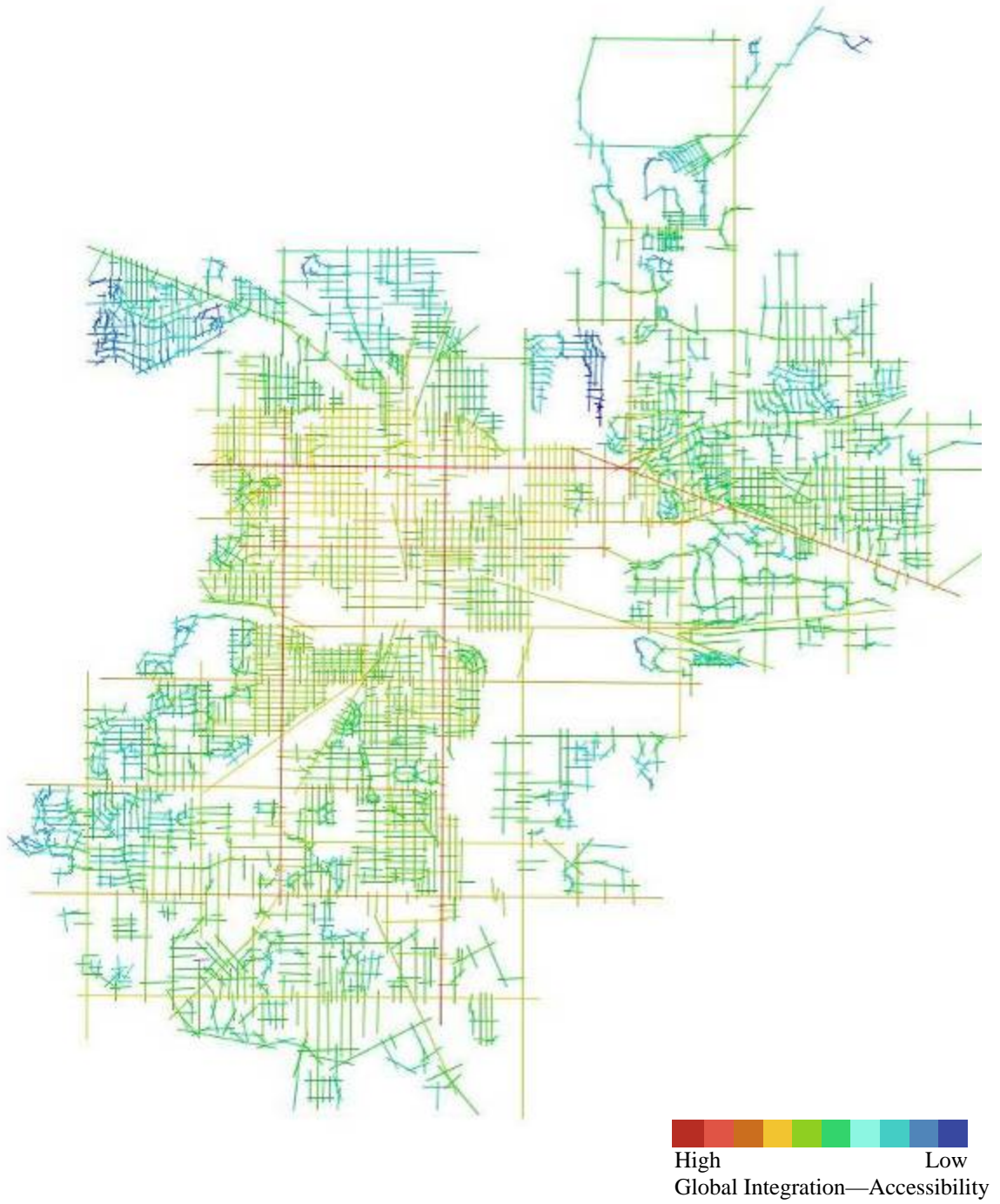
Figure 6-4: Axial map of Lansing showing the global integration values.

The comparative syntactic analysis of the four cities is summarized below.

	Ann Arbor, Michigan	Athens, Georgia	Tallahassee, Florida	Lansing, Michigan
Number of axial lines	3885	2406	7929	2538
Mean connectivity	2.912	2.810	2.746	3.863
Global integration (Rn)	0.832	0.498	0.687	1.410
Local integration (R3)	1.482	1.387	1.406	2.065
Core – number of axial lines	389	243	791	256
Core - integration	1.139	0.700	0.970	1.976
Strength of the core	1.369	1.406	1.412	1.401

Table 6.1: Summary of the syntactic properties of the four case study cities: Ann Arbor, Athens, Lansing – East Lansing, and Tallahassee.

From Table 6.1, it is clear that the four cities present comparable but different urban systems in terms of size and number of axial lines. Athens consists of the least number of axial lines while Tallahassee contains the highest number of axial lines. The table also indicates the three major syntax properties of each of the urban environments: (1) connectivity, (2) global integration, and (3) local integration. Comparative analysis of the syntactic data is discussed below for Ann Arbor, Athens, and Tallahassee. Lansing is discussed separately as spatial organization is distinct because of its nature as a grid layout.

Mean connectivity indicates the average number of connections (i.e. intersection with another line) each axial line has in the urban system. Ann Arbor, Athens, and

Tallahassee are consistent in terms of the connectivity value (2.912, 2.810, and 2.746

respectively). Global integration is a measure of overall accessibility in the system. From

the integration values in the table, it can be noted that Ann Arbor has slightly higher

integration value (.832) among the three systems. This reflects the strong central core of

the city that is highly integrated to the periphery through the steady diagonals (Figure

6.1). The presence of a similar stronger core-periphery dynamic, stronger diagonal

streets, and larger number of axial lines (Figure 6.3), results in a higher integration value

in Tallahassee (.687) compared to Athens (.498). The integration measure is closely

related to the "integration core" and the "strength of core" measures. The integration

core is conventionally formed by the axial lines, which constitute the 10% most

integrated values (Hillier, 1989; Hanson, 1989). The ratio between the mean integration

of the core and the entire city provides a measure of the core's "strength." The higher the

value, the more efficient the core tends to be in attracting activities and generating

movements. The relative values of the integration of the core for the three cities follow

the same pattern of integration values—Ann Arbor, Tallahassee, and Athens, from

highest to the lowest. In each case (1.369, 1.406, and 1.412), the high value of the

strength indicates that the historic core of the city has been sustained in terms of having

central importance in the urban system. The values of the strength of the core indicate

that the combination of the core, its historic significance, and its evolving functions has

maintained the relevance of the central area of the cities. Second order measures are also

explored, with particular interest to local integration. Results for the local integration in

each city correspond to the respective global integration values. This measure of local

accessibility and connection could be a critical measure to assess the accessibility immediately around the 25 most important places selected by the respondents.

In case of Lansing, the morphological analysis underlines a spatial duality in the syntax of the urban environment. Looking at the greater Lansing area (Lansing and East Lansing), the urban grid can be characterized as two moderately integrated grid system connected by a few highly integrated lines. The spatial system, both for Lansing and East Lansing, is dominated by rectangular grids. What are different from the previous cases (Ann Arbor, Athens, and Tallahassee) are the diagonal connectors, which resulted from grid distortion. Less distortion of the grid and higher grid regularity results in an urban system that contains few highly integrated lines (red lines) many moderately integrated lines (orange and yellow lines). The higher number of moderately integrated lines in Lansing inflates the overall integration value of the urban system. Thus, compared to the other three case studies, Lansing possesses comparatively higher global and local integration values because of the nature of the grid. The same grid typology also makes spaces in Lansing have fewer variations of integration.

6.4 Syntactic configuration of public places in the city—a common pattern

The preceding analysis demonstrates the grid configuration as the generator of patterns of movement in the cities. The next stage of analysis examines if the spatial pattern of the cities influence the perception of publicness. The hypothesis is that there will be some correlation between grid configuration and the city's perceived main activity places. The intention is to compare the physical accessibility (integration) of the grid configuration of the urban system to the location of the 25 settings perceived as important public places in the city.

The 25 important places are plotted as red dots on the integration map of each city. (Figure 6.5, 6.6, 6.7, and 6.8)

Figure 6-5: Distribution of the 25 selected places with respect to the integration lines in Ann Arbor.
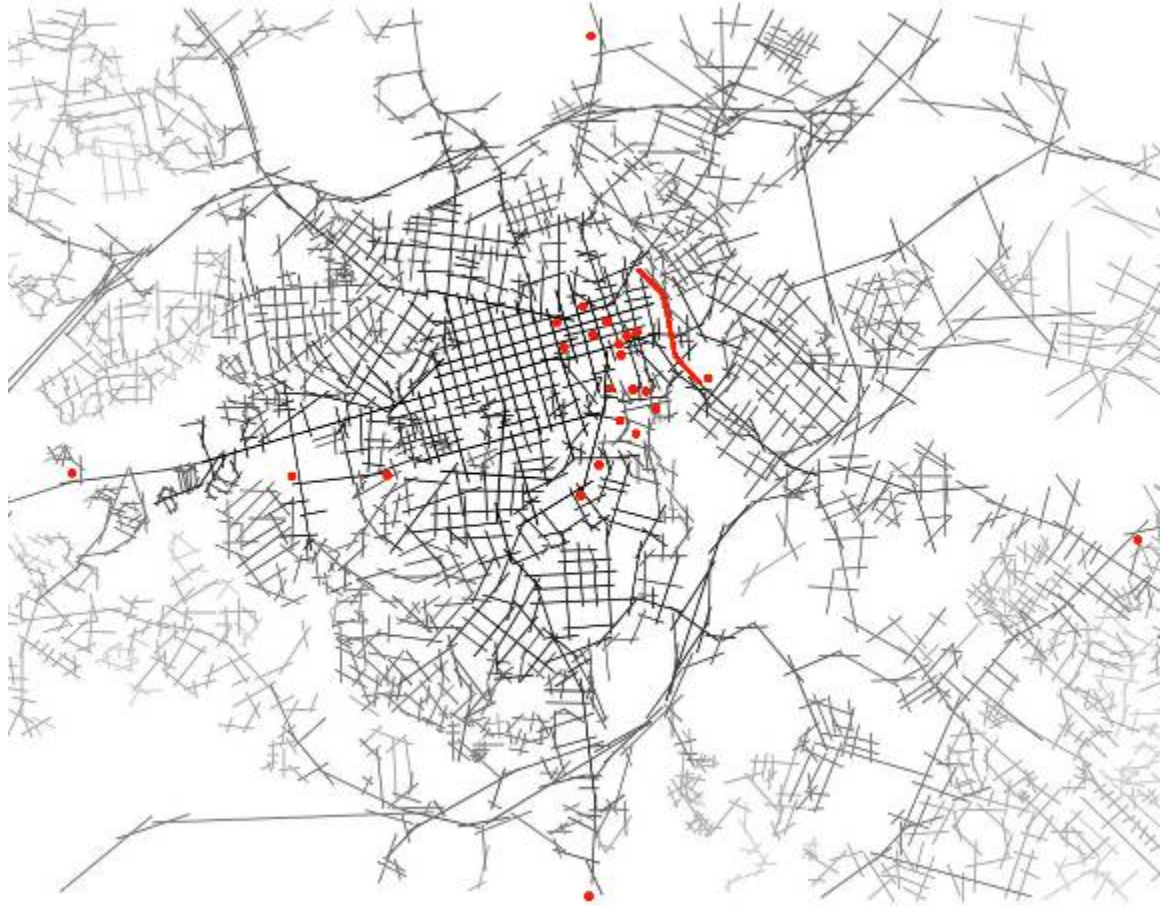
Figure 6-6: Distribution of the 25 selected places with respect to the integration lines in Athens.
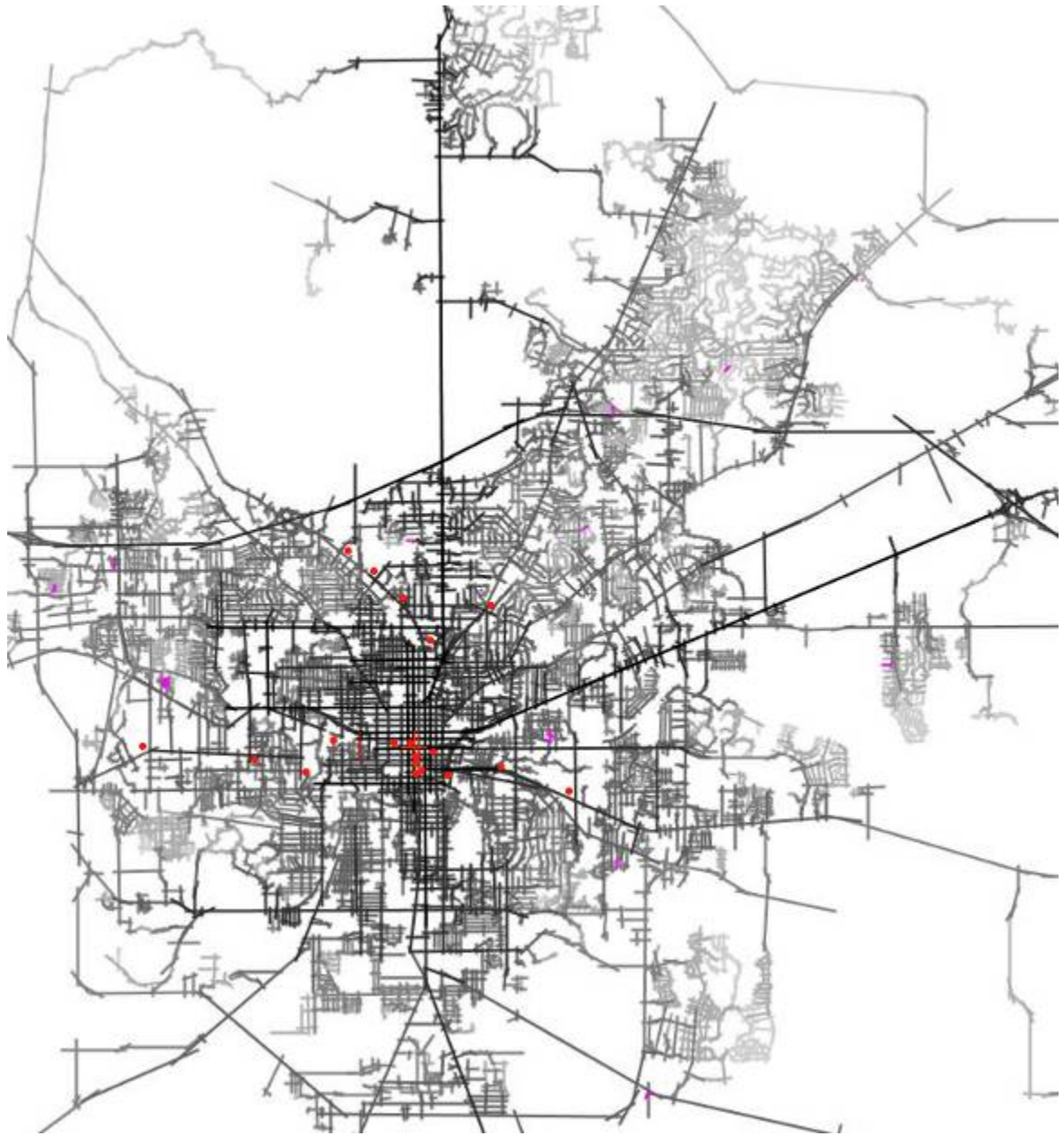
Figure 6-7: Distribution of the 25 selected places with respect to the integration lines in Tallahassee.
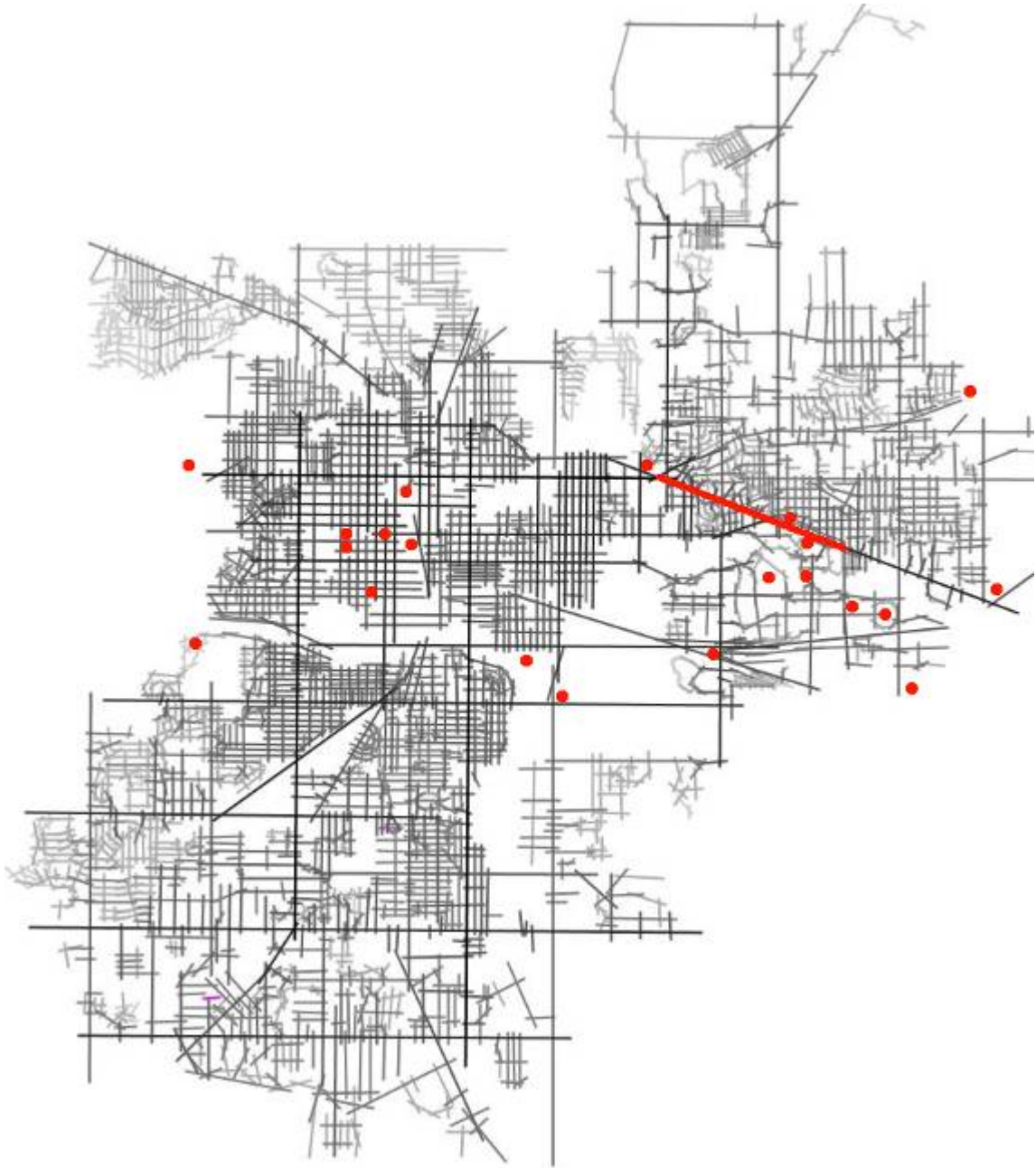
Figure 6-8: Distribution of the 25 selected places with respect to the integration lines in Lansing.

	Total number of exemplar settings	Settings within the integration core (%)	Settings within the integration core (%)
Ann Arbor, MI	25	20 (80%)	5 (20%)
Athens, GA	25	21 (84%)	4 (16%)
Tallahassee, FL	25	20 (80%)	5 (20%)
Lansing, MI	25	18 (72%)	7 (28%)

Table 6.2: Distribution of the 25 public settings with respect to the integration core in each city.

The analysis (Table 6.2) illustrates that the 80% or more of the 25 settings in each city are within and in the vicinity of the integration core—urban core formed by the 10% most integrated lines. Looking at the diagrams above (Figures 6-5, 6-6, 6-7, and 6-8), it is evident that the 25 settings correspond to the highly integrated lines. Most of the 25 important public places are situated on streets that are well connected and highly accessible in the city. The places which are outside the core are either along the highly connected peripheral highway ring or along the few diagonals that connect the core and the periphery. This distribution indicates how highly integrated areas of a city tend to attract more natural movement of people and a greater concentration of activities. The natural movement and generation of activities are integral to people's experience and understanding of publicness. The spatial-perceptual analysis in this chapter demonstrates how the morphological configuration of a city is associated with people's perception of places. Using a multiple sorting task and interviews, people's perceptual constructs about the same 25 settings are investigated in the following chapter.

Chapter 7

MEANINGS OF THE PUBLIC REALM:
Human Construction of Publicness

7.1 Multiple sorting task

This chapter considers the evaluation of the meanings associated with the public realm, measured through multiple sorting tasks and the open-ended interview.

A "Multiple Sorting Task" (MST) is described as an analytical tool for the purpose of exploring and understanding the "user experience" (Canter et al, 1985). In the current research, the MST is applied to investigate how users conceptualize their experience with public places. More specifically, the MST accesses users' construct systems, thereby enabling us to understand their subjective meanings and experience of publicness.

The present study employs both an open-ended sorting of various public places with no restrictions on the type of constructs generated, and a directed sort. In the open-ended sort, respondents were asked to sort the set of 25 public places into as many different piles (categories) as they liked according to a criterion of their choice; participants were also encouraged to continue with as many additional sorts as they could. After each sort, participants were interviewed about sorting criterion (construct) and the way in which the constituent categories are similar or different from each other. In the directed sort, the same respondents were asked to sort the same set of 25 public places into three specific piles (categories) based on the degrees of publicness: highly public, moderately public, and restricted public. Again after each sort, participants were interviewed about their categorization.

An important aspect of this first interview segment is that the respondents were not predisposed, by either the interviewer or interview description, to consider the issue of publicness. All respondents were told that the purpose of the interview was to explore

their understanding of different places in their city. It is assumed that the relative frequency with which the various constructs were selected indicate the relative significance of these criteria for the respondents (Groat, Canter & Brown, 1985). It is also assumed that these sorting criteria indicate the encoded meanings by which people interpret publicness. However to conduct these analyses, it is critical first to establish some basis of comparison among the respondents' idiosyncratic sorting criteria.

7.1.1 Sorting frequencies

The summary of the number of sorting per city is presented in Table 7.1. Both the number of overall sorts and the number of sorts performed by individual respondents in each city is consistent across the four cities. In the four cities at least two-thirds of the respondents sorted two times, which was the minimum number of times people were asked to do the sorting during the open sort.

	Sorted once	Sorted twice	Sorted thrice	Sorted four times	Mean sorting	Total sorting
	No. (%)	No. (%)	No. (%)	No. (%)	No.	
Ann Arbor	5 (15.62)	20 (62.50)	7 (21.88)	0 (0)	2.06	66
Athens	6 (18.75)	22 (68.75)	4 (12.50)	0 (0)	1.94	62
Tallahassee	4 (12.50)	25 (78.13)	2 (6.25)	1 (3.13)	2.00	64
Lansing	2 (6.25)	22 (68.75)	7 (21.88)	1 (3.13)	2.22	71

Table 7.1: Numbers of open sorting in the four case studies.

7.1.2 Content analysis

Content analysis procedures were applied to the sorting criteria to achieve a basis of comparison. Content analysis has been defined as a procedure for identifying "specific characteristics of communications systematically and objectively in order to convert the raw material into scientific data" (Mostyn, 1985, p.117). Within this general definition, a variety of operational strategies (qualitative or quantitative) are possible. The content

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analysis procedure used in the present study conforms to a more quantitative orientation. The responses, consisting primarily of short descriptive phrases, did not necessitate detailed qualitative analyses.

The raw data from the open sorting exercise in each city is summarized in Appendices J-M. Each table in the appendix consists of five columns: (1) the first column (n) represents the sample of respondents selected in each city, (2) the second column (sort sequence) indicates the number of time the sorting was conducted by a respondent, (3) the third column (constructs) lists the criterion used by the respondent for a particular sorting sequence, (4) the fourth column (categories) describes the different constituent categories within each sorting construct, and (5) the final column (construct groups) codifies each sorting construct and the constituent categories into construct groups based on the content analysis. The content analysis is undertaken in order to systematically develop some underlying principles of the sorting from analysis of the raw data. The specific content analysis steps are described below.

To be specific, each construct (sorting criterion) and its constituent categories were written on index cards. The construct cards were then organized into as few groups (construct groups) as possible based on the thematic similarity of the construct. Thus, the constructs used by the respondents are analyzed and are grouped into the fewest possible construct groups. The reliability of this analysis was then tested by a colleague familiar with the research. He was asked to assign each individual construct card to the set of construct groups identified by this author. The result of this reliability exercise was that the two evaluators achieved the same results for 95.2% of the constructs. The distribution of the constructs are listed in Figures 7-1 to 7-4 (sorts) and also Table 7.2 (respondents).

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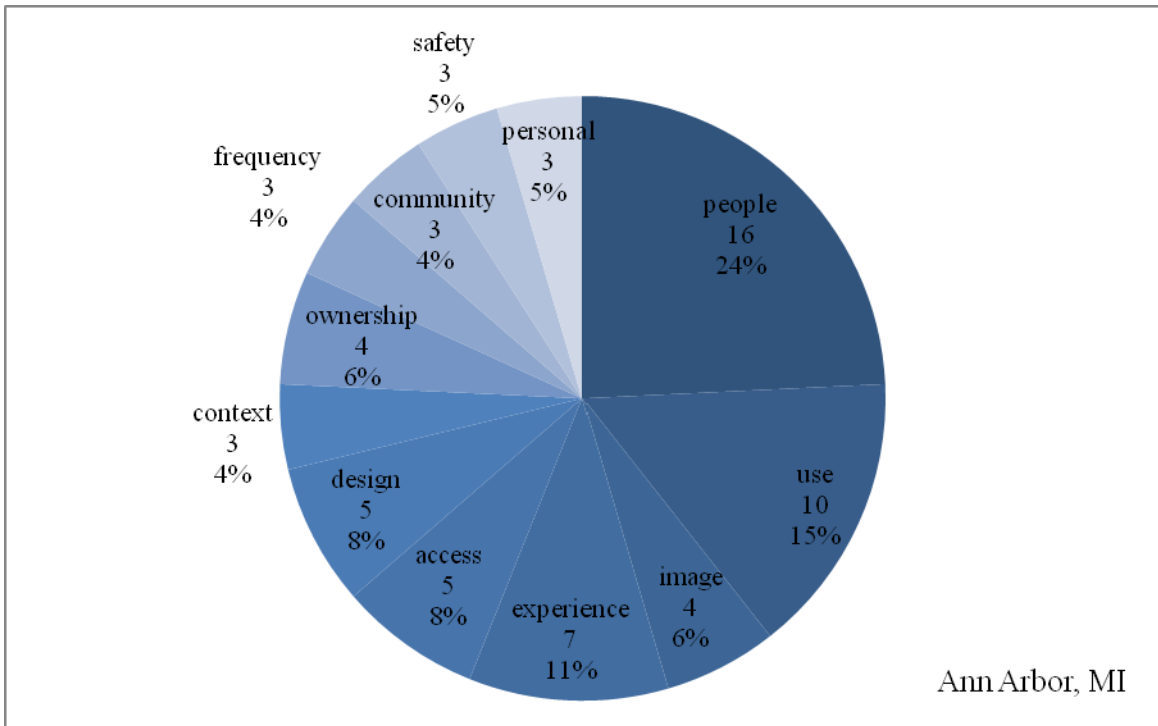
Figure 7-1: Proportion of total sorts used by respondents during open sort Ann Arbor, MI.
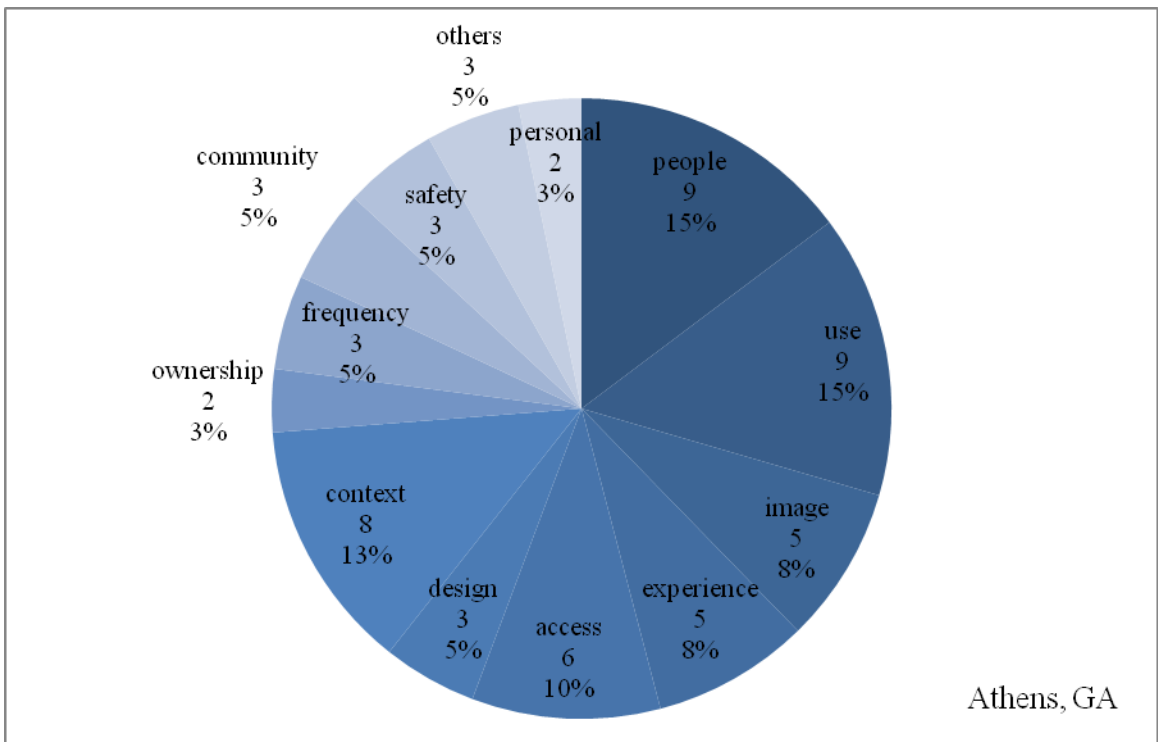
Figure 7-2: Proportion of total sorts used by respondents during open sort Athens, GA.
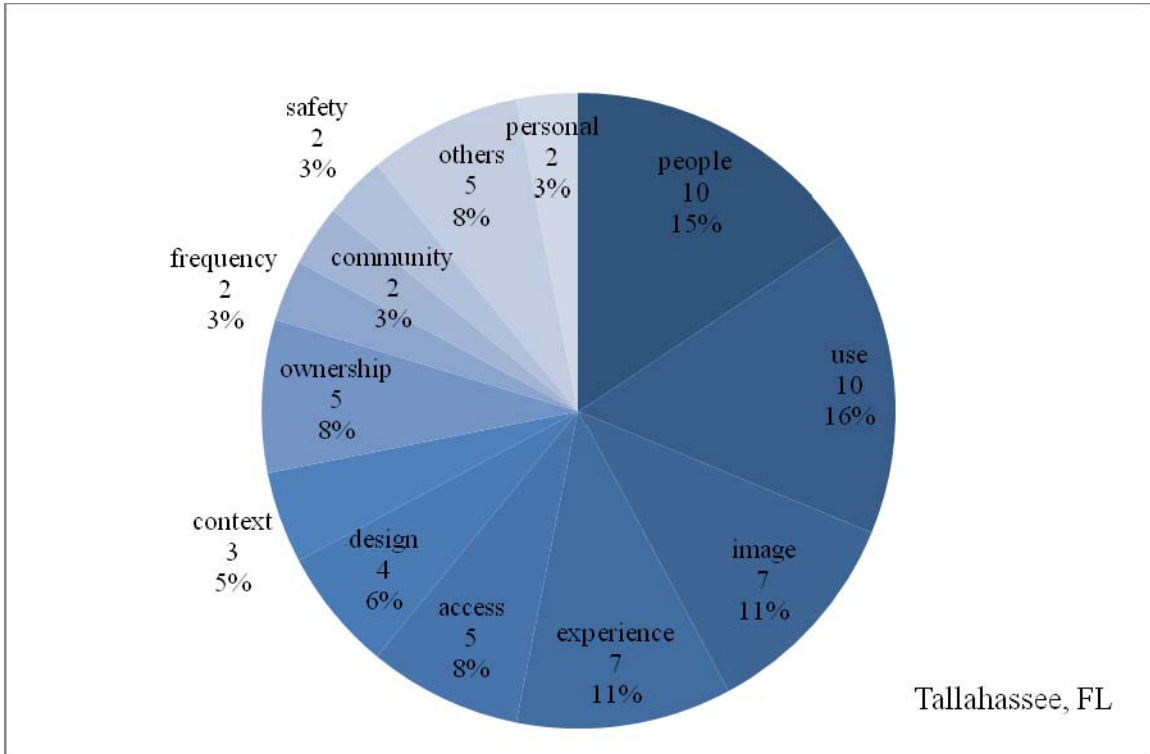
Figure 7-3: Proportion of total sorts used by respondents during open sort Tallahassee, FL
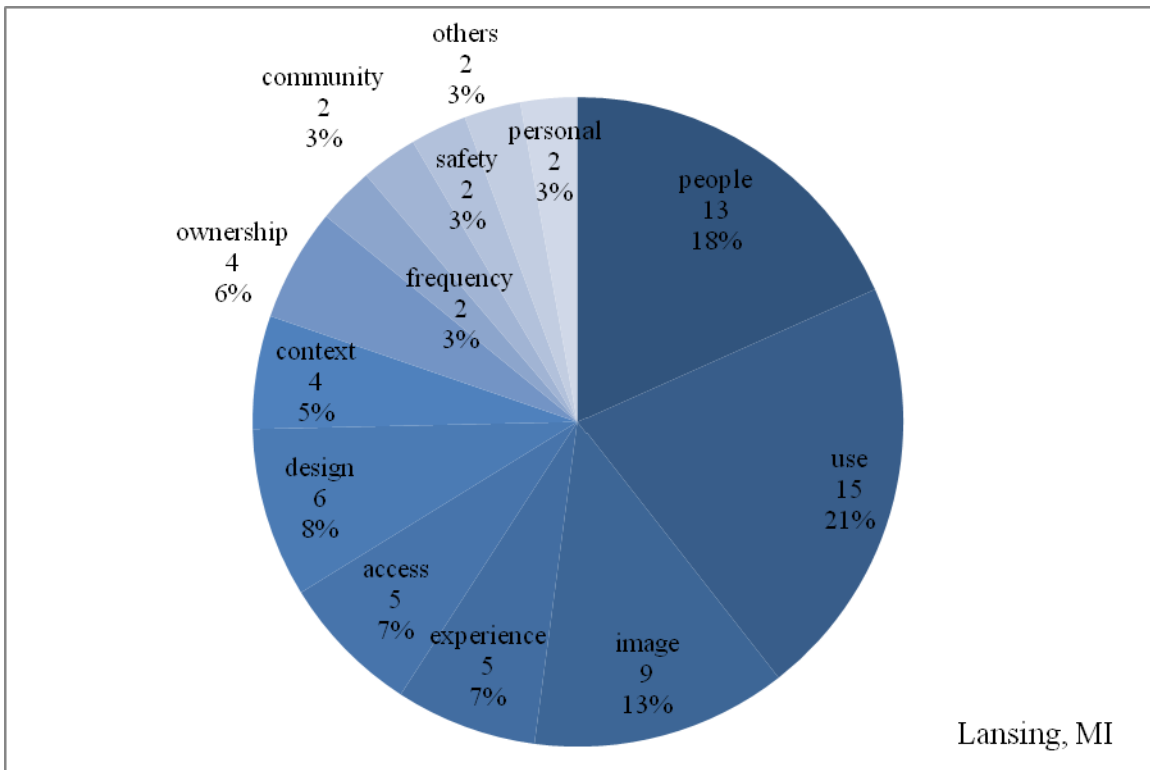
Figure 7-4: Proportion of total sorts used by respondents during open sort Lansing, MI

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7.2 Frequency of construct use

The content analysis revealed the underlying constructs (sorting criteria) used by the 32 respondents in each of the four cities to sort their 25 public settings. The use of these constructs (sorting criteria) can be organized in terms of their proportion of the total sort undertaken in each city. Figures 7-1, 7-2, 7-3, and 7-4 present the distribution of the construct groups (sorting criteria) in each city as percentages based on the total number of sorts. The analyses demonstrate a consistent use of multiple constructs (sorting criteria) in the open sorting exercise by the 32 respondents in each city.

The content analysis of frequencies with which the various constructs were selected by individual respondents is presented in Table 7.2. The first four columns of the table indicate the percentage of people (out of 32 respondents) in each city who used a sorting criterion. The final column indicates the total percentage of people (out of 128 respondents) using each criterion.

The analysis reveals some inherent structure within the construct (sorting criteria) use by the individual respondents. It is noted that around one-third of the overall respondents in all the four college towns used two specific constructs "people" (32.03%) and "everyday use" (31.25%). The dominance of these two constructs demonstrates the importance of everyday functionality and people's presence in place evaluation. 15% to 18% percent of the overall respondents used other constructs such as "Image & symbolism," "Quality of experience," and "Accessibility." Constructs such as "Spatial design quality," "Surrounding context," and "Ownership" were used by about 8% to 10% of the overall respondents. Seven to eight percent of the respondents used the rest of the constructs including: "Frequency of use," "Community," "Safety and security," "Personal

reasons," and "Others." The "Others" category consists of outlying incidents of individual constructs that could not be allotted to any of the construct groups derived from the content analysis. Careful study of these individual cases reveals that some of the underlying sorting criteria used by these outliers are "Parking needs, Cost of living, Good for business" (Athens), "Place attachment, Part of healthy lifestyle, Political activity, and Investment" (Tallahassee), "Water and Food" (Lansing).

	Construct groups	Frequency of respondents				
		Ann No. (% out of 32)	Ath No. (% out of 32)	Tal No. (% out of 32)	Lan No. (% out of 32)	Total (% out of 128)
1	People	11 34.38%	8 25.00%	10 31.25%	13 40.63%	41 32.03%
2	Everyday use	9 28.13%	8 25.00%	10 31.25%	13 40.63%	40 31.25%
3	Image & symbolism	4 12.50%	5 15.63%	4 12.50%	7 21.88%	20 15.63%
4	Quality of experience	7 21.88%	5 15.63%	7 21.88%	5 15.63%	24 18.75%
5	Accessibility	5 15.63%	5 15.63%	5 15.63%	5 15.63%	20 15.63%
6	Spatial design quality	4 12.50%	3 9.38%	3 9.38%	4 12.50%	14 10.94%
7	Surrounding context	2 6.25%	8 25.00%	3 9.38%	4 12.50%	17 13.28%
8	Ownership	3 9.38%	2 6.25%	5 15.63%	4 12.50%	14 10.94%
9	Frequency of use	3 9.38%	2 6.25%	2 6.25%	2 6.25%	9 7.03%
10	Community	3 9.38%	3 9.38%	2 6.25%	2 6.25%	10 7.81%
11	Safety and security	4 12.50%	3 9.38%	2 6.25%	2 6.25%	11 8.59%
12	Others	0 0.00%	3 9.38%	5 15.63%	1 3.13%	9 7.03%
13	Personal reasons	4 12.50%	2 6.25%	2 6.25%	2 6.25%	10 7.81%

Ann = Ann Arbor, MI; Ath = Athens, GA; Lan = Lansing, MI; Tal = Tallahassee, FL.

Table 7.2: Relative frequency of individual respondents using certain constructs; in individual college towns as well as overall across all the cities.

This data also suggests that although publicness did not appear as a specific sorting criterion, the respondents used factors that are commonly associated with publicness. Some of these factors are: presence of people (Whyte, 1980), quality of experience (Sennett, Brill, 2002), ownership (Loukaitou-Sideris & Banerjee, 1998), and accessibility (Arendt, 1953). Thus this synthesis demonstrates that publicness plays an important role in people's perception of places.

In theories and practices of urban design, the public sphere is commonly defined by a single notion of accessibility (Lofland, 1998) and ownership (Sorkin, 1992). Instead, from the above analysis, the multiple ways of understanding places are evident. This analysis also demonstrates that a single factor such as ownership or accessibility does not dominate people's understanding of publicness. The relevance of such a diverse range of elements associated with publicness can indicate that different places can be public in different ways. In other words, it can be concluded that different places have different publicness profiles. The concept of publicness profiles reinforces the multidimensional understanding of publicness and weakens the argument for a uniform and homogeneous concept of publicness.

The next stages of the interview (directed sort and open-ended questions) will explore this idea of publicness profiles. Naturalistic observation, in Chapter 8, will also examine the nature of everyday experience in specific site locations.

7.3 Patterns of sorting constructs used by participants in the four cities

In the preceding section, content analysis of the sorting data revealed the set of constructs (sorting criteria) that the participants across the four cities employ to conceptualize the range of their cities' most important public settings; in other words the

focus was on the respondents' constructs themselves. By contrast, this analysis is intended to compare the use of sorting criteria among the 32 respondents in each city.

As the study requires multivariate analysis, a multidimensional scaling program from the SPSS suite of programs was used to perform Multi-Dimensional Scaling (MDS)[5].

MDS is a multivariate analytical technique for examining patterns of responses to a given set of data, in this case sorting data. In this analysis, the relationship among the 32 respondents is plotted, based on the use, or not, (i.e. binary data) of each construct group for each respondent. The closer the points (respondents) on the plot, the more similar are their use of particular constructs (Zvulun, 1978). The goodness of fit of the MDS plot is indicated by two statistics: stress statistic[6] and coefficient of contiguity[7] (squared correlation or RSQ).

Figures 7-5, 7-6, 7-7, and 7-8 illustrate the MDS plots of the respondents (n) in each city. Each point in the plot represents one respondent (n1, n2, n3… n32).

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[5] The MDS analysis, in this case, was based on a respondent's use (or not) of a specific construct group. Thus, a binary set of data was entered in the SPSS program where "use of a construct" was denoted by 1 and "non-use of a construct" was denoted by 0.

[6] Stress values are calculated based on Kruskal's stress formula and iterations of S-stress. Lower the stress value, higher is the goodness of fit of the MDS plot. Desirable stress value is as low as possible.

[7] RSQ values are the proportion of variance of the scaled data in the table which is accounted for by their corresponding distances. The RSQ, also known as the Coefficient of Contiguity, can have a maximum possible value of 1.0. Higher is the RSQ value for an MDS, better the fitness of the plot. RSQ value of 0.6 or more is considered as a significant indicator of the goodness of fit (SPSS, 2008).
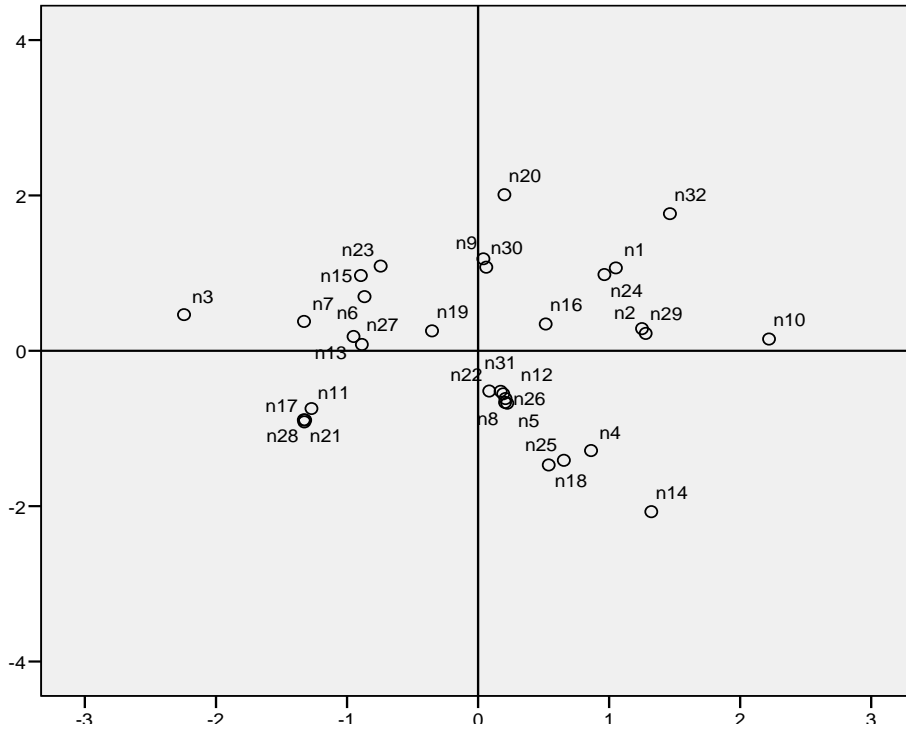
Figure 7-5: MDS, relationship among the 32 respondents in Ann Arbor based on their construct use (stress = .26712, RSQ = .64638).
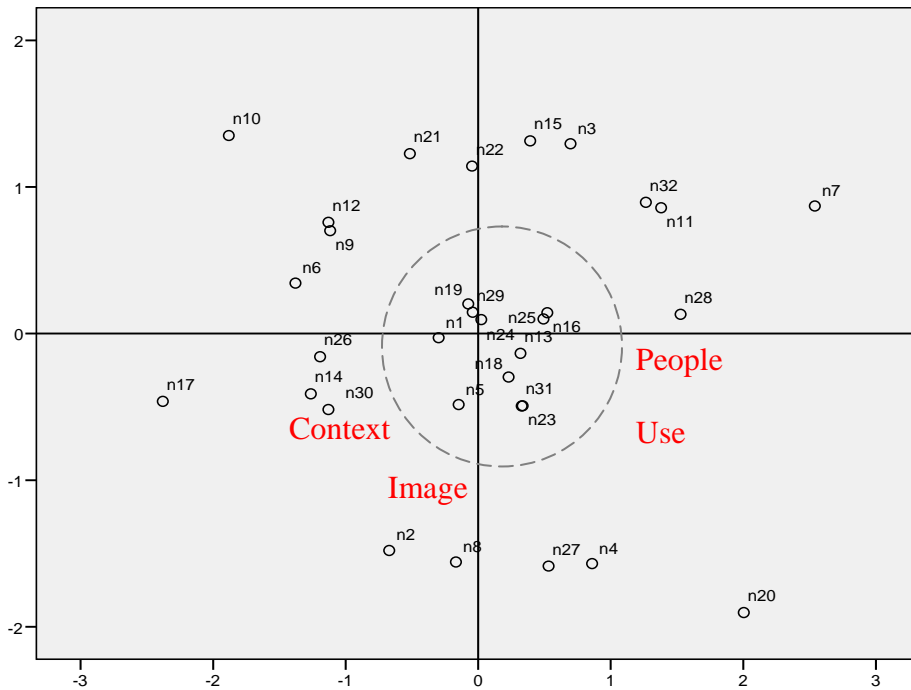
Figure 7-6: MDS, relationship among the 32 respondents in Athens based on their construct use (stress = .25313, RSQ = .70555).
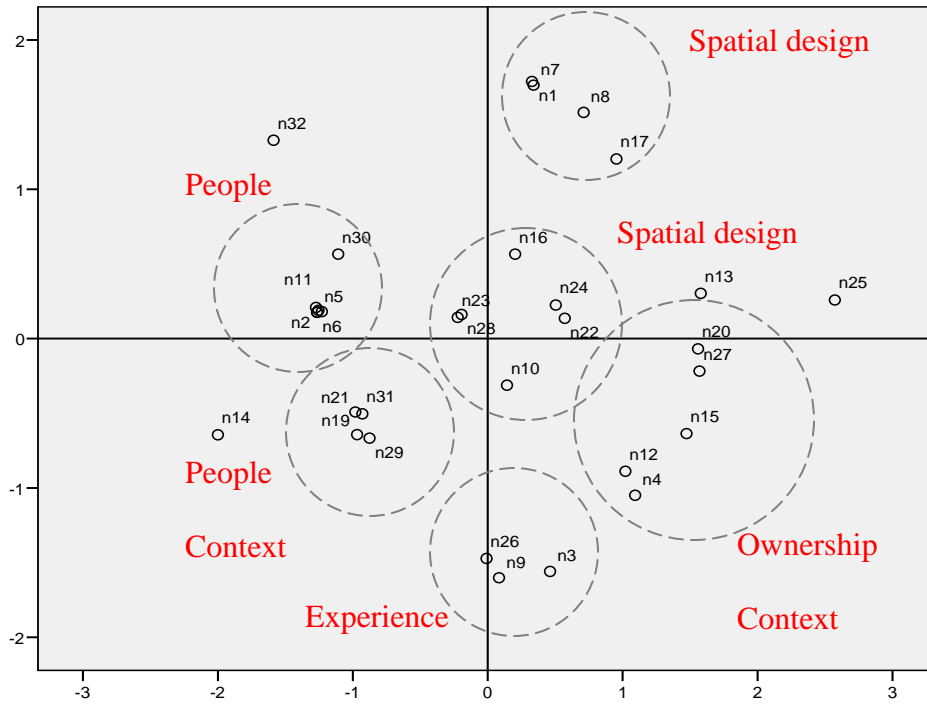
Figure 7-7: MDS, relationship among the 32 respondents in Tallahassee based on their construct use (stress = .24745, RSQ = .69603)
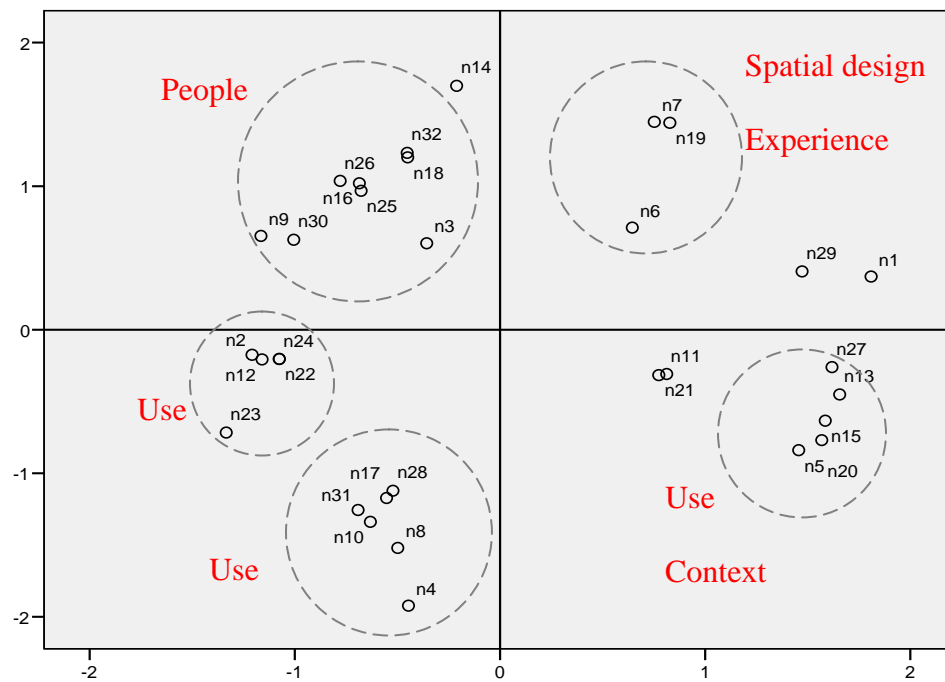
Figure 7-8: MDS, relationship among the 32 respondents in Lansing based on their construct use (stress = .29150, RSQ = .55241)

Figures 7-5 to 7-8 presents the distribution of respondents (n=32) on the MDS plot based on their use of certain sorting criteria. In the Ann Arbor MDS plot (Figure 7-5); the respondents are closely distributed at the center of the plot without any prominent clustering. This distribution pattern of respondents in Ann Arbor suggests a relatively uniform use of sorting criteria among all the respondents.

By comparison, the continuous, though more widely dispersed distribution of respondents is observed in the Athens MDS plot (Figure 7-6). However, within an overall continuous distribution, there are some patterns of distinction. In comparison, the respondent groups in MDS plots for Tallahassee and Lansing (figure 7-7 and 7-8) illustrate relatively more dispersal and strong clustering.

To gauge the comparative differences among the various respondent groups, the abovementioned MDS plots (Figure 7-5 to 7-8) are studied carefully in relation to the constructs (sorting criteria) used by each respondent (Table 7.2). The close study of the sorting criteria indicates strong patterns of respondent clusters in the MDS plots and use of specific constructs during the sorting by specific groups of respondents. The MDS plot in Ann Arbor (Figure 7-5) is the least dispersed and the most integrated, which indicates that the constructs (sorting criteria) are consistently used by the most of the respondents in Ann Arbor. The integration is also observed in the MDS plot of Athens, but there is a distinct cluster of respondents in the center (Figure 7-6). The constructs (sorting criteria) of Context and Image are prevalent within this group compared to the others. The pattern of increased dispersal and strong clustering is clearly visible in Tallahassee and Lansing, cities with strong variations in respondents' construct use. Figure 7-7 and Figure 7-8 illustrates the distribution of the respondent groups in the two cities and the constructs

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(sorting criteria) used by the groups. Examination of the MDS plots of these two cities in relation to the sorting data reveals two prominent patterns:

1. The conceptual constructs of people, use, and experience are widely used by the respondent groups in each city.

2. Image, Spatial design, Context, Accessibility and Ownership are some key factors that distinguish the respondent groups from one another.

7.4   Constructs of place in relation to the environmental role

The four plots above (Figure 7-5, 7-6, 7-7, and 7-8) illustrate the distribution of respondents based on their use of constructs during the open sort. In contrast, the present analysis focuses on overlaying the environmental role of each respondent on the MDS distribution. In Figures 7-9, 7-10, 7-11, and 7-12, the respondents are color-coded into three distinct environmental roles: the first one consisting of people who are residents of the town but not associated with the university (town only), the second one consisting of people who are residents of the town and is also associated with the university (town and university), and the third group consists of people who are associated with the university, but are not residents of that town (university only). The analysis suggests: (1) the three groups of respondents employ different set of sorting criteria and (2) the pattern of relationship among these three groups varies from one case study to another.
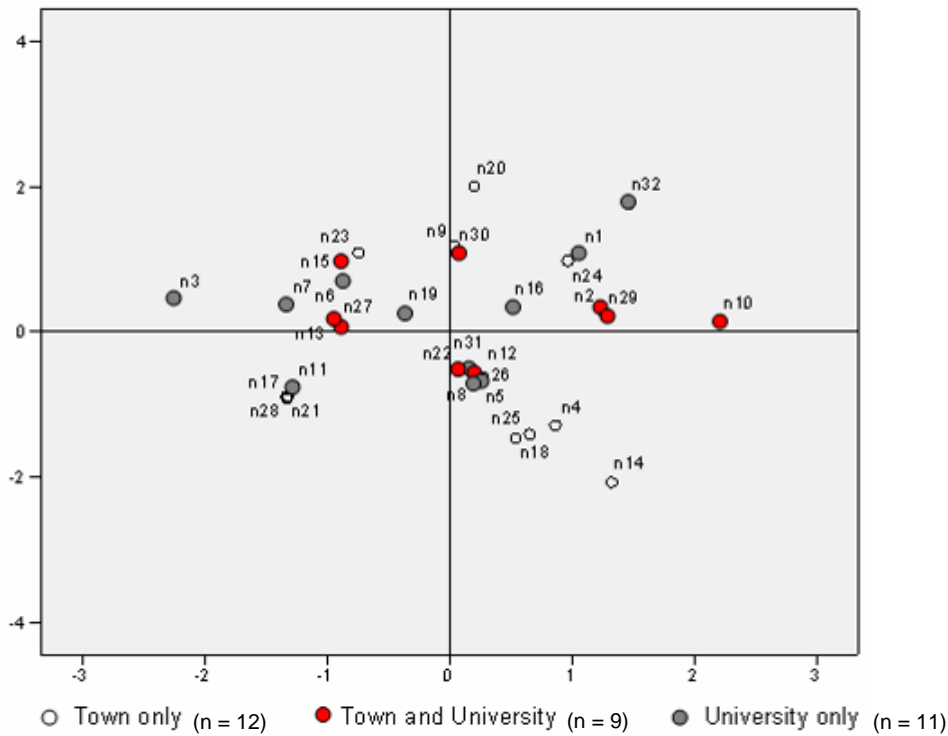
Figure 7-9: MDS, relationship among the 32 respondents in Ann Arbor based on their construct use (stress = .26712, RSQ = .64638).
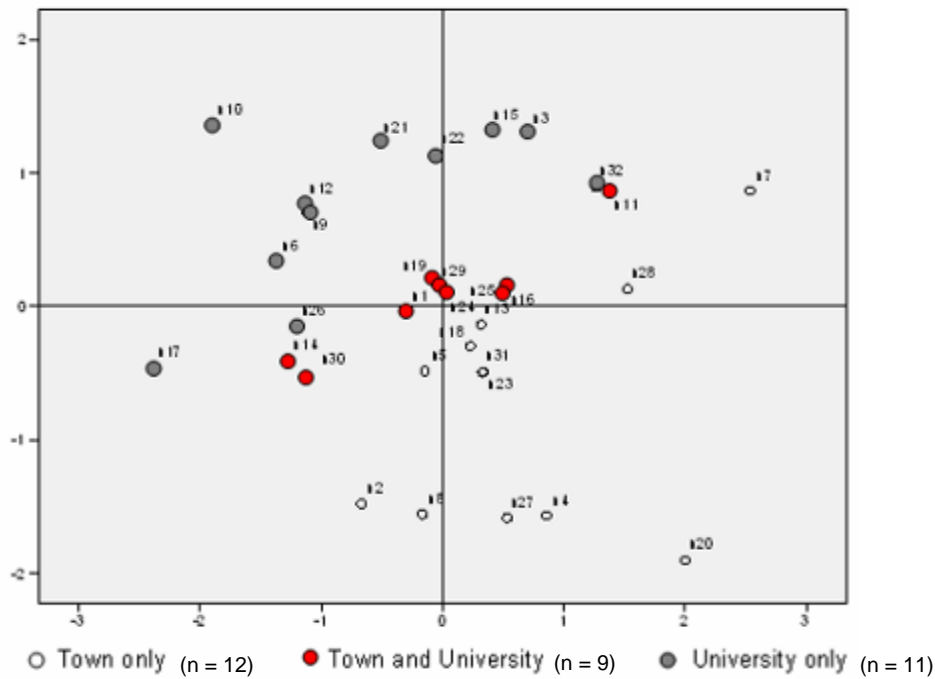
Figure 7-10: MDS, relationship among the 32 respondents in Athens based on their construct use (stress = .25313, RSQ = .70555).
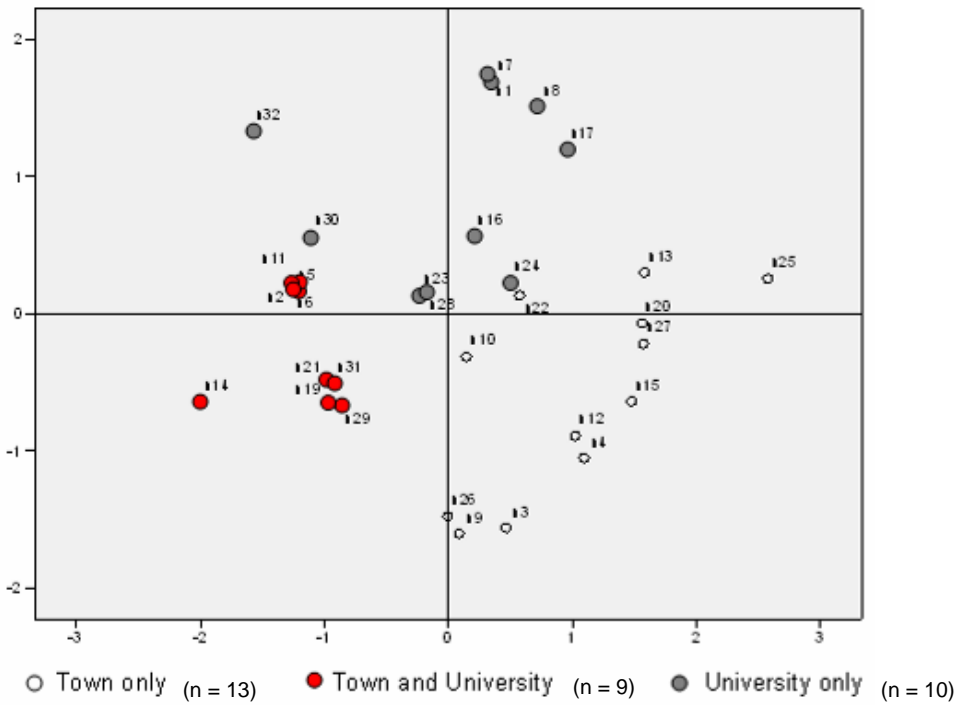
Figure 7-11: MDS, relationship among the 32 respondents in Tallahassee based on their construct use (stress = .24745, RSQ = .69603).
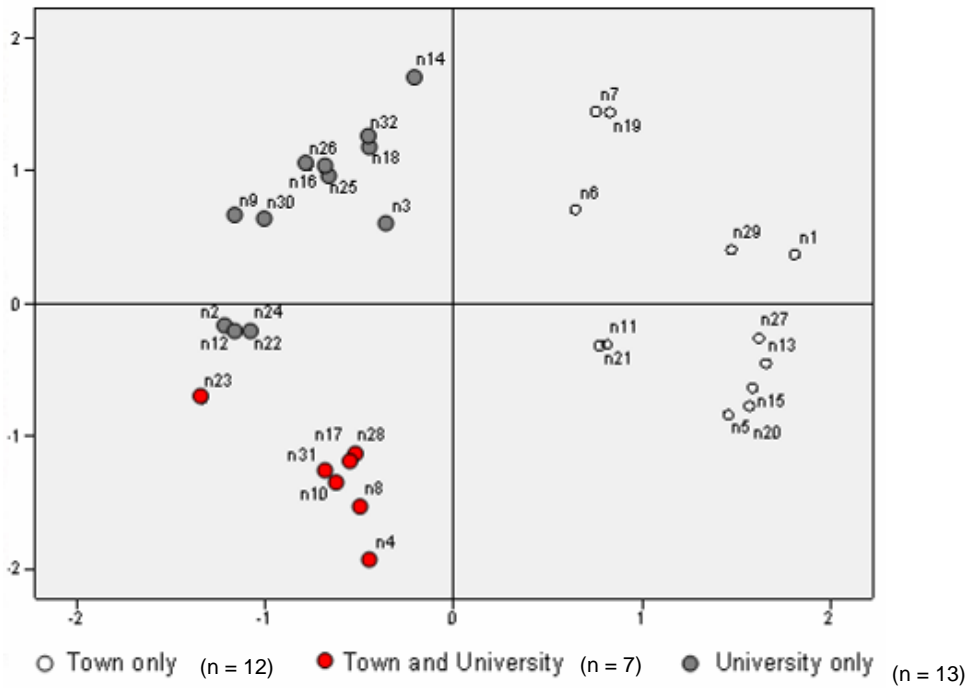
Figure 7-12: MDS, relationship among the 32 respondents in Lansing based on their construct use (stress = .29150, RSQ = .55241).

From Figures 7-9 to 7-12, the configuration of the three groups of respondents in each city becomes more dispersed and more distinct. In figure 7-9, the MDS plot for Ann Arbor residents, the three groups of respondents are more or less uniformly distributed. Though there are small clusters of certain respondent groups, these clusters are close to individuals or clusters of another respondent group. This indicates that in Ann Arbor, "town only," "town and university," and "university only" respondents do not differ in their use of sorting criteria. Thus, irrespective of their different environmental role, the 32 respondents' employed construct systems are relatively similar.

Comparing this to the MDS plot for respondents of Athens (Figure 7-10), it is evident that town only people and university only people are quite different in their use of construct (sorting criteria) of places. This is indicated by the larger distance between the two respondent groups. The third group, people associated with town and university, lies at the interface of the two previous groups. This demonstrates a subtle continuous variation in use of construct (sorting criteria) that differentiates the three respondent groups.

In comparison, the respondent groups in MDS plots for Tallahassee and Lansing (figure 7-11 and 7-12) depict three highly distinct respondent groups. This is characterized by larger difference among the groups and tighter clustering within the individual groups. Comparative analysis of the Tallahassee and Lansing MDS plots reveals that the distinction among the three respondent groups is more prominent in Lansing. Specifically, in Lansing, the "town and university" people are more closely related to the university respondents. This can be explained from the fact that most of the

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"town and university" respondents reside near campus whereas many "town only" people live away from the campus.

These results clearly suggest that (1) the respondents (in the four case studies) employ relatively different constructs (sorting criteria) in evaluating their urban places for their settings, depending on their environmental role; and (2) the relative differences among the case study respondents reflect systematic differences across the four case study sites. The relationship between this systematic difference and the spatial configuration will be examined in a later Chapter 9.

7.5   Degrees of publicness

In addition to the open sort, the sorting task included a directed sort of the same 25 settings in each city. In this case, the respondents were asked to place each of the 25 settings in only one of the three categories: "highly public," "moderately public," and "restricted public." The directed sorting of the 25 public settings by 32 respondents in each city is documented in Appendices N - Q. The intention of this analysis was (1) to evaluate how people characterize different places in terms of specific publicness categories, (2) to measure if perception of publicness is related to the respondents' environmental role in a city, and (3) to examine how publicness might vary across the four college towns.

The results of the directed sort by the 32 respondents in each city are summarized below (Figures 7-13, 7-14, 7-15, and 7-16). Each figure consists of 25 stacked columns that represent the 25 settings used during the directed sort. Each column is color coded based on the frequency with which that setting is classified into the three categories of publicness: "highly public," "moderately public," and "restricted public." The proportion

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of these categories of publicness in each column creates a unique publicness profile for

each of the 25 settings in each city. For example, Main St (Figure 7-13: Ann Arbor) and

Lake Ella (Figure 7-14: Tallahassee) are exemplar settings with all the respondents

classifying them as "highly public." This clear distribution generates a highly public

profile for Main St and Lake Ella. In contrast, Gandy Dancer (Figure 7-15) and Fun

Station (Figure 7-16) illustrate a relatively low public profile, being sorted as "restricted

public" by 80% or more respondents.
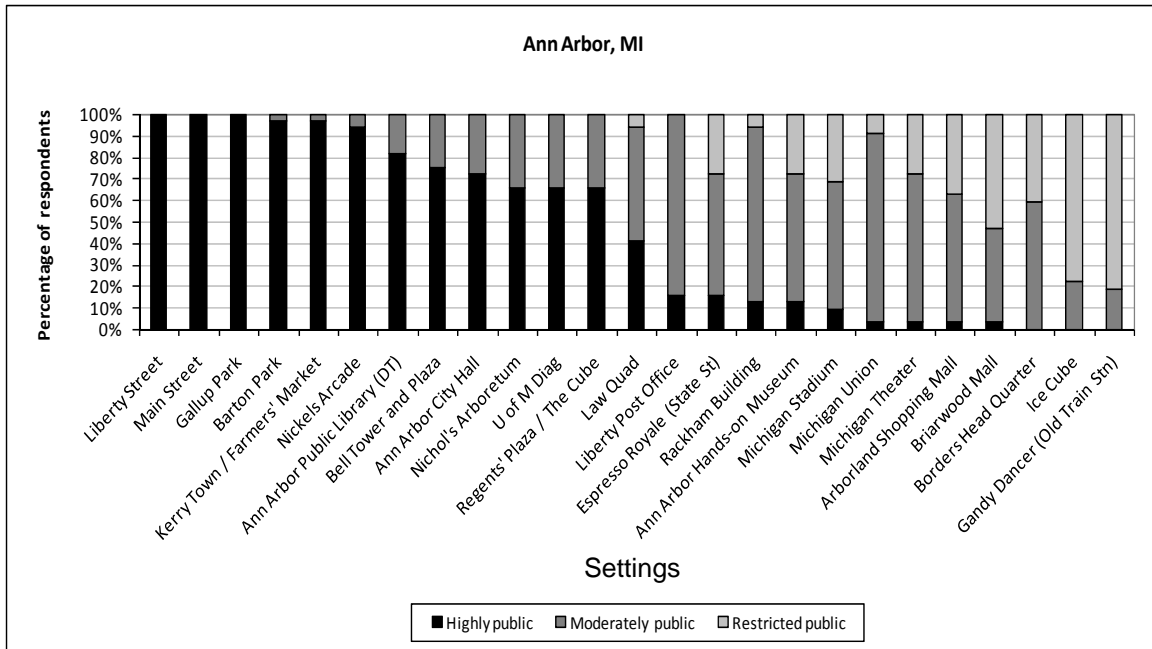
Figure 7-13: Distribution of responses for directed sort across all the four sites in Ann Arbor, MI.
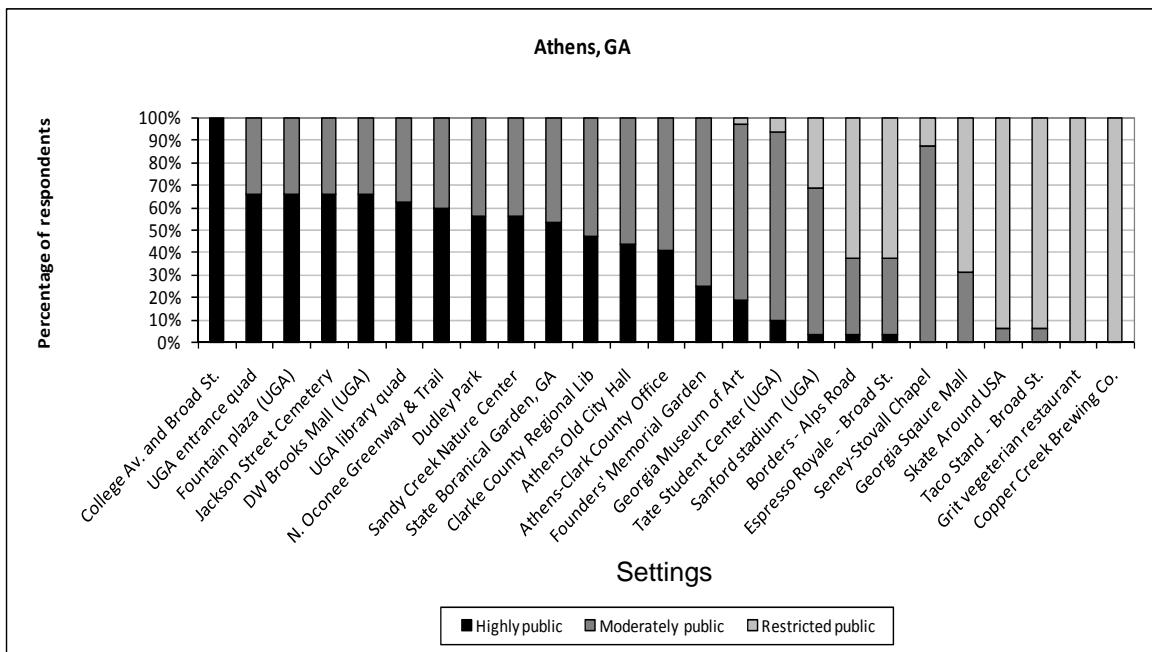
Figure 7-14: Distribution of responses for directed sort across all the four sites in Athens, GA.
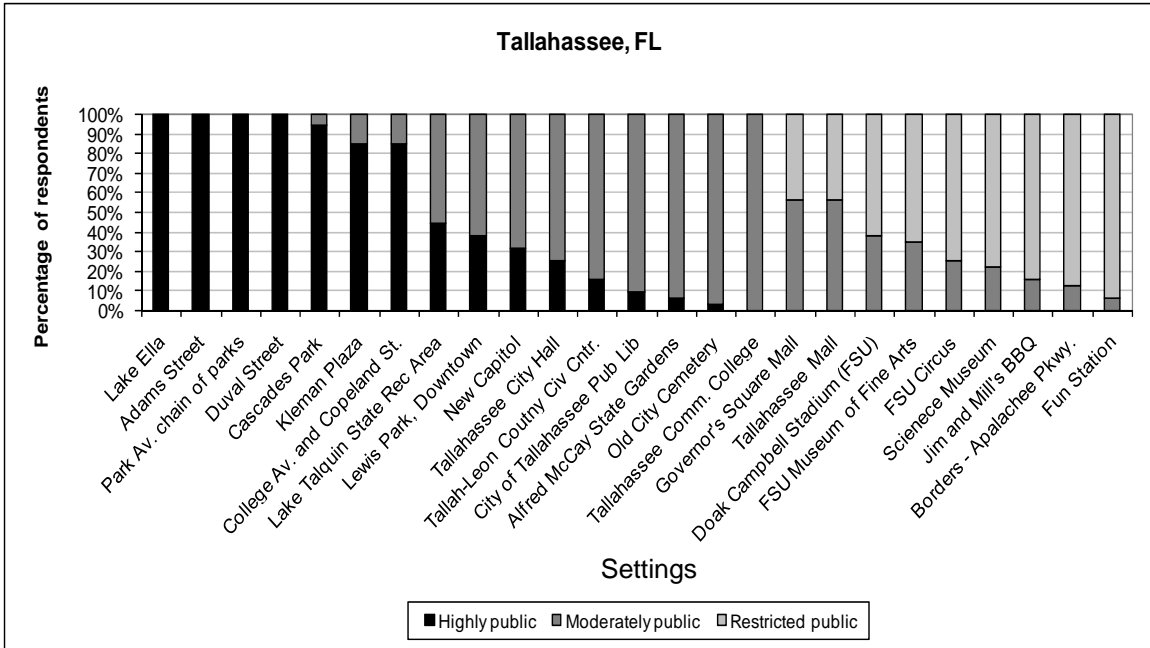
Figure 7-15: Distribution of responses for directed sort across all the four sites in Tallahassee.
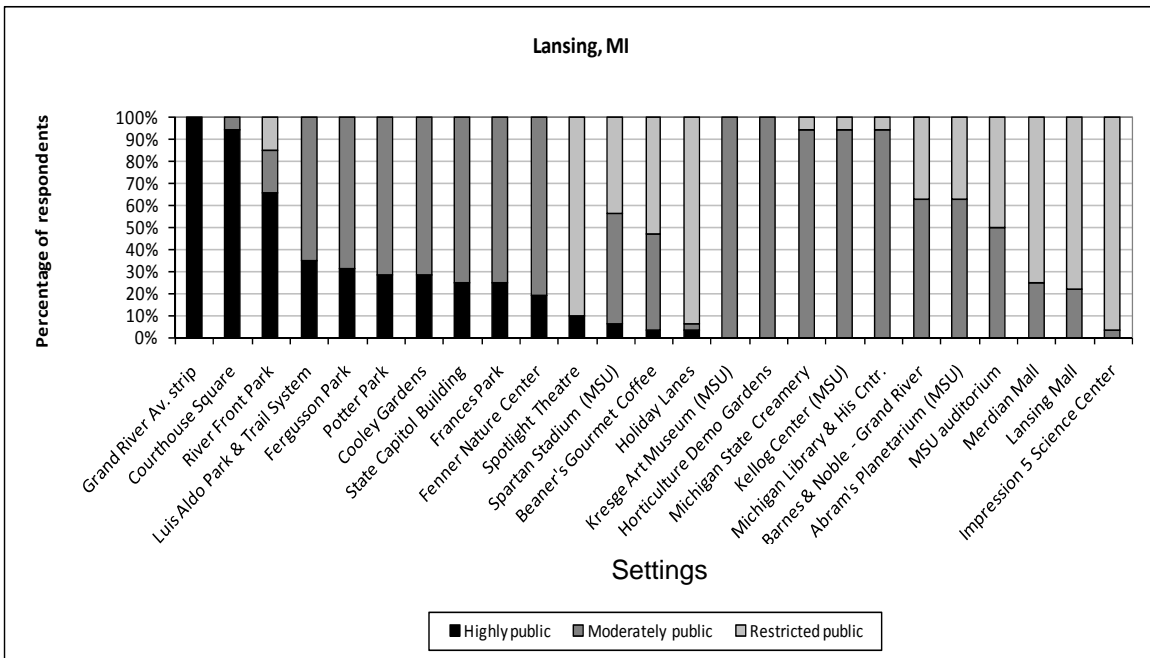
Figure 7-16: Distribution of responses for directed sort across all the four sites in Lansing.

In each city, the 25 settings are ordered in descending order of their publicness profile. At one end of the spectrum, there are some settings, such as Main St, College

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Av/Broad St, Lake Ella, and Grand River Av, which have consistently been sorted as "highly public." On the other end of the spectrum, there are a few settings, such as Gandy Dancer restaurant, Copper Creek Brewery, Fun Station, and Impression 5 Science Center, which have consistently been classified as "restricted public." The middle of the spectrum is populated by a large number of settings, such as Hands-on Museum, Espresso Royale Coffee-shop, Governor's Sq Mall, Michigan State Creamery, which are primarily classified as "moderately public." The public profile charts also indicate strong variations in perception of publicness across the four cities. Ann Arbor contains the maximum number of "highly public" settings whereas Lansing has the minimum number of "highly public" settings.

Whereas previous analyses emphasize degree of publicness of the 25 public settings in four cities, this data (Figures 7-13 to 7-16) focuses on the relative publicness profile of each city as a whole. Figure 7-17 summarizes the directed sorting by eight respondents at each of the four exemplar settings in each city. In other words, each column indicates a total of 200 setting categories, i.e., responses of eight respondents about 25 settings they sorted into the categories of publicness (8 respondents x 25 settings = 200 setting categories). The column divisions indicate the percentage distribution of responses in the three given categories: highly public, moderately public, and restricted public.
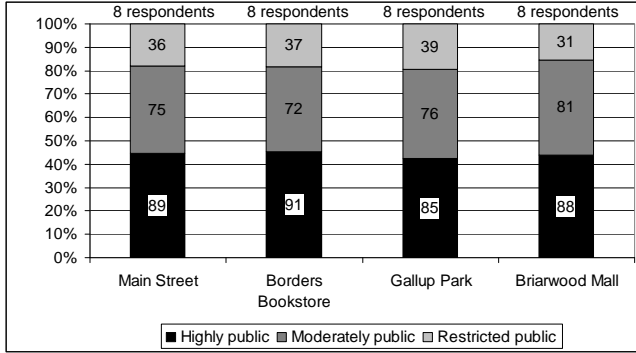
Ann Arbor, MI
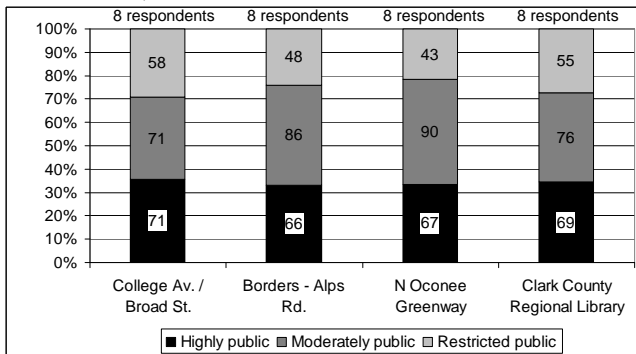
Athens, GA
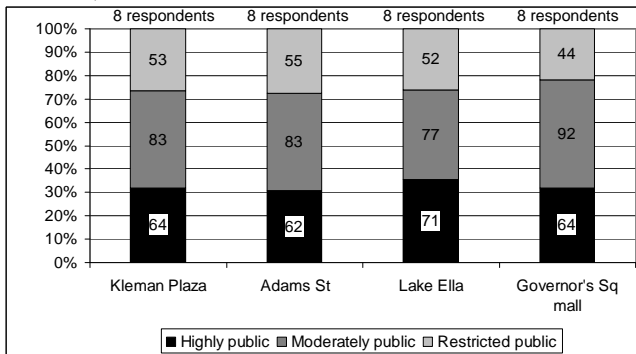
Tallahassee, FL
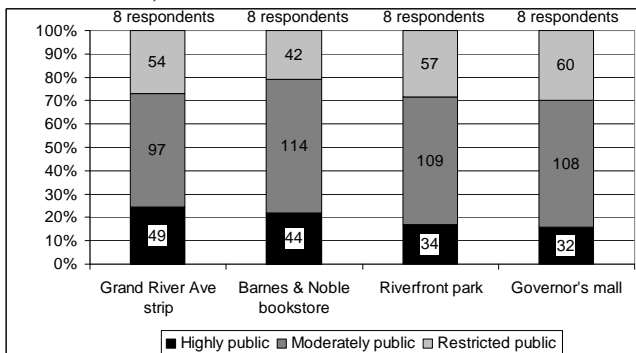
Lansing, MI

Figure 7-17: Distribution of responses for directed sort across all the four sites in all the four cities.

Analysis of the stacked columns in Figure 7-17 reveals distinct patterns in both the intra-city and the intercity publicness profiles.

On the one hand, there is some considerable consistency in the publicness profiles of settings within a city. For example, in all the four exemplar settings in Ann Arbor, 40-45% of the responses correspond to "highly public" perception, around 30-35% of the responses correspond to "moderately public" perception, and around 20-30% of the responses correspond to "restricted public" perception. Similar trend of consistency is observed across all the four exemplar settings within Athens, Tallahassee, and Lansing.

On the other hand, the same data distribution and analysis indicates that there are strong variations across the cities. The percentage distribution in Figure 7-17 indicates that the perception of publicness is much higher in Ann Arbor compared to any other city. Using the same example, in all the four exemplar settings in Ann Arbor, 40-45% of the responses correspond to "highly public" perception. In comparison, the "highly public" response in all the four exemplar settings in Athens is around 35% and that in Tallahassee is around 30% of their overall responses. Lansing, in contrast, shows the least perception of highly public places. The Lansing respondents in all the four exemplar settings perceive only around 20% of "their settings as "highly public." The analysis using Figure 7-17 thus validates the pattern of respondents' perception observed in the first analysis of the directed sort in the four cities (Figures 7-13 to 7-16).

7.6 Qualities of publicness in the four college towns

Whereas the earlier analysis emphasized the degrees of publicness across all the 25 settings in each college town, the current MDS analyses presented here focus on the pattern of relationships (based on publicness) among the 25 settings in each town.
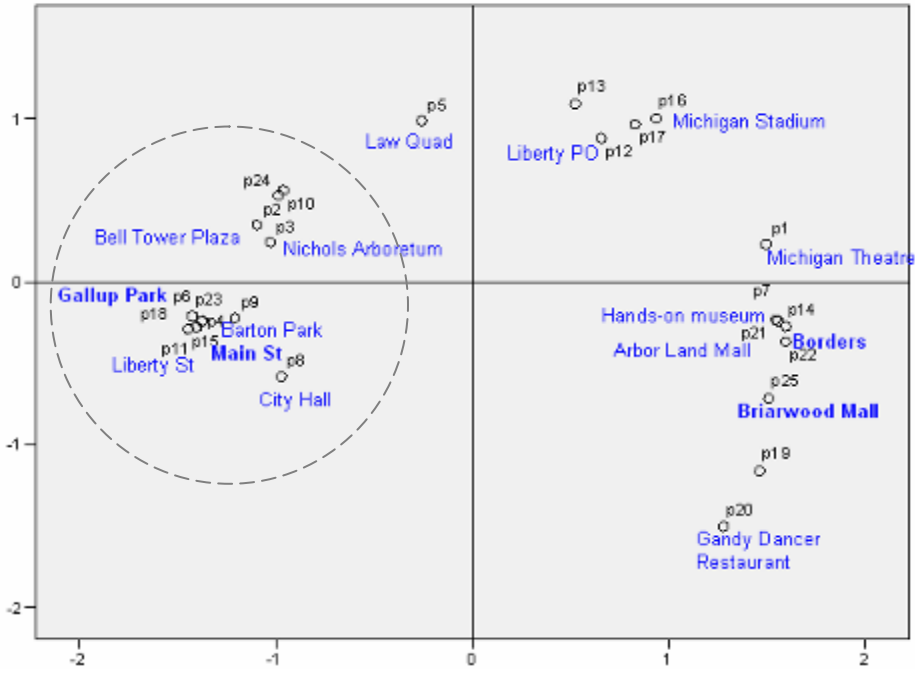
Figure 7-18: MDS, the 25 important places in Ann Arbor based on the respondents' perception of publicness (stress = .07923, RSQ = .97578)
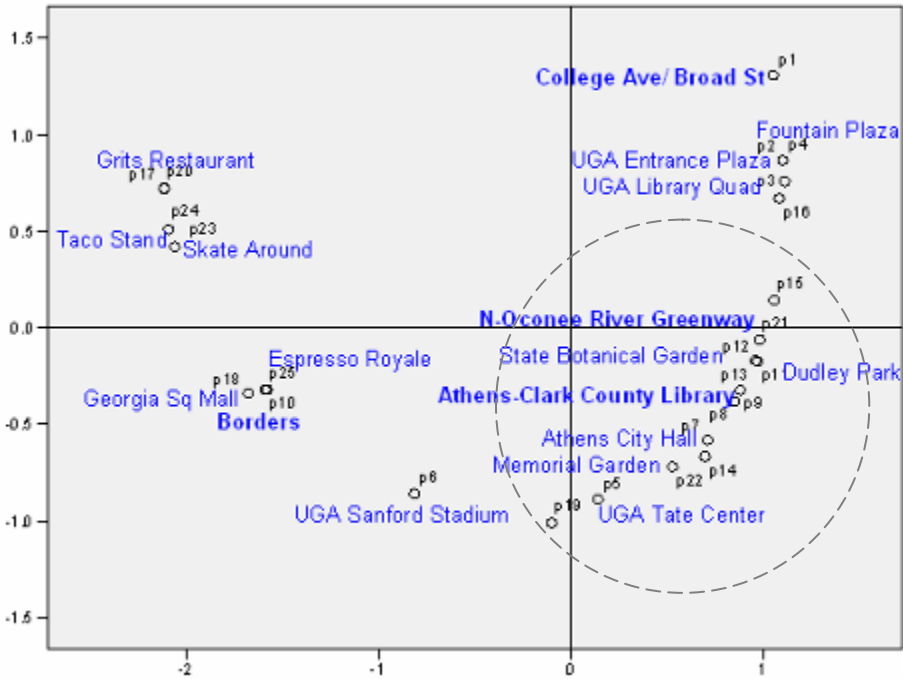
Figure 7-19: MDS, the 25 important places in Athens based on the respondents' perception of publicness (stress = .11523, RSQ = .95309)

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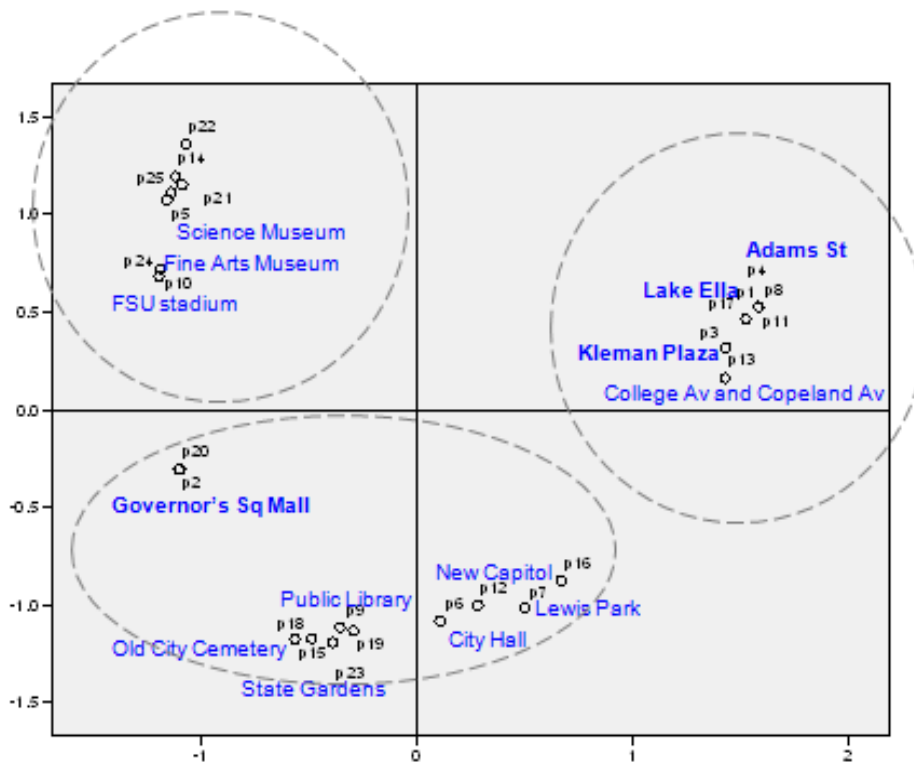
Figure 7-20: MDS, the 25 important places in Tallahassee based on the respondents' perception of publicness (stress = .07878, RSQ = .97290)
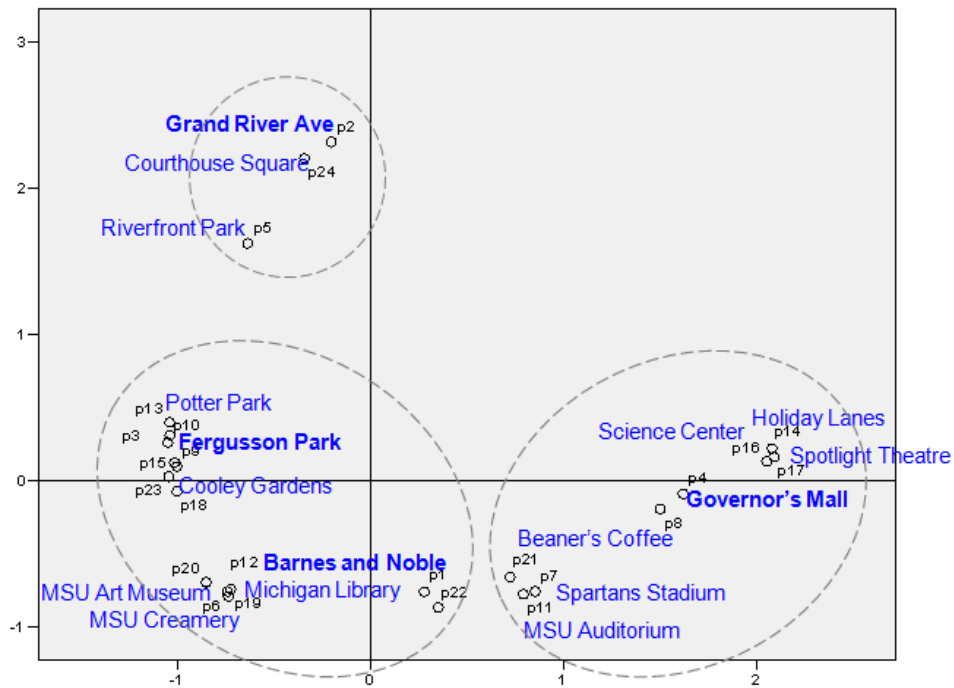
Figure 7-21: MDS, the 25 important places in Lansing based on the respondents' perception of publicness (Stress = .09407, RSQ = .96485)

Considering the scaled natured of the sorting construct (the three degrees of publicness), it is to be expected that a relatively continuous distribution emerges in the MDS plots (Figures 7-18, 7-19, 7-20, and 7-21). From these figures, the most integrated and continuous distribution is found in Ann Arbor and the distribution becomes gradually more clustered (and less continuous) pattern in Lansing., the separation of these three groups (with

The MDS plot for Ann Arbor (Figure 7-18) demonstrates a uniform and continuous distribution of places. This indicates that the Ann Arbor respondents perceived the publicness of places in a continuous consistent manner. In other words, the "highly public" places (Main St, Liberty St, Gallup Park) are not perceived very differently from the "moderately public" places (Bell tower plaza, Nichols Arboretum). Similarly, these "moderately public" places are not perceived as completely different from the "restricted public" places (Michigan Stadium, Hands-on museum). Within this uniform distribution of the settings, however the MDS plot contains a cluster of ten settings at the "highly public" end of the distribution. Closer study of the settings reveals that these settings are cases that are consistently sorted as "highly public" by most of the Ann Arbor residents. This cluster of a large number of "highly public" settings reinforces earlier indication of high perception of publicness in Ann Arbor.

The MDS plot for Athens (Figure 7-19) illustrates uniformity in distribution, though some clustering effects are found. The "highly public" places (College Ave/Broad St, UGA entrance plaza) are somewhat tightly clustered. Similarly, the least public places (Taco Stand, Skate around USA) are closely grouped. These two groups are separated by a large tightly clustered group of ten "moderately public" settings. The perception of

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publicness in Athens, in comparison to Ann Arbor, is weighted more to the middle category of moderate publicness.

In the case of Tallahassee and Lansing (Figure 7-20 and 7-21 respectively), three distinct clusters are apparent in their respective MDS plots. Unlike Ann Arbor and Athens, these two plots indicate clear and strong clustering of settings in three distinct regions. Comparing the plots of Tallahassee and Lansing, the MDS plot for Lansing indicates more separation and distinct clustering of settings compared to that of Tallahassee. The MDS plot of Tallahassee demonstrates a large clustering at the center comparable to that in Athens. The similar clustering pattern indicates predominance of the largely perceived "moderately public" settings. In contrast, four distinct clusters can be seen in the Lansing MDS plot. Lansing presents an extreme case with least number of "highly public" places, distinct from the rest of the distribution.

7.7   Publicness in relation to environmental role

To specifically examine the relationship between environmental role and the nature of publicness, the directed sorting of the 25 settings are further examined, specifically in terms of the environmental role. In earlier analyses, the directed sorting data was analyzed through an MDS plot focusing on the relationship between the 25 places, based on their profile of publicness perceived by all the 32 respondents in each city. In the current analysis (Figures 7-22, 7-23, 7-24, and 7-25) , similar MDS plots, emphasizing the distribution of the 25 places (based on their degrees of publicness), are produced; but instead of a single MDS plot for the overall 32 respondents in a city, three separate MDS plots are generated to analyze the distribution of the 25 places (based on their degrees of publicness) as perceived by the three distinct respondent group differing

in their environmental role: town only, town and university, and university only. The three MDS pots are compared within a city (intra-city comparison) to gauge the difference in perception of publicness of the three respondent groups in the city. The MDS plots of specific respondent groups (for example town only) were also compared across the cities (inter-city comparison).

MDS plots of Ann Arbor (Figure 7-22) demonstrate that the distribution of the 25 places in each of the three plots of the three respondent groups is almost identical. The three MDS plots are identical in the nature of the distribution (all consistently uniform distribution) and the relative position of the places (sample groups of settings at similar positions in each curve). In other words, there is almost no difference in the MDS plots of the town only, town and university, and university only people in Ann Arbor. These three respondent groups, it can be inferred, perceive publicness of significant public settings in a very similar fashion.

Comparing this to the distribution of the three MDS plots in Athens (Figure 7-23), it is evident that the distribution of the 25 places based on the town only people's perception is distinctly different from that based on the town and university and university only people. This is indicated by the different nature of the distribution (less continuous, more dispersed, clustering prominent in town only, highly distorted in university only). This analysis demonstrates that how the town only people perceive the publicness in the 25 public settings in Athens is quite different from how the town and university and the university only people perceive the publicness of the same 25 settings. Variation also exists between the distribution of the places in town and university plot

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and the university only plot. While the town and university plot is more consistent and continuous, the university only plot in Athens is dispersed and the distinctly clustered.

In comparison, the MDS plots for Tallahassee (Figure 7-24) and Lansing 9Figure 7-25) reveal differences among perceived degrees of publicness between different respondent groups. The perception of town and university people forms an interesting aspect of these two towns. In Tallahassee, the distribution of the 25 places based on the town and university respondents' perception of publicness is similar in nature to that of the town only respondents; whereas the perception of publicness of the town and university respondents in Lansing is closer to that of the university only respondents.

Overall, the separate examination of the directed sort MDS plots based on the environmental roles discloses a hidden pattern of relationship. The current MDS analyses underscore that the degrees of publicness can be experienced differently by people with different environmental roles and it the perception of publicness is also affected by the spatial nature of the city.
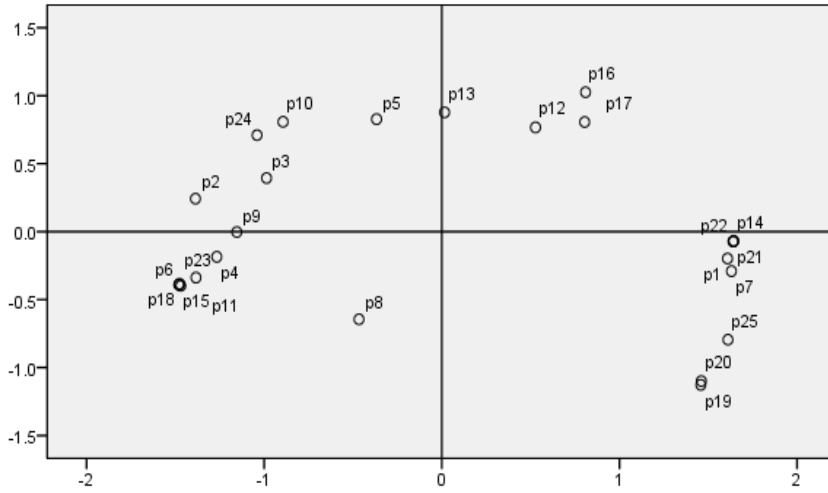
Ann Arbor: (as perceived by 12 town only respondents).
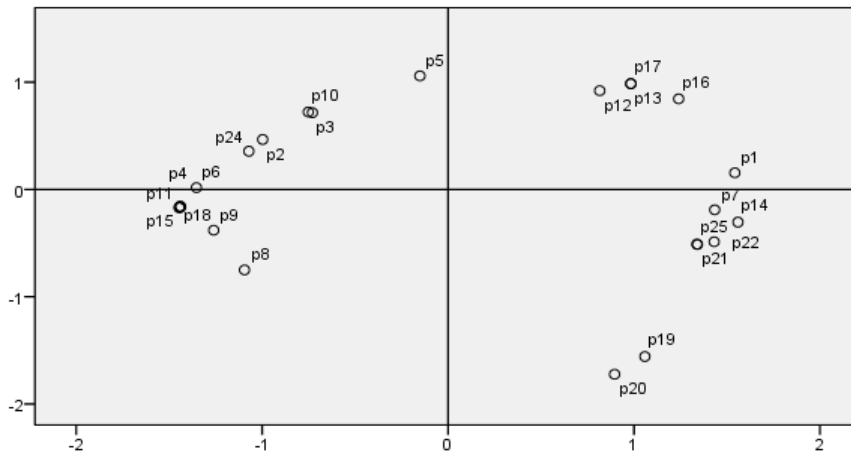
Ann Arbor: (as perceived by 9 town and university respondents).
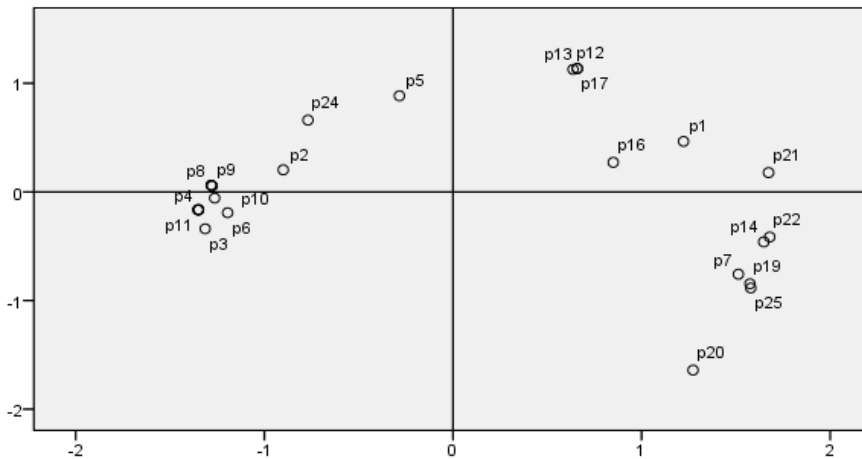
Ann Arbor: (as perceived by 11university only respondents).

Figure 7-22: MDS plot of 25 settings based on respondents' dirceted sorting in Ann Arbor, MI.

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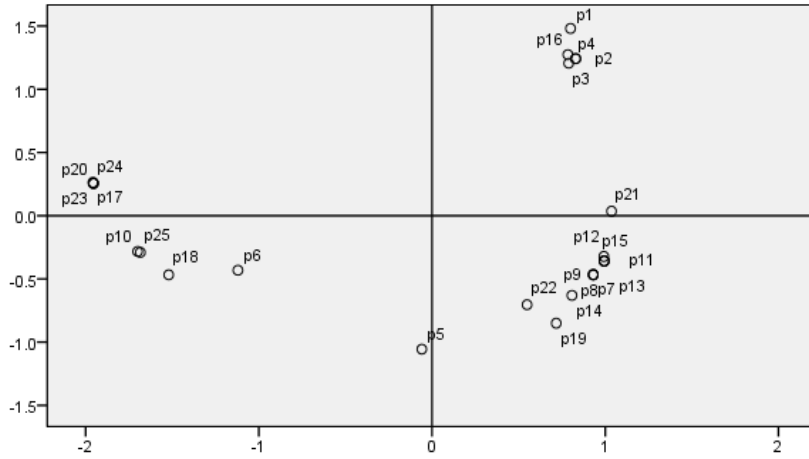
Athens: (as perceived by 12 town only respondents).
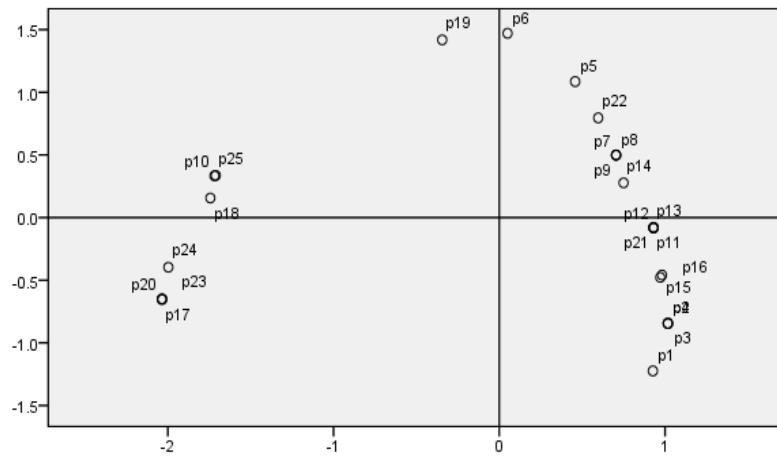
Athens: (as perceived by 9 town and university respondents).
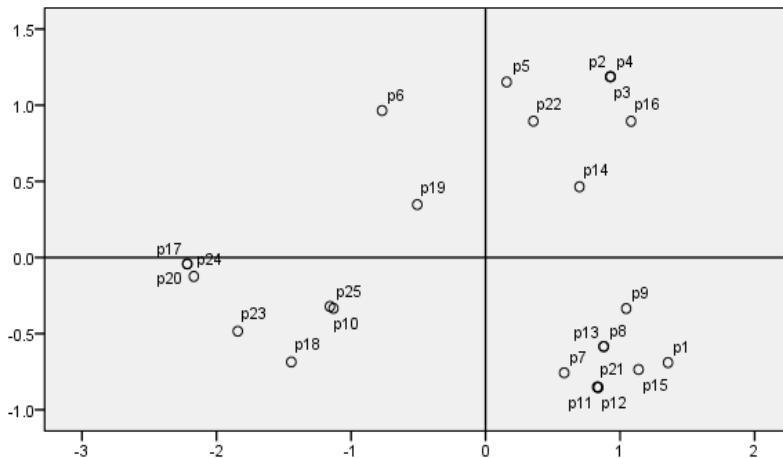
Athens: (as perceived by 11 university only respondents).

Figure 7-23: MDS plot of 25 settings based on respondents' dirceted sorting in Athens, GA.
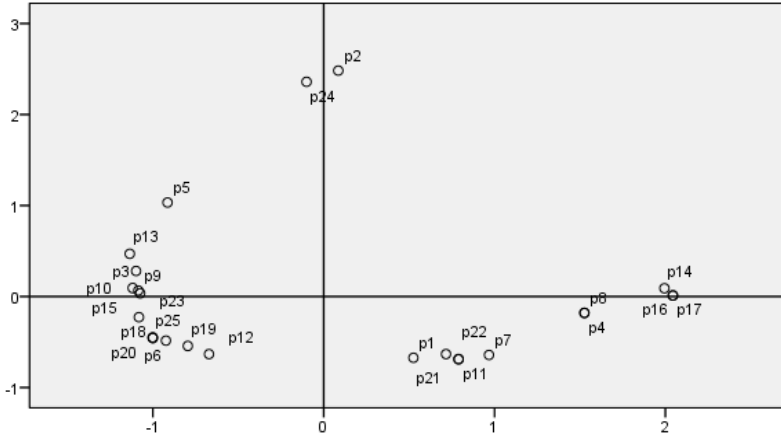
Tallahassee: (as perceived by 13 town only respondents).
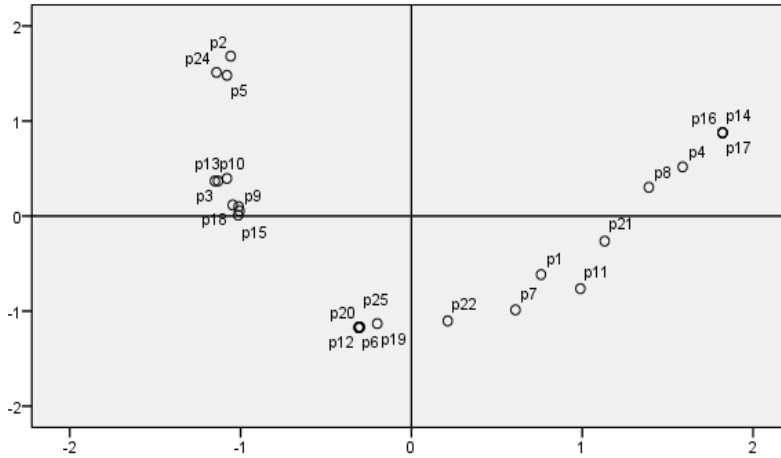
Tallahassee: (as perceived by 9 town and university respondents).
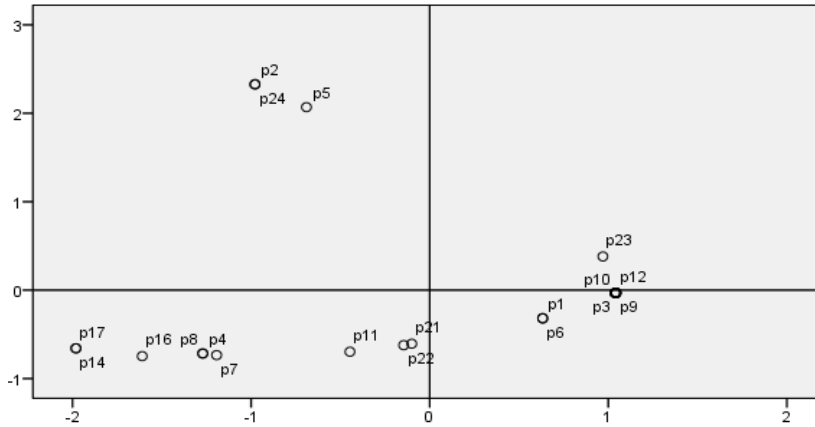
Tallahassee: (as perceived by 10 university only respondents).

Figure 7-24: MDS plot of 25 settings based on respondents' dirceted sorting in Tallahassee, FL.
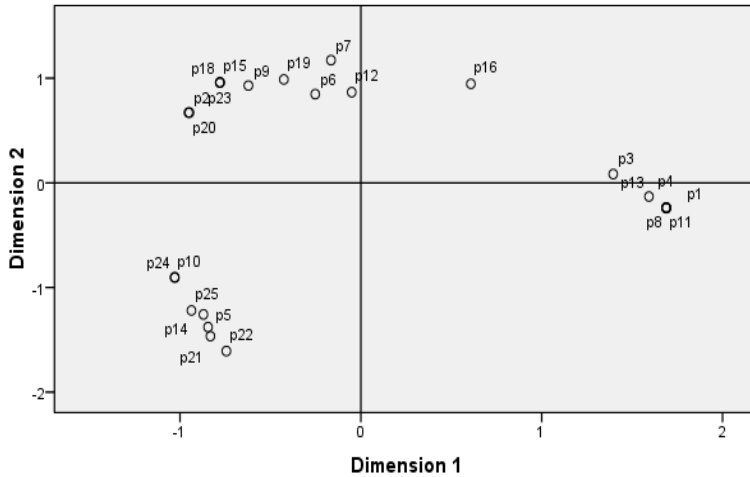
Lansing: (as perceived by 12 town only respondents).
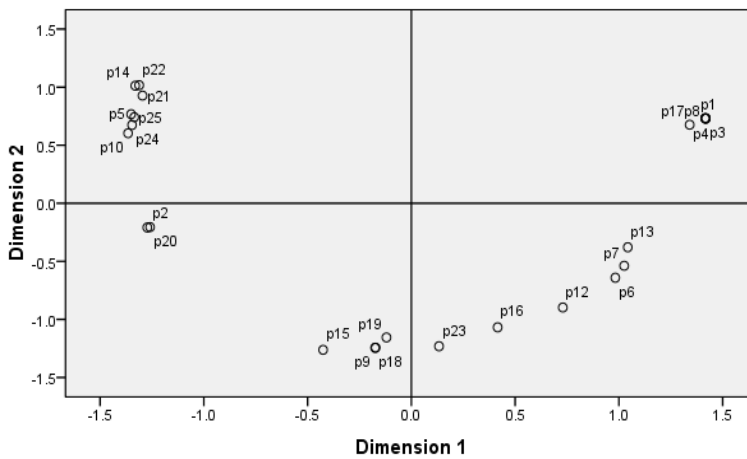
Lansing: (as perceived by 7 town and university respondents).
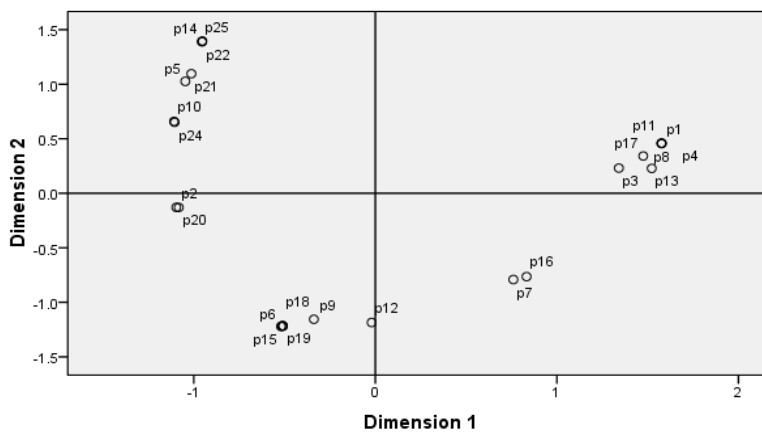
Lansing: (as perceived by 13 university only respondents).

Figure 7-25: MDS plot of 25 settings based on respondents' dirceted sorting in Lansing, MI.

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7.8   Human construction of publicness

The findings from the multiple sorting tasks, interviews, and the MDS analyses highlight the shifting values and meanings of the public realm. The open sort analysis (section 7.3) indicates that there are multiple constructs and experiences of publicness and that these different perceptions of public places are fairly consistent across the four college towns. Analysis of the constructs of public places in relation to the environmental role (section 7.4) reveals how used constructs (sorting criteria) can be affected more or less by environmental role, depending on the nature of campus-town relationship within the cities. In section 7.4, the analysis demonstrates that people do understand and experience different degrees of publicness. The variation in perception of the profile (nature and extent) of publicness depending on the spatial nature of the cities is illustrated in the analysis of directed sort data in terms of environmental role (section 7.5). Finally in sections 7.6 and 7.7, the analysis demonstrates that the degrees of publicness can be experienced differently by people with different environmental roles and it is also affected by the nature of the city.

The analysis presented in this chapter indicates that diverse elements are associated with people's conceptual construct of publicness. Within the post-modern plural framework of publicness (Sandercock, 2003; Amin, 1995), this chapter illustrates that people understand publicness in different ways. Regarding this diverse human understanding, places can be comprehended to have different profiles of publicness. This analysis of the public realm therefore shifts the focus of the public realm from Arcadian principles, historically romantic typologies, and unitary legal framework to human construction and definition of publicness. This human dimension of the public realm

emphasizes opportunities and possibilities associated with an empirically-based on-the-ground research focusing on people and their everyday experience in relation to the public realm.

Chapter 8

EVERYDAY EXPERIENCE OF THE PUBLIC REALM:
Human Appropriation and Control of Publicness

8.1 Everyday experience of the public realm

In Chapter 6, the spatial syntax analysis addressed the first research question of overall spatial configuration of public places within the urban morphology. In Chapter 7, the Multiple Sorting Task examined the second research question regarding constructs of human understanding related to publicness. The third research question, which has often been neglected in defining and understanding public places (Carr, 1992) is critical to the study of public places from the users' perspective. In this chapter the focus of the final research question, naturalistic observation is employed to study human uses of specific public places.

There are many urban design and sociological studies, which while focusing on theoretical interpretations of the public sphere, nevertheless fail to consider the *practical* use of the public places. There are also many environment and behavior studies that evaluate design and practice of the public realm empirically, but ignore the theoretical framework of publicness. The present research posits that a balanced approach is critical to studying the public realm. In this chapter, it is noted that the public realm should be understood in terms of human construction and appropriation of publicness.

The naturalistic observation was intended (1) to explore the various types of people using the sites, (2) to study the distribution of different uses and user groups within the sites, and (3) to understand the nature of publicness constructed by human appropriation in these specific site locations (Table 8.1). Informal pilot observation was used to identify four predominant activities within these sites: Standing, Sitting/ Dining, Sitting/ Working, and Playing/ Recreation. Along with these count measures, detailed

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information was recorded regarding people's age, sex, ethnicity, and type of group (See

Appendices S-V for details of data collected through the naturalistic observation).

		Survey site a	Survey site b	Survey site c	Survey site d
1	Ann Arbor	Main Street	Borders Bookstore	Gallup Park	Briarwood mall
2	Athens	Broad St/ College Av	Borders Bookstore	Heritage Trail	Athens Regional Lib
3	Lansing	Grand River Av strip	Barnes & Noble	Fergusson Park	Governor's mall
4	Tallahassee	Adams Street	Kleman Plaza	Lake Ella	Governor's Square mall

Table 8.1: Naturalistic observations conducted in four survey sites for each of the four case study sites.

Table 8-1 describes four of the 25 specific places selected for detailed naturalistic observation in the case studies. These four places reflect different locations with respect to the urban configuration (downtown and outside) and enclosure type (See Chapter 4, section 4.4.2). Within each site, a certain specific area was selected as a point of observation and recording. Observations were taken twice, once on a weekday (between Monday and Thursday) and once during the weekend (between Friday and Sunday). During each day of observation, four sets of observations were taken. The four observation times were taken considering the changing activities and users throughout the day. The four times of observations were: 10:00 am, 1:00 pm, 3:00 pm, and 6:00 pm. Care was taken to ensure that one particular site was observed at four different times and also that the site was during various days of the week (Table 8.2).

	Weekends		Weekdays				
	Sat	Sun	Mon	Tue	Wed	Thu	Fri
Site A	3:00 PM	6:00 PM	10:00 AM	1:00 PM	3:00 PM	6:00 PM	1:00 PM
Site B	6:00 PM	10:00 AM	1:00 PM	3:00 PM	6:00 PM	10:00 AM	3:00 PM
Site C	10:00 AM	1:00 PM	3:00 PM	6:00 PM	10:00 AM	1:00 PM	6:00 PM
Site D	1:00 PM	3:00 PM	6:00 PM	10:00 AM	1:00 PM	3:00 PM	10:00 AM

Table 8.2: Summary of observation times in all sites in each case study place.

8.2   Observation of four specific sites within the cities

Naturalistic observation is a method of observation (commonly used by psychologists, behavioral scientists and social scientists) which involves observing subjects in their natural habitats. In this research, an important aspect of the naturalistic observation was to observe and record patterns of demographic information such as gender and age of the users. Naturalistic observation studies events as they occur in their natural settings without interfering with the observed behavior (Manoli & Frank, 2007). This section summarizes the preliminary demographic distribution of users and observation data regarding their behavior in all four cities. This chapter also analyzes the functions and everyday experiences of people in the specific public places in the four case studies.

8.2.1 Ann Arbor

Table 8-3 describes the primary demographic profile of users observed in the four specific sites in Ann Arbor: Main Street, Borders Bookstore, Gallup Park, and Briarwood Mall. The first row illustrates the gender of users observed. The four places observed reflect equal distribution of male and female users. One slight exception is the case of Briarwood Mall, where 62% of the users were found to be women, which is considerably higher compared to that in the other three sites in Ann Arbor. The second row describes

the age distribution, which is dominated by young adult (21-35 years) users. At the same time two sites (Gallup Park and Briarwood Mall) demonstrated a higher percentage of children compared to those in Main Street and Borders Bookstore. Gallup Park and Briarwood were also places with relatively more group activities and higher numbers of family users. This could be related to the greater number of children at these two specific sites. In terms of race, as indicated in the third row, the ethnic distribution is dominated by Caucasian users. Gallup Park had the minimum number of African-American users and Briarwood Mall offered the most balanced distribution of race among the four sites. Finally, the group distribution, as seen in the fourth row, demonstrates a consistently balanced pattern of people using the sites both singly and in groups. Gallup Park, a notable exception to this pattern, was used by the most single people. This could be connected to the recreational nature and the designated purpose of the park area.

	Main St (%)	Borders Bookstore (%)	Gallup Park (%)	Briarwood Mall (%)

Gender

male / female

Main St: 53.5, 46.5
Borders Bookstore: 43.8, 56.2
Gallup Park: 44.1, 55.9
Briarwood Mall: 58.0, 42.0

Age

<14 yrs / 14-20 yrs / 21-35 yrs / 36-60 yrs / >60 yrs

Main St: 3.5, 13.2, 11.6, 12.0, 59.7
Borders Bookstore: 3.6, 8.9, 8.9, 22.3, 56.2
Gallup Park: 6.5, 9.7, 28.0, 9.1, 46.8
Briarwood Mall: 6.4, 8.0, 14.9, 11.2, 59.6

Race

white / black / asian / hispanic

Main St: 2.3, 11.6, 10.9, 75.2
Borders Bookstore: 6.2, 12.5, 14.3, 67.0
Gallup Park: 10.8, 21.5, 3.2, 64.5
Briarwood Mall: 9.6, 13.8, 13.3, 53.3

Group

1 person / 2 persons / 3-5 person / > 5 person

Main St: 14.7, 31.8, 34.9, 18.6
Borders Bookstore: 52.7, 32.1, 15.2
Gallup Park: 14.5, 21.5, 48.4, 15.6
Briarwood Mall: 22.3, 37.2, 34.0, 6.4

Table 8.3: Primary demographic profile of users recorded in four specific places in Ann Arbor, MI
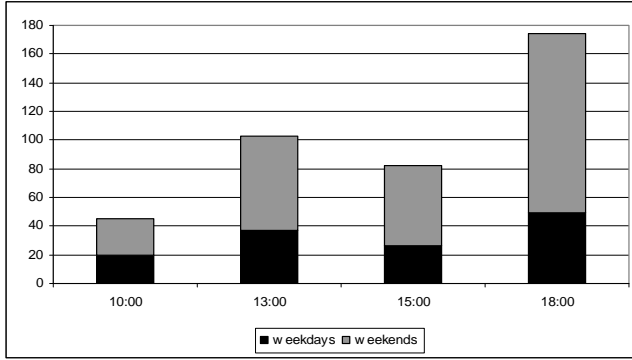
Main Street
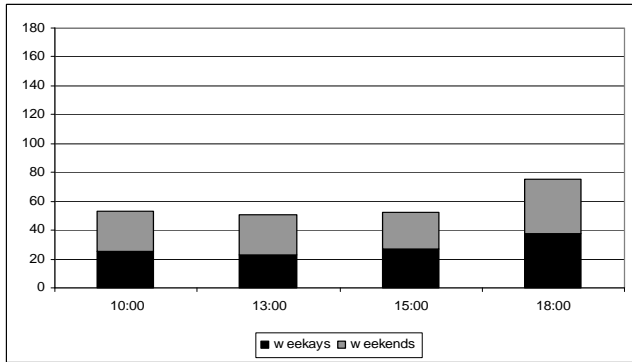
Borders Bookstore
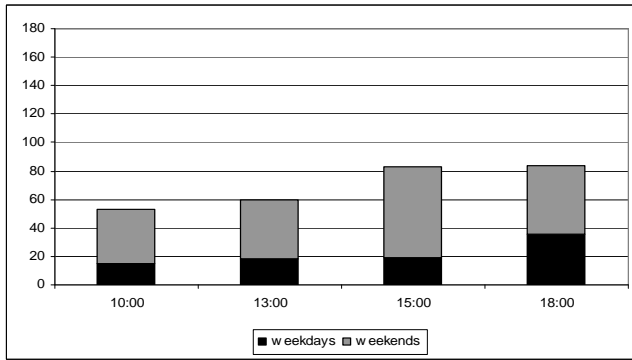
Gallup Park
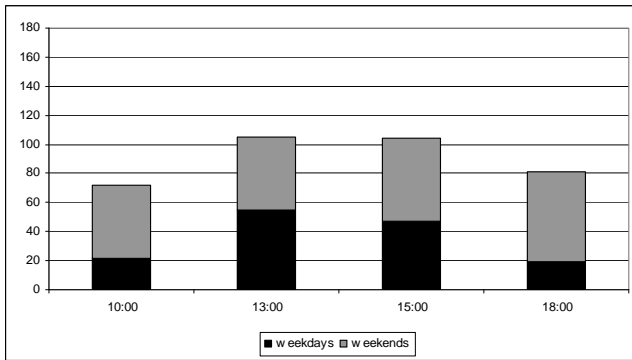
Briarwood Mall

Table 8.4: Comparison of number of users during weekdays and weekend for the four specific sites in Ann Arbor, MI.

Table 8.4 illustrates that the numbers of people using the four specific sites at various points of time (10:00 am, 1:00 pm, 3:00 pm, and 6:00 pm) vary within a particular site as well as among all the four sites. For example, examination of the Main Street site discloses that the number of people using the site change depending on the time of the day and depending on whether it is a weekday or weekend. It is also evident that on weekend evenings the number of people on Main Street is much denser and more active than that at the other three sites. In general, all the sites (except that of the Borders) are more popular on weekends compared to weekdays. Special events, such as football games on Saturdays, produce greater number of people frequenting the eating establishments on Main Street.

Figure 8-1: Borders Bookstore on Liberty St. during the annual Art Fair, Ann Arbor, MI.

8.2.2 Athens

Table 8-5 represents the demographic profile of users observed in the four specific sites in Athens: the intersection of Broad Street and College Avenue, Borders Book store, N Oconee Heritage Trail and Parkway, and Athens-Clarke County Regional Public Library. As indicated in the table, the four places contain an equal distribution of male and female users. The young adults (21-35 years) dominated all the places except the Regional Library. The Regional Library users have a significantly higher number of children and teenagers, and contain a considerably higher number of African-Americans.

When comparing the user ethnic distribution in the places of study, Caucasian users dominate all the sites. Last, the group distribution measures reflect a consistently balanced pattern of people using the sites individually and in groups. Borders and the Regional Library in Athens are notable exceptions to this pattern. In both of these cases, single users dominate the user distribution. The Regional Library was observed to be a popular choice of African-American children and teenagers, who use the library and the attached computer center as their educational hub. Thus the library transforms into an empowering place for this generation of African-American children from an economically weaker section of the city.

	College Av – Broad St	Borders	N Oconee Park	Regional Library
Gender	45.8 / 54.2	52.6 / 47.4	41.4 / 58.6	47.5 / 52.5
Age	4.0 2.8 6.8 16.9 69.5	7.1 7.1 5.8 20.5 59.6	2.9 4.8 12.5 9.6 59.6	8.3 10.0 26.7 45.0 10.0
Race	5.2 0.8 14.5 79.5	11.5 3.2 10.3 75.0	1.9 1.9 96.2	6.7 3.3 40.0 50.0
Group	2.3 21.0 44.4 32.3	10.1 19.3 70.6	22.4 48.3 29.3	1.3 14.9 20.3 63.5

Legends:
- Gender: male, female
- Age: <14 yrs, 14-20 yrs, 21-35 yrs, 36-60 yrs, > 60 yrs
- Race: white, black, asian, hispanic
- Group: 1 person, 2 persons, 3-5 person, > 5 person

Table 8.5: Primary demographic profile of users recorded in four specific places in Athens, GA.
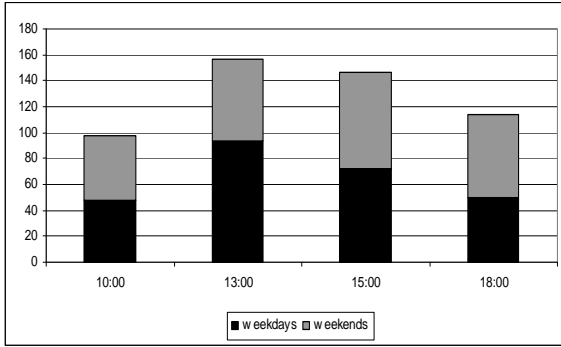
College Avenue / Broad Street
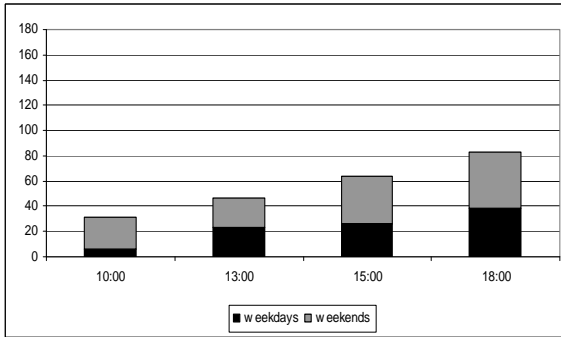
Borders Bookstore
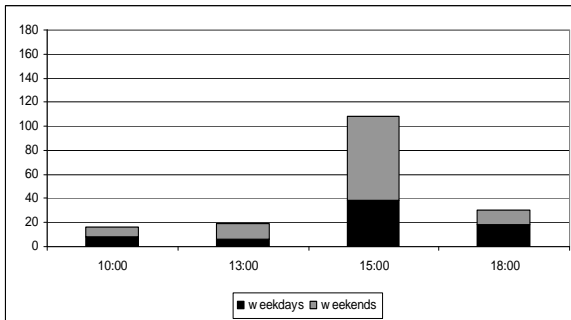
N Oconee Heritage Trail
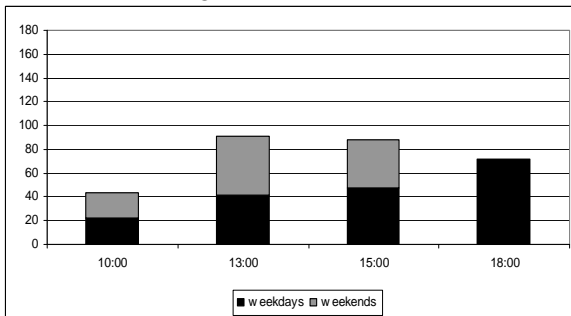
Athens – Clarke County Regional Library[8]

Table 8.6: Comparison of number of users during weekdays and weekend for the four specific sites in Athens, GA.

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[8] The Athens-Clarke County Regional Library is not open during the weekend evenings. So, there was no weekend evening data available for the site.

Table 8.6 illustrates the numbers of people engaged in different activities in four observation sites in Athens. The charts delineate a variation in types and times of activities across the four sites. For example, examination of College Avenue and Broad Street, demonstrates that the number of users walking or sitting changes depending on the time of day.

Strong variation was found at the observation sites between weekdays and weekends. Certain places, such as College Ave/Broad St and the Regional Library, are dominated by people in small and large groups (in two or more) than individuals, both on weekdays and weekends. Contrariwise, Borders Bookstore and the Heritage Trail were more popular for individual users during the weekends. The variation of individuals, couples, and groups changed with time and day during the week. Thus, if individuals were seen on the streets studying or having coffee at College Ave/Broad St more often during morning and afternoon, game-day and weekend evenings produced people in groups at the same site. Proximity of the university and the close interdependent downtown-campus physical relationship (as illustrated in Chapter 5) act as a catalyst encouraging this consistent use of the primary downtown-campus interface, regardless of day or time.

A critical element observed was the dual role of places located near the interface of the downtown and the campus. Sites like College Ave/Broad St, and several university open spaces, at the edge of the campus, were settings for both campus activities and general town events. These intermediate spaces between the downtown and campus harbored overlapping uses and diverse opportunities for town-gown interaction. One specific case in point was the "food for homeless" program, which periodically happens

at the College Square area, on edge of the campus (Figure 8.2). Such social programs are common platforms for both enthusiastic residents and students. These public activities are sheltered in the streets and sidewalks of the downtown, accessible for the large number of student volunteers, and an effective location to reach the homeless. The food for homeless program has become a spontaneous weekly ritual, though it is not formally accepted as a legitimate event by the university or the city administration.

Figure 8-2: Food for Homeless program on College Ave on a typical Sunday, Athens, GA

Such a sense of ritual is evident in many places at the downtown-campus interface. For example, the intersection of College Ave and Broad St is frequented by several distinct groups: students, professors, University of Georgia staff, bikers, homeless, panhandlers, and tourists. People in each group are closely knit, but many are

acquaintances of people from other groups. This spontaneous relationship is made possible by people coming to the same place and experiencing their everyday routines.

8.2.3 Tallahassee

Table 8.7 describes the primary demographic profile of users observed in the four specific sites in Tallahassee: Kleman Plaza, Adams Street, Lake Ella, and Governor's Square Mall. A relative equal distribution of men and women is seen in all four places. Adams Street is an exception as we find 44% of the users to be female, which is relatively fewer compared to that in the other sites for this city. The young adult (21-35 years) users dominate all four places, a trend seen in the other sites studied in Ann Arbor and Athens. This is prominent in the downtown areas (Kleman Plaza and Adams Street) because of the presence of the government center. On the other hand, Lake Ella, a city park outside the downtown area, demonstrates a considerably higher percentage of children compared to that in the other sites because of more group activities and higher number of family users. This could be related to the greater number of children in these two specific sites.

Caucasians are the most observed users at all four sites. Nevertheless, the sites outside downtown (Lake Ella and Governor's Square Mall) are also places with considerably higher number of African-American users. This distribution reflects a distinct difference in activities and use pattern between the downtown and the edge of the city. Downtown, which is also the government center and capital of the state, is used more by legislators and staffs. The demographic distribution of this group might be reflected in the racial profile of users in the downtown spaces. It is also apparent that the sites outside the downtown are more accessible offering everyday activities to wider

sections of the society. Finally, the group distribution indicates a consistently balanced pattern of people using the sites individually and in groups. Kleman Plaza, a notable exception to this pattern, is used by more individuals. Site observations indicate that the plaza is a popular destination during the lunch-time for the downtown workers, many of whom eat alone.
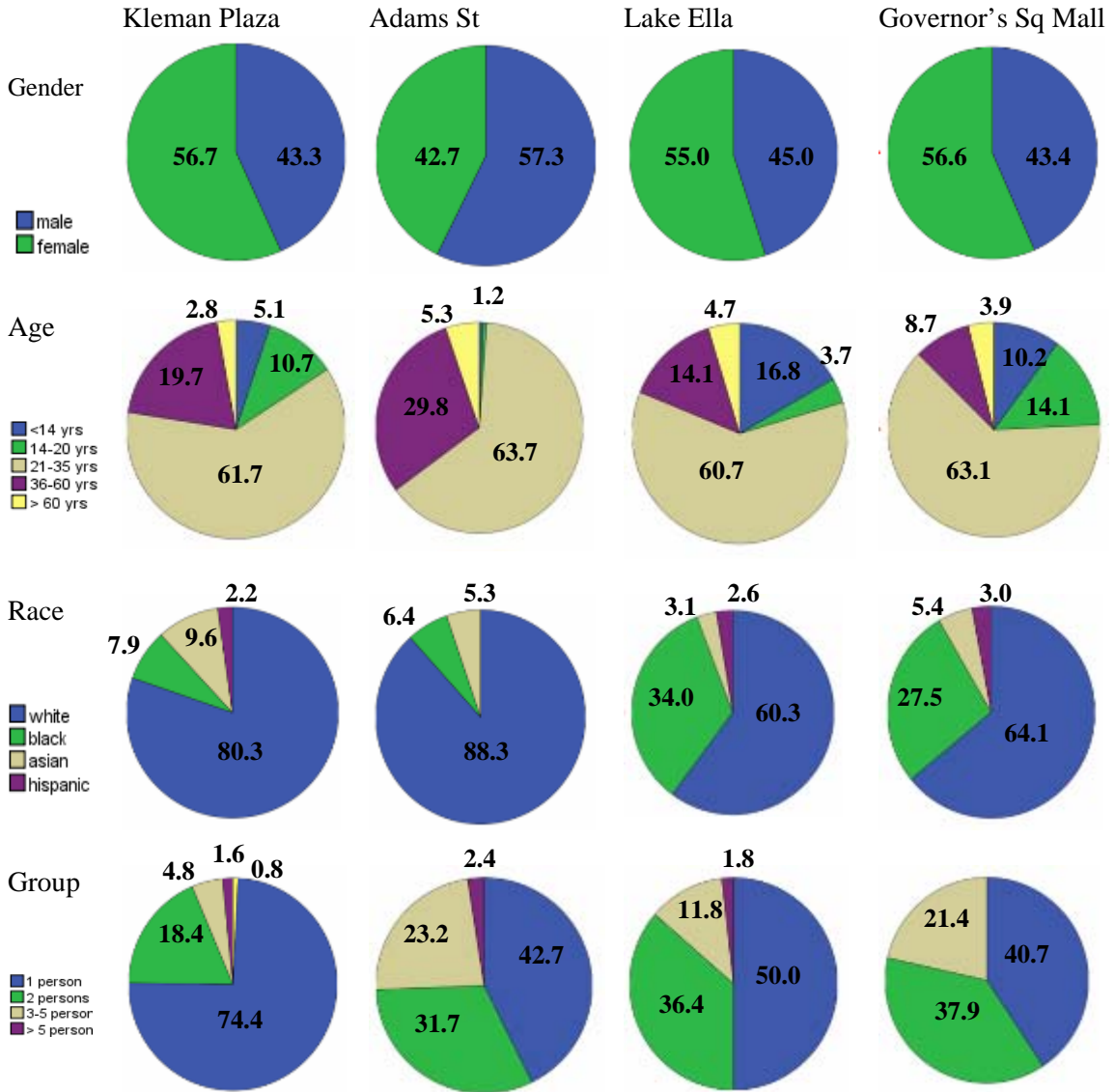
Table 8.7: Primary demographic profile of users recorded in four specific places in Tallahassee, FL.

Table 8-8 demonstrates that the numbers of people using the places at various times vary within a particular site as well as across all the four sites. There is a significant difference in the pattern of usage at the four sites depending on weekdays and weekends. The downtown sites are used on weekdays during office hours because of the proximity of the Government Center. On weeknights and weekends, these sites are more or less empty (See figure 8-3 and 8-4). In contrast, the sites outside downtown demonstrate greater numbers of activities during weekends.

During weekdays, Kleman Plaza and nearby Adams Street were popular destinations for lunch. A unique characteristic of downtown Tallahassee is its three lunch rush hours because of the different timing of the legislature, a service sector, and the professional institutions. While Kleman Plaza was frequented by individuals for a quick lunch from a local street vendor, Adams St was popular for groups of people enjoying an elaborate dining experience (Figure 8-3). At the same time, weekend lunchtime and the afternoons at Kleman Plaza and Adams St were generally vacant because of the lack of a working population in downtown (Figure 8-4). Weekend evenings again attracted crowds to the bars and restaurants, but these predominantly were tourists and visitors.
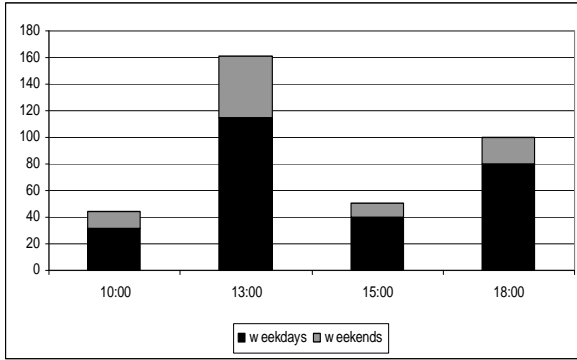
Adams Street
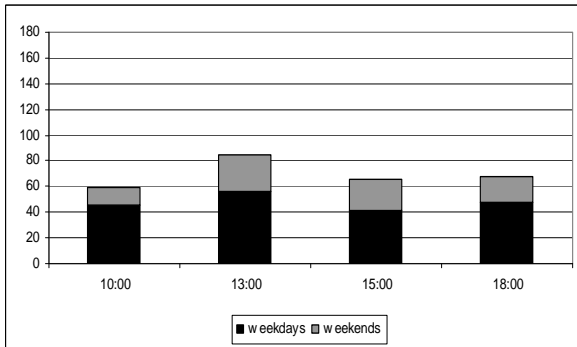
Kleman Plaza
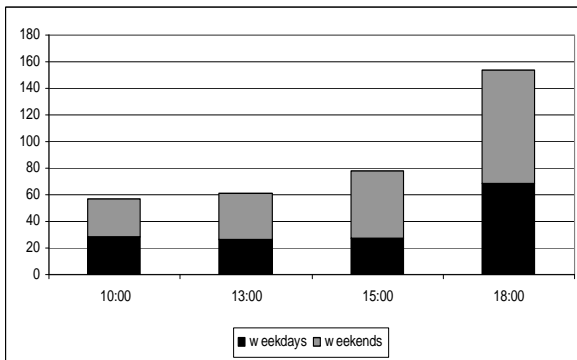
Lake Ella
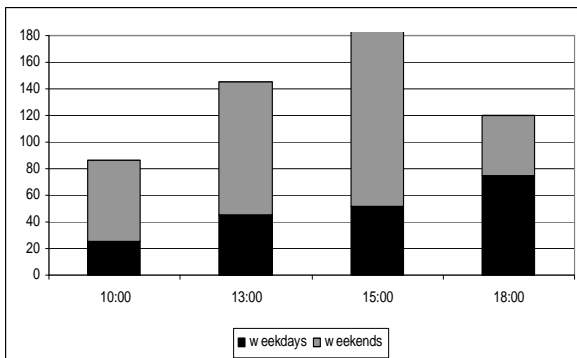
Governor's Square Mall

Table 8.8: Comparison of number of users during weekdays and weekend for the four specific sites in Tallahassee, FL.

Figure 8-3: Busy restaurants and governor's club on Adams Street on a regular weekday

Figure 8-4: Lifeless Adams Street with empty restaurants and club during the weekend.

The observation data in terms of demographic profiles of users and activities in the four places support the conclusion that there are two or three distinct districts within Tallahassee: (1) downtown, the government center, (2) outside downtown, the everyday place, and (3) campus, the student center. These three districts were significantly different in terms of profiles of users, nature of activities, and time and days they are active. The observed patterns illustrate that public places in the three districts are used by different groups of people at different periods of time. The experiences in public places thus vary with location and time. Observations in Tallahassee emphasize the temporal nature of publicness.

8.2.4 Lansing

Table 8.9 illustrates the primary demographic profile of users observed in the four specific sites in Lansing: Grand River Ave, Barnes & Noble Bookstore, Fergusson Park, and Lansing Mall. The four sites indicate a consistent pattern of a slightly higher number of female users. In the four sites, young adults (21-35 years) are the most observed users, similar to the other three cities studied. The only deviation is in Fergusson Park with a higher percentage of children compared to that at Grand River Ave, Barnes & Noble Bookstore, or Lansing Mall. Family oriented and group activities make Fergusson Park conducive and attractive to children.

In consistent with the other cities studied, the ethnic distribution is dominated by Caucasian users. Besides the white users, the sites outside the downtown (Fergusson Park and Lansing Mall) contain users from other ethnic background. Strong variation was found in terms of group types. Certain places, such as Grand River Ave and the Lansing Mall are populated by people individually as well as in small and large groups (in two or

more). Contrarily, Barnes & Noble Bookstore and the Fergusson Park were more popular to individuals and sometimes small groups. The variation of individuals, couples, and groups changed with time and day.
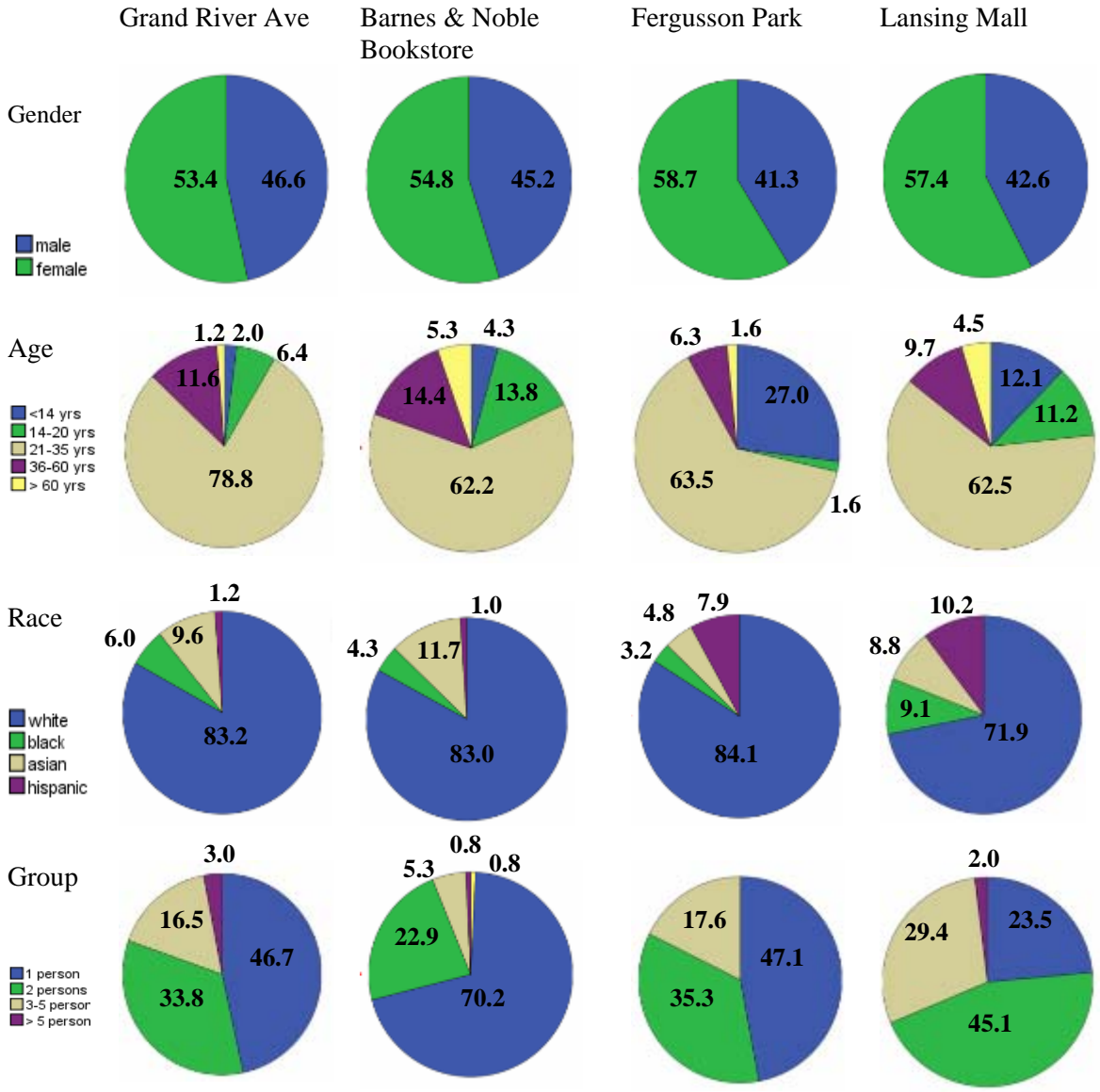
Table 8.9: Primary demographic profile of users recorded in four specific places in Lansing, MI
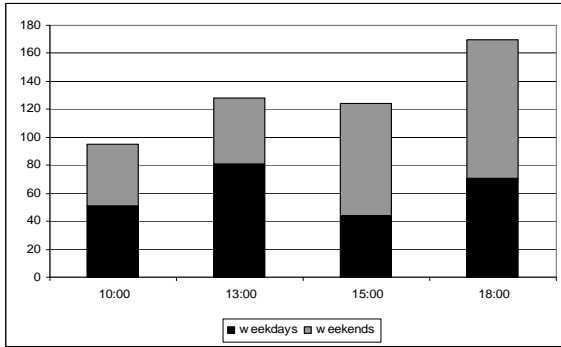
Grand River Ave
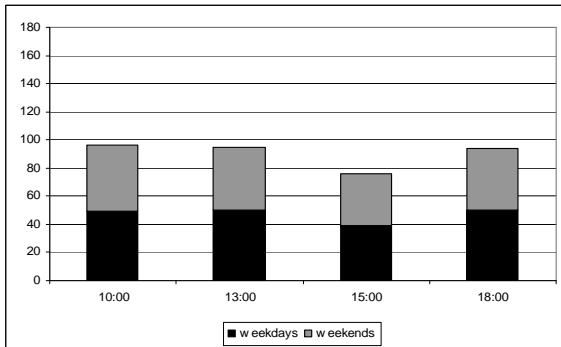
Barnes & Noble
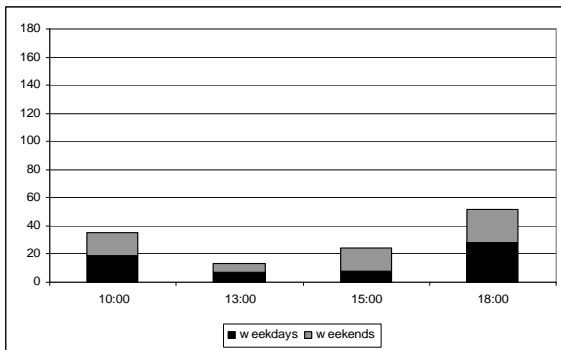
Fergusson Park
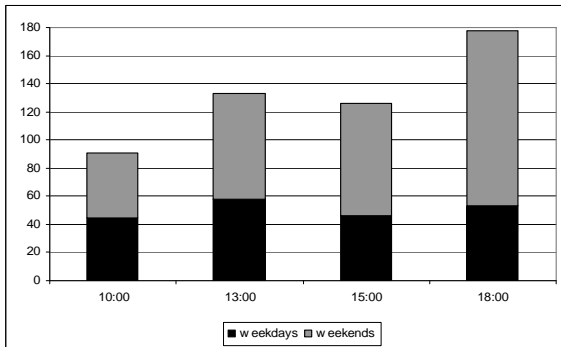
Lansing Mall

Table 8.10: Comparison of number of users during weekdays and weekend for the four specific sites in Lansing, MI.

Table 8.10 illustrates the number of people engaged in different activities at four observation sites in Lansing. The charts depict a variation in types of activities, based on day and time, among the four sites. Overall, the Lansing sites showcase higher activities on weekends compared to that during weekdays (Table 8.10). For example, Grand River Ave demonstrates the number of people changes depending on the time of day. During weekdays, lunchtime attracts a large population from the nearby campus and workplaces, whereas the street shops and restaurants are more populated during weekend evenings.

A variation in types of activities depending on time and day was observed. Certain activities, such as walking and standing, were observed consistently across all four sites. On the other hand, entertainment activities like running and playing are predominantly found in the Riverfront Park and some at Grand River Av. Similarly, Barnes & Noble Bookstore was primarily used for work (i.e. reading and studying), compared to the other three sites. Individuals were more often seen on the streets studying or having coffee during morning and afternoon, game-day while weekend evenings bought out people in groups engaged in more relaxing and entertainment activities to the same sites.

Closer observation at the interface of the campus with East Lansing downtown revealed that the campus buildings and spaces have no direct access from the downtown strip. There is a designed green edge that separates the campus from the commercial strip of Grand River Ave. Most of the buildings face away from the strip and toward the campus. In spite of many designed impediments, the business strip is still a popular spot for the students. The students use the shops and eating establishments on the strip regularly, constructing and appropriating the level of publicness on the strip.

8.3 Human appropriation and control of publicness

Figures 8-5 and 8-6 illustrate that the numbers of people using the sites at various points of time vary within a particular site as well as across all the four sites. For example, if we consider Main Street (Ann Arbor), we find that the number of people walking or sitting varies depending on the time of day as well as through day of the week. On weekend evenings, the percentage of people walking or sitting on Main Street is much denser than that in the other three sites.

A variation in the percentage of people engaged in certain activities is accompanied by a variation in the types of activities themselves. For example, during weekdays people are found sitting and working on Main Street in the morning and afternoon hours whereas there was no working activity on a weekend evening. In the same vein, at a particular point of time, the types of activities differ from place to place.

Strong variation was found in terms of group types in which people were found at the observation sites. Certain places such as Main Street and malls were dominated by people in groups versus individuals. On the contrary, bookstores were more popular for individuals. Interestingly, the variation of individuals, couples, and groups also varied with time and day. Evenings of a game day brought large groups with mixed ages and ethnicity to Main Street which was otherwise dominated by couples and small groups.

Variation in group sizes and associated activities prompt one to think about the dynamics of individual publicness and group publicness. It is possible to simultaneously hold a view of publicness that is both individually oriented (around personal tasks, food, and shopping) and at the same time publicly oriented (around interaction and group activities).

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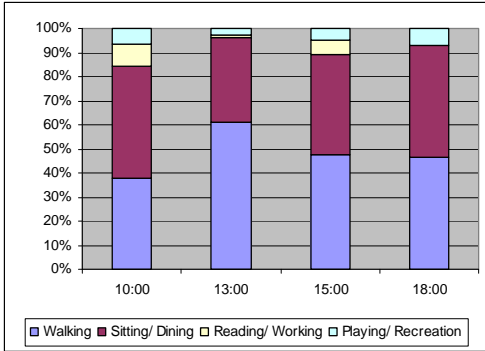
Ann Arbor a - Main Street
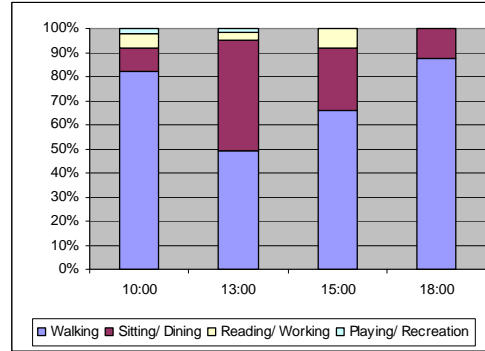
Athens a - College Ave/ Broad St
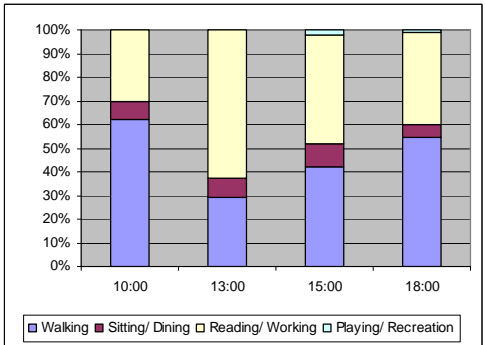
Ann Arbor b - Borders Bookstore
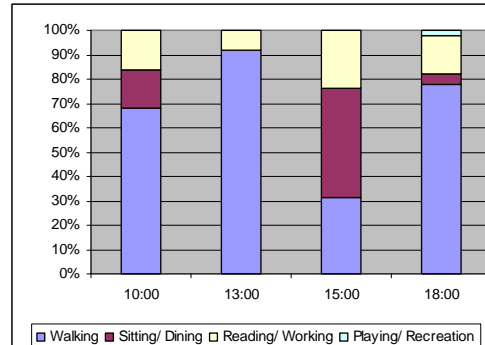
Athens b - Borders Bookstore
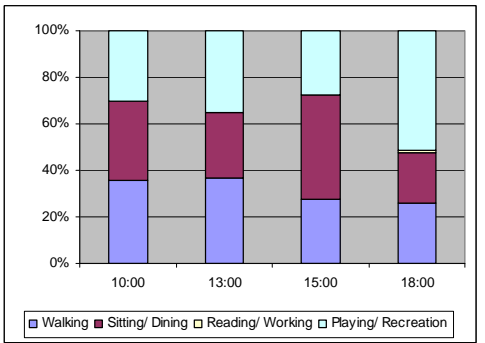
Ann Arbor c - Gallup Park
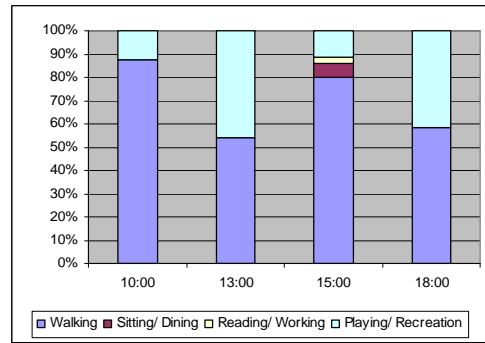
Athens c - N Oconee Greenway
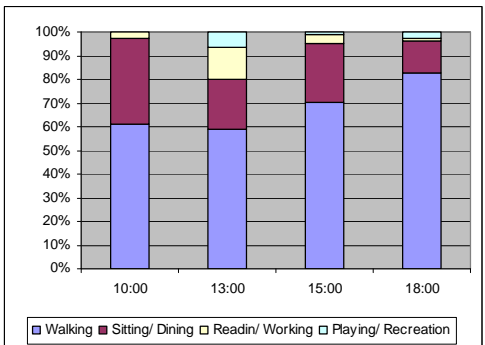
Ann Arbor d - Briarwood Mall
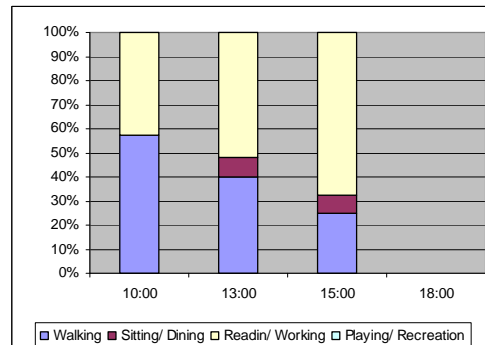
Athens d - Regional Library

Figure 8-5: Summary chart of percentage of various activities and predominant group behavior in four exemplar places in Ann Arbor, MI and Athens, GA.
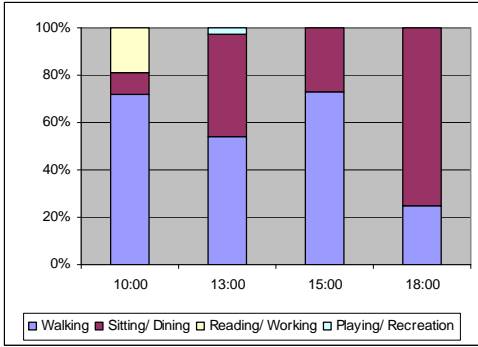
Tallahassee a – Adams Street
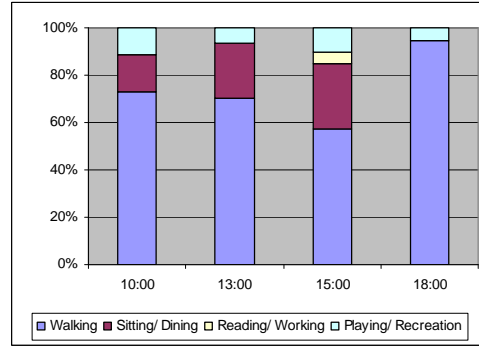
Lansing a – Grand River Ave
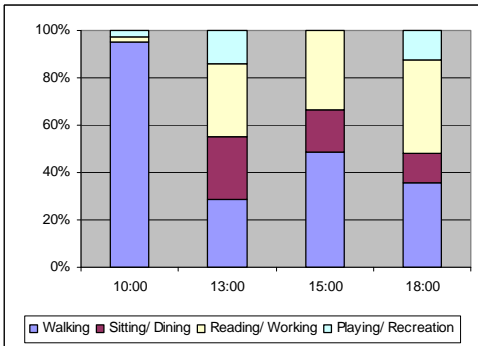
Tallahassee b – Kleman Plaza
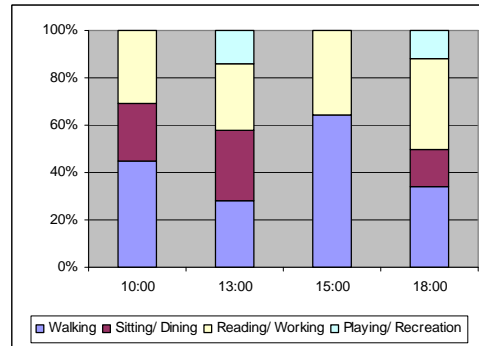
Lansing b – Barnes & Noble Bookstore
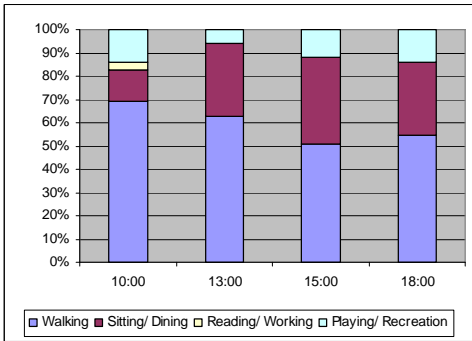
Tallahassee c – Lake Ella
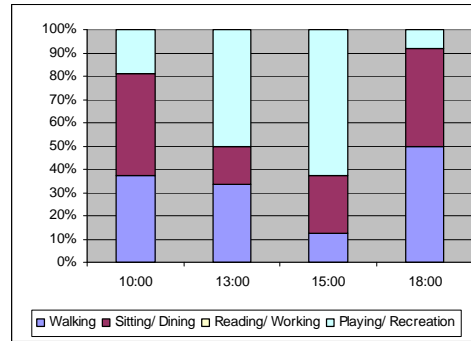
Lansing c – Fergusson Park
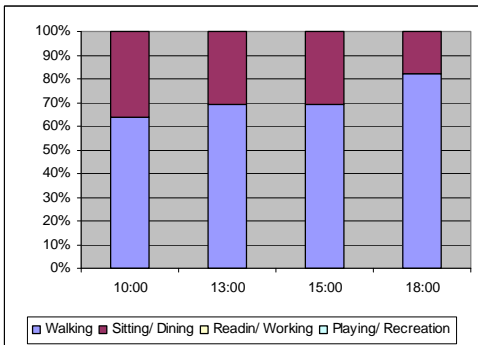
Tallahassee d – Governor's Sq Mall
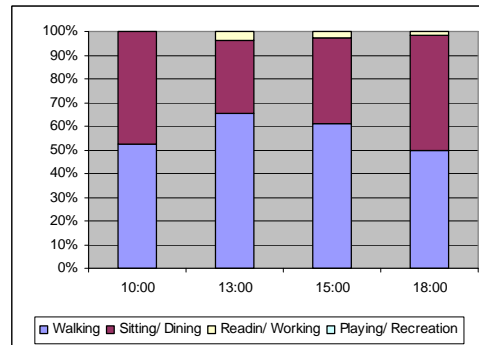
Lansing d – Lansing Mall

Figure 8-6: Summary chart of percentage of various activities and predominant group behavior in four exemplar places in Tallahassee, FL and Lansing, MI.

Daily activities and temporary special activities were observed in several locations. For example, shopping for books, having coffee, working, and reading are common daily activities in bookstores. Sometimes however for a short period of time, it becomes the site for a special activity such as an author's book. Such special activities generate more movement and attract a wider range of human activities.

The presence of everyday activities and special functions in places demonstrate the concept of temporary publicness. Informal talks, visiting strangers, smiles, and nods, all provide multiple opportunities of spontaneous interaction. There is also a sense of ritual in public places. Many people know one another by virtue of coming to the same place and participating in routine daily activities. A sense of belonging, comfort and safety is created through such activities (Low, 2004).

Activities in privately owned "third places" (Oldenburg, 2000) such as bookstores, cafes, and malls reflect limited publicness. They are public for certain types of activities and for certain group of people. The influence of a university was evident, especially in view of the activities and the presence of people in the downtown sites of more integrated cities such as Ann Arbor and Athens. The presence of a powerful force such as a university is critical to harboring diverse people, promoting multiple group activities, providing opportunities of interaction and thereby constructing certain physical organizations in these places.

Naturalistic observations disclose a fluid nature of activities in the popular places. Each site illustrates a rich heterogeneity of activities and human behavior. The prominence of these settings develops from their inherent capacity to be adaptive to the

changing people and function. Thus, certain places become public for certain groups of people, for specific periods of time, and for certain activities.

The argument for the public realm as a temporary phenomenon is reinforced by the continual human appropriation. What defines the public realm is a limit of publicness; what constructs publicness is the human appropriation of that limit. The essence of the public realm is constituted by this dialectic process of interaction. The boundaries of publicness are constantly interpreted and restructured through the forces of formal and informal control of individuals, public institutions, and private establishments. Realization of the public realm is not in its finite determination. Instead, it is a continuing conflict of what it could be, what opportunities it could offer, and what forms it could take.

Chapter 9

CONSTRUCTION AND APPROPRIATION OF PUBLICNESS:
Analysis and Discussion

9.1   Interrelationships among the different dimensions of publicness

9.2   Spatial configuration of publicness

9.3   Environmental role and spatial relationship of city and university
9.3.1   Human constructs of publicness in relation to environmental role

9.4   Identifying the elements and issues that contribute to the perception of publicness

9.5   Philosophy and practice of the public realm
9.5.1   The public realm is a spatial formation
9.5.2   The public realm is a human construction
9.5.3   The public realm is a temporary phenomenon

9.1   Interrelationships among the different dimensions of publicness

The study of publicness is centered on the three elements of the place model—conceptions, activities, and physical attributes (Figure 9-1). These three elements also served as the basis for the research design employed in the four case studies: Ann Arbor, MI; Athens, GA; Tallahassee, FL; and Lansing, MI. Each city narrates a story of town-gown relationship in relation to the experience, actions, and expressions of publicness. In chapters 5, 6, 7, and 8, the findings of the four tactical strategies (morphological study, space syntax, multiple sorting task, and observation) employed in each city are reported. The findings from all the four case studies are analyzed in this Chapter 9. The analyses are discussed with three specific purposes: (1) comparing the findings from the four case studies, (2) identifying common themes and patterns in the four cities, and (3) analyzing the different types of publicness based on the Place Model; conceptions (evaluated through sorting tasks), activities (measured through observations), and physical attributes (syntax analysis).
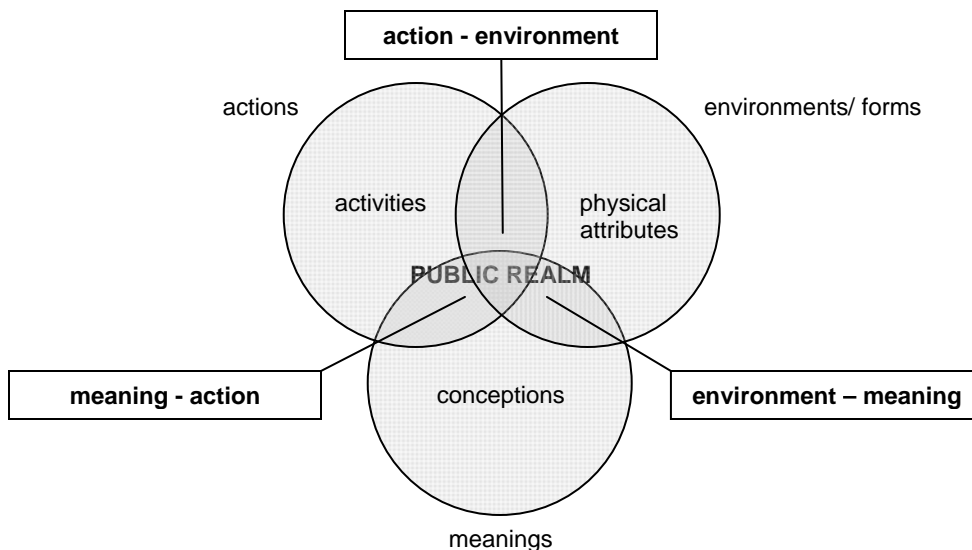
Figure 9-1: The place model, highlighting the interrelationships among the three constituents. A visual metaphor for understanding the nature of the public realm

9.2 Spatial configuration of publicness

How perceptions of publicness in a specific environment correspond to the spatial configuration of a place is a critical research question (Hillier, 1993; Penn, 2001). In this section, the relationship between the physical environment and its perception is examined through a comparative analysis. Conclusions are derived from the comparison of the directed sorting outcomes of 25 settings (meanings of publicness) and the syntactic properties of the same 25 settings (environmental context) in the four case studies.

Data organization

As described in Chapter 4 (Research Design), the 25 specific settings were selected in each city for use in the space syntax analysis and multiple sorting tasks, and interviews. These 25 settings in each city form the sample for the correlation analysis

Tables 9.1, 9.2, 9.3, and 9.4 present the data as two sets of measures. First set of measures are addressed by the perception variables. The 25 settings in each city are grouped based on the degree of publicness: highly public (P1), moderately public (P2), and restricted public (P3). The second set of measures focuses on the syntactic variables. In this regard, the 25 settings are also grouped based on their syntactic properties: connectivity (Conn), global integration (Int-Rn), and local integration (Int-R3). These two sets of variables for all the 25 settings in the four cities are listed in Appendices E, F, G, and H.

Perception variables

The perception of publicness for the selected public places are characterized by directed sorting by 32 respondents per city. These places were sorted in terms of the three categories of publicness (see Chapter 7, section 7.6). These three

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categories form the three individual variables (P1, P2, and P3). These three individual

categorical variables are also combined to develop a mean publicness variable for each

setting in a city. The mean perception variable (*Pmean*[9]) was calculated from the

transposed values of the individual publicness measures:

$$Pmean = \frac{3*P1 + 2*P2 + P3}{3}$$

Syntax variables

The location of the selected public settings is defined by one or more streets they

are situated on. These streets are represented by the respective axial line(s) and with the

corresponding syntactic measures of the axial line(s) (see Chapter 6, section 6.2).

Specific syntactic measures considered for this analysis are (1) connectivity (number of

axial lines connections), (2) global integration (overall accessibility), and (3) local

integration (accessibility immediately around the site).

The intended goal of the comparative analysis is to find any relationship between

the perceived natures of publicness (measured from the directed sorting) of a place with

the corresponding syntactic properties of that place (measured from the connectivity and

integration values). From the table of each city (Tables 9.1, 9.2, 9.3, and 9.4), it is evident

that the syntax measures in the four selected settings are considerably higher than the

average syntax measures in the respective cities. The findings also validate the outcomes

of the space syntax study (in Chapter 6, section 6.4, p.103) that at least 80% of the 25

public settings in each city are situated within or in the vicinity of the integration core[10].

	Site	Public	Axial#	Syntactic properties

[9]P1, P2, and P3 are three categorical variables. The Pmean is considered as a continuous variable derived from the three categorical variables.

[10] Integration core is constituted by 10% most integrated lines of the urban system. This indicates the most highly integrated and accessible area of a city. For details, see Chapter 4 (4.6.2, p.64) and Chapter 6 (6.4, p.108)

		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
2	Main Street	32	0	0	116	.213	14.000	1.297	3.401
3	Gallup Park	32	0	0	940/941	.115	4.000	.805	1.771
22	Briarwood Mall	1	14	17	180/227	.124	15.500	1.255	3.350
23	Borders Head Quarter	0	19	13	78	.125	14.000	1.262	3.434
	City average	**14.5**	**12.0**	**5.5**			**2.912**	**.832**	**1.482**

Table 9.1: Nature of publicness and the syntactic properties of the 25 sites in Ann Arbor.

	Site	Public			Axial#	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	College Av. and Broad St.	32	0	0	2284/2306	.288	14.500	.745	3.022
7	N. Oconee Greenway - Trail	19	13	0	2308	.154	6.000	.717	2.571
11	Clarke County Regional Lib	15	17	0	1433	.506	15.000	.767	3.197
18	Borders - Alps Road	1	11	20	14/733	.345	7.500	.685	2.613
	City average	**10.8**	**13.1**	**8.1**			**2.810**	**.498**	**1.387**

Table 9.2: Nature of publicness and the syntactic properties of the 25 sites in Athens.

	Site	Public			Axial	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	Lake Ella	32	0	0	6963	0.098	5.000	1.041	3.113
2	Adams Street	32	0	0	5254	0.021	2.000	0.713	1.666
6	Kleman Plaza	27	5	0	5357/5360	0.007	2.000	0.823	0.617
17	Governor's Square Mall	0	18	14	4460/4461	0.013	1.500	0.670	0.854
	City average	**10.7**	**13.2**	**8.1**			**2.745**	**.687**	**1.406**

Table 9.3: Nature of publicness and the syntactic properties of the 25 sites in Tallahassee.

	Site	Public			Axial	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	Grand River Av. strip	32	0	0	406	.658	55.000	2.352	4.461
5	Fergusson Park	10	22	0	1704	.207	12.000	1.711	2.993
20	Barnes & Noble - Grand River	0	20	12	406	.658	55.000	2.352	4.461
24	Lansing Mall	0	7	25	0	.704	53.000	2.603	4.633
	City average	**6.0**	**17.1**	**8.8**			**3.863**	**1.410**	**2.065**

Table 9.4: Nature of publicness and the syntactic properties of the 25 sites in Lansing.

As a part of the analysis, the correlational relationships were examined between the perceived publicness measures (P1, P2, and P3) and the syntactic measures (connectivity, global integration, and local integration) in two stages.

In the first stage, the syntactic variables were correlated with a mean value of perceived publicness (*Pmean*). As explained above, the *Pmean* is calculated from transposed values of the individual publicness variable. However, the analysis between the syntactic variables and the mean publicness variable and did not suggest any significant correlational relationship.

In the second stage, the syntactic variables were correlated with each of the three individual publicness measures (P1, P2, and P3). Within these independent analyses, strong correlations were observed for Ann Arbor, MI. For the other three cities, findings from the analyses did not suggest any significant correlation. Tables 9.6 and 9.7 illustrate the descriptive statistics of the variables and their correlation respectively for Ann Arbor, MI.

	Mean	Std. Deviation	n
P1	14.48	12.943	25
P2	12.04	8.984	25
P3	5.48	7.938	25
Connectivity (conn)	2.91200	6.932292	25
Global integration (Int-Rn)	1.23216	.111505	25
Local integration (Int-R3)	3.27476	.607818	25

a. city = ann arbor

Table 9.5: Descriptive statistics of the perception measures (P1, P2, and P3) and the syntactic measures (connectivity, global integration, and local integration) in Ann Arbor, MI.

	Connectivity (Conn)			Global Integration (Int-Rn)			Local Integration (Int-R3)		
	Pearson Correlation	p-value	N	Pearson Correlation	p-value	N	Pearson Correlation	p-value	N
P1	-.317	.123	25	-.273	.187	25	-.425*	.034	25
P2	.413*	.040	25	.381	.060	25	.465*	.019	25
P3	.049	.815	25	.014	.949	25	.168	.423	25

*. Correlation is significant at the 0.05 level (2-tailed).

Table 9.6: Correlation between the perception measures (P2) and the syntactic measures (connectivity, global integration, and local integration) in Ann Arbor, MI.

Table 9.6 demonstrates the correlation between the syntactic variables and the perception variables in Ann Arbor. With respect to "moderately public" settings (P2), strong correlations were noted with connectivity (.413, .040) and local integration (.465, .019) in Ann Arbor. The correlation between the "moderately public" perception and global integration was not statistically significant (p-value<.05). Nevertheless the analysis suggests a tendency for the "moderately public" perception of a setting being related to its global integration value (.381, .060).

In Ann Arbor, the relationship of the syntactic properties of a place is found to be consistent with places perceived as moderately public (P2). The relationship of the syntactic properties is not found with highly public (P1) and restricted public places (P3). Findings of the directed sorting in Chapter 7 indicated that the respondents were very consistent and similar in the perception of the highly public places (predominantly streets and parks) and the restricted public places (predominantly restaurants and entertainment places) in all the cities. Differences in perception were evident for the moderately public places. It can be argued that people classified the two extremes of publicness based on certain factors such as presence of open space and ownership. On the contrary, these factors have less or no impact when people considered the moderately public places (P2),

whose nature and degree of publicness can be debated. When considering such difficult places to classify, the spatial properties may play a stronger role.

9.3   Environmental role and spatial relationship of the city and the university

Canter's "purposive" model of place postulates that in any environment, a person assumes a specific role based on a specific purpose (Canter, 1977). From this definition of the "environmental role," people's proximity to specific environments in a city (or the environmental propinquity) corresponds to their conceptual constructs of the public realm. In the context of college towns, association with the university and the town shapes people's understanding and experiences of publicness (Lyndon, 2005). Based on this premise of the environmental role in college towns, three respondent groups are identified in each case study, (1) town only, (2) university only, and (3) town and university. In this section, two relational analyses are presented. First, the respondents' conceptual constructs based on their environmental role in each city are compared to the campus-town spatial configuration. Second, the perceived degree of publicness in places is compared to the campus-town spatial configuration.

9.3.1 Human constructs of publicness in relation to environmental role

A large part of urban life is dependent on the perceptual-spatial link in an urban system (Hillier, 1993; Penn, 2001). An important and recurrent theme in environment behavior research has been the investigation of human perception in relation to urban morphology. The analysis illustrated in Figure 9-2 highlights the perceptual-spatial dimension of publicness. This analysis examines the environmental propinquity of the three different respondent groups in the four cities in relation to the spatial and morphological interaction of the downtown and the university. More specifically, for

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each of the case studies, two diagrams are compared: (1) a map of each city illustrating

the downtown-university relationship and (2) an MDS plot of open sort data indicating

the relationship among respondents based on their sorting criteria use. The underlying

assumption for the comparison is that the MDS plots represent the environmental roles

and propinquity depending on the respondents' varying association with the city, the

university, or both. The city-university relationship is reflected in the physical

configuration of the downtown with respect to the university campus. The analytical

diagrams (Figure 9-2) reveal an insightful relationship between the spatial configuration

and the perceptual construct of people.

The comparative diagrams illustrate that the pattern of downtown-campus

relationship is similar to the pattern of relationships among the respondent groups in each

city. In Ann Arbor, the downtown-campus relationship is close as a result of an

interspersing campus across the city. The integrated spatial relationship is reflected in the

uniformly distributed pattern of Ann Arbor respondents. The MDS plot indicates that

there is not much difference in perception of places among the three respondent groups:

town only, town and university, and university only. It can be argued that Ann Arbor's

spatial configuration influences the perceptual pattern of the respondents in that city.

Examination of the Athens MDS plot reveals a similar relationship pattern among

its respondent groups. The respondents are distributed uniformly across the space

showing no major difference in their perception. The difference between Ann Arbor and

Athens is in the nature of the relationship. While Ann Arbor possesses a campus that is

interspersed with the city, Athens has the downtown and campus integrated with an

interfacing edge. The spatial configuration of interfacing campus and downtown in

Athens is reflected on the relationship pattern among its respondents. The "town and university" respondents are clustered at the interface of the 'town only" and the "university only" respondents.

In both Tallahassee and Lansing, the downtown is spatially separated from the university campus. In these two cities, the disintegrated spatial configuration of the downtown and the campus is reflected in the MDS plots. The three respondent groups form distinctly recognized clusters away from one another. Compared to Tallahassee, the clusters in Lansing are farther apart and more prominent, depicting the larger distance between the downtown and the campus.

This spatial-perceptual analysis established some basis for understanding the relationship between a city's morphological configuration and people's perceptual constructs. Further correlation studies are required to establish a measurable relationship between the spatial syntax and the environmental roles of an urban environment in order to understand the influence of environmental propinquity in cities. Further studies can also be conducted to generalize the spatial-perceptual connection, in the context of other types of cities, where association with various institutions and environments can be investigated.

(3a-1) Ann Arbor, MI
(3a-2) Integration map

(3b-1) Athens, GA
(3b-2) Integration map

(3c-1) Tallahassee, FL
(3c-2) Integration map

(3d-1) Lansing – East Lansing, MI
(3d-2) Integration map
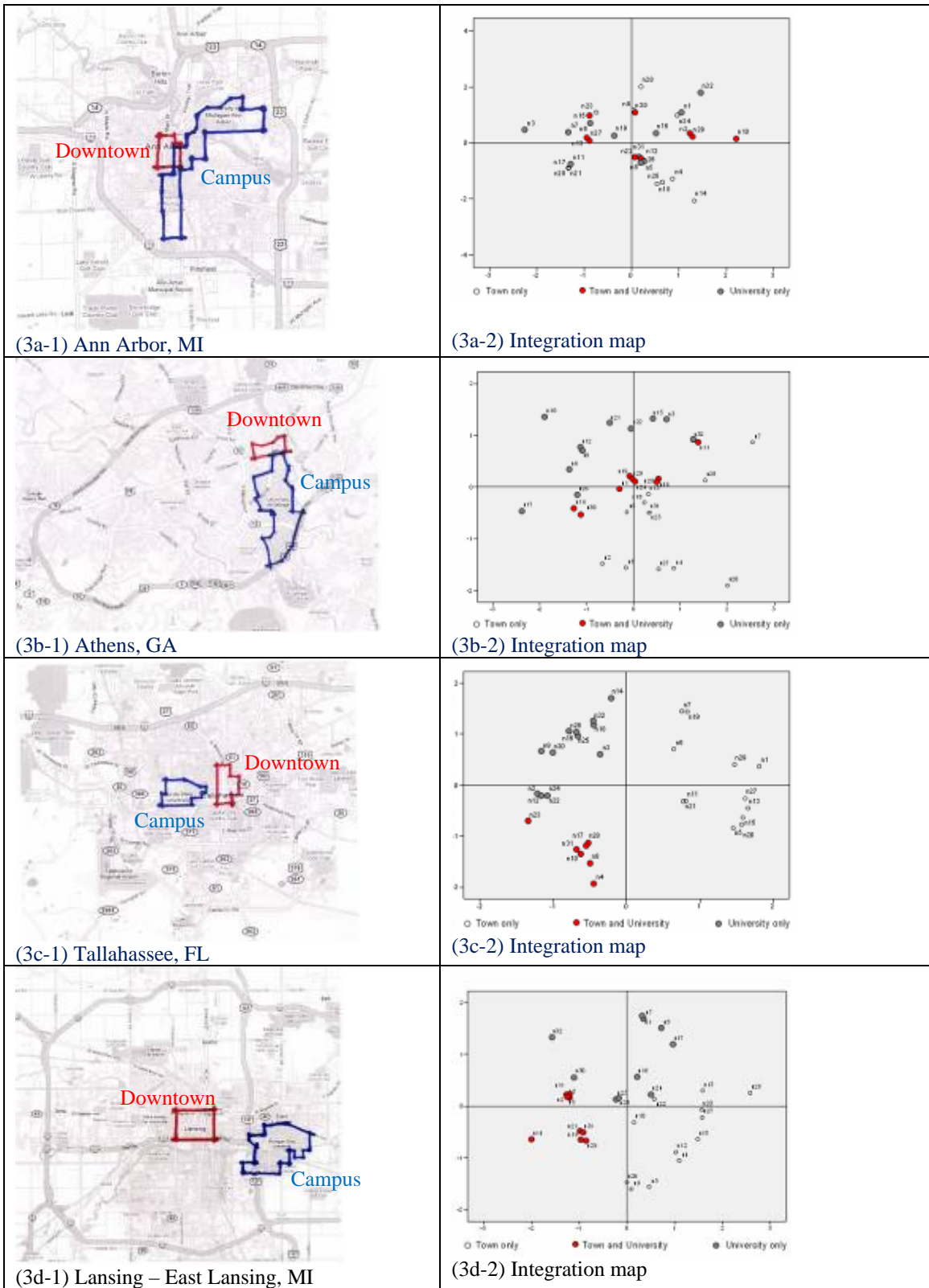
Figure 9-2: (1) Downtown-campus relationship (Red = Downtown, Blue = campus) and (2) comparative MDS plot of open sort criteria use, in the four cities.

9.4   Identifying the elements that contribute to perception of publicness

In this section, the responses from the open-ended follow-up questions are discussed. The open-ended interviews were intended to understand reasons and factors influencing people's sorting and construction categories. These questions were asked so as to understand respondents' thought processes during the informal conversation and sorting tasks. The follow up questions also generated some vital factors integral to the notion of publicness and exploration of public life. The questions asked of the respondents depended on the nature of sorting and the categories they selected during the sorting task. Hence, the specific questions asked of each respondent varied from case to case and city to city. In some cases, the questions were designed for a specific city because of a certain type of town-gown relationships that was historically known. The complete list of open-ended questions can be referred to in the Appendix. Some of the insights and themes related to publicness are elaborated here.

Publicness as an experience

In the four cities, 22 out of 128 (8.53%) respondents classified the perception of publicness as an experience. Quality of experience is an important sorting criterion as seen in the analysis of open sort data. According to these respondents, a quality of experience that manifests publicness includes the presence of other people, opportunities for formal and informal interaction among people, and opportunities for multiple activities by diverse groups. For example, 7 out of the 32 (11.11%) respondents in Ann Arbor spoke about the summer festival in Ann Arbor. They termed the festival as an enhanced experience of publicness. Figure 9-3 shows a performance in front of the Rackham building during the 2008 summer festival. The campus streets and grounds host

this festival in areas where both residents and visitors come and enjoy the entertainment. For many of the residents of Ann Arbor who are not associated with the university, this is an opportunity to experience several campus environments. The Ann Arbor's close city-university relationship and the shared integrated experience of places are major factors in developing a quality experience of publicness.

Figure 9-3: A performance during the Summer Festival in front of Rackham Building in Ann Arbor (Source: The Michigan Daily, Ann Arbor).

Ownership, control, and everyday use

Ownership and control are two key factors that define publicness (5.81% overall). However, some respondents posited an interesting difference between these two factors. For example, Nichols' Arboretum in Ann Arbor now owned and maintained by the University of Michigan, is a combination of three or four different private properties. This is an unusual example where a place consisted of several private properties, owned

by a semi-public institution (the university), and is used every day by the entire public (town and university people alike).

Control generated by regular or everyday use of space was also an important factor in people's perceptions. Attention was drawn to the fact that certain places are public in terms of ownership, but they are highly limited in terms of accessibility. For example, City Hall is a city owned public building controlled with high security, making it less accessible. By contrast, privately owned and controlled places such as Borders Bookstores and Briarwood Mall are relatively easy to enter. Such a dichotomy of publicness in image and in action illustrates a way of looking into public places. This specific way is less about what a place means and more about how a place is used. A use and user oriented approach to publicness is highlighted. Within this context of formal designation and everyday use of a place, formal and informal publicness are an important topic of respondent discussions. Streets, squares, plazas, markets, and public buildings are commonly known as formal public places. Some respondents mentioned that there are many formal public places in the city and the university that are not used, either because they are not relevant to everyday life or because they are difficult to find and access. A case in point is the amphitheatre on the Florida State University campus (Figure 9-4). Though it is a beautifully designed space meant for public on-campus use, it is seldom used either by students or by the general public. Some respondents in Tallahassee argued that certain other spaces like the food-court at the Governor's Square Mall (Figure 9-5), though privately owned and controlled, provides opportunities of experiencing publicness by means of everyday activities such as shopping, strolling, eating, or meeting with friends.

Figure 9-4: Empty amphitheatre at the Florida State University campus.

Figure 9-5: Food-court crowd at the Governor's Square Mall, Tallahassee

To some respondents, publicness specifically means the everyday experience of public life. Spontaneity and rituals in everyday spaces were found important to people's perception. Respondents noted that they associate publicness with activities and spaces that are relevant to their everyday needs and activities. For example, respondents discussed how private spaces like malls and coffee shops exhibit temporary activities and interaction that is public in many ways. This conforms to the notion of "third places," propounded by the urban sociologist, Ray Oldenburg (2000). He defines these places as informal public gathering places essential to community and public life. This shifts the notion of the public realm from a legal and jurisdictional definition to a human construction and appropriation.

Temporary nature of publicness

A closely integrated aspect that some respondents noted was the temporary nature of publicness that is demonstrated in places. Kristine Miller (2007), in a recent critique of New York's well known public places, argued that "public space is not a concrete or fixed reality, but rather a constantly changing situation open to the forces of law, corporations, bureaucracy, and government." Within this formal framework, respondents noted that the nature of publicness can also be enhanced through a combination of everyday use and special functions in urban spaces.

Figure 9-6: State Street, Ann Arbor – a typical evening in December, 2007.

Figure 9-7: State Street, Ann Arbor – during Ann Arbor Art Fair, July 2007.

An example is the Ann Arbor Art Fair that allows the mundane State Street (Figure 9-6) to temporarily transform into an enhanced informal public place (Figure 9-7). The legal framework formally accommodates the economic interest of the city and the artists for the special event. In response, people construct an enhanced sense of publicness through their everyday actions at the fair.

Town-gown relationship

Finally, a large share of responses to the open-ended questions in all the four cities references the city-university relationship. Each university town studied in this research has its own narrative of the town-gown relationship. Each town offers many stories; of people, of significant events and time-tested conditions, and of an institution— all evolving together. Ann Arbor presented a coherent picture of a town completely at ease with the university campus interspersed with the downtown. For each respondent, the physical interrelationship was vital for a coherent experience of the city. Campus places, close to the downtown, double up for use as an everyday activity hub for students and many residents. Athens historically grew around the university campus. This is still reflected in the close and vibrant interface of the town and the university. Though Athens' city-county unification has reduced the vitality of the university, it still remains as the primary generator of activities and revenue in the city.

Tallahassee and Lansing are two cases where the town-gown relationship is disintegrated in terms of physical distance as well as in everyday use and experience. In Lansing, the distance exists because the university is in the adjacent town of East Lansing. The relationship is complex as many residents of Lansing do not relate to the campus and many students in the university do not need to depend on downtown

Lansing. The town and the university have evolved independently. There exists a complex relationship between the university that is formally introverted and physically removed from the surrounding community. However, in terms of everyday use and experience of public life, the Grand River Avenue strip (the downtown spine of East Lansing) may be viewed as the constructed and appropriated public sphere for the university, although removed from the primary downtown of Lansing. In Tallahassee, the town and the university are deliberately disconnected because of many historical precedents of negative relationships between them. First, Florida State University (FSU) is known for its raucous students. It has a reputation of being a party school. This has negatively impacted the perception of people in general regarding the image of both university and students. Second, the university and the city have policy differences regarding university expansion plans. This conflict has resulted in the city and the university growing apart from each other. This is manifested in the urban morphology, but is also evident in a real aversion of city residents to using campus spaces and a lack of relevance of downtown spaces for the students. The new location of the FSU Department of Anthropology is an example. A growing student population, space limitation, and expansion needs required the department to move off campus. The university was forced to select a strip-mall away from the campus (Figure 9-8 and 9-9); the school was not granted any space in the downtown or its vicinity. The resulting environment is a case of place creation. Currently, the department shares the strip-mall with other private businesses and eating establishments. This has created a juxtaposition of private commercial interests with semi-public service ideal and public access and control issues. The context and condition have forced a construction and appropriation of publicness.

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Figure 9-8: FSU Department of Anthropology location on a strip-mall

Figure 9-9: Strip-mall signage showing the presence of FSU Department of Anthropology with the other commercial establishments.

9.5   Philosophy and practice of the public realm

The research questions pursued in this dissertation are (1) to what extent does spatial configuration affect people's understanding and experience of publicness? (2) In what ways do people conceptualize publicness? (3) In what ways do people's activities vary with time across different types of public places? This research posits that the public realm is a place of everyday urbanism through the following findings: (1) the public realm is a spatial formation (2) the public realm is a human construction, and (3) the public realm is a temporal phenomenon.

9.5.1 The public realm is a spatial formation

Form and organization of space characterize the physical environment. Ordering of public space has been seen as the interface of daily involvements with different scales of movement networks (Hillier & Hanson; 1984). Morphological analysis has revealed that the spatial organization in cities influences movement, visibility, and presence of people in places. Analysis of people's conceptual constructs has emphasized the relevance of these aspects to the perception of publicness. This spatial-perceptual relationship augments the assertion that the public realm is shaped by the spatial properties and their relations within the urban environment. The perception of publicness, the public activities, and the physical organization of public places—the various dimensions of the public realm—are encoded in the physical configuration of the space.

The campus-town spatial pattern of each city creates an ecology that generates specific emotions, actions, and forms of publicness. The spatial ecology sets up the parameters within which users perceive, function, contest, and interpret. The formative nature of the spatial ecology establishes the criticality of physical design and attention to

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spatial configuration. This spatial notion of publicness affirms Hillier's position that space is the machine. Specific to the current study, space is the machine of publicness. While there is growing recognition that urban form can influence health, environmental, and social outcomes, the spatial configuration of publicness underscores the relevance of space and spatial organization to people and their everyday lives.

9.5.2 The public realm is a human construction

The public realm is heterogeneous in perceptions, actions, and forms. The public sphere that frames urban life reflects the diverse needs, desires, values, and norms of different groups of people. The plurality in human perception regarding publicness can be measured by understanding the various constructs and elements that people associate with the notion of public space. In the theories and practices of architecture and urban design, the traditional classifications of public spaces are based on historic typologies [such as parks, plazas, streets, markets, and public buildings (Project for Public Spaces, 2008)], aesthetic ideologies such as symbolism and semantics (Jencks, 2002), or a uni-dimensional constructs such as accessibility (Lofland, 1998) and ownership (Sorkin, 1992). The present study illustrates multiple dimensions of human perception regarding publicness. From the sorting tasks, interviews, and observations, specific concepts are identified below:

1. People: Closely related to the activities, the presence of people and other users in space is critical to exploring publicness. Individual and group actions, reaction, and interactions are instrumental in how the space caters to different needs of diverse groups of people.

2. Use: This is identified with activities and opportunities that the space has to offer. From the users' perspective the public realm can be defined with respect to its relevance to everyday life.

3. Identity and image: This is associated with the quality of experience in space and can be narrowed down to specific ideas, such as historic importance, uniqueness, and quality of maintenance.

4. Access: The idea of access is attached to finding one's way and getting about. Connectivity and accessibility determines how permeable and inclusive a place is.

5. Design and appearance: The appearance of the space, materials used, and the interrelationships of inside to outside invoke certain feelings and emotions, including a certain degree of interaction between people.

6. Ownership: It is an overarching concept related to publicness in the American context. A powerful finding is that ownership is not the single most important element; rather how it is integrated with other important ideas, like use and users, ultimately influences the construction of publicness.

7. Quality of experience: The perception of safety, comfort, and security is integral to the quality of space and the experience of publicness in places.

8. Community: The surrounding context and community are important factors associated with perception of publicness. Communal aspects are particularly critical regarding importance of the space to local people and available opportunities for direct and indirect participation.

9.5.3 The public realm is a temporary phenomenon

Focusing on the transient character of urban evolution, the public realm can be analyzed in terms of both spatial and temporal aspects. People's behavior in public spaces changes with times of the day, with days of the week, and even with seasons. The current study reveals the temporary nature of the public realm as a place of everyday urbanism. Based on the multiple dimensions of perception of publicness and actions in public spaces, the nature of the public realm develops as incidental, experiential, and situational. Another critical phenomenon in public places of everyday life is the blurring of boundaries between public and private, thus creating spontaneous and intimate statements about public life. Everyday urban spaces also project a place and process of dialogic conversation. Urban users and visitors of the public places are engaged in an interactive conversation through their routine daily activities.

Relevance of everyday life in the construction of publicness poses a critical question: why don't designers consciously design everyday urban spaces? Architecture and urban design remains rooted in historic morphological typologies (parks, plazas, squares, markets, and streets) and default stereotypical categories. The focus of urban theory and design practice needs a shift, from a universal formal approach to a contextual, specific, and multidimensional approach that is sensitive to heterogeneity of human perception and everyday human activities.

Understanding places from the users' perspective demonstrates the importance of human appropriation in public places. This notion of public space empowers people to define, construct, and control publicness through their actions, reactions, and interactions. Within the formal framework of political processes, social ideologies and morphological

typologies, publicness from the perspective of everyday actions posits an informal counterpoint. It pushes the boundary of the public realm and that offers challenging yet exciting opportunities for making public places adaptive.

People transform the places they find themselves into places they live in through a diverse creative process. Everyday life is an adaptive procedure through which people create, control, and maintain their lives and urban spaces. Against the formal and dogmatic framework of political and social ideologies and morphological typologies, informal and adaptive public places are the human counterpoint. The public realm is a continuous process of placemaking.
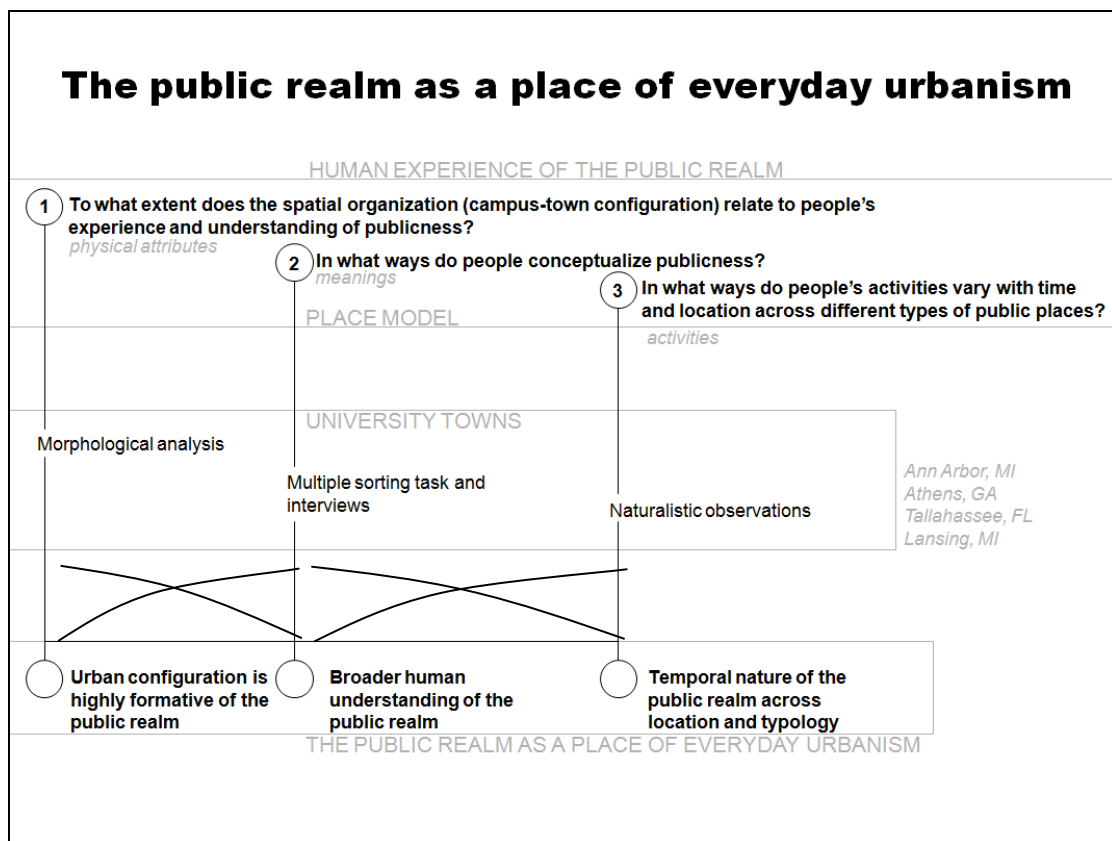
Figure 9-10: The research outline illustrating the integration of the research questions, research design, and research methods

Chapter 10

PUBLIC REALM AS A PLACE OF EVERYDAY URBANISM:
Conclusions

10.1   A human experience of the public realm

10.2   Philosophical implications of the research

10.3   Pragmatic implications of the research

10.4   Future directions of the research

10.5   The importance of human understanding of the public realm

10.1 A human experience of the public realm

Throughout this dissertation the human experiences of publicness have been discussed in reference to the form, meaning, and function of the North American public realm. These experiences are related to the ways in which the physical organization of the city shapes the spatial configuration of public places, to the multiple ways in which people understand publicness, and to the ways in which people use public places in their daily life.

In Chapter 1, the research questions were introduced as an exploration of human experience of the public realm. The research was organized around the Place Model (Canter, 1977; Habraken, 1992), from which questions regarding conception, activities, and physical attributes of the public realm were addressed. Within the changing roles and meanings of the public sphere (Arendt, 1958; Habermas, 1962), the human connection to the public realm was recognized. This human connection to the public realm was further analyzed using the notions of everyday urbanism (Lefebvre, 1974; Certeau, 1984) and micro-publics (Sandercock, 2003; Amin, 1995). People's everyday understanding, experiences, and expressions were then carefully studied using a mixed-methods multiple case study approach. Perceptions, experiences, and uses of the public realm were described within the four narratives of campus-downtown configuration. With the evidence collected, the theoretical issues described, and the findings analyzed, this chapter is an assessment of general implications and future directions.

This chapter outlines the scope of this research, underscores some philosophical implications, and emphasizes further research and practical possibilities. In conclusion, the dissertation revisits the same questions with which this study began: Where is the

exploration of the evolution of the public realm taking us? What do we understand from the everyday experiences of the public realm? What role do people play in defining what is public? What responsibility do designers have in production and consumption of space? What might it all, one day, come to mean? And last but not the least, why do we care about a better understanding of public places?

10.2 Philosophical implications of the research

This research develops a comprehensive understanding of the public realm, focusing on the role of human involvement and appropriation. Through exploration of human perception and human actions in the environment, this study proposes a pluralistic construction of publicness that is adaptive, catalytic, and empowering. This study underlines the need for a focus on people and their actions in the imagination and production of public places.

The relevance of the Place Model (Canter, 1977; Habraken, 1992), its constituent three elements and their interrelationships is critical to understanding the multiple dimensions of the public realm. This was a primary assumption of the dissertation and necessary to both address the reality of the urban condition and to frame a paradigm to comprehension (Chapter 2). Therefore, the Place Model provided the overall framework of research design (Figure 10.1). An examination of the public realm using these three elements framed a comprehensive system of inquiry. The place oriented approach of the theoretical framework was integral to the three research questions framed in Chapter 1. This system of inquiry using the place model also informed the selection of research methods and specific tactics (Figure 10.1). Historic-morphological analysis and space syntax were used to characterize the spatial configuration of public places. Multiple

sorting and interviews were applied to measure people's perceptions of public places. Naturalistic observation was employed to evaluate people's activities in the public places. Thus, an appropriate mixed-methodology targeted to directly address the research questions ensured that the findings were empirical, specific, and relevant.

Everyday urbanism has long argued for an urban design paradigm celebrating the everyday life and functions in cities. Current literature of Everyday Urbanism (Chase, Crawford, & Kaliski, 1999) establishes a case based on logical argumentation using existing urban examples and alternate architecture design proposals. However, the premise of incremental human-oriented approach of the everyday urbanists does not have any supporting empirical data or any rigorous standardized analytical technique. The current dissertation, in contrast, undertakes an in-depth empirical study of the public realm. Examination of the multiple dimensions of the public realm includes formal and spatial description and analysis of public settings, evaluation of conceptual constructs of publicness, and observation of people's behavior in public places. The findings and the analysis reveal that publicness is constructed by people depending on their environmental role and function in the city. Thus, a major contribution of this dissertation is in validating the Everyday Urbanism's emphasis on people and their actions in everyday urban settings.

The research framework involved use of mixed-methods in a multiple case study design. The findings from this multidimensional approach reinforced the integrated nature of the framework and the interrelationships within the Place Model. Studying the interrelationships was a key component to reveal the connections among the various facets of the public realm. Many of the findings (such as the conceptual constructs

developed from the open sorting of respondents) illustrated that constructs used by the

respondents pertain to different domains of the Place Model. This confirms that elements

of meanings, actions, and environments play important roles in the human perception of

places. The purposive nature of the place model was also provided to emphasize the

connection between the environmental roles of people, their perceptions of place, and the

spatial configuration of the college town environment. Throughout this dissertation, the

framework of the Place Model was instrumental in revealing many underlying

relationships existing in the public realm.

10.3 Pragmatic implications of the public realm

The integrative model of place posits a specific interpretation of publicness.

Studying human experiences and focusing on college towns suggests important practical

applications. Two specific pragmatic urban design implications are discussed in this

section.

An evaluative model of campus-town relationship

The spatial organization of the campus and town embodies the dynamic

interrelationships present in the college towns. The four college towns studied in this

research represent four forms of campus-town relationship. The physical relationship

seen in the four cities varied from being overlapping (in Ann Arbor), close (in Athens),

separate (in Tallahassee), to distant (in Lansing). The physical campus-town organization

was found strongly related to the people's environmental role and associated perception

of publicness. The analyses revealed that the greater the integration of the campus and the

town, the closer are different groups of people in their perceptions of publicness.

Integrated nature of the campus-downtown configuration is identified with interspersed

use of university and city spaces, leading to perception of higher degree of publicness in different urban settings. Thus overlap of use (or mixed use) is a key factor in enhanced perception of publicness and greater extent of pubic activities in the urban environment. The close campus-downtown interaction creates places where multiple features of interest converge. The intersecting interests make these settings important destinations for different groups of people. The emphasis on overlapping use pattern and the focus on a functional approach to publicness reinforces the "role of destination" (Lusk, 2002) in popularity and use of places.

Based on the above findings, an evaluative model is suggested for the design and development of small towns (comparable to many college towns).

1. A strong integration between the downtown and the campus is paramount. This can be achieved through presence of the campus and overlapping functions (mixed use) in the central core. Campus-town integration parallels the study by Fillion et al (2004) that attributed success and recognition of many small scale towns to presence of niche markets such as a university campus, state capital, and medical center within two miles of the downtown. An integrated spatial configuration also reinforces the notion of mixed-use development propagated by many traditional and neo-traditional developments such as that of the New Urbanism.

2. Emphasis on people and their functional needs is critical. The study reveals that people and their activities are the two most important aspects that inhabitants associate with perceptions of publicness. Therefore, to ensure successful public places, the design should be relevant to everyday experience and user activities.

The notion of urban design has fluctuated from the modernist architectural conception of the city to the post-modern problematic effect of the negative space (Kallus, 2001). Traditionally, urban design was a discourse in architecture focusing on the design of the city as an object. From Daniel Burnham's *City Beautiful Movement* to Ebenezer Howard's *Garden Cities*, from Corbusier's *Plan Voisin* to Wright's *Broadacre City*, solutions to urban problems were found in redesigning the spatial order of urban morphology. Post-modern critical thinking questions design dominance and calls for an understanding of the complex relationships of politics, economics, sociology, behavior, and environment embedded in the urban context. Some urban designers have addressed this post-modern urban problem by studying environment and human behavior (Lang, 1994), celebrating the market driven quotidian and everyday needs (Chase, Crawford & Kalinsky, 1999), examining economic-political nexus as a growth machine (Molotch, 1976), or embracing diversity in grassroots level participation towards communicative action (Sandercock, 2003; Amin, 1995).

The overall dissertation demonstrates that the relationship between urban experience and design is indivisible and that their integration is essential. Based on the findings of this dissertation, it is argued that both the importance of Design and a critical understanding of the Urban are required to achieve a responsive approach to urban design. The research findings illustrate that the spatial configuration (campus-town relationship) is dependent on people's environmental roles and perceptions of public places. The formative nature of the physical environment reinforces the importance of spatial forms and their design. It supports the classic idiom held by the designers that

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design can make a difference. At the same time, this research also highlights the power of people. People construct and interpret publicness in places, irrespective of ownership, accessibility, and design. The recognition of the human dimension is critical in order to design places that are relevant to people's everyday needs, sensitive to people's perceptions, and adaptive to people's appropriations.

10.4 Future directions of this research

Contemporary cities are complex and the public realm framing the urban environment is continuously evolving. Within this context of the urban condition, there are multiple dimensions of publicness to be examined in multiple ways. This dissertation has examined the public realm specifically as a place of everyday urbanism. In this section, the scopes and limitations of this investigation are discussed, and possible directions for further studies are suggested.

The public realm and power

The everyday experiences, functions, and forms of the public realm have been explored whilst emphasizing the role of people in this dissertation. The changes in urban form and the social uses of public places are closely related to the evolution of society from a pre-industrial to a post-industrial organization. The role of agencies and power, anchored in the modern way of life is important for the construction, control, and sustenance of the public sphere (Harvey, 2001; Townsend, 2008). Future research can be framed around the question of how human experience and understanding of publicness operate in the face of powerful agencies of society such as wealth and politics. Similar research can also inquire how these powerful agencies accommodate people's everyday construction and contestation of publicness.

The findings highlight the role of human experience and everyday use in public places in this dissertation. This people oriented approach reestablishes the importance of physical public places in cities. According to Castells (2002), our societies are increasingly structured around the bipolar opposition of the Net (global) and the self (self). As new forms of networks emerge as the dominant form of global social organization, the on-ground public places relate to the multiple practices through which people try to reaffirm identity and meaning. The physical public places are still critical for this local identification and search for meaning.

In the context of post-industrial cities and modern way of living, advancing technology has permitted new forms of information to enter the virtual public space. Marshall McLuhan warned that as technology progresses, we will have new kinds of cities, work, and leisure activities (McLuhan, 1964). Global information networks have revolutionized the nature of economic coordination in the world through networks and the "space of flows" (Castells, 2002). Production, power and experience of this virtual public realm have impacted the organization of the economy, of the state and its institutions, and the ways that people create meaning in their lives through collective action. Applying such an analysis to the development of the Internet, the roles of the state (military and governmental), social movements (hackers and social activists) and businesses can be examined to better understand such impacts in shaping the public infrastructure of the 21st century. A focus on the role of new technologies in economic restructuring provides another exciting research opportunity.

Along with the philosophical and theoretical approaches to new research, this dissertation offers certain prospects of more specific investigation in the field of environment and behavior, design studies, and urban design. Selecting college towns for the case study sites acknowledges inherent idiosyncrasies. Though universities and college towns provide great opportunities to find and study publicness in a small and controlled setting, there are limitations. College towns are known for public culture, public values, and a deliberate practice of publicness. These are urban environments characterized by many people of the same age, able-bodied, young, and educated. These aspects render college towns isolated and insulated from the prevalent market dynamics and complex socio-political forces influencing typical urban forms and functions. Consequently, this study of public places in college towns does not lend itself to generalizations. Nevertheless, college towns provide critical insights into how cities can address current social, economic, and infrastructural challenges.

With further exploration and data collection, one possible research opportunity is the expansion of the case study approach to a cross-cultural study of college towns. The urban environments of college towns could be examined to understand the interrelationship of human understanding, human actions, and physical forms, in depth. Patterns of these interrelationships can be investigated with respect to the environmental roles of people, also a major finding in this research. Further study could reveal important patterns of human relationships in understanding the distinctly identifiable characteristics of the college towns across history and geography. Another opportunity for research is to

examine the connection of spatial syntactic properties like connectivity and integration and to compare these spatial qualities with human cognition and behavior variables.

10.5 The importance of human understanding of the public realm

Within this early 21st century debate between a modernist morphological understanding of the public realm (Lofland, 1998; Mumford, 1938; Project for Public Spaces, 2005) and a post-modern multiple notions of public sphere (Sandercock, 2003; Amin, 1995); there exists a contemporary paradox regarding understanding the "public." This paradox is manifest in the polarization of contemporary urban design theory and practice. Though some are committed to social change, they often ignore questions of form, material, and spatial order. Others are devoted to technology, computation, and morphology, but disregards social and cultural concerns (Hatuka, 2007). Similarly within the design and planning disciplines, Sandercock (2003) has asserted that architects and designers have been unable to reconcile their need to address everyday life with a desire to engage abstract concepts. In a Design Studies research, Gospodini (2002) and Schaller and Modan (2005) have proposed an empirical approach to urban design that is teleological (driven by environmental purpose and role) and relevant (grounded in first principles and human values).

To address Sandercock's concern for the gap between the spatial (abstract imagined space) and the social (lived experience) facets of the city, and with regard to Gospodini's and Schaller and Modan's search for an empirical framework for urban design, the current research reveals a need for use- and user-oriented perspective for a better understanding of the public realm. The critical question is why is it a problem that we don't have a good understanding of publicness and public spaces? Who cares and why

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should they? With the market seeming to do a good job in providing public places, why need we learn about publicness and who needs to know this?

First of all, this dissertation demonstrates a specific, but critical role of the public realm in contemporary western society. Habermas (1962) outlines the 18th century roots of public space in publicity, events or "spectacles," and recreational space. He also traces the evolution of 19th century fantasies of public democratic space (such as the Greek agora and Roman forum) as does Hanna Arendt (1958) for the emancipation and empowerment of the "human condition." Twentieth century discussions of public vs. private, and the debates of ownership and control are well documented in the works of Sorkin (1992) and Oldenburg (2000). This dissertation, within the context of the 21st century, highlights the role of "on-ground" public spaces and their human experience and appropriation. My research reinforces the social condition where the public realm is "glue"—an interstitial adhesive place. In the current context, it is unlikely that many public processes are decided in formal public spaces such as squares, plazas, markets, and streets. Most decisions are taken in "intermediate institutions" and are then enacted in the public space. Such a study highlights this function of the public realm as a stage of enactment. The research findings illustrate the powerful role of human construction on these interstitial spaces irrespective of ownership and typology. Studying the everyday human experience and actions in public places enunciates the construction and contestation of publicness through spontaneous everyday actions. This understanding of the public realm as a place of everyday urbanism can be catalytic in promoting public spaces as a shared "dialogic space" (Schneekloth & Shibley, 1995), where things can function in relation to others, in simple sight or knowledge.

Second, the discussion of public realm in the present capitalist society needs to be in reference to the production and consumption of space. The market seems to be doing a satisfactory job in providing public spaces. But often it ignores everyday human experience and disregards the importance of everyday human actions in public places. There is a two-fold gap between the production and consumption of public space. First, the design profession is engaged predominantly in the private realm of residential and corporate architecture. Second, the everyday spaces produced for consumption and use by people are not necessarily designed or worse, poorly designed. The disconcerting fact is that architects and designers continually have less and less of a role in the production of such everyday public spaces. The profession has retracted from designing public places for people and their everyday needs. This stance is a primary reason behind the diminishing role of designers in our everyday life. Within the constraints of economic interest and political control, human experience, use, and relations are sometimes neglected. An emphasis on the human connection to the public realm, as demonstrated by this research, is critical to restoring the roles of designers in the public realm.

Appendices

Appendix A: List of 25 places in Ann Arbor, MI.

No.   Places   Images

1   Michigan Theater

2   Bell Tower and plaza

3   Nichol's Arboretum
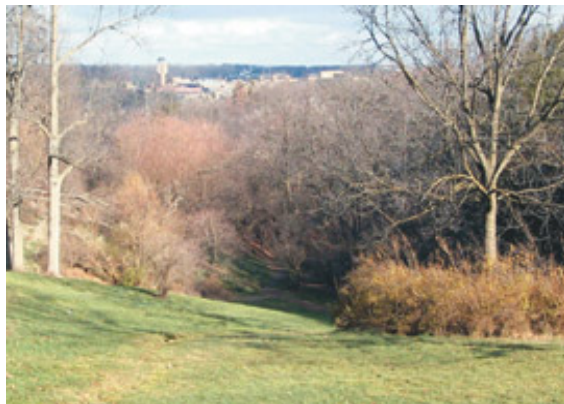
4   Barton Park

5   Law School Quad

6   Nickel's Arcade

7   Hands on Museum

8   City Hall

9   Downtown Public Library

10   UM Diag

11   Liberty Street

12   Liberty Street Post Office

13   Rackham Building

14   Espresso Royal, State Street

15   Main Street

16   Michigan Stadium

17   Michigan Union

18   Gallup Park

19   Ice Cube

20   Gandy Dancer/ Old Train Station

21   Kerry Town and Farmer's Market

22   Regents' Plaza and the Cube

23   Arborland Shopping Mall

24   Briarwood Shopping Mall

25   Borders Bookstore - Headquarters

Appendix B: List of 25 places in Athens, GA.

No.	Places	Images
1	College Ave and Broad St	
2	UGA Entrance Quad	

3   UGA Library Quad

4   UGA Fountain Plaza

5   Tate Student Center

6   Sanford Stadium

7   Athens-Clarke County Office

8   Athens Old City Hall

9   Clarke County Regional Library

10   Borders – Alps Road

11   Dudley Park
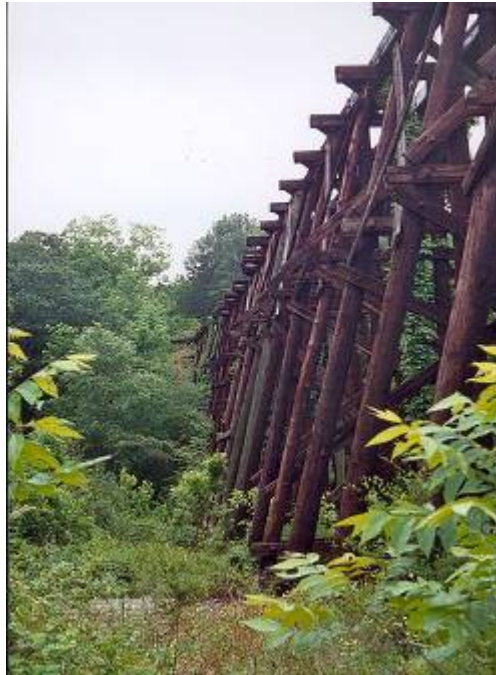
12   Sandy Creek Nature Center

13   State Botanical Garden

14   Founders' Memorial Garden

15   Jackson Street Cemetery

16   DW Brooks Mall

17   Grit vegetarian restaurant

18   Georgia Square Mall

19   Seney-Stovall Chapel

20   Copper Creek Brewing Co.

21   N. Oconee Greenway & Trail

22   Georgia Museum of Art

23   Skate Around USA
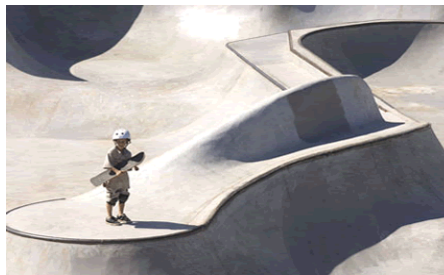
Athens, Georgia

24   Taco Stand – Broad St

25   Espresso Royale – Broad St

Appendix C: List of 25 places in Tallahassee, FL.

No.	Places	Images
1	Lake Ella	
2	Governor's Square Mall	
3	Kleman Plaza	
4	Adams Street	

5	Science Museum	
6	Tallahassee City Hall	
7	Lewis Park, Downtown	
8	Park Av. chain of parks	

9   City of Tallahassee Public Library

10   Doak Campbell Stadium

11   Duval Street

12   New Capitol

13   College Av and Copeland St

14   Borders – Apalachee Pkwy

15   Tallahassee Community College

16   Lake Talquin State Recreation Area

17   Cascades Park

18   Old City Cemetery

19   Leon County Civic Center

20   Tallahassee Mall

21   FSU Circus

22   Fun Station

23   Alfred McCay State Gardens

24   FSU Museum of Fine Arts

25   Jim and Mill's BBQ

Appendix D: List of 25 places, Lansing, MI.

No.	Places	Images
1	Barnes & Noble – Grand River	
2	Grand River Av. Strip	
3	Fergusson Park	
4	Lansing Mall	

5   River Front Park

6   Michigan State Creamery

7   Spartan Stadium

8   Meridian Mall

9	State Capitol Building	
10	Potter Park Zoo	
11	MSU auditorium	
12	Kellog Center	

13   Luis Adado Park & Trail System

14   Holiday Lanes

15   Frances Park

16   Impression 5 Science Center

17   Spotlight Theatre

18   Fenner Nature Center
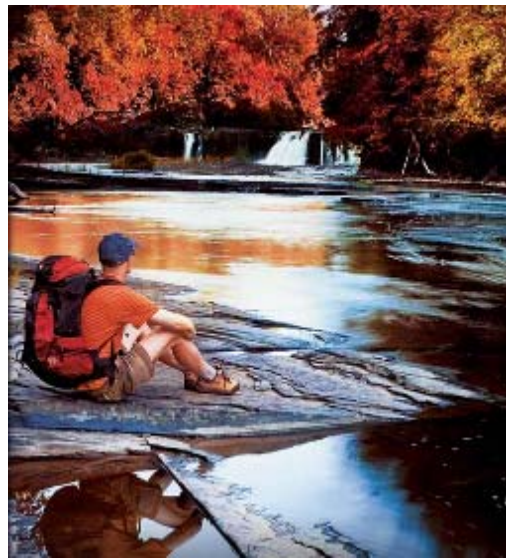
19   Michigan Library & Historical Center

20   Kresge Art Museum

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21   Beaner's Gourmet Coffee

22   Abram's Planetarium

23   Cooley Gardens

24   Courthouse Square

25 Horticultural Demo Gardens

Appendix E: Syntactic properties of all the 25 places in Ann Arbor, MI.

	Site	Public			Axial#	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	Liberty Street	32	0	0	78	.125	14.000	1.262	3.434
2	Main Street	32	0	0	116	.213	14.000	1.297	3.401
3	Gallup Park	32	0	0	940/941	.115	4.000	.805	1.771
4	Barton Park	31	1	0	119	.103	3.000	1.050	1.255
5	Kerry Town / Farmers' Market	31	1	0	66/67/ 116	.142	11.000	1.274	3.265
6	Nickels Arcade	30	2	0	86/193	.252	18.000	1.234	3.180
7	Ann Arbor Public Library (DT)	26	6	0	87/79	.227	19.500	1.298	3.517
8	Bell Tower and Plaza	24	8	0	98	.342	26.000	1.265	3.696
9	Ann Arbor City Hall	23	9	0	89/92/99	.250	17.000	1.294	3.397
10	Nichol's Arboretum	21	11	0	953	.100	8.000	1.121	2.435
11	U of M Diag	21	11	0	80/82/ 84/86	.214	17.000	1.269	3.489
12	Regents' Plaza / The Cube	21	11	0	86/192	.326	22.500	1.306	3.635
13	Law Quad	13	17	2	82	.176	13.000	1.260	3.401
14	Liberty Post Office	5	27	0	78	.125	14.000	1.262	3.434
15	Espresso Royale	5	18	9	86	.450	33.000	1.355	4.023
16	Rackham Building	4	26	2	98	.342	26.000	1.265	3.696
17	Hands-on Museum	4	19	9	99	.307	24.000	1.308	3.810
18	Michigan Stadium	3	19	10	164/171	.249	15.500	1.193	3.353
19	Michigan Union	1	28	3	82/86	.313	23.000	1.307	3.712
20	Michigan Theater	1	22	9	78	.125	14.000	1.262	3.434
21	Arborland Shopping Mall	1	19	12	177	.332	12.000	1.240	3.135
22	Briarwood Mall	1	14	17	180/227	.124	15.500	1.255	3.350
23	Borders Head Quarter	0	19	13	78	.125	14.000	1.262	3.434
24	Ice Cube	0	7	25	162	.516	20.000	1.113	3.347
25	Gandy Dancer (Old Train Stn)	0	6	26	38/39	.122	10.500	1.247	3.265

Appendix F: Syntactic properties of all the 25 places in Athens, GA.

	Site	Public			Axial#	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	College Av. and Broad St.	32	0	0	2284/2306	.288	14.500	.745	3.022
2	UGA entrance quad	21	11	0	2306	.247	15.000	.761	3.087
3	Fountain plaza (UGA)	21	11	0	2297	.334	12.000	.720	2.905
4	Jackson Street Cemetery	21	11	0	1365	.083	2.000	.572	1.344
5	DW Brooks Mall (UGA)	21	11	0	1355	.241	4.000	.735	2.200
6	UGA library quad	20	12	0	1402	.121	6.000	.642	1.979
7	N. Oconee Greenway - Trail	19	13	0	2308	.154	6.000	.717	2.571
8	Dudley Park	18	14	0	2270	.198	7.000	.664	2.211
9	Sandy Creek Nature Center	18	14	0	2044	.165	3.000	.547	1.905
10	State Botanical Garden, GA	17	15	0	940	.224	6.000	.608	2.207
11	Clarke County Regional Lib	15	17	0	1433	.506	15.000	.767	3.197
12	Athens Old City Hall	14	18	0	1442/2289	.347	10.500	.718	2.699
13	Athens-Clark County Office	13	19	0	2310	.144	6.000	.734	2.794
14	Founders' Garden	8	24	0	1399	.153	5.000	.733	2.127
15	Georgia Museum of Art	6	25	1	1332	.217	7.000	.749	2.539
16	Tate Student Center (UGA)	3	27	2	1362	.045	2.000	.573	1.273
17	Sanford stadium (UGA)	1	21	10	1362	.045	2.000	.573	1.273
18	Borders - Alps Road	1	11	20	14/733	.345	7.500	.685	2.613
19	Espresso Royale	1	11	20	2306	.247	15.000	.761	3.087
20	Seney-Stovall Chapel	0	28	4	1439/1453	.352	10.500	.745	3.071
21	Georgia Square Mall	0	10	22	360	.314	5.000	.555	1.931
22	Skate Around USA	0	2	30	1795	.362	9.000	.477	2.750
23	Taco Stand - Broad St.	0	2	30	2306	.247	15.000	.761	3.087
24	Grit vegetarian restaurant	0	0	32	1424	.393	18.000	.758	3.301
25	Copper Creek Brewing Co.	0	0	32	1465/1467	.196	7.000	.736	2.696

Appendix G: Syntactic properties of all the 25 places in Tallahassee, FL.

	Site	Public			Axial	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	Lake Ella	32	0	0	6963	0.098	5.000	1.041	3.113
2	Adams Street	32	0	0	5254	0.021	2.000	0.713	1.666
3	Park Av. chain of parks	32	0	0	5049	0.030	2.000	0.991	2.493
4	Duval Street	32	0	0	5357	0.005	1.000	0.823	1.098
5	Cascades Park	30	2	0	4985/5020	0.043	4.000	0.874	0.968
6	Kleman Plaza	27	5	0	5357/5360	0.007	2.000	0.823	0.617
7	College Av. and Copeland St.	27	5	0	5045/5360	0.017	3.500	0.900	0.836
8	Lake Talquin State Rec Area	14	18	0	6203/7367	0.020	3.000	0.725	1.479
9	Lewis Park, Downtown	12	20	0	5049	0.030	2.000	0.991	2.493
10	New Capitol	10	22	0	4953	0.044	2.000	0.910	2.433
11	Tallahassee City Hall	8	24	0	3405	0.020	2.000	0.762	1.359
12	Tallah-Leon County Civic Center.	5	27	0	5712	0.047	4.000	0.869	2.506
13	Tallahassee Pub Lib	3	29	0	5049	0.030	2.000	0.991	2.493
14	Alfred McCay State Gardens	2	30	0	6822/6823	0.016	2.000	0.670	1.070
15	Old City Cemetery	1	31	0	5360	0.010	3.000	0.823	1.403
16	Tallahassee Comm. College	0	32	0	7164	0.017	3.000	0.705	1.473
17	Governor's Square Mall	0	18	14	4460/4461	0.013	1.500	0.670	0.854
18	Tallahassee Mall	0	18	14	7002	0.016	2.000	0.877	1.499
19	Doak Campbell Stadium (FSU)	0	12	20	5910	0.016	3.000	0.839	1.346
20	FSU Museum of Fine Arts	0	11	21	3761	0.008	1.000	0.753	0.333
21	FSU Circus	0	8	24	5907	0.020	2.000	0.725	0.887
22	Science Museum	0	7	25	5360	0.010	3.000	0.823	1.403
23	Jim and Mill's BBQ	0	5	27	6203	0.018	4.000	0.796	1.870
24	Borders - Apalachee Pky.	0	4	28	4460	0.014	2.000	0.733	0.862
25	Fun Station	0	2	30	6999/7002	0.013	2.000	0.914	1.825

Appendix H: Syntactic properties of all the 25 places in Lansing, MI.

	Site	Public			Axial	Syntactic properties			
		P1	P2	P3		Length	Conn	Int - Rn	Int - R3
1	Grand River Av. strip	32	0	0	406	.658	55.000	2.352	4.461
2	Courthouse Square	30	2	0	48	.200	12.000	1.986	3.640
3	River Front Park	21	6	5	6/104	.325	24.500	2.108	3.781
4	Luis Aldo Park & Trail System	11	21	0	114	.967	61.000	2.498	4.729
5	Fergusson Park	10	22	0	1704	.207	12.000	1.711	2.993
6	Potter Park	9	23	0	114	.967	61.000	2.498	4.729
7	Cooley Gardens	9	23	0	2	.281	20.000	2.099	3.910
8	State Capitol Building	8	24	0	6	.531	45.000	2.261	4.197
9	Frances Park	8	24	0	915	.058	6.000	0.958	1.892
10	Fenner Nature Center	6	26	0	113/865	.848	33.000	2.071	4.238
11	Spotlight Theatre	3	0	29	0	.704	53.000	2.603	4.633
12	Spartan Stadium (MSU)	2	16	14	1733/1785	.022	3.000	1.264	1.546
13	Beaner's Gourmet Coffee	1	14	17	406	.658	55.000	2.352	4.461
14	Holiday Lanes	1	1	30	406	.658	55.000	2.352	4.461
15	Kresge Art Museum (MSU)	0	32	0	1739	.053	5.000	1.398	2.200
16	Horticulture Demo Gardens	0	32	0	1707	.027	3.000	1.301	1.438
17	Michigan State Creamery	0	30	2	1706	.052	3.000	1.395	2.078
18	Kellog Center (MSU)	0	30	2	1702	.530	32.000	1.961	4.130
19	Michigan Library & His Center.	0	30	2	48	.200	12.000	1.986	3.640
20	Barnes & Noble - Grand River	0	20	12	406	.658	55.000	2.352	4.461
21	Abram's Planetarium	0	20	12	2368	.024	3.000	1.181	1.621
22	MSU auditorium	0	16	16	1739/1740	.058	4.000	1.504	2.536
23	Meridian Mall	0	8	24	406	.658	55.000	2.352	4.461
24	Lansing Mall	0	7	25	0	.704	53.000	2.603	4.633
25	Impression 5 Science Center	0	1	31	6	.531	45.000	2.261	4.197

Appendix I: Open-ended interview questionnaire.

Place Research: Multiple Sorting Task/ University of Michigan

College of Architecture and Urban Planning

OPEN-ENDED INTERVIEW TOPICS/ QUESTIONS

I. Questions regarding sorting process and categories:

1. Please describe the thoughts that helped you doing (a) the free sort, and (b) the directed sort.

2. For each of the three directed sort category, one exemplar place will be selected for further detailed investigation.

    (a) Please indicate why certain places are in certain groups? For example, please briefly explain why "Place 1" is in "Group A."

    (b) What aspects of these places helped you to make your decision?

    (c) What are the elements of a place you think about when you look at it in terms of how public or private that place is?

II. Questions regarding actions and behavior in the selected exemplar places:

1. What are certain actions or behavior you are engaged in this place and how long?

2. What kind of people and actions/ behaviors you see in this place?

3. What are certain actions or behavior you like to find in this place?

III. <u>Questions regarding meanings and values associated with the selected exemplar places</u>:

1. What are the different feelings and thoughts evoked by this place in you?

2. What does this place mean to Ann Arbor and how important is it for Ann Arbor? Why?

IV. <u>Questions regarding physical attributes of the selected exemplar places</u>:

1. What physical characteristics and/ or qualities of this place are the most significant that you would describe while writing/ speaking to someone about it?

Appendix J: Sorting criteria and categories used by respondents for open sorting in Ann
Arbor, MI.

n	Sort Seq.	Construct (sorting criteria)	Constituent categories	Construct group
1	A	Primary use by	City-county/university/individuals	Ownership
	B	Activity	Live/work/play/others	Type of use
2	A	Will I go there?	Yes/no/may be	Personal
	B	Atmosphere	Friendly/not friendly	People
3	A	Historic importance	High/medium/low	Image & symbolism
	B	Do I know this place	Yes/no	Personal
	C	Homeless	Present/absent	People
4	A	How can I go there?	Walking/car/public transportation	Accessibility
	B	Types of place	Vibrant/boring	Experience quality
5	A	Green space	High/moderate/low	Spatial design
	B	Type of enclosure	Indoor/outdoor/mixed	Spatial design
6	A	Time to go	Morning/afternoon/evening/anytime	Type of use
	B	Presence of people	Always/sometimes/never	People
	C	Number of people	High/medium/low	People
7	A	Type of people	City/university/outsiders	People
	B	Safety and security	High/moderate/low	Safety and security
8	A	Buildings	Old/moderate/new	Image & symbolism
	B	Materials	Brick/stone/concrete/others	Spatial design
9	A	Activity type	Highly active/active/passive	Type of use
	B	Use	Recreation/education/business	Type of use
	C	People	University/others/both	People
10	A	Location	Downtown/near downtown/far away	Context
	B	Type of place	Busy/mixed/empty	Type of use
	C	Use time	Weekdays/weekends/both	Frequency of use
11	A	Cleanliness	High/moderate/low	Experience quality
	B	Importance to locals	High/moderate/low	Community
12	A	Place quality	Stimulating/passive/repulsive	Experience quality
13	A	Used by	General public/university	Experience quality
	B	Level of comfort	High/moderate/low	Experience quality
14	A	Noise level	High/medium/low	Experience quality
	B	Walking ability	High/medium/low	Accessibility
	C	Color	Vibrant/monochrome/dull	Image & symbolism
15	A	Owned by	City/university/private	Ownership
	B	Used by	City/university/private	Ownership
16	A	Type of use	Daily/sometimes/never	Type of use
17	B	Rd layout/Condition	Good/ok/bad	Spatial design
	C	Presence of police	High/medium/low	Safety and security
18	A	When is it used	Regular/holidays/both	Frequency of use

	B	Important to the city	Yes/no/may be	Image & symbolism
19	A	Amount of people	High/low	People
	B	Type of people	Diverse/not diverse	People
20	A	Can I go there easily	Yes/no	Accessibility
	B	What can I do there	Lot of things/one or two things/nothing	Type of use
	A	Type of place	For individuals/families/both	People
21	B	How do I feel here	Safe/not safe	Safety and security
	C	Is the place cared for	Very much/ok/not cared at all	Experience quality
22	A	Relevant to the city	High/medium/low	Community
23	A	Getting around	Easy/ok/difficult	Accessibility
	B	Friends in and near	Yes/no	People
24	A	Belongs to	Public/university/private	Ownership
	B	Things to do	A lot/some/none	Type of use
25	A	When to go there	Everyday/sometime	Frequency of use
	B	Nature	A lot/some/little	Green
26	A	Architecture	Old/new	Spatial design
27	A	Space for	Everyone/university	People
	B	Using & being there	Comfortable/ok/not good	Experience quality
28	A	Safety and security	High/medium/low	Safety and security
	B	Can I take children	Yes/may be/no	People
29	A	Location	On/near/off campus	Context
	B	Restrictions	High/moderate/low	Personal
30	A	How is it used	Work/recreation/food/shop	Type of use
	B	Who uses it	Town only/university only/both	People
31	A	Feeling	Nice/boring/scared	Personal
32	A	Helpful for community	High/moderate/low	Community
	B	Need money to enter	Yes/no	Accessibility
	C	Things to do	Lots/some/few	Type of use

Appendix K: Sorting criteria and categories used by respondents for open sorting in Athens, GA.

n	Sort Seq.	Construct (sorting criteria)	Constituent categories	Construct group
1	A	Distance from home	Long/medium/small	Accessibility
	B	Location	Downtown/campus/none	Context
2	A	Use	University/city/state/others	Types of use
	B	Level of activities	High/medium/low	Types of use
3	A	Parking	Easy/medium/difficult	Others
	B	Appearance	Vibrant color/monotonous	Image
4	A	Safety	Safe/unsafe	Safety and security
	B	Use frequency	High/medium/low	Frequency of use
5	A	Types of activities	Mixed/single/none	Types of use
6	A	Connection to campus	High/medium/low	Context
	B	Business investment	High/medium/low	Community
7	A	How do I feel	Happy/ok/bored	Personal
	B	Trees	Yes/few/no	Context
	C	Neighborhood	Good/bad	Community
8	A	Things to do	Work/study/sport/entertain/shop	Types of use
	B	Money required	High/medium/low	Accessibility
9	A	How do I get there	Car/bus/walking	Accessibility
	B	People orientation	Elderly/middle-aged/teens/kids/family	People
10	A	People	General/government/university	People
	B	Maintenance	High/medium/low	Experience quality
	C	Connection to campus	High/medium/low	Context
11	A	Important for the city	Yes/no	Image
	B	Important for me	Yes/no	Personal
12	A	Interaction with people	High/medium/low	People
	B	Community involvement	High/medium/low	Community
13	A	Time spent there	Long hours/few hours/none	Types of use
14	A	Can I bike there	Yes/no	Accessibility
	B	Events	Everyday use/special	Types of use
15	A	Number of people	High/medium/low	People
	B	Ownership	City/state/university/individuals	Ownership
16	A	What is around	University/downtown/others	Context
	B	Historic importance	High/medium/low	Image
17	A	What to do there	Many/some/none	Types of use
	B	Location	Downtown/campus/outside	Context
	C	Community around	Good/bad/none	Safety and security

18	A	Time to go there	Weekdays/weekends/both	Frequency of use
	B	Time to go there	Morning/evening/both	Frequency of use
19	A	Type of people	Students/non-students/mixed	People
20	A	Safe to go	Yes/no	Safety and security
	B	Inviting	Yes/no	Experience quality
	C	Control	High/medium/low	Accessibility
21	A	People	Friendly/not friendly	People
	B	Culture	Rich/mediocre/poor	Experience quality
22	A	Natural elements	High/medium/low	Context
	B	Bikability	High/medium/low	Accessibility
23	A	Cost of living	High/medium/low/na	Others
24	A	Identity	Strong/mediocre/weak	Image & symbolism
	B	Good for business	Yes/may be/no	Others
25	A	Important for the city	Yes/may be/no	Image & symbolism
26	A	Activities	Shop/work/study/sport/none	Types of use
	B	People	Locals/university/tourists	People
27	A	Used by	City/state/university	Ownership
	B	Movement	Easy/difficult	Spatial design
28	A	Feeling	Good/ok/bad	Experience quality
	B	Open space	Yes/no	Spatial design
29	A	People	Individuals/groups/kids & family	People
	B	People	Engaging/indifferent	People
30	A	Interactive activities	Many/some/none	Types of uses
	B	Cleanliness	High/medium/low	Experience quality
31	A	Ease of finding	High/medium/low	Others
32	A	Buildings	Tall/medium/low	Spatial design
	B	Type of area	Downtown/campus/none	Context

Appendix L: Sorting criteria and categories used by respondents for open sorting in Tallahassee, FL.

n	Sort Seq.	Construct (sorting criteria)	Constituent categories	Construct group
1	A	Attachment	High/ medium/low	Others
	B	Inviting and welcoming	Yes/ sometimes/ no	Experience quality
2	A	Users	Townies/gownies/mixed	People
	B	Opportunities	Multiple/ single	Types of uses
3	A	Location	DT/ near DT/ outside DT	Context
	B	Access	Hard/ medium/ easy	Accessibility
4	A	Ownership	City/ university/ others	Ownership
	B	How frequent I go there	Very frequent/frequent/not so much/not at all	Frequency of use
5	A	Events and activities in the place	Everyday/ special/ mixed	Types of use
	B	Presence of people	High/ medium/ low	People
6	A	Activity types	Mixed/ single	Types of use
	B	User types	Diverse/ not diverse	People
7	A	Community participation opportunities	High/ medium/ low	Community
	B	Part of healthy lifestyle	Yes/ no	Others
8	A	History	Historic Tallahassee/ new Tallahassee	Image
	B	Image and identity	High/ medium/ low	Image
9	A	Perception of fear	High/ medium/ low	Safety and security
	B	Comfort	High/ medium/ low	Personal
10	A	Experience	Positive/ neutral/ Negative	Experience quality
11	A	User type	City/ state/ university/ others	People
	B	Political activity	High/ medium/ low	Others
12	A	Open space	High/ medium/ low	Spatial design
	B	Healthy living	Relevant/ not relevant	Others
13	A	Parking	Easy/ medium/ difficult	Accessibility
	B	Use frequency	High/ medium/ low	Frequency of use
14	A	Activities	Active/ passive/ mixed	Types of use
	B	Other people	Yes/no	People
	C	Associated feelings	Positive/neutral/negative	Experience quality
15	A	Belongs to whom	City/ state/ public/ private	Ownership
	B	Control	High/ medium/ low	Accessibility
16	A	Image	Positive/ negative	Image
17	A	Designed and planned	Formal/ informal	Spatial design
	B	Condition	Well maintained/ poorly maintained	Experience quality
18	A	Uses	Service/ consumption	Types of uses
	B	People	Diverse/ limited	People
19	A	Emotions	Valuable to the city/ not valuable	
	B	Type of people	Predominantly white/	People

			predominantly blacks/ mixed	
20	A	Used by	City/ state/ university/ others	Ownership
	B	Street	One way/ two way/ pedestrian	Spatial design
21	A	Energy and activity in the area	High/ medium/ low	Experience quality
	B	Connection with the university	Strong/ neutral/ weak	Context
22	A	Structure	Historic and important/ new and important/ new and not important	Image
	B	Color	Brick red/ concrete white/ others	Image
23	A	Interaction opportunities with people	High/ medium/ low	Types of activities
	B	Type of people	City/ university	People
24	A	Part of old Tallahassee	Yes/ no	Image
	B	Important for the city	Yes/no/may be	Image
25	A	Design	Closed/ semi-open/ open	Spatial design
	B	Investment	No/ current/ future	Others
	C	Stakeholders	City/ university/ individuals	Ownership
26	A	Comfort	High/ medium/ low	Experience quality
	B	Walkability	High/ medium/ low	Accessibility
27	A	Controlled by	City/ state/ university/others	Ownership
	B	Personal use frequency	Everyday/ sometime/ rarely	Personal
28	A	Use	Living/ working/ shopping/ eating/ recreation	Types of use
29	A	How to get there	Car only/ walking/ car or bus	Accessibility
	B	People	Friendly/ indifferent	People
30	A	Activities	Formal/ informal/ temporary	Types of use
	B	Participation	Spontaneous/forced	Community
31	A	Relation to campus	On campus/ near campus/ away from campus	Context
	B	Activities	Fun/ neutral/ boring	Types of uses
32	A	Character	Safe/ ok/ unsafe	Safety and security
	B	Energy	High/ medium/ low	Experience quality
	C	Activities	Diverse/ few/ none	Types of use
	D	People	High/ medium/ low	People

Appendix M: Sorting criteria and categories used by respondents for open sorting in Lansing, MI.

n	Sort Seq.	Construct (sorting criteria)	Constituent categories	Construct group
1	A	Use Frequency	High / Moderate / Low	Frequency of use
	B	Transportation	By car / by bus / by foot	Accessibility
	C	Location	Downtown / within city / outside city	Context
2	A	Type of people/ users	Non-student / students / both	People
	B	Type of use	Recreation / commercial / office / academic / others	Types of use
3	A	Age-group of users	Children / teenagers / adults / elderly	People
	B	Type of users	Individuals / family-friends / large groups / mixed	People
4	A	Ownership	City / university / business	Ownership
	B	Activities	Special / mixed / daily	Types of uses
	C	Symbolic importance	High / medium / low	Image
5	A	Easiness to enter	Hard / OK / easy	Accessibility
	B	Type of structure	City / private / university	Spatial design
6	A	Movement through the place	Outdoor/ Semi open/ Indoor	Spatial design
	B	Type of intervention	Totally designed/ partially designed/ spontaneous	Spatial design
7	A	Quality of experience	Multidimensional and rich/ inferior	Experience quality
	B	Enclosure	Built/ partially built/ unbuilt	Spatial design
8	A	Type of activities	Highly formal/ formal-informal/ highly informal	Types of use
	B	Historic importance	High/ Moderate/ Low	Image
9	A	Awareness of other people	High/ Moderate/ Low	People
	B	Image	Colorful/ Green/ Boring	Image
10	A	Overlapping of uses	High/ Moderate/ Low	Types of use
	B	Community participation/ involvement	High/ Moderate/ Low	Community
11	A	Ownership	Public/ University/ Private	Ownership
12	A	Users	Gownies/ townies/ combined	People
	B	Activities	University/ general/ mixed	Types of use
13	A	Frequency of use	High/ moderate/ low	Frequency of use
	B	Ease of getting there	High/ moderate/ low	Accessibility
14	A	Ownership	Public/ semi-public/ private	Ownership
	B	Types of space	Open/ semi-open/ closed	Spatial design
	C	Users	University/ city/mixed	People
15	A	Location	DT/ outside DT/ far away	Context
	B	Security	Safe/ OK/ unsafe	Safety and security

16	A	Activities	Active/ Passive/ Boring	Types of use
	B	Users	Single types/ mixed	People
17	A	Relevant to daily life	High/ moderate/ low	Types of use
	B	Emotions	Good/ moderate/ bad	Experience quality
18	A	Uses	Daily/ weekly/ rare	Types of use
	B	People	Similar/ diverse	People
19	A	Age of structure	Old/ moderate/ new	Image
	B	Space	Outdoor/ indoor/ in-between	Spatial design
20	A	Comfort	High/ moderate/ low	Experience quality
	B	Accessibility	High/ moderate/ low	Accessibility
	C	Security	High/ moderate/ low	Safety and security
21	A	Historic significance	High/ moderate/ low	Image
	B	Symbolism	High/ moderate/ low	Image
22	A	Uses	Work/ play/ shop/mixed	Types of uses
	B	People	Few/ some/ many	People
23	A	People	University/ town/ visitor	People
	B	Activities	Serious/ fun/ mixed	Types of uses
	C	Money needed	No money/ low/ high	accessibility
24	A	Diversity of people	High/ moderate/ low	People
	B	Relevance to daily life	High/ moderate/ low	Types of use
25	A	Sense of belonging	High/ moderate/ low	Experience quality
	B	Number of people	High/ moderate/ low	People
26	A	Community involvement	High/ moderate/ low	Community
	A	Diversity of people	High/ moderate/ low	People
27	B	Location	DT/ near DT/ outside DT	Context
	C	Ownership	City/ University/ Private	Ownership
28	A	Energy and vibrancy	High/ moderate/ low	Experience quality
	B	Activities	Single/ group/ mixed	Types of use
29	A	Quality of experience	High/ moderate/ low	Experience quality
	B	Connection with the surrounding	High/ moderate/ low	Connectivity
30	A	Uniqueness	High/ moderate/ low	Image
	B	Image	High/ moderate/ low	Image
31	A	Activity type	Everyday/ sometime/ rare	Types of use
	B	Important for the city	High/ moderate/ low	Image
32	A	Water	Yes/ no	Others
	B	Food	Yes/ no	Others
	C	Children	Yes/ no	People
	D	Elderly	Yes/ no	People

Appendix N: Directed sort responses in Ann Arbor, MI.

■ Highly public　　■ Moderately public　　▨ Restricted public

Main Street

No.	Places	Respondents							
		1 F	2 M	3 F	4 M	5 F	6 F	7 M	8 M
1	Michigan Theater								
2	Bell Tower and Plaza								
3	Nichol's Arboretum								
4	Barton Park								
5	Law Quad								
6	Nickels Arcade								
7	Ann Arbor Hands-on Museum								
8	Ann Arbor City Hall								
9	Ann Arbor Public Library (DT)								
10	U of M Diag								
11	Liberty Street								
12	Liberty Post Office								
13	Rackham Building								
14	Espresso Royale (State St)								
15	Main Street								
16	Michigan Stadium								
17	Michigan Union								
18	Gallup Park								
19	Ice Cube								
20	Gandy Dancer (Old Train Stn)								
21	Arborland Shopping Mall								
22	Borders Head Quarter								
23	Kerry Town / Farmers' Market								
24	Regents' Plaza / The Cube								
25	Briarwood Mall								

Borders Bookstore

No.	Places	Respondents							
		9 M	10 F	11 M	12 M	13 F	14 M	15 F	16 F
1	Michigan Theater								
2	Bell Tower and Plaza								
3	Nichol's Arboretum								
4	Barton Park								
5	Law Quad								
6	Nickels Arcade								
7	Ann Arbor Hands-on Museum								
8	Ann Arbor City Hall								
9	Ann Arbor Public Library (DT)								
10	U of M Diag								
11	Liberty Street								
12	Liberty Post Office								
13	Rackham Building								
14	Espresso Royale (State St)								
15	Main Street								
16	Michigan Stadium								
17	Michigan Union								
18	Gallup Park								
19	Ice Cube								
20	Gandy Dancer (Old Train Stn)								
21	Arborland Shopping Mall								
22	Borders Head Quarter								
23	Kerry Town / Farmers' Market								
24	Regents' Plaza / The Cube								
25	Briarwood Mall								

Gallup Park

No.	Places	Respondents							
		17 F	18 M	19 M	20 M	21 M	22 F	23 F	24 F
1	Michigan Theater								
2	Bell Tower and Plaza								
3	Nichol's Arboretum								
4	Barton Park								
5	Law Quad								
6	Nickels Arcade								
7	Ann Arbor Hands-on Museum								
8	Ann Arbor City Hall								
9	Ann Arbor Public Library (DT)								
10	U of M Diag								
11	Liberty Street								
12	Liberty Post Office								
13	Rackham Building								
14	Espresso Royale (State St)								
15	Main Street								
16	Michigan Stadium								
17	Michigan Union								
18	Gallup Park								
19	Ice Cube								
20	Gandy Dancer (Old Train Stn)								
21	Arborland Shopping Mall								
22	Borders Head Quarter								
23	Kerry Town / Farmers' Market								
24	Regents' Plaza / The Cube								
25	Briarwood Mall								

Briarwood Mall

No.	Places	Respondents							
		25 F	26 M	27 F	28 M	29 F	30 F	31 M	32 M
1	Michigan Theater								
2	Bell Tower and Plaza								
3	Nichol's Arboretum								
4	Barton Park								
5	Law Quad								
6	Nickels Arcade								
7	Ann Arbor Hands-on Museum								
8	Ann Arbor City Hall								
9	Ann Arbor Public Library (DT)								
10	U of M Diag								
11	Liberty Street								
12	Liberty Post Office								
13	Rackham Building								
14	Espresso Royale (State St)								
15	Main Street								
16	Michigan Stadium								
17	Michigan Union								
18	Gallup Park								
19	Ice Cube								
20	Gandy Dancer (Old Train Stn)								
21	Arborland Shopping Mall								
22	Borders Head Quarter								
23	Kerry Town / Farmers' Market								
24	Regents' Plaza / The Cube								
25	Briarwood Mall								

Appendix O: Directed sort responses in Athens, GA.

■ Highly public　　■ Moderately public　　□ Restricted public

College Av and Broad St

No.	Places	Respondents							
		1 M	2 F	3 M	4 F	5 M	6 M	7 F	8 F
1	College Av. and Broad St.								
2	UGA entrance quad								
3	UGA library quad								
4	Fountain plaza (UGA)								
5	Tate Student Center (UGA)								
6	Sanford stadium (UGA)								
7	Athens-Clark County Office								
8	Athens Old City Hall								
9	Clarke County Regional Lib								
10	Borders - Alps Road								
11	Dudley Park								
12	Sandy Creek Nature Center								
13	State Boranical Garden, GA								
14	Founders' Memorial Garden								
15	Jackson Street Cemetery								
16	DW Brooks Mall (UGA)								
17	Gritz vegeterian restaurant								
18	Georgia Sqaure Mall								
19	Seney-Stovall Chapel								
20	Copper Creek Brewing Co.								
21	N. Oconee Greenway & Trail								
22	Georgia Museum of Art								
23	Skate Around USA								
24	Taco Stand - Broad St.								
25	Espresso Royale - Broad St.								

Borders Bookstore

No.	Places	Respondents							
		9 F	10 M	11 F	12 F	13 M	14 F	15 M	16 M
1	College Av. and Broad St.								
2	UGA entrance quad								
3	UGA library quad								
4	Fountain plaza (UGA)								
5	Tate Student Center (UGA)								
6	Sanford stadium (UGA)								
7	Athens-Clark County Office								
8	Athens Old City Hall								
9	Clarke County Regional Lib								
10	Borders - Alps Road								
11	Dudley Park								
12	Sandy Creek Nature Center								
13	State Boranical Garden, GA								
14	Founders' Memorial Garden								
15	Jackson Street Cemetery								
16	DW Brooks Mall (UGA)								
17	Gritz vegeterian restaurant								
18	Georgia Sqaure Mall								
19	Seney-Stovall Chapel								
20	Copper Creek Brewing Co.								
21	N. Oconee Greenway & Trail								
22	Georgia Museum of Art								
23	Skate Around USA								
24	Taco Stand - Broad St.								
25	Espresso Royale - Broad St.								

N Oconee Greenway and Heritage Trail

No.	Places	Respondents							
		17 M	18 F	19 F	20 F	21 F	22 M	23 M	24 M
1	College Av. and Broad St.								
2	UGA entrance quad								
3	UGA library quad								
4	Fountain plaza (UGA)								
5	Tate Student Center (UGA)								
6	Sanford stadium (UGA)								
7	Athens-Clark County Office								
8	Athens Old City Hall								
9	Clarke County Regional Lib								
10	Borders - Alps Road								
11	Dudley Park								
12	Sandy Creek Nature Center								
13	State Boranical Garden, GA								
14	Founders' Memorial Garden								
15	Jackson Street Cemetery								
16	DW Brooks Mall (UGA)								
17	Gritz vegeterian restaurant								
18	Georgia Sqaure Mall								
19	Seney-Stovall Chapel								
20	Copper Creek Brewing Co.								
21	N. Oconee Greenway & Trail								
22	Georgia Museum of Art								
23	Skate Around USA								
24	Taco Stand - Broad St.								
25	Espresso Royale - Broad St.								

Athens-Clarke County Regional Library

No.	Places	Respondents							
		25 M	26 F	27 M	28 F	29 M	30 M	31 F	32 F
1	College Av. and Broad St.								
2	UGA entrance quad								
3	UGA library quad								
4	Fountain plaza (UGA)								
5	Tate Student Center (UGA)								
6	Sanford stadium (UGA)								
7	Athens-Clark County Office								
8	Athens Old City Hall								
9	Clarke County Regional Lib								
10	Borders - Alps Road								
11	Dudley Park								
12	Sandy Creek Nature Center								
13	State Boranical Garden, GA								
14	Founders' Memorial Garden								
15	Jackson Street Cemetery								
16	DW Brooks Mall (UGA)								
17	Gritz vegeterian restaurant								
18	Georgia Sqaure Mall								
19	Seney-Stovall Chapel								
20	Copper Creek Brewing Co.								
21	N. Oconee Greenway & Trail								
22	Georgia Museum of Art								
23	Skate Around USA								
24	Taco Stand - Broad St.								
25	Espresso Royale - Broad St.								

Appendix P: Directed sort responses in Tallahassee, FL.

| ■ Highly public | ▦ Moderately public | ▨ Restricted public |

Kleman Plaza

No.	Places	Respondents							
		1 F	2 M	3 F	4 M	5 F	6 F	7 M	8 M
1	Lake Ella								
2	Governor's Square Mall								
3	Kleman Plaza								
4	Adams Street								
5	Scienece Museum								
6	Tallahassee City Hall								
7	Lewis Park, Downtown								
8	Park Av. chain of parks								
9	City of Tallahassee Pub Lib								
10	Doak Campbell Stadium (FSU)								
11	Duval Street								
12	New Capitol								
13	College Av. and Copeland St.								
14	Borders - Apalachee Pkwy.								
15	Tallahassee Comm. College								
16	Lake Talquin State Rec Area								
17	Cascades Park								
18	Old City Cemetery								
19	Tallah-Leon Coutny Civ Cntr.								
20	Tallahassee Mall								
21	FSU Circus								
22	Fun Station								
23	Alfred McCay State Gardens								
24	FSU Museum of Fine Arts								
25	Jim and Mill's BBQ								

Adams St

No.	Places	Respondents							
		9 M	10 F	11 M	12 M	13 F	14 M	15 F	16 F
1	Lake Ella								
2	Governor's Square Mall								
3	Kleman Plaza								
4	Adams Street								
5	Scienece Museum								
6	Tallahassee City Hall								
7	Lewis Park, Downtown								
8	Park Av. chain of parks								
9	City of Tallahassee Pub Lib								
10	Doak Campbell Stadium (FSU)								
11	Duval Street								
12	New Capitol								
13	College Av. and Copeland St.								
14	Borders - Apalachee Pkwy.								
15	Tallahassee Comm. College								
16	Lake Talquin State Rec Area								
17	Cascades Park								
18	Old City Cemetery								
19	Tallah-Leon Coutny Civ Cntr.								
20	Tallahassee Mall								
21	FSU Circus								
22	Fun Station								
23	Alfred McCay State Gardens								
24	FSU Museum of Fine Arts								
25	Jim and Mill's BBQ								

Lake Ella

No.	Places	Respondents							
		17 F	18 M	19 M	20 M	21 M	22 F	23 F	24 F
1	Lake Ella								
2	Governor's Square Mall								
3	Kleman Plaza								
4	Adams Street								
5	Scienece Museum								
6	Tallahassee City Hall								
7	Lewis Park, Downtown								
8	Park Av. chain of parks								
9	City of Tallahassee Pub Lib								
10	Doak Campbell Stadium (FSU)								
11	Duval Street								
12	New Capitol								
13	College Av. and Copeland St.								
14	Borders - Apalachee Pkwy.								
15	Tallahassee Comm. College								
16	Lake Talquin State Rec Area								
17	Cascades Park								
18	Old City Cemetery								
19	Tallah-Leon Coutny Civ Cntr.								
20	Tallahassee Mall								
21	FSU Circus								
22	Fun Station								
23	Alfred McCay State Gardens								
24	FSU Museum of Fine Arts								
25	Jim and Mill's BBQ								

Governor's Square Mall

No.	Places	Respondents							
		25 F	26 M	27 F	28 M	29 F	30 F	31 M	32 M
1	Lake Ella								
2	Governor's Square Mall								
3	Kleman Plaza								
4	Adams Street								
5	Scienece Museum								
6	Tallahassee City Hall								
7	Lewis Park, Downtown								
8	Park Av. chain of parks								
9	City of Tallahassee Pub Lib								
10	Doak Campbell Stadium (FSU)								
11	Duval Street								
12	New Capitol								
13	College Av. and Copeland St.								
14	Borders - Apalachee Pkwy.								
15	Tallahassee Comm. College								
16	Lake Talquin State Rec Area								
17	Cascades Park								
18	Old City Cemetery								
19	Tallah-Leon Coutny Civ Cntr.								
20	Tallahassee Mall								
21	FSU Circus								
22	Fun Station								
23	Alfred McCay State Gardens								
24	FSU Museum of Fine Arts								
25	Jim and Mill's BBQ								

Appendix Q: Directed sort responses in Lansing, MI

| ■ Highly public | ▨ Moderately public | ▫ Restricted public |

Grand River Av strip

No.	Places	Respondents							
		1 F	2 M	3 F	4 M	5 F	6 F	7 M	8 M
1	Barnes & Noble - Grand River								
2	Grand River Av. strip								
3	Fergusson Park								
4	Lansing Mall								
5	River Front Park								
6	Michigan State Creamery								
7	Spartan Stadium (MSU)								
8	Merdian Mall								
9	State Capitol Building								
10	Potter Park								
11	MSU auditorium								
12	Kellog Center (MSU)								
13	Luis Aldo Park & Trail System								
14	Holiday Lanes								
15	Frances Park								
16	Impression 5 Science Center								
17	Spotlight Theatre								
18	Fenner Nature Center								
19	Michigan Library & His Cntr.								
20	Kresge Art Museum (MSU)								
21	Beaner's Gourmet Coffee								
22	Abram's Planetarium (MSU)								
23	Cooley Gardens								
24	Courthouse Square								
25	Horticulture Demo Gardens								

Barnes & Noble Bookstore

No.	Places	Respondents							
		9 M	10 F	11 M	12 M	13 F	14 M	15 F	16 F
1	Barnes & Noble - Grand River								
2	Grand River Av. strip								
3	Fergusson Park								
4	Lansing Mall								
5	River Front Park								
6	Michigan State Creamery								
7	Spartan Stadium (MSU)								
8	Merdian Mall								
9	State Capitol Building								
10	Potter Park								
11	MSU auditorium								
12	Kellog Center (MSU)								
13	Luis Aldo Park & Trail System								
14	Holiday Lanes								
15	Frances Park								
16	Impression 5 Science Center								
17	Spotlight Theatre								
18	Fenner Nature Center								
19	Michigan Library & His Cntr.								
20	Kresge Art Museum (MSU)								
21	Beaner's Gourmet Coffee								
22	Abram's Planetarium (MSU)								
23	Cooley Gardens								
24	Courthouse Square								
25	Horticulture Demo Gardens								

Fergusson Park

No.	Places	Respondents							
		17 F	18 M	19 M	20 M	21 M	22 F	23 F	24 F
1	Barnes & Noble - Grand River								
2	Grand River Av. strip								
3	Fergusson Park								
4	Lansing Mall								
5	River Front Park								
6	Michigan State Creamery								
7	Spartan Stadium (MSU)								
8	Merdian Mall								
9	State Capitol Building								
10	Potter Park								
11	MSU auditorium								
12	Kellog Center (MSU)								
13	Luis Aldo Park & Trail System								
14	Holiday Lanes								
15	Frances Park								
16	Impression 5 Science Center								
17	Spotlight Theatre								
18	Fenner Nature Center								
19	Michigan Library & His Cntr.								
20	Kresge Art Museum (MSU)								
21	Beaner's Gourmet Coffee								
22	Abram's Planetarium (MSU)								
23	Cooley Gardens								
24	Courthouse Square								
25	Horticulture Demo Gardens								

Lansing Mall

No.	Places	Respondents							
		25 F	26 M	27 F	28 M	29 F	30 F	31 M	32 M
1	Barnes & Noble - Grand River								
2	Grand River Av. strip								
3	Fergusson Park								
4	Lansing Mall								
5	River Front Park								
6	Michigan State Creamery								
7	Spartan Stadium (MSU)								
8	Merdian Mall								
9	State Capitol Building								
10	Potter Park								
11	MSU auditorium								
12	Kellog Center (MSU)								
13	Luis Aldo Park & Trail System								
14	Holiday Lanes								
15	Frances Park								
16	Impression 5 Science Center								
17	Spotlight Theatre								
18	Fenner Nature Center								
19	Michigan Library & His Cntr.								
20	Kresge Art Museum (MSU)								
21	Beaner's Gourmet Coffee								
22	Abram's Planetarium (MSU)								
23	Cooley Gardens								
24	Courthouse Square								
25	Horticulture Demo Gardens								

Appendix R: List of professionals and residents interviewed

Name	Designation	Information
Ann Arbor		
Bonnie S. Bona	Architect/Resident	Role of the university in development of Ann Arbor. The university as a developer.
Martin Schwartz	Architect/Resident	College-town relationship. Debate of development in the context of the greenway initiative in Ann Arbor.
Tom van der May	Resident	General residents' perspective. Student-resident relationship in Ann Arbor.
Elizabeth van der May	Resident	History of political activism in Ann Arbor. Historic preservation.
Athens		
Rick Cowick	Senior Planner	Planning history of Athens.
Bruce Lonnee	Senior Planner	Campus-town relationship. Historic preservation efforts in Athens.
Mary Martin	GIS/Graphics Administer	Comprehensive planning documents. Zoning and landuse information.
Daniel Victorio	Resident	Politics and economics of Athens. Recent evolution of Athens as a major attractor of resident population.
Tallahassee		
Christopher Coutts	Resident/Professor	Campus development and planning. Recent campus infrastructure development.
Daniel Donovan	Senior Planner/ Urban Designer	Historic development of Downtown Tallahassee. Sketch of historic Tallahassee. Recent urban design projects and developments in Tallahassee.
Lansing		
Banhi Bhattacharyya	Student	Pedestrian behavior on campus. Dynamics of downtown Lansing and downtown East Lansing.
René Hinojosa	Professor	Campus history and planning. Relationship of the university with the city.

Appendix S: Data from four observation sites in Ann Arbor, MI.

Time: 10:00   10:15   Place: MAIN STREET   Day: Thursday   Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	2		■			■					
1	5	1	friends		■			■					
2	3	2	2	■									
2	3	2	friends	■									
1	4	1	2		■			■					
1	4	1	couple		■			■					
2	5	1	2		■			■					
1	2	1	family		■			■					
2	5	1	3		■			■					
2	3	1	family		■			■					
2	2	1			■			■					
1	3	1	1		■			■				■	
2	3	2	1	■									
1	5	1	2	■									
2	5	1	friends	■									
2	4	3	1		■			■				■	
2	3	3	1	■									
1	3	1	2		■			■					
2	3	1	couple		■			■					
2	3	2	1		■			■				■	
2	5	1	2	■									
1	3	1	friends	■									
1	5	1	1		■			■				■	
2	3	1	2		■			■					
2	3	1	friends		■			■					

Notes

1 Male	1 <14	1 white	1 1	mostly adults and groups of two. Not many stduents
2 Fem	2 14 - 20	2 black	2 2	most of the people having coffee or breakfast
	3 21 - 35	3 asian	3 3-5	
	4 36 - 60	4 hisp	4 >5	
	5 >60			

Time: 13:00   13:15   Place: MAIN STREET   Day: Friday   Date: 9/16

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2		■			■					
2	3	3			■			■					
2	5	2	2	■									■
2	4	3	friends	■									
1	4	1	2	■									
2	4	1		■									
2	3	2	2	■									
1	3	2		■									
2	3	3	2	■									■
2	3	1		■									
2	4	2	4		■		■	■					
2	3	1	friends		■		■	■					
2	3	1			■		■	■					
2	4	1			■		■	■					
2	3	1			■		■	■					
2	3	3			■		■	■					
2	3	1			■		■	■					
1	5	1	2		■		■	■					
2	3	2			■			■					
1	3	1	3	■									
1	1	1	famly	■									
2	3	1		■									
2	2	1		■									
1	3	1	2	■	■						Watching		
2	3	1	couple	■									

Notes

1 Male	1 <14	1 white	1 1	People seating or gathered around/ in fornt of the food stores
2 Fem	2 14 - 20	2 black	2 2	Other shop fronts empty
	3 21 - 35	3 asian	3 3-5	Lot of people for lunch/ coffee
	4 36 - 60	4 hisp	4 >5	
	5 >60			

Table 1

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	3										
2	4	1											
2	3	1											
2	3	2	1										
2	3	3	1										
1	2	1	1										
2	3	1	1										
1	3	4	1								Watching		
1	3	2	2										
2	4	1											
1	4	1	1								Watching		
2	4	1	1										
1	2	2	1										
1	3	1	3										
2	3	1											
1	1	3											
1	1	3											
1	3	1	2										
2	3	3											
1	4	1	1										
2	5	4	2										
2	3	4											
1	5	1	2										
2	5	1											

Notes	

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 2

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
1	3	2	2										
2	3	2											
1	5	1	3										
2	5	1											
1	3	1											
2	3	1											
1	3	2	3										
2	3	1											
2	3	1											

Notes	

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15 Place: MAIN STREET Day: Saturday Date: 9/17

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	3										
2	3	1											
2	3	1											
1	4	2	1										
2	5	2	2										
2	5	2											
2	3	1	1										
1	3	3	1										
2	3	2	1										
2	4	1	1										
1	3	1	2										
1	3	1											
2	3	1	1										
1	3	3	3										
1	3	3											
2	1	3											
1	3	1	2										
1	2	1											
1	3	2	1										
1	4	4	1										
2	3	1	1										
1	3	1	3										
2	3	1											
1	3	1											
2	3	1											

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	2										
2	4	1											
2	3	1	1										
1	3	2	2										
1	3	2											
1	3	2	1										
2	3	1	3										
1	3	1											
2	1	1											
2	5	3	1										
2	5	3	1										
2	3	1	1										
1	3	1	1										
1	5	1	2								Music		
1	5	1											
2	3	2	1										
1	3	3	1										
1	5	1	2										
2	2	1											
2	4	1	2										
2	4	1											
1	3	1	2										
1	3	1											
1	3	1	2										
2	3	2											

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	3	X									
2	3	1		X									
1	2	1		X									
2	2	1		X									
1	4	1	3	X									
2	4	1		X									
1	3	1		X									
2	3	1		X									
1	3	1	3	X									
2	3	1		X									
1	2	1		X									
2	2	1		X									
1	3	1	3		X			X					
2	3	1			X			X					
2	3	1											
1	3	3	2	X									
2	1	3											
1	3	3	2		X								
2	3	1			X								
2	5	1	2		X			X					
2	5	1			X			X					
1	5	1	3	X									
2	5	1		X									
1	5	1		X									
2	5	1		X									
Notes													

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	4	X									
2	4	1		X									
2	3	1		X									
2	3	1		X									
1	3	1		X									
2	3	1		X									
2	2	1		X									
1	3	1	4		X			X					
2	3	1			X			X					
2	5	1			X			X					
2	2	1			X			X					
1	3	1			X			X					
1	3	1			X			X					
2	2	1			X			X					
2	2	1			X			X					
1	3	1	3	X									
1	3	1		X									
1	3	1		X									
1	3	1	3	X									
2	3	1		X									
1	2	1		X									
2	2	1		X									
1	3	1	3		X	X		X					
2	3	1			X	X		X					
1	2	1			X	X		X					
Notes													

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1	■									
1	3	1	3	■									
2	3	1		■									
1	2	1		■									
1	3	1	3		■			■					
2	3	1			■			■					
1	5	1			■			■					
1	3	1	4		■			■					
2	3	1			■			■					
1	2	1			■			■					
1	2	1			■			■					
1	3	1			■			■					
1	2	1			■			■					
1	3	1	2		■			■					
1	3	1			■			■					
1	3	4	2		■			■					
2	3	4			■			■					
2	2	1	3	■									■
2	2	1		■									■
2	3	1		■									■
1	2	2	3	■									
2	3	2		■									
1	3	2		■									
1	3	1	2	■									
2	3	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2	■									
2	3	1		■									
1	5	1	3		■			■					
2	5	1			■			■					
1	5	1			■			■					
2	5	1			■			■					
1	4	1	2	■							Theatre		
2	4	1		■									
2	3	1	2	■							Theatre		
2	3	1		■									
1	4	1	1	■							Theatre		
1	3	1	1	■							Theatre		
2	3	1	3	■							Theatre		
2	3	1		■									
1	3	1		■									
1	4	1	2	■							Theatre		
2	4	1		■									
1	3	1	4	■									
2	3	1		■									
2	3	1		■									
1	3	1		■									
2	3	1		■									
1	3	1		■									
2	3	1		■									
1	3	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	4	■									
2	3	3		■									
2	3	3		■									
2	2	3		■									
2	2	3		■									
2	1	3		■									
1	3	3	3		■			■					
2	3	3			■			■					
1	3	3			■			■					
2	3	3			■			■					
1	3	1	3		■			■					
2	3	1			■			■					
1	1	1			■			■					
1	1	1			■			■					
1	3	1	1	■									
1	3	1	1	■									
2	4	1	1	■									
1	3	1	4	■									
2	3	1		■									
1	3	1		■									
1	2	1		■									
2	2	1		■									
2	2	1		■									
1	3	1	2	■									
2	3	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 10:00 10:15   Place: BORDERS   Day: Sunday   Date: 9/18

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2		■							■	
1	3	1						■					
2	4	1	2	■				■					■
1	4	1											
2	3	3	1		■			■				■	■
2	5	1	1	■									■
2	4	1	1	■									
1	3	1	1	■									
1	4	1	1	■				■					
2	4	1	1										
2	3	1	1		■			■				■	
1	4	3	1	■				■					■
2	3	1	1		■							■	
1	3	1	1										
1	3	1	1	■									■
1	5	1	1										
1	4	1	1		■			■				■	
1	5	1	1										
1	4	1	1	■									■
2	3	1	1	■									
1	4	1	2	■									
1	3	1											
2	5	1	1		■							■	
2	3	1	1		■							■	

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	■									■
2	2	1											■
1	3	1	1		■								
1	4	3	1	■	■								■

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00 13:15 Place: BORDERS Day: Thursday Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	2	1	1		■			■				■	
1	3	3	1		■			■				■	
2	3	2	2		■			■				■	
2	3		3 friends		■			■				■	
1	3	1	1		■							■	
1	4	1	1		■							■	
1	3	2	1								Sleeping	■	
1	3	2	1		■								
1	3	3	2		■			■					
2	3	1 friends			■			■					
2	2	1			■							■	
1	3	1	1		■								
1	5	1	1	■									
2	2	1	2	■								■	
2	3	1 friends										■	
2	3	3	1		■								
1	3	1	2		■							■	
2	3	1 friends										■	
1	3	2	1		■							■	
1	5	1	1	■									■
1	2	1	3	■								■	■
1	3	1 family		■								■	■
1	4	1		■								■	■
2	4	1		■								■	■
1	3	1	1	■								■	■

Notes

1 Male	1 <14	1 white	1 1	Many UM stduents and professors reading and working along with having a quick bite
2 Fem	2 14 - 20	2 black	2 2	People utilizing the space for working in spite of having libraries and work areas in campus
	3 21 - 35	3 asian	3 3-5	Importance of food (Whyte)
	4 36 - 60	4 hisp	4 >5	
	5 >60			

Time: 15:00 15:15 Place: BORDERS Day: Friday Date: 9/16

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1		X							X	
2	3	1	1		X			X				X	
1	5	1	1		X							X	
2	3	2	2	X									X
1	2	2		X									X
1	4	1	1									X	
2	3	1	3		X			X				X	
1	1	1			X			X				X	
1	1	1			X							X	
1	3	3	2	X								X	X
2	3	3		X								X	X
1	4	1	1	X									X
1	4	3	1	X								X	X
1	3	2	2		X							X	
2	3	2			X							X	
2	3	1	1		X			X				X	
1	5	1	1		X							X	
2	3	1	1		X							X	
2	2	4	2	X									X
2	3	4		X									X
1	3	1	2									X	X
2	3	1										X	
1	5	1	1		X							X	
1	3	3	1									X	X
2	3	3	1	X	X							X	

Notes

1 Male	1 <14	1 white	1 1	Many UM stduents and professors reading and working along with having a quick bite
2 Fem	2 14 - 20	2 black	2 2	People utilizing the space for working in spite of having libraries and work areas in campus
	3 21 - 35	3 asian	3 3-5	Importance of food (Whyte)
	4 36 - 60	4 hisp	4 >5	
	5 >60			

Time: 18:00 18:15 Place: BORDERS Day: Saturday Date: 9/17

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	1									X	
1	3	2	1		X							X	
1	3	1	1										X
2	3	3	2	X				X					
2	3	1	friends										
2	3	1	1	X									
2	4	1	1	X								X	
1	3	2	1									X	
1	3	1	1									X	
1	4	1	1		X							X	
1	4	1	2	X				X				X	
2	4	1	couple										
1	3	2	2										
1	3	4											
1	3	4	3	X				X					X
2	3	4	family	X				X					X
2	3	4		X									
1	1	4		X				X					
2	4	1	3		X							X	
1	4	1	family	X								X	
2	2	2		X									
1	3	1	1									X	X
2	3	1	1	X								X	X
2	4	2	1	X								X	
1	2	1	1	X				X				X	

Notes

1 Male	1 <14	1 white	1 1	Author's book reading event. Seating arranged for 25-30 persons
2 Fem	2 14 - 20	2 black	2 2	Less people using in these arranged seating areas
	3 21 - 35	3 asian	3 3-5	More people watching or gathering around while browsing through books or sipping coffee
	4 36 - 60	4 hisp	4 >5	Spontaneous space versus designed/ intended space
	5 >60			

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	3	1										
1	4	1	2										
2	4	1											
1	3	1	3										
2	3	1											
1	1	1											
1	3	2	2										
2	3	2											
2	2	1	1										

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 10:00 10:15   Place: GALLUP PARK   Day: Saturday   Date: 9/17

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	2										
2	5	1											
2	5	4	1										
1	3	1	3										
1	1	1											
1	3	1											
1	1	1											
2	4	1	1										
2	3	3	3										
2	1	3											
1	1	3											
2	5	1	2										
2	3	1											
1	3	1	2										
2	1	1											
2	3	1	4										
2	3	3											
1	1	1											
2	1	3											
2	1	1											
2	5	1											
1	3	1	3										
2	3	1											
1	1	1											

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2		■								
2	3	1									Watching birds ■		
1	3	1	2										
1	2	1									Biking		
1	3	1	3										
2	3	3									Skating		
1	1	1									Biking		
2	3	3	2	■									
1	1	3								■			

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00   13:15   Place: GALLUP PARK   Day: Sunday   Date: 9/18

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	3	3	■	■								
2	3	3		■	■								
1	1	3		■	■				■				
1	3	3	3	■	■								
2	3	3		■	■								
1	1	3		■	■				■				
2	3	1	1								■		
1	3	1	3	■					■				
2	3	1		■					■				
2	1	1								■			
2	1	1								■			
1	1	1											
1	5	1	1	■									
1	3	1	2										
2	3	1				■							
1	3	1	1	■	■								
2	1	1	1	■	■								
1	3	3	3	■									
2	3	3		■							Exercise		
1	1	3		■									
2	1	3											
1	3	1	3								Fishing ■		
2	1	1									■		
2	1	1											
1	1	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	3	■									
1	3	1		■									
1	3	1		■									
1	3	4	2	■									
2	3	4		■									
1	3	1	3	■				Picnic					
2	3	1			■								
1	5	1			■			■					
2	1	1			■			■					
2	1	1			■								
1	5	3	1								Fishing		
1	3	1	3								Biking		
2	3	1									■		
1	2	1									■		
1	2	1									■		

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15 Place: GALLUP PARK Day: Thursday Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	4	3		■						Watching		
1	3	4			■						■		
1	1	4			■						■		
2	3	1	2	■									
1	1	1		■									
1	3	1	1								Skating		
1	3	2	3	■					■				
2	3	1		■									
1	1	1		■						■			
2	1	1		■						■			
2	1	1		■									
1	3	3	3	■					■				
2	3	3		■									
1	1	3		■						■			
1	3	3	3	■							Shooting photos		
1	1	3		■							■		
1	1	1		■							■		
2	1	1		■									
2	3	3	1						■				
1	1	1	1							■			
1	3	3	3		■								
2	3	3			■			Family picnic					
2	3	3			■								
2	1	3			■			■					
2	1	3			■								

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

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People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	4	■					■				
2	3	1		■									
1	1	1		■						■			
1	1	1		■						■			
2	1	1		■									
2	1	1		■									
1	4	1	4		■								
2	4	1			■			Family					
1	3	1			■			picnic					
1	3	1			■								
2	2	1			■			■					
2	2	1			■			■					
1	4	1	2	■									
2	4	1		■									
2	3	4	2	■									
2	3	4		■									
1	3	1	3	■						■			
1	1	1		■						■			
1	1	1		■						■			
1	1	1		■						■			
1	1	1		■						■			
1	4	3	2	■					■	■			
2	4	3		■						■			
2	3	4	2		■					■			
2	1	4			■					■			
1 Male	1 <14	1 white	1 1										
2 Fem	2 14 - 20	2 black	2 2										
	3 21 - 35	3 asian	3 3-5										
	4 36 - 60	4 hisp	4 >5										
	5 >60												

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	2	3										
2	5	2		■	■								
1	1	2		■	■								
1	1	2		■	■								
2	3	4	2	■									
2	1	4		■									
2	3	3	1		■								
2	4	1	1		■								
1	5	1	3	■									
2	5	1		■									
1	3	1		■									
2	3	1		■									
1	1	1		■									
1 Male	1 <14	1 white	1 1										
2 Fem	2 14 - 20	2 black	2 2										
	3 21 - 35	3 asian	3 3-5										
	4 36 - 60	4 hisp	4 >5										
	5 >60												

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Time: 10:00 10:15 Place: BRIARWOOD Day: Thursday Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2		■		■	■					
1	3	1			■		■	■					
1	5	1	1	■									
2	3	1	2	■									
1	1	1		■									
2	5	1	3	■									
2	3	1		■									
1	1	1		■									
2	3	1	2	■									■
2	4	1		■									■
1	3	1	1		■			■					■
2	5	1	1	■									■
2	5	1	2		■			■					■
2	3	1			■			■					■
2	3	2	2	■									■
2	3	1		■									■
2	3	1	2	■									■
2	1	1		■									■
2	3	1	1		■			■					
1	3	1	3		■			■					
1	3	1			■			■					
1	3	1			■			■					
2	4	1	2	■									■
2	1	1		■									
1	4	1	1		■			■					

Notes

1 Male / 2 Fem

1 <14	1 white	1 1
2 14 - 20	2 black	2 2
3 21 - 35	3 asian	3 3-5
4 36 - 60	4 hisp	4 >5
5 >60		

Not many people in large groups
Mostly singles with kid or couples

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1		■								
2	4	3	3	■				■					
2	3	3		■				■					
2	1	3		■				■					
1	5	1	2	■	■			■					
2	5	1		■				■					
1	3	1	3	■									■
2	3	1		■									■
1	1	1		■									
1	3	1	3		■		■						
1	3	1			■		■						
1	3	1			■		■						
2	3	1	2	■				■					■
2	1	1		■									
1	3	1	2	■									
2	3	2		■									
2	3	3	1	■									■
2	4	1	1	■									■
1	5	1	1	■									
2	4	1	2	■									■
2	3	1		■									
2	3	1	1		■			■					
2	3	1	2	■			■						■
2	1	1		■			■						
1	3	4	1	■									

Notes

1 Male / 2 Fem

1 <14	1 white	1 1
2 14 - 20	2 black	2 2
3 21 - 35	3 asian	3 3-5
4 36 - 60	4 hisp	4 >5
5 >60		

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People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2										
2	2	1											
2	2	2	1										
2	5	1	1										
2	3	1	2										
2	2	1											
1	3	2	2										
2	3	2											
2	4	1	1										
1	3	1	1										
1	3	1	1										
2	3	1	1										
2	3	1	2										
2	2	1											
2	3	1	4										
2	3	1											
2	3	2											
2	3	4											
2	3	1											
2	3	2											
2	3	2	1										
2	3	3	2										
1	1	3											
1	3	1	1										
1	3	3	1										

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	2	1	3										
2	2	3											
2	2	3											
1	3	1	3										
2	3	1											
1	1	1											
2	3	1	2										
2	3	1											
2	3	2	3										
2	2	2											
1	1	2											
1	3	2	2										
2	2	2											
1	2	3	2										
1	2	3											
2	3	1	3										
2	1	1											
1	1	1											
1	3	4	2										
1	3	4											
2	3	3	1										
2	5	1	1										
2	5	2	2										
2	2	2											
1	5	1	1										

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	3	■					■				■
1	1	3		■									■
2	3	3		■					■				■
1	1	3		■									■
2	3	4	3	■									■
2	3	4		■									■
2	1	4		■									■
1	3	1	2	■									
2	3	1		■									
1	4	1	2		■			■					
1	3	3			■			■					
1	3	1	2	■									■
2	3	1		■									■
2	3	1	3	■									■
2	3	1		■									■
1	3	4	2	■									■
2	3	1		■									■
1	3	1	2	■									■
2	3	1		■									■
1	1	3	3	■									■
2	3	3		■									■
2	3	3		■									■
1	3	3	1	■									■
1	3	2	1	■									■

Notes

1 Male	1 <14	1 white	1 1	Not many large groups
2 Fem	2 14 - 20	2 black	2 2	More women
	3 21 - 35	3 asian	3 3-5	More family, women with kids
	4 36 - 60	4 hisp	4 >5	Some common activities such as walking and shopping are predominant
	5 >60			

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	2	2	■									■
2	3	2		■									
1	3	2	1	■									
2	3	1	1	■									■
2	3	1	1	■									
1	4	3	1	■									
1	3	1	1	■									
2	2	1	1	■									
2	2	1	1	■									■
2	5	1	3	■				■					
1	1	1		■				■					
1	1	1		■				■					
1	3	1	1		■			■					
2	3	1	2		■		■	■					
2	3	2			■		■	■					
1	3	3	1	■									
1	3	1	2	■									■
2	3	1		■									■
1	3	2	1	■									■
1	3	2	1	■									■
2	3	1	3	■									■
1	1	1		■									■
2	1	1		■									■
2	2	1	1	■									■
2	5	1	1	■									■

Notes

1 Male	1 <14	1 white	1 1	
2 Fem	2 14 - 20	2 black	2 2	
	3 21 - 35	3 asian	3 3-5	
	4 36 - 60	4 hisp	4 >5	
	5 >60			

Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	4	3	■									
2	3	4		■									
2	1	4		■									
2	3	1	1	■									
1	3	1	2	■									
2	3	3		■									
2	3	3	1	■				■					
1	1	3	1	■				■					■

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15 Place: BRIARWOOD Day: Sunday Date: 9/18

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	4	3										
2	3	4	friends		■		■	■	■				
2	3	4			■		■	■	■				
2	1	4											
1	1	4								■			
2	3	1	2	■									■
1	3	1	couple	■									■
1	3	1	4									■	
1	3	1	colleague				■					■	
1	3	2	friends				■						
1	4	1											
1	3	1					■						
2	4	1											
2	3	1	2	■									■
1	1	1	friends	■									
2	3	1	1					■					
1	5	1	3		■			■					
1	2	1	family		■			■					
2	2	1			■			■					
2	3	1											
1	5	1	3									■	
1	2	1	family									■	
2	4	1											
1	2	1	2				■						
1	2	1	friends				■						

Notes

Sex	Age	Ethnicity	Group	Notes
1 Male	1 <14	1 white	1 1	Newsstand also serves as info desk, people stopping by and asking for directions etc
2 Fem	2 14 - 20	2 black	2 2	Seatings surrounding the central area is empty
	3 21 - 35	3 asian	3 3-5	The group of 6 people is occasionally changing in composition as different people is coming and going. The
	4 36 - 60	4 hisp	4 >5	group is here for some kind of display and exhibition
	5 >60			

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	2	3	■	░	░	■	■	■	░	░	░	░
1	3	4	friends	■	░	░	■	■	░	░	░	░	░
1	1	4		■	░	░	░	■	░	■	░	░	░
1	2	2	2	■									■
2	1	1	couple	■									■

Notes				
1 Male	1 <14	1 white	1 1	Lot of people using the central space to cut across rather than going all around the atrium - just for circulation
2 Fem	2 14 - 20	2 black	2 2	Some people waiting/ standing along the peripheral circualtion areas
	3 21 - 35	3 asian	3 3-5	Security is visible, often speaking in walkie-talkie and keeping a vigil
	4 36 - 60	4 hisp	4 >5	Photography not allowed
	5 >60			

Appendix T: Data from four observation sites in Athens, GA.

Time: 10:00   10:15   Place: COLLEGE AVE   Day: Sunday   Date: 9/18

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
4	1	1	3		X		X						
3	2	1			X		X						
3	2	1			X		X						
3	2	1			X		X						
5	1	1	1		X			X					
5	1	1	1		X			X					
3	1	1	1		X			X					
3	1	1	2	X									
3	2	1		X									
3	1	1	2	X									
3	2	1		X									
3	2	1	1	X									
3	1	1	1	X									
3	1	1	2	X									
3	2	1		X									
4	1	1	1	X									
5	1	1	1	X									
3	1	1	1	X									
3	2	1	1	X									
2	2	1	2	X									
3	2	1		X									
3	1	1	3	X									
3	2	1		X									
3	1	1		X									
3	1	1		X									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	1	X									
3	1	1	2	X									
3	2	1		X									
4	1	1	2	X									
2	2	1		X									
2	2	1	1	X									
3	1	1	1	X									
3	2	1	3	X			X						
3	1	1					X						
4	2	1					X						
1	1	1					X						
3	1	4	3				X						
3	1	3					X						
3	2	3					X						
3	2	3					X						
3	2	3					X						
4	1	1	1	X									
5	1	1	4	X									
5	2	1		X									
3	2	1		X									
3	2	1		X									
3	1	1		X									
1	1	1		X									
3	1	1	1			X							

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1	■									
2	3	1	2	■									
2	2	1		■									
1	3	1	3	■									
1	3	1		■									
2	3	1		■									
1	2	2	1	■									
1	3	1	2		■								
1	3	1		■									
1	4	1	2	■									
1	5	1		■									
1	3	3	1	■									
1	3	1	1		■								
2	3	1	1									■	
1	4	1	1		■								
2	4	1	3		■			■					
2	3	1			■			■					
2	3	1			■			■					
1	3	1			■			■					
1	4	1	1		■			■					
1	3	1	3		■			■					
1	3	1			■			■					
1	3	1			■			■					
1	3	1			■			■					
2	3	1			■			■					

Notes

| 1 Male 2 Fem | 1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60 | 1 white 2 black 3 asian 4 hisp | 1 1 2 2 3 3-5 4 >5 | Predominantly college students (age 21-35) and some older professors (age > 61), sitting - watching drinking - reading |

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1		■			■					
1	3	1	1		■			■					
2	3	1	1		■			■					
2	3	1	1	■									
2	3	1	1	■									
1	3	3	3	■									
1	3	1		■									
1	3	1		■									
1	3	1	2	■									
2	3	1		■									
1	3	3	1	■									
2	3	1	2	■									
2	3	1		■									
1	2	3	2	■									
2	2	3		■									
1	3	1	1	■									
2	4	1	1	■							with bike		
2	4	1	2	■									
1	4	1		■									
1	4	1	3		■			■					
1	4	1			■			■					
2	4	1			■			■					
1	2	1			■			■					
2	3	1	2	■									
2	3	1		■									

Notes

| 1 Male 2 Fem | 1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60 | 1 white 2 black 3 asian 4 hisp | 1 1 2 2 3 3-5 4 >5 | |

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	3		■								
1	3	1			■								
1	3	1			■								
1	3	1	2		■			■					
2	3	1			■								
2	3	2	2	■									
2	3	2		■									
1	4	2	3		■								
1	4	2			■								
1	5	1			■								
1	4	2	2	■									
1	4	2		■									

Notes	
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

| Time: | 15:00 | 15:15 | Place: | COLLEGE AVE | Day: Friday | Date: 9/16 |

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	2	1	1		■							■	
3	1	2	1		■							■	
3	1	1	1		■							■	
4	1	1	3		■							■	
3	1	3			■							■	
3	2	1			■							■	
4	1	1	3	■									
5	1	1		■									
4	2	1		■									
3	1	1	2	■									
3	1	1		■									
3	1	1	1		■								
3	1	1	1		■								
3	1	1	2		■								
3	2	1			■								
3	1	1	2		■								
3	1	1			■								
3	1	1	3		■		■						
3	2	1			■		■						
3	2	1			■		■						
3	1	1	1		■		■						
3	2	1	3	■									
3	2	1		■									
3	2	1		■									

Notes	
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Table 1

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
4	2	1	2	■									
4	2	1		■									
4	2	2	2	■									
3	2	2		■									
3	1	2	2	■									
3	2	2		■									
3	1	1	2	■									
3	2	1		■									
4	1	2	1	■									
3	1	1	3	■									
3	2	1		■									
1	2	1		■									
3	1	1	3	■				■					
3	1	1		■				■					
3	2	1		■				■					
4	1	1	2		■			■					
4	2	1			■			■					
3	1	3	2	■									
3	2	3		■									
3	2	2	3		■								
4	1	2			■								
4	1	2			■								
3	1	2	1		■								
4	1	1	2		■			■					
4	2	1			■			■					

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Table 2

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	2	1	1	■									
3	1	1	3	■									
3	1	1		■									
3	1	1		■									
3	1	2	4	■									
3	1	2		■									
3	2	2		■									
1	2	2		■									
2	2	2		■									
2	1	2		■									
3	2	2		■									
3	2	2		■									
3	1	2		■									
2	1	1	3	■									
3	2	1		■									
1	2	1		■									
1	1	1		■									
4	1	1	1		■								
5	1	1	4	■									
4	2	2		■									
3	2	2		■									
2	2	2		■									
3	1	2		■									
3	2	1		■									
3	2	1		■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Time: 18:00 18:15   Place: COLLEGE AVE   Day: Saturday   Date: 9/17

People | Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	2	■									
3	2	1		■									
3	1	2	2	■									
3	1	2		■									
3	1	2	3		■								
3	1	2			■								
3	1	1			■								
3	2	1	2	■									
3	2	1		■									
3	1	1	1	■									
3	1	1	1	■									
3	2	1	1	■									
3	1	1	1		■			■					
3	1	4	1	■									
3	2	1	2	■									
3	2	1		■									
4	2	1	1	■									
3	2	1	2										
3	2	1			■		■						
3	1	1	2		■		■						
3	2	1											
4	1	1	3	■									
4	2	1		■									
2	1	1		■									
2	2	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People | Activities

Age	Sex	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	3	■									
3	2	1		■									
3	1	1		■									
3	2	1		■									
3	2	1	1	■									
4	1	1	1	■									
3	2	2	1	■									
3	1	3	1	■									
3	1	1	2	■									
3	2	1		■									
3	1	1	2	■									
4	2	1		■									
3	2	1	2	■									
3	2	1		■									
3	1	1	2	■									
3	2	1		■									
3	1	1	3	■									
2	2	1		■									
3	1	1		■									
3	2	1		■									
3	1	1	2	■									
3	2	1		■									
3	2	1	1	■									
3	2	1	2	■									
1	2	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

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People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
4	1	1	3	■									
3	2	1		■									
4	1	1		■									
2	1	1		■									
3	2	1	1	■									
4	1	1	1	■									
3	1	2	1	■									
5	1	1	3	■									
3	1	1		■									
2	2	1		■									
3	2	1	1	■									
3	1	1	2	■									
3	2	1		■									
3	2	1	1	■									
Notes													
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5										

Time: 10:00 10:15 Place: BORDERS Day: Sunday Date: 9/18

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	1	2	3		■								
2	2	2			■								
2	2	2			■								
2	2	2			■								
5	2	1	1	■									
4	1	1	1	■									■
4	1	4	1	■									■
3	1	1	1	■									■
3	2	1	1	■									■
4	1	1	1	■									
3	2	1	1	■									
5	2	1	1	■									
3	2	1	1	■									
3	1	1	1	■									
3	1	1	1		■			■				■	
4	1	1	1		■			■				■	
3	2	1	1		■			■				■	
3	1	1	1		■			■				■	
5	1	1	1	■									
4	2	1	1	■									■
3	1	1	1	■									■
3	2	1	1	■									
3	2	1	2	■									
3	1	1		■									
3	2	1	1	■									
Notes													
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5										

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Time: 13:00 13:15 Place: BORDERS Day: Thursday Date: 9/15

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	1		X			X				X	
3	1	1	1		X			X				X	
4	1	1	1		X			X				X	
3	1	1	1		X			X				X	
3	2	4	2	X									
1	2	4		X									
3	2	3	1		X							X	
3	2	1	1		X							X	
3	2	1	1									X	
4	1	1	1	X									X
3	2	1	1		X								
3	1	1	3		X			X					
3	2	1						X					
3	1	3			X			X					
3	2	2	3		X			X				X	
3	2	2			X			X				X	
3	2	2			X			X				X	
3	2	3	1		X			X					
4	1	1	2		X			X				X	
3	1	1			X			X				X	
3	2	2	2		X			X					
3	1	3			X			X					
3	2	1	1		X			X				X	
3	2	1	1		X			X				X	
3	1	1	1		X			X				X	
Notes													

1 Male 1 <14 1 white 1 1
2 Fem 2 14 - 20 2 black 2 2
3 21 - 35 3 asian 3 3-5
4 36 - 60 4 hisp 4 >5
5 >60

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
4	1	1	1	X									
3	2	1	2	X									
3	1	1		X									
3	2	1	1	X									
3	1	1	2	X									
3	2	1		X									
4	2	1	2	X									X
3	1	1		X									X
4	2	1	1	X									
4	1	1	1	X									
3	1	1	2	X									
3	2	1		X									
5	1	1	1	X									
3	1	1	1	X									
4	1	1	1		X							X	
3	1	1	2	X									
1	1	1		X									
3	2	1	1	X									
4	1	1	1		X							X	
4	2	1	2	X									X
3	2	1		X									
3	1	1	3	X									
1	1	1		X									
1	1	1		X									
Notes													

1 Male 1 <14 1 white 1 1
2 Fem 2 14 - 20 2 black 2 2
3 21 - 35 3 asian 3 3-5
4 36 - 60 4 hisp 4 >5
5 >60

Time: 15:00 15:15 Place: BORDERS Day: Friday Date: 9/16

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	1		X			X					
5	1	1	1		X			X					
3	1	1	2		X			X					
3	2	1			X							X	
5	1	1	1		X			X				X	
3	2	1	1		X			X					
3	1	1	1		X			X					
3	2	1	2	X									X
3	2	1											
5	2	1	3		X			X					
4	2	1			X			X					
4	2	1			X			X					
4	2	1			X			X					
3	1	3	1	X									X
3	2	3	3	X									
3	2	3		X									
3	2	3		X									
2	2	3		X									
3	1	1	2		X			X					
3	2	1			X								
3	2	3	1		X							X	
4	1	1	1		X							X	
3	2	3	1		X							X	
3	2	3	1		X							X	
3	1	3	1		X							X	

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	2	4	2		X			X					
3	2	4			X			X					
3	1	1	1		X			X					
3	2	1	3		X							X	
1	1	1			X								
1	2	1			X								
4	1	1	1		X			X					
3	1	1	1		X			X					
3	1	2	1	X									
3	1	1	3	X									
3	2	1		X									
1	2	1		X									
4	2	1	1	X									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Time: 18:00 18:15   Place: BORDERS   Day: Saturday   Date: 9/17

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	2	3	X									
3	2	2		X									
1	1	2		X									
1	2	2		X									
2	1	1	3										X
2	2	3											
2	2	3											
3	1	2	1		X							X	
3	1	1	1		X							X	
3	2	1	1		X							X	
3	2	1	1		X							X	
3	2	1	1		X							X	
3	2	1	1		X							X	
5	2	1	1		X							X	
4	1	1	1	X									
4	2	1	1										
5	1	1	2		X			X					
5	2	1			X			X					
4	1	3	1	X									
4	1	1	2	X									
4	2	1											
3	2	1	1	X									X
3	2	1	1										X
3	1	1	1	X									
3	1	2	1	X									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	1	X									
3	1	1	3	X									
1	2	1		X									
1	2	1		X									
4	1	1	1	X								X	
3	1	1	2	X									
3	2	1		X									
5	2	1	1	X									X
3	2	2	1	X									
3	1	3	2	X								X	
2	2	3										X	
4	1	1	2	X									
4	2	1		X									
3	1	1	1	X									X
3	1	1	2	X									X
3	2	1		X									
4	1	1	2	X									X
4	2	1		X									
4	1	1	1	X									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time: 10:00   10:15   Place: PARK   Day: Sunday   Date: 11/04

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	3	■									
3	1	1											
3	1	1											
3	2	1	1			■							
3	1	1	1										
3	2	1	3	■									
4	1	1		■									
2	2	1		■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time: 13:00   13:15   Place: PARK   Day: Sunday   Date: 11/04

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	2	■							with dog ■		
1	2	1											
3	1	1	3	■									
3	2	1		■									
1	1	1		■									
1	1	1		■									
2	2	1		■									
3	2	1	3	■									
2	1	1		■							with dog ■		
1	1	1		■									
1	2	1		■									
3	1	1	2	■									
3	2	1		■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time: 15:00 15:15   Place: PARK   Day: Friday   Date: 11/04

People / Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
5	1	1	1	■									
3	2	1	1								with dog		
3	1	1	2									■	
3	1	1											
2	1	1	2							Soccer			
2	2	1								■			
3	1	1	1	■									
5	1	1	1	■									
4	1	1	2										
4	2	1											
3	1	1	2							Biking			
3	1	1											
3	1	1	2	■									
3	2	1		■									
3	2	1	3	■									
3	2	1		■									
3	2	1		■									
3	1	1	2	■									
3	2	1		■									
3	1	1	3	■									
3	1	1		■									
3	1	1		■									
3	2	1	1	■									
3	2	1	2	■									
3	2	1		■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People / Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	1	1	2	■									
2	1	1		■									
4	1	1	1	■									
3	2	1	1	■									
3	1	1	2	■									
3	2	1		■									
3	1	1	1								with dog		
3	2	1	1								with dog		
3	1	1	1								Bike	■	
2	1	2	2	■									
3	2	2		■									
4	1	1	3	■									
4	2	1		■									
2	2	1		■									
4	1	1	1	■									
2	1	1	1			■							
3	1	1	1	■									
4	1	1	1	■									
3	2	3	3			■							
3	1	1				■							
3	2	3											
3	1	1	3	■									
3	1	1		■									
3	2	1		■									
4	1	1	1	■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People / Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	1	X									
3	2	1	1	X									
3	1	1	2	X									
3	1	1		X									
3	1	1	3		X								
3	1	1			X								
3	1	1			X								
3	1	1	1	X									
3	2	1	2	X									
3	2	1		X									
3	2	1	1		X								
3	1	1	2	X									
3	2	1		X									
3	1	1	3	X									
3	2	1		X									
3	1	1		X									
3	1	1	3	X									
3	2	1		X									
3	2	1		X									
5	1	1	1	X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15 Place: PARK Day: Saturday Date: 9/17

People / Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	1	1	1	X									
3	2	1	1	X									
3	1	1	3	X									
3	2	1		X									
3	1	1		X									
3	2	1	1	X									
4	2	1	2								Biking		
3	1	1									X		
3	1	1	1	X									
4	1	1	1	X							with bike		
3	2	1	1			X							
4	1	1	2								Biking		
4	2	1											

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

It was too dark by 6 pm and no one could be observed during the 15 minute slot.

Time: 10:00 10:15 **Place:** REGIONAL LIBRARY **Day:** Sunday **Date:** 9/18

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
5	1	1	2	■									
5	2	1		■									
3	2	2	1		■							■	
3	1	1	3		■							■	
3	2	1			■								
1	1	1			■								
3	1	2	1	■									
2	1	2	3	■									
2	1	2		■									
2	1	2		■									
4	1	1	2	■									
4	2	1		■									
3	2	2	3	■									
1	1	2		■									
1	1	2		■									
3	2	1	1									■	
4	1	2	1		■							■	
5	1	1	1		■							■	
4	1	1	1		■								
4	1	1	1	■								■	
4	1	2	1		■							■	

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00 13:15 **Place:** REGIONAL LIBRARY **Day:** Thursday **Date:** 9/15

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
5	1	1	1		■								
5	1	1	1		■								
4	2	1	1		■								
3	2	2	2		■							■	
1	1	2			■								
3	1	4	4	■									
3	2	4		■									
2	2	4		■									
1	1	4		■									
1	1	4		■									
1	1	4		■									
5	2	1	1	■									
3	1	1	1	■									
5	2	1	2	■									
1	2	1		■									
3	2	1	1		■							■	
4	1	2	1		■								
4	2	1	1								sleeping		
3	1	1	3	■									
1	2	1			computer							■	
3	2	1		■									
3	1	1	1	■									
3	2	3	1	■									
3	2	1	1	■									
2	2	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
3	2	1	2		X								
1	1	1			X								
1	1	1	3		X								
1	1	1			X								
1	1	1			X								
1	1	1			X								
1	1	2	3		X								
1	1	2			X								
1	1	2			X								
2	2	2			computer								
2	2	2			station								
3	2	2	2		area								
1	1	2			X								
3	2	2	3		X								
1	2	2			X								
1	1	2			X								
4	1	2	2		X								
1	1	2			X								
3	1	1	3	X									
3	2	1		X									
1	1	1		X									
1	2	1		X									
3	1	1	3		X							X	
3	2	1			X							X	
1	1	1			X								

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15 Place: REGIONAL LIBRARY Day: Friday Date: 9/16

People / Activities

Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
5	1	1	1		X							X	
5	1	1	1		X							X	
4	2	1	1		X								
3	1	1	3	X									
1	1	1		X									
1	1	1		X									
3	2	1	3	X									
1	2	1		X									
1	1	1		X									
3	1	1	2	X									
3	2	1		X									
3	1	1	2	X									
3	1	3		X									
3	1	3	1		X							X	
3	2	1	1		X							X	
5	1	2	1		X								
3	2	1	1		X							X	
3	1	2	1		X							X	
3	2	2	1		X							X	
3	1	4	1		X							X	
3	2	2	1		X							X	
3	2	2	1		X							X	
3	2	2	1		X							X	
3	1	4	1		X							X	

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Age	Sex	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	1	2	1										
3	2	2	2										
1	2	2											
3	2	2	2										
1	1	2			computer station								
4	2	1	1										
3	2	1	1										
3	2	2	1										
2	2	2	2										
3	2	2											
3	1	1	1										
3	2	1	1										
3	2	2	2										
3	2	2											
2	1	2	2										
2	1	3											
3	1	2	2										
3	2	2											
1	1	2	1										
3	2	1	1										
3	2	1	1										
3	2	1	1										
2	2	2	1										
2	2	2	1										
3	2	2	1										

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Time: 18:00   18:15   Place: BORDERS   Day: Saturday   Date: 9/17

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Seating	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	Library closed

Appendix U: Data from four observation sites in Tallahassee, FL.

Time: 10:00   10:15   Place: KLEMAN PLAZA   Day: Sunday   Date: 9/18

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1	■									
2	4	1	1	■							exercise		
1	3	2	1	■									
1	3	2	1	■									
2	3	2	1	■									
1	3	1	1	■									
2	3	1	1	■									
1	4	1	1	■									
1	4	1	1	■									
2	3	1	1	■									
2	3	1	1	■									
1	4	1	1	■								■	
2	3	1	2	■									
2	3	1		■									
2	3	4	1	■									
2	3	2	1	■									
2	3	1	1	■									
1	4	1	1	■									
1	4	1	1	■									
1	3	1	1	■									
2	4	2	1	■									
1	3	4	1	■									
2	3	1	3	■									
2	3	1		■									
1	1	1		■									
Notes													

1 Male	1 <14	1 white	1 1	Food stall present
2 Fem	2 14 - 20	2 black	2 2	Parking garage below the plaza - walking activity between the parking and the plaza
	3 21 - 35	3 asian	3 3-5	Construction over the parking lot for expanding the parking facility into a garage
	4 36 - 60	4 hisp	4 >5	
	5 >60			

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1	■									
1	4	1	1	■									
1	3	1	1	■									
1	4	1	1	■									
1	3	1	1	■									
2	4	1	4	■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
1	3	2	1	■									
1	3	1	1	■									
1	3	2	1	■									
Notes													

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00 13:15 Place: KLEMAN PLAZA Day: Thursday Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2		X			X					
2	3	1			X			X					
2	3	1	2		X			X					
2	3	1			X			X					
1	4	1	1		X							X	
2	4	1	1		X							X	
2	4	1	1		X							X	
1	3	1	1		X							X	
1	3	1	1		X							X	
1	3	1	1		X							X	
2	3	1	2	X									X
2	3	1		X									X
1	3	1	2	X									X
2	3	1		X									X
1	4	1	3	X									X
2	4	1		X									X
2	3	1		X									X
1	4	1	2		X							X	
2	4	1			X							X	
2	2	2	1		X			X					
2	3	3	1		X			X					
2	3	1	1		X							X	
1	3	1	2		X			X					
1	3	1			X			X					
1	4	1	1	X	X							X	

Notes	
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	1		X			X					
1	4	1	3	X									
2	4	1		X									
1	3	1		X									
2	1	1		X									
1	3	1	1		X							X	
2	3	1	1		X								
1	4	1	2		X			X					
2	4	1			X			X					
2	3	1	1		X			X					
2	3	1	2	X			X	X					
2	3	1		X				X					
2	3	1	3	X			X	X					
1	1	1		X				X					
1	1	1		X				X					
2	1	1		X				X					
1	3	1		X				X					
1	3	1	1		X							X	
1	3	4	2		X							X	
2	3	4			X								
1	2	1	2	X									
2	2	1		X									
1	3	2	1		X			X					
2	3	1	1		X			X					
1	5	1	1		X			X					

Notes	
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Time: 15:00 15:15 Place: KLEMAN PLAZA Day: Friday Date: 9/16

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	2	1	5	X									
2	2	1		X									
2	2	1		X									
2	2	1		X									
2	2	2		X									
2	2	2		X									
1	4	1	1									X	
1	3	1	1									X	
1	2	1	1									X	
1	1	1	1		X							X	
1	5	1	1		X							X	
2	3	1	1		X							X	
1	3	2	1		X							X	
2	3	1	1		X							X	
2	3	1	1		X							X	
2	3	1	1		X							X	
2	3	2	2		X		X					X	
2	3	1			X							X	
2	4	1	1									X	
2	3	1	2	X									
2	2	1		X									
2	3	1	1		X							X	
2	3	1	1		X								
2	3	1	1		X								
2	2	1	1	X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	4	1	1	X									
1	4	1	1	X									
2	3	2	1	X									
2	4	1	1	X									
2	3	1	1	X									
1	4	1	2		X		X						
2	4	1			X		X						
2	4	3	1	X									
2	3	1	1	X									
2	3	1	1	X									
1	3	1	1	X									
1	3	1	1	X									
1	4	1	1	X									
1	3	3	1	X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15 Place: KLEMAN PLAZA Day: Saturday Date: 9/17

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	2	X									X
2	3	3		X									X
2	3	3	3	X									X
2	1	3		X									X
1	1	3		X									X
2	1	3		X									X
1	3	1	1		X							X	
1	4	3	1		X							X	
1	3	1	2		X			X					
2	3	1			X			X					
2	3	3	2		X								
2	3	3			X								
2	3	3	1		X							X	
2	3	1	1		X							X	
1	4	1	1		X							X	
2	3	1	1		X			X					
2	3	1	2		X							X	
2	3	1			X							X	
1	3	3	2		X							X	
2	3	3			X							X	
1	3	3	2		X							X	
2	3	3			X							X	
2	3	1	2		X			X					
2	3	1			X								
1	3	1	1		X			X					

Notes				
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1		X							X	
2	3	1	1		X							X	
2	3	1	1									X	
1	4	1	1	X								X	
2	3	1	1	X								X	
1	3	1	1	X								X	
1	2	1	4	X								X	
1	2	1		X								X	
1	2	1		X								X	
2	2	1		X								X	
2	2	1		X								X	
1	3	1	1	X								X	
2	3	1	1	X								X	
1	3	1	1		X							X	
2	3	1	1		X							X	
1	4	1	2		X							X	
2	3	1			X							X	
2	3	1			X							X	
1	3	1	3	X									
2	3	1		X									
2	2	1		X									
1	5	1	2	X									
2	5	1		X									
1	2	1	1	X									
1	3	1	1	X									

Notes				
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Time: 10:00 10:15 Place: ADAMS ST Day: Sunday Date: 9/18

People / **Activities**

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1	■									
1	4	1	2		■								
2	3	1			■								
1	4	1	4		■							■	
1	3	4			■							■	
1	3	4			■							■	
1	3	1			■							■	
1	3	1			■							■	
1	3	1	1	■									
2	3	1	4	■									
2	3	1		■									
2	4	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	2	1	■									
2	4	1	2	■									
2	3	1		■									
2	3	1	1	■									
2	4	1	1	■									
1	4	1	1	■									
1	3	1	1		■								
2	4	1	1	■									
1	3	2	1	■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People / **Activities**

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1	■									
2	3	1	1	■									
1	4	1	2	■									
1	4	1		■									
1	4	1	1	■									
1	3	2	2	■									
1	3	2		■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time: 13:00   13:15   Place: ADAMS ST   Day: Thursday   Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	5	1	1	X									
2	3	1	1	X									
1	4	1	1	X									
1	4	1	3	X									
1	4	1		X									
2	3	1		X									
1	3	1	1	X									
2	3	2	1	X									
1	5	1	3	X									
1	4	1		X									
1	3	1		X									
1	3	1		X									
1	4	1	2	X									
1	4	1		X									
1	3	1	2	X									
1	3	1		X									
1	3	1	1	X									
1	3	1	2	X									
1	3	1		X									
1	3	1	2		X								
2	3	1			X								
1	3	1	3		X								
1	3	1			X								
2	5	1			X								
1	3	1	1	X									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	3	X									
1	4	1		X									
1	3	1		X									
2	4	1		X									
2	3	1		X									
1	3	1	1	X									
1	3	1	3	X									
1	4	1		X									
1	3	1		X									
1	3	4	2		X								
2	3	4			X								
2	4	4	3		X								
2	4	4			X								
2	3	4			X								
2	4	4			X								
2	3	4			X								
2	4	1	2	X									
2	3	1		X									
1	4	1	2	X									
2	3	1		X									
1	3	1	1	X									
1	3	1	1	X									
1	3	1	2	X									
2	3	1		X									
2	3	1	1	X									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Table 1

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
1	3	1	3										
2	3	1											
2	3	1											
1	4	1	2										
1	4	1											
2	3	1	1										
1	4	1	2										
1	4	1											
2	3	2	1										
2	3	1	1										
1	3	1	1										
1	3	1	1										
1	3	1	1										
1	4	1	3										
1	4	1											
1	4	1											
2	3	1	2										
2	3	1											
1	3	1	1										
2	4	1	2										
2	3	1											
2	3	1	1										
1	4	1	1										
Notes													

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 2

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
1	3	1	3										
1	3	1											
2	4	1											
1	4	1											
2	4	1	3										
2	4	1											
1	5	1											
1	4	1	3										
1	4	1											
1	5	1											
1	3	1											
1	4	1	3										
2	3	1											
1	4	1											
1	4	1											
Notes													

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15   Place: ADAMS ST   Day: Friday   Date: 9/16

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	2	3		■								
1	3	2			■								
1	4	2			■								
1	4	1	2	■									
2	4	1		■									
1	3	1	1	■									
1	5	1	3	■									
2	3	1		■									
2	3	1		■									
1	2	1		■									
1	1	1		■									

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15   Place: ADAMS ST   Day: Saturday   Date: 9/17

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	4	1	1	■									
1	3	1	2		■								
2	3	1			■								
2	3	1	2		■								
2	3	1			■								
1	3	1	2		■								
2	3	1			■								
1	4	1	2		■								
2	4	1			■								
2	5	1	2		■								
2	3	1			■								
1	3	1	2		■								
2	3	1			■								
1	4	1	2	■									
1	4	1		■									
1	3	1	3	■									
1	3	1		■									
1	3	1		■									
1	3	1	2		■								
2	3	1			■								
1	3	1	3		■								
2	3	1			■								
2	3	1			■								

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	3		■								
2	3	1			■								
2	3	1			■								
1	3	2	1	■									
1	5	1	2	■									
1	5	1		■									
1	3	1	3		■								
2	3	1			■								
1	3	1			■								
2	3	1			■								
1	3	2			■								
1	3	1	3		■								
2	3	1			■								
2	3	1			■								
2	3	1			■								
2	3	1			■								

Notes				
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	Group of 30-40 people in the balcony of the Governor's club - predominant age group (3-4), predominant sex (1) and predominant ethnicity (1)

Time: 10:00   10:15   Place: LAKE ELLA   Day: Monday   Date: 3/12/07

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1			■							
2	2	1	3		■								
2	2	1			■								
2	2	1			■								
2	3	1	2	■									
2	3	1		■									
2	3	1	1	■								birdfeeding	
1	4	1	1		■							■	
1	5	1	1		■								
1	3	1	1	■									
2	3	1	2	■									
1	1	2								■	with bike		
2	3	3	1	■		■							
2	4	1	1	■									
2	3	2	1	■									
1	5	1	2	■									
2	5	1		■									
2	3	1	1	■									
2	3	1	1	■									
2	3	1	1	■									
2	3	1	3	■					■				
1	1	1		■									
2	1	1		■									
2	3	3	1	■									
1	3	2	1	■									

Notes				
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

Time: 13:00 13:15   Place: LAKE ELLA   Day: Thursday   Date: 9/15

| People | | | | Activities | | | | | | | | | |
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1	■									
1	3	1	2		■								
2	3	1			■								
1	4	1	1		■								
1	3	1	1		■						with dog		
1	4	2	3		■								
2	4	2			■								
2	4	1			■								
2	3	1	1		■			■					
1	3	1	2		■								
2	3	1		■									
1	4	1	1	■									
2	4	1	1		■								
1	4	1	1										
1	5	4	2		■								
1	5	4			■								
2	3	2	1	■									
2	3	2	1	■									
2	3	2	1	■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
1	4	1	1	■									
2	3	2	1	■									
1	4	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

| People | | | | Activities | | | | | | | | | |
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	1	■									
1	3	2	1	■									
1	3	2	3	■									
2	3	2		■									
1	3	2		■									
1	3	1	3	■									
2	4	1		■									
1	1	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15 Place: LAKE ELLA Day: Friday Date: 9/16

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	■									
2	3	3		■									
1	3	1	2	■									
2	3	1		■									
1	3	1	1		■								
2	3	2	1		■								
1	3	1	2		■								
2	3	1			■								
1	3	1	3		■								
1	1	1								■			
1	1	2								■			
2	3	1	1			■							
1	4	1	3	■									
1	3	1		■									
2	3	1		■									
1	3	2	4		■								
2	3	2			■								
2	3	2			■								
1	1	2			■								
1	1	2			■								
2	1	2			■								
1	5	1	2	■									
2	5	1		■									
1	3	2	1		■								
2	3	1	1		■								

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	■									
1	1	1		■									
2	3	1	1	■									
2	3	1	3	■									
1	1	1		■									
1	1	1		■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
2	5	1	2	■									
2	4	1		■									
1	3	2	1			■							
1	3	1	1										
2	1	1	1								on bike ■		
2	3	4	2		■								
2	3	4			■								
2	3	2	2	■									
1	1	2		■									
1	3	2	2	■									
2	3	2		■									
2	3	1	2	■									
2	1	1		■							■		

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time: 18:00 18:15 Place: LAKE ELLA Day: Saturday Date: 9/17

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	2	2	■									
1	1	2		■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
1	3	2	2	■									
2	3	2		■									
2	3	2	1		■								
2	3	2	3	■									
1	1	2		■									
1	1	2		■									
1	3	2	2		■								
1	1	2			■								
1	3	1	1		■								
1	4	2	2		■								
2	4	2			■								
2	3	2	2		■								
2	3	2			■								
1	3	1	3		■								
1	3	1			■								
1	3	1			■								
1	4	1	2	■									
2	4	1		■									
2	3	2	1	■									
2	3	1	1	■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1	■							with dog		
2	3	1	2	■									
2	1	1		■									
1	4	1	2	■									
2	4	1		■									
2	5	1	1		■								
1	3	2	2		■								
2	3	2			■								
2	3	1	2		■								
2	3	1			■								
1	4	1	2		■								
2	4	1			■								
2	3	1	2	■							with dog		
2	3	1		■									
1	3	1	3	■									
2	3	1		■									
1	1	1		■									
1	4	1	1	■									
1	3	2	3		■								
1	3	2			■								
1	2	2			■								
1	2	2			■								
1	3	1	2		■								
2	3	1			■								
1	2	2	1	■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	2	2	1	■									
2	3	1	1	■									
1	3	2	2	■									
2	3	2		■									
2	1	1	3	■									
1	3	1		■									
2	3	1		■									
1	1	1	1	■									
2	3	3	2		■								
1	1	3			■								
1	4	1	1		■								
1	3	1	2			■							
2	3	1				■							
1	3	3	1	■									
1	3	2	2	■									
2	3	2		■									
2	4	1	2	■									
2	4	1		■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
1	3	1	2	■									
2	1	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	2	4	■									
2	3	2		■									
2	3	2		■									
2	1	2		■		■				■			
2	1	2		■		■				■			
2	1	2		■		■				on tree			
2	1	2		■		■				■			
1	1	2		■		■				■			
1	1	2		■		■				■			
1	1	2		■		■				■			

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
1	3	2	2	X									
2	3	1											
2	5	1	1		X								
1	3	1	3		X			X					
1	3	1			X			X					
1	3	1											
2	3	1	2	X									
2	2	4											
1	3	2	1		X			X					
2	4	1	1		X			X					
2	3	1	1		X			X					
1	4	1	1		X			X					
1	3	1	2		X			X					
1	3	1			X			X					
1	4	1	1		X			X					
2	2	2	2	X									
2	2	2		X									
1	2	1	2	X									
1	2	1		X									
1	4	1	1		X			X					
1	5	1	2	X									
2	5	1		X									
1	3	1	2	X									
2	3	1		X									
1	3	1	1		X			X					

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
2	3	1	1	X									
1	3	1	2	X									
2	3	1		X									
1	3	1	1		X			X					
2	4	1	2	X									
2	2	1		X									
2	3	1	2	X									
2	3	1		X									
1	3	2	1	X									
1	5	1	2		X			X					
2	5	1			X			X					
2	5	1	1		X			X					
1	3	1	1	X									
2	3	2	1										
2	3	1	2		X			X					
2	3	1			X			X					
1	4	1	1		X			X					
2	3	2	1										
2	3	1	1	X									
1	4	1	1	X									
2	4	1	1	X									
1	2	2	1		X								
2	4	4	3	X									
2	3	4		X									
1	1	4		X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	1	■									
2	4	1	2	■									
1	1	1		■									
2	3	1	2	■									
1	2	1		■									
1	3	1	3	■									
2	3	1		■									
2	1	1		■									
1	3	1	1	■									
1	2	1	1	■									
1	3	3	2	■									
2	3	3		■									
2	3	1	1	■									
1	3	2	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00 13:15 Place: GOVERNOR'S MALL Day: Thursday Date: 9/15

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	2	2	■									
2	3	2		■									
2	4	1	2		■								
2	3	1			■								
2	5	1	3		■								
1	5	1			■								
2	4	1			■								
1	4	1	3	■									
1	3	1		■									
2	3	1	1	■	■								
2	3	1	2	■									
2	3	1		■									
1	3	1	2	■									
2	3	1		■									
2	3	1	1	■									
1	2	1	1	■									
1	3	2	2	■									
2	3	2		■									
2	3	1	3	■									
2	1	1		■									
2	1	1		■									
1	5	1	1	■									
1	3	2	2	■									
1	3	2		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

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Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2	X									
1	3	1		X									
1	3	1	3	X									
2	3	1		X									
2	3	1		X									
1	3	4	3	X									
1	3	4		X									
1	3	4		X									
1	3	4		X									
2	3	1	2	X									
1	2	1		X									
1	3	1	2	X									
2	3	1		X									
1	3	2	2	X									
2	3	2		X									
2	3	2	3		X								
2	3	2			X								
2	3	2			X								
1	1	2			X								
2	3	1	1	X									
1	3	1	3		X								
2	3	1			X								
1	1	1			X								
2	2	1			X								
2	4	1	1		X								

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	2	1		X								
1	3	2	3		X								
2	3	2			X								
1	1	2			X								
2	2	1	2	X									
2	2	1		X									
1	4	1	2		X								
1	2	1			X								
2	3	3	2		X								
1	1	3			X								
1	3	1	3	X									
2	3	1		X									
2	3	1		X									
1	1	2	3		X								
2	2	2			X								
2	2	2			X								
2	3	1	3	X									
1	1	1		X									
1	1	1		X									
1	1	1		X									
2	3	1	2	X									
2	2	1		X									
1	3	2	2	X									
1	3	2		X									
4	3	1	1	X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	5	1	2	X									
2	2	1		X									
1	3	3	1	X									
1	3	2	3	X									
1	2	2		X									
2	2	2		X									
2	2	2		X									
2	4	1	3	X									
2	3	1		X									
2	3	1		X									
2	4	1	1	X									
2	3	1	3		X								
2	3	1			X								
2	3	1			X								
2	3	1			X								
2	3	1	3	X									
2	3	1		X									
2	3	1		X									
2	5	1	1	X									
1	3	1	3	X									
2	3	1		X									
2	1	1		X									
1	3	1	2	X									
2	2	1		X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00   15:15   Place: Governor's Sq mall   Day: Friday   Date: 9/16

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	2	3		X			X					
1	1	2			X			X					
2	1	2			X			X					
1	3	1	2		X			X					
2	3	1			X			X					
2	3	3	3		X			X					
2	2	3			X			X					
2	2	3			X			X					
2	3	1	1		X			X					
2	4	2	1		X			X					
1	2	1	2		X			X					
1	2	1			X			X					
1	3	3	1		X			X					
1	3	2	3		X			X					
2	3	2			X			X					
1	1	2			X			X					
1	1	2			X			X					
2	3	2	3		X			X					
2	2	2			X			X					
2	1	2			X			X					
2	1	2			X			X					
2	1	2			X			X					
2	3	1	3	X									
2	3	2		X									
2	3	2		X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2	■									
2	3	1		■									
1	3	1	1	■									
2	3	2	2	■									
2	3	2		■									
1	3	1	2	■									
2	3	1		■									
2	4	1	2	■									
2	2	1		■									
2	3	3	1	■									
2	3	3	1	■									
2	3	1	2	■									
2	3	1		■									
1	3	2	2		■			■					
2	3	2			■			■					
1	3	1	1										
2	3	3	1	■									
1	4	1	2	■									
2	4	1		■									
1	3	1	2	■									
2	3	1		■									
1	3	2	1	■									
1	4	1	1		■			■					
1	3	2	1		■			■					
2	3	4	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2	■									
2	3	1		■									
1	2	1	3	■									
1	2	1		■									
2	2	1		■									
2	3	1	3		■			■					
1	1	1			■			■					
1	1	1			■			■					
1	3	2	1		■			■					
2	3	2	1		■			■					
1	3	2	2		■			■					
1	3	2			■			■					
1		1	2	■									
2	32	1		■									
1	3	1	3	■									
2	3	1		■									
2	2	1		■									
2	3	1	1	■									
2	3	3	1	■									
2	3	1	2	■									
2	2	1		■									
2	3	2	2		■			■					
2	3	2			■			■					
1	3	3	1		■			■					
2	3	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities — Form 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
2	3	1	2	■									
1	1	1		■									
2	3	2	2	■									
1	1	2		■									
1	3	3	3		■			■					
2	3	3			■			■					
1	3	3			■			■					
2	3	3			■			■					
2	3	1	2	■									
2	2	1		■									
1	3	1	3	■									
1	1	1		■									
1	1	1		■									
2	3	1	2	■									
2	3	1		■									
1	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
2	3	2	1	■									
1	3	2	2		■			■					
1	1	2			■			■					
2	3	2	1	■									
1	3	1	3	■									
1	3	1		■									
1	3	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities — Form 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation Working	Reading	Shopping
2	3	1	1	■									
2	3	1	3	■									
2	2	1		■									
2	1	1		■									
2	4	1	1	■									
2	3	2	1	■									
2	3	1	1	■									
2	5	1	3	■									
2	4	1		■									
2	1	1		■									
1	4	1	2	■									
	4	1		■									
21	3	1	2	■									
2	3	1		■									
1	3	1	3	■									
1	1	1		■									
1	1	1		■									
1	3	1	2	■									
2	3	1		■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
1	3	2	2		■			■					
1	3	2			■			■					
2	3	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15 Place: GOVERNOR'S SQ MALL Day: Saturday Date: 9/17

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1										
2	3	2	1										
2	3	2	2										
2	3	2											
1	3	2	3										
1	3	2											
1	2	2											
1	2	2											
1	3	2	2										
1	2	2											
1	2	1	3										
2	2	1											
1	2	1											
2	2	1											
1	3	1	3										
2	3	1											
1	1	1											
2	1	1											
1	3	1	2										
2	3	1											
2	4	4	1										
1	3	2	2										
2	3	2											
2	3	2	1										
2	3	1	1										

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2										
2	2	1											
2	3	2	1										
2	3	1	2										
2	3	1											
1	3	2	1										
1	3	1	2										
2	3	1											
1	3	1	1										
2	4	2	3										
2	3	2											
2	2	2											
2	3	2	2										
2	3	2											
1	3	1	3										
2	3	1											
2	2	1											
1	3	2	1										
1	3	2	2										
1	3	2											

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Appendix V: Data from four observation sites in Lansing, MI.

Time: 10:00   10:15   Place: GRAND RIVER AVE   Day: Thursday   Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	1	■									
1	3	1	3								biking		
1	3	1									biking		
1	3	1									biking	■	
1	3	1									biking		
2	3	1	2	■									
2	3	1											
1	3	1	1		■			■					
1	3	1	3		■			■					
2	3	1			■			■					
1	3	1			■			■					
1	3	1	1	■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1											
1	3	1	3		■								
1	3	1			■								
2	3	1			■								
2	3	1	1	■	■								
1	3	1	1		■						guitar		
1	3	1	3	■									
2	3	1		■									
1	1	1		■									
2	3	3	2	■									
2	3	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	3	■									
2	4	1		■									
1	3	1		■									
2	3	1		■									
1	3	3	1	■									
2	3	3	2	■									
2	4	3		■									
1	2	1	3	■									
1	2	1		■									
1	2	1		■									
1	4	1	2	■									
2	4	1		■									
2	3	1	1	■									
1	3	3	1	■									
1	3	3	2	■									
2	3	3		■									
1	3	1	2	■									
1	3	1		■									
1	3	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00 13:15 Place: GRAND RIVER AVE Day: Sunday Date: 9/18

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	1	■									
2	2	2	1	■									
1	3	1	2	■									
2	3	1		■									
2	3	1	3	■									
2	3	1		■									
2	3	1		■									
1	3	2	1		■						with dog		
1	3	1	2	■							with dog		
2	3	1		■									
1	3	3	2										
2	3	1											
1	3	1	2										
1	1	1											
1	3	1	1		■			■					
1	3	1	2		■			■					
2	3	1			■			■					
1	4	1	3		■			■					
2	4	1			■			■					
2	4	2			■			■					
1	4	1	2		■			■					
2	4	1			■			■					
1	3	1	2		■			■					
2	3	1			■			■					
1	3	2	1		■			■					

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	4	2	■									
2	3	4		■									
1	4	1	3	■									
2	4	1		■									
1	4	1		■									
2	3	1	2	■									
2	3	1		■									
2	3	1	1	■									
2	3	1	2	■									
2	3	1		■									
2	3	1	4	■									
2	3	1		■									
1	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
1	4	1		■									
2	4	1		■									
1	3	3	3	■									
2	3	3		■									
1	3	1		■									
2	3	1		■									
1	3	1	1	■									

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

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Time: 15:00 15:15 Place: GRAND RIVER AVE Day: Friday Date: 9/16

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	1	X									
1	4	1	2	X									
2	4	1		X									
1	3	3	1	X									
1	4	1	1	X									
2	3	2	1	X									
2	3	2	1	X									
1	3	2	3	X									
2	3	2		X									
1	3	1		X									
1	3	2	1	X							with bike		
2	3	1	2	X									
2	3	1		X									
2	3	1	1	X									
2	4	1	1	X									
2	3	3	1	X									
1	3	1	1	X									
1	2	1	4		X			X					
1	2	2			X			X					
1	2	2			X			X					
2	2	1			X			X					
2	2	1			X			X					
1	3	1	3					X					
2	3	1						X					
1	1	1			X	X		X					

Notes

| 1 Male 2 Fem | 1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60 | 1 white 2 black 3 asian 4 hisp | 1 1 2 2 3 3-5 4 >5 | | | | | | | | | | |

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	3	X									
2	3	1		X									
2	3	1		X									
2	3	1		X									
2	3	1	1	X									
2	3	1	1	X									
2	3	3	1	X									
2	3	1	2	X									
2	3	1		X									
1	5	1	1	X									
1	3	1	1	X									
1	3	4	1	X									
2	3	1	1			X							
2	3	1	3		X								
2	3	1			X								
2	3	1			X								
1	3	1	1	X									
2	3	2	1	X									
2	3	1	3	X									
2	3	1		X									
2	3	1		X									
1	3	3	1	X									
2	2	1	1	X									
2	2	1	2		X								
2	2	1			X								

Notes

| 1 Male 2 Fem | 1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60 | 1 white 2 black 3 asian 4 hisp | 1 1 2 2 3 3-5 4 >5 | | | | | | | | | | |

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People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	1	■									
1	3	1	1										
2	3	1	2		■			■					
2	3	1			■			■					
2	3	3	1		■							■	
2	3	1	1		■							■	
2	3	1	1		■							■	
2	3	3	1		■							■	
2	3	1	1		■							■	
1	4	1	2		■			■					
2	4	1			■			■					
1	4	1	3		■			■					
2	4	1			■			■					
1	2	1			■			■					
1	4	1	2		■			■					
2	4	1			■			■					
1	4	1	2	■									
2	4	1		■									
1	3	1	3	■									
1	3	1		■									
1	3	1		■									
2	3	1	1	■									
1	3	1	1	■									
1	3	1	1	■									
2	3	1	1	■									

Notes

| 1 Male 2 Fem | 1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60 | 1 white 2 black 3 asian 4 hisp | 1 1 2 2 3 3-5 4 >5 | | | | | | | | | | |

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	3			■							
1	3	1				■							
1	3	1				■							
1	3	1	1								Bike ■		
1	2	1	1								Bike ■		
2	3	1	1								Bike ■		

Notes

| 1 Male 2 Fem | 1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60 | 1 white 2 black 3 asian 4 hisp | 1 1 2 2 3 3-5 4 >5 | | | | | | | | | | |

Time: 18:00   18:15   Place: GRAND RIVER AVE   Day: Saturday   Date: 9/17

People				**Activities**									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	4	■									
1	3	1		■									
1	3	1		■									
2	3	1		■									
1	3	1		■									
2	3	1		■									
2	3	1	4	■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
2	3	1		■									
1	3	1	2	■									
2	3	1		■									
2	3	1	2	■									
2	3	1		■									
2	3	1	2	■									
2	3	1		■									
2	3	1	2	■									
2	3	1		■									
1	3	1	2	■									
1	3	1		■									
1	3	1	2								Bike	■	
1	3	1									Bike		
1	3	1	1	■									

Notes				
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

People				**Activities**									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	■									
2	3	1		■									
1	2	1	2	■									
1	2	1		■									
1	3	1	2	■									
2	3	1		■									
1	3	3	3	■									
1	3	3		■									
1	3	3		■									
1	3	1	2	■									
1	3	1		■									
1	3	1	3	■									
1	3	1		■									
1	3	1		■									
1	3	1	2	■									
2	3	1		■									
2	3	1	2	■									
2	3	1		■									
2	3	1	1	■									
1	3	1	2	■									
2	3	1		■									
2	3	1	3	■									
2	3	1		■									
1	3	1		■									
1	4	1	1	■									

Notes				
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5	

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	■									
2	3	1		■									
2	3	1	2	■									
2	3	1		■									
2	3	1	2	■									
1	3	1		■									
1	3	1	1	■									
1	3	3	1	■									
2	3	1	1	■									
1	3	2	1	■									
2	3	2	2	■									
2	3	2		■									
1	3	3	2	■									
2	3	3		■									
1	3	1	2	■									
2	3	1		■									
1	4	1	2	■									
2	3	1		■									
1	3	1	3	■									
2	3	1		■									
1	1	1		■						■			
2	1	1		■									
2	3	1	1	■									
2	3	1	1	■									
1	3	1	1	■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time:　　10:00　　10:15　　Place:　　BARNES & NOBLE　　Day: Sunday　　Date: 9/18

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	3	1		■							■	
2	5	1	1										
1	3	1	1	■									
1	3	1	2		■			■					
2	3	1			■			■					
1	3	2	1		■			■					
2	3	3	1										
1	3	1	2	■									
2	3	1		■									
1	3	1	1	■									
2	3	1	1	■									
2	3	1	1	■									
2	3	3	1										
1	3	1	3		■			■					
1	3	1			■			■					
2	3	1			■								
2	3	3	1		■							■	
1	3	1	1		■								
1	3	1	2		■							■	
2	3	1			■								
1	3	1	2		■			■					
2	3	1			■								
1	3	1	1		■							■	
1	5	1	1		■								
1	4	1	1	■	■								

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	5	1	1	■									
2	3	1	1	■									
1	3	1	1	■									
1	3	1	1		■							■	
1	3	1	1		■							■	
1	3	1	1		■							■	
2	3	1	1		■								
1	5	1	1		■			■					
1	3	1	2		■			■					
2	3	1			■								
1	3	1	2	■									
2	3	1		■									
1	3	1	2	■									
2	3	1		■									
1	5	1	1	■									
2	2	3	2	■									
2	2	1		■									
1	2	1	3	■									
1	2	1		■									
1	2	1		■									
1	3	1	1		■							■	
1	2	1	1		■							■	
2	4	1	1		■								
2	2	1	1	■									

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

Time: 13:00 13:15 Place: BARNES & NOBLE Day: Thursday Date: 9/15

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2		■			■					
2	3	1			■			■					
2	3	1	2		■			■					
2	3	1			■								
1	4	1	1		■							■	
2	4	1	1		■							■	
2	4	1	1		■							■	
1	3	1	1		■							■	
1	3	1	1		■							■	
1	3	1	1		■							■	
2	3	1	2	■									■
2	3	1		■									■
1	3	1	2	■									■
2	3	1		■									
1	4	1	3	■									■
2	4	1		■									■
2	3	1		■									■
1	4	1	2		■							■	
2	4	1			■							■	
2	2	2	1		■			■					
2	3	3	1		■							■	
2	3	1	1		■			■				■	
1	3	1	2		■			■					
1	3	1			■								
1	4	1	1	■								■	

Notes

1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	1		X			X					
1	4	1	3	X									
2	4	1		X									
1	3	1		X									
2	1	1		X									
1	3	1	1		X							X	
2	3	1	1		X								
1	4	1	2		X			X					
2	4	1			X			X					
2	3	1	1					X					
2	3	1	2	X			X	X					
2	3	1					X	X					
2	3	1	3	X				X					
1	1	1		X				X					
1	1	1		X				X					
2	1	1		X				X					
1	3	1		X				X					
1	3	1	1		X							X	
1	3	4	2		X							X	
2	3	4			X								
1	2	1	2	X									
2	2	1		X				X					
1	3	2	1		X			X					
2	3	1	1		X			X					
1	5	1	1		X			X					
Notes													
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5										

Time: 15:00   15:15   Place: BARNES & NOBLE   Day: Friday   Date: 9/16

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	2	1	5	X									
2	2	1		X									
2	2	1		X									
2	2	1		X									
2	2	2		X									
2	2	2		X									
1	4	1	1									X	
1	3	1	1									X	
1	2	1	1	X								X	
1	1	1	1		X							X	
1	5	1	1		X							X	
2	3	1	1		X							X	
1	3	2	1		X							X	
2	3	1	1		X							X	
2	3	1	1		X							X	
2	3	1	1		X							X	
2	3	2	2		X		X					X	
2	3	1			X							X	
2	4	1	1	X								X	
2	3	1	2	X									
2	2	1		X									
2	3	1	1		X							X	
2	3	1	1		X							X	
2	3	1	1		X							X	
2	2	1	1	X									
Notes													
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5										

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People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	4	1	1	■									
1	4	1	1	■									
2	3	2	1	■									
2	4	1	1	■									
2	3	1	1	■									
1	4	1	2		■		■						
2	4	1											
2	4	3	1	■									
2	3	1	1	■									
2	3	1	1	■									
1	3	1	1	■									
1	3	1	1	■									
1	4	1	1	■									
1	3	3	1	■									

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15 Place: BARNES & NOBLE Day: Saturday Date: 9/17

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	2	■									■
2	3	3		■									■
2	3	3	3	■									■
2	1	3		■									■
1	1	3		■									■
2	1	3		■									■
1	3	1	1		■							■	
1	4	3	1		■							■	
1	3	1	2		■			■					
2	3	1			■			■					
2	3	3	2		■			■					
2	3	3			■								
2	3	3	1		■							■	
2	3	1	1		■							■	
1	4	1	1		■								
2	3	1	1		■			■					
2	3	1	2		■							■	
2	3	1			■								
1	3	3	2		■							■	
2	3	3			■							■	
1	3	3	2		■							■	
2	3	3			■								
2	3	1	2		■			■					
2	3	1			■								
1	3	1	1		■			■					

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities — Observation Sheet 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	1		■							■	
2	3	1	1		■							■	
2	3	1	1		■							■	
1	4	1	1	■								■	
2	3	1	1	■								■	
1	3	1	1	■								■	
1	2	1	4	■									
1	2	1		■									
1	2	1		■									
2	2	1		■									
2	2	1		■									
1	3	1	1	■									
2	3	1	1	■									
1	3	1	1		■							■	
2	3	1	1		■							■	
1	4	1	1		■							■	
2	3	1	2		■							■	
2	3	1			■							■	
1	3	1	3	■									
2	3	1		■									
2	2	1		■									
1	5	1	2	■									
2	5	1		■									
1	2	1	1	■									
1	3	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 10:00   10:15   Place: FERGUSSON PARK   Day: Sunday   Date: 9/18

People / Activities — Observation Sheet 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	1			■							
2	4	1	1	■							with bike		
2	3	3	1	■		■							
2	3	3	1	■									
1	3	1	2		■								
2	3	1		■									
2	4	1	1	■									
1	3	1	3		■								
1	1	1			■					■			
2	3	1			■								
1	3	3	1	■									
2	2	4	1		■								
1	3	1	1		■								
2	3	1	2	■									
1	3	1		■									
2	4	1	2		■								
2	3	1			■								

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

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Time: 13:00 13:15 Place: FERGUSSON PARK Day: Thursday Date: 9/15

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	3	■									
1	1	1		■		■				■			
2	1	1		■		■				■			
2	1	1		■									
2	3	1	2					■					
2	1	1			■			■					

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15 Place: FERGUSSON PARK Day: Friday Date: 9/16

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	3							■			
2	1	1											
2	3	1			■								
2	3	1	3										
1	1	1								■			
2	1	1								■			
1	1	1								■			
2	1	1								■			
1	3	4	3		■								
2	3	4			■								
1	1	4								■			
2	1	4								■			
1	3	1	3	■									
1	1	1								■			
2	3	1		■									
1	1	1								■			

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 18:00 18:15 Place: FERGUSSON PARK Day: Saturday Date: 9/17

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	1			■							
2	3	1	1			■							
1	5	1	1		■								
2	3	2	1	■									
2	3	2	1	■									
2	3	1	2	■									
2	3	1		■									
1	3	1	2	■									
2	3	1		■									
1	3	1	2		■								
1	3	1			■								
1	3	1	1	■									
2	3	1	2		■								
2	3	1			■								
2	1	1	2		■								
2	3	1			■								
2	3	1	2	■									
1	1	1		■									
1	3	1	1		■								
1	3	1	2		■								
2	3	1			■								
1	3	1	1	■									
2	3	1	2	■									
2	1	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 10:00 10:15 Place: LANSING MALL Day: Thursday Date: 9/15

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	2	3	■									
2	2	2		■									
2	2	2		■									
1	3	4	3	■									
2	3	4		■									
1	3	4		■									
1	3	1	3	■									
1	3	1		■									
1	3	1		■									
1	3	1	2	■									
2	2	1		■									
1	3	3	3		■			■					
2	3	3			■			■					
1	1	3			■			■					
2	3	1	1		■			■					
1	3	1	1		■			■					
1	3	3	3		■			■					
2	3	3			■			■					
2	1	3			■			■					
1	3	1	2		■			■					
2	3	2			■			■					
1	3	1	2		■			■					
1	3	1			■			■					
2	3	4	2		■			■					
1	3	4			■			■					

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	3	2	X									
2	3	3		X									
2	3	1	4	X									
2	3	1		X									
2	3	1		X									
1	3	1		X									
1	3	1		X									
1	3	1		X									
2	3	2	3	X									
2	1	2		X									
2	1	2		X									
1	1	2		X									
2	3	2	1	X									
1	3	1	3		X			X					
2	2	1			X			X					
2	2	1			X			X					
1	2	1			X			X					
2	3	4	2		X			X					
1	3	4			X			X					
1	3	1	2		X			X					
2	3	1			X			X					

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 13:00   13:15   Place: LANSING MALL   Day: Sunday   Date: 9/18

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	1	2	X									
2	3	1		X									
2	3	1	2	X									
1	3	1		X									
1	3	2	1	X									
2	4	1	1	X									
2	3	1	1	X									
2	3	1	2		X			X					
1	1	1			X			X					
2	3	1	2		X			X					
2	3	3			X			X					
1	4	1	1		X			X					
2	3	1	1		X			X					
1	3	1	3		X			X					
2	3	1			X			X					
2	3	1			X			X					
1	4	1	1	X									
2	3	1	1	X									
1	3	1	2	X									
2	3	1		X									
2	3	1	2	X									
2	3	1		X									
1	3	1	2	X									
2	3	1		X									
1	4	1	1	X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	2	■									
2	3	1		■									
2	4	1	3	■									
2	3	1		■									
1	1	1		■									
2	3	1	3	■									
2	3	1		■									
2	3	1		■									
2	3	1	2	■									
2	3	1		■									
1	3	1	2	■									
2	3	1		■									
2	3	3	3	■									
1	1	3		■									
2	1	3		■									
2	1	3		■									
1	3	1	2	■									
1	3	1		■									
2	4	1	3	■									
1	3	1		■									
2	2	1		■									
1	3	1	3	■									
2	3	1		■									
1	1	1		■									
1	4	1	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	3		■			■					
2	3	1			■			■					
1	3	1			■			■					
2	3	1	2	■									
1	1	1		■									
2	4	1	3	■									
2	3	1		■									
2	3	1		■									
2	4	1	2		■			■					
2	3	1			■			■					
1	3	4	3		■		■						
1	3	4			■		■						
2	2	4			■		■						
1	3	3	2	■									
2	3	3		■									
1	3	1	2		■			■					
1	1	1			■			■					
2	3	1	2		■			■					
1	2	1			■			■					
2	3	1	2		■			■					
2	2	1			■			■					
1	3	4	3		■			■					
2	3	4			■			■					
1	1	4			■			■					
2	3	2	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Time: 15:00 15:15 Place: LANSING MALL Day: Friday Date: 9/16

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	■									
2	3	1		■									
1	3	3	2	■									
1	3	3		■									
1	3	1	2		■			■					
2	3	1			■			■					
1	3	4	2		■			■					
1	3	4			■			■					
2	2	1	3	■									
2	3	1		■									
2	4	1		■									
2	3	1	3	■									
2	3	1		■									
1	1	1		■									
2	2	1	3	■									
2	3	1		■									
2	3	1		■									
1	3	1	3		■			■					
2	3	1			■			■					
1	3	1			■			■					
1	3	1			■			■					
2	3	1			■			■					
1	5	1	3	■									
1	3	1		■									
1	3	1		■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People / Activities

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	4	1	2		■			■					
2	3	1			■			■					
2	3	3	3		■			■					
1	1	3			■			■					
2	1	3			■			■					
1	3	4	2		■			■					
2	3	4			■			■					
2	3	1	1		■							■	
1	3	1	2	■									
1	3	1		■									
2	3	1	1		■							■	
1	3	1	3	■									
1	1	1		■									
2	1	1		■									
1	4	1	3	■									
2	4	1		■									
2	2	1		■									
1	3	3	2		■			■					
2	3	1			■			■					
1	3	1	2		■			■					
2	4	1			■			■					
2	4	1	2		■			■					
2	2	1			■			■					
2	3	2	1	■									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	2	X									
2	3	1		X									
2	3	3	1	X									
1	3	1	3	X									
2	3	1		X									
1	2	1		X									
1	3	4	3	X									
2	3	4		X									
1	1	4		X									
2	3	3	1	X									
2	3	1	1	X									
1	3	2	1	X									
2	5	1	2		X			X					
2	5	1			X			X					
1	3	2	1	X									
1	4	1	1	X									
2	2	1	2	X									
2	2	1		X									
1	3	1	2	X									
2	2	1		X									
2	3	1	3		X	X	X	X					
2	2	1			X	X	X	X					
2	2	1			X	X	X	X					
2	3	1	2		X			X					
1	1	1			X			X					
Notes													
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5										

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	3	3	2	X									
2	3	1		X									
1	3	1	2	X									
2	3	1		X									
2	4	1	1	X									
Notes													
1 Male 2 Fem	1 <14 2 14 - 20 3 21 - 35 4 36 - 60 5 >60	1 white 2 black 3 asian 4 hisp	1 1 2 2 3 3-5 4 >5										

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	4	1	2	X									
1	4	1		X									
2	4	1	1	X									
2	4	1	2	X									
2	3	4		X									
1	4	4	2	X									
2	4	1		X									
2	2	1	2	X									
2	2	1		X									
2	3	1	1	X									
1	3	1	1	X									
2	2	1	3		X			X					
2	2	1			X			X					
1	2	1			X			X					
1	3	1	2	X									
2	3	1		X									
1	5	1	2	X									
2	5	1		X									
2	3	2	2	X									
2	3	1		X									
2	5	1	2	X									
2	1	1		X									
1	3	2	2	X									
2	3	2		X									
2	3	1	1	X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	3	X									
2	3	1		X									
2	3	1		X									
1	3	2	2	X									
2	1	3		X									
1	3	2	2	X									
2	3	2			X			X					
2	3	1	3		X			X					
2	3	1			X			X					
1	1	1			X			X					
1	3	2	3		X			X					
2	3	2			X			X					
2	2	2			X			X					
1	3	1	3		X			X					
2	3	1			X			X					
2	1	1			X			X					
1	3	1	2	X									
2	3	1		X									
2	3	1	2	X									
2	3	1		X									
2	4	1	2		X							X	
1	4	1			X							X	
1	3	1	3		X							X	
2	3	1			X							X	
1	1	1			X								

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 1

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
1	5	1	2		■			■					
2	5	1			■			■					
1	3	1	2		■			■					
2	1	1			■			■					
1	2	1	3		■			■					
1	2	1			■			■					
1	2	1			■			■					
1	3	4	2		■			■					
2	3	4			■			■					
1	3	3	3		■			■					
1	3	3			■			■					
2	3	3			■			■					
2	3	1	2		■			■					
2	3	1			■			■					
1	3	4	4		■			■					
1	3	4			■			■					
1	3	4			■			■					
2	3	4			■			■					
1	1	4			■			■					
2	1	4			■			■					
1	3	1	1		■			■					
2	3	2	2		■			■					
2	3	2			■			■					
1	5	1	1		■			■					
2	3	1	1		■			■					

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Table 2

Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	2	3		■			■					
1	1	2			■			■					
1	1	2			■			■					
2	3	1	3		■			■					
1	1	1			■			■					
1	1	1			■			■					
2	2	1	3		■			■					
2	2	1			■			■					
2	2	1			■			■					
2	3	1	3	■									
2	3	1		■									
2	2	1		■									
1	3	1	3	■									
2	3	1		■									
1	1	1		■									
1	4	1	2	■									
2	4	1		■									
1	3	4	2	■									
2	3	4		■									
1	3	2	1		■								■
1	3	1	2		■			■					
2	3	1			■			■					
1	4	1	2		■			■					
2	4	1			■			■					
2	3	2	1		■								■

Notes

Sex	Age	Ethnicity	Group
1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

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People				Activities									
Sex	Age	Ethnicity	Group	Walking Standing	Sitting	Running	Meeting	Dining Coffee	Baby sitting	Playing	Other recreation	Reading Working	Shopping
2	3	1	3	X									
2	2	1		X									
2	2	1		X									
2	5	1	3	X									
1	1	1		X									
2	1	1		X									
1	3	1	2		X			X					
2	3	1			X			X					
2	3	1	1		X			X					
2	5	1	1		X			X					
1	3	3	2		X			X					
1	3	1			X			X					
2	3	1	4	X			X						
2	1	1		X			X						
2	3	1		X			X						
1	1	1		X			X						
1	3	4	2	X									
1	3	4		X									
1	4	1	2	X									
2	4	1		X									
1	2	1	1	X									
2	3	1	1	X									
1	3	1	3	X									
1	2	1		X									
1	1	1		X									

Notes

1 Male	1 <14	1 white	1 1
2 Fem	2 14 - 20	2 black	2 2
	3 21 - 35	3 asian	3 3-5
	4 36 - 60	4 hisp	4 >5
	5 >60		

Bibliography

Reference list

Adhya, A. & Amorim, L. (2005). From Annarbour to A2. In A.V. Nes (Ed.). *Proceedings Space Syntax. 5th International Symposium.* (pp. 617-631). Delft, The Netherlands.

Adler, A. & Adler, P. (1998). Chapter 3: Observation Techniques. In N. K. Denzin & Y. S. Lincoln (Eds.). *Collecting and Interpreting Qualitative Materials.* (pp. 79-109). London, UK: Sage Publications.

Amin, A. & Thrift, N. (2002). *Cities: Reimagining the Urban.* Cambridge: Polity Press.

Arendt, H. (1958). *The Human Condition.* Chicago, IL: The University of Chicago Press.

Bonnes, M., Mannetti, L., Secchiroli, G., and Tanucci, G. (1995). The city as a multi-place system: an analysis of people – urban environment transactions. In L. N. Groat (Ed.). *Giving Places Meaning.* (pp. 57-86). London: Academic Press.

Brill, M (2001). Problems with Mistaking Community Life for Public Life. *Places.* 14/2. 48-55.

Berman, M. (1982). *All That Is Solid Melts Into Air: the experience of modernity.* New York, NY: Penguin Books.

Breheny, M. ed. (1992), *Sustainable Development and Urban Form.* London: Pion Limited.

Bruner, J., Goodnow, J., and Austin, G. (1956). *A study of thinking.* Mew York, NY: Wiley.

Canter, D., Brown, J., & Groat, L. (1985). The Multiple Sorting Procedure. In M. Brenner, J. Brown, and D. Canter (Eds.). *The Research Interview: Uses and Approaches* (pp. 79-114.). London: Academic Press.

Canter, D. (1977). *The Psychology of Place.* London: Architectural Press.

Canter, D. (1969). An Inter-group Comparison of Connotative Dimensions in Architecture. *Environment and Behavior. 1/1,* 37-48.

Carr, S. et al. (1992). *Public Space.* Cambridge, UK: Cambridge University Press.

Castells, M. (I. Susser, Ed.). (2002). *The Castells Reader on Cities and Social Theory.* Malden, MA: Blackwell.

Castells, Manuel. (1997). *The Power of Identity,* Blackwell Pub., Oxford.

Certeau, M. de (1984). The Practice of Everyday Life. Berkeley, CA: University of California Press.

Chakravorty, S. (2005). From Colonial City to Globalizing City? The Far-fro-complete Spatial Transformation of Calcutta. In N. R. Fyfe & J. T. Kenny (Eds.). *The Urban Geography Reader*. New York, NY: Routledge.

Chase, J., Crawford, M. & Kaliski, J. (Eds.). (1999). *Everyday Urbanism*. New York, NY: Monacelli Press.

Comte, A. (1856). *Social physics: from the Positive philosophy of Auguste Comte*. (M. Harriet Trans.). Retrieved on Oct 31, 2005 from http://www.hti.umich.edu/cgi/t/text/text-idx?c=moa;idno=AFT5601.0001.001. New York, NY: C. Blanchard.

Coleman, K. (1967). *Confederate Athens*. Athens: University of Georgia Press.

Dawson, Peter. (2002). Space Syntax Analysis of Central Inuit Snow Houses. *Journal of Anthropological Archaeology.* 21, 464-470.

Drisin, A. (2004). Intricate Fictions: Mapping Princely Authority in a Sixteenth-Century Florentine Urban Plan. *The Journal of Architectural Education*. 57,4. 41-55.

Ferguson, T.J. (1996). *Historic Zuni Architecture and Society: An Archaeological Application of Space Syntax.* Tucson, AZ: University of Arizona Press.

Filion, P. et al. (2004). The Successful Few: Healthy Downtowns of Small Metropolitan Regions. *Journal of the American Planning Association*. *70, 3*, 328-343.

Fishman, R. (2005). The Fifth Migration. *Journal of the American Planning Association*. *71, 4*, 357-366.

Florida, R. (2002). *The Rise of the Creative Class. And How It's Transforming Work, Leisure and Everyday Life*. New York: Basic Books.

Foucault, M. (1977). *Discipline and Punish: the Birth of the Prison* (A. Sheridan, Trans.). New York, NY: Pantheon Books.

Goldrick, M. (1982). The Anatomy of Urban Reform in Toronto, in Roussopoulos, D.I. ed., *The City and Radical Social Change*. Montreal: Black Rose, 267.

Gospodini, A (2004). Urban Morphology and Place Identity in European Cities: Built Heritage and Innovative Design. *Journal of Urban Design*. *9, 2*, 225-248.

Groat, L. N. & Wang, D. (2002). *Architectural Research Methods*. New York, NY: John Wiley and Sons, Inc.

Groat, L. N. (1999). Civic Meaning: The Role of Place, Typology and Design Values in Urbanism. *Symposium on Traditional Urbanism Reconsidered*. Chapel Hill, NC: University of North Carolina.

Groat, L. (1985). Psychological Aspects of Contextual Compatibility in Architecture: A Study of Environmental Meaning. PhD Dissertation. University of Surrey.

Groat, L. (1982). Meaning in post-modern architecture: An examination using the multiple sorting task. *Journal of Envrionmental Psychology, 2/3,* 3-22.

Habermas, J. (1962). *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society*. Cambridge, MA: MIT Press.

Habraken, N.J. (1992). J. Teicher (ed.). *The Structure of the Ordinary: Form and Control in the Built Environment*. Cambridge, MA; London, England: The MIT Press.

Haken, H. Portugali, J. (2003). The face of the city is its information. *Journal of Environmental Psychology. 23*. 385-408.

Halsband, F. (2005). Campuses in Places. *Places. 17,1*, 4.

Hare, J. (2002). *Tallahassee: A Capital City History*. Charleston, SC: Arcadia.

Harvey, D. (2001). *Spaces of Capital: Towards a Critical Geography*. New York: Routledge.

Harvey, D. (2000). *Spaces of Hope*. Berkeley: University of California Press.

Harvey, D. (1996). Cities or Urbanization. *City*, 1996. 1/2.

Hayden, D (1995). *The power of place: urban landscapes as public history*. Cambridge, MA: The MIT Press.

Hester, C. et al. (1999). *Athens, Georgia: Celebrating 200 Years at the Millennium.* Athens, GA: Community Communications.

Hillier, B., Penn, A., Hanson, J., Grajewski, T., & Xu, J. (1993). Natural movement: or, configuration and attraction in urban pedestrian movement. *Environment and Planning B*, *20/1*, 29-66.

Hillier, B; Hansen, J. (1989). *The Social Logic of Space*. London, UK: Cambridge University Press.

Jacobson, H., and Wilson, J. (1975). *Lansing – A Look To The Past*. Lansing, MI: St. Paul's Episcopal Church.

Jenks, M., Burton, E., and Williams, K. (eds.). (1996). *The Compact City: A Sustainable Urban Form?* London: E & FN Spon.

Jiang B. and Claramunt C. (2002). Integration of space syntax into GIS: new perspectives for urban morphology, *Transactions in GIS*, *6, 3*, 295-309.

Jiang B. (1998). Multi-agent simulations for pedestrian crowds. Bargiela A. and Kerckhoffs E. (Eds.), *Simulation Technology: Science and Art*, 10th European Simulation Symposium and Exhibition, October 26 - 28, 1998, Nottingham, 383 - 387.

Kaplan, S. (1982). Where Cognition and Affect Meet: a Theoretical Analysis of Preference. D. Bart, A. Chen, G. Francescato (Eds.). *Knowledge for Design*. Washington, DC: Environment Design Research Association.

Kostof, S. (1992). *The City Assembled: The Elements of Urban Form through History*. London, UK: Thames & Hudson.

Lefebvre, H. (1991). *The Production of Space.* (D. Nicholson-Smith, Trans.). Malden, MA: Blackwell. (Original work published 1974)

Loukatiou-Sideris, A; Banerjee, T. (1998). *Urban Design Downtown: Poetics and Politics of Form*. Berkeley, CA: University of California Press.

Lofland, L.H. (1998). *The Public Realm: Exploring the City's Quintessential Social Territory*. New York, NY: Hawthorne.

Low, S.M. (2000). *On the Plaza: The Politics of Public Space and Culture*. Austin, TX: University of Texas Press.

Lusk, A.C. (2002). Guidelines for Greenways: Determining the Distance to, Features of, and Human Needs Met by Destinations on Multi-Use Corridors. (Doctoral dissertation, University of Michigan, 2002).

Lyndon, D. (2005). Caring for Places: Caring for Thought. *Places. 17,1*. 3.

Lynch, K. (1981), *Good City Form* , Cambridge: The MIT Press.

Lynch, K. (1960), *Image of the City*, Cambridge: The MIT Press.

MacLean, J. and Whitford, C.A. (2003). *Lansing: City on the Grand 1836 – 1939*. Charleston, SC: Arcadia.

Marwil, J.L. (1987). *A History of Ann Arbor*. Ann Arbor, MI: The Ann Arbor Observer Company.

Milgrom, R. (2002). Realizing differential space? Design processes and everyday life in the architecture of Lucien Kroll. *Capitalism, Nature, Socialism, 13 (2),* 75.

Miller, W. (2002). *East Lansing: Collegeville Revisited.* Charleston, SC: Arcadia.

Major, M.D. (2001). When Is a Door More Than a Door? *Proceedings Space Syntax. 3rd International Symposium.* Peponis, J and Wineman, J. (Eds.) Atlanta. pp.37.1-37.14.

Major, M.D. (1997). Are American Cities Different? If so how do they differ. *Proceedings Space Syntax. 1st International Symposium.* Peponis, J. (Ed.) London. 3. p.9.1-9.14.

Manzo, L.C. (2005). For better or worse: Exploring multiple dimensions of place meaning. *Journal of Environmental Psychology. 25,* p.67-86.

Mehrotra, R. (Ed.). (2004). *Everyday Urbanism: Margaret Crawford vs. Michael Speaks.* Ann Arbor, MI: Michigan Debates on Urbanism I.

Milgrom, R. (2002). Realizing differential space? Design processes and everyday life in the architecture of Lucien Kroll. *Capitalism, Nature, Socialism.* Santa Cruz: Jun 2002. Vol.13/2; p. 75.

Molotch, H. (1976). The City as a Growth Machine: Toward a Political Economy of Place. *The American Journal of Sociology, 82 (2),* 309-332.

Montgomery, J. (Feb, 1998). "Making a City: Urbanity, Vitality and Urban Design." *Journal of Urban Design. Vol 3. Iss.1.* 93-116

Mostyn, B. (1985). The Content Analysis of Qualitative Research Data. In M. Brener, J. Brown & D. Canter (Eds.). *The Research Interview.* London: Academic Press.

Mumford, L. (1937, November). What is a City? *Architectural Record, LXXXII,* 59-62.

Murray, A.T. et al. (2001). Exploratory Spatial Data Analysis Techniques for Examining Urban Crime. British Journal of Criminology. 41. p.309-329.

Nasar, J.L., Stamps III, A.E., and Hanyu, K. (2005). Form and function in public buildings. *Journal of Environmental Psychology. 25.* p.159-165.

Nasar, J.L. (1998). *The Evaluative Image of the City.* Thousand Oaks, CA: Sage Publications.

Norberg Schulz, C. (1981). *Genius Loci: Towards a Phenomenology of Architecture.* New York: Rizzoli.

Oldenburg, R. (2000). *Celebrating the Third Place: Inspiring Stories about the "Great Good Places" at the Heart of Our Communities*, Marlowe & Company.

Outhwaite, W. (1996). *The Habermas Reader*. Cambridge, UK: Polity Press.

Oxford English Dictionary (2005, 2nd edition). Retrieved on Oct 24, 2005 from http://www.oed.com. Oxford, UK: Oxford University Press.

Pavlovskaya, M.E. (2002). Mapping Urban Change and Changing GIS: other views of economic restructuring. *Gender, Place and Culture. 9,3.* p.281-289.

Penn, A. (2001) Space Syntax and Spatial Cognition. Or, why the axial line? *Proceedings of the Space Syntax 3rd International Symposium.* Georgia Institute of Technology Atlanta May 7-11 2001. A. Alfred Taubman College of Architecture and Urban Planning, University of Michigan, Michigan, USA, 11.1-11.17.

Project for Public Spaces. Retrieved on Oct 24, 2005 from http://www.pps.org.

Relph, E.C. (1976). *Place and Placelessness*. London: Pion Ltd.

Robbins, P; Birkenholtz, T. (2003). Turfgrass revolution: measuring the expansion of the American lawn. *Land Use Policy. 20.* p.181-194.

Rowe, H.J. (2000). *History of Athens and Clarke County*. Greenville, SC: Southern Historical Press.

Reap, J.R. (1982). *Athens: A Pictorial History*. Virginia Beach, Va.: Donning Communications, 1982).

Sandercock, L. (2003). *Cosmopolis II: Mongrel Cities of the 21st Century*. New York, NY: Continuum.

Schaller, S and Modan, G. (2005). Contesting Public Space and Citizenship. *Journal of Planning Education and Research. 24*. p.394-407.

Schneekloth, L; Shibley, R. (1995). *Placemaking: The Art and Practice of Building Communities*. NewYork, NY: John Wiley & Sons, Inc.

Scott, M.J., Canter, D.V. (1997). Picture or Place? A Multiple Sorting Study of Landscape. *Journal of Environmental Psychology. 17*. p.263-281.

Sennett, R (1974). *The Fall of Public Man*. New York, NY: Alfred A. Knopf.

Shibley, R.G. et al. (2003). Constituting the Public Realm of a Region: Placemaking in the Bi-National Niagaras. *Journal of Architetcural Education. 57, 1.* p.28-42.

Short, J.R. (1998). *The Urban Order: An Introduction to Cities, Culture, and Power.* Cambridge, MA: Blackwell Publishers.

Sorkin, M. (ed.) (1992). *Variations on a Theme Park: The New American City and the End of Public Space*. New York: Hill and Wang.

Spain, D (1992). *Gendered Space*. Chapel Hill, NC: University of North Carolina Press.

Strickland, R. (Ed.). (2004). *Post Urbanism & Reurbanism: Peter Eisenman vs. Barabara Littenberg and Steven Peterson*. Ann Arbor, MI: Michigan Debates on Urbanism III.

Sugrue, T. J. (1996). *The Origins of the Urban Crisis: Race and Inequality in Postwar Detroit*. Princeton, NJ: Princeton University Press.

Thomas, F.T. (1992). *A Portrait of Historic Athens and Clarke County*. Athens: University of Georgia Press.

Tuna, Y. (1977). *Space and Place: The Perspective of Experience*. Minneapolis, MN: University of Minnesota.

Violich, F. (1985). Toward Revealing the Sense of Place: An Intuitive "Reading" of Four Dalmatian Towns. D. Seamon & R. Mugerauer, (eds.). *Dwelling, Place and Environment: Towards a Phenomenology of Person and World*. NY: Columbia University Press, 113-136.

Warner, M. (2002). *Public and Counterpublics*. New York, NY: Zone Books.

Williams,K. et al. eds. (2000). *Achieving Sustainable Urban Form*. London: E & FN Spon.

Whyte, W.H. (1980). The Social Life of Small Urban Spaces. Washington D.C.: The Conservation Foundation.

Williams,K. et al. eds. (2000). *Achieving Sustainable Urban Form*. London: E & FN Spon.

Wills, M & Morris, J.P. (1987). *Seminole History: A Pictorial History of Florida State University*. Jacksonville, FL: South Star Pub. Co.

Wirth, L. (1938, July). Urbanism as a way of life. *The American Journal of Sociology, XLIV: 1*, 1-24.

Yin, R.K. (1994). Case Study Research: Design and Methods. Thousand Oaks, CA: Sage Publications.

Zeisel, J. (1981). *Inquiry by Design: Tools for Environment-Behavior Research.* Monterey, CA: Brooks/ Cole Publishing Company.

Zvulun, E. (1978). Multidimensional Scalogram Analysis: The Method and its Application. In Shye, S. *Theory Construction and Data Analysisin the Behavioral Science*. Jossey-Bass: San-Francisco.