

STOP, TALK & LEARN:
SOCIALIZATION IN A UNIVERSITY OPEN SPACE

by

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ABSTRACT

Landscape architects have the opportunity to compose a setting in which certain types of socialization may prosper by altering the environment to improve opportunities for socialization. Socialization, or interpersonal contact, is a primary determinant in the formation of individual characteristics and behavior. The experiences to which one is exposed contribute to personal development and are affected by environmental stimuli.

The purpose of this thesis is to document the design process of a project that has enhancement of socialization as the primary goal. This study includes a review of the existing literature to determine the design elements that can improve socialization in the designed environment employing the theories of Randolph Hester (1975), Clare Cooper Marcus with Trudy Wischemann (1998) and William “Holly” Whyte (1980). These design elements are categorized by the types of socialization that they can facilitate: manifest, latent, and spontaneous interaction. Next, a case study of Spaight Plaza on the University of Wisconsin-Milwaukee campus was conducted to define the current socialization levels among university users. A new design addressing socialization elements was drafted, and a comparative analysis of the existing and proposed designs concludes the thesis.

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DEDICATION

This thesis is dedicated to my husband Aaron Joseph Asher because he makes me laugh, loves me despite my faults, and he followed me to Kansas. Thank you, Aaron. I love you!

CHAPTER 1: INTRODUCTION



Figure 1.1: UW's Library Mall looking north toward Memorial Union and Lake Mendota, October 1, 2005.



Figure 1.2: Library Mall looking east along State Street with the State Capitol in the background, October 1, 2005.



Figure 1.3: UWM's Spaight's Plaza looking north toward Golda Meir Library, October 3, 2005.

The University of Wisconsin-Madison (UW) is a lively campus rife with activity. Several plaza spaces within 300 feet of each other function as separate zones of activity as well as transition spaces to one another (Figures 1.1 and 1.2). The animation of users flowing through the spaces, as well as those who pause to watch performers, vendors, or talk to a friend is like watching a well choreographed ballet. In contrast, the activity within Spaight's Plaza at the University of Wisconsin-Milwaukee (UWM) is drab, few people pause, and facial expressions are not animated like those on warm Madison days (Figure 1.3). The drastic difference in atmosphere between Madison and Milwaukee, two campuses only 80 miles apart, led this researcher to evaluate the college plaza space and elements incorporated therein.

It can be argued that differences in activity levels on the two campuses could be caused by several factors. Perhaps the difference lies in the student population; the size of UW's student body is 40,000 versus UWM's 28,000. Or could it be the additional activities offered to Big 10 Conference schools? Students in Madison enjoy football, softball, and hockey in addition to Milwaukee's basketball and soccer. The climate cannot be the culprit. Each school is located in close proximity to a lake which brings refreshing summer breezes and harsh winter winds.

Design Elements Encourage Socialization

An alternative theory is that the surrounding relationships and design elements included in a plaza are the true cause of a range

of activity levels within a campus plaza space. This could even mean that two plazas on one campus may achieve different levels of activity due to the design elements offered within those areas.

In fact, this researcher believes it is indeed the design elements that reduce the functionality and appreciation of Spaight's Plaza, and by altering the environment, all users including students, faculty, staff and visitors could benefit with additional social opportunities.

Purpose of This Research

The topic of socialization design requires study because landscape architects have the skills and opportunity to positively affect socialization experiences for the public good. The following chapters study the research of Randolph Hester, Clare Cooper Marcus and Trudy Wischemann, and William "Holly" Whyte to compile a list of design elements required to create a successful plaza space. The research is then applied to a design exploration of Spaight's Plaza. This methodology was chosen as much to gain experience in applying the theories as it was to address the deficiencies of Spaight's Plaza. Finally, an analysis of the proposed design of Spaight's Plaza will demonstrate whether additional social opportunities can indeed be developed through alteration and/or addition of design elements.

CHAPTER 2: EXISTING THEORY ON DESIGN FOR SOCIALIZATION



Figure 2.1: Manifest interaction occurs when two or more people plan an activity such as group study, October 3, 2005.



Figure 2.2: Latent interaction occurs as customers talk with vendors, August 7, 2004.



Figure 2.3: Spontaneous interaction is demonstrated as a person spots a friend and pauses to say hello, October 3, 2005.

The National Institute of Education report (1984) concluded that “The most effective education is one which most fully involves the student in the learning process and the opportunities for enriching experiences in the college setting... The quality of education can be improved by three critical conditions: student involvement, high expectations, and assessment and feedback” (Pace, 1990).

In order to understand the mechanics of campus plaza design emphasizing socialization amongst the users, one must first study existing theory. In this chapter, an examination of the importance of socialization among campus users is presented. Next, the challenges to designers posed by university central plaza spaces are addressed. Several guidelines required by these spaces will be identified and explored.

Definitions

In 1954, Peter H. Mann described a form of socialization that he termed neighborliness. He broke the term into two forms: manifest and latent neighborliness. While manifest neighborliness is “characterized by overt forms of social relationships,” latent neighborliness is depicted as “favorable attitudes to neighbors which result in positive action when a need arises.” (Mann, 1954, p. 164)

Following the example set by Mann, several terms will be employed throughout this thesis to categorize socialization into three distinct activities. First, *manifest interaction* will be used to describe planned group events such as musical performances, receptions, or demonstrations (Figure 2.1). *Latent interaction* can be defined as interaction between users

occurring as necessity arises. Two examples that can transpire between strangers are a customer's interaction with a vendor or a visitor requesting directions (Figure 2.2). Finally, *spontaneous interaction* describes instances in which accidental or unplanned groups of two or more are formed. These events will occur between known individuals such as friends or student-professor (Figure 2.3).

The Importance of Socialization in College Settings

Many college students experience significant personal growth during the transition time between adolescence and adulthood when they leave their parents homes for higher education. The events that occur during these formative years develop skills and behaviors essential for success in life. Students begin to make choices for themselves and are able to learn from their successes as well as their failures. During this time, political ties, religious orientation, and personal ideologies are tried and tested, and it is the social events students are exposed to that form these beliefs. This researcher proposes that socialization experienced on campus shapes human development of identity and can be a useful tool for learning.

Socialization Shapes Identity

Each person has a varied background of experiences, and it is the order, time, and environment in which one encounters critical moments that develop and shape a person's identity. The time period studied in this document is the developmental stage following high school. One environment, however, in



Figure 2.4: Group socialization shapes identity, October 3, 2005.



Figure 2.5: Students learn from one another, August 7, 2005.

which these experiences may occur is critical for study by landscape architects or campus planners. Here, environment is representative of both the social and physical setting in which activity occurs. College is a transition time for many students who first venture out on their own, independent of parental purview. The social activity in which one participates during these formative years can greatly affect one's sense of self. Therefore, the environment in which social activity occurs is just as important to personal development. In fact, "environment is so significant to human functioning that a person must first construct an understanding of the immediately surrounding environment before he or she can construct a personal identity" (Saari, 2002, p. 13).

Socialization is a Tool for Learning

Peatross and Peponis (1995) propose that spaces that allow interplay between teacher and student as well as student-student interaction provide a greater educational experience in which the student is exposed to varied methods and theories. One of these methods is the learner-centered style of teaching. Learner-centered learning focuses on a collaborative process in which students explore material through active research rather than solely listening to an instructor lecture. In fact, exploring a topic through group interaction assists in comprehension and analysis of the subject (Bloom, 1956).

On-campus Learners Versus Commuters

It follows that institutions with a high percentage of students living off-campus (i.e. commuters) have an even greater responsibility

to create spaces in which these students can effectively learn during their brief campus visits and experience a sense of belonging to a community. Kenney (2005) believes colleges are losing their sense of community for seven reasons: a loner lifestyle, busy lives, suburbanization of the physical campus layout, residential trends away from dormitory-style living, faculty and student commuting, erosion of community dining, and increased diversity of constituencies on campus. (Kenney, 2005, p. 50) Campus designers must provide a safe and comfortable place for commuter students to integrate into the campus community.

The topics of shaping identity and learning are addressed with the three types of socialization identified. Manifest and latent interaction are most beneficial in this regard. A sense of community is developed by providing an identity to the space in which activity will occur.

Design of Campus Plaza Spaces

Long before campus plaza spaces were created, urban plazas were formed. The plaza was a central location to gain information on current events, conduct daily market activities, and socialize with friends and neighbors. Campus plazas were developed for the same reasons. Because universities can rival the size of small cities, locations in which students may participate in and gain information on current events must be made available. Just like urban dwellers, students require a central space attached to a building of great importance.

Two authors reviewed herein addressed urban settings. Randolph Hester's (1975)

work, *Neighborhood Space*, is applicable to the study of college plazas as it focuses on the users within a community setting. Colleges and universities are both individual communities as well as members of the neighborhoods that surround them.

William H. Whyte's (1980) work, *The Social Life of Small Urban Spaces*, studied urban plaza design and identified eleven elements essential to social success of a plaza space. Because campus plazas are so similar to urban plazas, Whyte's research is a prime resource for socialization design on college campuses.

A final source of information on design for campus plazas is found in *People Places* (1998) edited by Carolyn Francis and Clare Cooper Marcus. Marcus and Trudy Wischemann conducted case studies of several campus spaces to determine successful and unsuccessful design features. Current campus planners can use these findings as a guide when designing or redesigning a similar space.

Design Criteria

The design recommendations of these three theorists are summarized in a matrix (Table 2.1). Analysis and comparison of the three perspectives revealed twelve common categories of factors and elements that influence plaza users.

Seating

Each of the authors ranks seating as a primary feature leading to failure or success of a space. Hester values the placement of seating while Whyte believed patrons will use any available flat surface on which to sit. Marcus

and Wischemann take their study further by offering specific requirements. Benches should not be long as conversation on benches is comfortable for only two people. A range of seating choices must be offered for both the able bodied and disabled as well as individuals and groups.

People

Hester believes including people one wants to do an activity with is the most important determinant in neighborhood space. He has determined that desirable interaction participants "may be described by life-cycle-stage, class, ethnic, or regional characteristics" (Hester, 1975, p. 85). Whyte knows that people imbibe life into the plaza itself. Active users encourage greater numbers of new visitors.

Marcus and Wischemann, on the other hand, identify users in a different way. They are concerned with how people use the site and feels that users, not designers should determine how the space is designed through involvement during the programming phase.

Safety

In order to create a safe environment, Marcus and Wischemann have again provided necessary stipulations. They advocate a well illuminated porch with partial enclosure for transition.

Hester, however, is concerned with physical safety as well as psychological comfort. If a site appears safe, users will feel more at ease. In coordination, Whyte studied users he termed the "undesirables." Undesirables include muggers, drug dealers, and winos. Whyte determines that the "best way to handle

Table 2.1: Design Recommendations Matrix

	HESTER (1975)	MARCUS/WISCHEMANN (1998)	WHYTE (1980)
SEATING	placement affects the type of interaction	long benches to be avoided	sitting space
		picnic-type benches	
		able bodied and ADA seating	
		seating for 1-4 with some privacy	
		seating with backs next to building entry	
	place to study and eat comfortably		
PEOPLE	friends, fun	users determine how spaces are designed	life of the plaza
	as many social classes as possible		
SAFETY	safe environment	porch needs partial enclosure for transition	the Undesirables
	psychological comfort	well illuminated porch	
	Balance of order and diversity		
COMFORT	settings for activities	overhangs to create a cool shaded place	sun, wind, trees, water
	convenience	sun trap creation in cool environments	effective capacity
	physical comfort		
	trees		
need personal space (invisible area surrounding one's body, i.e. effective capacity)			
IDENTITY	relate to natural environment	name of building must be clearly identifiable	triangulation
	aesthetically appealing	main entrance identified and given porch	
	symbolic ownership		
	status objects reinforce ownership		
FOOD		food and drink in close proximity	food
CLEANLINESS		plenty of litter and recycling receptacles	
ACCESSIBILITY		front porch requires unimpeded access	
LOCATION		buildings as houses and spaces as front or back yard	the street
			indoor spaces
			concourses and megastructures
USE	policy on use	users determine use	
	variation in activities		
	Range of choices limited for visual unity		
COST	user cost should remain low		

the problem of undesirables is to make a place attractive to everyone else” (Whyte, 1980, p. 63). With an increased level of users, the undesirables stay away.

Comfort

Whyte (1980) found that sun is of great importance and designers should make the most of southern exposures. The absence of winds are critical. Trees should be related to sitting spaces for a satisfying feeling of enclosure, to “feel cuddled, protected-very much as they do under the awning of a street cafe” (Whyte, 1980, p. 46). Access to water is important in that people should be allowed to use it. The sounds of water can be peaceful or refreshing on warm summer days.

Hester defines personal space as an area “into which intruders may not venture” (Hester, 1975, p. 53). Distances for personal comfort with some interaction range from 1 1/2 to 4 feet. Whyte’s rule of thumb for the average number of people who will be “using a prime sitting space at peak periods, divide the number of feet in it by three and you won’t be far off from a good figure” (Whyte, 1980, p. 66-68).

Identity

When studying a relation to the natural environment, Hester looks to Harold F. Searles who says that “relatedness is a sense of intimate kinship with nature and a sense of personal identity apart from nature and thus implies a dynamic balance between a sense of oneness with nature and a lack of oneness with it” (Hester, 1975, p. 92). Symbolic ownership is a collective ownership of a space or even a place that a group may adopt as their

own. This ownership gives the site identity and vice versa. Status objects can be a part of symbolic ownership as communities place special importance on a unique object that only their space can offer. These objects can be physical or biological (i.e. topography or unique vegetation). Whyte’s theory of triangulation is similar in that it is the “process by which some external stimulus provides a linkage between people and prompts strangers to talk to each other as though they were not” (Whyte, 1980, p. 94). Triangulation pieces can include street characters, physical objects or performances.

Food

“If you want to seed a place with activity, put out food” (Whyte, 1980, p. 50). Just as a party host offers food and drink, so must an open space offer these comforts. Guests, whether at someone’s home or a public gathering space, feel more comfortable when there exists a distraction in the form of food. In fact, Marcus and Wischemann state that “observations in downtown office districts and campus plazas indicate that eating gives many people a needed excuse to be in a public space while at the same time reading, studying, or watching the world go by” (Marcus and Wischemann, 1998, p. 189).

Location

While Hester does not comment on location of an open space, Marcus and Wischemann state the designer must view buildings as houses and spaces as back yards to ensure comfortability among the users. This idea also translates into ownership and identity. Whyte has more specific guidelines

in this category. He postulates that a plaza's "relationship to the street is integral" (Whyte, 1980, p. 54). Also, although indoor spaces take activity away from plazas, connections to indoor activity spaces "should be easy and inviting" (Whyte, 1980, p. 80). Finally, underground concourses as indoor plaza spaces should be avoided due to the lack of a sense of place.

Cost

Hester is concerned with areas that charge a fee to users. Costs to the user should remain low in order to encourage continued use. However, fees for transportation are acceptable if kept to a minimum.

Additional Authors

Several concepts were studied by additional authors that complement the recommendations summarized in the matrix. Al-Homoud and Tassinary (2004) suggests that residents view their house and yard as components of home. A resulting hypothesis is formed in which campus users do not view the plaza as a separate space, but as a component of the Union "home." Marcus and Wischemann's theory of front and backyard relationships is similar.

The importance of user interaction to determine use is subscribed to by Hillier and Hanson (1984) who state "plazas cannot be designed without the functional uses determined by the social groups who will use it. Similarly, Relph (2002) discusses the importance of a sense of place. He proposes that places matter to people and must be constructed through the involvement of people who live and work in them.

Finally, students need private space. Private spaces "offer a base from which to venture out and seek engagement and involvement with others" (Pace, 1990, p. 146). Semi-private areas also become spaces for quiet reflection or study while maintaining a sense of comfort by keeping crowds in view. These spaces should be large enough to accommodate small groups, but should not become daunting for a single user.

Summary

How can this information be utilized? Because socialization is so vital to the college experience, it is of greatest importance that landscape architects provide areas in which an array of experiences can occur to enrich personal growth. Campus planners must provide spaces in which group interaction through manifest, latent and spontaneous socialization can occur. Finally, the design recommendation matrix is a tool that can be used as a checklist to verify that successful features and elements are not missed.

The following chapters include a case study of one college campus in which the social needs of the students do not appear to have been addressed and a design exploration for the campus that utilizes the criteria listed above.

CHAPTER 3: METHODOLOGY

The goal of this study was to conduct a design exploration to test the application of accepted theories toward the enhancement of socialization on college campuses. The steps taken to achieve this goal are provided here as a guide that future researchers may choose to follow or modify per the notes listed in Appendix 5: Notes for Future Researchers.

Literature Review

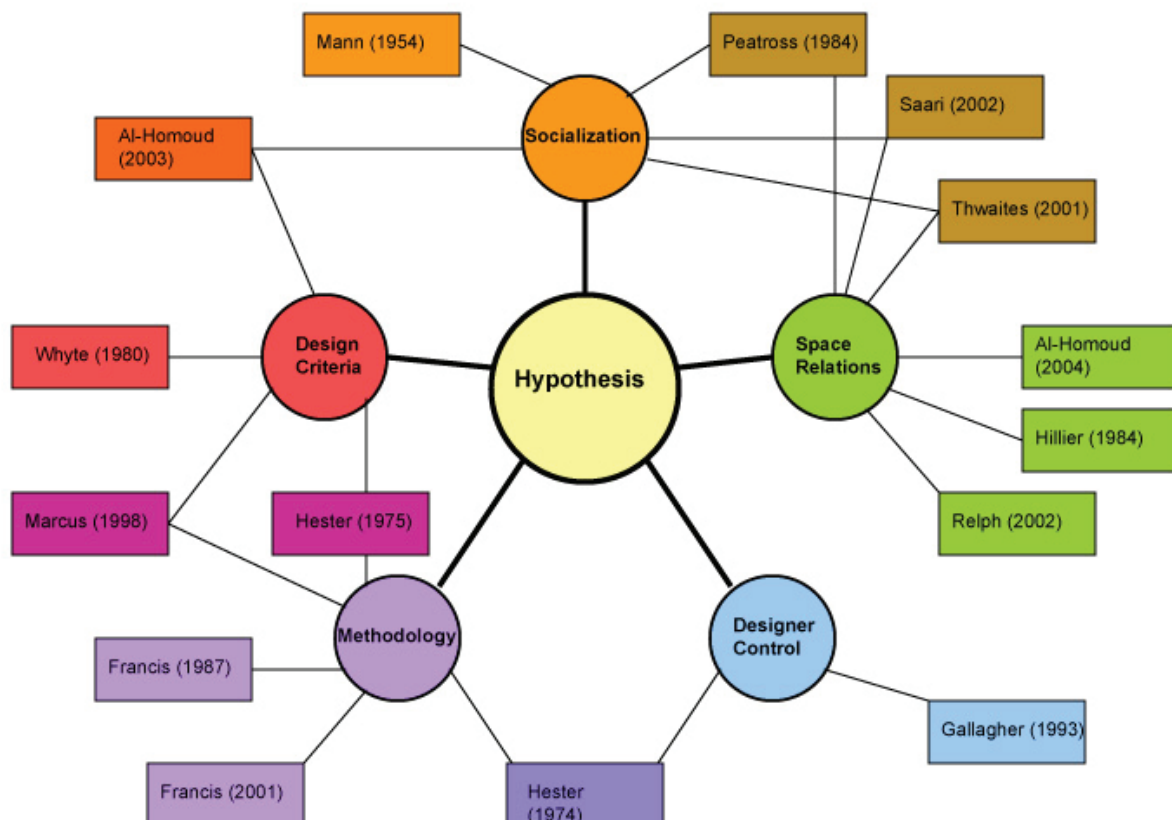
To begin, a literature review was undertaken and the topics studied appear below in Figure 3.1. Several important subjects explored were the benefits of socialization in learning environments, three definitions of socialization, and lists of the design factors and elements to encourage socialization theorized by Randolph Hester, Clare Cooper Marcus

with Trudy Wischemann, and William “Holly” Whyte as described in chapter 2. The design recommendation matrix was developed with this research.

Precedent Research

Prior to examining Spaight's Plaza, a study of several existing projects occurred. Studying precedents provided the researcher a base of information from which to begin. This practice allows designers to make informed decisions based upon the lessons learned from their predecessors. The precedents studied appear in Appendix 1 and include Union Square in San Francisco, California; Debra Saber-Salisbury Memorial Garden at William Beaumont Hospital of Royal Oak, Michigan; and Bryant Park in New York City, New York. Each

Figure 3.1: Literature Map for an evaluation of socialization in a university open space.



case study provided a lesson or offered hints toward the design exploration of Spaight's Plaza. For example, Union Square reminds designers to limit the use of hardscape, offer shade trees, choose materials wisely to discourage glare or burning, and offer buffers from unsightly objects. As well, the Debra Saber-Salisbury Memorial Garden shows designers that material choices such as artificial trees can lighten structural loads and still create a pleasant environment for users. Finally, Bryant Park demonstrates its success by offering handicap accessible routes, well maintained vegetation to instill a sense of security, and a wide range of uses to encourage events throughout the day.

Case Study of Spaight's Plaza

Next, a case study of Spaight's Plaza took place. First, the researcher conducted a history of the plaza including prior designs and current utilization of the space. Then a site evaluation as documented below was conducted to reaffirm design elements missing in the space and identify unique needs specific to the University.

Site Inventory & Analysis

The goals of site inventory and analysis were to gather information relevant to

design and to use this store of information for decision making. The data to be collected was determined by the researcher and diagrammed in Figure 3.2. As shown, the information is divided into three categories of cultural, physical and biological data. These topics were studied in two phases including a user analysis and review of physical and biological data.

Phase 1: User Analysis

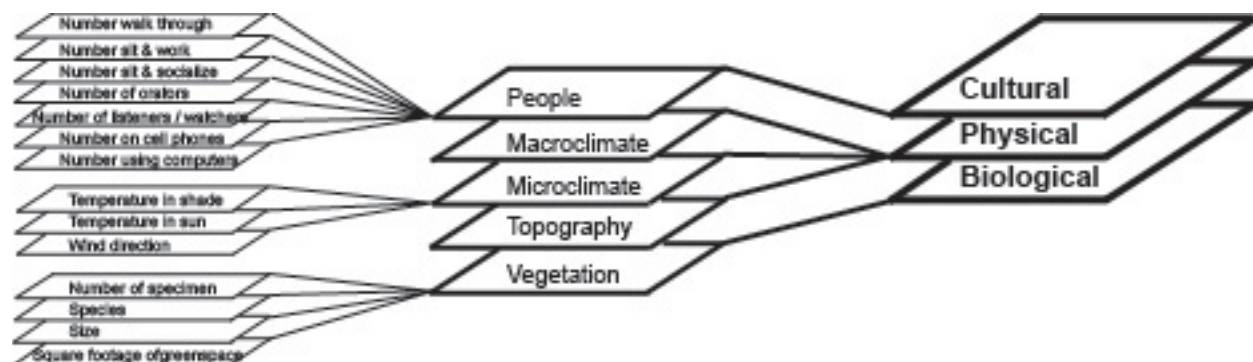
Several techniques were used to conduct a user analysis including general observation, recording of trace information, activity mapping, and counting. Madden and Love (1982) served as a model for this cultural documentation.

General Observation

The following questions provided a guide to making general observations of activities. It is important to note that biased reporting was minimized through reporting of events at regular twenty minute intervals throughout the day. Also, the observations were tested through the use of numerical collection techniques.

- How many people are in the plaza?
Does this number change over time?
- Is the sample representative of different genders, ages, and cultures?

Figure 3.2: Process Diagram for an inventory of Spaight's Plaza.



- Are the people in groups or alone?
- What kinds of activities are they participating in?
- Is there a pattern to where different people choose to congregate?
- How are people interacting (facing one another, on angle, laughing, fighting)?
- What do users carry with them?
- Do users have any trouble with elements in the plaza?
- Where do users enter the plaza?
- How well is the area maintained?
- Is there evidence of security?
- Are any events held in the plaza? What kind? How often?
- Does the area comfortably accommodate event attendees?

The answers to these questions are summarized in Chapter 4 and can be studied in greater depth in Appendix 2: Site Visit Journal.

Trace Measures

Trace identification included a visual inspection of the site. Trace evidence included random trash lying outside receptacles despite the addition of temporary waste cans and physical deterioration of site furniture due to severe weather, improper use (skating), and lack of maintenance (chair screws loose). Studying these variables was useful to identify the range of uses of the plaza and to suggest a hypothesis that not only is the design at fault for the lack of social activity occurring in the space, but poor maintenance plays a role as well.

Counting

Counts were performed at regular intervals and results compiled in Excel to

answer the following questions: the number of people passing through the site tells how large walks must be to accommodate the crowd; the number of people sitting and working shows whether current seating options fulfill user needs; the number of orators/presenters determines whether separate speech stages are necessary; the number of listeners/watchers shows whether more space is needed for users to fit comfortably; the number of cell phone users may determine a need for separate intimate spaces for privacy; and the number of people using computers may determine a need for wireless access within the plaza.

Activity Mapping

Activity mapping is a labor intensive, but telling technique of data collection. First, the researcher determined the type of information that would be useful to the study at hand. Then, a map of the site was printed onto which the data was recorded. The hourly interval mapping results can be found in Appendix 4. A list of the types of activities observed, and the number, sex, and approximate age of users conducting these activities was recorded.

Phase 2: Review of Physical and Biological Data

Physical data includes study of the regional climate, microclimate, topography, hydrology, and soils. Macroclimate data was compiled in Microsoft Excel to determine, on average, how often the space can be utilized. Wind patterns were studied on site to find if disrupting wind tunnels formed and if wind blocks are required.

Because the topography of the area is

unique due to glacial formations, a question arises of whether the plaza should represent local topography.

The biological data reviewed for Spaight's Plaza included vegetation types, sizes, numbers and health. A goal of this inventory is to find whether conditions facilitate or hinder vegetative growth and what species should remain in the design. This information was compiled into a chart using Microsoft Excel.

Another tool utilized was AutoCAD. A copy of the existing design was traced into CAD to easily calculate the square footage of greenspace.

While Chapter 4 includes the inventory and observations of the site, Chapter 5 analyzes the existing design using the design guideline matrix explored in Chapter 2. Colors were applied to the cells to indicate whether the guideline was successfully included, included with limited success, not included, or the designer did not have control over the guideline.

Program Development

Following the site analysis and compilation of opportunities and constraints, a program for the site was developed. Using the existing site inventory, user analysis, and design element research as guides, a program was developed incorporating additional seating options, a multi-use amphitheater, private rooms for small group discussion, relation of tables and chairs to the food court, and removal of bicycles from the plaza.

Design Production

With a program in hand, the designer

followed a standard process including: schematic design, conceptual design, and final layout with section and perspectives. Chapter 5 details the process that occurred to develop a new, socially stimulating design for Spaight's Plaza.

Comparison of Existing Versus Proposed Design

Finally, analysis of the proposed design and a comparison with the existing design took place. Again the design recommendations matrix proved useful as a standard measure against the existing design. Figure ground diagrams were also found to be appropriate representations for comparison and analysis.

CHAPTER 4: A CASE STUDY OF THE EXISTING SPAIGHTS PLAZA

Prior to the redesign of Spaights Plaza, an investigation of the existing design is required. A procedure for analysis of a project has been defined by Mark Francis in his 2001 article, "Case Study Method for Landscape Architecture" and was used as a guide in completing this investigation. "A case study is a well-documented and systematic examination of the process, decision-making and outcomes of a project, which is undertaken for the purpose of informing future practice, policy, theory, and/or education" (Francis, 2001). The topics covered in this case study include context, site history, inventory and user analysis.

Context

The "East Side" area of Milwaukee, Wisconsin shown in Figure 4.1, includes several eclectic residential neighborhoods. Within this upscale area lies the University of Wisconsin - Milwaukee (UWM). The university's northern boundary is formed by the city's northern limits along Edgewood Avenue. The Village of Shorewood lies to the north of Edgewood Avenue. The campus' eastern border is defined by Downer Avenue with Lake Michigan only one mile beyond. The Student Union Building is entered via the southern boundary along Kenwood Boulevard, while Oakland Avenue encloses the campus on its western edge. The Milwaukee River is only one-half mile west of Oakland.

With a diverse student body of 28,000 students representing 90 countries, the university does not remain a discrete entity within the residential zone (UWM webpage).

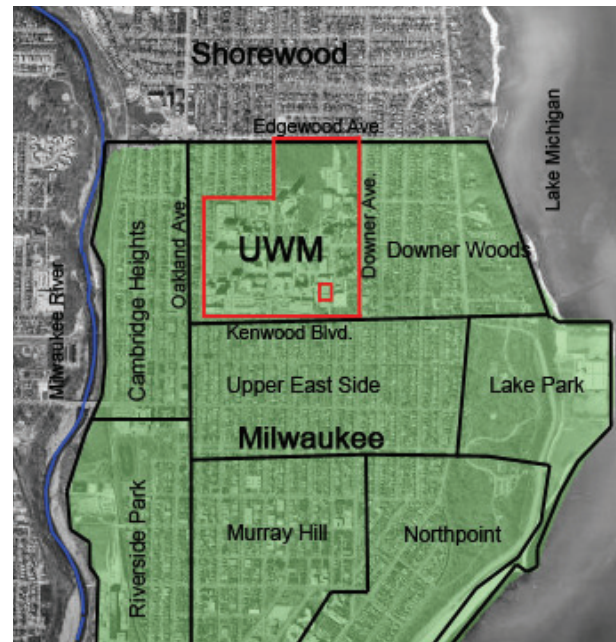


Figure 4.1: Neighborhoods surrounding UWM in Milwaukee, Wisconsin's East Side. Spaights Plaza is located in the southeast corner of UWM's campus. (www.terraserver.com)

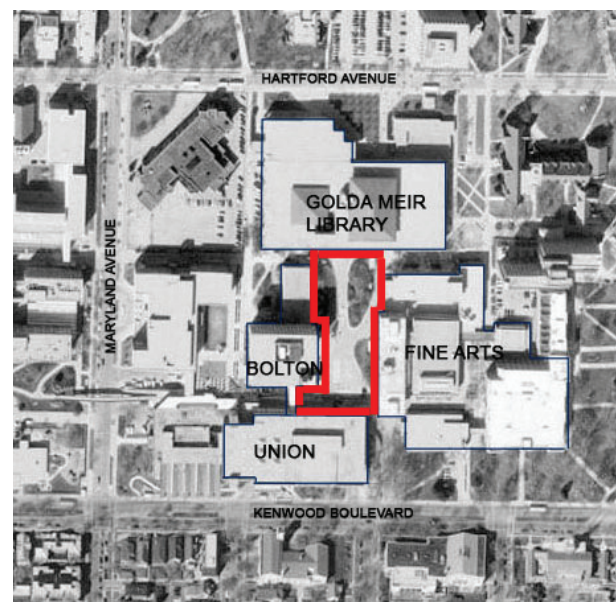


Figure 4.2: Spaights Plaza is surrounded by Golda Meir Library, the Fine Arts complex, the Student Union and Bolton Hall. (www.terraserver.com)



Figure 4.3: The Mall under construction to receive a two story parking garage 1972. Photo by John W. Alley with permission from the University Archives.



Figure 4.4: The Mall in spring 1974. Photo by Alan Magayne-Roshak with permission from the University Archives.

In fact, several issues have arisen with local neighborhood associations due to the continued expansion of the student population. Limited housing, reduced parking, and a loss of a sense of community have eroded relationships with long-time residents (City of Milwaukee, 2004).

Figure 4.2 highlights the study site, Spaight's Plaza. The Plaza is contained by Golda Meir Library to the north, the Fine Arts Complex to the east, the Student Union to the south, and Bolton Hall, a classroom building, to the west. With classrooms, study areas, performance space, food court, and campus bookstore all located adjacent to the plaza, most students will pass through the space at least once during the course of the day. However, Spaight's Plaza may not fulfill the needs of the students and faculty users as it encompasses an area of only 1.5 acres with 0.9 acres of green space.

School History

UWM has a varied history. In 1885 the people of Milwaukee recognized the need for a teachers college, and the Milwaukee Normal School was formed. As the need for teachers increased and more majors were added, administrators changed the name to the Milwaukee State Teachers College, offering a four-year degree, in 1927. Then, in 1951, a liberal arts degree was offered and the name needed to be changed again. The Wisconsin State College was formed. Only five years later, 16 colleges in Wisconsin, including the State College, combined to form the University of Wisconsin System. UWM has been offering liberal arts and professional degrees to students

since 1956.

Even before the consolidation of state institutions occurred, the students of Milwaukee began planning construction of a student union. This building was to be located at the end of a road connecting Maryland Avenue to Downer Avenue. Bolton Hall, Golda Meir Library, and the Fine Arts Complex were organized perpendicular to the old street which became a concrete open space known as “The Mall” shown in Figures 4.3-4.6.

In 1972, university officials identified the need for additional parking on campus. A two-story parking garage was constructed adjacent to the Union and the Mall was reintroduced atop the structure. The Mall was a vast space in which vendors, kiosks, and performers were able to congregate. Students lined the small grassy slopes along the edges of the space and even utilized the movable tables and chairs provided. Photographs show the activity within the area as booming.

In 1987, the parking structure required repairs due to leakage. “The pedestrian paths were reconfigured and narrowed to provide room for additional plantings to create a larger campus green space” (Bardes and Warner, 1997, p. 21). This new design is represented by the site plan in Figure 4.7.

In 1993, the plaza was named for Ernest Spaight, former Associate Professor of Educational Psychology and Assistant Chancellor – Student Services and Special Programs 1970-1991. Spaight was an active advocate on behalf of the students. He fought for minority groups and financial aid, as well as

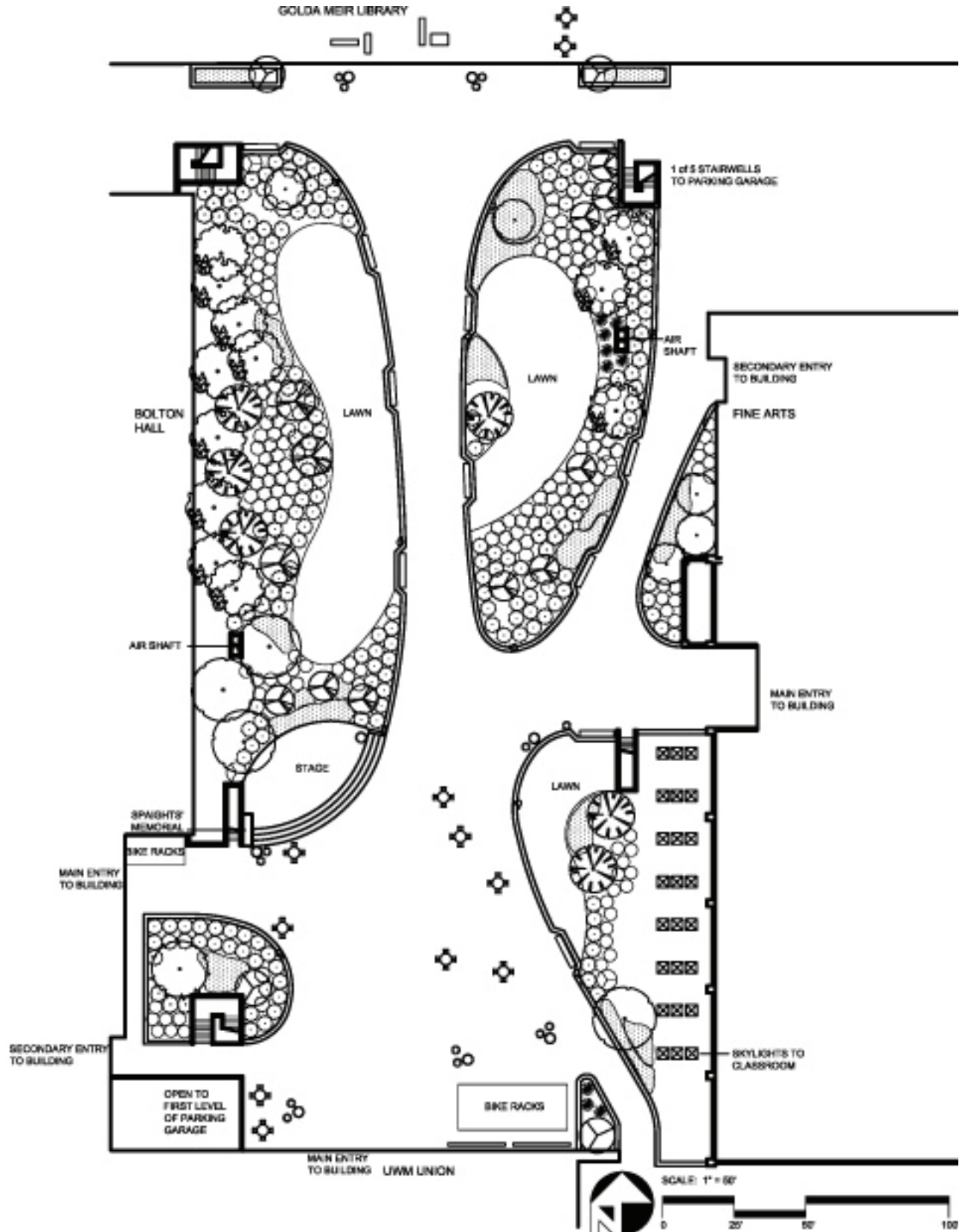


Figure 4.5: The Mall circa 1977. Photo by John W. Alley with permission from the University Archives.



Figure 4.6: The Mall in the early 1980s. Photo by Alan Magayne-Roshak with permission from the University Archives.

Figure 4.7: Site Plan of Spaight's Plaza per construction documents of 2002.



instituting an Experimental Program “toward serving approximately 500 students who need remedial instruction and intensive academic advising” (Spaights, 1969).

In 2002, the plaza required additional repairs for more leaks, and the vegetation was replaced. The Madison firm Arnold and O’Sheridan completed the construction documents, but no changes were included to the 1987 design. Phone calls to the firm regarding design decisions were not returned.

User Analysis

As described in Chapter 3, the user analysis began by noting general observations. A journal of the experience is included in Appendix 2. Data collection included identification of site maintenance problems through a trace analysis, counting users of various services, and mapping user activity. An interview of Dennis Greenwood, Buildings and Grounds Supervisor can be found in Appendix 3.

Trace Measurement

An inspection of the site began in the southwest corner near the secondary entrance to Bolton Hall. Since many smokers congregate around the planter, it has become a large cigarette urn holding a vast number of butts. There was one ash tray attached to a light post at this location which was utilized, but not overflowing.

Just north of the planter a great deal of gum was ground into the sidewalk. It appeared that users spit out their gum before entering the building, but do not take the time to place it in the garbage can next to the ash tray. Perhaps



Figure 4.8: Spaights Plaza looking north toward Golda Meir Library, August 7, 2005.



Figure 4.9: Spaights Plaza looking east toward Fine Arts, August 7, 2005.



Figure 4.10: Spaights Plaza looking south toward the Student Union, August 7, 2005.



Figure 4.11: Spaight's Plaza looking northwest toward Bolton Hall and Golda Meir Library, August 7, 2005.



Figure 4.12: Tables and chairs are difficult to move to comfortable locations.



Figure 4.13: Seatwalls show wear and tear due to skateboard use, September 30, 2005.

the same smokers who neglect the ash tray are spitting out their gum before lighting cigarettes. School maintenance could use a power washer more frequently to keep this area clean.

Moving northward, additional trash cans were added to the site. These bins are moveable and temporary, and food trays were left in front of them. This signals either the current receptacles are not meeting the needs of users, or a special event took place that required additional support.

Evidence of skateboarders appeared on the seat walls as viewed in Figure 4.13. Since the walls were replaced only three years earlier, skateboarders must use the area frequently to cause this degree of damage. Since skateboarders can be hazardous to pedestrians in the plaza, a solution must be found to discourage the activity.

Circling the northern reaches of the site, it was noted that drains are kept free of debris and trash is emptied regularly. However, the light posts and cigarette urns required painting. Figure 4.14 shows peeling paint common to several posts.

Contrary to the light posts, chairs and benches appeared to have been recently painted. However, leaves were caught behind the benches in the cut outs. Facilities should devote attention to the cleanliness of this area.

Two large ventilation shafts for the parking garage are located within the plaza. Figure 4.15 identifies the polluted appearance of these massive structures. With exhaust escaping through these shafts throughout the day, cleaning the structures would prove futile.

However, these imposing features may be better located to the edges of the site where they do not stand out to visitors.

Finally, the secondary entrance to the Fine Arts Complex was under repair. Figure 4.16 shows the installation of an ADA accessible automatic door button. At least, that is what is surmised due to the position of the post. The box surrounding the apparatus discourages the user from identification. It should be noted that later in the day, users began to lock bikes to the post.

Counts

Counting included identification of the number of pedestrians and bikes passing through the space, cell phone users, orators, watchers and laptop users. A matrix of pedestrians and bicyclists is found in Table 4.1 while the remaining counts were not marked on regular intervals.

To begin, it is noted that bike racks are used responsibly inside Spaight's Plaza. In fact, 22 bikes were racked at the Library leaving only 10 available spaces. Unfortunately, as viewed in the matrix, 39 bicyclists considered it necessary to ride through the plaza throughout the day. With the pedestrian data, it can be estimated that up to 1,000 users pass through Spaight's Plaza each hour.

The pedestrian and bicycle counts were taken at ten-minute intervals each hour throughout the day. Original count data is included in Appendix 4.

A five minute cell phone count revealed that only 14 of 177 passers-by used cell phones within the plaza.



Figure 4.14: Cigarette receptacles and light posts require regular painting, September 30, 2005.



Figure 4.15: Air shafts are essential to the parking garage, but the colossal structures are daunting, September 30, 2005.



Figure 4.16: Public protection during construction at a building entry, September 30, 2005.

Table 4.1: Ten minute count matrix.

TIME	PEDESTRIANS	BIKES
8:00 - 8:10 am	50	3
9:00 - 9:10 am	194	8
10:00 - 10:10 am	92	7
11:00 - 11:10 am	80	0
12:00 - 12:10 pm	190	1
1:00 - 1:10 pm	140	2
2:00 - 2:10 pm	117	7
3:00 - 3:10 pm	80	2
4:00 - 4:10 pm	138	4
5:00 - 5:10 pm	113	5

The plaza remained devoid of orators or presenters on these two days in September and October 2005. A question arises as to how many performances spontaneously occur on the stage. Since there were no presenters, no users were stopping to watch the action. It was not determined if additional viewing opportunities are necessary.

With UWM serving a great number of commuter students, perhaps an opportunity for wireless access within Spaight's Plaza should be created. However, only one person used a computer in the plaza during the study. This is not sufficient information to determine need.

Activity Map

Figure 4.17 delineates the results of activity mapping at one hour intervals. Users were identified by size of group, gender composition, and activity in which they participated. Individual maps for each hour are found in Appendix 4.

The activities which caused users to pause within the site were broken down into several groups: talking with friends, smoking,

reading/studying, eating, watching activity and other minor actions such as tying shoe laces. Size of group is represented on the map through the size of the activity icon while colors determine the hour of day for each occurrence.

The inferences that can be made from this data include that smokers prefer the seat wall planter in the southwest area of the site because it has ample seating outside major doorways and is protected from the wind. Also, users like sunny locations on cool Wisconsin days. The lawn areas are utilized by sunbathers and studiers, but the smaller area is more heavily utilized than the larger northern areas. Skateboarders enjoy using the low stairs of the performance space to practice tricks, and the wide pathways accommodate skateboard play as pedestrian activity lessens. Finally, the single unit tables and chairs are heavy and awkward requiring at least two people to move. There are not enough of these units, and those users interested in seats look around to find tables out of the main pedestrian pathway. Per the interview of Dennis Greenwood, the tables once included umbrellas for shade. However, it was not destruction by students, but by the elements that caused the removal of these plastic shades. Perhaps finding an alternative material that withstands the harsh weather could have been incorporated instead of removing the feature altogether.

Physical and Biological Data

The macroclimate of southern Wisconsin includes summers reaching average highs of 80 degrees Fahrenheit. Table 4.2 lists weather

Figure 4.17: Results of activity use mapping. Benches and seat walls are well utilized while lawn areas see sporadic use.



- Legend**
- Light post
 - ▬ 12' Bench
 - ⊕ Table with chairs attached
 - ⊗ Movable planters
 - Time of Day**
 - 8:00 am
 - 9:00 am
 - 10:00 am
 - 11:00 am
 - 12:00 pm
 - 1:00 pm
 - 2:00 pm
 - 3:00 pm
 - 4:00 pm
 - 5:00 pm
 - Type of Activity**
 - ★ Talking with Friends
 - ☿ Smoking
 - ☾ Reading / Studying
 - ▲ Eating
 - Watching Activity
 - ★ Other

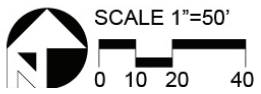


Table 4.2: Milwaukee, Wisconsin climate data (www.weatherchannel.com).

Month	Avg High in F°	Avg Low in F°	Avg Temp in F°	Avg Precip in inches
January	27	13	20	1.3
February	32	18	25	1.35
March	42	27	35	2.22
April	54	38	46	3.86
May	67	50	59	3.08
June	77	59	68	3.61
July	82	66	74	3.58
August	80	64	72	3.93
September	73	55	64	3.52
October	61	44	52	2.61
November	46	31	39	2.78
December	33	19	26	2.02

Table 4.3: Existing plant schedule.

PLANT LEGEND		
Botanical Name	Common Name	Size
SHADE TREES		
Betula nigra	River Birch	10 - 12'
Betula nigra	River Birch	8 - 10'
Carpinus caroliniana	American Hornbeam	2" cal.
Fraxinus americana 'Autumn Purple'	Autumn Purple Ash	3" cal.
Prunus maackii	Amur Chokecherry	2 1/2" cal.
EVERGREEN TREES		
Picea pungens	Colorado Spruce	8 - 10' Ht.
ORNAMENTAL TREES		
Acer ginnala 'Flame'	Flame Amur Maple	2" cal.
Amerlanchier x gradiflora 'Autumn Brilliance'	Autumn Brilliance Serviceberry	2 1/2" cal.
Cornus alternifolia	Pagoda Dogwood	6' Ht.
Magnolia stellata 'Royal Star'	Royal Star Magnolia	5 - 6' Ht.

data for Milwaukee. Early fall and late spring are also comfortable at 63 degrees, while winters can be harsh falling to average lows of 16 degrees. The average yearly temperature is 50 degrees Fahrenheit. Cool winds from Lake Michigan affect areas within five miles of the coastline during summer months, while mitigating the cold weather of winter months.

The weather within the site, or microclimate, includes mild temperatures due to protection from the surrounding buildings. However, winds are funneled into the area from the southeast corner. On a typical early fall day in October, temperatures in the shade ranged from 60-65 degrees while temperatures in sunny spots reached 80 degrees.

The topography of the Milwaukee area was sculpted by glaciers over 10,000 years ago. The last glacial period, the Wisconsinian Glaciation, produced an area of kettles, moraines, and drumlins and left rich deposits of soil to encourage dense forest growth. A large German immigrant population during the nineteenth century discovered that the glacial soil deposits served as prime cropland and cleared much of the area for agricultural pursuits.

The regional vegetation remains varied from deciduous to coniferous forest as well as cropland in production. More importantly, Table 4.3 lists several species of trees included in the existing design that thrive in the southern Wisconsin environment. The specification of these trees require minimal height at installation, therefore taking years to reach full growth. With limited earth above the parking

garage, maintenance prefers not to replace species in the short term. However, Spaight's Plaza continues to be devoid of shade as users wait for the trees to grow.

Summary

Spaights Plaza was designed to accommodate pedestrians moving through the space between the library and the union. Little attention was paid to the comfort of individuals choosing to pause within the area. The few chairs offered have been stripped of umbrellas to ease the burden on campus facilities while long benches assume much of the responsibility to seat on-lookers.

The site offers little stimulation toward social activity by providing an overly open environment devoid of shade, too few seating choices, and no source of information such as vendors or kiosks. An analysis of the existing design is further explored in Chapter 5.

CHAPTER 5: DESIGN EXPLORATION

The design exploration tests whether landscape architects can promote socialization through design. Design is a multi-phase process that differs with each project one undertakes. Students of design learn to follow an established order of events including: conducting a site inventory and analysis, conceptual design, preliminary design, and final layout with section and perspective. The following pages relay in greater detail the process that occurred to develop a new, socially stimulating design for Spaight's Plaza.

Inventory

Spaight's Plaza was chosen as the study site due to the amount of hardscape visibly present in the current design. As discussed in Chapter 4, one half of the site is concrete. This leads to user discomfort on hot as well as windy days. Figure 5.1 relays an inventory of site features summarized in the paragraphs below.

Several negative aspects of the design include: smokers dominate the areas away from strong lake breezes, and very little seating in the form of tables and chairs exists. Vegetation is aligned along the building with few locations where users can find a shady spot to sit. Also, bikers feel free to ride through the plaza without dismounting, and safety of pedestrians entering the plaza from a parking stairwell is compromised due to the concrete construction. Finally, the stage is a welcome addition, but unscheduled events rarely occur.

Where the plaza does succeed is the amount of semi-informal sitable space offered. The seat walls provide 943 linear feet of space.

Using Whyte's theory of effective capacity where the amount of space divided by three equals capacity; the site can accommodate 314 people on the seat walls alone. The benches and chairs accommodate 73 patrons, and the lawn with a total area of 7,021 square feet will seat approximately 440 (area/15 to allow extra space for stretching out). Using these numbers, the current design can theoretically seat 517 users. With a student population of 28,000, the plaza only accommodates 1.8% of the student body. Remember as well that faculty, staff and outside visitors will also utilize the site.

Analysis

The site analysis (Figure 5.2) reveals that users need more choice in seating type and location. Users require a range of full sun, partial shade and full shade locations for comfort. Therefore, vegetation should not be excluded from the center of the site.

Recalling the design recommendation matrix, movable seating allows users to choose their destination as well as group size and should be incorporated into a new design.

Visual interest is necessary for discussion and stimulation. The center node is an appropriate location for a triangulation piece, and pulls the visitor's eye away from the surrounding brick buildings.

Water should be included as a design element to calm and cool users in summer months.

For safety, bikes must be removed from the space and parking stairwells should be altered to allow visual access for entering

Figure 5.1: Site Inventory

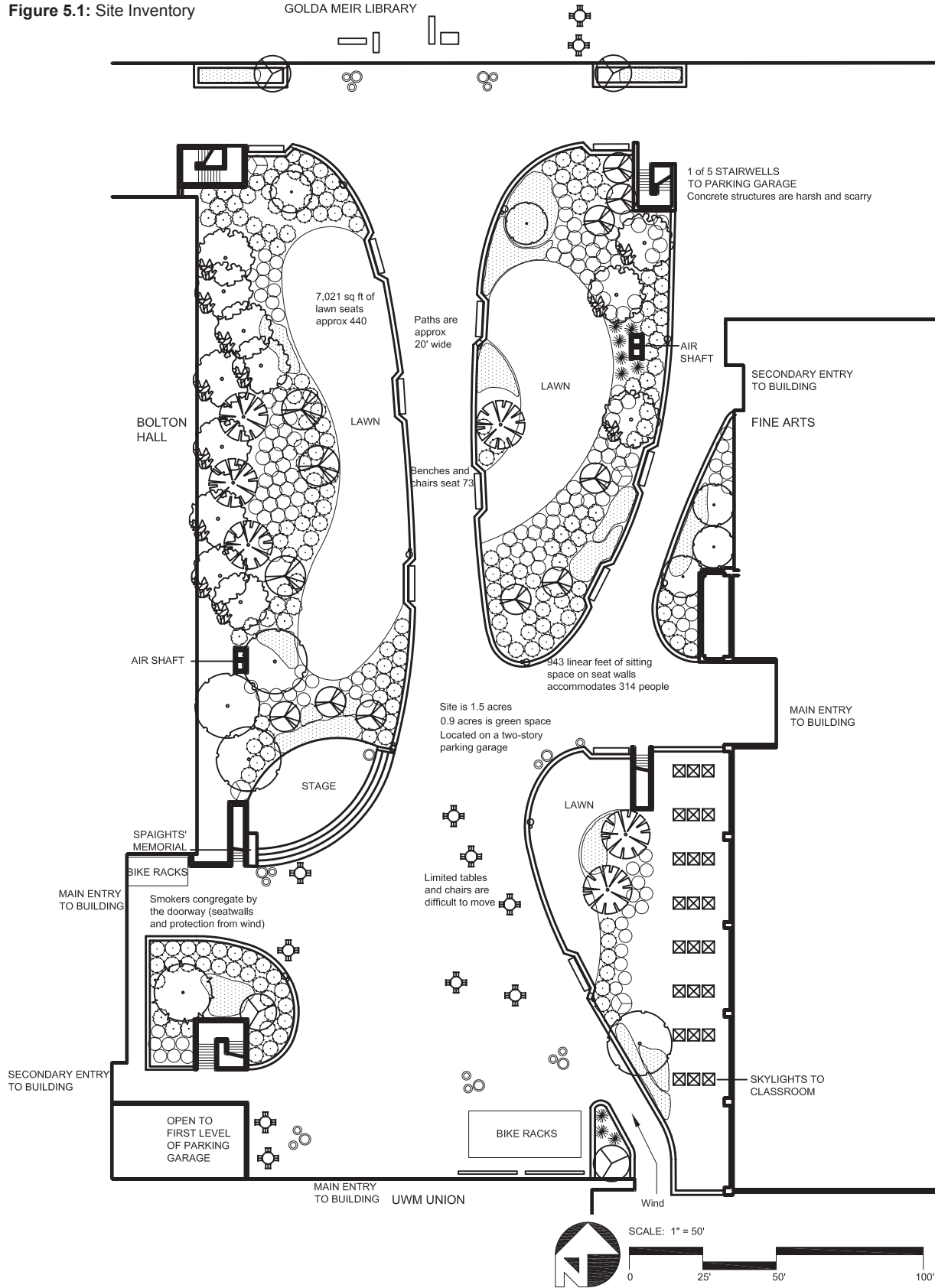


Figure 5.2: Site Analysis

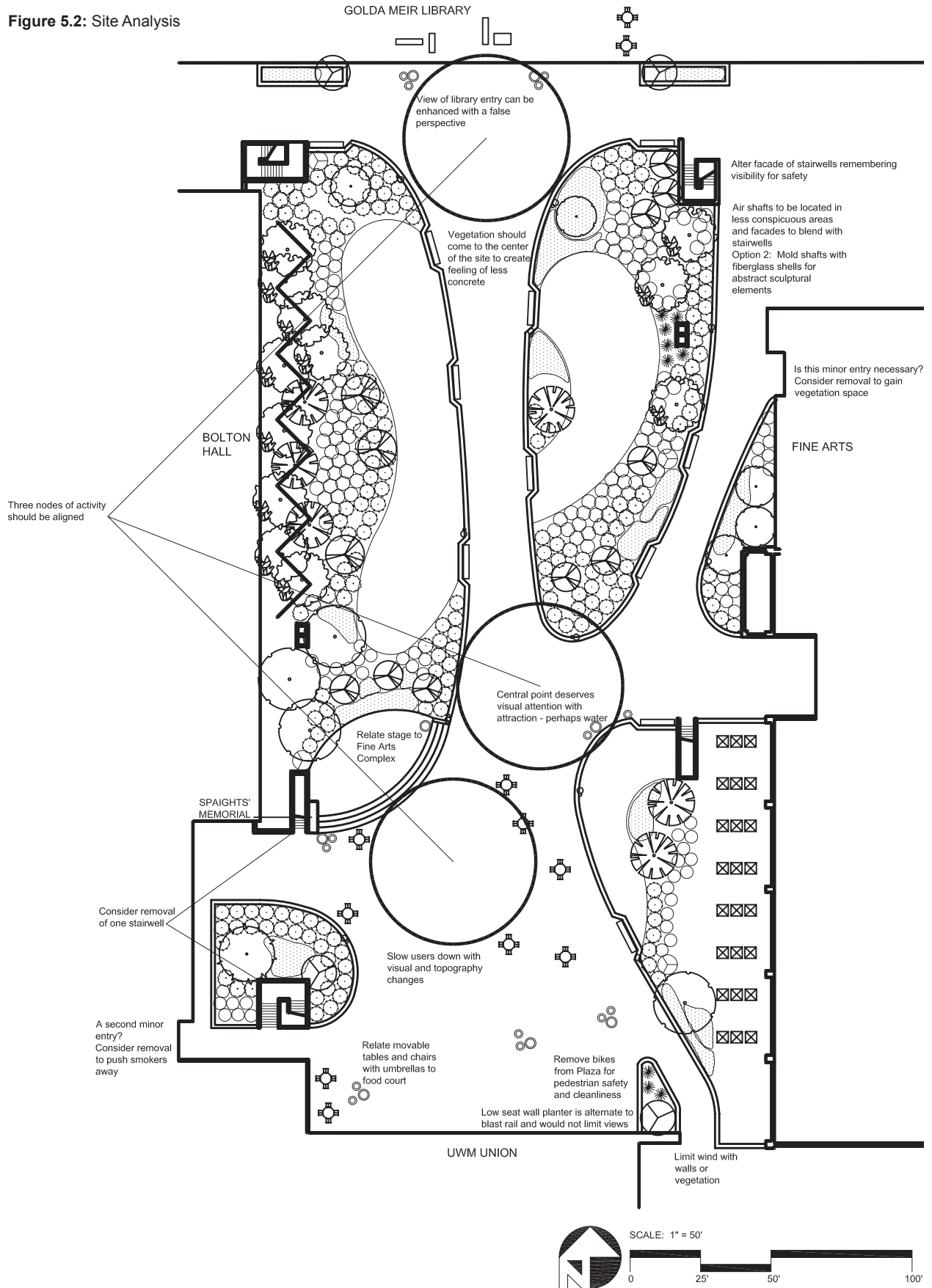


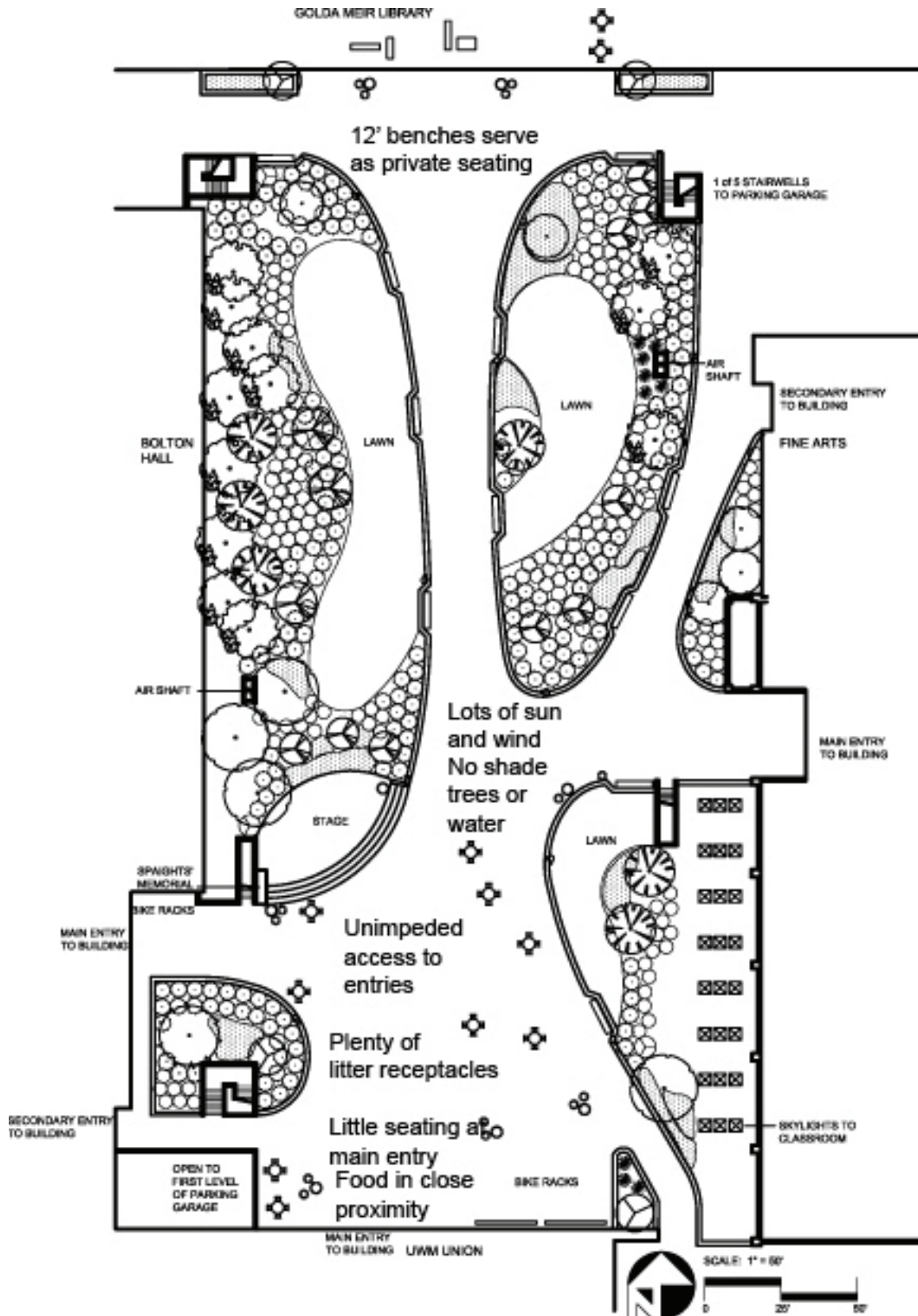
Table 5.1: Existing design analysis utilizing the design recommendation matrix.

	HESTER (1975)	MARCUS/WISCHEMANN (1998)	WHYTE (1980)
SEATING	placement affects the type of interaction	long benches to be avoided	sitting space
		picnic-type benches	
		able bodied and ADA seating	
		seating for 1-4 with some privacy	
		seating with backs next to building entry	
		place to study and eat comfortably	
PEOPLE	friends, fun	users determine how spaces are designed	life of the plaza
	as many social classes as possible		
SAFETY	safe environment	porch needs partial enclosure for transition	the Undesireables
	psychological comfort	well illuminated porch	
	Balance of order and diversity		
COMFORT	settings for activities	overhangs to create a cool shaded place	sun, wind, trees, water
	convenience	sun trap creation in cool environments	effective capacity
	physical comfort		
	trees		
	need personal space (invisible area surrounding one's body, i.e. effective capacity)		
IDENTITY	relate to natural environment	name of building must be clearly identifiable	triangulation
	aesthetically appealing	main entrance identified and given porch	
	symbolic ownership		
	status objects reinforce ownership		
FOOD		food and drink in close proximity	food
CLEANLINESS		plenty of litter and recycling receptacles	
ACCESSIBILITY		front porch requires unimpeded access	
LOCATION		buildings as houses and spaces as front or back yard	the street
			indoor spaces
			concourses and megastructures
USE	policy on use	users determine use	
	variation in activities		
	Range of choices limited for visual unity		
COST	user costs should remain low		

LEGEND

- Significantly incorporated into design
- Incorporated with limited success
- Not incorporated / missed opportunity
- Out of designer's control

Figure 5.3: Existing design analyzed with design guideline matrix.



patrons as well as offer aesthetic appeal. Possible grade changes to slow people through the site must be ADA accessible, and paths must remain wide enough for maintenance vehicles with a minimum width of 12'.

Severe wind gusts could be dissipated with the use of barriers in the form of vegetation or even constructed walls. Finally, if possible, the air shafts should be relocated to blend with other elements in the plaza, and lightweight manufactured materials should be utilized to reduce the structural load on the parking garage.

Table 5.1 and Figure 5.3 further analyze the site using the design recommendations matrix. Colors have been added to the cells delineating which item was incorporated into the design with full success (green), with limited success (yellow), not addressed (red) or was out of the designers control (gray). A summary of the table shows 12 successes, 15 partial successes, 7 failures, and 13 items that were not applicable.

Program

With this information, a program of elements is required that will enrich the college learning experience by facilitating three types of socialization between students, faculty, and the public at large.

To begin, the new design must be incorporated within the existing location. Accessibility to the buildings must be maintained. The pathways must be able to accommodate emergency vehicles, and the area should facilitate a performance space with an audience of 1,250 (5% of the student body)

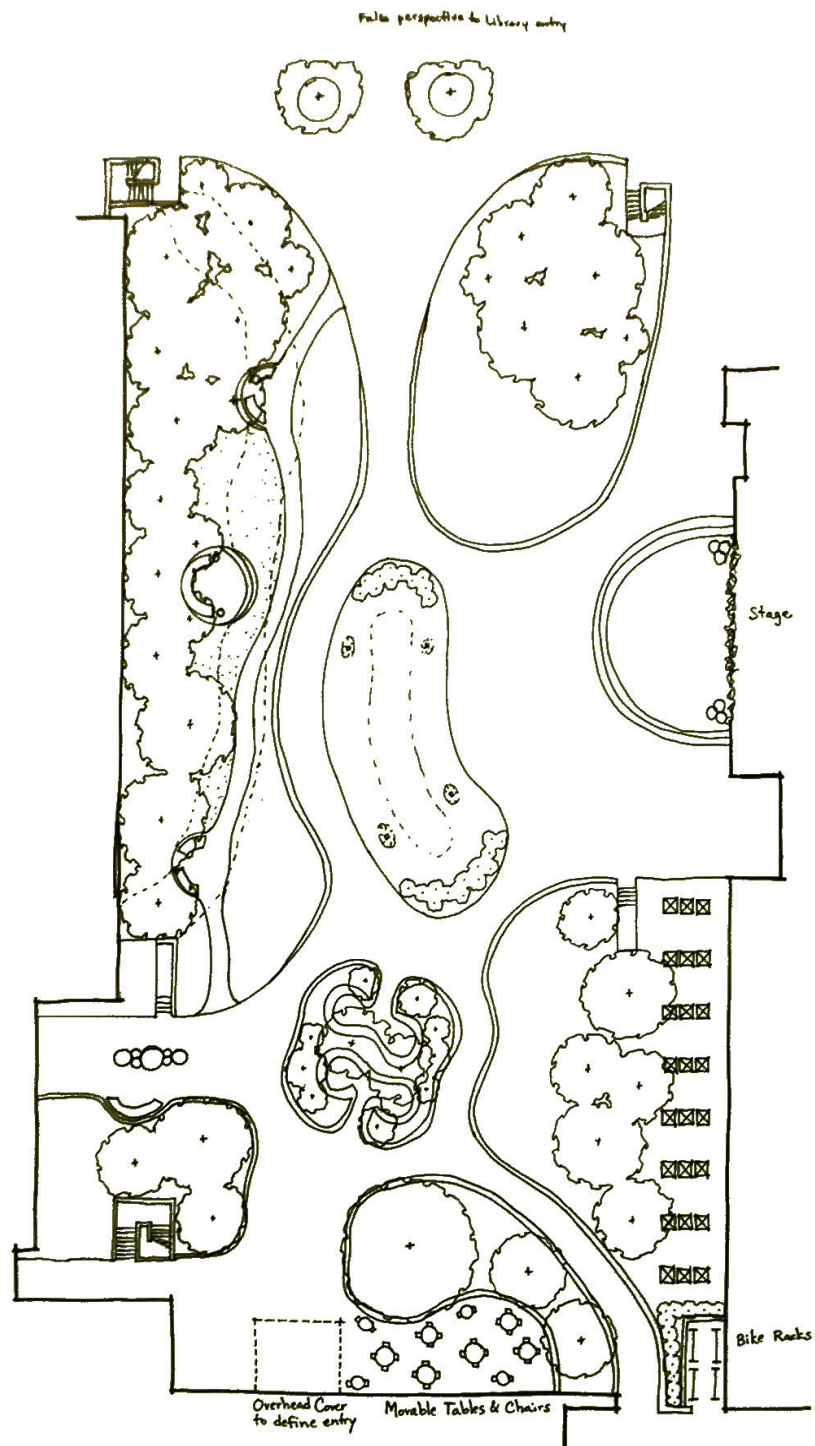
Preliminary Design

The first design concept developed for this study was focused on incorporating elements known to promote socialization. Close attention was paid to providing a full range of opportunities for users to socialize with one another. However, without an underlying concept, socialization elements are strewn haphazardly about the site.

One accidental success in this first attempt is the relation of the stage to the arts complex. Also, additional informal seating for performances is offered to visitors in the form of lawn and seat walls. Lastly, the meandering pathways accommodate users by encouraging choice. If a performance is in progress, users have the opportunity to pass behind the audience without disruption. They can walk through the lawn, sit in open or shaded areas, and experience small group socialization in the center node.

Unfortunately, this design is a failure for its lack of theme to provide focus and a sense of place. The design does not provide additional bench or table/chair seating, and bikes remain inside the plaza. There continues to be an absence of vendors, kiosks, and triangulation. The design allows for mobility, but lacks dynamism to stimulate the users. Perhaps this is due to the fact that the design closely resembles the existing layout save for a different location for the stage.

Figure 5.4: Schematic design rearranges existing elements and adds private rooms.



Conceptual Design

With the uninteresting and sporadic first attempt at design for socialization, a second attempt was required. Additional research identified a concept that would tie the space together and provide direction.

The initial site research showed the diversity of students on campus and the cultural diversity of the area with several art and history museums as well as theaters in near proximity to campus. Additional research identified stratification of neighboring communities from the university. A unified community, celebrating the diversity of students and residents of North Milwaukee is needed. The Milwaukee River served as an inspiration to develop 'The Confluence' (Figure 5.5). Confluence is defined as a place where things merge or flow together or a flocking or assemblage of a multitude in one place.

The Confluence concept provided a direction for design. Two rivers flow intertwined, meeting at a central location, the sunken amphitheater. The stairs are surrounded by six trees, representative of the six neighborhoods forming one community.

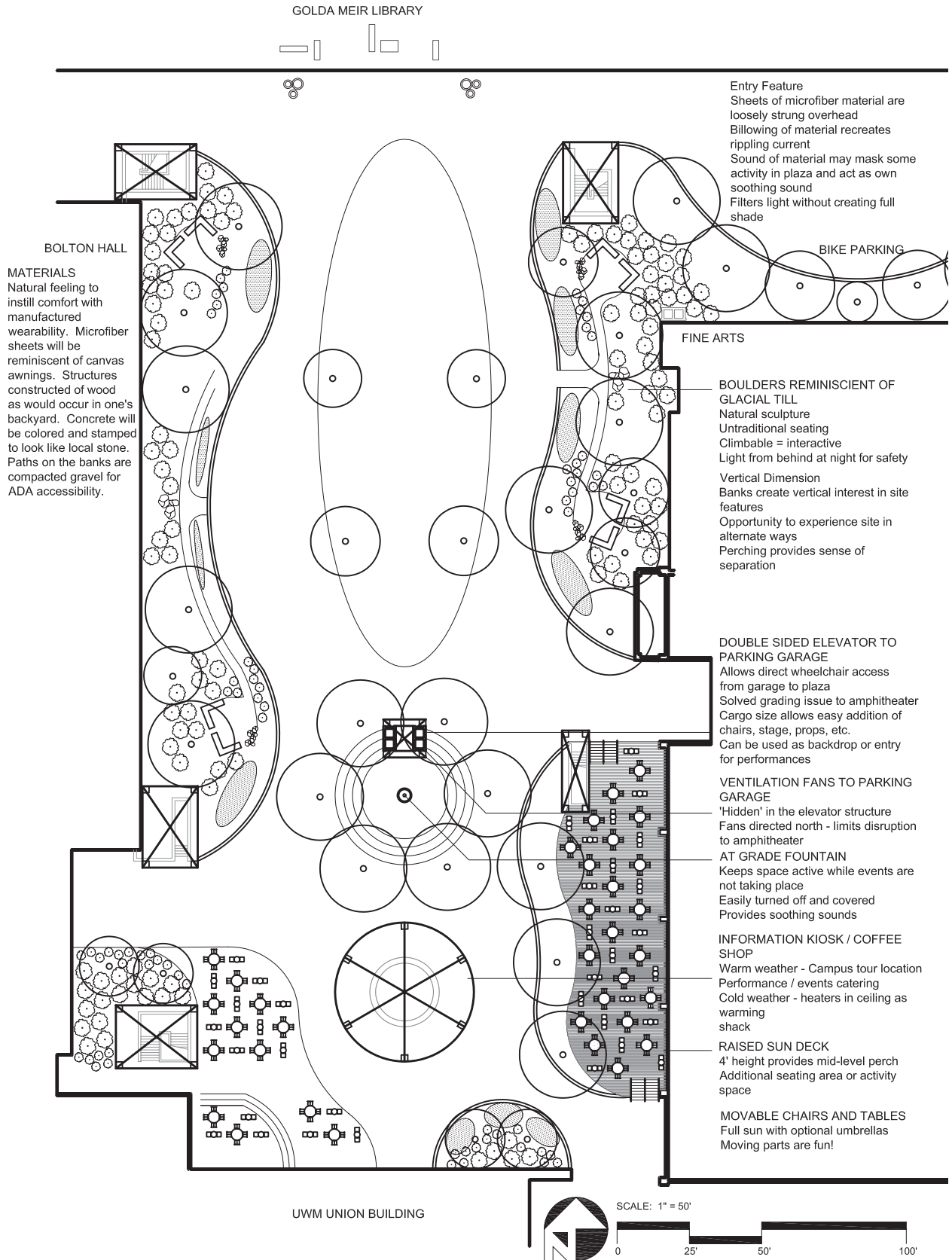
Several features of the plan include four "private" areas for small group discussion or reflection. The benches are removed from the main traffic way and oriented to encourage discussion by turning users toward one another. Another idea developed for the design is a raised deck to provide space for additional tables and chairs. This deck is raised to a height of four feet to represent the bluffs common along the Lake Michigan shoreline. Also, a kiosk offers

multiple opportunities for every season. This structure can serve as an outdoor vendor, information booth or even shelter for smokers to encourage them away from building entrances. Computer terminals could be located here for the technologically minded and to scroll through daily campus events. Finally, a large open lawn completes the center of the space to allow multi-purpose events, small sports, or lounging in the sun.

Successes of this design include the development of multi-use spaces. Each area within the plaza has more than one defined use or has allowed the users to define the program. Vegetation has been moved to the center of the site, and fully shaded as well as full sun areas have been developed. Seating opportunities abound in the form of benches (seating approximately 24), seat walls or stairs (347), chairs (210), and open grass (572). This is an increase of 636 seats from the existing design.

But does an increase in the amount of seating space lead to an increase in socialization? If the seating offered is arranged in a manner that encourages discourse, it should. Some seating areas in this design include benches facing one another spurring discussion, but most seating orients the user toward the site forcing him to become a watcher, not a doer. Although this design includes vendors and technology in the form of computers, it fails in providing greater social stimulation. 'The Confluence' theme is lost with an unidentifiable river and visual barriers interrupting the central axis.

Figure 5.5: Conceptual design adds a strong theme, but does not encourage additional socialization.



Final Design

The final design attempt continued with the river theme. 'Down By the River' (Figure 5.6) is a visually stimulating design that represents a river in several ways. Vertical dimension plays a key role in the success of this space as it allows users to perch and watch action from above. These 'bluffs' come in the form of cut banks for the amphitheater, private seating for small groups, and the deck for movable chairs and tables. Boulders provide physical stimulation as items on which to sit or climb. Finally, rough hewn logs serve as benches.

The design also provides a variety of full sun to fully shaded seats as well as a variety of seat types. Seating is identified as formal, that which has a back rest, semi-formal is off the ground, but without back support, and informal seating is on the grass.

A water element is centered in line with the Art Complex exit to pull the user's eye, and therefore body, to the boulders and benches in full sun.

The most important element in this design is the van sculpture. Chris Farley, a Wisconsin native, was a performer on Saturday Night Live for several years. One character he played was a motivational speaker who was known to have "lived in a van, down by the river." Many people are familiar with this character, in fact college students continue to be Farley's biggest fans. Therefore, it is only appropriate to recognize Farley's accomplishments on a college campus in Wisconsin, next to the theater. For those visitors unaware of the character, Matt Foley, the van serves as a triangulation

piece stimulating commentary and discussion. After all, how often does one see a van in the middle of a plaza?

Figure 5.6: The final design, 'Down By the River,' incorporates a strong theme, creates identity, and orients users toward one another.



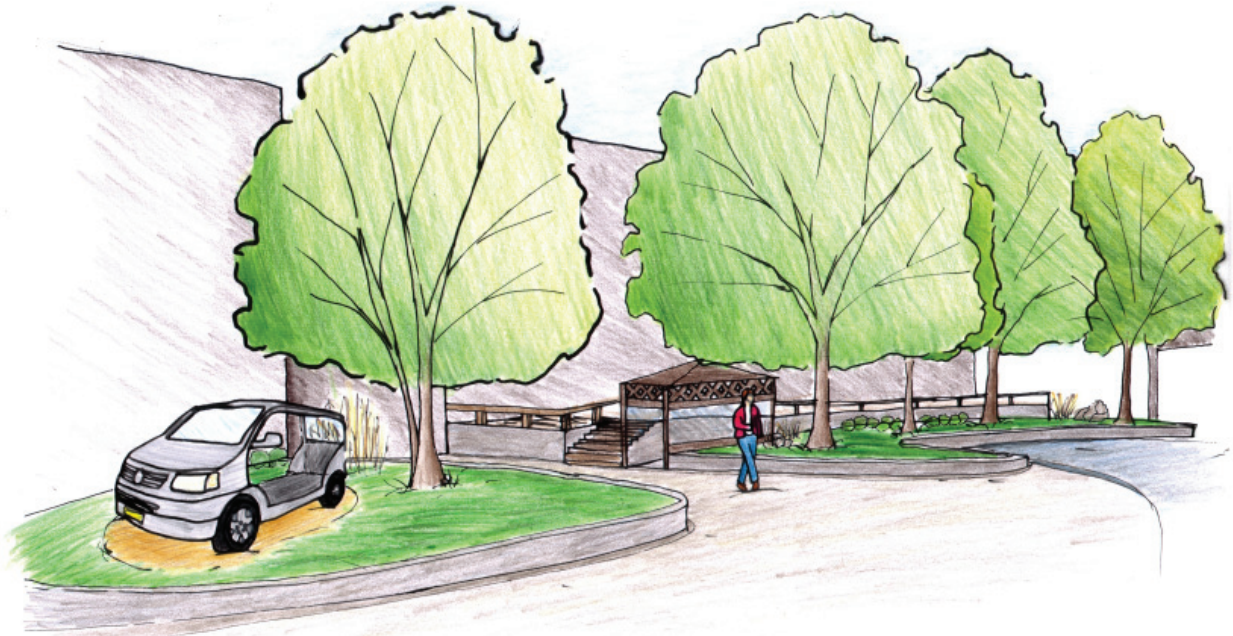


Figure 5.7: Perspective view of 'Down By the River'

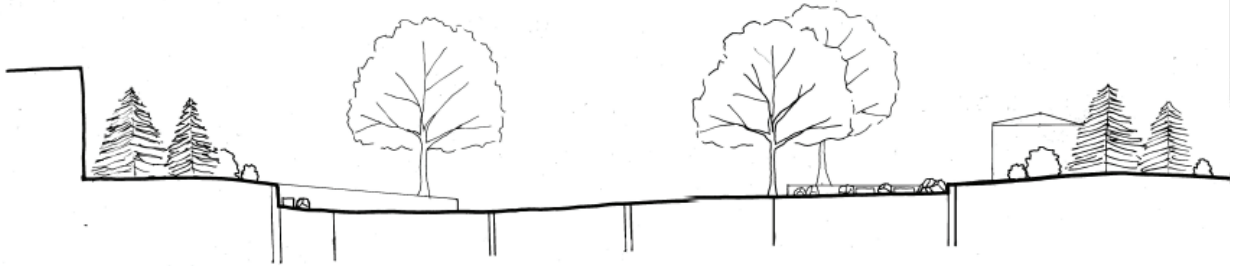


Figure 5.8: Section looking north

CHAPTER 6: CONCLUSIONS

Assessing socialization can only truly be accomplished through the use of a post-occupancy evaluation. Therefore, it is not an easy task to rate the success of an unconstructed design. Because the design is not built, analysis of the proposed design is only possible with the design recommendation matrix and the assistance of diagrams.

Assessment

Figure 6.1 on the following page analyzes the proposed design using the design recommendation matrix (Table 6.1). While the existing design does not adhere to many of the guidelines proposed by Hester, Marcus and Wischemann, and Whyte, the proposed design offers several accommodations. The changes from the existing design are documented below according to category within the matrix.

Seating

Three forms of seating occur within the design, 'Down By the River.' Formal seating is that which has a back. Semi-formal seating has a seat but no back. Informal seating takes place on grass. Each of these opportunities can occur in sun or shade, and an approximate capacity in this new design is 1,250. That is an increase of more than double the existing design.

Marcus and Wischemann would be pleased with the choice of movable tables and chairs near the building entry, close to food, and ADA accessible. These seats offer places to eat or study comfortably alone or in groups.

People

As this is a college campus, the type

of users will mainly be students of a similar age. The younger, full-time students frequent the plaza throughout the day, while older, commuting students appear in the evening. This topic is mostly out of the designers control, however.

Safety

Marcus and Wischemann would frown at the lack of a porch for transition at the Union entry. However, the additional vegetation adds psychological comfort to the user.

Comfort

The space addresses user comfort through the amount of softscape in comparison to hardscape. Larger shade trees were introduced for aesthetic comfort as well as physical comfort for those seeking a cool shelter from the sun. Whyte would be pleased with the amount of sun and addition of trees and water. Unfortunately, existing winds will likely continue to be problematic.

The design did succeed in offering a greater number of people to remain within personal space comfort levels. The effective capacity of the new design is 1,250 compared to only 550 currently.

Identity

An identity has been created using the 'Down By the River' concept. Order exists as the levels of the plaza relate to a flood plain and terraces of a true river. The river also identifies the main entrance of the Union. Status objects have been introduced with the van, water fountain and unique boulder seating. The van in particular is a triangulation piece stimulating

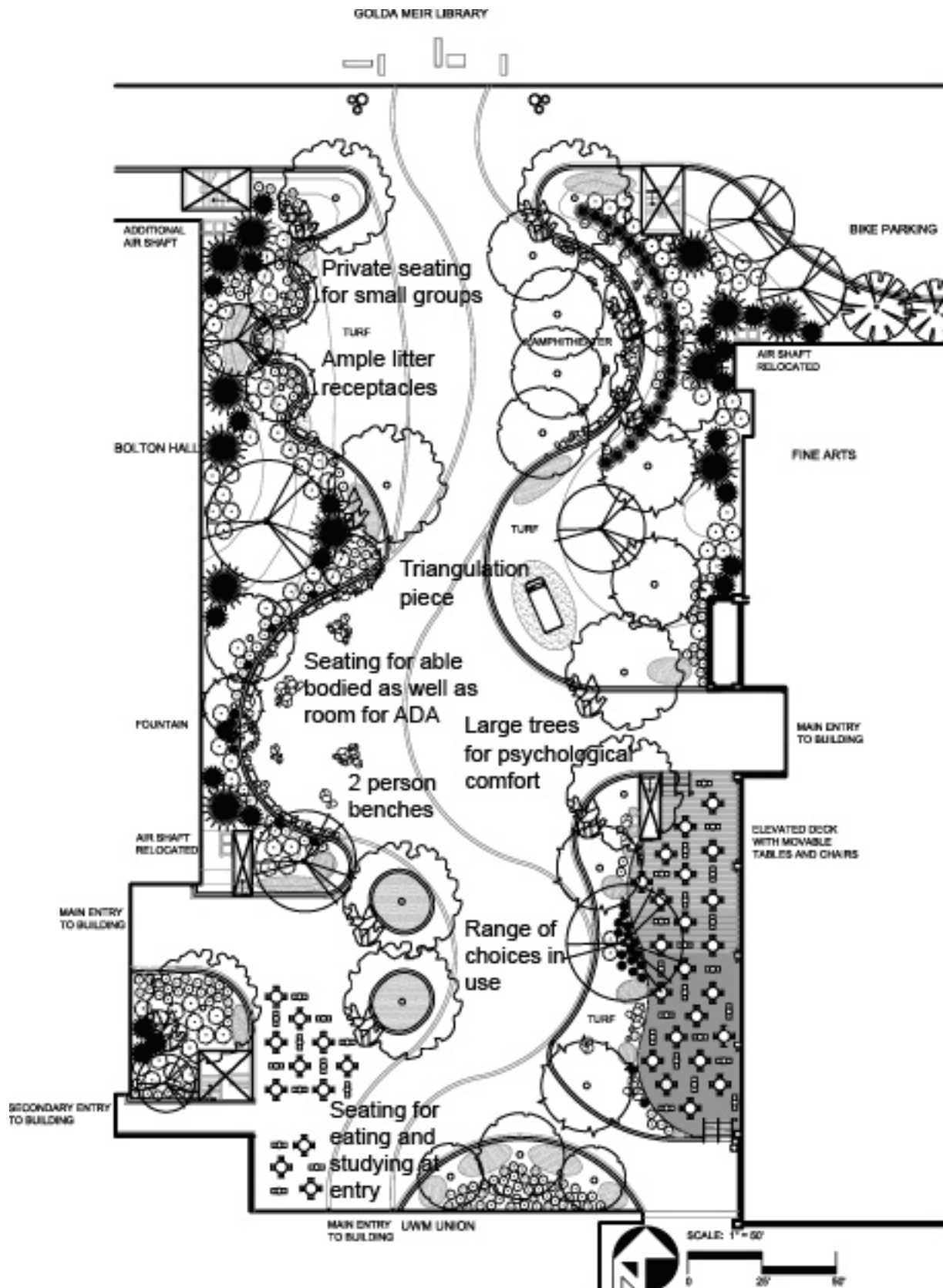
Table 6.1: Proposed design analysis utilizing the design recommendation matrix.

	HESTER (1975)	MARCUS/WISCHEMANN (1998)	WHYTE (1980)
SEATING	placement affects the type of interaction	long benches to be avoided	sitting space
		picnic-type benches	
		able bodied and ADA seating	
		seating for 1-4 with some privacy	
		seating with backs next to building entry	
		place to study and eat comfortably	
PEOPLE	friends, fun	users determine how spaces are designed	life of the plaza
	as many social classes as possible		
SAFETY	safe environment	porch needs partial enclosure for transition	the Undesireables
	psychological comfort	well illuminated porch	
	Balance of order and diversity		
COMFORT	settings for activities	overhangs to create a cool shaded place	sun, wind, trees, water
	convenience	sun trap creation in cool environments	effective capacity
	physical comfort		
	trees		
	need personal space (invisible area surrounding one's body, i.e. effective capacity)		
IDENTITY	relate to natural environment	name of building must be clearly identifiable	
aesthetically appealing	main entrance identified and given porch		
symbolic ownership			
status objects reinforce ownership			
FOOD		food and drink in close proximity	food
CLEANLINESS		plenty of litter and recycling receptacles	
ACCESSIBILITY		front porch requires unimpeded access	
LOCATION		buildings as houses and spaces as front or back yard	the street
			indoor spaces
			concourses and megastructures
USE	policy on use	users determine use	
	variation in activities		
	Range of choices limited for visual unity		
COST	user costs should remain low		

LEGEND

- Significantly incorporated into design
- Incorporated with limited success
- Not incorporated / missed opportunity
- Out of designer's control

Figure 6.1: Proposed design analyzed with design recommendation matrix.



discussion among all users.

Food

Additional food or vendors were not introduced into the new design. The limited space offered between buildings and close proximity of food within the Union led to a choice of keeping vendors out of the plaza.

Cleanliness

A number of litter receptacles are called for in the new plan. In fact, more permanent receptacles were introduced reducing the need for temporary cans.

Accessibility

ADA accessibility within the new design is great. Although, wheelchair bound users cannot access the deck, movable seating remains near the Union entrance for them to access. All pathways and entrances are free for ease of maneuverability.

Location

The location of the design was out of this designer's control as all new construction must occur upon the existing site.

Use

A range of choices of use was a primary objective of the design. Choices include small to large group activities in private or open space. A large grassy area remains for the sporty minded user during minimal activity elsewhere in the site, and quiet reflection may occur to the edges of the site.

Cost

'Down By the River' was created to stimulate social activity among a range of users including community members. Although students pay privilege fees, there are no direct

fees charged to access the site.

Categories of Great Significance

The most important alterations provided in the new design are the addition of large shade trees and a variety of seating options. These changes are explored further in Figures 6.2-6.5. The diagrams suggest that "Down by the River" may be a more comfortable and inviting environment as compared to the existing design. Theoretically, a greater number of visitors will choose to remain in the proposed design to socialize with friends and strangers.

Socialization Opportunity

Figures 6.6-6.7 analyze the opportunity for the three types of socialization to occur. Interestingly, it does not appear that a great difference in the offering of socialization types has occurred. However, one item that is not addressed is quality of socialization experience.

While the existing design offers room for manifest socialization to occur, limited seating opportunities discourage medium to large group gatherings. Small group gatherings may occur at tables or on the lawn. Benches become a difficult location for two or more people to speak face to face.

'Down By the River' offers several opportunities for medium to large group manifest interaction. The amphitheater located in the northeast corner of the site provides immobile seating on benches and boulders as well as a small lawn area behind this formal and semi-formal seating. Larger groups may also choose a sunny location near the fountain at the center of the design. Both formal and semi-

Figure 6.2: Limited shade trees in the existing design.



Figure 6.3: Opportunities for shade in the proposed design.

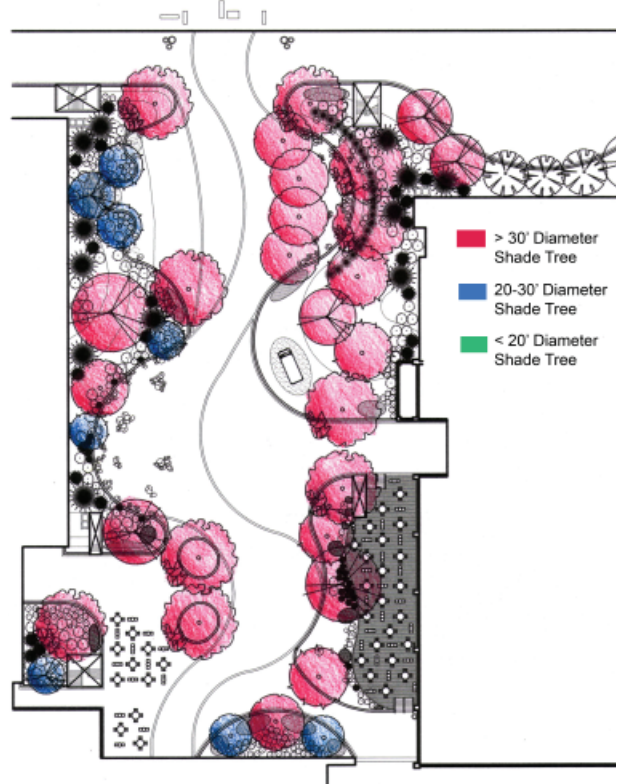


Figure 6.4: Limited seating in the existing design.



Figure 6.5: Additional seating in the proposed design.

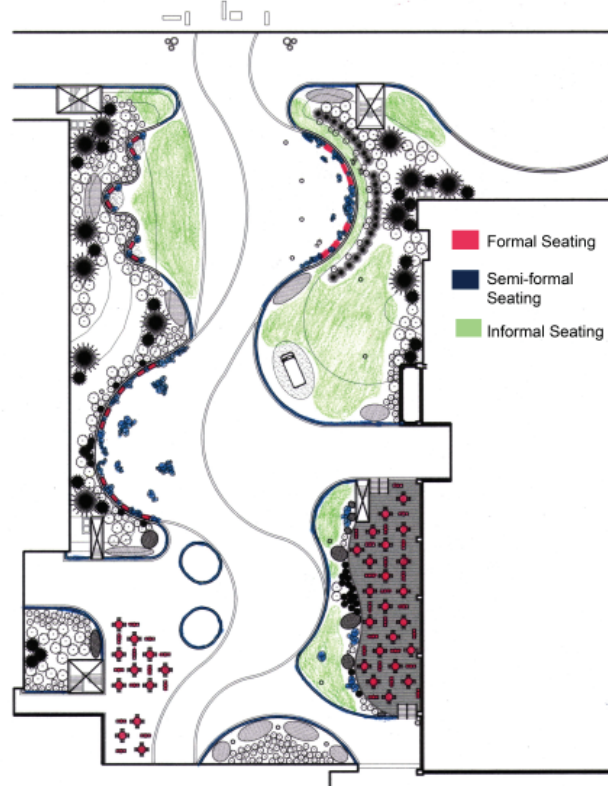
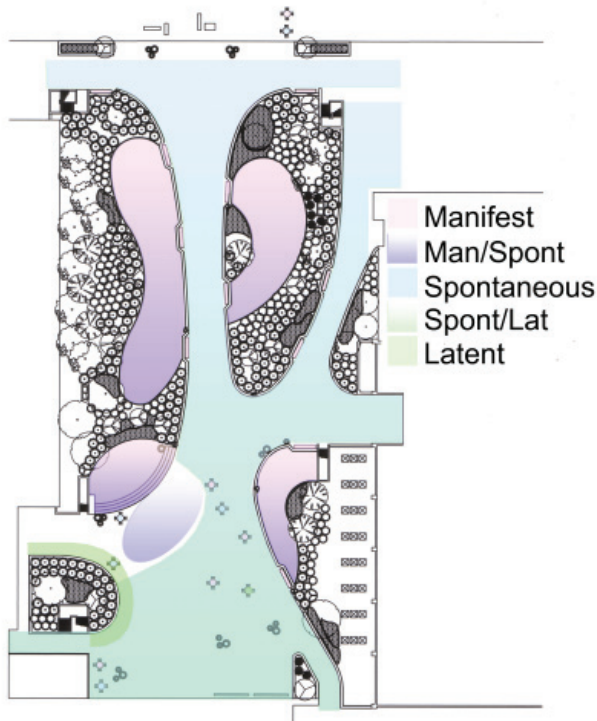


Figure 6.6: Socialization opportunity in the existing design.

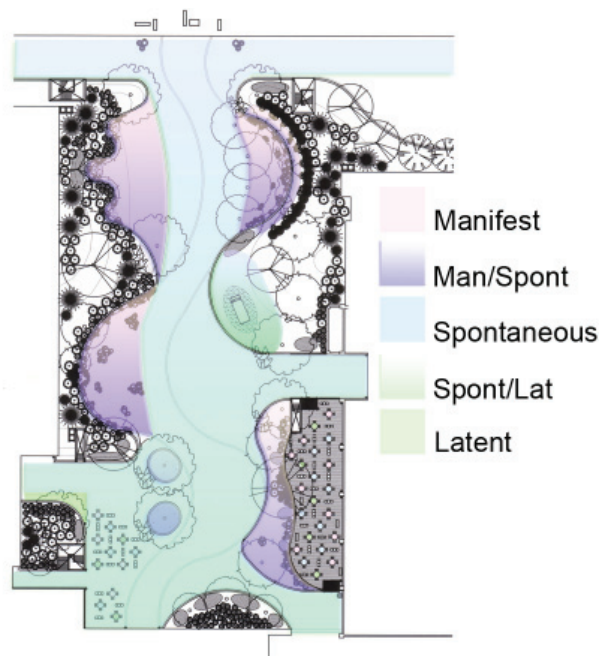


formal seating is offered in this location. A third option is the semi-private small group meeting area in the northwest corner of the site. Three small rooms with benches and boulders can accommodate groups of 2-8. Finally, additional movable seating has increased the opportunity for manifest interaction in the south half of the site. All areas are ADA accessible except the raised sun deck.

Also, the existing design offers only one consistent opportunity for latent interaction. This interaction occurs outside the entry of Bolton Hall where the smokers congregate. Some forced interaction may occur between smokers requiring additional cigarettes or lights. Possible latent interaction may occur throughout the site as visitors require directions or need to know the time.

In contrast, the proposed design offers

Figure 6.7: Socialization opportunity in the proposed design.



a triangulation sculpture in the form of the van. It has been explained that this sculpture can produce discourse by patrons familiar with the character of Matt Foley as well as elicit confusion and discussion between those visitors unfamiliar with the skit. Latent interaction among smokers and direction seekers will continue within this design.

Spontaneous interaction can occur at any location in both designs. However, the existing design offers limited seating for these random social events to expand into extended conversations. The additional seating opportunities of the proposed design allow ample space for acquaintances to expand upon their conversations.

Lessons Learned

The goals of this research were to compile existing socialization theory and put those theories to the test. The most important lesson learned from this research and application is that designers must incorporate choice. Users require shade, sun, formal, semi-formal, and informal seating, direct and indirect paths, noise, quiet, private space, and open space. Diverse options allow users to choose the elements that make them comfortable.

One should not expect to design a space anticipating no future alterations or adjustments. This means that designs must be evaluated after their installation and adjustments made to the design to fit current user needs allowing an opportunity to address mistakes made in the previous design.

Social success of a design is determined by how many people go to, remain in, and utilize a site. Getting people there, keeping them there, and encouraging them to interact should be the goal of landscape architects.

Summary

This thesis utilized a design exploration to study whether researched elements identified to enhance socialization will truly stimulate socialization within the space. Unfortunately, results are inconclusive until the design is implemented and a post-occupancy evaluation is conducted.

A hypothesis stated that surrounding relationships and design elements cause activity. Findings show that these along with design and orientation of elements is what makes a space successful socially. It is

not just the design elements, but how they are implemented in terms of design and/or orientation that determines success.

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All uncredited photographs were taken by the author.

APPENDIX 1: PRECEDENT RESEARCH

Union Square, San Francisco, CA

Union Square is a 2.6 acre park with a long history. In fact, the square could possibly be located upon the world's first multilevel underground parking facility. The first design for the park was constructed in 1860. It was redesigned four times since that first implementation, and the 2002 product marks redesign number five.

In 1997, the city held a design competition. Several of the program elements were to provide a stage, and a hard-surfaced area for movable audience seating, art shows, food festivals, rallies, holiday events and a winter ice rink. The winner of the design competition was dismissed as an unbuildable scheme, so the Union Square Improvement Association chose a second place winner for implementation.

The designers of the project are April Philips of April Philips Design Works, Inc. in Sausalito, CA, and Michael Fotheringham of M.D. Fotheringham Landscape Architects in San Francisco. These two designers had several goals in mind. They adjusted the program elements to create a space that accommodates 2500 people for events, reinterprets the 22 foot grade change, provides pavilions for a café and theater, screens the ventilation systems, and encourages evening use through sufficient lighting. The designers also wanted to de-emphasize the square's narrow, steep sloping entrances.

As one can see by studying Figure A1.1, the designers incorporated a great amount of

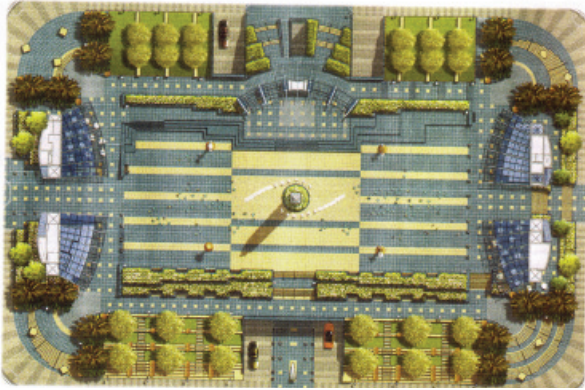


Figure A1.1: Union Square Plan. *Landscape Architecture Magazine* (12/2003): 66-77.



Figure A1.2: Union Square aerial view. *Landscape Architecture Magazine* (12/2003): 66-77.



Figure A1.3: Union Square seating. *Landscape Architecture Magazine* (12/2003): 66-77.

hardscape. The expanse of open space looks daunting, and vegetation is minimal. Additional vegetation would provide shade and incorporate a feeling of smaller rooms that would be less daunting. The designers, however, wished to create an Italian piazza.

A critique of the final design reveals that pedestrians wander in and out of the site “unstimulated and unengaged.” (Marcus, 2003) The amount of hardscape and the seating, rails, and supporting elements cause a glare when events are not occurring. This harsh glare would be reduced by trees (there are only several palm trees on the outer edges of the site). The most utilized area is a series of small terraces facing the street in which the users are not provided a buffer from busy traffic.

Several lessons could be learned from studying this project. The designers did not conduct a user survey of their own and refused to listen to user needs during Advisory Board meetings. Therefore, the design now “inadequately fulfills the needs of its varied users.” (Marcus, 2005) Also, the space chosen for the stage causes the audience to be split by the plinth in the middle of the square. This would have been alleviated by facing the stage in another direction. Finally, a buffer from the heavy traffic could have produced a retreat away from the busy city life.

Debra Saber-Salisbury Memorial Garden at William Beaumont Hospital, Royal Oak, MI

The goal of the Memorial Garden was to create a multi-sensory environment for patients, families, and staff that simulates the outdoors. Although this project occurs in an indoor atrium space, this project applies to the thesis for its special weight requirements. The space is located on the sixth floor of the hospital, and its unique use of artificial trees met structural load requirements.

Designers Grissim Metz Andriese Associates, Inc. worked with structural engineers from HarleyEllis to develop a garden 100 x 80 feet wide with a formal plan and symmetrical design that creates a soothing effect. The grass also adds to the elimination of weight because it does not require soil. The designers used artificial turf instead. Benches and architectural elements are detailed for lighter loads while stonework and seat walls are thin-set brick and limestone veneer with metal framing and dry wall cladding. Flooring as well is only ½ inch thick slate and bluestone.

The garden is considered a success for several reasons. The skylights meet hospital requirements for daylight in inpatient rooms in the interior of the hospital while reading lights in the alcoves combine with the natural light from skylight for a comforting feeling in the garden. Staff, families and patients utilize the “comforting oasis within the busy hospital setting.” (Metz, 2005)

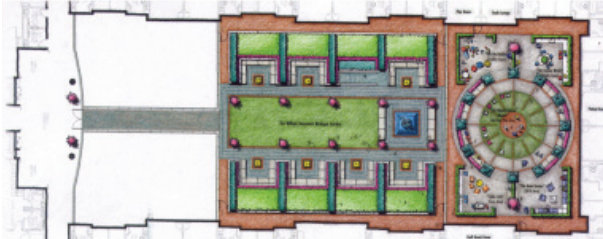


Figure A1.4: Debra Saber-Salisbury Memorial Garden Plan *Landscape Architecture Magazine* (4/2005): 46-52.



Figure A1.5: Debra Saber-Salisbury Memorial Garden *Landscape Architecture Magazine* (4/2005): 46-52.



Figure A1.6: Artificial tree assembly. *Landscape Architecture Magazine* (4/2005): 46-52.

Bryant Park, New York City, NY

Bryant Park, located to the rear of the New York Public Library, houses two levels of library stacks underneath the park. This structure deals with similar structural requirements as Spaight's Plaza albeit on a much larger scale. The site contains 9 acres as compared to 1 acre for UWM. No parking is required as users gather from surrounding office buildings.

The history of the site is long and varied from use as a Civil War training ground to drug dealers. A plan developed in 1934 included elevation of the park four feet above street level and confining it by an iron fence. Users surveyed in the 1980s felt unsafe due to the drug dealers, homeless, and confining nature of the park. Because people at street level could not see what was happening inside, a vital piece of security was lost. Also, entrances were few, narrow, and steep while users became trapped by dead end paths. Maintenance was a problem creating a mass of overgrown material and trash strewn throughout the site.

Landscape Architect Laurie Olin developed a redesign in 1983 that included handicap access ramps, moveable chairs, open stairways, and a feeling of security by reduction of messy vegetation.

Since its opening in 1993, the park is a vibrant, busy space with festivals, movies, and users throughout the day. The park is a success by catering to a wide variety of uses.



Figure A1.7: ADA accessibility in Bryant Park, NY, March 18, 2004.



Figure A1.8: Movable seating in Bryant Park, NY, March 18, 2004.

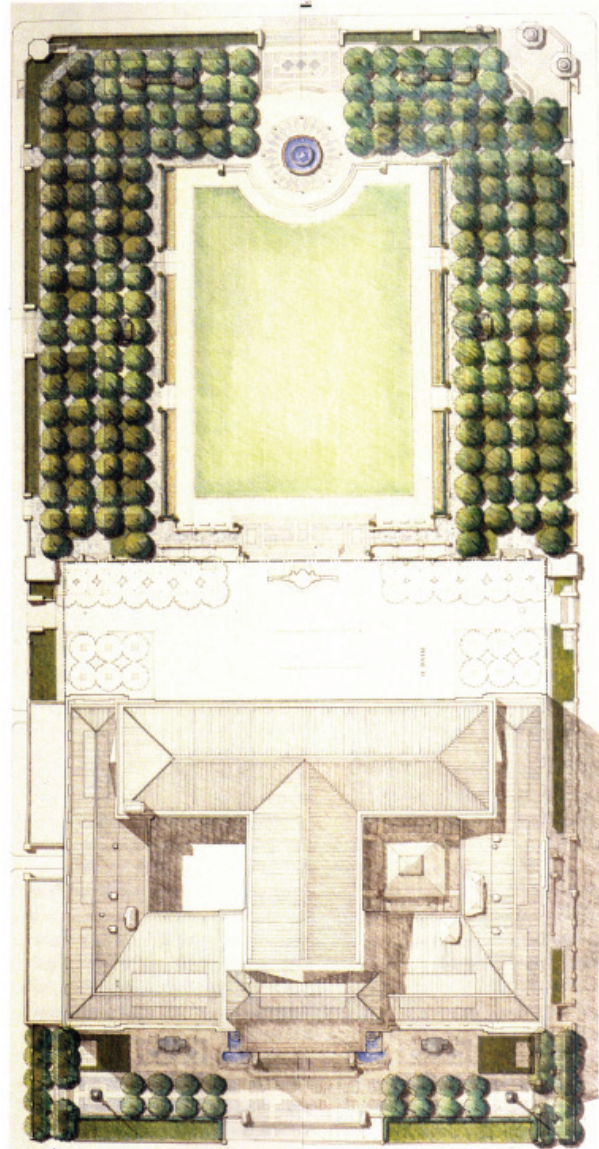


Figure A1.9: Bryant Park Plan (Thompson, 28)

APPENDIX 2: SITE VISIT JOURNAL

General observations of Spaight's – 10:00 am 9/30/05. Temperature in the sun 65°F and 60°F in shade. The wind circulates within the plaza with strong gusts occurring. Noises – a radio from workmen tooling and filling joints on the balcony, some vehicular traffic on the other side of the Union, and planes overhead. Smells – French fries from the food court below me.

Activity picks up 9:52-10:05 am. There are two extra trash cans on the edge of the main path. Was there an event recently? The wind does not deter the smokers and they like to stay on the edges of the site. It seems like a majority of the users are male. Tracking would be impossible with the limited assistance I have. The main path is in full sun and most people walk here. Some users choose to walk in the shade even when it is not the shortest path and in cool weather. At least three maintenance vehicles have crossed in front of the library in 30 minutes. Only one has entered the site to check garbage cans. Vegetation is in good condition with nice fall / seasonal color. The air shafts seem to stick up like stone monoliths. They look as though they should be supporting a bridge or overpass, but are not aligned for that purpose. The wind is so strong, it is shaking the light posts. Most users who sit down, only stay less than 20 minutes. Smokers use the entrance to Bolton to light their cigarettes and most users are good about using available trash cans.

I considered several options for lunch. I was automatically inclined to eat inside, but

realized I am trying to encourage outdoor use – shouldn't I do it myself? I then realized how loud it was in the atrium – busy and uncomfortable when alone. Decided I would be more relaxed in sculpture garden – space is well used – more couples as well as singles – several looking for backrests – quite a few people who move through space, pause and remain. I am only disturbed by the cell user 30 feet away and sound of children at playground to NW. I do hear the air conditioner on the Northeast corner, but it is a constant hum. I searched out a sunny space with a backrest, but was originally seeking a table on the inner corner of the plaza. Whoa! Freaky 70's feminist with short hair, John Denver glasses, orange blazer, tie, baggy pants and Doc Marten's. Gray hair suggests professor and large number of feminist books in bookstore lead me to hypothesize that UWM is a major feminist theory campus. My original theory that the Sculpture Court would be a destination is proving true. A majority of people entering are using it as their destination. In fact, most users are entering from the Union. This must be an escape from the commotion of other areas. Look up "park as retreat" theory. I wonder how many of these users come from rural backgrounds and how many Spaight's users come from urban backgrounds. Wind is picking up at 11:45 am and the number of users still increasing with lunch hour approaching. Most walkers choose inner path next to Bolton to avoid contact with people seated on seat wall. That is also a direct path to the Union door – why is it smaller than the path by the

seat wall? More people notice me and become uneasy as I pull out my camera here. Only scared one couple while I was on the balcony at the Union. A great mix of people using sun and shade. Those of us with colds choose the sun! Partial shade is desirable, but sun is good during cooler weather or strong breezes off the lake. Cell users much quieter here. More respectful of other users. Garden elicits reverence and peace. Church bells at noon help to emphasize this. Could bells be heard in busy Spaight's? Users of Spaight's much more on edge than those in the garden. After 20 minutes of sunning myself (and damn close to falling asleep) a skateboarder began to disrupt everyone with jumps. And I really could use some shade about now! Everyone else in the space is still respectful of the peace and quiet. More people in the shade now. Temperature is going up? Breeze lower? Skateboarder trustworthy of users – leaves his personal items on seatwall while he boards up to 100 feet away. He's right though, no one touches his stuff. 12:30 – more people walking through and not stopping now. I really need some shade!

APPENDIX 3: INTERVIEW OF DENNIS GREENWOOD

Interview of Dennis Greenwood, Buildings and Grounds Supervisor, September 30, 2005.

Events occur about once per week or every other week. Workers spray/wash the concrete as needed, but doesn't occur often. The garbage cans are emptied once a day. There is one gardener assigned to the library area, one to the remainder of the plaza. Miracle grow and other additives are necessary for the vegetation. Trees received much reflection in the plaza and minimal soil depth of 12-18". There is an irrigation system installed in the lawn areas and for trees and shrubs. Vegetation includes Ash, Rudbekia, Star Magnolia, Lilac, ornamental grasses, Autumn Joy Sedum. The umbrellas for the tables were destroyed by wind – were there a few years. Kiosks were always a mess, so they were removed approximately 15 years ago. There have not been vendors on the plaza for 20 years. Winter is a problem. Maintenance must use a rubber bladed plow and power broom so as not to destroy the paving. No salt is allowed, only sand or magnesium chloride. Graffiti can be a problem, but not too bad. Students are allowed to use chalk in exposed areas.

APPENDIX 4: ACTIVITY MAPPING

The following images include jpg files of the original data collection for the user analysis. A map of the existing site was sized to fit the page in order to number the location of groups. Then, data for each group was documented on the same page. If additional space was required, the back of the map was used. This additional information is included following the time period to which it relates.

Figure A4.1: Original documentation of count collection.

COUNTING: DATA COLLECTION SHEET

LOCATION:

DATE:

OBSERVER:

TIME		
8:00	- 8:10 - 50	3 were on bikes
8:30		
9:00	9:10 - 194	8 bikes
9:30		
10:00	10:10 - 92	Walking/Biking ⁷
10:30		
11:00	11:10 - 80	Walking/No Bikes This Time
11:30		
12:00	12:10 - 190	Walking/1 Bike
12:30		
1:00	1:10 - 140	Walking/2 Bikes
1:30		
2:00	2:10 - 117	" 17 Bike - 1st person walking bike thru ped. area.
2:30		
3:00	3:10 - 80	" 1/2 Bikes
3:30		
4:00	4:10 138	4 bikes
4:30		
5:00	5:10 113	5 bikes

Figure A4.3: User analysis 9:00-9:20 am.

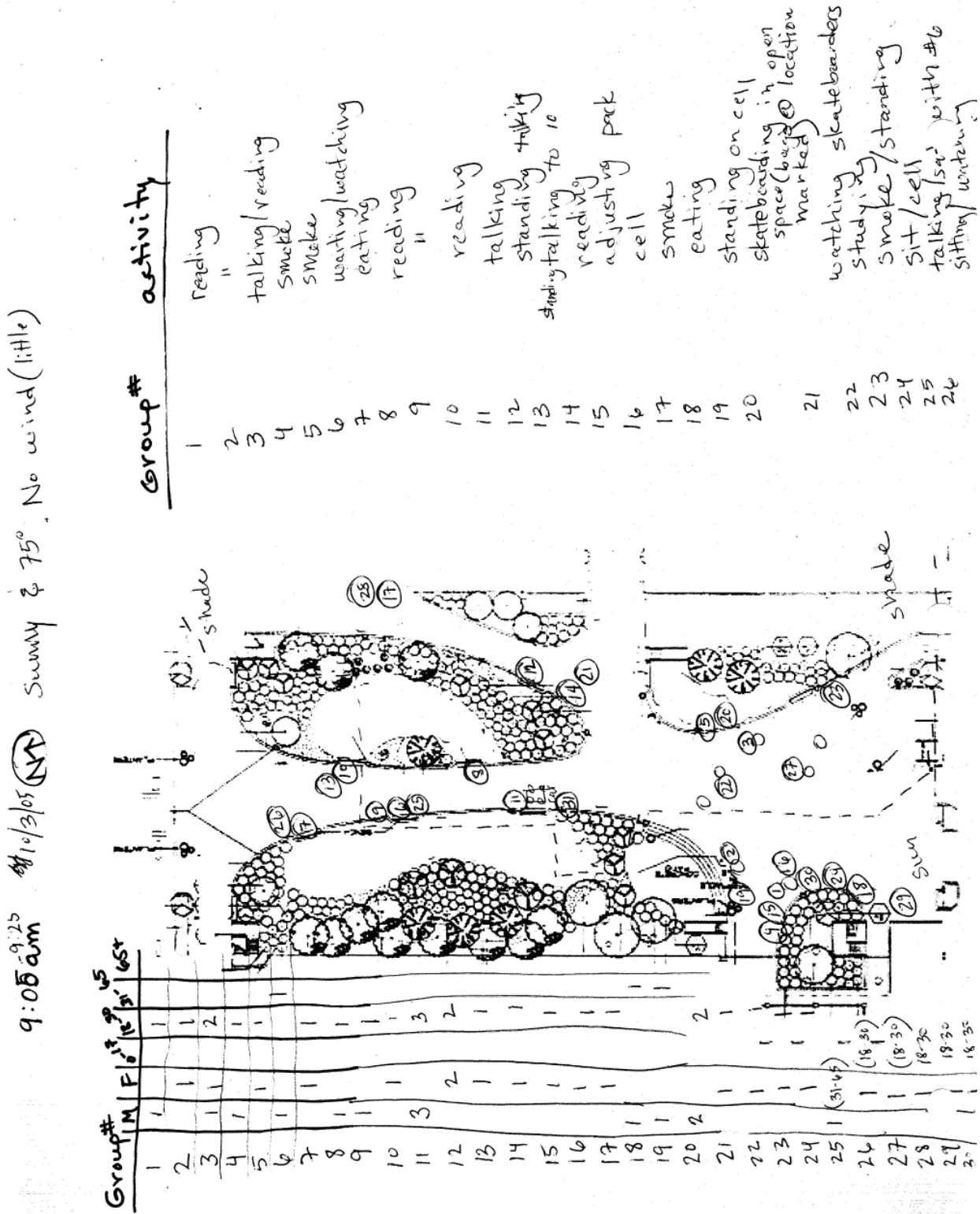


Figure A4.4: Additional information for the user analysis 9:00-9:20 am.

27 sitting / cell
28 standing / cell
29 smoke / stand
30 sit / cell
31 sit / cell Girl alone 18-30

Figure A4.6: User analysis 11:00-11:20 am.

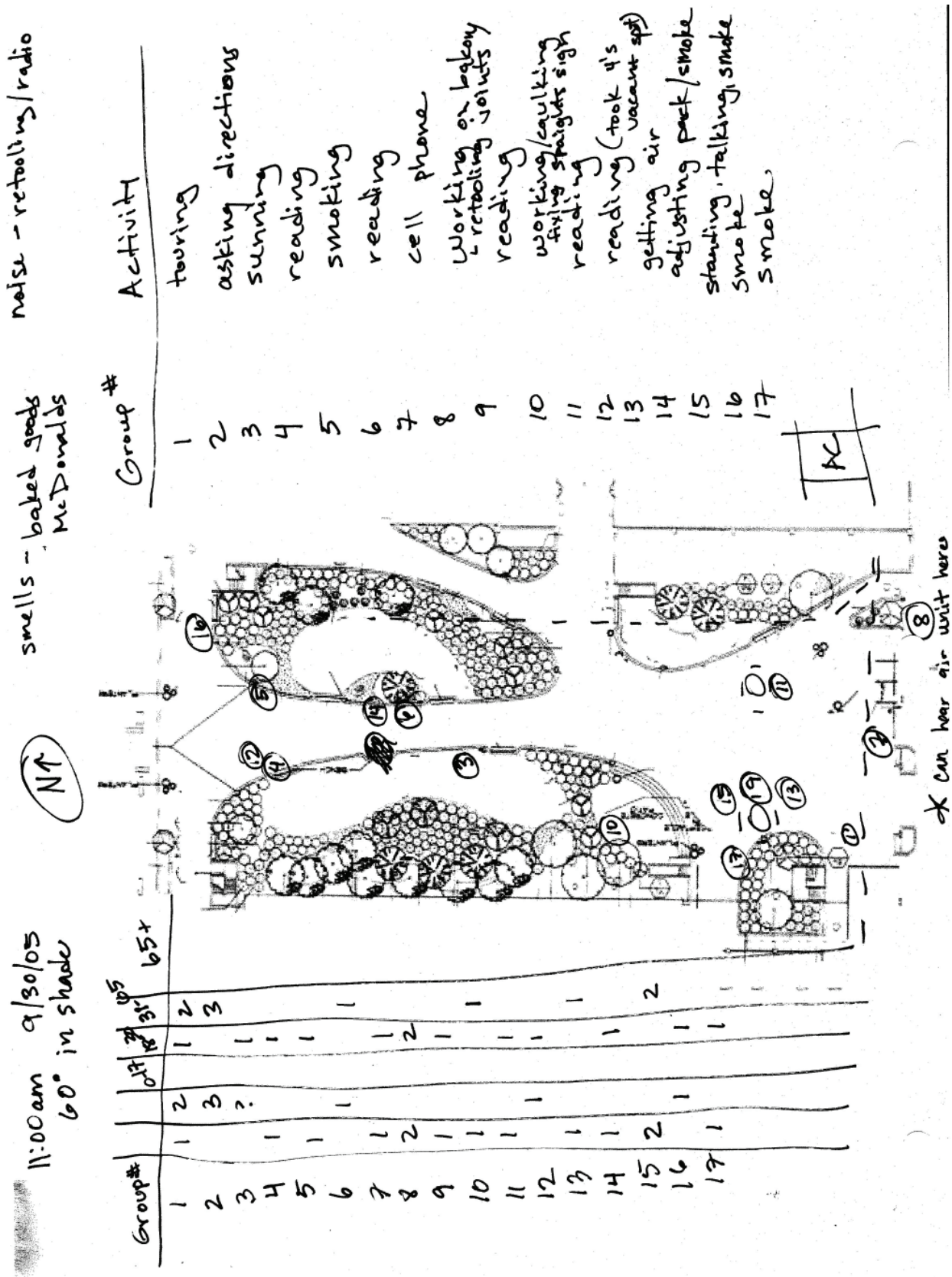


Figure A4.7: User analysis 12:00-12:20 pm.

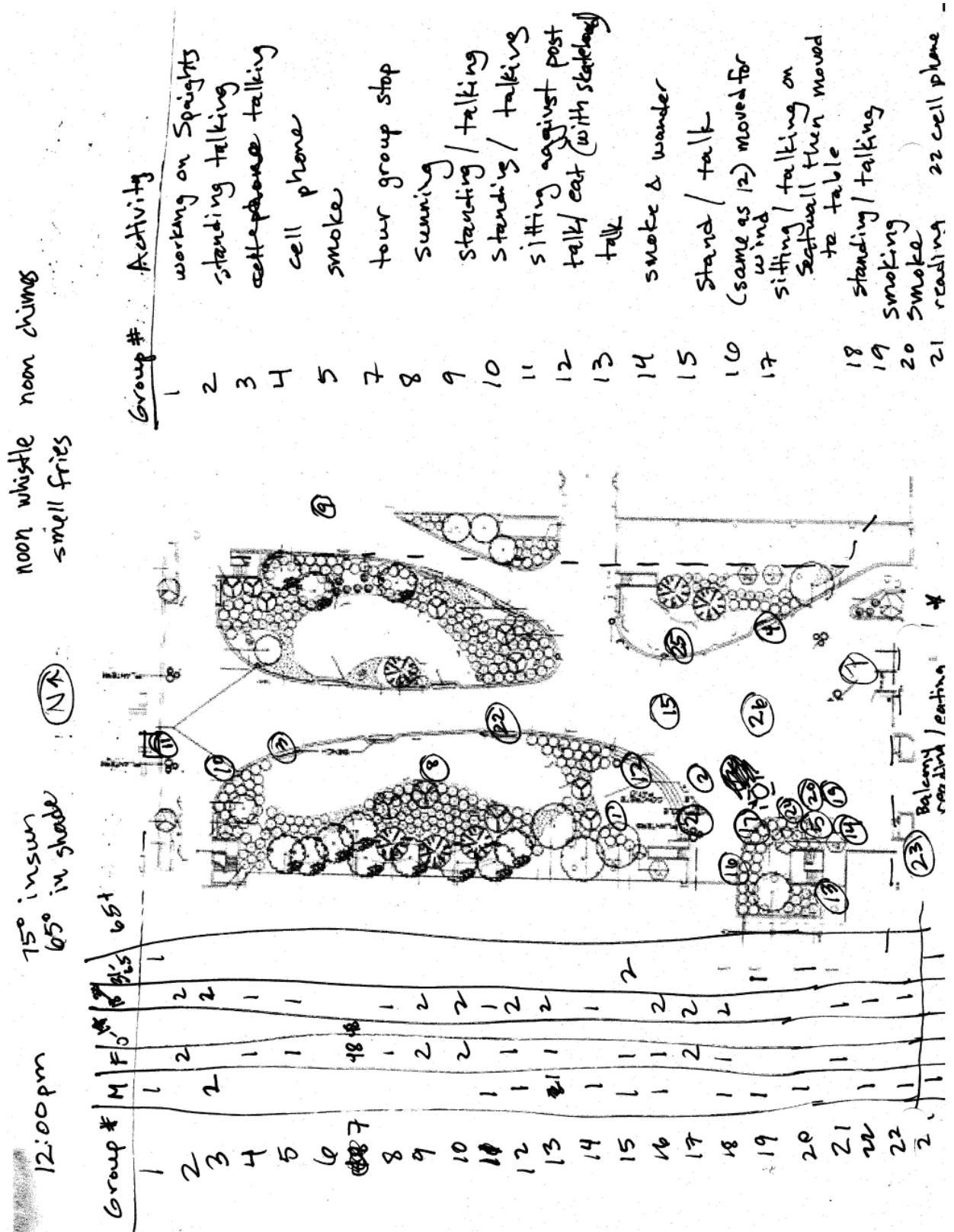


Figure A4.8: Additional information for the user analysis 12:00-12:20 pm.

24	eating	25	1M	18-20
25	cell	26	2M	31-65
26	standing talking			

Figure A4.9: User analysis 1:00-1:20 pm.

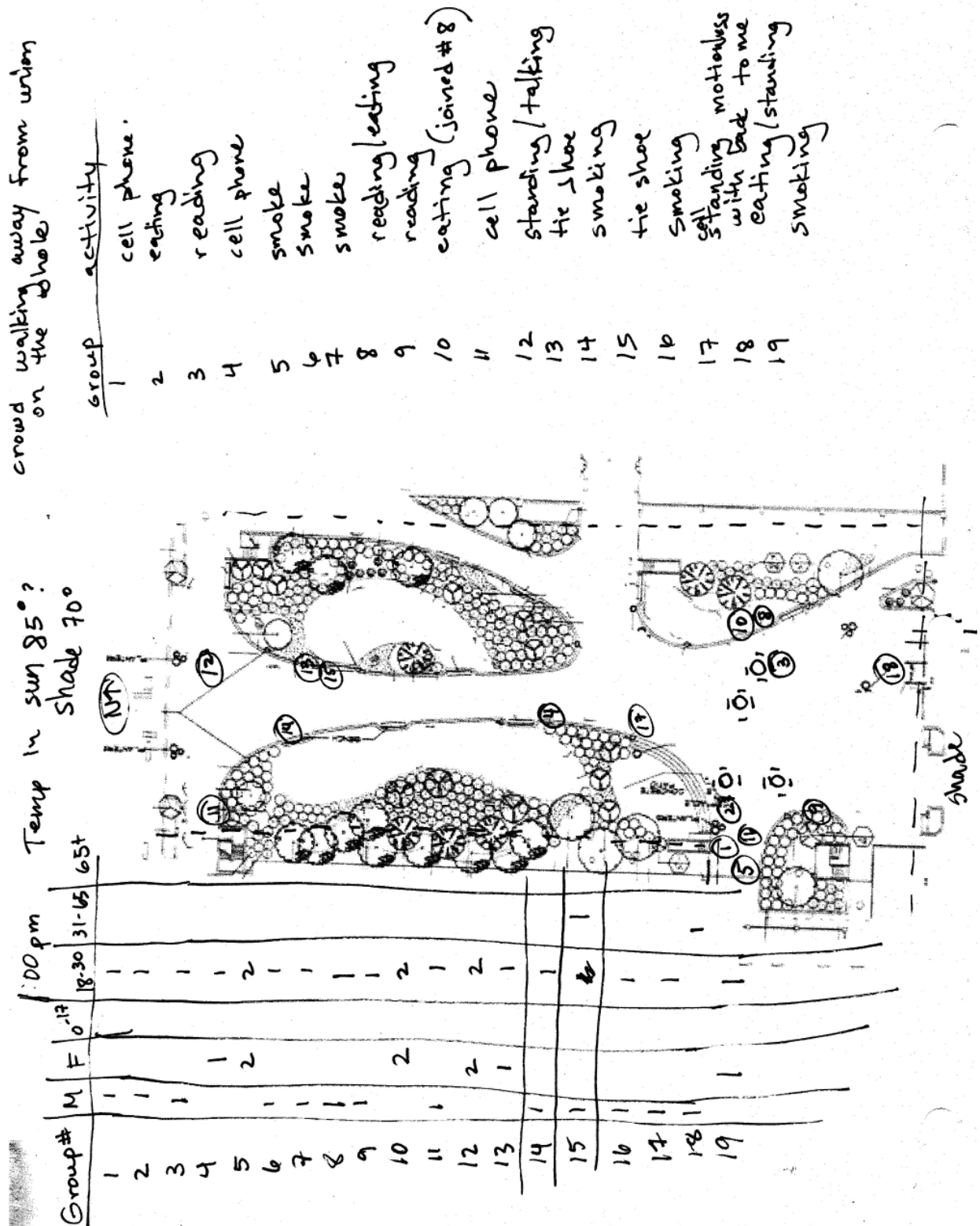


Figure A4.10: User analysis 2:00-2:20 pm.

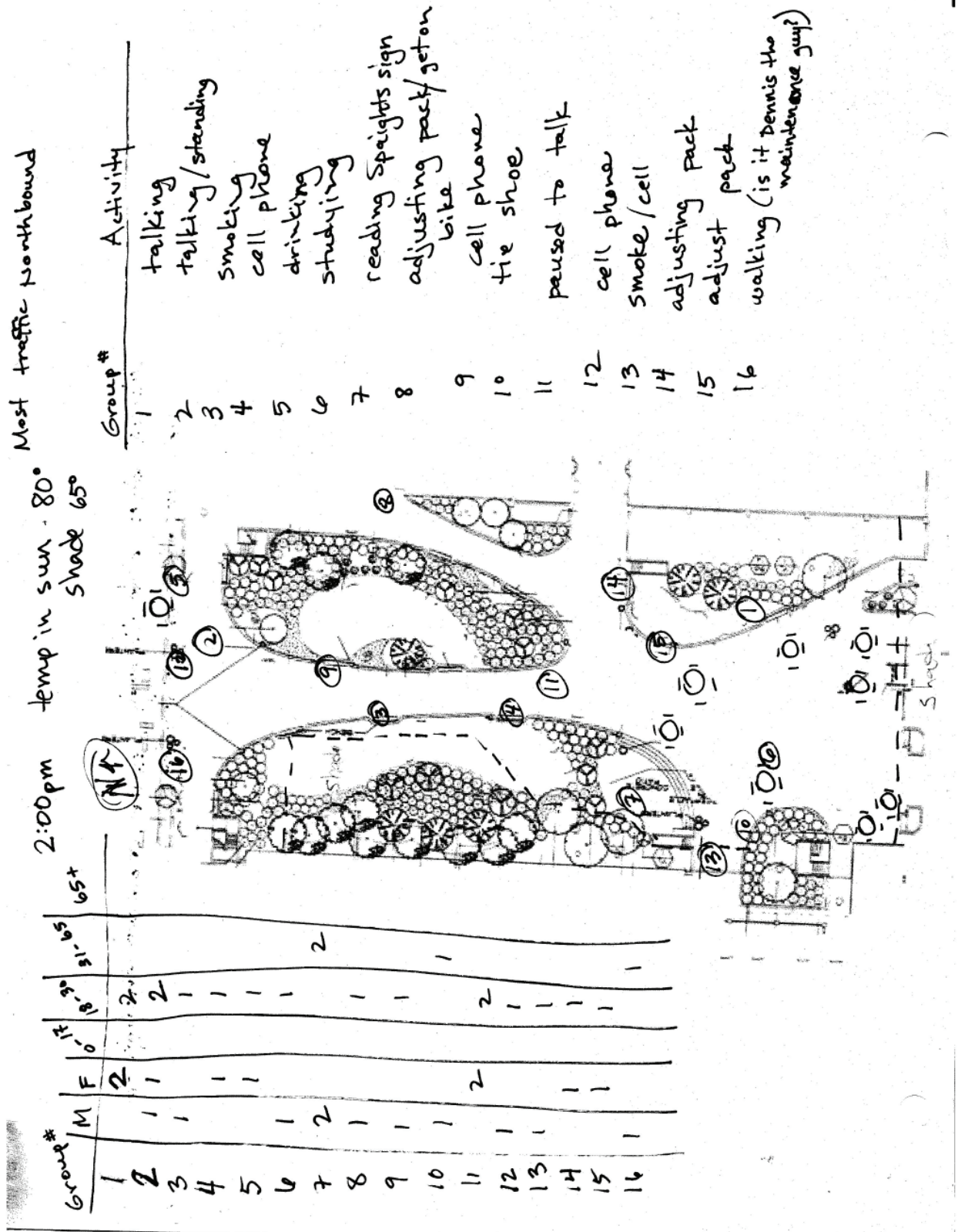


Figure A4.11: Additional information for the user analysis 2:00-2:20 pm.

lots of bikes ride through - never crowded enough to be unsafe for pedestrians

Figure A4.13: User analysis 4:00-4:20 pm.

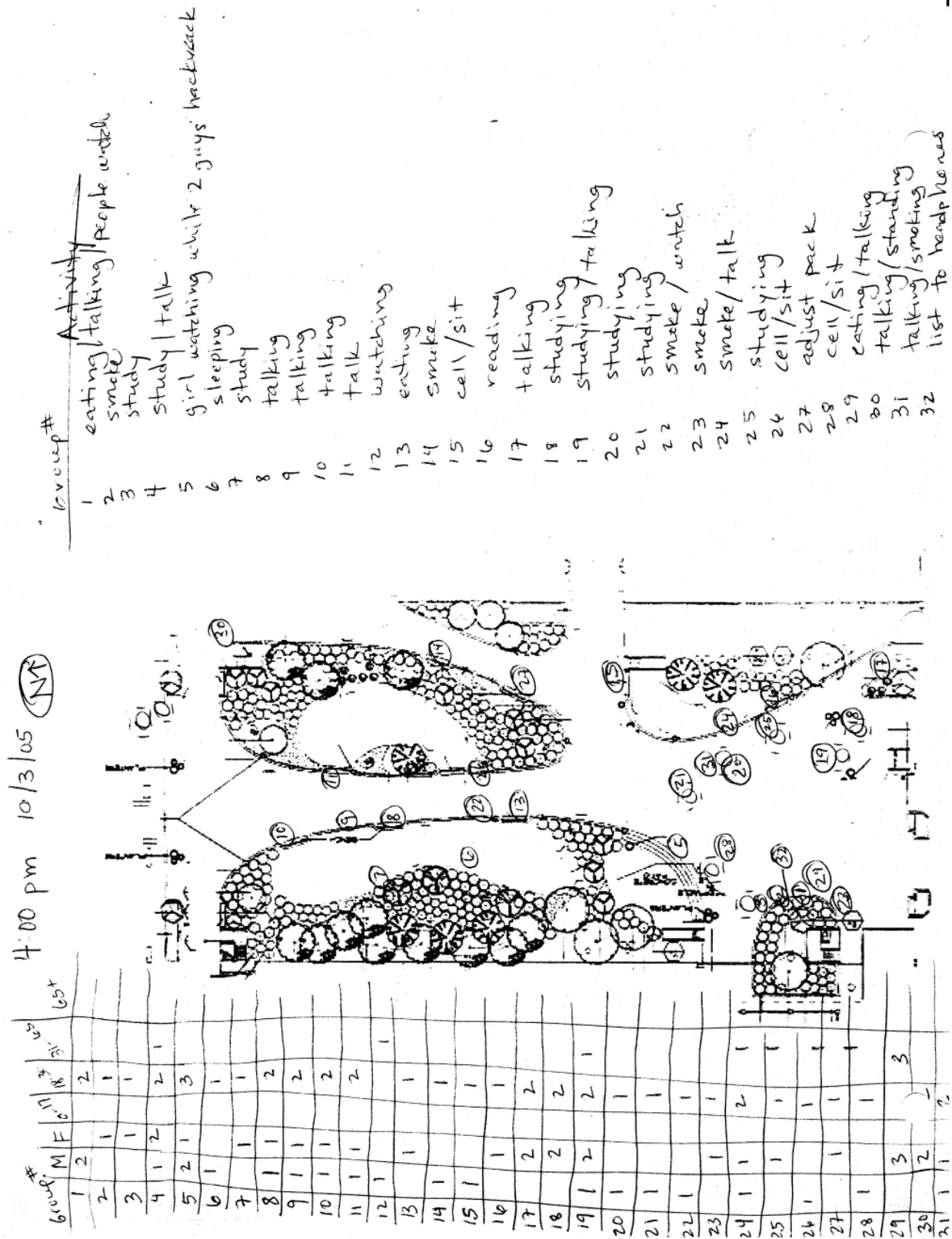


Figure A4.14: User analysis 5:00-5:20 pm.

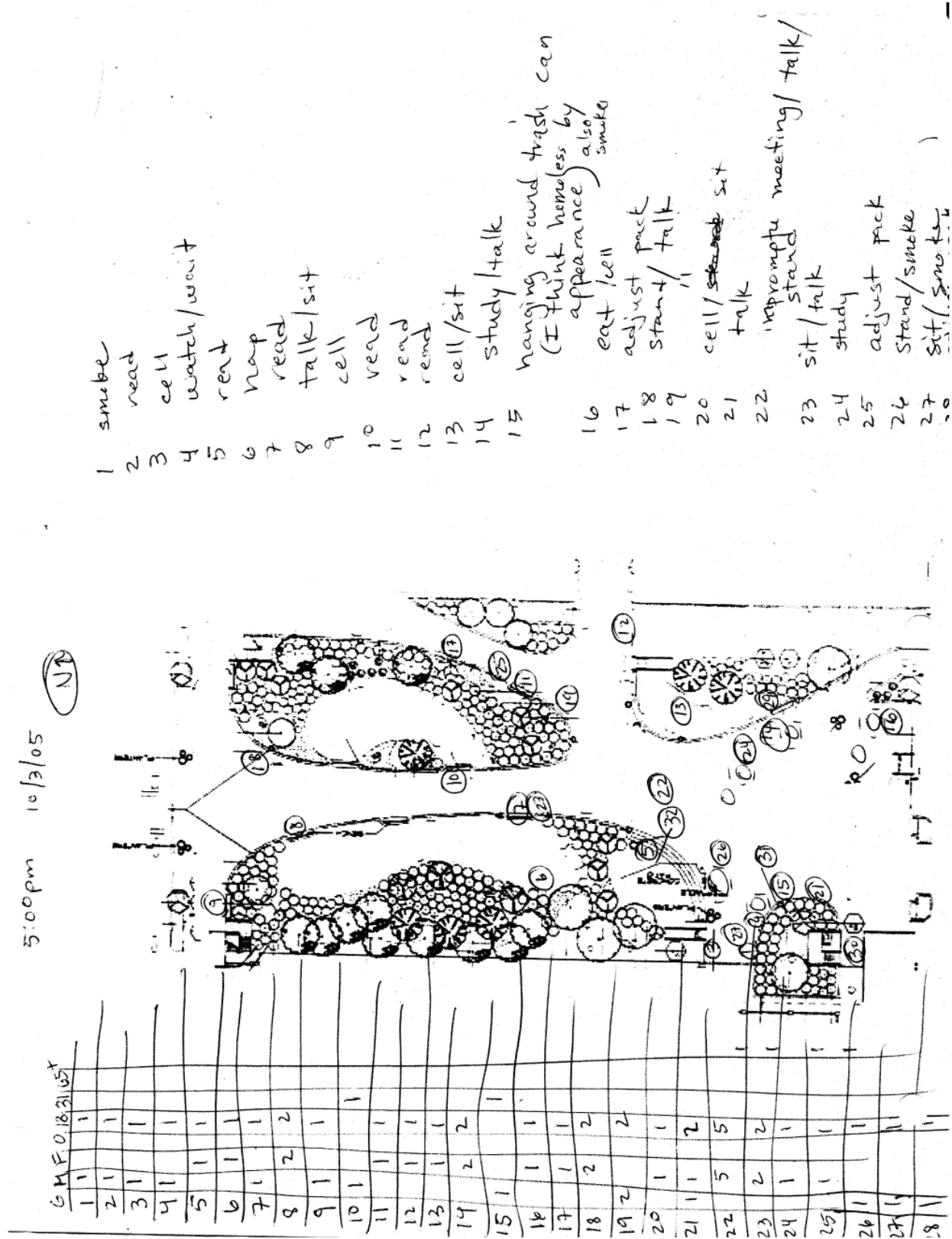


Figure A4.15: Additional information for the user analysis 5:00-5:20 pm.

29	IF	19	cell/sit
30	IM	18	cell/smoke/stand
31	IM	18	tie shoe/sit
32	IM	18	sitting/watching

APPENDIX 5: NOTES TO FUTURE RESEARCHERS

Although the electronic submission was an option for this researcher, it was chosen for several reasons. The amount of paper for one-sided printing stood against a landscape architect's environmental responsibility. Also, the EDTR submission allowed an opportunity for design of the document layout. The yellow and black borders represent UWM as they are the school colors.

As a general guide to writers and designers to come, this document was formatted using Adobe InDesign CS2. The font is Arial with chapter headings in 12 pt bold and paragraphs in 11 pt regular font with 18 pt kerning (spacing). Figure and table headings were completed in 8 pt font with 14 pt kerning.

It was found that writing in Microsoft Word and placing the edited text into the layout in InDesign was the most efficient use of time in order to use tools such as spell check and thesaurus. However, including figures or tables in Word is frustrating and should wait until a layout in InDesign is prepared.

Finally, the document was transformed into a pdf file and submitted to the Graduate School per their requirements. The final submission was easy and even accomplished off campus following the graduation ceremony.

Additional Research Needs

As the enclosed design will not be implemented, the conclusions may only be termed hypotheses. In the future, the hypothesis that design elements can positively affect socialization could be tested by arranging elements such as movable tables and chairs,

potted plants, speakers/performers within an existing plaza deemed unsuccessful. All elements should be introduced separately then collectively. This type of research could be very costly and much effort and assistance would be necessary in order to place these items in the appropriate context. Bosco Plaza on the Kansas State University campus could make an acceptable testing ground.

Vice versa, elements could be removed from plazas deemed successful. A period of study must be defined that incorporates a transitional interval allowing users to find the changes. Perhaps one week is an appropriate length of study.

A third idea is to assemble volunteers to pack an unsuccessful plaza to determine the importance of presence of others. Is it true that the mere presence of people encourages others to remain in the space?

Finally, triangulation could be examined using a controversial topic such as abortion. Does a visual exhibit that users explore on their own garner more interest and social interaction than a speaker on the same subject? Does the location of the exhibits and speakers significantly alter the amount of interaction, i.e. moving from sun to shade or center of plaza to edges of the space? These are interesting questions that can help designers in the future to plan and program a site. Whether there appears to be one overriding element that must be included in every project, or that no one element enhances socialization with greater success, the study has proven valuable.