EXAMINING URBAN SOCIABILITY AND THE BUILT ENVIRONMENT: A DESCRIPTIVE STUDY OF THREE URBAN PLAZAS IN KANSAS CITY, MISSOURI

by

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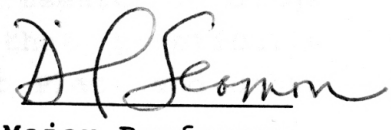

Major Professor

ABSTRACT

EXAMINING URBAN SOCIABILITY AND THE BUILT ENVIRONMENT: A DESCRIPTIVE STUDY OF THREE URBAN PLAZAS IN KANSAS CITY, MISSOURI

Sociability in the city often occurs in the spaces between and within buildings -i.e., public places in which different kinds of people gather, giving character and identity to the city (William Whyte, 1980). This thesis attempts a study of sociability in the city through an analysis of three small plazas in the Country Club Plaza, Kansas City, Missouri.

This research attempts to determine the rationale for behavior patterns and sociability, by observing and studying the three plazas over a period of time. By comparing behavior patterns and frequencies of different activities occuring in each of the three small plazas, the researcher seeks to consider the manner in which the built qualities in the immediate environment of plazas contribute to their sociability. The research also seeks to discern certain architectural elements that contribute to the sociability of urban open spaces.

This thesis also examines a plaza in terms of environmental elements like location, surroundings, seating, weather conditions, and so forth and attempts to elucidate the diversity of plaza experience and what goes into the making of plazas as places. The study examines the importance of environmental form, process and relationship, appropriation and indigenous quality in the phenomenon of place and existential relationship with them.

The nature of this study is also to highlight salient issues and to suggest ways to a better future for sociability and urban design. The thesis seeks to provide certain initial research insights on plazas that other studies of this nature can extend and use to evaluate urban outdoor plazas so that they become "positive environments for social interaction". The thesis also aims to utilize particular research findings to formulate certain design guidelines that practically enhance the sociability of the Country Club Plaza and urban plazas in general.

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First of all, I would like to thank my advisor Dr. David Seamon, who has been an indispensable source of guidance and inspiration in putting this research together and who has devoted a large amount of time and patience, especially in the concluding stages of this thesis. His prompt and critical responses to my thesis drafts were truly a tremendous source of encouragement and motivation in carrying this thesis through completion.

I am also grateful to Prof. Ray Weisenburger and Dr. Carolyn Norris-Baker for their time, assistance and encouragement in helping me to organize my research data.

I take this opportunity to thank all my friends who accompanied me to Kansas City, Missouri, on my observation trips and steered me through difficult traffic conditions. Acknowledgements are also due to Prof. John Lowe who offered the course "Topics in AutoCAD", which was of tremendous help to me in plotting the behavior maps and in the process saved me painstaking effort, time and money.

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CHAPTER ONE: INTRODUCTION

SOCIABILITY, URBAN DESIGN, AND THE THREE PLAZAS

The question of upgrading the quality of city life through plazas has been studied by people from many fields. The author is intrigued by the answers to this crucial question because the success of the city plays a major role in our world today. One objective of this thesis is to offer some solutions for making the city a better place to live.

As William Whyte (1980) demonstrates, sociability in the city often occurs in the spaces between and within buildings - i.e., public places in which different kinds of people gather, giving character and identity to the city. This thesis attempts a study of sociability in the city through an analysis of three small plazas in the Country Club Plaza, Kansas City, Missouri. These three plazas are: (1) Nichols Plaza, (2) Broadway Plaza, and (3) 47th Street Plaza. A map of Country Club Plaza and the location of the three smaller plazas is illustrated in figure 1.1.

These three plazas are representative of a mixture of small outdoor urban spaces which include unplanned meetings and an active street life. This thesis attempts to determine the rationale for behavior patterns and sociability, through the observation and study of these three plazas over a period of time. The author also considers the manner in which the built qualities in the immediate environment of these plazas contribute to their sociability. This is done by comparing the

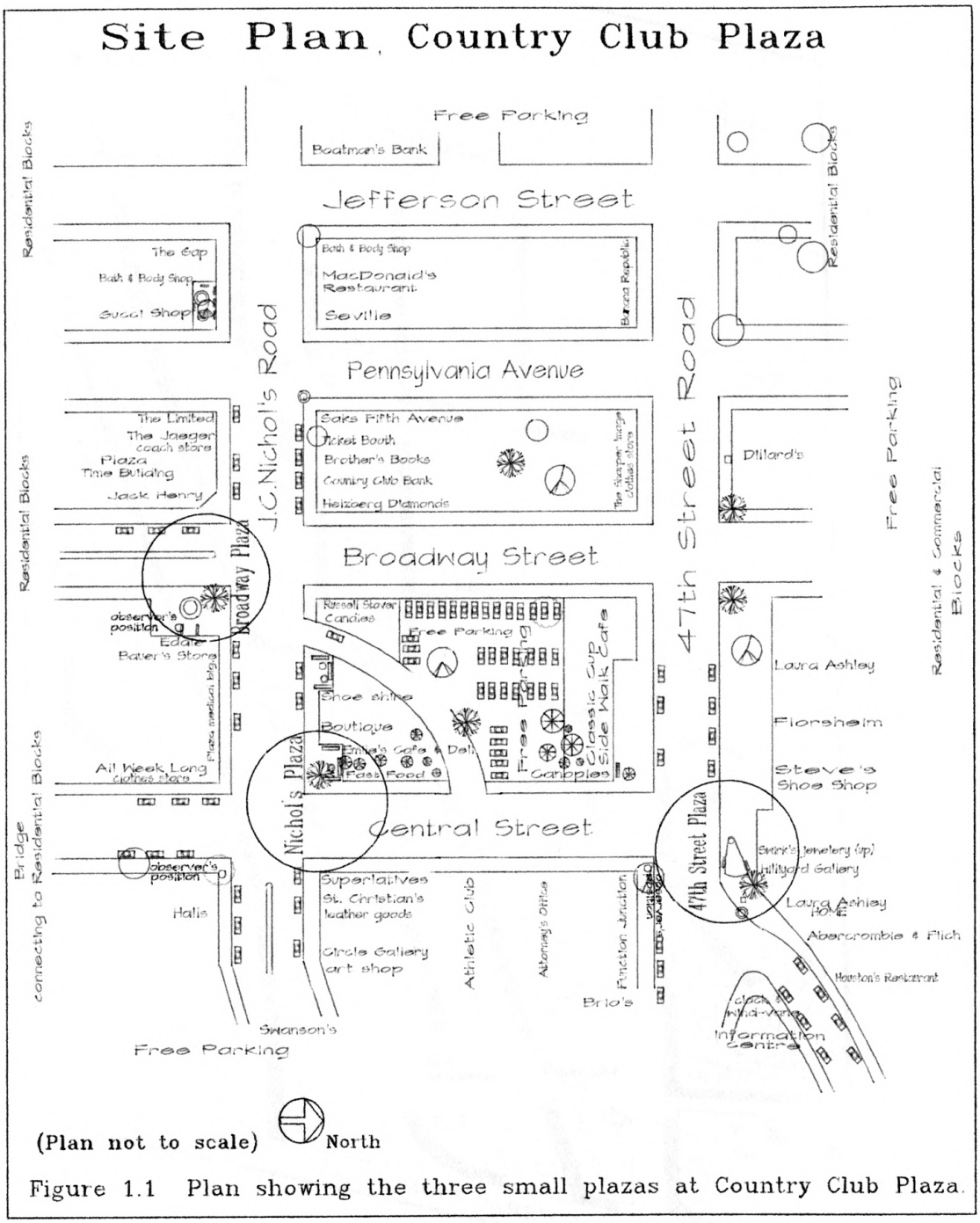

Figure 1.1 Plan showing the three small plazas at Country Club Plaza.

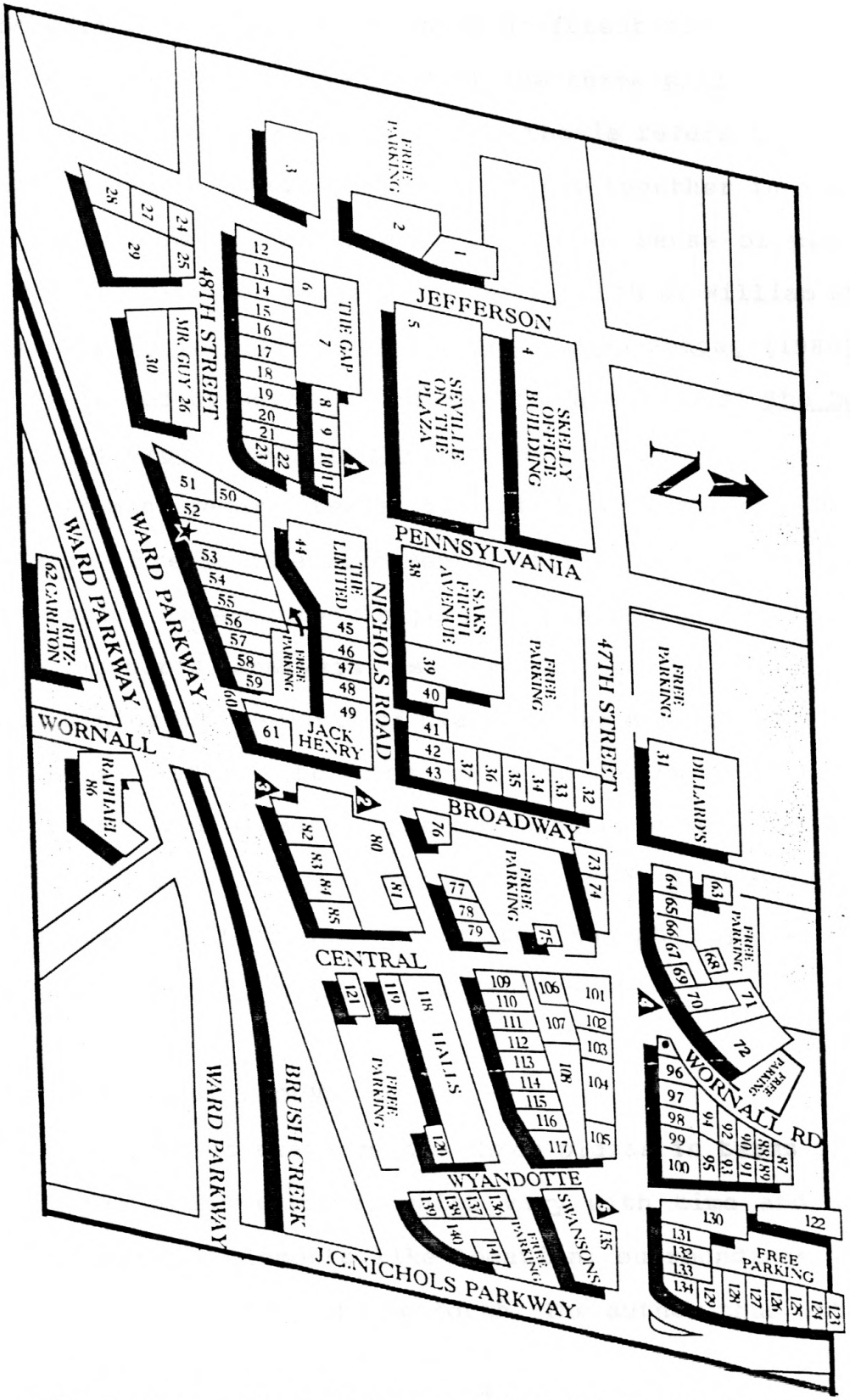

Figure 1.2 Plan of Country Club Plaza showing location of renowned establishments.

behavior patterns and frequencies of different activities occurring in each of the three different plazas, in part due to specific design features of the three plazas.

The term sociability in this thesis refers to the ability of a plaza to informally bring people together in a place and thereby generate human activity and a sense of place. This definition relies largely on the research of William Whyte and his The Social Life of Small Urban Open Spaces (1980) and is also guided by several premises of Jane Jacobs' The Death and Life of Great American Cities (1961).

In most general terms, this study analyzes the three small plazas in terms of environmental attributes that are conducive to social interaction in public open spaces. In this sense, the author's analysis is also guided by the literature pertaining to the works of Clare Cooper Marcus (1986) and Mark Francis (1987). The research also seeks to discern some architectural elements that contribute to the sociability of an urban public space. The nature of this study is also to highlight salient issues and to suggest ways to a better future for sociability and urban design.

CONCEPTUAL BACKGROUND

This thesis examines the three plazas in terms of regular patterns of activities, which vary with time and different environmental elements like location, surroundings, seating, weather conditions, and so forth. The author thus attempts to

elucidate the diversity of the plaza experience and what goes into the making of the three plazas as "places". In this sense, the study examines the importance of environmental form, process and relationship, appropriation and indigenous quality in the phenomenon of place and our existential relationship with them.

The aim is to determine a connectedness between people and their world and the relationships between space and place. In this sense, the thesis provides a qualitative study of urban place through a regular pattern of activities which correspond with time and the changing outdoor structure in the three plazas. Even to an outsider, it is noticeable that these plazas are places of gathering, walking, or places to sit, watch, relax and exchange information.

The thesis will also explore the differences in behavior patterns in the three plazas and the differences in the sociability of each due to design-related factors. An attempt will be made to identify and justify those plaza elements which enhance the sociability of the plaza or hinder the sociability performance.

In most general terms, the aim of this thesis is to help environment-behavior researchers learn more about public spaces in cities and the role that the physical environment and contextual attributes play in achieving sociability. The thesis also aims to utilize particular research findings to formulate certain design guidelines that practically enhance

the sociability of the Country Club Plaza and urban plazas in general. The thesis seeks to provide certain initial research insights on plazas that other studies of this nature can extend and use to evaluate urban outdoor plazas so that they become "positive environments for social interaction."

CHAPTER TWO: COUNTRY CLUB PLAZA

HISTORICAL BACKGROUND AND THE THREE PLAZAS AS STUDY SITES

This chapter overviews the history of Kansas City's Country Club Plaza (hereafter referred to as CCP), particularly in terms of the planners' original design intentions. This chapter also justifies the selection of the three small plazas and describes them physically. The historical information in the first part of the chapter provides an understanding of factors that have influenced the plaza's design and policy decisions as well as the user's expectations. In addition, an analysis of plaza functions and land uses help to identify potential users of the plaza and their demographic backgrounds.

The analysis of the physical design and context of the three study sites clarify their contextual fit in terms of physical and social surroundings. This analysis also helps to understand the plaza formally and behaviorally. This evaluation is carried out through a description and analysis of such physical attributes of the three plazas as overall size, amount and kind of seating, plantings, spatial relationship to major pedestrian flows, and so forth.

HISTORICAL BACKGROUND

The CCP is a regional shopping center and is the nation's first large shopping center built outside the Central Business

District. It is the center of city's financial, professional and cultural community. The CCP draws people from a 250 mile radius and is known as one of Kansas City's main tourist attractions.[1] The Plaza is situated on forty acres of land located four miles south of the Central Business District of Kansas City, Missouri, and at the gateway to the residential area known as the Country Club District (see figure 2.1).

CCP was conceived by the late Jesse Clyde Nichols. The actual construction of the first buildings commenced in 1922, and by 1926, nearly 100 businesses were operating on the plaza. When J. C. Nichols, Sr., real estate investor and developer, began developing this large commercial and residential development, Main Street was a narrow country road with no utilities or paved streets and Brush Street which ran through its center, was surrounded by marshes. But as the city began spreading southward, Nichols envisioned a new residential area removed from the Central Business District.[2]

The CCP is known for being a major fashion retail center in a four state region and is the attraction of visitors during the Christmas season. The CCP hosts the September Art Fair and the Christmas Lighting Ceremony draws crowds totalling 500,000. The Plaza's tourist market draws 6,000,000

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[1] Data Compiled from Equifax Marketing Decision Systems, February, 1992, including 1990 Census Report; Country Club Plaza Study by Gentleman Associates, December, 1990.

[2] 'There is less smoke in the district' : J. C. Nichols, Mark H. Rose, 1940, Urban Change, and Technological Systems. Journal of the West, Vol 42, p. 44-54.

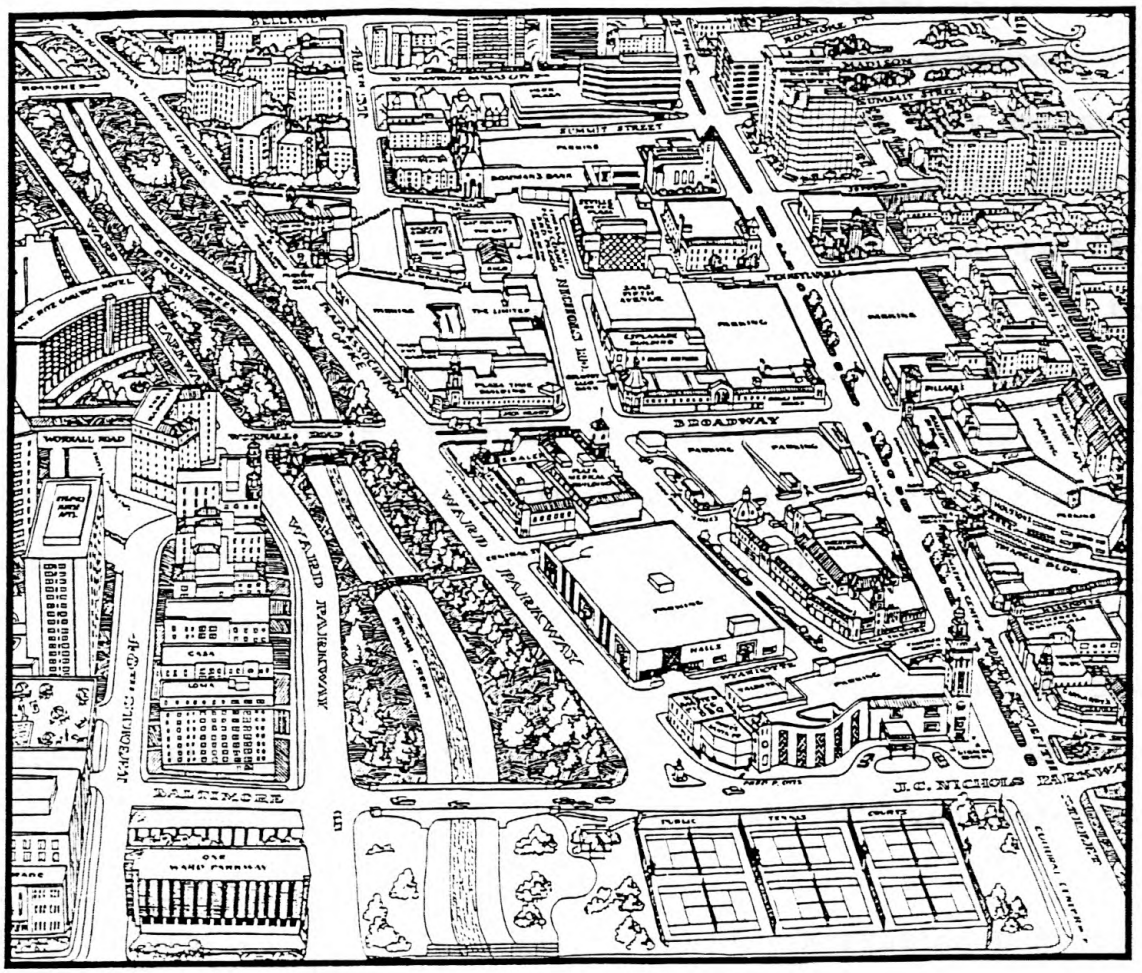

Figure 2.1 Perspective view showing portions of CCP.

visitors annually in this area.[3]

Some of the events due to these require particular physical form adoptions. Among the events, the traditional Christmas extravaganza of outdoor lights, the illumination of the whole plaza, is a remarkable and memorable one. Shopping is at its peak during this time of the year and the plaza has to accommodate the needs of thousands of people, to provide food and entertainment for all age groups. A major percent of plaza shoppers come from the multi-county Kansas City Market.[4]

J. C. Nichols considered the total environment in his planning, with shops, churches and schools providing quality services for quality residences.[5] In his determination to build tree-lined boulevards and landscaped parkways following the natural terrain, Nichols was influenced by George E. Kessler, designer of Kansas City's Parks and Boulevard System, who was eventually employed for the preparation of the design.

Edward Buehler Delk (1922-1925), the architect of the original plans for the area, and Edward W. Tanner, under the supervision of Nichols, envisioned low buildings with red tile roofs, wrought-iron grill work ornamentation and colorful

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[3] Data Compiled from Plaza Facts, Equifax Marketing Decision Systems, February, 1992.

[4] Data compiled from Equifax Marketing Decision Systems, February, 1992, including 1990 Census Report; Country Club Plaza Study by Gentleman Associates, December, 1990.

[5] Nichols, 'The Planning and Control of Outlying Shopping Centers', Country Club District Bulletin, December 15, 1920, Vol 3, pp 50-51.

towers. Nichols considered the total environment and sought harmony in the architecture of these structures, which is reflected in the Tudor style fire and police stations and cut-stone streetcar-line shelters. He named the district for the exclusive golf and country club that was located at 55th Street and Wornall Road, now the site of Loose Park.

The development is today one of the most well-used residential and shopping districts in Kansas City.[6] Nichols situated the plaza near homes and apartments in the Country Club District and also at the intersection of major highways. The plaza is accessible from several surrounding residential neighborhoods and parking is provided within the plaza area. No off-street parking was incorporated in the initial design, although several filling stations were among the early buildings erected on the Plaza. Stores in the plaza were grouped together in terms of 'scientific principles' encouraging flow of customers between stores.[7] The aim was that people would be drawn into other establishments on their way to a particular store.

Nichols also sought to create an architectural distinctiveness and selected a past architecture period, the Spanish Renaissance, as a style to guide the plaza design and

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[6]Country Club District, Kansas City , 1979, The Kansas City Chapter of The American Institute of Architects, pp 130-134.

[7] 'Planning and Management of Nichols Shopping Centers', Country Club District Bulletin, December 15, 1920, pp 50.

environment.[8] On the other hand, shop interiors emphasized modern technologies as well as traditional decor. For example, some of the stores still have original interiors that include replicas of 17th century hand-chiseled doors and antique iron-grilled doorways from Spain.[9]

Within the plaza, there are ten towers that rise above the Plaza roof lines (see figure 2.1). The tallest is the 130 ft. Giralda tower, part of the Swanson Building. The design and name of this tower was inspired by the world famous Giralda Tower, a part of the Great Cathedral of Seville, Spain. The Country Club District presents many examples of architectural styles favored in Kansas City - Colonial, Georgian, Tudor, and Italianate dwellings abound. The architecture of the plaza is a blend of Old Spain, Mexico and Southern California and its Spanish architecture is appropriately symbolic for a city that was once the head of the Santa Fe trail.

The buildings have red tiled roofs, imported wrought-iron grill work, mosaic tile-plaques and colorful towers reminiscent of Europe. There is an extensive use of colorful Spanish details (see figure 2.2a and 2.2b), like the ornate towers, open courtyards, balconied buildings, fountains, and the generous use of decorative tiles and ornamental iron which reflects the pervasive interest in Spanish architecture in

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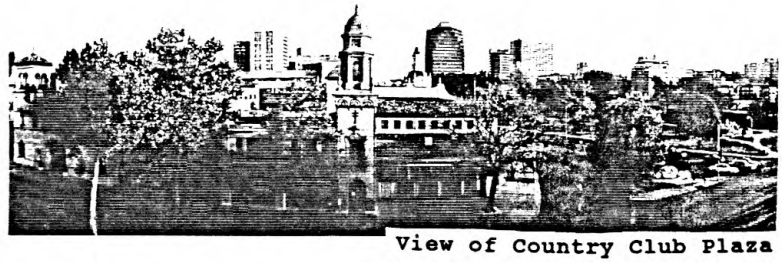
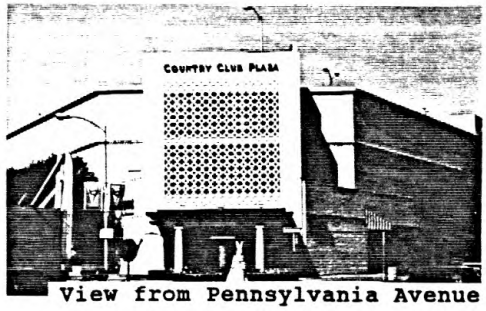
[8] 'Millions in New Shops', Country Club Bulletin, June 1, 1923, Vol 1.

[9]Country Club District, Kansas City - A Place in Time, 1977, Landmarks Commission of Kansas City, Missouri. pp 233-239.

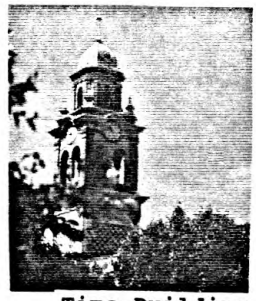
Seville Plaza



View of Country Club Plaza

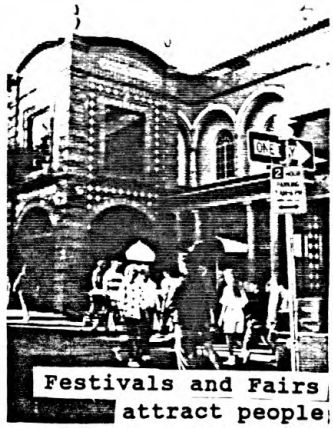


View from Pennsylvania Avenue

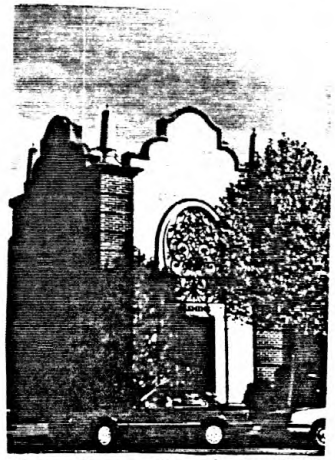


Time Building

Fountain Statues

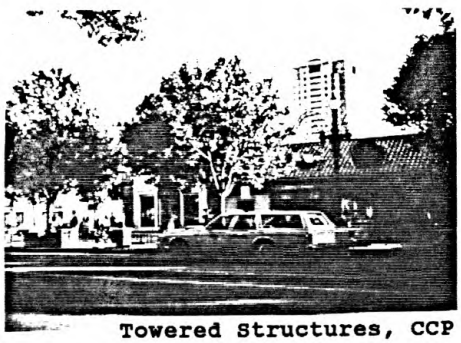


Festivals and Fairs attract people

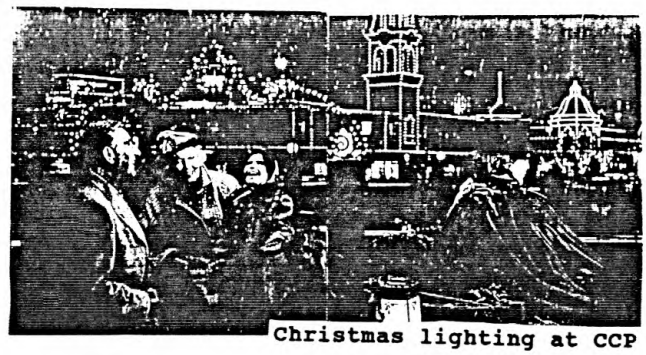


The plaza florist shop

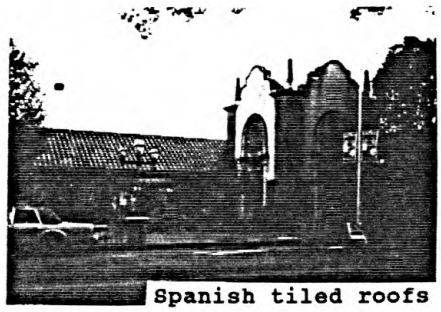
Figure 2.2 Photographs showing portions of Country Club Plaza.



Towered Structures, CCP



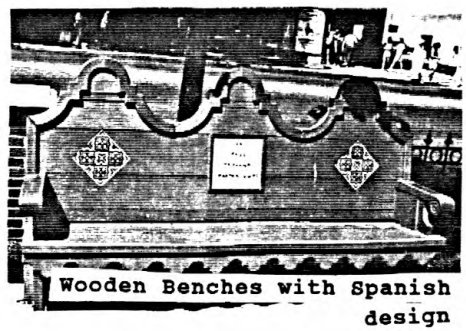
Christmas lighting at CCP



Spanish tiled roofs

Spanish features

View of Country Club Plaza



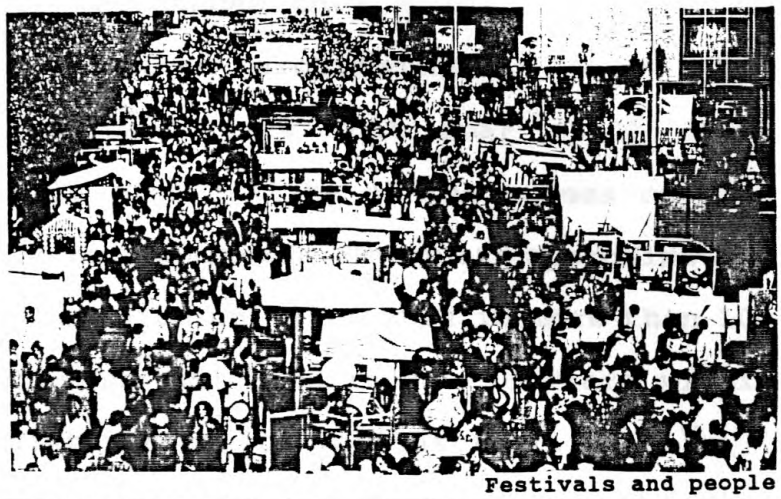
Wooden Benches with Spanish design

View of residential blocks from CCP

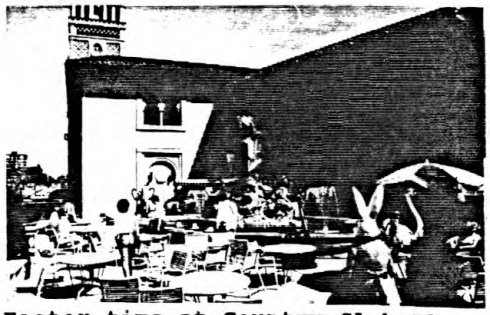
Limousines

Figure 2.2a Photographs showing portions of Country Club Plaza.

Windvane at Information Center

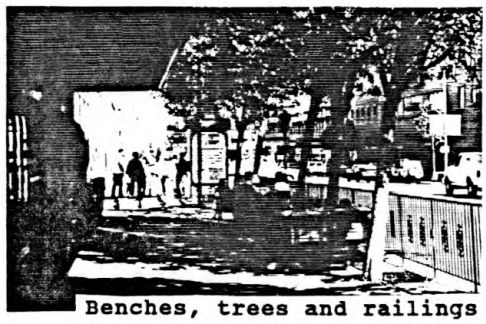


Festivals and people

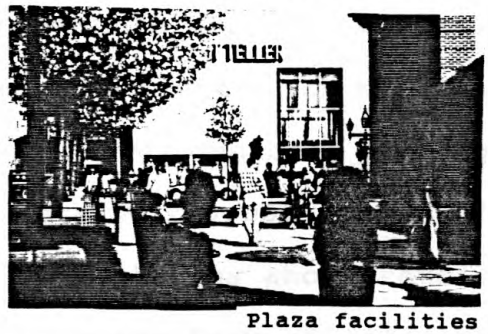


Easter time at Country Club Plaza

Street Artists



Benches, trees and railings



Plaza facilities

Spanish features

Residential towers in the background, CCP

Figure 2.2b Photographs showing portions of Country Club Plaza.

this country.

The Country Club District covers an area of approximately 9,000 acres and has a population of approximately 60,000. While there are a few residences that might be considered premier examples of American architectural design (for example, the balconied penthouses that soar above Brush Creek), the consistently high quality of the houses creates distinctive surrounding neighborhoods. There are approximately 7000 apartment and condominium units located in more than 100 high and mid-rise buildings which surround the Plaza within comfortable walking distance of its various facilities.[10]

CCP contains 1.2 million square feet of retail space occupied by nearly 200 quality retail stores and services, five major banks, hundreds of business offices including attorneys and architects, and nearly 200 physicians and dentists. There are thirty major gourmet restaurants and hotels (1866 rooms) including the Ritz-Carlton, Marriott Suites and five other hotels, eight theaters offering movies, two night clubs offering live music, four art galleries, a food-court and nine (six are multilevel) free customer parking garages. It also contains approximately 130,000 sq.ft of office space located on 2nd floors of buildings above retail areas, and an additional two million square feet of office

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[10] Data drawn from Census Report, 1990, and confirmed by the J. C. Nichols Company in March, 1993 at Kansas City, MO.

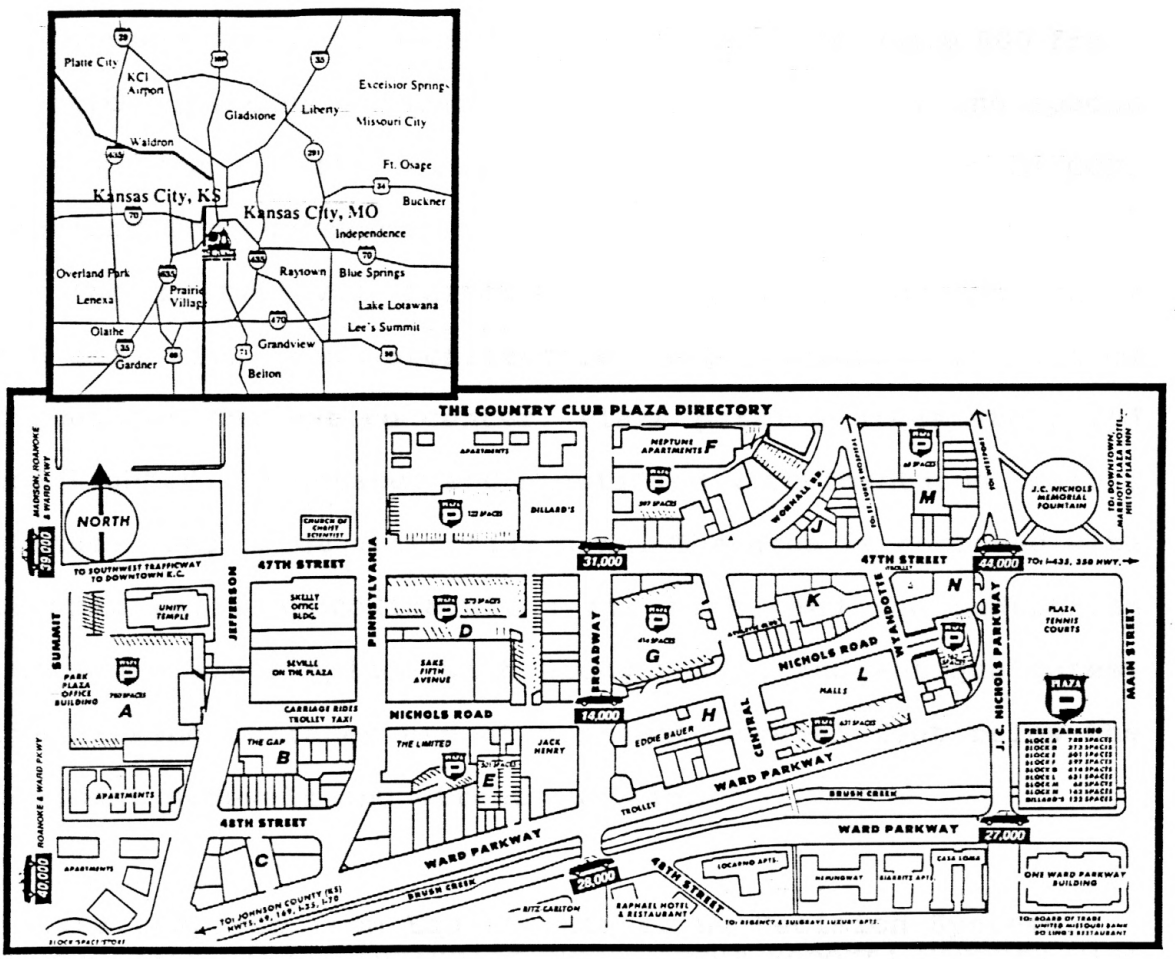

Figure 2.3 Distribution plan for parking spaces within Country Club Plaza.

space located in buildings within walking distance.[11]

The CCP hosts nearly 12,000 retail and business employees. 15,000 employees work on or near the plaza in 2,000,000-plus square feet of office space. Over 30,900 employees are located within a one-mile radius of the plaza.[12]

On an average shopping day, the through streets in CCP have a volume of 14,000 - 44,000 vehicles.[13] Public transportation vehicles like the metro buses, taxis, trolleys, and horse-drawn carriages converge at CCP. There are 800 free, on-street parking spaces; 4,200 free, covered parking spaces (see figure 2.3 for distribution of parking spaces in CCP) provided for customers and tenants of the plaza.

The multi-level customer parking decks are carefully blended with the architecture and conveniently placed throughout the entire center. Plaza parking areas are paved and lighted, landscaped and beautified with fountains, marble statues, and large attractive urns. The area is enclosed with parapet walls approximately 4 ft. high, and the pedestrian entrances are supplied with wrought-iron and antique gates. The parking surfaces are at a height several feet below the adjacent sidewalk and street surface.

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[11] Data compiled from Equifax Marketing Decision Systems, February, 1992, including 1990 Census Report; Country Club Plaza Study by Gentleman Associates, December, 1990.

[12] ibid.

[13] Based on 24-hour weekday traffic studies by the Department of Public Works, Kansas City, Missouri, through July, 1992.

The plaza itself offers a variety of focal points: statues, sculptured fountains, planters with tulip beds, street-side cafes, sitting places under bright umbrellas, flapping banners advertising plaza events, horse-drawn carriages, ornamental imported wrought-iron lamp-posts, 15th century Italian marbles, finely detailed mosaic tiles, murals and traditional newspaper booths which contribute in the enhancement of the sociability of the Country Club Plaza.[14] It has a mix of controlled rural and urban features which shaped J. C. Nichols' idea of design, landscaping, and overall appearance of CCP.[15]

THE THREE STUDY SITES

To study sociability in CCP, it is important to realize all the dimensions which make a plaza sociable. To focus the study of sociability in CCP, the author has chosen three smaller plazas, the locations of which are shown in figure 1.1. These plazas are:

(1) The Nichols Plaza, (2) The Broadway Plaza, and (3) The 47th Street Plaza.

The author chose these three plazas because, during her initial visits to CCP, a significant difference in the sociability of these three plazas was observed by her. The

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[14] The Heart of the District, J.C. Nichols and the shaping of Kansas City, University of Missouri Press, Columbia & London. Worley S. William, 1991, pp 232-263.

[15] Kansas City Star, December 15, 1940, Vol 8 D.

author surmised that these differences could be attributed to various factors that might include location, structural or built form, street-plaza and street-corner relationship, and the mix of various activities that the specific location offered. The author assumed that the differences in the activities and built forms of the three plazas would yield enough range and variety to compare and contrast sociability in the three plazas.

A descriptive study of the three small plazas will provide a base for further analysis to evaluate the factors due to which the plaza can be judged either successful or unsuccessful in terms of sociability. In the following section, the author describes the three small plazas in terms of their physical environment and potential for varying sociability.

Nichols Plaza

A plan of Nichols Plaza is provided in figure 2.4. The site is situated at the northwest corner of the junction of Central Street and J. C. Nichols Road. This site is the smallest of the three plazas to be studied. It is adjacent to a central open parking lot which is sunken several feet from street level and is also near a multi-level, free parking lot (see figures 1.2 and 2.1). This plaza is a small portion of public open space immediately adjacent to the sidewalk and closely connected to the street. It is actually a widening of

the sidewalk proper, a pedestrian link and, more or less, a corner sun pocket. From preliminary observations, this plaza appeared to be used for brief periods of sitting, waiting, and watching.

The building opposite the south side of Nichols Plaza is the Plaza Medical Building, which has Spanish grilled balconies and colorfully textured tile facade. The space immediately west of the plaza is occupied by the Emile's Cafe and Deli and also a shoe-repair (Shoe-shine) store which can be reached from a short flight of steps. Part of Emile's Cafe is in the open patio and borders the north-west side of the plaza in the form of an open restaurant with umbrellas, tables and chairs during the summer. Also the north side of this open courtyard looks down into a central open parking lot. In the south-east side of the plaza is located the Halls' store, which is an important attraction to shoppers.

A tree stands in front of this store in an otherwise treeless plaza. The plaza itself is a recessed niche in the southeast side of the Emile's Cafe and Deli and has a small fountain punctuated with the 'boy and the frog' statue (see figure 2.4). This space also has two wooden benches for seating and overlooks directly into the plaza. It was observed that users like to sit on the steps leading up to the Cafe. Just a few steps ahead on the west side of the plaza are more niches with fountains and sitting places. This space was observed as a favorite place for users to stop and pause and

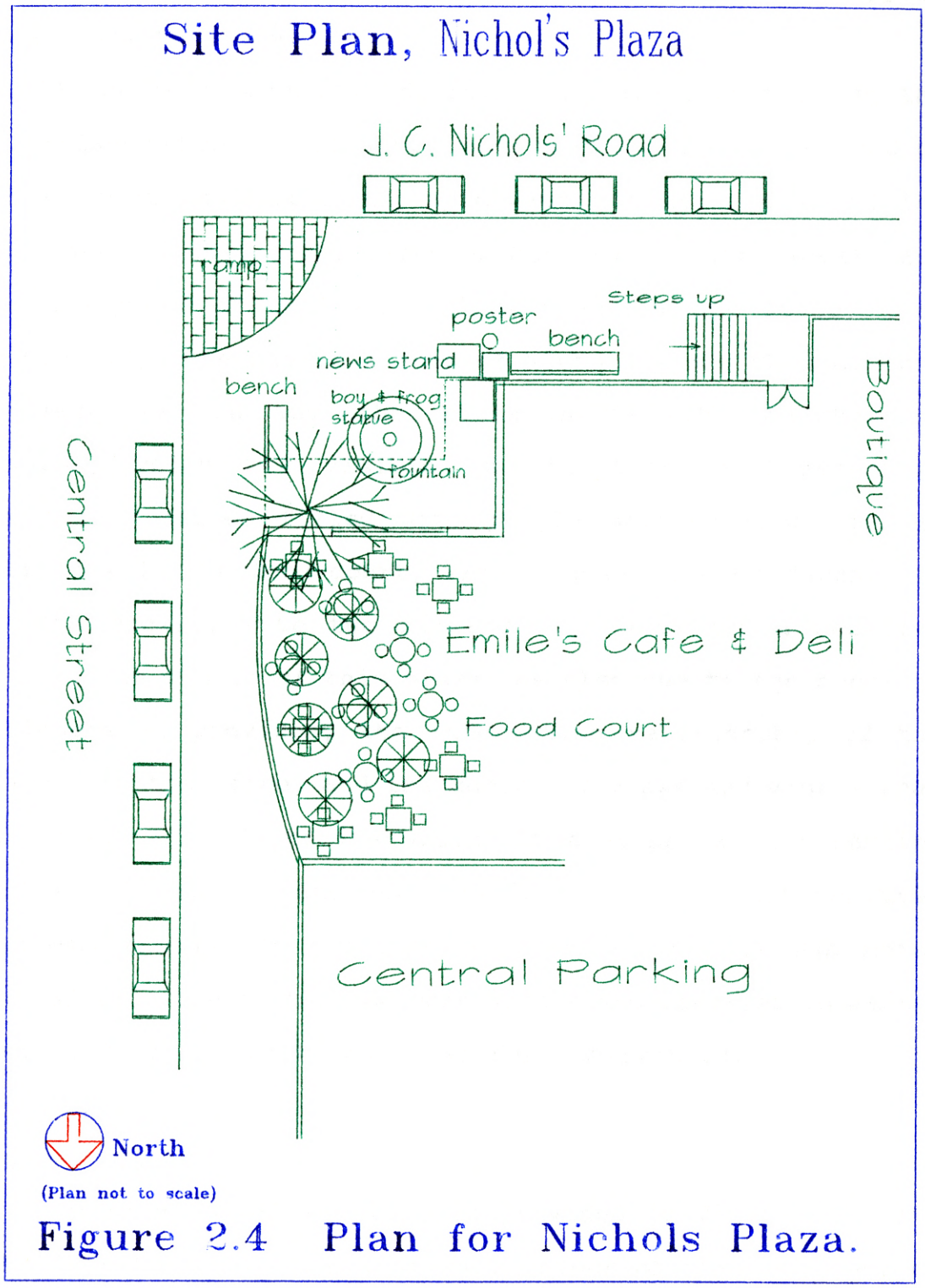

Figure 2.4 Plan for Nichols Plaza.

enjoy the street activity. Horse-drawn carriages were noticed to frequent this plaza in the process of transporting shoppers from place to place.

The author's choice of Nichols Plaza was influenced by the multi-faceted nature of activities that the plaza appeared to offer, including shopping, people-watching, leisure activities (eg. the athletic club, rides on horse-drawn carriages), and the enjoyment of food and drinks under canopy space, (see figure 2.4). The physical form of Nichols Plaza changed more consistently than any other plaza in CCP with the changing seasons, which was visible in the form of horse-drawn carriages, tables filled with people sitting under bright umbrellas in the food court, vivid banners and so forth.

Its proximity to two parking lots was also a decisive factor. The choice of this plaza was also due to the sense of enclosure it provides, the interesting relationship of the plaza with the street and the choice of views and vistas that this place affords to its users. It also has an interesting mixture of both old and new buildings with a richly textured shopping facade. In preliminary observations, it was noted that Nichols Plaza was much more active and livelier in warmer weather than in the times of winter observation.

Broadway Plaza

A plan of Broadway Plaza is provided in figure 2.5. The site is situated at the southeast corner of the intersection

of J. C. Nichols Road and Broadway Street. This plaza is an extension of the Eddie Bauer's clothing store and is a symbol of a "Grand Public Space", or "the impressive forecourt" as defined by Clare Cooper Marcus in People Places.[16] This plaza is dominated mostly by the activity of the Eddie Bauer's store which is a major attraction for teenage and the youth who come shopping for new fashions. This plaza faces an active pedestrian traffic coming from the residential side of the Broadway Street, the 47th Street and also along the J. C. Nichols Road.

Broadway Plaza is larger in area than the Nichols Plaza and is surrounded by high quality shops such as Eddie Bauer's, Jack Henry (clothes stores), Helzberg Diamonds and Russell Stover Candies. The physical form of this paved plaza embodies a circular water fountain and statue (the Mermaid fountain) which has a parapet around it. The parapet (alternate seating space) is functional in size and height, but looks away from the center of attraction, that is, away from the dynamism of the water fountain and the passersby. The entrance to the Eddie Bauer's store is flanked by benches on both sides and there is a tendency amongst users to use the limited seating spaces near the sides of the entranceway, which is the only one looking towards the plaza space.

Eddie Bauer's was closed when the author began her study,

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[16] Marcus, Clare Cooper & et. al. (1984), People Places, Van Nostrand Reinhold, New York, p. 18.

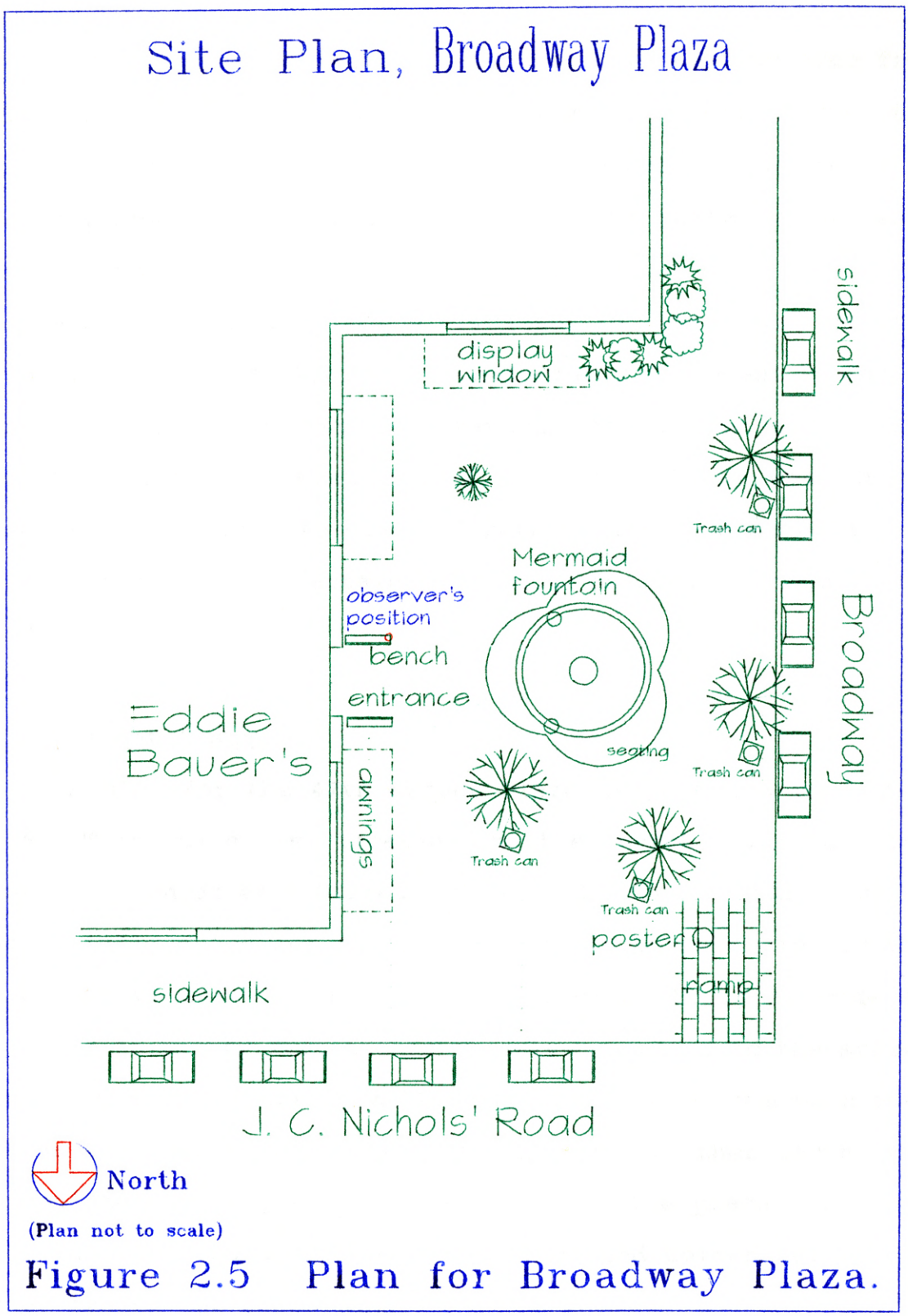

Figure 2.5 Plan for Broadway Plaza.

due to renovation work and the facades were kept covered from all sides. Later, as discussed in more detail below, the author observed important changes in the behavior patterns of pedestrians when the store reopened. The plaza became more active and sociable.

Broadway Plaza, though located in the same general vicinity as Nichols Plaza, is considerably different in design and appeared to be less sociable for reasons the author will identify later in chapter six. Broadway Plaza was chosen because it appeared to have the potential for becoming a more sociable plaza if certain carefully designed changes were made.

47th Street Plaza

A plan for the 47th Street Plaza is provided in figure 2.6. This site is located on the north side of the intersection of 47th Street and Central Street. This plaza is essentially a "street plaza" since it is an extension of the sidewalk proper. At some places the sidewalk is as wide as fifteen to twenty feet and is closely connected to the street and serves as a pedestrian link. It is essentially a more open plaza with vistas which take the audience farther beyond the immediate vicinity of the plaza itself. The plaza overlooks the lush layered detail of residential and commercial blocks that frames the background.

The Hilliyard Gallery, with its intricate balconies and

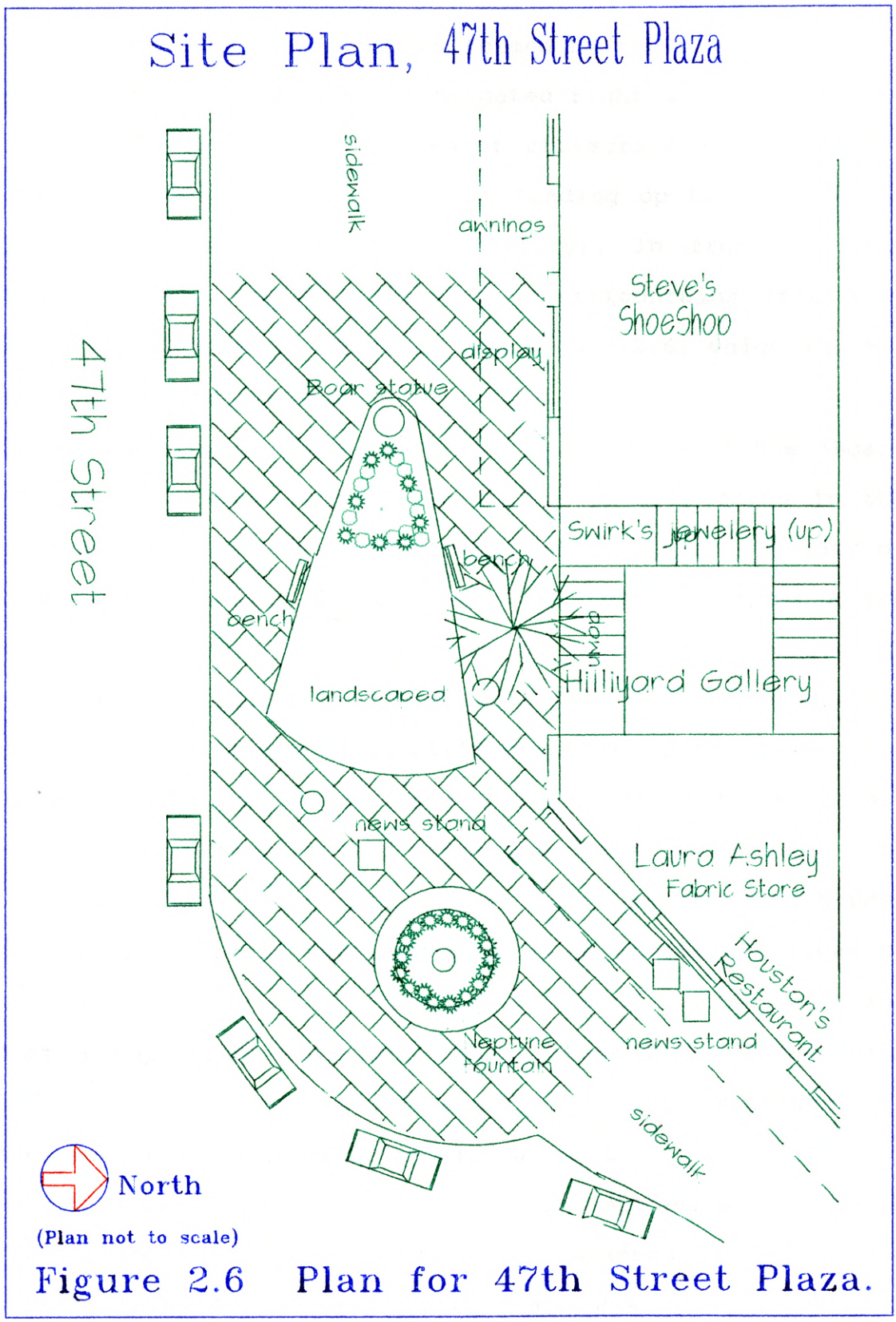

Figure 2.6 Plan for 47th Street Plaza.

Spanish architectural features formed by the red tiled roof and colorful wall facade, is situated right adjacent to this plaza and appeared to be a major attraction for users who pause here to relax on the steps leading up to the Swirk's Gallery (above the Hilliyard Gallery). In front of this gallery space, are two imposing water-fountains (the Boar fountain and Neptune fountain, see figure 2.6) which attract shoppers and tourists.

People stop at this plaza to rub the nose of the 'Boar-Statue' or at the 'Neptune Fountain' to drop coins in the water and also to take photographs at this place. Plenty of trees and beckoning devices such as steps and awnings are found in the 47th Street Plaza. One of the main attractions or focus of this plaza is the Classic Cup (Street Side) Cafe which is a restaurant diagonally opposite to the plaza, and the open eating space under the canopies afford a comfortable place to sit and relax and watch the street activities. The umbrellas and awnings both in the front and the south-west side of the Classic Cafe appeared to be preferred places to pause and eat a snack or sip a glass of wine, coffee, etc. The Classic Cup Street Side Cafe, being situated at a focal point from the street, becomes the theatrical stage for passers by. Here action is both performed and watched.

It was observed that this plaza was active and lively at all observation times in spite of seasonal changes. The justification for choosing this plaza was to identify this

plaza's liveliness and sociability.

CHAPTER THREE: LITERATURE REVIEW

CITIES, URBAN DESIGN AND PLAZA SOCIABILITY

After reviewing the physical structure of the three plazas, it is next important to understand the theoretical and conceptual basis for sociability in urban plazas. This is the task of this chapter, which overviews the literature on cities, plaza design and sociability.

As William Whyte (1980) demonstrates, sociability in the city often occurs in the spaces between and within buildings - i.e., public places in which different kinds of people gather, giving character to the city. The interpretation of sociability in this thesis is crucial to determine the rationale for behavior patterns in the three plazas described in chapter two. How built qualities of these plazas contribute to their sociability, is also considered in this study.

By sociability, as was explained in chapter one, it is meant the ability of the plaza to informally bring people together in a place, generate human activity and a sense of place. This definition relies largely on the research of William Whyte and his book The Social Life of Small Urban Open Spaces (1980) and is also guided by several premises based on Jane Jacobs' book, The Death and Life of Great American Cities (1961). In most general terms, this study analyzes the plaza in terms of environmental attributes that are conducive to social interaction in public open spaces. This analysis is

also guided by the literature pertaining to the works of Clare Cooper Marcus (1986) and Mark Francis (1987). The research also seeks to discern some architectural elements that contribute to the sociability of an urban public space. The nature of the study is to highlight salient issues and suggest a way to a better future for sociability and urban design.

The method the author used for the formal reading of the Country Club Plaza was inspired by William Whyte's video on The Social Life of Small Urban Open Spaces. This method is a typical qualitative approach which requires an open, free and sincere personal intuition and familiarity with the site. The reading process can be described in two steps. The first step is a general recognition of the place based on a several-day reconnaissance and a twenty-four-hour continuity of focus. One takes notes in regard to any flash reactions that occur on the site and tries to draw a first-impression map of the overall structure of the place. During this stage, besides the concentration on the emotional responses to the contents and quality of the built environment and its basic landscape, one should also observe people, speak with users and document it in order to deepen one's total experience of the place.

Since it is a personal experience of the physical environment within a short period of time, the depth and precision of the understanding towards the place developed will be preliminary and incomplete. However, the generalizability of the reading result could be improved by

using the guidance of certain conceptual criteria. Many researchers believe that there are certain similarities among places. If identified, these similarities can help to build places that work better. Some researchers are specifically interested in generalizing behaviorally and experientially these similarities into certain design criteria from various points of view. One such study is Responsive Environments (Bentley et al., 1985), which is based on the idea that human choice defines environment success. This has been discussed briefly in the literature review.

In his Inquiry by Design, Zeisel (1981) does a remarkable job of summarizing social-science methods which are used in the environment-behavior research field. The book contains a useful discussion on observing environmental behavior. According to Zeisel, observing behavior is both empathetic and direct, deals with a dynamic subject, and allows observers to be variably intrusive (Zeisel, 1981, P. 116). He summarizes only six elements in environment-behavior observation that an observer must pay attention to -i.e., who: actor; doing what: act; with whom: significant others; in what relationship (aural, visual, tactile, olfactory, symbolic); in what context (socio-cultural context); and where (physical setting).

Other important literature pertaining to the observation and environment-behavior research of the plaza and its subsequent study and conclusions is briefly discussed below.

Mark Francis' Work

The review by Mark Francis (1987) is a reflection of the research done over the past decade focusing on the previously neglected aspects of open-space quality which has helped provide recognition to the social, psychological, and economic benefits of urban open space. Francis illustrates that the non-use of parks, vandalism, and outdated facilities are examples of problems commonly identified with urban open spaces. He reaffirms that urban open-space research has originated from public awareness of the social failure of many urban open spaces. Relationship of traffic reduction to environmental quality of neighborhood streets has resulted from empirical studies, and in a similar fashion, relationship of neighborhood control to perceived safety grew out of empirical observations.

Francis observes that the fact that case studies have not always used comparable methods often makes it difficult to compare results. He agrees on the idea that urban open spaces should be publicly accessible (Lynch, 1981), designed and built for human activity and enjoyment and that the user should have the freedom to use the space, to claim and change the space through their use, as well as to transfer their right of use and modification to other individuals. Francis also attempts to distinguish some of the open spaces in urban settings, especially the plazas, neighborhood open spaces, streets and found spaces (informal open spaces of cities where

social life takes place).

Francis explains that the awareness of open spaces as the larger public landscape of cities has provided increased public support for design innovation and research activity. Some basic work on urban spaces and studies on the relationship between physical layout of urban spaces and safety have been completed which points to the psychological benefits of open space use. Francis takes pride in mentioning that, as a result of these studies, metropolitan cities, before approval of design plans have now required developers to show how plazas will contribute to overall design vitality. Thus research on plazas have contributed to a better understanding of the effect of physical design on plaza use.

Francis also explains that Joardar and Neill (1978) have observed that subtle differences in configuration effected user's enjoyment of plazas. They found that edges provided better viewing areas and sitting options than interior parts of the plaza. It has also been researched that plazas owned by their users as community land trusts, make an impact on behavior patterns, especially in its approach to maintenance, vandalism, etc. It has been studied with effect that influence of the network of spaces around the plaza itself (sidewalks, vacant lots, street corners, alleys) can be crucial to the plaza design and its eventual success.

It has also been researched by Sommer (1981) that users rate quality and taste of food bought at these places more

highly than those bought at supermarkets. Seamon and Nordin (1980) attribute the success of the space to the changing activity, or the 'place-ballet' that occurs over time. There is a need for inexpensive ways to attract life (such as a market-place) and activity to underutilized areas of cities. These can become centers where people would meet to buy, meet friends, and exchange information. These places contribute to the economic vitality of downtown areas because trips to these places often are tied up with trips to nearby businesses. It has also been found that innovative use of existing open spaces (by interpreting local history) recognizes the potential for urban space as a focus of environmental learning.

Francis also illustrates that found or informal places (where people naturally gather or meet, Carr et al., in press) comprise a long ignored part of the public landscape and the recognition of the importance of found spaces has contributed to the social life and culture of towns. Specific guidelines for the placement of street furniture, including news stands and trash containers, should be developed in order to increase opportunities for meeting and socializing at informal downtown open spaces. The needs of people at different stages of life are a major theme in urban open space studies. Francis also recognizes the need for the feeling of security, diversity and sense of comfort in a successful urban space. He articulates that adequate and comfortable seating, solar access, natural

settings for stress relief (Ulrich and Simons, 1986), water fountains (sound of water influences perception of environments, Anderson, Mulligan, Goodman and Regen, 1983) and protection from wind, rain, and other climatic elements have been found to be important reasons for open space use and satisfaction.

Open space preferences have been found to vary between socio-economic groups (Foresta, 1980). Francis also wants to take our attention to the fact that visual quality is often one of the highest priorities for designers and officials in creating an open space, although visual quality is frequently given lower rating by users. Meaning to space, symbol or reference influences user preferences (even if they don't use the space, Carr et al. in press). Both real and symbolic ownership or control has been determined to be an ingredient of people's satisfaction with community spaces (Fox, Koeppel, & Kellam, 1985; Hester 1984).

He reiterates the need to treat urban open spaces as an evolutionary process where spaces are continually evaluated, redesigned and repaired after construction. To create successful places, designers need to show restraint in design and a willingness to come back and adjust the space based on user evaluation and local participation. Last but not the least, Francis exemplifies the need for plaza spaces to be democratic, to afford opportunities for user involvement, control, and manipulation, opportunities for discovery,

delight and challenge, and to also contribute economic benefits to surrounding community.

William Whyte's Work

One of the most important studies done in the field of research regarding the "sociability" of urban open spaces are the studies and observations done by William H. Whyte (1980 - 1988).

Whyte wants us to reconsider the spaces that we take very much for granted - the street itself which can be the ultimate theatrical phenomenon with its diverse activities. Whyte identifies that zoning is not the ideal way to achieve better design of spaces. "What attracts people most is other people", so it is a must to choose the plaza location very carefully. It should be sited near office blocks and commercial centers where the possibility of a large number of people is very high. Whyte believes that a good plaza design can change the lifestyle of its users. The best used plazas are sociable places - places for meeting people, conversing, schmoozing, eating, exchanging goodbyes, and so forth. Whyte observes that the most "used" plazas have a higher than average proportion of women since they feel safer and relatively find it more comfortable to be in.

Whyte suggests that plaza use is essentially sporadic, usually more during peak hours and can vary considerably according to seasons and weather. The way people distribute

themselves over the space, however is fairly consistent, with some sectors getting heavy use day in and day out, others much less. Whyte further commemorates that most activities happen right in the center of the plaza amongst everyone else. He observes that this way, the people have more choices and can continue conversing, discontinue when they want to and this means freedom of real choice. It is also noticeable that some kind of silent communication seems to be taking place between the plaza users. Each responds to the others moves. He observes that this is not conscious, but perhaps instinctive. He emphasizes the need to understand and respect this innate experiences and embrace them in the design process of plazas.

One of the major contributions by Whyte in the study of urban plazas is regarding the effect of seating patterns on the behavior of plaza users and the way they respond to the different choices. The possibility of choice is as important as the exercise of it. Whyte also illustrates the importance of sunshine for the satisfaction of the user. Another important feature is the sightline. Steps work for the same reason. The range of space provides an infinity of possible groupings, and the excellent sightlines make virtually all the seats great for watching the theater of the street. Comfort of vision, comfort of feel, is very important. If people do not see a space, they will not use it. He asserts that sunken plazas don't work, because its not psychologically comfortable. Things that are happening at eye level, is what

interests people most. The easier the flow between the street and the plaza, the more likely people are to move between the two - and to linger and to sit. Whyte also wants to bring our attention to the fact that the users don't care much for building design, form and aesthetics of surrounding spaces. However, a sense of enclosure contributes to the enjoyment of using a plaza.

Trees, water (and access to water), the aura of water-fountain, food (food attracts people who attract more people), vendors, art and sculpture, street artists, etc have major roles to communicate with the plaza space and in no way should be overlooked. The multiplier effect is tremendous. It is not just the number of people using them, but the larger number who pass by and enjoy them vicariously, or even larger number who feel better about the city center knowledge of them. For a city, such places are priceless, whatever the cost. They are built of a set of basics and they are right in front of our noses, if we will look.

The key space for the plaza is the street and the traffic lines intersecting the plaza. The relationship to the street is integral, and it is far and away the critical design factor. A good plaza starts at the street corner. Whyte also raises the question of the saturation limit for the plaza. How many people is too many ? Irrespective of city sizes, pedestrian patterns are similar. Given the basic elements of a city center such as high pedestrian volumes, concentration

and mixture of activities, people in one place tend to act much like people in another, irrespective of the cultural differences. However, due to lower densities in smaller cities, it becomes essential for the plazas at such places to use tactics that would enrich street life (like street artists, painters and musicians, palmists, vendors, and so forth) and enhance the richness of experience by suitable design measures.

However, William Whyte's study is highly focussed on the plaza stage itself and doesn't throw much light on how the socio-economic structure of the surroundings (street-plaza relationship) contribute in the place-making process. In this regard, other researchers offer important ideas and results.

Jane Jacobs' Work

Clues to a plaza's contextual success are provided by Jane Jacobs in her book The Death and Life of Great American Cities (1961). She contends that small urban spaces such as parks and plazas are creatures of their surroundings and the way these surroundings generate mutual support from diverse uses. She believes that "places are directly and drastically affected by the way its neighborhood acts upon, or surroundings should consist of highly diverse conditions. To generate diversity, Jacobs presents four conditions which, she says, are indispensable.

First, she argues that urban areas should have a good

mixture of activities, that is that there should be some primary uses, which are establishments which draw people necessarily to themselves, for example, offices, factories, and educational institutions. She asserts, in addition to these primary uses, there should also be some secondary uses, by which she means uses which arise in response to primary uses, such as, restaurants, bars and shops. The primary uses must be effective to insure the presence of people who go outdoors on different schedules and are in the place for different purposes, but who are able to use many facilities in common.

Second, she criticizes long blocks for not providing enough turnings, thus, minimizing chances for social encounters. The bedrock attribute of a successful city district is that a person must feel personally safe and secure on the street amongst all strangers. In view of this she recommends short city blocks. She emphasizes the need for the continuous presence of people on the streets, the need for the residential blocks to face the streets to insure safety of both residents and strangers. Third, she recommends a diversity in the ages of the buildings in a district. In other words she emphasizes the need for both new construction or costly renovation that attracts well established enterprises, as well as lower rent facilities that can house businesses with lower profit margins, in order to maintain varying economic yields. It is also the richness of human variation

that gives vitality and color to the human setting. A good plaza location should offer a multiplicity of choice, intensive city trading, immense concentrations of people, intricate mingling of uses and complex interweaving of paths.

Jacobs' fourth and last condition relates to the sustenance of high density in urban districts. In condition one, Jacobs emphasizes the primary uses that draw people into a district whereas, in the fourth condition the emphasis is on keeping people in the district. Jacobs contends that high densities play an important role in healthy street life and sociable urban spaces.

Responsive Environments

The study of Responsive Environments (Bentley et al., 1985) suggests that the success of an environment depends on the human choice that it offers. The authors argue that "a responsive environment should provide its users with an essentially democratic setting, enriching their opportunities by maximizing the degree of choice available to them". The authors identify seven levels which are said to influence the choices people can make in a designed place. These seven qualities are: permeability, variety, legibility, robustness, richness, visual appropriateness, and personalization. The first two qualities, which are closely related to the built environment, are further explained in brief below:

1. Permeability: Permeability is closely related to the

physical form of a place. It is the key measure of a place's responsiveness: "Only places which are accessible to people can offer them choice" (Bentley, 1985). In terms of public space, permeability refers to the number of alternative routes it offers from one destination to another in the city district.

2. Variety: The authors argue that the more the variety, the better. The only dilemma is to maximize variety in practical ways, especially through design and policy decisions. The authors identify three main factors which will affect the variety of uses a place can support: a) 'demand' for the range of activities to be located there, b) the possibility of supplying 'affordable' space to house these activities, and c) the extent to which the design encourages 'positive interactions' among the activities.

3. Legibility: According to the authors, legibility is the quality which makes a place mentally graspable. Local restaurants and street corners are a great place to ask people about their perceptions of the environment.

4. Robustness: A place that can be used for many different purposes has the quality of robustness. In terms of public space, the authors believe that the design of the edge of the space is especially important to gain this quality, 'because it is here that most activities takes place. The authors also develop several criteria to encourage robustness including: encouraging active building fronts, supporting pedestrian use

against the inhibiting effects of vehicular traffics, and creating a pleasant microclimate.

5. Visual appropriateness: Visual appropriateness relates to people's responses to individual buildings. To check visual appropriateness, the architectural elements like the vertical rhythms, horizontal rhythms, skylines, wall details, windows, doors, and ground level details should be checked.

6. Richness: Richness relates to the variety of sense-experiences which users can enjoy. A rich environmental experience can contain the sense of motion, smell, hearing, touch, and sight. Visual richness comes from visual contrast in relation with viewing distances, and visual complexity in terms of viewing time.

7. Personalization: It makes clearer a place's pattern of activities, which is particularly valuable in robust environments. Personalization closely relates to the legibility of individual buildings. In terms of public buildings, personalization can be realized through architectural elements such as finistrations, facade treatment, window cills, flower beds, and so forth which would mark the stamp of the place's or person's tastes and values.

From the study of these seven qualities, we can infer that Responsive Environments is a comprehensive work on issues that influence people's experiences of the environment. This will be a departure point, which will help me in reading the built environment of the three plazas at Country Club Plaza, Kansas

City.

Clare Cooper Marcus' Work

According to Clare Cooper Marcus & et al. in People Places (1984), a plaza has been defined as a mostly hard surfaced, outdoor public space from which cars are excluded. Its main function is as a place for strolling, sitting, eating, and watching the world go by. Unlike a sidewalk, it is a place in its own right rather than a space to pass through. Although there may be trees, flowers or ground cover in evidence, the predominant ground cover is hard. The activities in the plaza is affected by the particular building function. The primary people generator have a vested interest in the appearance of the space and in how it is used. One of the activities most observed is "Sitting" in plazas. On the increase are public displays of affection, smiling, street entertainment, crazy characters, groups engaged in side-walk gossiping and impromptu sidewalk 'conferences' among business persons.

Clare Cooper Marcus illustrates that variations in detailing of plaza form can transform an empty stage set into animated outdoor lunchrooms. According to her, the main plaza users are people living alone, who may seek relaxed conversations and companionship during the lunch hour, and to escape the stress of the office environments. She emphasizes on the need to study the visual and aesthetic design, the historical ground, the importance of real estate structure,

economics, the social-cultural context and the social-historical influences on the plaza.

There is also a need to understand the larger philosophical issues of buildings and open space, the tensions inherent in city design and development, and issues of figure and ground, space definition versus occupation, and the solid-void dialectic between spaces. Issues of human scale or the desirability of twenty four hour activity in open spaces can be one of the major factors which will have to be dealt with, while designing the plaza. The spatial and aesthetic qualities of various building forms and the areas enclosed by them, morphological classification of urban spaces will give an insight into these.

It is important to develop universal axioms and meaningful methods for analyzing and exploring the more concrete issues of casual use of real spaces by ordinary people. Another issue is the relationship of these spaces to the activities and experiences they support and the connection between people's desires and needs and the built environment. The accent should be more on the human use of public spaces and this can be done at the policy, planning and managerial levels than at the design stage itself.

Reviewing this material, she categorizes downtown spaces in many ways: by their size, use, relationship to street, style, predominant function, architectural form, location and so on.

She identifies several general forms:

1. The Street Plaza: A street plaza is a small portion of public open space immediately adjacent to the sidewalk and closely connected to the street. It sometimes is a widening of the sidewalk proper or an extension of it under an arcade. Such spaces are generally used for brief periods of sitting, waiting, and watching, and they tend to be used more by men than women. Successful plazas should have a good seating edge, a widened sidewalk, the bus waiting place, a pedestrian link, the corner sun pocket, the arcade plaza (unlike the corporate foyer, the decorative porch, the impressive forecourt, the stage set, and so forth.)

2. The urban oasis: It usually has the outdoor lunch plaza, the garden oasis, and the roof garden.

3. The transit foyer: which has the subway entry place, the bus terminal, and other points of circulation exchange and interaction.

4. The Grand Public Place: like the city plaza or the city square is similar to old-world town square or piazza. When located near a diversity of land uses, the plaza tends to attract users from a greater distance and in greater variety (by age, gender, ethnicity). Such an area is often big and flexible enough to 'host' brown-bag lunch crowds; outdoor cafes; passers through; and occasional concerts, art shows, exhibits, and rallies.

Most plazas, she says, should be able to accommodate peak

rush-hour flows to and from building entries, passing through, people using the plaza as a short cut or a pleasant walking-through space, access to a cafe, bank or other retail use peripheral to the plaza, access to seating or viewing areas, people entering the plaza in order to sit in the sun, eat a bag lunch, view an exhibit, or listen to a concert. Good places tend to be all of a piece - and the reason can almost always be traced to a human being.

Merging of these different activities create the place ballet. Qualitative criteria for identifying a sense of place are also crucial in the design process and can contribute to protecting and enhancing existing environments or designing new places with greater human significance. A renewed sense and appreciation of place can be disseminated, displacing the over-engineered environment, or perhaps representing a step toward integrating urban life. Working with users in the cities, we might discover ways to build into new areas, more authentic qualities of uniqueness and thus assure greater feelings of identity with the places where we spend our daily lives.

Conclusion

The key aim of this literature review has been to identify research findings that will help to formulate design guidelines that might practically enhance the sociability of the three plazas at CCP and urban plazas in general. Another

aim of this review has been to provide some initial research insights on plazas that other studies can extend and use to evaluate other urban outdoor plazas so that they become "positive environments for social interaction". Most importantly, the findings from the literature review can be used to establish a procedure for studying the activities, physical form and structure of the three plazas in CCP.

This literature review has addressed factors associated with the location of the plaza and its physical characteristics. The location of the plaza is important, since several researchers have argued that the primary factor determining the potential for sociability in an urban open space is its location in relation to its potential users and its nearby activities (Whyte 1980; Jacobs 1960; Rutledge 1976; Francis 1988). In other words, the plazas location is important in bringing people to it.

As already mentioned above, one of the necessary conditions for thriving sociable plazas is having a sufficiently dense concentration of people in the surrounding areas (Jacobs 1960; Whyte 1980). Jacobs (1960) argues that in order to ensure a busy street life and diversity in cities, 'a district must have a sufficiently dense concentration of people, for whatever purpose they may be there' (p. 200). The argument is further supported by Whyte who contends that high downtown concentrations of people strongly influence the use of open spaces in a positive way (1980, p. 90) in that high

densities provide greater number of users. This issue of location will be central in the analysis of the three small plazas in CCP in the following chapters.

A second criterion affecting the sociability of urban plazas is that the space should not only be inviting to a variety of people but, in order to maintain the inflow of people, the surrounding of the plaza should provide a mixture of uses and activities (Jacobs, 1960 p. 98; Francis, 1987 p. 29, 1988, p. 57). Jacobs contends that small urban spaces such as parks and plazas are creatures of their surroundings and these surroundings generate mutual support from diverse uses (Jacobs, 1960, p. 98).

Jacobs argues that a key to urban diversity is a mixture of primary uses, by which she means establishments such as offices, factories, and educational institutions, which necessarily bring people to them for specific purposes. Further, she asserts that there should be more than one primary function in a certain area. The users must have different schedule of utilizing these facilities to insure a consistent flow and presence of people in the area (ibid. p. 152). Jacobs argues that in addition to primary uses, there should also be secondary uses, which she defines as uses which emerge in response to the presence of primary uses and serve the people drawn by primary uses. Examples of such uses include restaurants, bars and shops (Ibid., p. 152). This issue of surrounding mixture of activities and uses will be

central to my analysis of the three plazas in CCP.

A third factor integrally related to plaza location is the plaza's relationship with the street and street corners. This point is especially emphasized by Whyte (1980), who argues that there is a direct relationship between the number of people using a plaza and the pedestrian flow on adjacent streets. He contends that plazas should be located near heavily used streets or street corners.

To maintain a constant flow of people, streets near the plaza should be a link between major activities such as offices, shopping areas and restaurants. Whyte also argues that plazas be located near 'choke points' such as subway stations and bus stops, since large numbers of people are often concentrated at these places (p. 12 & 54).

In addition, Whyte argues that street corners have a special significance, since, if they are busy, they contribute considerable pedestrian traffic that may use the plaza (1980, p. 54). The issue of relationship of street and street corners with the plaza will be an important research concern in regard to the three CCP plazas.

If the location of the plaza is a crucial first factor which influences a plaza's sociability, physical characteristics of the plaza itself are also important, since they help to retain the users who come into the plaza. Two major components can be evaluated in regard to a plaza's physical elements: (a) the transition between street and

plaza; and (b) sittable spaces, which provide users a place to watch linger, and comfortably converse.

The criteria to assess these factors are again drawn from Whyte's book, especially chapters two and five, which discuss plaza sitting and street-plaza transition (1980). Whyte contends that the 'transition should be such that its hard to tell where one ends and the other begins' (p. 57). He argues that the relationship between the street and the plaza should stimulate 'impulse use', by which he means the quality of a space to draw people into it without any hesitation or conscious consideration.

Whyte believes that a completely sunken plaza or a plaza above passersby's eye level will not stimulate impulse use. On the other hand, beckoning devices like trees and entrance markings, if designed carefully, can stimulate use of a plaza, since they physically and visually draw people in. In Whyte's argument, sitting is crucial, since he demonstrates that it is a primary element for keeping people in a plaza. The issue of all forms of sitting and beckoning devices will be of central concern in my analysis of the three plazas in CCP.

The next chapter analyzes the three plazas in Country Club Plaza through behavioral mapping. In this analysis, the design factors highlighted above will be crucial to a thorough understanding of the relative success of the three plazas as indicated by observable activity.

CHAPTER FOUR: METHODOLOGY & FRAMEWORK OF ANALYSIS

If William Whyte and other urban scholars offer conceptual understanding as to how sociability happens in urban plazas, the next need is to find ways to analyze CCP in terms of that conceptual understanding. The following factors are examined in regard to the three small plazas of CCP described in chapter one and illustrated in figures 2.4 - 2.6 : (1) Location of the plaza, (2) street-plaza relationship (3-block radius around the plaza), (3) the physical design and context of the plaza (sittability, dynamism of activity, focus, water, trees, food, etc), (4) users' environmental behaviors in the plaza, depending on formal, physical and visual attributes of the setting, and (5) attitudes of plaza users, designers and policy makers. The argument is that each of these factors provide a way to assess the potential of the three plazas in CCP to foster social interaction.

These factors are discussed in detail first, in terms of their value for an evaluation of plaza sociability; second, in terms of methodology used to understand each factor empirically. Methods used to gather information on these factors include observation supported with behavior mapping and photographs. Behavior mapping is "a tool that social scientists have developed to study people's activities in a systematic way" (Davies, Love and Ziegler, 1981, p. 26). It was used in this study to document sequences of behavior in

the three plazas. Figures 2.4, 2.5 and 2.6 illustrate the base map used in the research. Users were differentiated by sex, age, and whether alone or in groups.

The mapping was done both on weekdays and weekends during different weather conditions. This schedule of observation was chosen, since some differences in usage of the plaza were expected due to contrasting routines on weekdays and weekends and also due to differences in winter and summer weather conditions. The CCP gets a lot of visitors during the Christmas season. Most observations were made after December 1992 during winter, with the temperatures ranging from 32 degree Fahrenheit to 68 degree Fahrenheit (see table 4.1). Although the observations began in October 1992, the organized formal behavioral map recordings were conducted on Thursday, December 17, 1992; Saturday, December 26, 1992; Saturday, January 23, 1993; Tuesday, February 2, 1993; Wednesday, March 24, 1993 and Friday, March 26, 1993 during the researcher's 'spring break' at her university.

As already said, the choice of these observation dates was based on the climate of Kansas City and also the variety of activities offered by the plaza at two different times of the year. Christmas time is cooler and has a festive aura about it. There is a large number of pedestrians and shoppers in the plaza who come from more distant locations than usual, to enjoy the shopping experience. The yearly illumination of Christmas lights, which this plaza has become famous for, is

	Temperature (F)		
	Morning	Noon	Afternoon
Thursday (Dec. 17, 1992)	42	58	50
Saturday (Dec. 26, 1992)	45	56	54
Saturday (Jan. 23, 1993)	34	40	32
Tuesday (Feb. 2, 1993)	38	44	41
Wednesday (Mar.24, 1993)	44	60	52
Friday (Mar. 26, 1993)	45	68	60

Table 4.1 Records of Temperature at Kansas City, Missouri 1992-93 (Source: National Weather Service)

also an important event which draws people from neighboring locations. The large crowds of people at this time, gives an opportunity to observe people in all facets of the shopping experience - such as window shopping, waiting, eating, and in other pedestrian-oriented activities.

The spring-break observations are conducted in warmer weather, when the outdoor food-courts are usable and people actually enjoy the weather and become more visible characters in a theatrical stage. Good weather brings activities like carriage-riding and outside eating into the plaza areas and this activity supplement the variety of functions offered by the plaza as a place of shopping. Thus, this spring observation period gives me an opportunity to observe the plaza when its physical form is transformed more due to the function it offers than due to the number of people occupying it.

Weekday Observation

Considering the opening times of most shops (10:00 a.m to 6:00 p.m., Monday through Saturday), the street life and shopping experience being more varied during day time, and the weather being colder in the evenings, the author preferred to have observation periods from 9:00 a.m. to 6:15 p.m. (see table 4.3). Also, many of the CCP establishments are not typically open past 6:00 p.m. on weekdays except on Thursdays, and till 9:00 p.m. on weekends, except on Sundays, when they

open at noon and close at 5:00 p.m.[17] Based on preliminary physical reading of the three plazas, the researcher observed their behavior patterns during different time periods, so as to encompass a wide variety of plaza activities.

During each observation period, all three plazas were observed in a continuous sequence, starting with the 47th street Plaza, then moving on to Nichols Plaza and finally the Broadway Plaza. All three observation periods involved twenty-minute behavior recordings and one-minute passing vehicle and pedestrian counts at the end of each observation period. Considering the time for moving between sites, each of these three different time observation phases took, on an average, about one hour and fifteen minutes.

In each of these observation periods, the author's focus was divided between two critical factors: (a) How people use the plaza, which was recorded by observing the routes of user movements; and (b) who the people were, which the author determined by categorizing the type of user in terms of their sex, age, or whether they were alone or in group.

Based on her earlier field experience in the three plazas, the researcher noticed that the appearance and age group of users closely related to certain potential activities in which they would participate. Accordingly, the author categorized the people into three groups (see table 4.2) which distinguish the main difference of activities in these plazas: **shoppers**,

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[17] Data drawn from the Country Club Plaza Directory, May 1992.

people who enter stores for transactional or window-shopping purposes, for example, customers who visited different business establishments (both indoors and outdoors), and appeared to have a meaningful dialogue with members or shopping goods of such establishments, or people who paused near store-windows and appeared to scrutinize the goods for more than a few seconds;a **passersby-group**, which encompassed people moving at a relatively faster pace between sidewalks, residences and parking lots, who appeared not necessarily to come to spend time at the plaza itself, but were on their way (on foot) to their respective destinations in the plaza during the author's observation period; and **street-watchers**, the people who "hang out" in the plaza to look at other people, and other users who appeared to be more or less static and seemed to have no clear reason to be at the plaza, for example: people sitting on benches for more than five minutes, folks leaning on balconies, steps and wall facades, people taking photographs and admiring statues and people waiting for taxi-cabs, trolleys or horse-drawn carriages.

In regard to the identification differences, the author divided the observation subjects into three groups based on her personal judgement: adults, teenagers and children. The researcher distinguished between children and teenagers based on her own personal sense and judgement. The same method was used to identify age groups in other categories. The author categorized age group among adults in ranges of 20 yrs-30 yrs,

35 yrs-50 yrs, 55 yrs-70 yrs and above 80 yrs. Similarly, among children, the age group was categorized between 6 months-2 yrs, 3 yrs-6 yrs and between 7 yrs to 12 yrs. The breakdown of age groups between various user types would serve the purpose of assessing the demographic background of the plaza users. This would help the writer in framing adequate and appropriate design guidelines for the needs and preferences of future plaza users. Assessments regarding age group were made purely on her own personal sense and this was further supported by clothing styles worn by users, visible signs of aging, and so forth.

The reason the author did not distinguish user activity in terms of individual business establishments is due to the limitations of her abilities as a single observer to watch and record all activities in the limited time period. Because of the density of the buildings and their linear forms, the author couldn't keep accurate trace of the shops or restaurants which users entered or left, especially at the times when large amounts of sidewalk and plaza activities were occurring.

In addition, the writer also separated gender difference during the observations. It was apparent during the short-period observations, (in terms of both observing time in one trip and the number of observation trips), that women were present in the plaza in a remarkably large number. However, when the author began to study these data, it was found that

this short-period observations did not provide a strong data base to capture the regularity of the gender difference in relation to both using time and using places in the plazas. Table 1.3 represents the number of users at the three sites during different observation times on weekdays and weekends.

Clearly, the categories the author uses here (especially the age group) are not for a precise data collection, but rather, for primary aggregate account which serves the descriptive purpose of this study.

BEHAVIORAL MAPPING PROCEDURE & METHOD OF OBSERVATION

The author observed the behavior patterns of the three selected plazas based on the physical-form readings as discussed in chapter two. The observation sites are indicated in figure 1.1. Each site was observed at three different times during the day - morning (9:00 - 10:10 a.m.), noon (12:05 - 1:15 p.m.) and evening (5:10 - 6:20 p.m.). The researcher assumed that these three observation times would capture the variations of behavior that compose the daily activity patterns in the three plazas.

The morning observations picture the street activity pattern when most shops start business; noon and afternoon hours are obviously two valuable time frames for on-street activities in a commercial area like CCP. The business establishments maintain the same business hours on Monday, Tuesday, Wednesday, Friday and Saturday, but on Thursday, the

FORMAT OF OBSERVATION TABLE USED FOR BEHAVIOR MAPPING

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults								
	Teenagers								
	Children								
	Total								
Passers by	Adults								
	Teenagers								
	Children								
	Total								
Street Watcher	Adults								
	Teenagers								
	Children								
	Total								
Gathering Size	Single								
	Group								
	Average Group Size								
********** Summary **********									
Aggregate Count	Shoppers								
	Passers-by								
	Street-Watchers								
	Total (M, F)								
	Total Users								

Table 4.2 Categories of pedestrians entering the observation site at CCP. Morning represents 9:00 a.m. - 10:10 a.m.; noon, 12:05 p.m. - 1:15 p.m.; and afternoon, 5:10 p.m. - 6:20 p.m.

	No. of Users on Site, Total								
	Nichols			Broadway			47th Street		
Time	9:00am to 9:20am	12:05pm to 12:25pm	5:10pm to 5:30pm	9:25am to 9:45am	12:30pm to 12:50pm	5:35pm to 5:55pm	9:50am to 10:10am	12:55pm to 1:15pm	6:00pm to 6:20pm
Tue. (Feb. 2, 1993)	35	61	114	44	80	80	54	127	172
Wed. (Mar. 24, 1993)	36	59	110	49	76	84	59	134	172
Thu. (Dec. 17, 1992)	46	92	126	77	110	121	69	171	214
Fri. (Mar. 26, 1993)	43	99	134	54	121	185	77	216	287
Sat. (Jan. 23, 1993)	43	98	123	49	90	92	68	152	182
Sat. (Dec. 26, 1992)	57	114	189	85	170	284	88	199	302

Table 4.3 Comparisons of the number of users during the different observation times on weekdays and weekends at the three observation sites.

stores remain open till 9:00 p.m. (three extra hours than usual working hours) and on Sundays, the stores are opened from 12:00 noon to 5:00 p.m. In the observations taken before spring break, my focus on observation was how people used the three plazas by recording the routes of their movements. During spring-break observation, my focus turned to who the people are by categorizing the type of people who were entering the observation sites at the observation times.

A numerical analysis of the preferred pedestrian routes and type of user associated with it would help in understanding optimum use of various resources on these routes and clarify traffic patterns which would help in carrying out future design recommendations.

Weekend Observation

It is common knowledge that weekend is an ideal time for many people's shopping and entertaining, while the business scene is also more relaxed. Definitely, this shift from weekday to weekend mood should result in some difference in the behavior patterns. The observation method used on the weekends was similar to the weekday observation, which included recording of behavioral routes and categorizing user groups.

The behavioral reading of the plaza is done through observations and this was decoded in the form of behavior maps. Environmental behavior was observed to determine the

various ways people used the plaza environment, the opportunities and constraints that the plaza environment presented, and the relationship between different activities that took place in the plaza environment.

The behavior-mapping was done by recording the flow patterns of users on site maps for the three plazas. The map codings for behavior maps are as follows. The patterns of movement were denoted in solid red lines, relative to user-intensity on that route. A single circle (standing) or triangle (sitting) by itself represents a lone pedestrian, while a cluster of symbols indicate two or more persons per group (see key provided with each behavior map). Further, groups of pedestrians are separated from the single users by a circle drawn around the symbols. The author also differentiated the gender of pedestrians by adopting red symbols to indicate female users and blue symbols to mark male users. Similar to weekday observations, the observation of each of the three plazas were carried out in a sequential order from morning to noon to afternoon (see table 4.3).

The analysis of plaza users will lead to the identification of criteria to evaluate the three plazas in terms of sociability. The analysis of the physical design and context will help to evaluate the contextual fit of the three plazas in terms of their physical and social surroundings. The analysis will also help to understand the plaza formally and behaviorally. This evaluation is carried out in chapter five

through a description and analysis of such physical attributes of the plaza as overall size, amount and kind of seating, spatial relationship to major pedestrian flows, and so forth.

CHAPTER FIVE: A BEHAVIORAL READING OF NICHOLS PLAZA

To study the regularities of people's behavior and the relationship of that behavior to the physical settings which is needed to sustain the behavior, observation of place is important. Based on the author's understanding of the physical environment of Country Club Plaza, the behavioral aspects of the plazas through observational methods are discussed below.

For observing Nichols Plaza, the researcher chose to sit under a tree in front of Halls', a large departmental store (see figures 1.1 and 2.4), since this location has the vantage point of an excellent view of the plaza. This plaza was observed at different times of the day during her observation visits. These periods involved twenty minutes of observation and a one-minute passing pedestrian and vehicle count at the end of each observation period. The author assumed that this length of time would adequately identify the variations of behavior that compose the daily activity patterns in Nichols Plaza. The results of these observations are summarized in tables 5.1 - 5.6 and figures 5.1 - 5.12.

As a result of the observations made over the winter and spring, the author noticed that Nichols Plaza is one of the most active plazas in CCP during warm weather. This plaza has a wide range of activities immediately surrounding it, including the Athletic Plaza (a health club), the Cafe (a fast food place), the Superlatives (an art and gift store) and

Circle Art Gallery, fountains, open parking spots and stores which provide regular street activity. This plaza appeared to be more active during warmer weather, since colorful awnings and umbrellas render a festive atmosphere to the plaza along with people.

For clarity of study and a deeper interpretation of both the numerical studies and the behavior mapping, the analysis of Nichols Plaza has been divided into two sections. In the first section, observation tables have been analyzed to compare user-patterns and interpret meaningful relationships. In the second section, the flow-patterns and the cluster-patterns of user movement, including the most commonly frequented or 'resting' places have been discussed and examined with the help of behavior maps .

1. Analyzing Aggregate Counts for Nichols Plaza

Tables 5.1 - 5.6 illustrate aggregate count of users in different time periods on six different observation days. The tables represented below are indicative of an average behavior pattern for all shoppers, passersby and street-watchers observed on the different observation days. The tables are arranged by user-type, age-group, gender, gathering size and time of day.

A summary of aggregate counts for all user-types is also listed towards the end of each table for an intelligible interpretation of resultant data. The summary provides an

articulate base for clear differentiation, in terms of the different behavior patterns and temporal differences. The summary of Tuesday, Wednesday, Thursday and Friday's observations are presented in tables 5.1 - 5.4, while the information obtained on weekends is summarized in tables 5.5 and 5.6. December 26, 1993, being the day after Christmas, brought unusual traffic inflow to the plaza, which helped in identifying some unusual behavior patterns tabulated in table 5.6.

Before interpreting the tables, the author would like to review briefly the patterns of activities in relation to the different user groups as originally explained in chapter four. Passersby are typically the group of people who walk in a faster pace as compared to other pedestrians in the plaza and they are often on their way to their residences, offices, or parking lots. Shoppers are a second major observation category and it was among this group of people, that the author mostly found the activities like strolling and window shopping, and talking with friends. Street-watchers were the category of people who tended to sit on benches or pause near the fountain area and watch the crowd moving by. Among this category was also included the group which waited on their friends and family outside business establishments, or people who waited for taxis, trolleys and horse-drawn carriages.

Table 5.1 summarizes Tuesday's reading results in regard to the user groups who entered the observation site at Nichols

NICHOLS PLAZA, USER GROUPS, Tues., Feb. 2, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Femal
Shopper	Adults	1	2	1	2	4	8	6	12
	Teenagers	2	2	2	4	2	6	6	12
	Children	0	0	1	0	1	2	2	2
	Total	3	4	4	6	7	16	14	26
Passers by	Adults	5	18	12	28	16	37	33	83
	Teenagers	1	2	1	2	4	14	6	18
	Children	0	0	2	3	3	6	5	9
	Total	6	20	15	33	23	57	44	110
Street Watcher	Adults	1	0	1	1	3	3	5	4
	Teenagers	1	0	0	0	0	2	1	2
	Children	0	0	0	1	2	1	2	2
	Total	2	0	1	2	5	6	8	8
Gathering Size	Single	11		14		42		22	45
	Group	7		12		21			
	Average Group Size	2 - 3		2 - 4		2 - 5			
********** Summary **********									
Aggregate Count	Shoppers	3	4	4	6	7	16	14	26
	Passers-by	6	20	15	33	23	57	44	110
	Street-Watchers	2	0	1	2	5	6	8	8
	Total (M, F)	11	24	20	41	35	79	66	144
	Total Users	35		61		114		210	

Table 5.1 Categories of pedestrians entering Nichol's Plaza for Tuesday, February 2, 1993. Morning represents 9:00 am - 9:22 am; noon, 12:05 pm - 12:27 pm; and afternoon, 5:10 pm - 5:32 pm.

NICHOLS PLAZA, USER GROUPS, Wed., Mar. 24, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	0	2	1	1	3	6	4	9
	Teenagers	1	1	1	4	1	5	3	10
	Children	0	0	0	1	2	2	2	3
	Total	1	3	2	6	6	13	9	22
Passers by	Adults	6	19	11	30	16	39	33	88
	Teenagers	2	3	1	3	7	12	10	18
	Children	0	1	2	3	2	5	4	9
	Total	8	23	14	36	25	56	47	115
Street Watcher	Adults	1	0	0	1	3	2	4	3
	Teenagers	0	0	0	0	0	3	0	3
	Children	0	0	0	0	2	0	2	0
	Total	1	0	0	1	5	5	6	6
Gathering Size	Single	12		19		44		31	44
	Group	5		10		21			
	Average Group Size	2 - 3		2 - 5		2 - 7			
********** Summary **********									
Aggregate Count	Shoppers	1	3	2	6	6	13	9	22
	Passers-by	8	23	14	36	25	56	47	115
	Street-Watchers	1	0	0	1	5	5	6	6
	Total (M, F)	10	26	16	43	36	74	62	143
	Total Users	36		59		110		205	

Table 5.2 Categories of pedestrians entering Nichol's Plaza for Wednesday, March 24, 1993. Morning represents 9:00 am - 9:22 am; noon, 12:05 pm - 12:27 pm; and afternoon, 5:10 pm - 5:32 pm

NICHOLS PLAZA, USER GROUPS, Thurs., Dec. 17, 1992

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	3	5	8	5	5	12	16	22
	Teenagers	0	1	4	5	2	6	6	12
	Children	0	2	3	4	2	3	5	9
	Total	3	8	15	14	9	21	27	43
Passers by	Adults	8	19	13	33	15	36	36	88
	Teenagers	2	4	1	3	5	15	8	22
	Children	0	1	3	3	4	7	7	11
	Total	10	24	17	39	24	58	51	121
Street Watcher	Adults	1	0	2	2	3	1	6	3
	Teenagers	0	0	1	0	2	5	3	5
	Children	0	0	1	1	1	2	2	3
	Total	1	0	4	3	6	8	11	11
Gathering Size	Single	10		22		39		28	43
	Group	4		8		22			
	Average Group Size	2 - 3		2 - 5		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	3	8	15	14	9	21	27	43
	Passers-by	10	24	17	39	24	58	51	121
	Street-Watchers	1	0	4	3	6	8	11	11
	Total (M, F)	14	32	36	56	39	87	89	175
	Total Users	46		92		126		264	

Table 5.3 Categories of pedestrians entering Nichol's Plaza for Thursday, December 17, 1992. Morning represents 9:00 am - 9:22 am; noon, 12:05 pm - 12:27 pm; and afternoon, 5:10 pm - 5:32 pm

NICHOLS PLAZA, USER GROUPS, Fri., Mar. 26, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	2	4	2	5	6	9	10	18
	Teenagers	2	3	2	3	7	10	11	16
	Children	0	1	2	2	1	2	4	4
	Total	4	8	6	10	14	21	25	38
Passers by	Adults	7	14	17	41	14	37	38	92
	Teenagers	5	2	6	10	4	13	15	25
	Children	1	0	2	4	3	2	6	6
	Total	13	16	25	55	21	52	59	123
Street Watcher	Adults	1	1	0	0	4	2	5	3
	Teenagers	0	0	1	1	6	2	7	3
	Children	0	0	1	0	1	1	2	1
	Total	1	1	2	1	11	5	14	7
Gathering Size	Single	10		21		40		25	46
	Group	4		12		24			
	Average Group Size	2 - 3		2 - 5		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	4	8	6	10	14	21	24	39
	Passers-by	13	16	25	55	21	52	59	123
	Street-Watchers	1	1	2	1	11	5	14	7
	Total (M, F)	18	25	33	66	46	78	97	169
	Total Users	43		99		124		266	

Table 5.4 Categories of pedestrians entering Nichol's Plaza for Friday, March 26, 1993. Morning represents 9:00 am - 9:22 am; noon, 12:05 pm - 12:27 pm; and afternoon, 5:10 pm - 5:32 pm

NICHOLS PLAZA, USER GROUPS, Sat., Jan. 23, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	2	4	2	3	4	9	8	16
	Teenagers	1	2	2	5	3	5	6	12
	Children	0	1	0	1	1	3	1	5
	Total	3	7	4	9	8	17	15	33
Passers by	Adults	4	21	10	25	11	45	25	91
	Teenagers	0	3	2	4	5	10	7	17
	Children	0	1	2	4	3	8	6	12
	Total	4	25	14	33	19	63	38	120
Street Watcher	Adults	1	1	2	1	5	2	8	4
	Teenagers	0	1	2	1	1	4	3	6
	Children	1	0	1	1	0	4	2	5
	Total	2	2	5	3	6	10	13	15
Gathering Size	Single	9		10		38		21	36
	Group	12		15		24			
	Average Group Size	2 - 4		2 - 5		2 - 7			
********** Summary **********									
Aggregate Count	Shoppers	3	7	4	9	8	17	15	33
	Passers-by	4	25	14	33	19	63	37	121
	Street-Watchers	2	2	5	3	6	10	13	15
	Total (M, F)	9	34	23	45	33	90	65	169
	Total Users	43		68		123		234	

Table 5.5 Categories of pedestrians entering Nichol's Plaza for Saturday, January 23, 1993. Morning represents 9:00 am - 9:22 am; noon, 12:05 pm - 12:27 pm; and afternoon, 5:10 pm - 5:32 pm

NICHOLS PLAZA, USER GROUPS, Sat., Dec. 26, 1992

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	3	5	9	12	14	30	26	47
	Teenagers	1	3	7	12	9	10	17	25
	Children	1	0	2	2	2	4	5	6
	Total	5	8	18	26	25	44	48	78
Passers by	Adults	9	18	10	33	16	40	35	91
	Teenagers	2	5	3	8	12	25	17	38
	Children	1	2	4	5	6	9	11	16
	Total	12	25	17	46	34	74	63	145
Street Watcher	Adults	2	2	1	3	2	5	5	10
	Teenagers	1	2	1	1	1	2	3	5
	Children	0	0	0	1	1	1	1	2
	Total	3	4	2	5	4	8	9	17
Gathering Size	Single	20		29		32		30	51
	Group	9		18		26			
	Average Group Size	2 - 3		2 - 4		2 - 5			
********** Summary **********									
Aggregate Count	Shoppers	5	8	18	26	25	44	48	78
	Passers-by	12	25	17	46	34	74	63	145
	Street-Watchers	3	4	2	5	4	8	9	17
	Total (M, F)	20	37	37	77	63	126	120	240
	Total Users	57		114		189		360	

Table 5.6 Categories of pedestrians entering Nichol's Plaza for Saturday, December 26, 1992. Morning represents 9:00 am - 9:22 am; noon, 12:05 pm - 12:27 pm; and afternoon, 5:10 pm - 5:32 pm

Plaza. In general, as the summary of the three user group indicates, the pedestrians, especially the category of 'passersby' tend to dominate the site. A closer study at the morning section of the aggregate count reveals that the 'passersby' group was extremely active in the morning, while the other two groups of 'shoppers' and 'street-watchers' were at their lowest period of presence. This same pattern can be observed during all observation days, as can be inferred from the comparison of aggregate counts of morning columns in tables 5.1 through 5.6. Overall, 'passersby' were the most popular group on Nichols Plaza at all observation times, as can be inferred from the last column of aggregate counts in tables 5.1 -5.6. The 'street-watchers' seemed to be the least significant group for this plaza.

In regard to daily variations, a comparison of the aggregate number of users during each observation period in table 5.1 reveals that afternoons were found to be the most popular time for users to be in the plaza. The same pattern can be observed on all the six observation days. From this recurring pattern of higher number of users in the afternoons, it can be concluded that Nichols Plaza is almost always most active during afternoons. Next to afternoons, the noon observation period is also a fairly active time period for Nichols users. The activities occurring during noon and afternoon comprised the richest texture of street life in Nichols Plaza. During these times, every category of user was

found using the plaza in abundant numbers.

The age group of the users fluctuated mostly between twelve years and sixty years with a greater number of adults (see tables 5.3 through 5.6) during all observation times. The increase in number of adults as compared to children and teenagers in this area can be explained by the nature and function of businesses offered (Plaza Medical Building, Superlatives, Circle Art Gallery). The nature of these businesses are presumably more appealing to adults than children. The entertainment activity (attracting children and teenagers) in this area was largely offered by Emile's outdoor food court, but this was in effect only during warm weather as indicated in tables 5.2 and 5.4.

As William Whyte (1980) has emphasized, there is a relationship between the appearance of people in groups and the sociability of the place. On Nichols Plaza (see tables 5.1 - 5.6), the author found that the maximum number of people appearing in groups was observed during afternoons. These clusters were location-specific too, as will be discussed in the next section with the help of behavior maps. In contrast, the morning for Nichols involves a reversed situation, mainly because of the large amount of pedestrians going to their work places from nearby parking lots. Overall, the size of the groups on the site tends to be small, with an average of 2-4 persons per group. The largest group size consistently appeared during afternoons (see tables 5.2 - 5.5), mostly in

relation with Emile's Cafe, Eddie Bauer's and Halls' (a departmental store) activities. Some of these groups were as large as 2-5, 2-7, or 2-8 persons per group.

The study of gender data in the last column of aggregate counts indicates that during most observation times, women were present in consistently larger numbers than men. This pattern is particularly apparent in the observations taken on Tuesday, February 2; Wednesday, March 24; Saturday, January 23; and Saturday, December 26, 1993 (see tables 5.1, 5.2, 5.5 and 5.6), probably because of the festive season which prompted gift-giving and gift-returning activities. Also during this observation period, most stores had a number of items on sale, which were an attractive reason for women to shop. But it is also interesting to note that in the street-watchers counts, the number of men is either equal to or more than women. This behavior pattern could be explained by the tendency of male observers to perform the role of "schmoozers" as described by William Whyte (1980, p. 18,19,22,51,101).

A significant increase in shopping activities was observed during the noon and afternoon hours of Friday, March 26, 1993 as indicated in table 5.4. The weather on this day was also favorable for outdoor activities (see table 4.1). However, no major changes in activity and behavior patterns were observed during the weekend observations taken on Saturday, January 23, 1993. On the contrary, as observed from table 5.5, there seemed to be a significant decrease in the number of patrons

on this particular day. This pattern could be explained by the weather being extremely cold on January 23, 1993 (see table 4.1) which might have discouraged passersby and other patrons to stroll out of the comfort of their cars and residences for shopping purposes.

On the other hand, during the days of December 17, 1992 (Thursday) and December 26, 1992 (Saturday) (Christmas time), as indicated in tables 5.3 and 5.6 there was a significant increase in the number of patrons in almost all categories observed in Nichols. This behavior could be explained by the inflow of large number of visitors in CCP who were at this place to experience the plaza illumination and decorations and also for Christmas shopping purposes. Also during the author's spring break observations, as indicated in tables 5.2 and 5.4, a large number of users were observed in the food court area of Emile's Cafe. This behavior was a result of the unusually warm weather experienced after a long spell of winter, which brought patrons outdoors, to enjoy the sunshine and outdoor activity offered in the plaza.

From the above analysis the following conclusions can be inferred in regard to overall use of Nichols Plaza:

(1) 'Passersby' were found to dominate the Nichols Plaza at all observation times. This group was extremely active in the mornings, when shoppers and street-watchers were at their lowest presence.

(2) Among the three observation times, 'afternoons' were the

most popular time for all categories of users.

(3) At all times, larger numbers of adults were noticed as compared to teenagers and children.

(4) At all observation times, the number of women was consistently larger than the number of men. This pattern was even more pronounced during the weekends.

(5) Group activities were most active during afternoons and least active during mornings.

(6) There was a slight increase in the number of users during weekends, but this pattern appears subject to change depending on weather conditions, festivities and so forth.

(7) In the street-watchers category, the number of men is regularly more than the number of women.

2. Analyzing Behavior Maps for Nichols Plaza

After the above aggregate study of Nichols Plaza, a more specific analysis in the form of behavior maps is presented for an understanding of the relationship between Nichols' physical context and its street life. Figures 5.1 - 5.6 illustrate graphically the use of sidewalks along Nichols while figures 5.7 - 5.12 describe user patterns in regard to the plaza itself. The author discusses each of these topics in turn.

(a) Flow Diagrams for Nichols Plaza

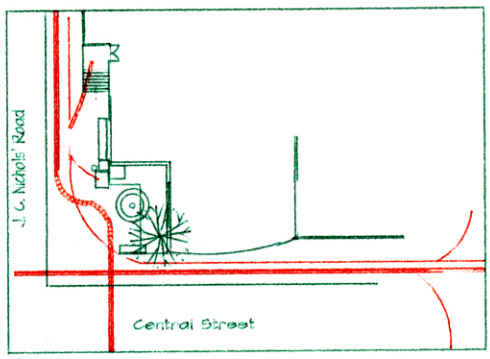
The maps in figures 5.1 - 5.6 indicate flow diagrams for

Nichols during the morning, noon and afternoon observation periods conducted over the six days of study. These figures are ordered according to the days of the week, for example, Tuesday, Wednesday, Thursday and so forth. This ordering will help in easily identifying the differences in behavior patterns if any, due to the day of the week. The solid red lines mark the routes of the pedestrians and the width of the line indicates the intensity of traffic along that route.

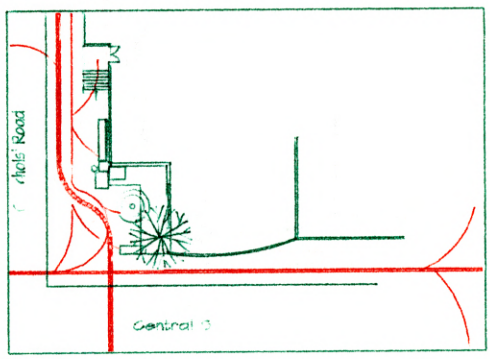
As can be observed in figures 5.1 - 5.6, the cross street action was relatively strong for all observation times in regard to movement between J. C. Nichols Road and Central Street or the streets leading from the residential blocks located south of Ward Parkway (see figure 2.1). The researcher found that this dominant pedestrian pattern was partly due to the three parking lots near Nichols (see figure 2.3) and, in morning periods, due to local residents going to work places near their homes. A closer observation indicated that most of the pedestrians coming from west of Nichols Road were on their way to the parking lot situated near Swanson's, to the lot behind Halls', or approaching Halls' itself.

The noon observations in figures 5.2 - 5.6 show an intense use of sidewalk in front of Nichols Plaza. This pattern is explained by the large number of pedestrians crisscrossing from Central, Broadway, Pennsylvania and 47th Streets on the way to lunch. This peculiar intensity in sidewalk flow-patterns is also found to be dense during all observation

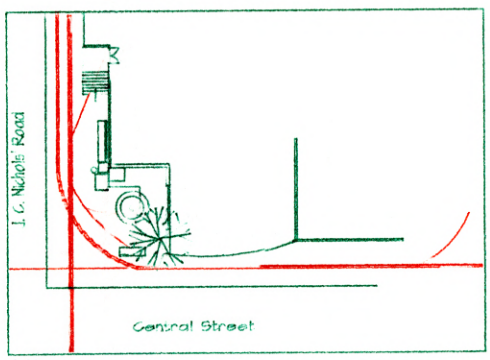
Flow Maps, Nichols Plaza, Tuesday, Feb. 2, 1993



Morning



Noon



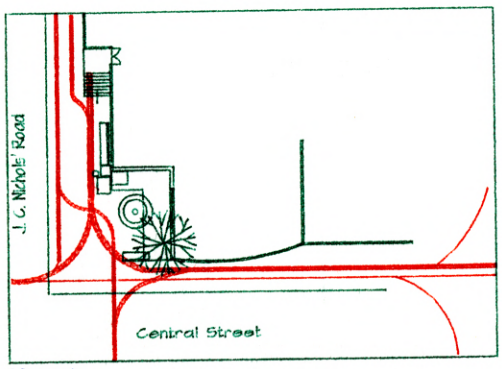
Afternoon

Key:

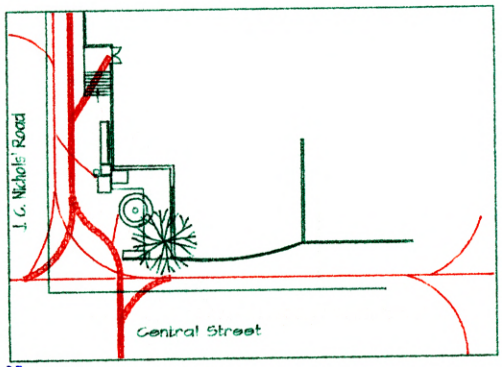
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 5.1 Flow Maps for Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

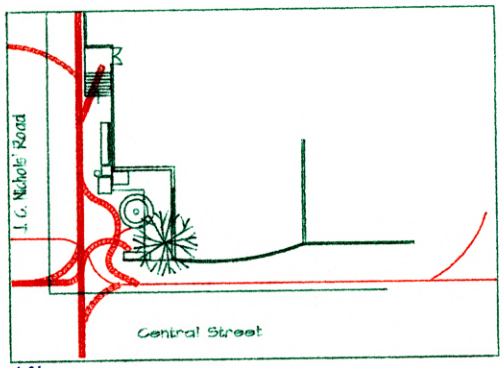
Flow Maps, Nichols Plaza, Wednesday, Mar. 24, 1993



Morning



Noon



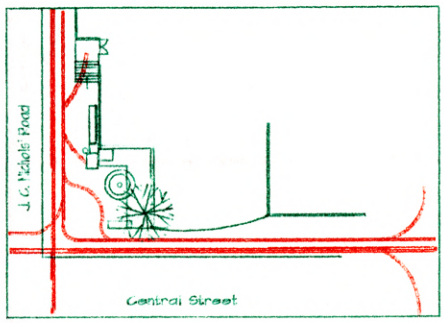
Afternoon

Key:

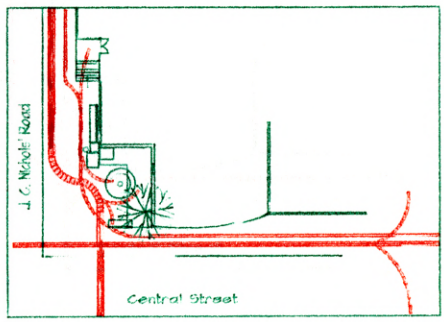
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 5.2 Flow Maps for Nichols Plaza; morning represents 9:00–9:22 a.m., noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

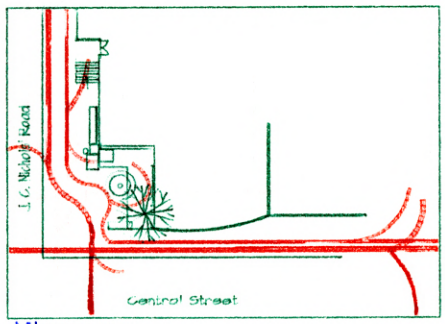
Flow Maps, Nichols Plaza, Thursday, Dec. 17, 1992



Morning



Noon



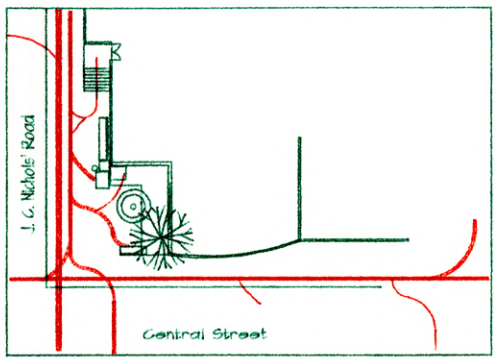
Afternoon

Key:

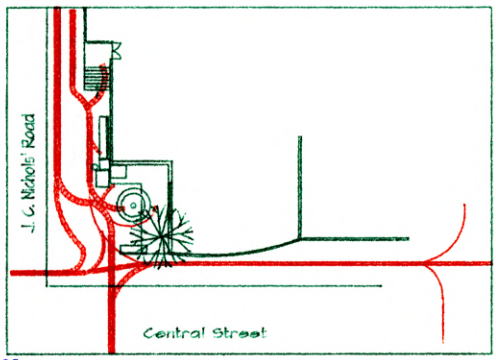
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 5.3 Flow Maps for Nichols Plaza, morning represents 9:00–9:22 a.m., noon, 12:05–12:27 p.m., and afternoon, 5:10–5:32 p.m.

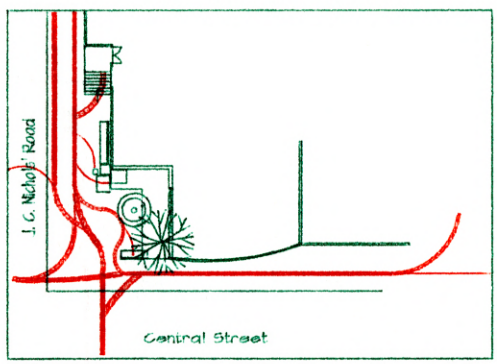
Flow Maps, Nichols Plaza, Friday, Mar. 26, 1993



Morning



Noon



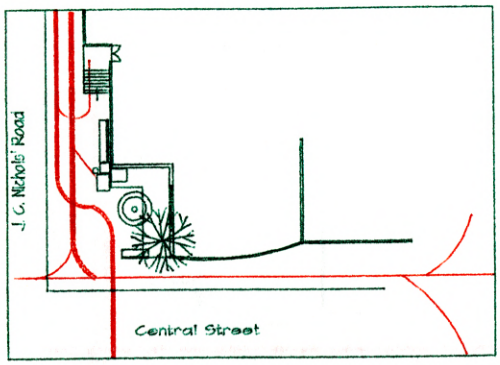
Afternoon

Key:

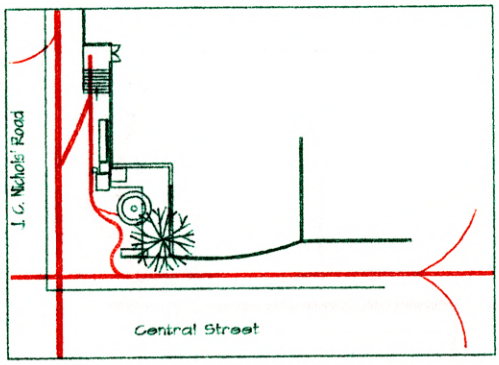
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 5.4 Flow Maps for Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

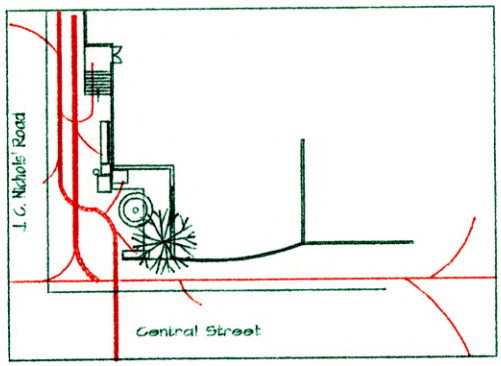
Flow Maps, Nichols Plaza, Saturday, Jan. 23, 1993



Morning



Noon



Afternoon

Key:

- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 5.5 Flow Maps for Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

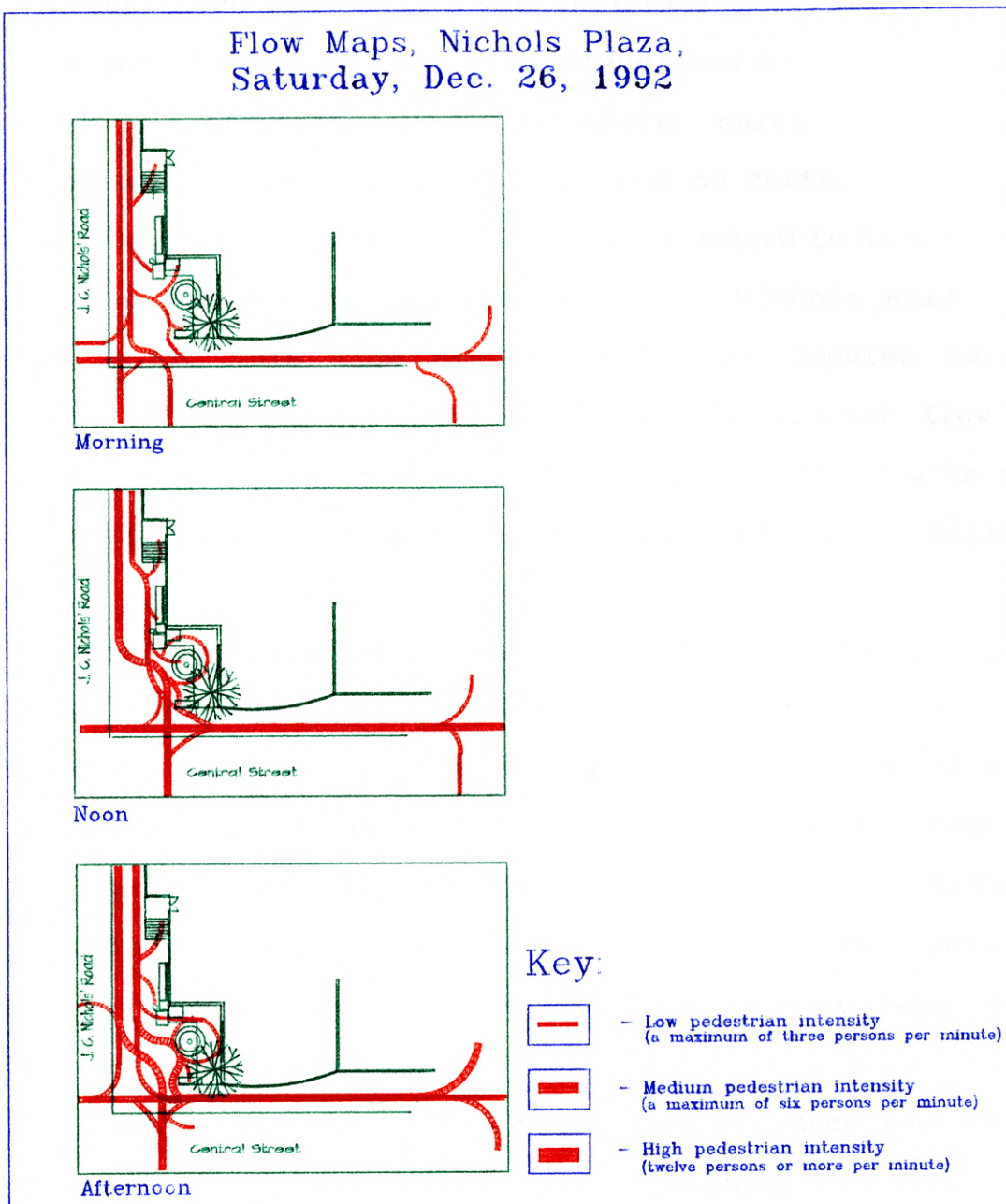


Figure 5.6 Flow Maps for Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

periods on Thursday, December 17 and Saturday, December 26, 1992, which could be explained by the large number of visitors and pedestrians at Nichols for Christmas shopping or other activities. The plaza activities intensified during these days due to the elaborate window displays, sales, horse-drawn carriages, Christmas illuminations, and so forth.

Another important pedestrian flow in regard to Nichols was along the eastwest sidewalk along J. C. Nichols Road (see figure 5.6). This flow seemed to involve impulse buying behavior indicated by small diversions in regular flow of traffic (see figures 5.2, 5.4, 5.6) and associated with the news stand, the wooden benches, the fountain area or Emile's Cafe.

A visibly different pattern of traffic flow was observed on Central Street's sidewalks during observations for Wednesday, March 24 and Friday, March 26, 1993 (see figures 5.2 and 5.4). Pedestrians crossed from the east end of Central Street more frequently to the sidewalk bordering Nichols Plaza. This behavior was possibly due to impulse buyers on their way to Emile's Outdoor Cafe, which was busy with customers sitting outdoors.

It was noticed that pedestrians with children more often traversed the corner edge of the plaza which has a gently-sloping access ramp down to the street. It was also noticed that the sidewalk on the south side of Nichols Plaza near the Plaza Medical Building did not encourage any informal seating

looking towards the plaza, though this area potentially afforded a good view of most street activities.

The center of Nichols Plaza has a fountain with a marble statue ('the boy and frog statue', see figure 2.4), but this area did not attract expected user activity. This is manifested in the lack of flow near the fountain area in figures 5.1, 5.2 and 5.5. This behavior could possibly be explained by the lack of water in the fountain (lack of maintenance) during most observation days and hence assuming that the fountain ceased to take the role of a central stage. However, there were occasional groups, especially children, who paused by the fountain statue to throw coins, in spite of the absence of water.

In Nichols, during warmer days, the role of 'central stage' is taken by the food court of Emile's Cafe which is signified in figures 5.2 and 5.4 by the irregular flow patterns around this area. Certain businesses, like Halls'; the large departmental store, and Eddie Bauer's, have the ability to attract large groups of people, as was evident from the large number of shoppers frequenting these stores during the researcher's observation periods. While on their way to such establishments, patrons were also drawn to other establishments like Emile's and Shoe Shine, which promoted impulse buying. This change in behavior pattern is observed in figures 5.2 - 5.4 in the form of diversions from the linear sidewalk along J. C. Nichols Road. This behavior could be

explained by the possible placement of two different type of commercial establishments near each other, which thereby have a mutually supporting relationship.

(b) Distribution Maps for Sitting and Standing individuals in Nichols Plaza

Figures 5.7 - 5.12 indicate the spatial patterns for people sitting and standing in Nichols Plaza. "Sitting" refers to any pedestrian who sits in Nichols Plaza for more than thirty seconds, for example: people sitting on benches, steps, and pavement edges and engaged in different activities like talking, reading, eating, relaxing, schmoozing and so forth. "Standing" refers to any pedestrian standing in Nichols for more than thirty seconds and engaged in such behaviors as leaning on balconies or walls, waiting for taxi-cabs, horse-drawn carriages, people waiting to cross the streets and so forth.

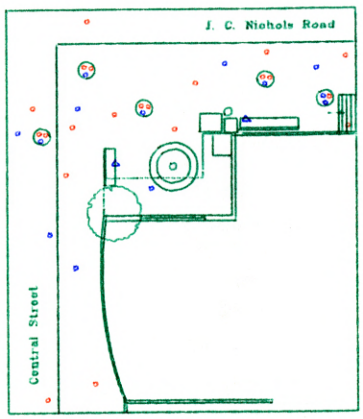
The map codings of figures 5.7 - 5.12 are as follows. A single circle (standing) or triangle (sitting) by itself represents a lone pedestrian, while a cluster of symbols indicate two or more persons per group (see key provided with each behavior map). Further, groups of pedestrians are separated from the single users by a circle drawn around the symbols. The author also differentiated the gender of pedestrians by adopting red symbols to indicate female users and blue symbols to mark male users.

Consistent with the reading results from tables 5.1 - 5.6, the patterns plotted in figures 5.7 - 5.12 illustrate that there were remarkably fewer patrons in Nichols Plaza in the morning as compared to noon and afternoon observation periods. Figures 5.8, 5.9, 5.10, and 5.12 indicate that Nichols Plaza was extremely favored at noon. A large concentration of standing pedestrians can be observed during noon and afternoon hours in Nichols Plaza as indicated in figures 5.9, 5.10 and 5.12. This behavior is partly due to shops like Halls'; the large departmental store, and Emile's Cafe which are located close to Nichols and are visited more frequently during noon hours. On the other hand, shops like Shoe Shine and Athletic Plaza were preferred in the mornings due to the nature of businesses i.e., shoe shining and physical fitness lessons, offered by the later two establishments.

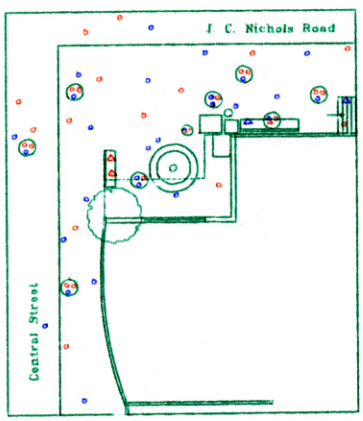
As the patterns in figure 5.12 indicate, the most favored sitting and standing activities in Nichols were manifest at the street junction near Emile's Cafe steps and the news-stand near the fountain. The physical form of the 'boy and frog' statue and the atmosphere of Emile's Outdoor Cafe encourages passersby at this plaza (mostly children), sometimes to drop a coin in the fountain or to buy a newspaper from the stand.

The facade of Halls' does not have any show windows (see photograph in figure 5.13), whereas shops like Shoe Shine, Superlatives, Circle Art Gallery and Eddie Bauer's have elaborate display windows which attracted pedestrians on their

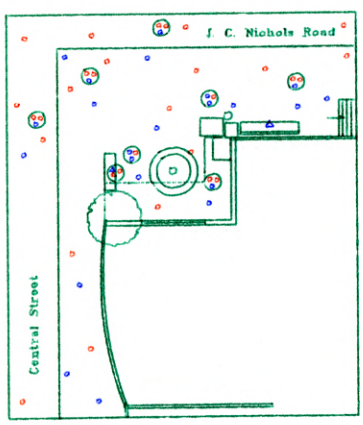
Sitting and Standing Patterns, Nichols Plaza,
Tuesday, Feb. 2, 1993



Morning



Noon



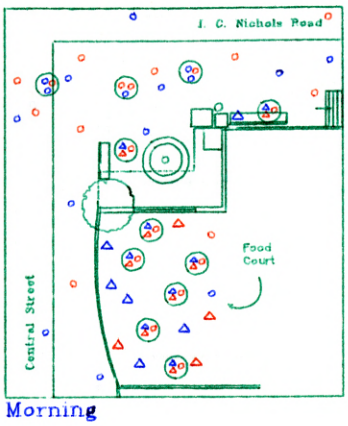
Afternoon

Key:

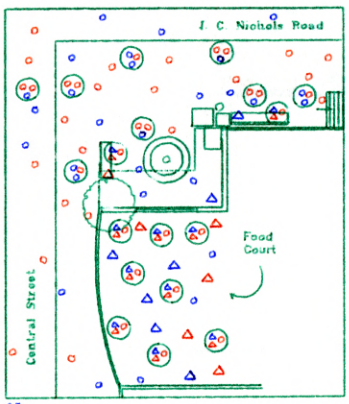
- ○ – indicates standing male (single) (standing in place at least 30 seconds)
- △ – indicates sitting male (single) (sitting in place at least 30 seconds)
- ○ – indicates standing female (single) (standing in place at least 30 seconds)
- △ – indicates sitting female (single) (sitting in place at least 30 seconds)
- – indicates individuals in a group

Figure 5.7 Distribution maps for sitting and standing individuals at Nichols Plaza; morning represents 9:00–9:22 a.m., noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

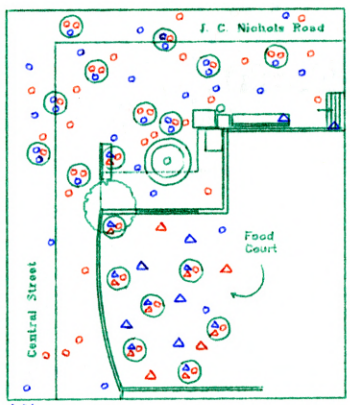
Sitting and Standing Patterns, Nichols Plaza,
Wednesday, Mar. 24, 1993



Morning



Noon



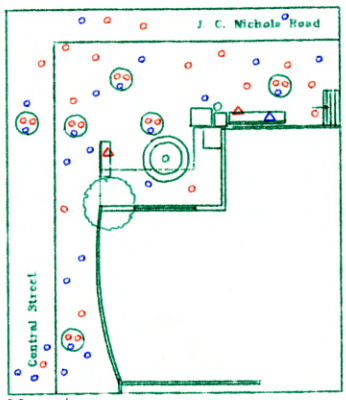
Afternoon

Key:

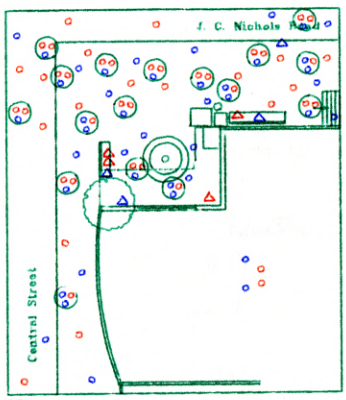
- indicates standing male (single) (standing in place at least 30 seconds)
- indicates sitting male (single) (sitting in place at least 30 seconds)
- indicates standing female (single) (standing in place at least 30 seconds)
- indicates sitting female (single) (sitting in place at least 30 seconds)
- indicates individuals in a group

Figure 5.8 Distribution maps for sitting and standing individuals at Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

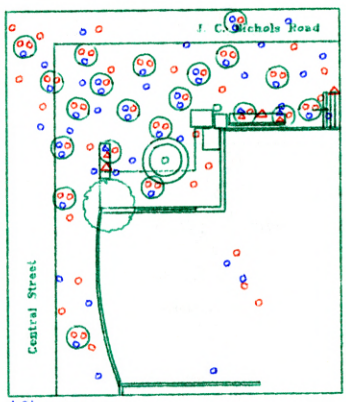
Sitting and Standing Patterns, Nichols Plaza,
Thursday, Dec. 17, 1992



Morning



Noon



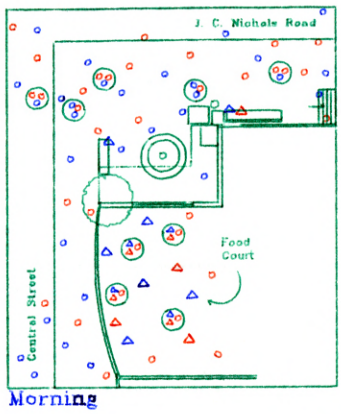
Afternoon

Key:

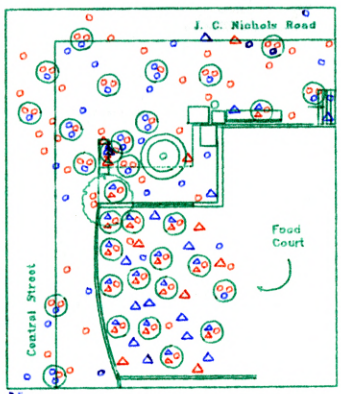
- indicates standing male (single) (standing in place at least 30 seconds)
- indicates sitting male (single) (sitting in place at least 30 seconds)
- indicates standing female (single) (standing in place at least 30 seconds)
- indicates sitting female (single) (sitting in place at least 30 seconds)
- indicates individuals in a group

Figure 5.9 Distribution maps for sitting and standing individuals at Nichols Plaza, morning represents 9:00–9:22 a.m., noon, 12:05–12:27 p.m., and afternoon, 5:10–5:32 p.m.

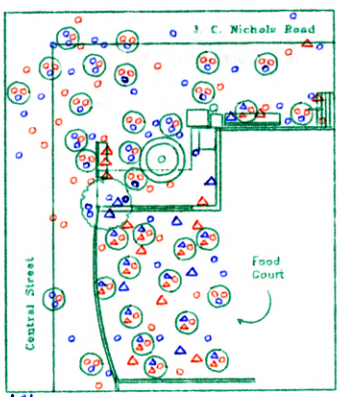
Sitting and Standing Patterns, Nichols Plaza,
Friday, Mar. 26, 1993



Morning



Noon



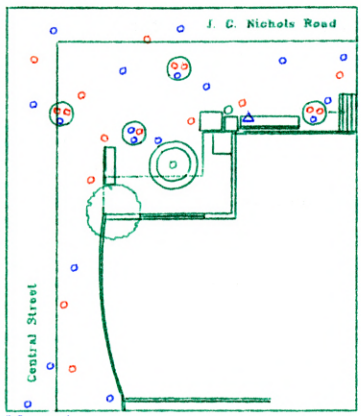
Afternoon

Key:

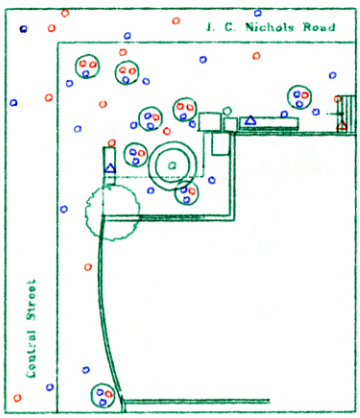
- ○ – indicates standing male (single) (standing in place at least 30 seconds)
- △ – indicates sitting male (single) (sitting in place at least 30 seconds)
- ○ – indicates standing female (single) (standing in place at least 30 seconds)
- △ – indicates sitting female (single) (sitting in place at least 30 seconds)
- ◎ – indicates individuals in a group

Figure 5.10 Distribution maps for sitting and standing individuals at Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

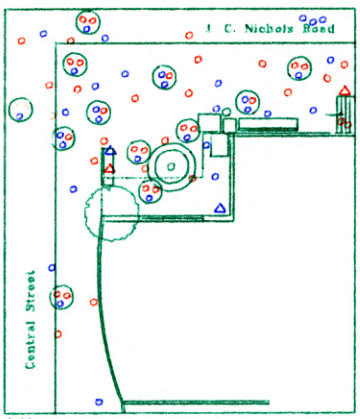
Sitting and Standing Patterns, Nichols Plaza,
Saturday, Jan. 23, 1993



Morning



Noon



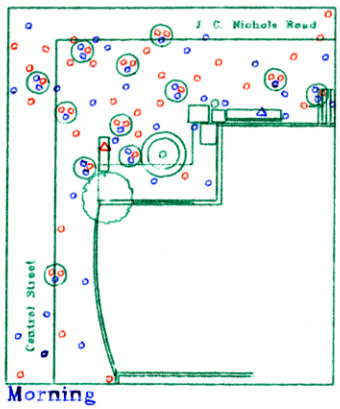
Afternoon

Key:

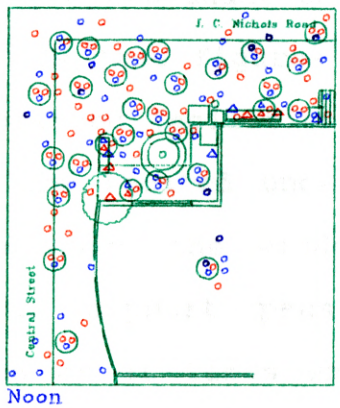
- indicates standing male (single) (standing in place at least 30 seconds)
- indicates sitting male (single) (sitting in place at least 30 seconds)
- indicates standing female (single) (standing in place at least 30 seconds)
- indicates sitting female (single) (sitting in place at least 30 seconds)
- indicates individuals in a group

Figure 5.11 Distribution maps for sitting and standing individuals at Nichols Plaza; morning represents 9:00–9:22 a.m.; noon, 12:05–12:27 p.m.; and afternoon, 5:10–5:32 p.m.

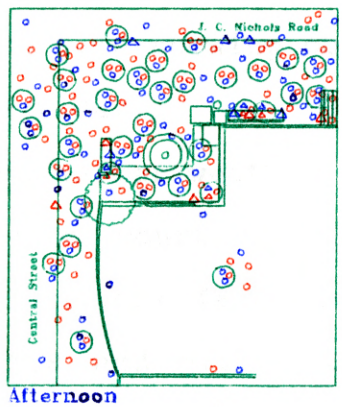
Sitting and Standing Patterns, Nichols Plaza,
Saturday, Dec. 26, 1992



Morning



Noon



Afternoon

Key:

- ○ – indicates standing male (single) (standing in place at least 30 seconds)
- △ – indicates sitting male (single) (sitting in place at least 30 seconds)
- ○ – indicates standing female (single) (standing in place at least 30 seconds)
- △ – indicates sitting female (single) (sitting in place at least 30 seconds)
- ◎ – indicates individuals in a group

Figure 5.12 Distribution maps for sitting and standing individuals at Nichols Plaza; morning represents 9:00–9:22 a.m., noon, 12:05–12:27 p.m., and afternoon, 5:10–5:32 p.m.

way to other establishments, to often pause and scrutinize items displayed in these windows and at times to even enter some of these establishments. This behavior is indicated in figures 5.9 - 5.12 by the abundance of standing patterns observed in the south end of Nichols Plaza corner, which indicate the large number of pedestrians waiting to approach the above mentioned shops after crossing the Central Street.

Other standing activities in Nichols were observed near trash cans, newspaper stands, a pennant describing plaza activities, spots under the tree, and on steps leading up to Emile's Cafe (see figures 5.9, 5.10 and 5.12). Some of the above mentioned facilities (for example, the news stand and benches) are located under awnings, which also during the afternoon shade the windows of Emile's Cafe. This shade appears to support pausing activity, especially during afternoons or at times when it was sunny and hot and the temperature rose above sixty degree Fahrenheit (see table 4.1 and figure 5.10 showing observations made on March 26, 1993, the warmest day).

During warmer weather, the tables in southwest corner of Emile's food court are partly shaded by the tree or by canopies and are favorite places to snack and relax (see figures 5.8 and 5.10). The regular preference in sitting behavior at this southwest corner of the food court is further encouraged by the view to Nichols Road and Central Street.

During warm weather, when tables and canopies are out in

the patio overlooking the central parking lot, the customers (men and women equally) often have their food here. This outdoor activity renders Nichols Plaza with the quality of a theatrical stage which passers-by have the privilege of watching while crossing streets, shopping, and so forth. The author noticed that in most cases, single women tended to sit in the rear end of the patio or looking away from the Central street (see figures 5.8 and 5.10). In winter, during extreme weather conditions, when the chairs placed in the open-court are brought inside, and window shopping activities are reduced, the plaza looses its usual vibrancy and activity (see figures 5.7 and 5.11).

The group activities in Nichols Plaza were noticed to be nearer to the fountain area and the Emile's Cafe steps (see figures 5.9, 5.10 and 5.12). The pedestrians approaching Halls' were predominantly female, who were in groups of two or three. On warmer days, the food court attracted the most group activities (see figures 5.8 and 5.10). This consistent behavior could be related to the lunch activities and entertainment facilities offered by Emile's.

The sitting activity (indicated in maps by triangles) included reading newspapers, having a bag-lunch, waiting for a taxi, or simply watching passersby. The wooden bench under the tree in Nichols (see figure 2.4) was used more often by women than men (see figures 5.9, 5.10 and 5.12), and this activity often included waiting for carriage rides, friends,

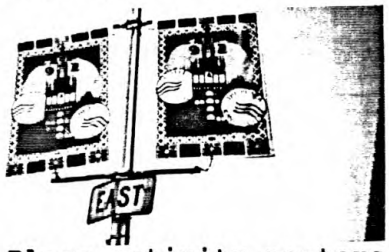
View of food court during warm weather

Spanish murals

People and plaza spaces, CCP

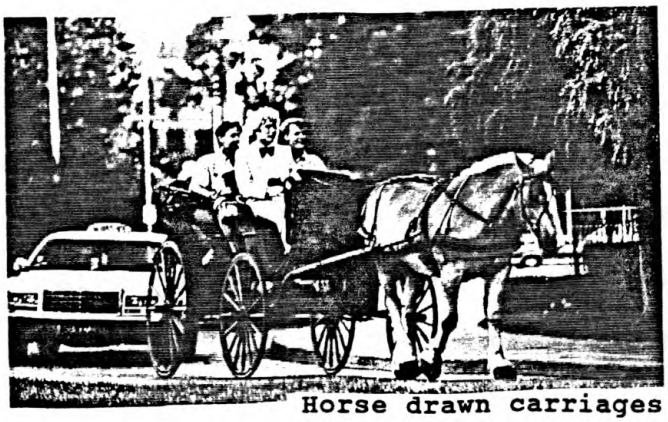
Plaza Medical Building Mosaic murals,

Brown bagging activities, CCP



Plaza-activity posters

Boy and Frog fountain



Horse drawn carriages

Figure 5.13 Photographs showing portions of Nichols Plaza.

or simply relaxing. However, more male than female pedestrians were observed to sit on the wooden bench facing J. C. Nichols Road, perhaps because its location is adjacent to a news stand (see figures 2.4, 5.7, 5.8 and 5.11).

But, these wooden benches seemed to be used less frequently than other seating facilities around Nichols Plaza and the other plazas in CCP (see figures 5.7 and 5.11). A closer observation revealed that the benches weren't used partly because of parked cars which blocked any view of passing traffic at eye level and partly because of the close proximity of the windows of Emile's Cafe (placed just overhead from the sitting area), which tends to invade the personal space and privacy of patrons. For this reasons, pedestrians preferred to sit in the more well-used and socially comfortable seating space which is situated across from the Shoe Shine shop, nearer to the gate leading to central parking lot from J. C. Nichols Road (see figure 1.1). Occasionally, the benches were noticed to be wet due to rain and at other times, covered by a layer of dust, which discouraged potential users.

As a matter of fact, one of the most preferred shops, Halls'; located on the southwestern side of Nichols, did not support any kind of seating activity. This behavior was partly because of the absence of any sitting-facilities surrounding the area and partly due to the blank facade, which made interaction with the shop interior impossible.

(c) Some general observations in regard to Nichols' pattern of standing and sitting

(1) One interesting observation was the disadvantage of the very location of Nichols in terms of standing and sitting. The researcher observed that most pedestrians walk on south sidewalks leading from 47th street or from Central street. In Nichols, the main attraction for shoppers is Halls'; which pedestrians approach either from the eastwest sidewalk adjacent to Plaza Medical Building or from the northsouth sidewalk, leading from 47th street along Superlatives (see figures 1.1 and 2.4). This pedestrian flow-pattern means that, the plaza's location being northwest from Halls', very few pedestrians, compared to the total number of users in this area actually walk through the plaza side itself.

(2) During warmer weather, when tables are pulled out in the patio and one smells the food from Emile's, the presence of people eating and drinking becomes a luring attraction for passers-by, irrespective of the location of the sidewalk on which they move. The sight of people eating food attracts people who attract more people (1980, William Whyte, p. 52).

During winter, however, when tables are pulled in, the food court activity disappears from the plaza. With this disappearance of people from under the canopies, the place doesn't attract traffic to linger longer, and hence impulse buying decreases, especially because the passersby do not have to come across the eastwest sidewalk while walking. This might

explain the shift in behavior (compare figures 5.10 and 5.11, which were observed respectively on a warm and cold day) and underuse of this plaza during winter observations as compared to warm-weather observations.

(3) Another feature of Nichols Plaza that aids its sociability is Nichols Road at this point not being used as a major thoroughfare. One side of Nichols Road ends in a deadend at Swanson's (see figure 2.1), and thus traffic is at a slower rate and hence safer for pedestrians. This feature also encourages more horse-drawn carriages and related businesses such as vendors and kiosks during art fairs, and so forth. A comparative observation of the number of cars passing per minute in the three plazas (see table 8.1) indicates a low rate of vehicular traffic (especially trucks) surrounding Nichols Plaza.

In the next chapter, Broadway Plaza will be studied using the same method as that used for Nichols. Unlike Nichols and the other "street" plaza of 47th Street (discussed in chapter 7), Broadway Plaza is designed to work first of all as an entrance foyer for the Eddie Bauer's store. Thus, this plaza is much larger (see figure 2.1) than the other two plazas the writer studies in CCP. Broadway Plaza appeared to have the potential of being a more sociable plaza, if certain carefully applied design changes were made. During initial observations when Eddie Bauer's was under renovation, the researcher observed that Broadway Plaza was used little as compared to

Nichols and 47th Street Plazas. After the re-opening of Eddie Bauer's however, a significant change in the plaza's activity patterns was observed. This shift in use will be discussed in full detail in chapter six.

CHAPTER SIX: A BEHAVIORAL READING OF BROADWAY PLAZA

Broadway Plaza is located southeast of the intersection of Broadway Street and J. C. Nichols Road (see figures 1.1 and 2.5). The Eddie Bauer's, to which the Broadway Plaza belongs, was closed before November 25, 1992, as the store was under renovation and was covered from all sides for constructional reasons.

For observation of Broadway Plaza, the author chose to sit on a wooden bench near the entrance of Eddie Bauer's (see figure 2.5) because from this point the researcher could be a participant observer without obstructing the natural behavior of plaza users. During the renovation period, the plaza was rarely used by pedestrians except as a sidewalk. A significant increase in the number of users in Broadway Plaza was observed after the first week of December, the reason for which can be attributed mainly to the reopening of the Eddie Bauer's store.

It was interesting to note these considerable changes in pedestrian behavior take place. Another reason for an obvious increase in the number of plaza users was due to the shopping activities during Christmas and also due to the discount 'sales' on most items in Eddie Bauer's store as part of its "grand reopening".

Being the foyer of Eddie Bauer's, Broadway Plaza attracted a large number of passersby (youths and adults equally) and shoppers during most observation periods. To cover the range

of information provided by both observation tables and behavior maps, the user patterns in Broadway Plaza will be studied in three different sections: (a) through an analysis of aggregate counts for user groups with the help of six observation tables, (b) a study of flow maps and (c) the examination of distribution maps for sitting and standing individuals.

1. Analyzing Aggregate Counts for Broadway Plaza

The researcher observed Broadway Plaza at three different times of day during her six observation visits to CCP (see table 4.3). Similar in fashion to Nichols Plaza, these observation periods were composed of twenty-minute segments and a one-minute passing pedestrian and vehicle count at the end of each observation period. The author assumed that this length of time would capture the variations of behavior that compose the daily activity patterns in Broadway Plaza.

A summary of conclusions interpreted from the six observation days are tabulated in tables 6.1 - 6.6. The tables presented are indicative of an average behavior pattern, for all shoppers, passersby and street-watchers. The tables are ordered by the days of the week beginning with Tuesday, in order to facilitate differentiation and comparison of behavior patterns on different days of the week, especially weekday versus weekend. Similar in manner to Nichols Plaza, the tables are arranged according to user types, age group, gender,

BROADWAY PLAZA, USER GROUPS, Tues., Feb 2, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	1	9	7	27	3	21	11	57
	Teenagers	0	0	1	3	2	6	3	9
	Children	1	0	0	0	1	4	2	4
	Total	2	9	8	30	6	31	16	70
Passers by	Adults	10	11	8	11	9	14	27	36
	Teenagers	2	4	5	8	3	9	10	21
	Children	1	0	1	1	1	2	3	3
	Total	13	15	14	20	13	25	40	60
Street Watcher	Adults	1	1	2	3	1	1	4	5
	Teenagers	0	1	0	2	0	1	0	4
	Children	0	2	0	1	1	1	1	4
	Total	1	4	2	6	2	3	5	13
Gathering Size	Single	22		16		27		23	42
	Group	6		22		25			
	Average Group Size	2 - 3		2 - 7		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	2	9	8	30	6	31	16	70
	Passers-by	13	15	14	20	13	25	40	60
	Street-Watchers	1	4	2	6	2	3	5	13
	Total (M, F)	16	28	24	56	21	59	61	143
	Total Users	44		80		80		204	

Table 6.1 Categories of pedestrians entering Broadway Plaza for Tuesday, February 2, 1993. Morning represents 9:25 am - 9:47 am; noon, 12:30 pm - 12:52 pm; and afternoon, 5:35 pm - 5:57 pm

BROADWAY PLAZA, USER GROUPS, Wed., Mar., 24, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	2	10	4	24	4	19	10	53
	Teenagers	0	2	1	6	4	5	5	13
	Children	1	0	0	1	1	3	2	4
	Total	3	12	5	31	9	27	17	70
Passers by	Adults	10	15	10	11	11	16	31	42
	Teenagers	2	4	5	7	4	8	11	19
	Children	1	1	1	0	1	2	3	3
	Total	13	20	16	18	16	26	45	64
Street Watcher	Adults	1	0	2	2	1	1	4	3
	Teenagers	0	0	0	0	1	2	1	2
	Children	0	0	2	0	0	1	2	1
	Total	1	0	4	2	2	4	7	6
Gathering Size	Single	18		14		22		22	32
	Group	9		24		29			
	Average Group Size	2 - 3		2 - 3		2 - 6			
********** Summary **********									
Aggregate Count	Shoppers	3	12	5	31	9	27	17	70
	Passers-by	13	20	16	18	16	26	45	64
	Street-Watchers	1	0	4	2	2	4	7	6
	Total (M, F)	17	32	25	51	27	57	69	140
	Total Users	49		76		84		209	

Table 6.2 Categories of pedestrians entering Broadway Plaza for Wednesday, March 24, 1993. Morning represents 9:25 am - 9:47 am; noon, 12:30 pm - 12:52 pm; and afternoon, 5:35 pm - 5:57 pm

BROADWAY PLAZA, USER GROUPS, Thurs., Dec. 17, 1992

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	4	13	5	29	6	24	15	66
	Teenagers	1	3	4	8	4	9	9	20
	Children	2	1	2	4	1	2	5	7
	Total	7	17	11	41	11	35	29	93
Passers by	Adults	12	19	11	14	16	19	39	52
	Teenagers	4	5	5	8	6	10	15	23
	Children	2	1	3	1	4	6	9	8
	Total	18	25	19	23	26	35	63	83
Street Watcher	Adults	2	1	4	2	2	1	8	4
	Teenagers	4	1	3	2	3	3	10	6
	Children	2	0	4	1	2	3	8	4
	Total	8	2	11	5	7	7	26	14
Gathering Size	Single	24		19		26		24	45
	Group	14		29		35			
	Average Group Size	2 - 3		2 - 6		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	7	17	11	41	11	35	29	93
	Passers-by	18	25	19	23	26	35	63	83
	Street-Watchers	8	2	11	5	7	7	26	14
	Total (M, F)	33	44	41	69	44	77	118	190
	Total Users	77		110		121		308	

Table 6.3 Categories of pedestrians entering Broadway Plaza for Thursday, December 17, 1992. Morning represents 9:25 am - 9:47 am; noon, 12:30 pm - 12:52 pm;and afternoon, 5:35 pm - 5:57 pm

BROADWAY PLAZA, USER GROUPS, Fri., March 26, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	2	4	8	14	7	32	17	50
	Teenagers	2	4	7	10	7	22	16	36
	Children	1	2	3	6	3	5	7	13
	Total	5	10	18	30	17	59	40	99
Passers by	Adults	7	18	15	30	16	32	38	80
	Teenagers	2	5	3	7	12	24	17	36
	Children	1	0	3	4	6	7	10	11
	Total	10	23	21	41	34	63	65	127
Street Watcher	Adults	1	1	2	2	4	1	7	4
	Teenagers	2	1	2	2	4	1	8	4
	Children	1	0	2	1	2	0	5	1
	Total	4	2	6	5	10	2	20	9
Gathering Size	Single	16		20		27		25	38
	Group	10		16		20			
	Average Group Size	2 - 3		2 - 8		2 - 7			
********** Summary **********									
Aggregate Count	Shoppers	5	10	18	30	17	59	40	99
	Passers-by	10	23	21	41	34	63	65	127
	Street-Watchers	4	2	6	5	10	2	20	9
	Total (M, F)	19	35	45	76	61	124	125	235
	Total Users	54		121		185		360	

Table 6.4 Categories of pedestrians entering Broadway Plaza for Friday, March 26, 1993. Morning represents 9:25 am - 9:47 am; noon, 12:30 pm - 12:52 pm;and afternoon, 5:35 pm - 5:57 pm

BROADWAY PLAZA, USER GROUPS, Sat., Jan. 23, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	2	9	6	24	5	27	13	60
	Teenagers	2	1	2	5	2	7	6	13
	Children	1	1	2	1	1	3	4	5
	Total	5	11	10	30	8	37	23	78
Passers by	Adults	8	13	9	14	7	11	24	38
	Teenagers	2	5	7	7	4	12	13	24
	Children	2	1	2	2	3	1	7	4
	Total	12	19	18	23	14	24	44	66
Street Watcher	Adults	1	0	3	1	3	2	7	3
	Teenagers	0	1	2	1	2	0	4	2
	Children	0	0	1	1	2	0	3	1
	Total	1	1	6	3	7	2	14	6
Gathering Size	Single	20		18		24		21	41
	Group	8		14		18			
	Average Group Size	2 - 3		2 - 5		2 - 7			
********** Summary **********									
Aggregate Count	Shoppers	5	11	10	30	8	37	23	78
	Passers-by	12	19	18	23	14	24	44	66
	Street-Watchers	1	1	6	3	7	2	14	6
	Total (M, F)	18	31	34	56	29	63	81	150
	Total Users	49		90		92		231	

Table 6.5 Categories of pedestrians entering Broadway Plaza for Saturday, January 23, 1993. Morning represents 9:25 am - 9:47 am; noon, 12:30 pm - 12:52 pm; and afternoon, 5:35 pm - 5:57 pm

BROADWAY PLAZA, USER GROUPS, Sat., Dec. 26, 1992

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	5	7	15	18	20	52	40	77
	Teenagers	3	9	10	15	11	31	24	55
	Children	1	4	3	7	4	6	8	17
	Total	9	20	28	40	35	89	72	149
Passers by	Adults	11	24	19	41	23	52	53	117
	Teenagers	4	9	5	12	18	31	27	52
	Children	1	1	6	9	9	12	16	22
	Total	16	34	30	62	50	95	96	191
Street Watcher	Adults	1	2	3	2	5	3	9	7
	Teenagers	1	1	2	2	2	1	5	4
	Children	1	0	1	0	3	1	5	1
	Total	3	3	6	4	10	5	19	12
Gathering Size	Single	21		28		40		32	57
	Group	15		21		29			
	Average Group Size	2 - 3		2 - 6		2 - 7			
********** Summary **********									
Aggregate Count	Shoppers	9	20	28	40	35	89	72	149
	Passers-by	16	34	30	62	50	95	96	191
	Street-Watchers	3	3	6	4	10	5	19	12
	Total (M, F)	28	57	64	106	95	189	187	352
	Total Users	85		170		284		539	

Table 6.6 Categories of pedestrians entering Broadway Plaza for Saturday, December 26, 1992. Morning represents 9:25 am - 9:47 am; noon, 12:30 pm - 12:52 pm; and afternoon, 5:35 pm - 5:57 pm

observation times, and so forth.

From tables 6.1, 6.2, 6.3 and 6.5, it can be observed that in Broadway Plaza, the number of 'shoppers' were more in number than the other two user categories, specifically the 'passersby' and the'street-watchers'. This data indicates the potential of stores surrounding Broadway Plaza towards attracting large number of 'shoppers'. The establishments surrounding Broadway Plaza are mostly, by function, magnet businesses. The Russell Stover candy store attracts children and adults alike for buying candy. Eddie Bauer's and Jack Henry's (located west of Broadway Plaza) are major enticements for teenagers to shop for fashionable clothes; and the display windows of Helzberg Diamonds (located at the northwest corner of Broadway Plaza, see figure 2.1) attract the attention of most adult women passing by the store.

However, it was observed that on Friday, March 26, 1993 and Saturday, December 26, 1992, there was a larger number of 'passersby' as compared to 'shoppers' (see tables 6.4 and 6.6). This irregular behavior pattern on Friday, March 26, 1993 could be related to the unusually good weather experienced on that day after a long spell of winter which brought many patrons outdoors to enjoy the sunshine and plaza ambience. The large number of passersby on Saturday, December 26, 1992 could be explained due to the Christmas shopping activities during this time of the year.

The age groups of shoppers in Broadway Plaza ranged from

fourteen to twenty-eight years and they were seen mostly in groups of two to six and occasionally in groups of eight (see tables 6.1 - 6.6). The types of users in Broadway were mostly friends, couples and families, who were at CCP for shopping and spending time at the plaza.

A study of gathering size shows that there were more group activities during afternoon hours in Broadway Plaza as compared to mornings. This behavior could be explained by the fact that during the mornings, pedestrians on their way to work (in singles or twos) used Broadway mostly as a sidewalk and seldom paused to sit or participate in the plaza ambience. But after 10:00 a.m., when the shops surrounding this plaza are opened, Broadway was also used for shopping and entertainment purposes which promotes group activities in the plaza.

From tables 6.1, 6.2 and 6.5, it can be observed that the aggregate number of users during noon and afternoon hours was more or less similar in count at Broadway Plaza, whereas on Thursday, Dec. 17, 1992 and Saturday, Dec. 26, 1992 (notice that these observations were conducted during Christmas festivities) the number of users in Broadway was significantly more during afternoon hours than noon. The same phenomenon was observed for Friday, Mar. 26, 1993 (a warm day after a long spell of winter and also the warmest of all observation days). From this data, it can be inferred that the plaza has a tendency to attract more users in afternoon hours during

eventful days like days before Christmas. This behavior signifies that, to improve sociability of Broadway Plaza, eventful activities should be conducted more often during afternoon hours at Broadway Plaza.

A closer study of tables 6.2, 6.3, 6.4 and 6.6 indicates that in the teenagers category, there was a relatively large and regularly equal number of shoppers and passersby. A comparative study with Nichols and 47th Street Plazas (discussed in more detail later in the thesis) will reveal that the number of teenagers in Broadway Plaza was consistently larger at all times than the other two plazas. This data illustrates the ability of Broadway Plaza in attracting youths, the reason for which could be attributed to the impulse buying activities triggered off by the disposition of Eddie Bauer's.

It is interesting to observe that Broadway Plaza, in spite of its large number of natural pedestrians (shoppers and passersby equally) (see tables 6.3, 6.4 and 6.6), provided very little street furniture and amenities (see figure 2.5) to hold the pedestrians to enjoy the plaza ambience. The plaza had minimal seating facilities, no news stands and no food court in the near vicinity of the plaza. However, one arresting feature of Broadway Plaza was the centrally located Mermaid fountain which attracted users of all age groups, when the water mechanism was in working order. This draws our attention to the fact that the plaza was inherently designed

to serve the purpose of a grand foyer (and just that) for the Eddie Bauer's store. The potential of this plaza in attracting and holding pedestrians is evident in figure 6.13 (photographs) which was taken during the September Art Fair, 1992, when tables, chairs and kiosks were laid at Broadway Plaza to entertain the fair visitors.

A study of aggregate counts in tables 6.1 - 6.6 shows that the number of female users in the 'shoppers' and 'passersby' category is regularly larger than male users. This user pattern is significantly evident in table 6.4 (Friday, Mar. 26. 1993) and table 6.6 (Saturday, Dec. 26, 1992). This behavior pattern could be traced to the strategic locations of Eddie Bauer's and Jack Henry in the close vicinity of Broadway Plaza. These stores, by virtue of their business type, attract large number of female customers.

However, tables 6.2 - 6.6 show that in the 'street-watchers' category, the number of men are more than women. This signifies that normally more men are involved in "schmoozing" activities than women as explained by William Whyte, (1980, p. 51). As was explained in chapter five, a similar behavior was observed for Nichols Plaza.

The plaza is located in a fairly secure zone (considering the fact that traffic on Broadway and Nichols Road intersection is less hurried as compared to 47th Street Plaza) and this promotes more pedestrian activity. This fact is supported by the large number of pedestrians (shoppers,

passersby and street-watchers) observed at Broadway Plaza as seen in tables 6.1 - 6.6. A comparison of the number of cars in the three plazas (see table 8.1) will justify the relatively lesser volume of vehicular traffic at Broadway intersection.

The next section on the study of behavior maps is divided into two sections: (a) Flow maps and (b) Distribution maps for sitting and standing individuals. The flow maps address behavior patterns that result as a consequence of the natural movements of pedestrians in Broadway Plaza. The flow maps also address some of the design issues and interaction of pedestrians with built form of the plaza. The sitting and standing maps identify the preferences of plaza users and how they use plaza amenities during different times of the day.

2. Analyzing the Behavior Maps for Broadway Plaza

The behavior mapping for Broadway Plaza is done in two sections as with Nichols Plaza -- first, the flow maps; and, second, the distribution maps for sitting/standing individuals. The flow maps indicate most commonly traversed routes by users on Broadway Plaza and they provide knowledge of movement patterns within the plaza in terms of daily activities, while the distribution maps for sitting and standing individuals indicate the way pedestrians use Broadway Plaza in terms of preferences, choices and gathering patterns.

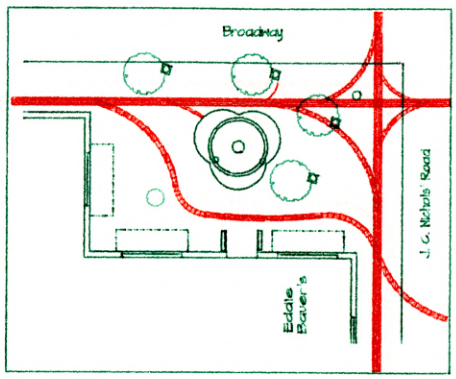
(a) Flow Maps for Broadway Plaza

In the flow maps of figures 6.1 - 6.6, the most frequently traversed pedestrian routes near Broadway Plaza are marked in solid red lines. The thickness of these lines indicate the intensity of pedestrian traffic in that particular area. These maps represent the behavioral observations taken on six different days of observations and these are ordered as per the days of the week.

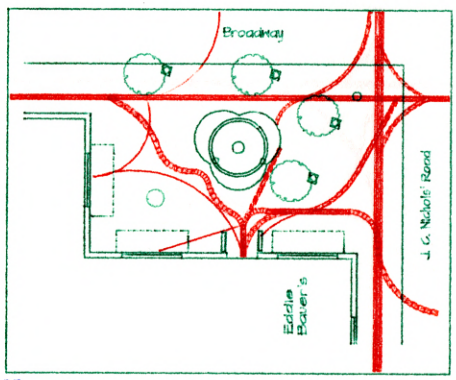
Broadway Plaza faces an active pedestrian traffic coming from the residential side of Ward Parkway, Broadway Street, 47th Street, and also along J. C. Nichols Road. As can be inferred from figures 6.2, 6.3, 6.4 and 6.6, Broadway Plaza experiences the most number of pedestrians during noon and afternoon observations. It was observed that during morning times, the number of pedestrians is comparatively less (compared to noon and afternoon observations) and predominantly linear along the sidewalks of Nichols Road and Broadway Street, as seen in figures 6.1, 6.3, 6.4 and 6.6. The linear movement on these sidewalks can be attributed to the large number of pedestrians going to work in the mornings.

During afternoons, the linear movement pattern on the two sidewalks is continued (as observed in figures 6.1 - 6.6), but the movement on Broadway Plaza itself becomes more random, uneven and thickly distributed on all sections of the plaza. The movement tends to be random only after 10:00 a.m. -- the opening time of Eddie Bauer's. This deviation in linear

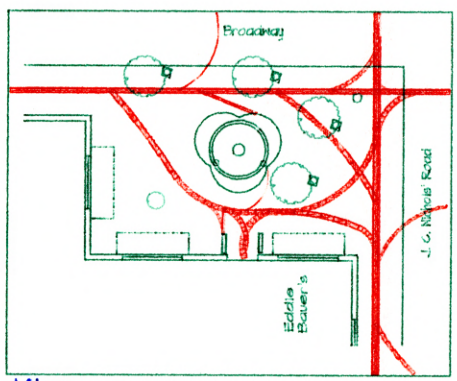
Flow Maps, Broadway Plaza
Tuesday, Feb. 2. 1993



Morning



Noon



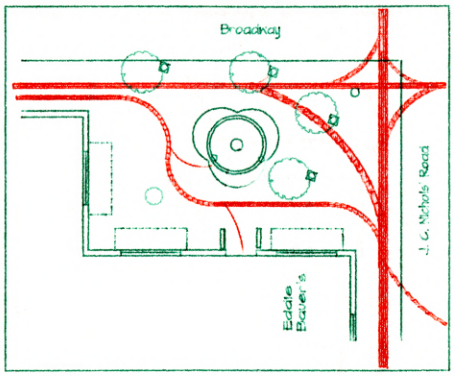
Afternoon

Key:

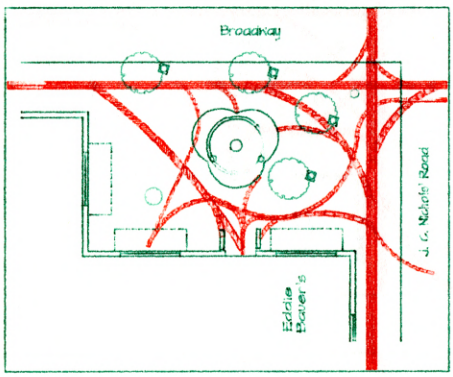
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 6.1 Flow Maps for Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

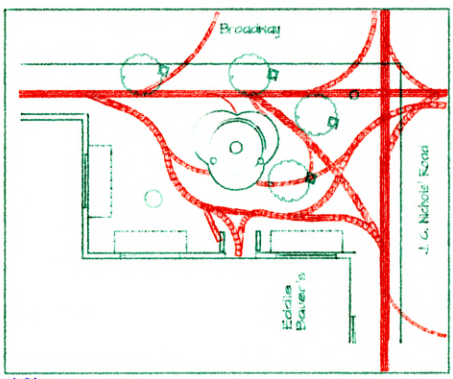
Flow Maps, Broadway Plaza
Wednesday, Mar. 24, 1993



Morning



Noon



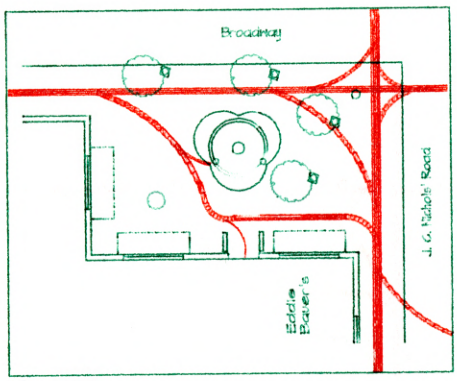
Afternoon

Key:

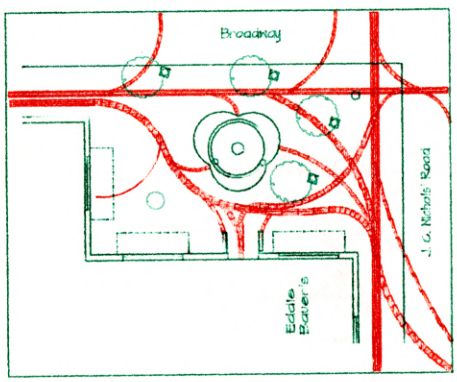
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 6.2 Flow Maps for Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

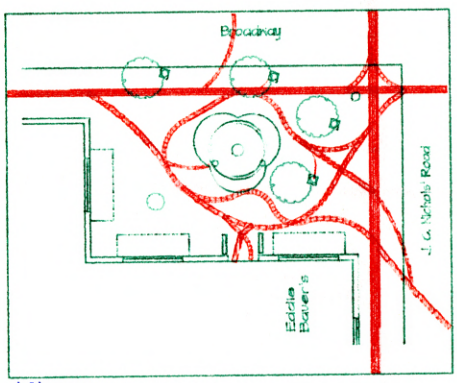
Flow Maps, Broadway Plaza
Thursday, Dec. 17, 1992



Morning



Noon



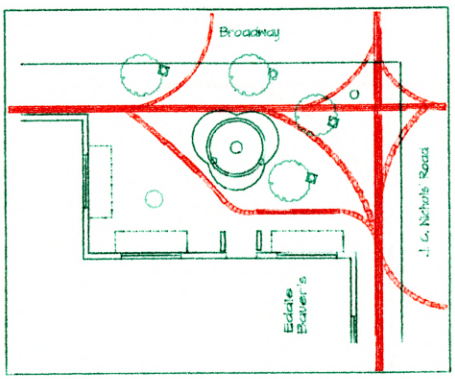
Afternoon

Key:

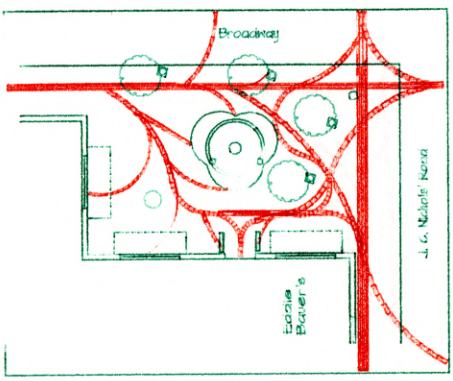
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 6.3 Flow Maps for Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

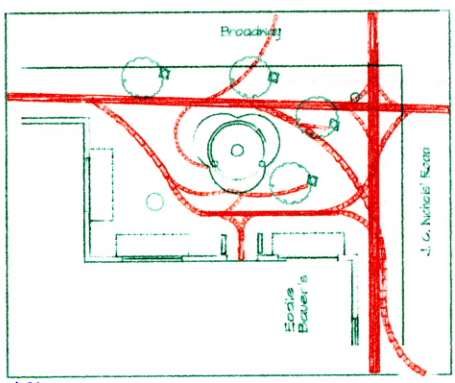
Flow Maps, Broadway Plaza
Friday, Mar. 26, 1993



Morning



Noon



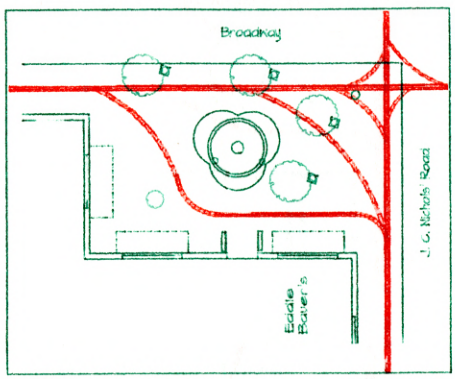
Afternoon

Key:

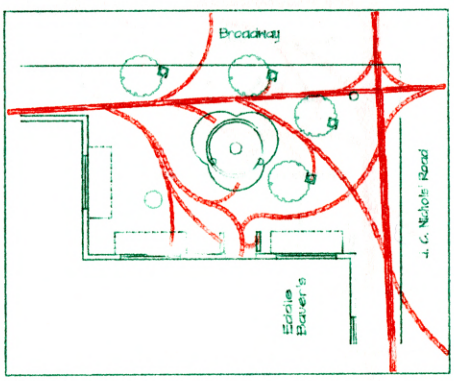
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 6.4 Flow Maps for Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

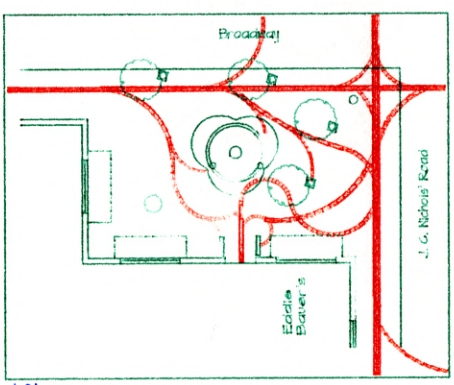
Flow Maps, Broadway Plaza
Saturday, Jan. 23, 1993



Morning



Noon



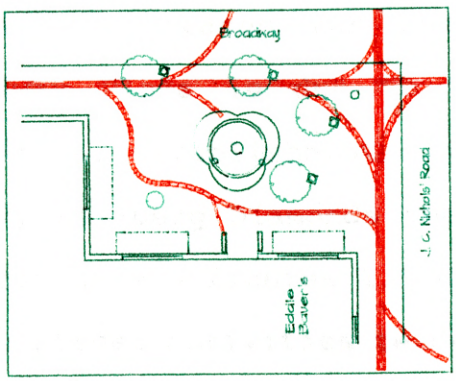
Afternoon

Key:

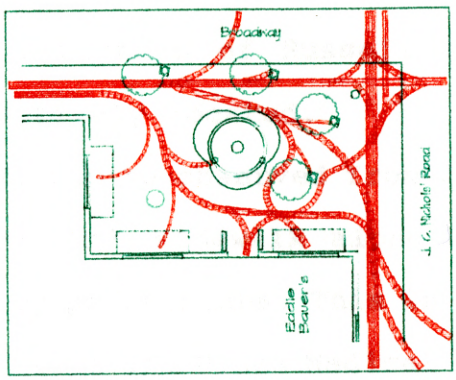
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 6.5 Flow Maps for Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

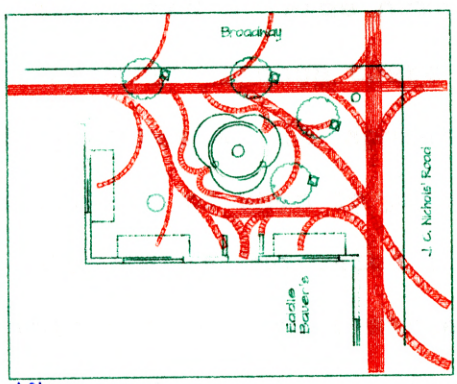
Flow Maps, Broadway Plaza
Saturday, Dec. 26, 1992



Morning



Noon



Afternoon

Key:

- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 6.6 Flow Maps for Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

pattern is mainly because of the strategic location of Eddie Bauer's entrance door, which necessitates the movement of pedestrians through the plaza before entering the store.

Another reason for the linear pedestrian pattern on Broadway Plaza is due to the corner location of popular commercial establishments like Russell Stover Candies, Jack Henry, Helzberg Diamonds and Eddie Bauer's on four sides of the plaza (see figures 1.1 and 2.1). It can be observed that cross-street activities tended to happen across the north and west ends of Broadway Plaza (see figures 6.1 - 6.6), where the shop entrances of Russell Stover Candy and Jack Henry are respectively located.

It can be observed from figures 6.2, 6.4 and 6.6, that the north-south sidewalk along J. C. Nichols is most intensely used by pedestrians. This is because of the location of stores like Halls and Plaza Medical Building along the same sidewalk, which attracted a large number of pedestrians and hence were always crowded. Though there were no stop signs on Nichols and Broadway Streets, it appeared that pedestrians had a good understanding of when to pause and where to cross the streets. This behavior is indicated in figures 6.2, 6.5 and 6.6, by the high intensity of cross-street traffic on the northwest corner of Broadway Plaza (see ramp in figure 2.5).

It was also observed that most paths in Broadway plaza inadvertently lead to the entrance of Eddie Bauer's (as inferred from figures 6.1. 6.2, 6.3 and 6.6), which meant that

the plaza was used more as a sidewalk rather than a place for relaxation, entertainment and enjoying plaza ambience. The reason for this behavior is partly due to the lack of amenities to hold pedestrians within the plaza. There are no news stands, formal seating facilities, or food kiosks on Broadway Plaza. The only entertainment offered is the Mermaid fountain, which attracts pedestrians (when the water mechanism is working) to pause for a while and enjoy the splashing water or to drop a coin in the fountain. This activity can be observed in figures 6.2, 6.3, 6.4 and 6.6 as indicated by the flow paths around the fountain.

The space immediately in front of the display windows of Eddie Bauer's store in Broadway Plaza was rarely used. This behavior is evident from the lack of activity in the southeast side of Mermaid fountain, as observed during most observation periods in figures 6.1 - 6.5. However, on Saturday, Dec. 26, 1992, the display windows appeared to attract attention by the special 'sale' displays and Christmas illuminations on these show windows (see figure 6.6).

Compared to Nichols Plaza, no significant changes in activities were observed at Broadway Plaza on Wednesday, Mar. 24, 1993 and Friday, Mar. 26, 1993 (see figures 6.2 and 6.4, which were observed during spring break, the two warmest days for observations). A remarkably different behavior could have been expected at Broadway Plaza, if amenities like food kiosks, newsstands and seating facilities were provided. This

point will be considered in greater detail in the last chapter on design recommendations for the three plazas.

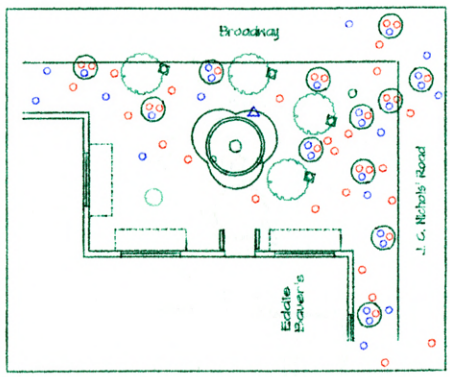
(b) Sitting and Standing Maps for Broadway Plaza

Using the same procedure applied to Nichols Plaza, the researcher observed the Broadway Plaza during three observation periods (morning, noon and afternoons) in terms of sitting/standing patterns, gender, and gathering size of plaza users. The behavior maps recorded during the six observation days are presented in figures 6.7 - 6.12, using the same symbolization as for Nichols Plaza.

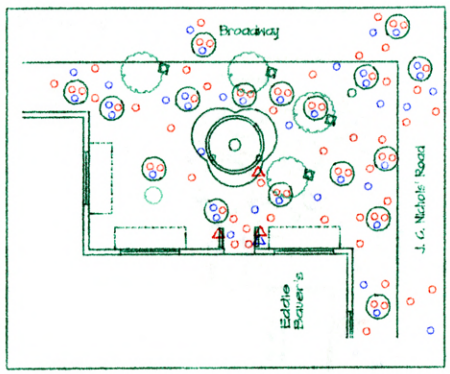
When one studies these maps, he or she notes that most pedestrians observed in Broadway Plaza were standing or were in the process of moving from one street to another during most observation periods (see figures 6.7, 6.8 and 6.11). In spite of the large inflow of shoppers and passersby, Broadway had very few resources to hold pedestrians within the plaza for a longer period. This behavior is mainly due to the lack of amenities provided in the plaza (see figure 2.5, which shows a lack of food kiosks, newspaper stands, or other similar entertainment facilities in the plaza, which would otherwise attract people to linger longer). The only street furniture provided is the trash container and the plaza-activity poster, which are not designed to invoke intense user participation.

During the six observation days, not much sitting activity

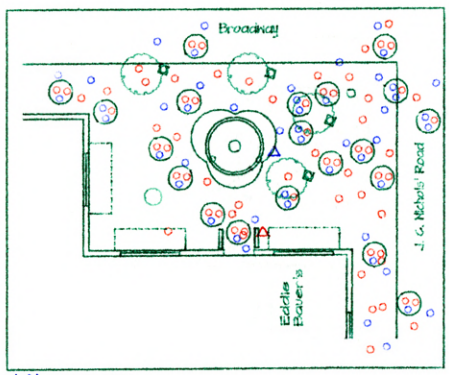
Sitting and Standing Patterns, Broadway Plaza, Tuesday, Feb. 2, 1993



Morning



Noon



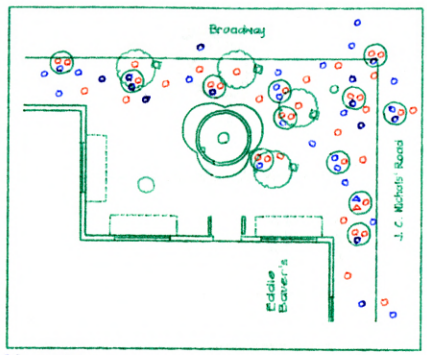
Afternoon

Key:

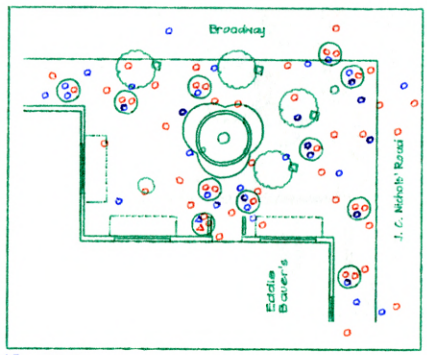
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- ○△ – indicates individuals in a group

Figure 6.7 Distribution maps for sitting and standing individuals at Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

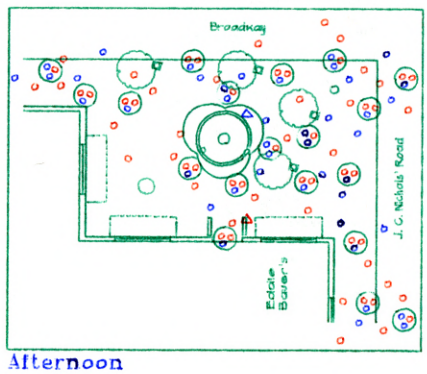
Sitting and Standing Patterns, Broadway Plaza, Wednesday, Mar 24. 1993



Morning



Noon



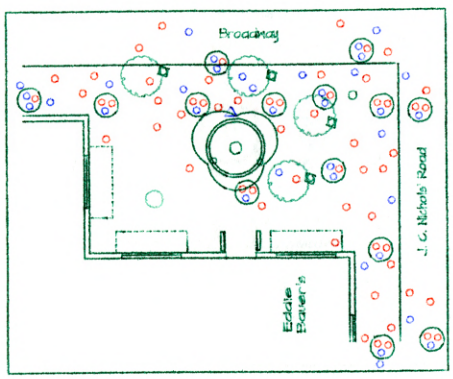
Afternoon

Key:

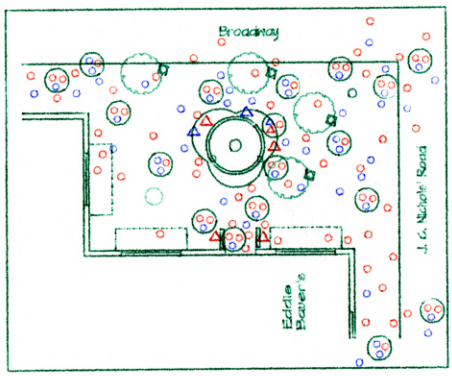
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- ○△ – indicates individuals in a group

Figure 6.6 Distribution maps for sitting and standing individuals at Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

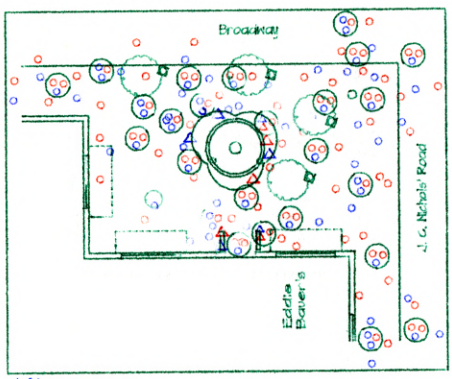
Sitting and Standing Patterns, Broadway Plaza, Thursday, Dec. 17, 1992



Morning



Noon



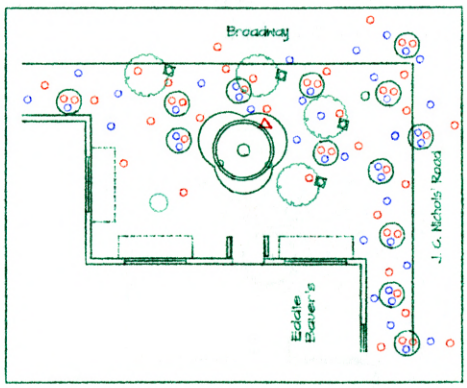
Afternoon

Key:

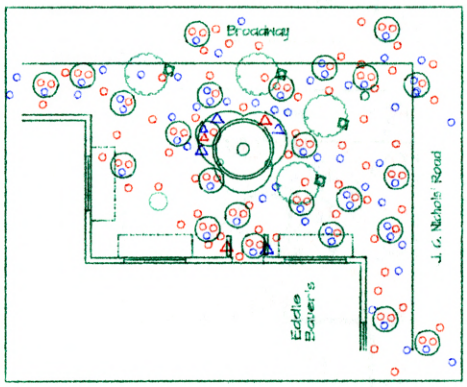
- indicates standing male (standing in place at least 30 seconds)
- indicates sitting male (sitting in place at least 30 seconds)
- indicates standing female (standing in place at least 30 seconds)
- indicates sitting female (sitting in place at least 30 seconds)
- indicates individuals in a group

Figure 6.9 Distribution maps for sitting and standing individuals at Broadway Plaza; morning represents 9:25–9:47 a.m., noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

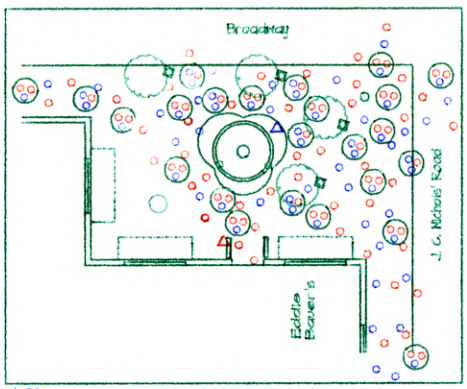
Sitting and Standing Patterns, Broadway Plaza, Friday, Mar. 26, 1993



Morning



Noon



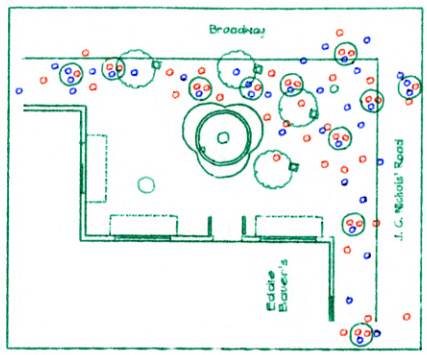
Afternoon

Key:

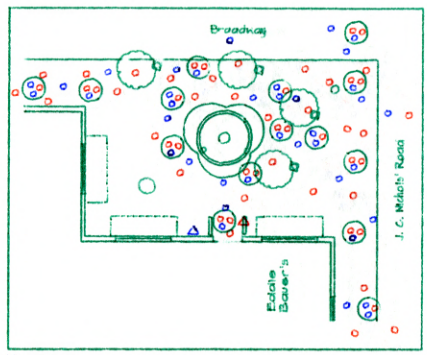
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- ⊙ – indicates individuals in a group

Figure 6.10 Distribution maps for sitting and standing individuals at Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

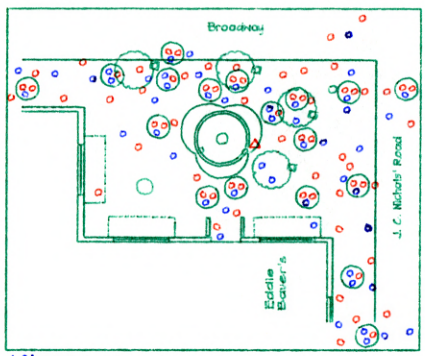
Sitting and Standing Patterns, Broadway Plaza, Saturday, Jan. 23, 1993



Morning



Noon



Afternoon

Key:

- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- ◎ – indicates individuals in a group

Figure 6.11 Distribution maps for sitting and standing individuals at Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

Sitting and Standing Patterns, Broadway Plaza, Saturday, Dec. 26, 1992

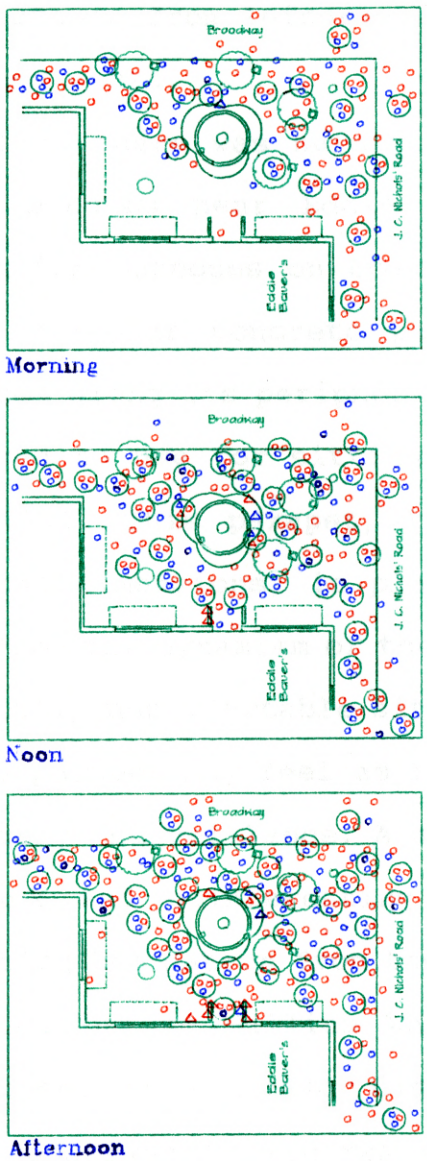


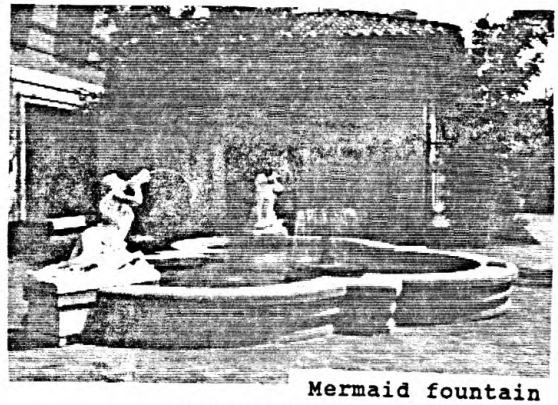
Figure 6.12 Distribution maps for sitting and standing individuals at Broadway Plaza; morning represents 9:25–9:47 a.m.; noon, 12:30–12:52 p.m.; and afternoon, 5:35–5:57 p.m.

was observed at Broadway Plaza (see figures 6.7, 6.8 and 6.11). Some of the reasons for this apparent lack in sitting behavior is due to the nature of activities offered in the immediate vicinity of Broadway, the most predominant being -- the distance from leisure-oriented activities and absence of any food court.

Also, there was hardly any seating (except for the two small benches near Eddie Bauer's entrance) provided for relaxation purposes on Broadway Plaza. The Mermaid fountain has a circular concrete parapet (alternate seating space) provided along its periphery, which very few pedestrians were observed to use for sitting purposes (see figures 6.7, 6.8, and 6.11). This parapet, though flat and accommodating in physical dimensions, is placed in such a manner as to look away from the dynamism of the fountain. This makes the parapet a socially uncomfortable sitting space. Also a patron sitting on the parapet may feel as if he or she is 'on-stage' under a passersby' surveillance. A section of this parapet also faces a blank and uninteresting facade (see figure 2.5), thus isolating the patron from the more dynamic view of the street.

According to William Whyte (1980, p. 63), the lack in viewingchoice is a major disadvantage for a parapet location. It is observed in figures 6.7, 6.9, and 6.12 that shoppers waited or relaxed on the small wooden benches provided under the awnings immediately adjacent to the entrance doors of Eddie Bauer's. But often, this space was insufficient for

Shopping activities



Mermaid fountain

Group activities

'Hang out' for teenagers

Russell Stover Candies

September Art Fair

Jack Henry

Figure 6.13 Photographs showing portions of Broadway Plaza.

demand and too small to accommodate more than two individuals.

It was apparent from the six observation days that, given a choice, shoppers preferred the sitting space under the awnings (wooden benches) facing the fountain rather than the concrete circular parapet looking away from it. This could be attributed to the fact that most of the street life and the water fountain was visible from the benches near the entrance door of Eddie Bauer's.

The author also noticed that the window display on southeast side of Broadway Plaza (see figures 2.5, 6.7, 6.8, 6.11 and 6.12) didn't necessarily invite or lure window-shoppers. This could be because the display space was rather small and uninviting, and the facade was empty and uninteresting. The role of central stage is taken by the Mermaid fountain, which is centrally located in Broadway Plaza. When the fountain is dynamic and in working condition, passersby (adults and children equally, see figures 6.8, 6.9, 6.10 and 6.12), linger here to splash and put coins in the water.

Considering the fact that Broadway has an active pedestrian life at all times of observations (as manifested later in the comparison of three plazas), the author would consider the lack of socially comfortable sitting spaces and other amenities (news stands, food kiosks and so forth) as a serious design limitation. However, the plaza was sensitively designed to accommodate the elderly and children by providing

a ramp on the northwest corner of the plaza (see figure 2.5).

As can be observed in figures 6.7 - 6.12, a large number of pedestrians at Broadway Plaza were women. This behavior can be attributed to the nature of shops surrounding Broadway Plaza (Eddie Bauer's and its image as a high fashion retail clothes store; Jack Henry - another fashion garments store; Helzberg Diamonds - a jewelry store; and so forth), which attracted feminine attention.

Also, as evident from figures 6.7, 6.10 and 6.12, most group activities were observed during afternoon hours and these tended to concentrate around the fountain area or near the entrance door of Eddie Bauer's (see figures 6.7 - 6.10 and 6.12). The groups were mostly in clusters of two to eight and were couples, or family members at the plaza for shopping and window-shopping purposes.

In the next chapter, the observations for the 47th Street Plaza will be studied to analyze the built form and behavior patterns specific to that plaza, which were large user participation at most time-periods (irrespective of temporal and seasonal changes); apparently finer achievement of sociability; high intensity of vehicular and pedestrian traffic, and so forth. 47th Street Plaza is a widening of the sidewalk proper and can be categorized under a typical "street plaza" and hence is different in many ways from Nichols and Broadway Plazas. This difference in behavior will be discussed in further detail in chapter seven.

CHAPTER SEVEN: A BEHAVIORAL READING OF 47TH STREET PLAZA

47th Street Plaza lies north of the intersection between 47th and Central Streets. This plaza is actually a widening of the sidewalk proper and can be categorized under a typical "street plaza." The author observed 47th Street Plaza from the sidewalk in front of Function-Junction, a department store (see figure 1.1). From this position, the writer could view the entire plaza and also watch most of the traffic activities, which tended to agglomerate at the intersection between 47th and Central Streets.

47th Street Plaza is bigger than Nichols Plaza and appears to be smaller in area than Broadway because of its linear shape (see figures 1.1 and 2.6). The mixture of activities offered by this plaza is greatly varied and includes clothing stores, departmental stores, a gallery, jewelry shop, boutique, restaurants, a shoe store, and so forth. This plaza also includes a number of water fountains, sculptures, news stands, sitting spaces, and trees, which appear to be frequent sources of interest to pedestrians. I study 47th Street Plaza in two sections: (1) a study of aggregate counts from observation tables; and (2) a study of behavior maps, using the same method as adopted for the interpretation of Nichols and Broadway Plazas.

1. Analyzing Aggregate Counts for 47th Street Plaza

The summary of aggregate counts for 47th Street Plaza

47TH STREET PLAZA, USER GROUPS, Tues., Feb 2, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	1	2	4	12	2	22	7	36
	Teenagers	1	1	2	4	3	9	6	14
	Children	0	0	1	1	2	1	3	3
	Total	2	3	7	17	7	32	16	53
Passers by	Adults	11	26	28	34	22	49	61	109
	Teenagers	3	3	7	13	11	14	21	30
	Children	1	0	1	3	1	2	3	5
	Total	15	29	36	50	34	65	85	144
Street Watcher	Adults	2	1	3	3	6	4	11	8
	Teenagers	2	0	5	3	11	6	18	9
	Children	0	0	2	1	4	3	6	4
	Total	4	1	10	7	21	13	35	21
Gathering Size	Single	11		14		32		24	33
	Group	19		36		40			
	Average Group Size	2 - 3		2 - 5		2 - 6			
********** Summary **********									
Aggregate Count	Shoppers	2	3	7	17	7	32	16	53
	Passers-by	15	29	36	50	34	65	85	144
	Street-Watchers	4	1	10	7	21	13	35	21
	Total (M, F)	21	33	53	74	62	110	136	218
	Total Users	54		127		172		354	

Table 7.1 Categories of pedestrians entering 47th Street Plaza for Tuesday, February 2, 1993. Morning represents 9:55 am - 10:12 am; noon, 12:55 pm - 1:17 pm; and afternoon, 6:00 pm - 6:22 pm

47TH STREET PLAZA, USER GROUPS, Wed., Mar., 24, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	1	3	5	11	7	19	13	33
	Teenagers	1	1	4	5	4	8	9	14
	Children	0	1	3	2	2	4	5	7
	Total	2	5	12	18	13	31	27	54
Passers by	Adults	14	22	21	30	29	45	64	97
	Teenagers	3	5	8	11	12	9	23	25
	Children	1	1	5	2	4	3	10	6
	Total	18	28	35	43	45	57	98	128
Street Watcher	Adults	1	2	4	3	7	4	12	8
	Teenagers	1	0	8	3	6	4	15	7
	Children	1	1	4	4	3	2	8	7
	Total	3	3	16	10	16	10	35	23
Gathering Size	Single	12		17		37		21	45
	Group	19		30		31			
	Average Group Size	2 - 3		3 - 5		2 - 5			
********** Summary **********									
Aggregate Count	Shoppers	2	5	12	18	13	31	27	54
	Passers-by	18	28	35	43	45	57	98	128
	Street-Watchers	3	3	16	10	16	10	35	23
	Total (M, F)	23	36	63	71	74	98	160	205
	Total Users	59		134		172		365	

Table 7.2 Categories of pedestrians entering 47th Street Plaza for Wednesday, March 24, 1993. Morning represents 9:50 am - 10:12 am; noon, 12:55 pm - 1:17 pm; and afternoon, 6:00 pm - 6:22 pm

47TH STREET PLAZA, USER GROUPS, Thurs., Dec. 17, 1992

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	2	2	7	14	8	22	17	38
	Teenagers	3	2	7	9	8	11	18	22
	Children	1	1	4	6	3	4	8	11
	Total	6	5	18	29	19	37	43	71
Passers by	Adults	16	27	25	33	22	52	63	112
	Teenagers	4	3	12	15	17	20	33	38
	Children	2	1	4	3	5	7	11	11
	Total	22	31	41	51	44	79	107	161
Street Watcher	Adults	2	1	6	5	10	7	18	13
	Teenagers	1	1	8	4	7	4	16	9
	Children	0	0	6	3	5	2	11	5
	Total	3	2	20	12	22	13	45	27
Gathering Size	Single	18		24		43		38	47
	Group	22		33		37			
	Average Group Size	2 - 3		2 - 6		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	6	5	18	29	19	37	43	71
	Passers-by	22	31	41	51	44	79	107	161
	Street-Watchers	3	2	20	12	22	13	45	27
	Total (M, F)	31	38	79	92	85	129	195	259
	Total Users	69		171		214		454	

Table 7.3 Categories of pedestrians entering 47th Street Plaza for Thursday, December 17, 1992. Morning represents 9:55 am - 10:12 am; noon, 12:55 pm - 1:17 pm; and afternoon, 6:00 pm - 6:22 pm

47TH STREET PLAZA, USER GROUPS, Fri., March 26, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	3	3	16	20	29	24	48	47
	Teenagers	3	6	14	18	21	32	38	56
	Children	1	1	5	3	3	5	9	9
	Total	7	10	35	41	53	61	95	112
Passers by	Adults	11	20	36	27	32	29	79	76
	Teenagers	7	7	10	8	14	17	31	32
	Children	1	1	5	6	7	7	13	14
	Total	19	28	51	41	53	53	123	122
Street Watcher	Adults	5	3	14	10	21	13	40	26
	Teenagers	2	1	10	7	14	9	26	17
	Children	1	1	3	4	7	3	11	8
	Total	8	5	27	21	42	25	77	51
Gathering Size	Single	27		32		27		34	52
	Group	17		35		41			
	Average Group Size	2 - 3		2 - 7		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	7	10	35	41	53	61	95	112
	Passers-by	19	28	51	41	53	53	123	122
	Street-Watchers	8	5	27	21	42	25	77	51
	Total (M, F)	34	43	113	103	148	139	295	285
	Total Users	77		216		287		580	

Table 7.4 Categories of pedestrians entering 47th Street Plaza for Friday, March 26, 1993. Morning represents 9:50 am - 10:12 am; noon, 12:55 pm - 1:17 pm; and afternoon, 6:00 pm - 6:22 pm

47TH STREET PLAZA, USER GROUPS, Sat., Jan. 23, 1993

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	3	2	6	14	3	20	12	36
	Teenagers	2	4	5	6	4	12	11	22
	Children	0	0	2	1	4	5	6	6
	Total	5	6	13	21	11	37	29	64
Passers by	Adults	14	28	31	39	20	52	65	119
	Teenagers	4	2	9	15	14	17	27	34
	Children	1	1	3	1	2	3	6	5
	Total	19	31	43	55	36	72	98	158
Street Watcher	Adults	3	1	6	2	8	5	17	8
	Teenagers	2	1	7	3	5	3	14	7
	Children	0	0	1	1	3	2	4	3
	Total	5	2	14	6	16	10	35	18
Gathering Size	Single	18		17		33		24	44
	Group	22		40		44			
	Average Group Size	2 - 3		2 - 5		2 - 7			
********** Summary **********									
Aggregate Count	Shoppers	5	6	13	21	11	37	29	64
	Passers-by	19	31	43	55	36	72	98	158
	Street-Watchers	5	2	14	6	16	10	35	18
	Total (M, F)	29	39	70	82	63	119	162	240
	Total Users	68		152		182		402	

Table 7.5 Categories of pedestrians entering 47th Street Plaza for Saturday, January 23, 1993. Morning represents 9:50 am - 10:12 am; noon, 12:55 pm - 1:17 pm; and afternoon, 6:00 pm - 6:22 pm

47TH STREET PLAZA, USER GROUPS, Sat., Dec. 26, 1992

User Groups		Morning		Noon		Afternoon		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Shopper	Adults	5	5	14	23	25	58	44	86
	Teenagers	2	9	12	19	16	40	30	68
	Children	1	2	2	4	2	7	5	13
	Total	8	16	28	46	43	105	79	167
Passers by	Adults	12	27	23	48	26	41	61	116
	Teenagers	5	11	7	12	12	17	24	40
	Children	1	0	7	10	11	13	19	23
	Total	18	38	37	70	49	71	104	179
Street Watcher	Adults	2	2	3	4	9	12	14	18
	Teenagers	1	3	2	4	3	6	6	13
	Children	0	0	2	3	1	3	3	6
	Total	3	5	7	11	13	21	23	40
Gathering Size	Single	32		49		35		47	69
	Group	18		31		52			
	Average Group Size	2 - 3		2 - 6		2 - 8			
********** Summary **********									
Aggregate Count	Shoppers	8	16	28	46	43	105	79	167
	Passers-by	18	38	37	70	49	71	104	179
	Street-Watchers	3	5	7	11	13	21	23	37
	Total (M, F)	29	59	72	127	105	197	206	383
	Total Users	88		199		302		589	

Table 7.6 Categories of pedestrians entering 47th Street Plaza for Saturday, December 26, 1992. Morning represents 9:50 am - 10:12 am; noon, 12:55 pm - 1:17 pm; and afternoon, 6:00 pm - 6:22 pm

during the six observation days are presented in figures 7.1 - 7.6. Theobservation tables are ordered by the days of the week and so forth and is arranged by user types, gender, age group, gathering size and observation times.

During initial observations, it appeared that the density of pedestrians at 47th Street Plaza was regularly more than the aggregate number of people in Nichols and Broadway Plazas during most observation days. 47th Street Plaza attracted a large number of users during all observation times (see tables 7.1 - 7.6) and even more so during weekends, festivals, art fairs and good weather conditions. This is manifested in the observations taken on Thursday, December 17, 1992 and Saturday, December 26, 1992 (Christmas time, see tables 7.3 and 7.6) and also on Wednesday, March 24, 1993 and Friday, March 26, 1993 (see tables 7.2 and 7.4; for spring temperatures, see table 4.1). This large number of users at 47th Street Plaza could be attributed to the nature of shops surrounding this plaza including Hilliyard Gallery, Houston's Restaurant, Classic Cup Cafe, Laura Ashley and Steve's Shoes which tended to attract large number of impulse users.

A closer study of the aggregate counts during the three observation periods show that 47th Street Plaza was more popular during afternoon hours than morning and noon (see tables 7.1 - 7.6). A study of the different user categories show that there were larger numbers of 'passersby' at 47th Street Plaza as compared to 'shoppers' and 'street-watchers'

(see tables 7.1, 7.2 and 7.5). and these passersby were observed more predominantly during noon and afternoon hours. However, on special occasions like festivals and good weather, the plaza also attracted a large number of 'shoppers' (see tables 7.3, 7.4 and 7.6 which involve warm weather and Christmas time activities). This irregular behavior can be traced to the large number of patrons visiting CCP during special occasions and the impulse-buying behavior triggered by strategically-located shops like the Classic Cup Cafe and Houston's Restaurant (see figure 1.2 and 2.6) in the 47th Street Plaza.

User groups in terms of age for the plaza varied mostly between twelve to thirty-four years (comparatively younger people), and these were observed mostly in groups of two to eight. This pattern is supported by the large number of teenagers 'hanging out' or window-shopping in 47th Street Plaza during noon and afternoon hours (see tables 7.1 - 7.6).

"Schmoozing" and relaxing also seemed more recurrent in this plaza, as manifested by the large number of street-watchers indicated by tables 7.2, 7.3, 7.4 and 7.6. This behavior is related to the street furniture provided in 47th Street Plaza, and the large number of people observed 'brown-bagging' on benches, waiting in front of Houston's restaurant (especially on evenings and weekends), taking pictures, admiring the statues, and so forth.

A study of gender as illustrated in tables 7.1 - 7.6 shows

that the number of women was regularly more than men in both the 'shoppers' and 'passersby' categories, but in the street-watchers category the number of men was larger than women perhaps because men are traditionally known to involve in activities like "schmoozing", watching passersby, reading newspapers, and so forth at outdoor places. On Friday, March 26, 1993, it was observed that the number of men and women present in 47th street Plaza was almost equal and in very large numbers (see table 7.4). This irregular behavior is due to the unusually warm weather experienced on Friday, the beginning of the weekend, (see table 4.1) which brought a large number of pedestrians (especially men) to 47th Street Plaza. As noted in chapters five and six, a similar behavior was also observed for both Nichols and Broadway Plazas.

A detailed comparison of gender patterns conducted later in the next chapter will show that there was <u>not much</u> difference in aggregate numbers in regard to gender for the 47th Street Plaza as compared to Nichols and Broadway Plazas. This difference could be accredited to the varied mixture of activities and stores provided in the vicinity of 47th Street Plaza, which catered to the needs and choices of all age groups and genders.

In the next section, the author studies 47th Street Plaza's flow maps and the distribution maps for sitting/standing patterns.

2. Analyzing the Behavior Maps for 47th Street Plaza

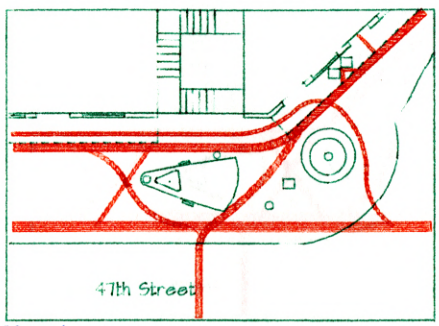
As in the other two plazas, the behavior mapping for 47th Street Plaza is analyzed in terms of two major kinds of information: (1) flow maps, and (2) distribution maps for sitting and standing individuals. The flow maps indicate most commonly traversed routes by users and these maps provide information on movement patterns within the plaza in terms of daily activities. In contrast, the distribution maps indicate the way pedestrians use 47th Street Plaza in terms of sitting, standing, and gathering patterns.

(a) Flow Diagrams for 47th Street Plaza

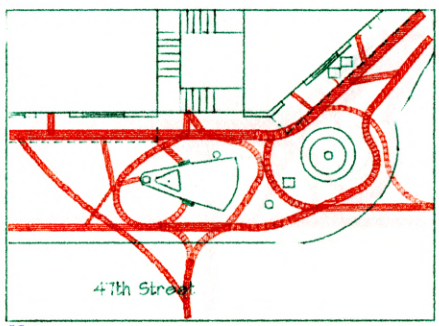
The flow patterns for 47th Street Plaza were observed using the same method as adopted for Nichols and Broadway Plazas. The maps are presented in figures 7.1 - 7.6 and are ordered by the days of the week. The solid red lines in the maps indicate the most frequently traversed pedestrian routes, and their thickness indicates the intensity of traffic in that particular area.

In Country Club Plaza, 47th Street Plaza acts as a major thoroughfare and street intersection (see figures 1.2, 2.1 and 2.3), and hence involves an active pedestrian traffic during most observation times. A large number of pedestrians were observed crisscrossing from Central Street and also along the east-west sidewalk of 47th Street as seen in figures 7.1 - 7.6. The thickest concentration of pedestrians was observed

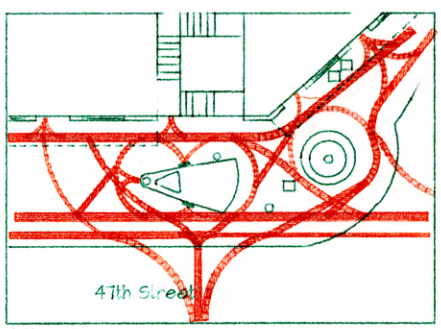
Flow Maps, 47th Street Plaza, Tuesday, Feb. 2, 1993



Morning



Noon



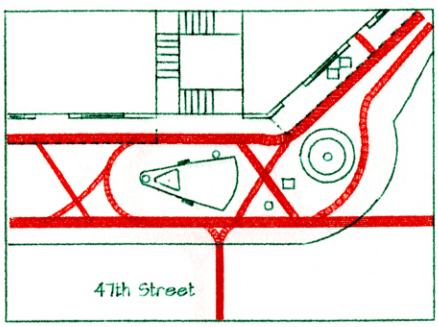
Afternoon

Key:

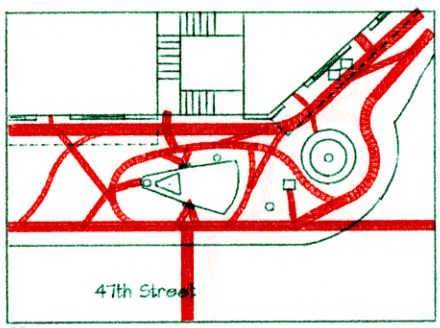
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 7.1 Flow maps for 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

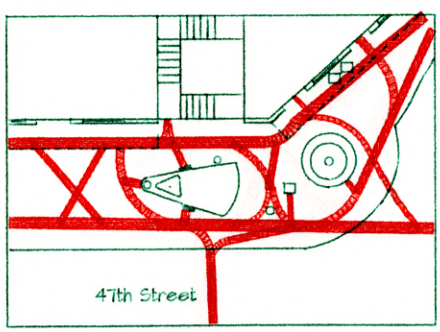
Flow Maps, 47th Street Plaza, Wednesday, Mar. 24, 1993



Morning



Noon



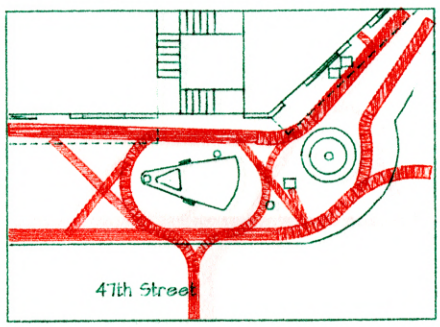
Afternoon

Key:

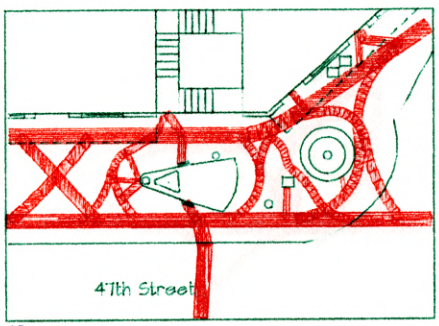
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 7.2 Flow maps for 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

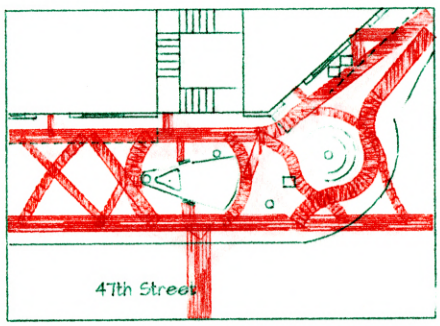
Flow Maps, 47th Street Plaza, Thursday, Dec. 17, 1992



Morning



Noon



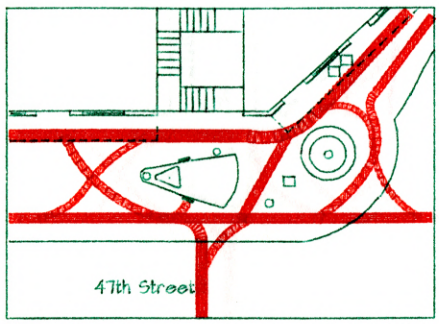
Afternoon

Key:

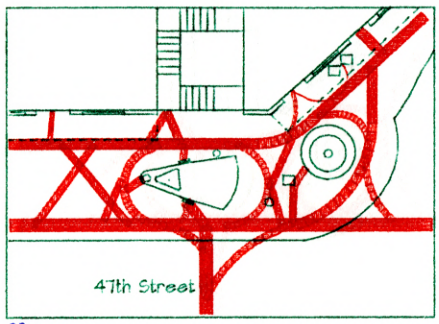
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 7.3 Flow maps for 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

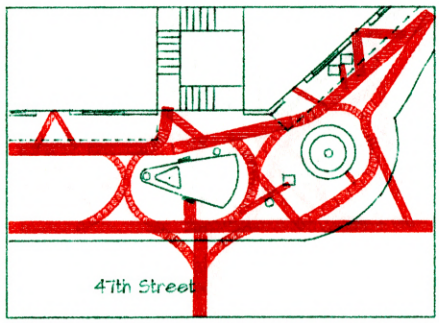
Flow Maps, 47th Street Plaza, Friday, Mar. 26, 1993



Morning



Noon



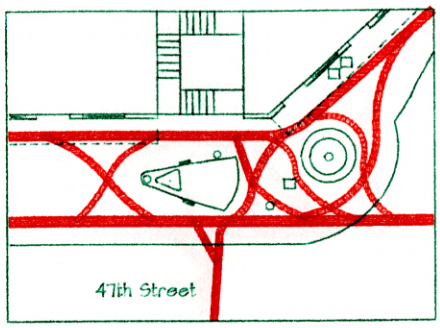
Afternoon

Key:

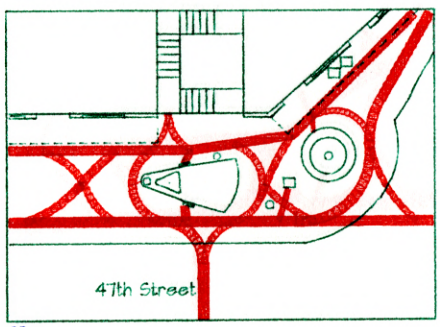
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 7.4 Flow maps for 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

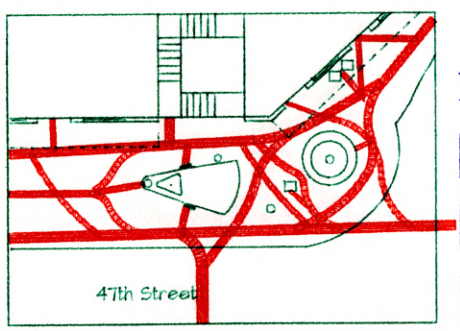
Flow Maps, 47th Street Plaza, Saturday, Jan. 23, 1993



Morning



Noon



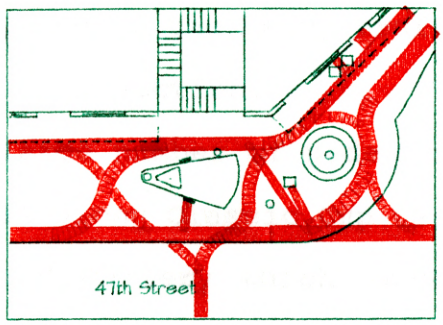
Afternoon

Key:

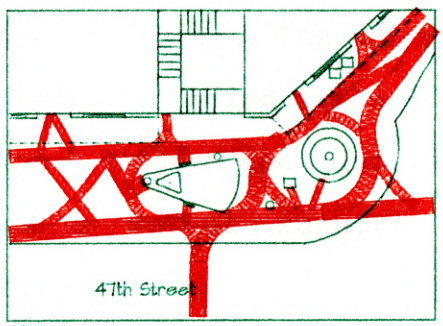
- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 7.5 Flow maps for 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

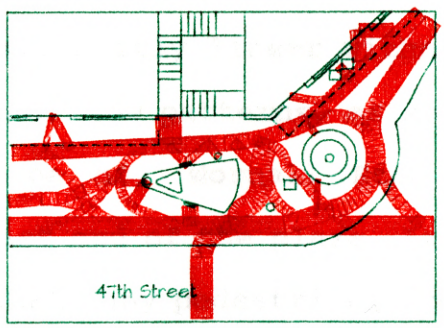
Flow Maps, 47th Street Plaza, Saturday, Dec. 26, 1992



Morning



Noon



Afternoon

Key:

- Low pedestrian intensity (a maximum of three persons per minute)
- Medium pedestrian intensity (a maximum of six persons per minute)
- High pedestrian intensity (twelve persons or more per minute)

Figure 7.6 Flow maps for 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

at the junction of 47th Street and Central Street (see figures 7.1, 7.2, 7.4, 7.5 and 7.6). This behavior was due to the large number of pedestrians waiting at this junction to cross the street. Sometimes, pedestrians were observed waiting at this point for as long as three minutes before crossing the street, due to the heavy traffic volume at the 47th - Central Street intersection.

A large number of pedestrians also crossed over from the sidewalk along Classic Cup Cafe to the widened sidewalk along Hilliyard Gallery which leads to Wornall Road and to many residential apartments and complexes (see figures 1.2, 7.2, 7.3, 7.4 and 7.6). The to-and-fro movement from Houston's Restaurant, Hilliyard Gallery, fountains, concrete benches and the Street Side Cafe including the benches and fountains indicate a mutual supporting relationship between these establishments.

The flow patterns on the south sidewalks of 47th Street Plaza are mostly linear without meandering or crisscrossing. The other flow patterns, as seen in figures 7.1 - 7.6, imitate the shape of Wornall Road, which is curvilinear at the northeast end of the plaza. It can be noticed from figures 7.3 - 7.6 that many pedestrians preferred shortcuts to go from one side of the wide sidewalk to another, especially in the space between the two statues (see figure 2.6). As seen in figure 2.6, street furniture including newspaper stands, trash containers, plaza-activity posters, easter-bunnies and so

forth were carefully placed at these various shortcut routes; these street elements regularly attracted the attention of passersby.

An active pedestrian activity was observed even during morning observations (unlike Nichols and Broadway Plazas as illustrated in chapters five and six) and this behavior could probably be attributed to 47th Street Plaza being a "street plaza" and also due to the close vicinity of Dillards, residential apartments and parking lots (see figure 2.1 and 2.3). Also, the mixture of uses (residential, commercial, retail, entertainment and so forth) surrounding 47th Street Plaza offered more choices in activity to the pedestrians at all times.

Being a "street plaza", 47th Street Plaza acts as an "expressway" for pedestrian movement. This feature is further enhanced by the wide sidewalk, which works to the plaza's advantage in augmenting its sociability. The strategic location of 47th Street Plaza makes it a vital thoroughfare and the consequent street dynamism due to pedestrian movement is further enhanced by street-corner activities (see figures 7.1, 7.2, 7.3, 7.5 and 7.6 which indicate street-corner activities surrounding Houston's Restaurant, news stands, and so forth). A comparative study of locations of the three plazas later in the next chapter will reveal that this element of sidewalk activity is missing in both Nichols and Broadway Plazas.

As observed in figures 7.4, 7.5 and 7.6, 47th Street Plaza clearly appeared to be more active during weekends than weekdays. This behavior could be attributed to stores like Houston's Restaurant, Street Side Cafe (also a bar), and Dillards being close to the plaza. This proximity tended to attract a large number of shoppers during weekends.

Traffic accumulates at 47th Street Plaza from all four sides of the street. At times, pedestrians approaching the north sidewalk from Central Street seemed flustered; often, this confusion was indicated by some pedestrians standing in the middle of the junction to let vehicles pass. This awkward behavior can be attributed to the lack of a stop sign at Central Street before it intersects the 47th street. Due to the heavy traffic volume at the 47th - Central Street intersection, few pedestrians were observed to cross Central Street from any point other than the center of the intersection itself. This behavior was followed by pedestrians, due to the potential risk of being struck by vehicles (stopped temporarily in order to allow pedestrians crossing the street) at any other location than the intersection itself. Also for this reason, few horse-drawn carriages were observed at 47th Street Plaza. As chapter five and chapter six illustrates, a significantly different behaviors (crossing at points other than the intersections; the presence of horse-drawn carriages) was observed in both Nichols and Broadway Plazas.

The location of 47th Street Plaza is such that the tall residential apartments on the north of plaza (see figure 2.1) provide a sense of enclosure and security to the pedestrians. However, as just explained, the sense of security in this plaza is otherwise impeded by the fast moving vehicles in the Central and 47th Streets.

Figures 7.1 and 7.3-7.6 indicate that the steps of Hilliyard Gallery is one of the most preferred 'hang-out' spots in 47th Street Plaza. This behavior occurs most likely because of the view offered by the stepped seating and the privacy of the recessed niche (see figure 2.6 for location of Hilliyard Gallery). The preference in lingering at this spot is indicated by the thick flow patterns in front of Hilliyard Gallery (see figures 7.1 - 7.6).

The 47th Street Plaza also has many attractions like the Boar statue and the Neptune fountain (see figure 2.6). As illustrated in figures 7.1, 7.3, 7.4, and 7.5, the Boar statue attracts a large number of passersby (unlike the Neptune fountain), probably because of the hands-on participation that the pig figure provides. The statue's signboard invites passersby to rub the nose of the boar with a coin and then drop the coin in the fountain for good luck. The preference of the Boar to the Neptune fountain is also probably due to certain design features surrounding these statues: for example, the parapet surrounding Neptune fountain is sloped inward whereas the parapet of the Boar fountain is flat and

thus sittable. This difference in the two fountains will be explained in further detail in the analysis of sitting/standing patterns for 47th Street Plaza in the next section of this chapter.

(b) Sitting and standing patterns for 47th Street Plaza

The distribution maps for sitting and standing patterns in 47th Street Plaza are presented in figures 7.7-7.12. These observations were made using the same method adopted for Nichols and Broadway Plazas in chapter five and six. As the following discussion shows, the sociability of 47th Street Plaza appeared to be more successful for attracting a significantly larger number of pedestrians than Nichols or Broadway Plazas.

47th Street Plaza is nearest to the main entrance gate of Country Club Plaza and the J. C. Nichols Memorial fountain, (see figure 2.1). Thus, this plaza has been carefully designed to leave a lasting impression on the visitor's mind. This area, being close to main entrance gate of CCP, appears to be more welcoming, which is partly expressed through built form. This expression includes wrought-iron grillwork gates and railings, intricately designed street lamps, and colorful Spanish balconies. In contrast to the other two plazas, it was observed that changes in weather did not make a significant difference in the intensity of pedestrians and the activity patterns in 47th Street Plaza. Some of the strong design

features of this plaza are the steps (leading up to Swirk's jewelry or down to Hilliyard Gallery) and the landscaped area in front of Hilliyard Gallery. The steps, fountains and restaurants, located in the vicinity of this landscaped area, attract large number of pedestrians who often relax and linger at this plaza. Pedestrians were observed to use benches, steps and parapets for sitting, relaxing, smoking, reading newspapers or simply watching plaza activities. The wooden balconies above Steve's Shoes and Laura Ashley are visually striking and add interest in viewing-choice for the pedestrians and sitters using the plaza. Also, the plaza's sidewalk is landscaped with flowering plants, street lamps, chiming bells, plaza-activity posters, mosaic murals and occasional festive features like Easter bunnies, Christmas trees, Santa Clauses, and so forth. These features give 47th Street Plaza a sense of richness in its multi-natured activities which is further supported by the constant presence of passersby.

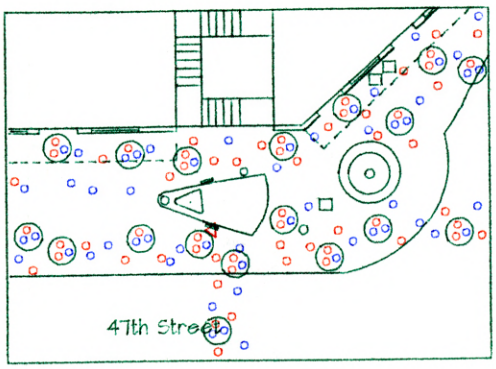
As explicated by Jane Jacobs (1960), diversity of primary and secondary uses (residences, offices, retail and so forth), mixture of activities, constant flow of pedestrians, appropriate street-corner location, presence of old and new buildings, and so forth contribute in the sociability of a plaza. In 47th Street Plaza, all the above mentioned features were observed in close affiliation with each other.

The view from this plaza is another reason which appeared

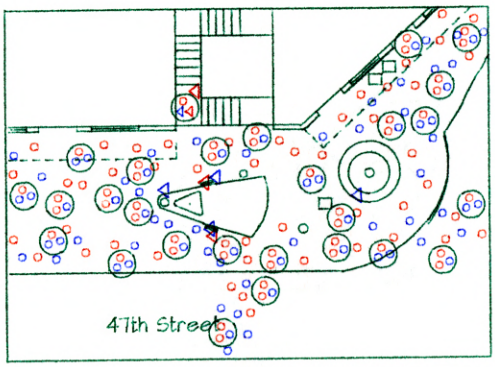
to encourage pedestrians to loiter here. The Street Side Cafe (with its umbrellas, tables, and chairs), the activities surrounding the two fountains, the entertainment amenities, and so forth take the role of a theatrical stage in 47th Street Plaza, which passersby have the benefit of watching on their way to respective destinations.

As illustrated in figures 7.1-7.4, fewer sitting patterns were noticed as compared to standing pedestrians. This behavior is mainly because of the insufficient sitting spaces provided in this area which is often deficient to demand. Though some sitting spaces (benches, steps, parapets, and so forth) are scattered throughout the plaza, there is not enough seating to support all plaza activities. It was observed that the parapet at Neptune fountain was less preferred for sitting purposes as compared to other seating areas in the vicinity due to an inward-sloping parapet which made sitting activity uncomfortable for patrons. Also the location of sitting was such, that a potential user would feel as if he or she were 'onstage' and open to the scrutiny of passersby. However, the other fountain, the Boar fountain, has a parapet made of rocks which are flat, and hence can be suitably used for sitting purposes when the demand is more. The same is true about the parapet in front of Houston's Restaurant, which appeared to be a favorite spot to linger when waiting for table-reservations. Given a choice, pedestrians preferred to sit on the steps of Hilliyard Gallery or the concrete benches

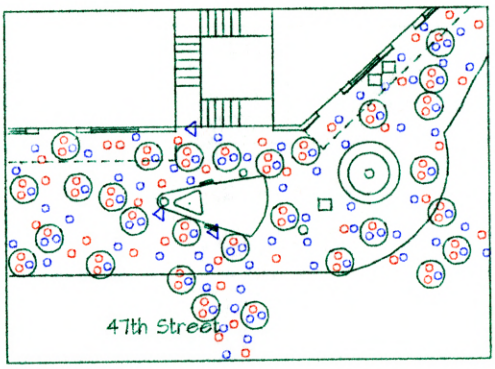
Sitting and Standing Patterns, 47th Street Plaza, Tuesday, Feb. 2, 1993



Morning



Noon



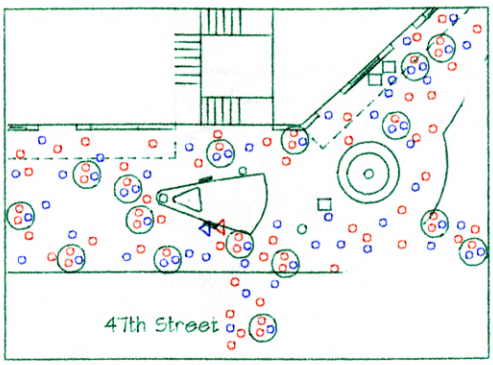
Afternoon

Key:

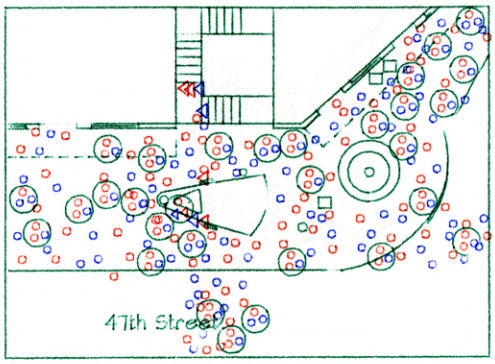
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- 3 – indicates individuals in a group

Figure 7.7 Distribution maps for sitting and standing patterns in 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

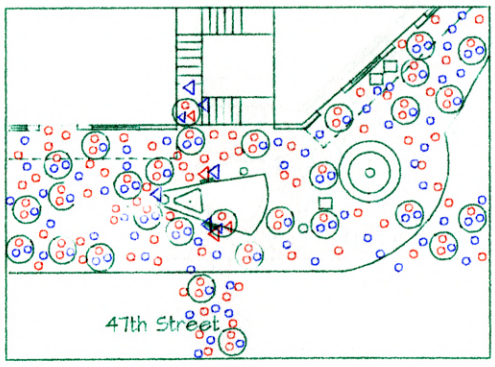
Sitting and Standing Patterns, 47th Street Plaza, Wednesday, Mar. 24, 1993



Morning



Noon



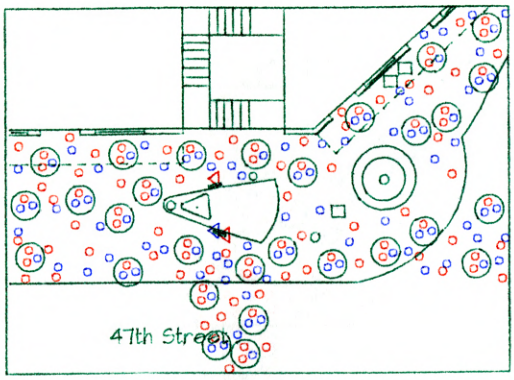
Afternoon

Key:

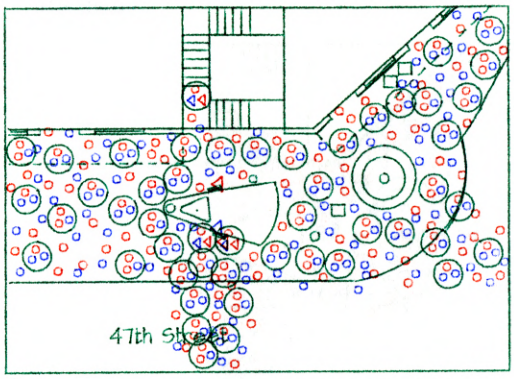
- indicates standing male (standing in place at least 30 seconds)
- indicates sitting male (sitting in place at least 30 seconds)
- indicates standing female (standing in place at least 30 seconds)
- indicates sitting female (sitting in place at least 30 seconds)
- indicates individuals in a group

Figure 7.8 Distribution maps for sitting and standing patterns in 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

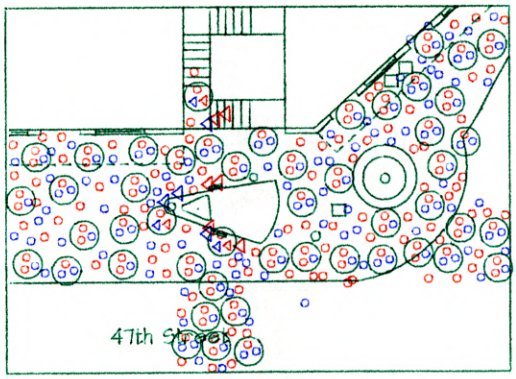
Sitting and Standing Patterns, 47th Street Plaza, Thursday, Dec. 17, 1992



Morning



Noon



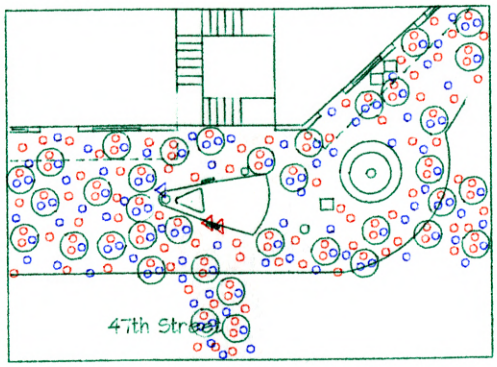
Afternoon

Key:

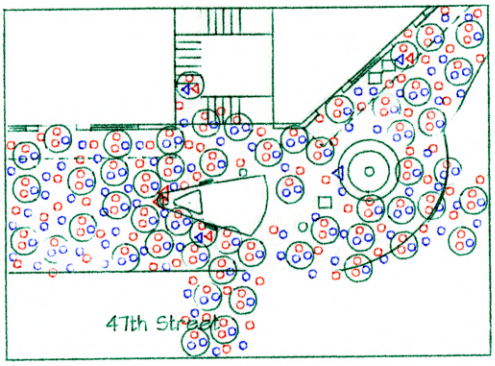
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- ○△ – indicates individuals in a group

Figure 7.9 Distribution maps for sitting and standing patterns in 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

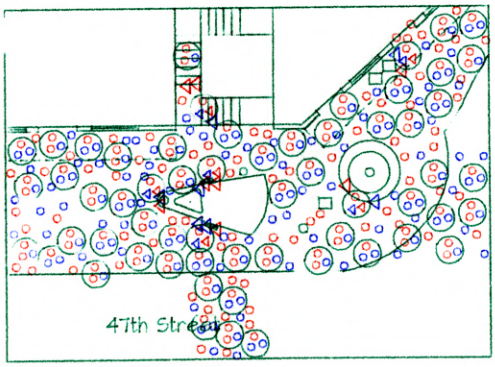
Sitting and Standing Patterns, 47th Street Plaza, Friday, Mar. 26, 1993



Morning



Noon



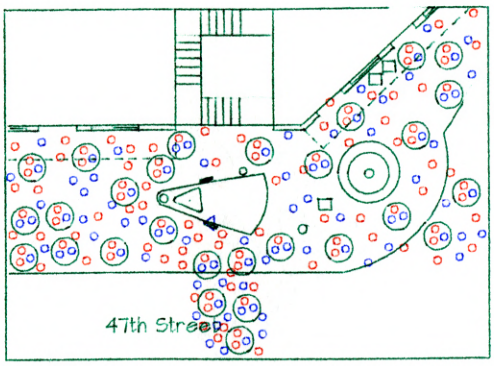
Afternoon

Key:

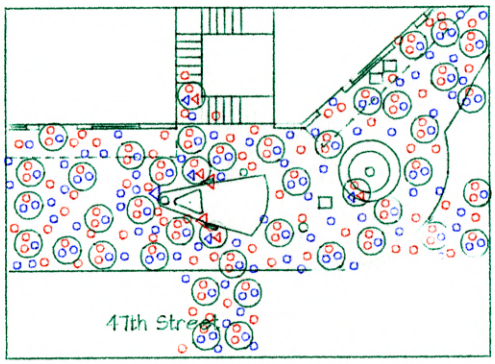
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- 2○ – indicates individuals in a group

Figure 7.10 Distribution maps for sitting and standing patterns in 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

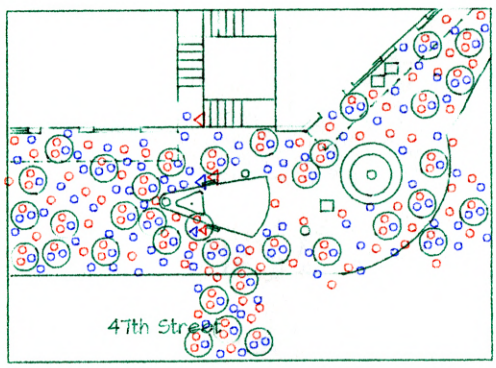
Sitting and Standing Patterns, 47th Street Plaza, Saturday, Jan. 23, 1993



Morning



Noon



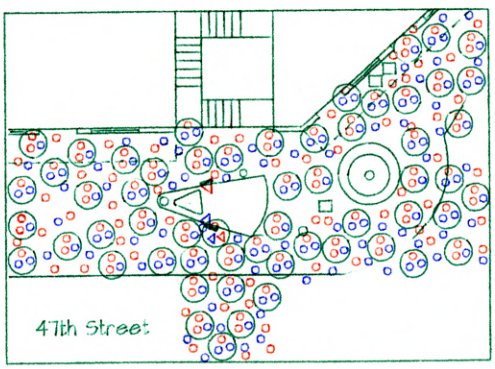
Afternoon

Key:

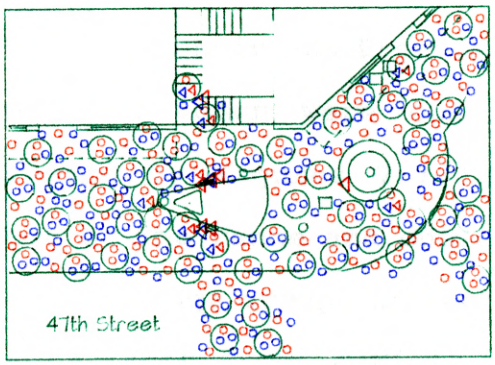
- ○ – indicates standing male (standing in place at least 30 seconds)
- △ – indicates sitting male (sitting in place at least 30 seconds)
- ○ – indicates standing female (standing in place at least 30 seconds)
- △ – indicates sitting female (sitting in place at least 30 seconds)
- ⚇ – indicates individuals in a group

Figure 7.11 Distribution maps for sitting and standing patterns in 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

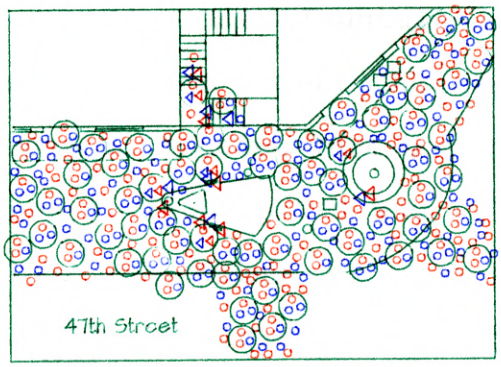
Sitting and Standing Patterns, 47th Street Plaza, Saturday, Dec. 26, 1992



Morning



Noon



Afternoon

Key:

- indicates standing male (standing in place at least 30 seconds)
- indicates sitting male (sitting in place at least 30 seconds)
- indicates standing female (standing in place at least 30 seconds)
- indicates sitting female (sitting in place at least 30 seconds)
- indicates individuals in a group

Figure 7.12 Distribution maps for sitting and standing patterns in 47th Street Plaza; morning represents 9:55 am–10:12 am; noon, 12:55 pm–1:17 pm; and afternoon, 6:00 pm–6:22 pm.

(as illustrated in figures 7.8-7.10 and 7.12), provided these spaces were dry and free of snow.

As explained earlier, the Boar statue invites people to participate in fountain activity. This activity-oriented participation attracted many passersby and is illustrated in figures 7.9-7.12 in the form of group activities observed around the Boar statue. Another spot which is a pausing point for most standing pedestrians (visitors and tourists) is the large 'Neptune Fountain', where the tourists often linger to take pictures.

Unlike Nichols and Broadway Plazas, almost an equal number of men and women were observed in 47th Street Plaza as manifested by figures 7.7-7.12. This behavior is probably because of the range and choice in activities offered by this plaza to all age groups and genders. As illustrated in figures 7.9-7.12, most group activities were observed near Hilliyard Gallery, the Boar fountain and the junction where Central intersects 47th Street. However, a significantly less number of group activities were observed around the Neptune fountain as seen in figures 7.7 and 7.9-7.12. This behavior is due to the lack of sitting spaces surrounding this fountain. Also as said above, the circular parapet around the statue is inward sloping (see photographs in figure 7.13) and hence inadequate for sitting purposes. Also the location of parapet is such that it is socially uncomfortable to a potential user.

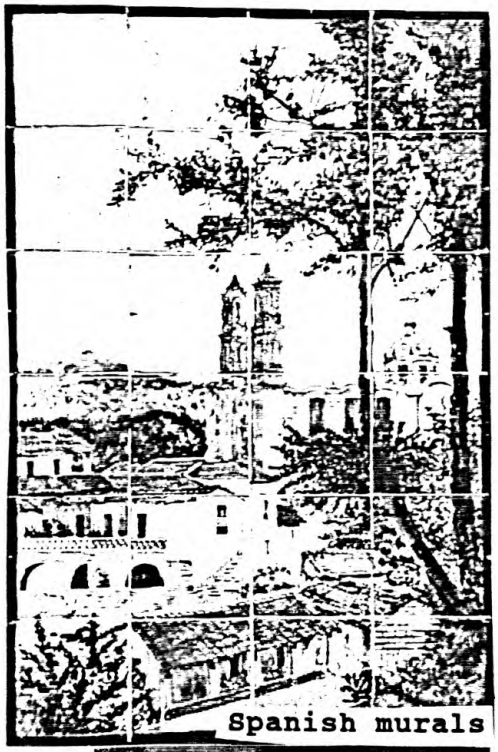
Hilliyard Gallery, with its recessed sunken atrium and its

wrought-iron grillwork, seemed also to attract pedestrians through its attractive built form. The sociability of this space is further enhanced by the large tree (see figure 2.6) which shades the benches provided in this area.

Patrons of Houston's Restaurant were observed to wait outside the establishment for reservations. This waiting activity was more prominent during weekends (see figures 7.10-7.12) when the restaurant attracted large number of customers. The smell of food, the constant passing of pedestrians in this sidewalk and the chiming of bells appeared to make the otherwise unpleasant waiting activity more bearable.

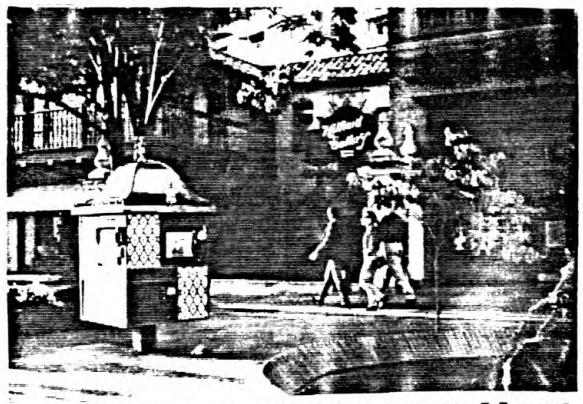
The vehicular traffic in 47th Street is observed to move at a higher speed than traffic on Nichols and Broadway Streets. Due to this reason, few standing patterns were observed in any area other than on the sidewalk of 47th Street Plaza itself. As illustrated in chapters five and six, a significantly different behavior was observed in Nichols and Broadway in terms of spilling of standing activities that spread into the street. This faster flow of traffic sometimes posed a threat to slow moving vehicles and pedestrians. It was also noticed that, due to the constant movement of traffic including trucks, 47th Street Plaza was more noisy and polluted as compared to Nichols and Broadway Plazas.

At times, pedestrians were observed to wait as long as two to three minutes before crossing 47th Street because of the fast moving vehicles. This pausing activity in the sidewalk,

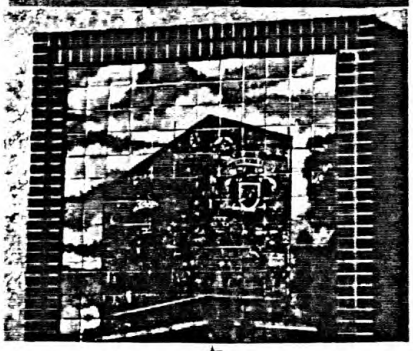


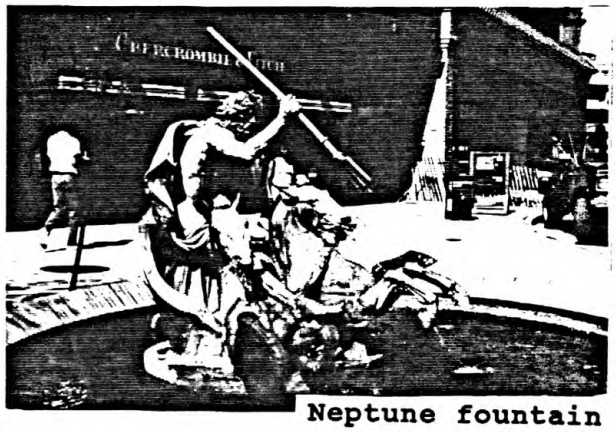
Spanish murals

View towards Steve's Shoe's and Spanish balconies

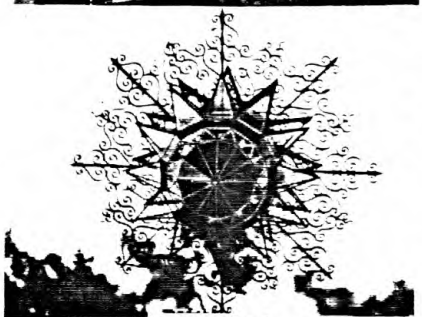


Facilities at Hilliyard Gallery





Neptune fountain



Spanish murals

Street Side Cafes

Figure 7.13 Photographs showing portions of 47th Street Plaza.

however, encouraged the use of certain amenities like buying newspaper from the news stand; admiring the easter bunny, Christmas tree and mosaic-murals; and at times to even enter establishments like Hilliyard Gallery, Street Side Cafe and Houston's Restaurant.

It appeared that one of the weak features of 47th Street Plaza was the southeast sidewalk (in front of Function-Junction; see figure 2.1) which did not encourage any outdoor sitting activity. Also, the window displays of the store were uninviting visually in appearance and passersby seemed reluctant to enter and explore the store further.

In the next chapter the author studies the differences between Nichols, Broadway and 47th Street Plazas and compares their activities and sociability in terms of built form and environment, for example, plaza location, density, street-corner relationships, street furniture, and so forth. The researcher will also investigate the effect of seasonal and temporal changes in these three plazas.

CHAPTER EIGHT: COMPARISON OF THE THREE PLAZAS

This chapter uses the findings of the literature review, analyses of observation counts and behavior mapping to present a comparison and contrast of the three plazas of Country Club Plaza presented in chapters 5 - 7. A key emphasis is the locations of the three plazas and their physical characteristics. The author emphasizes location because several researchers have argued that the primary factor determining the potential for sociability in an urban open space is its location in relation to its potential users and its nearby activities (Whyte, 1980; Jacobs, 1960; Rutledge, 1976; Francis 1988). In other words, the plaza's location is important for bringing people to it.

On the other hand, physical characteristics of the plaza - especially "street furniture" are important because they help hold people in the space. In other words, once people are in the plaza, well-designed elements such as sitting places and fountains inspire them to stay in the plaza for a longer period. In the following sections, the researcher studies the various characteristics and its effect on the enhancement of sociability in the three plazas.

1. LOCATION OF THE PLAZA

In this study, three factors were analyzed in order to assess how the location of the Country Club Plaza would

facilitate its sociability: (a) the density and category of people in areas surrounding the plaza; (b) the mixture of activities around the plaza; and (c) the relationship of the adjacent pedestrian streets and street corners to the plaza. The author reviews each of these factors here and then applies them to the three plazas.

a) Density of Population

As already mentioned in the literature review, one of the necessary conditions for thriving sociable plazas is the presence of a sufficiently dense concentration of people in the surrounding area (Jacobs 1960; Whyte 1980). Jacobs (1960) argues that in order to ensure a busy street life and diversity in cities, 'a district must have a sufficiently dense concentration of people, for whatever purpose they may be there' (p. 200). The argument is further supported by Whyte who contends that high downtown concentrations of people strongly influence the use of open spaces in a positive way (1980, p. 90) in that high densities provide greater number of users. The average density figures that Whyte gives for large cities like New York and Chicago are from 100,000 to 200,000 people per square mile with a pedestrian flow ranging from 2,500-3,000 per hour.

This last point by Whyte means that, for Country Club Plaza, adequate densities for plaza sociability is well under his specified need, since the population of Kansas City is

300,000 persons per square mile and the Country Club District's density is 60,000 persons per square mile.[18] CCP is occupied by many quality retail stores and services, banks, business offices, physicians and dentists, restaurants and hotels, theaters, night clubs, art galleries and customer parking garages. It also contains thousands of square feet of office space located on 2nd floors of buildings above retail areas and an additional two million square feet of office space located in buildings within walking distance.[19] There are approximately 7,000 apartment units located in more than 100 high and mid-rise buildings which surround the plaza within comfortable walking distance of its various facilities.

On an average shopping day, the through streets in CCP have a volume of 14,000 - 44,000 vehicles.[20] The number of passersby in CCP, estimated from the behavior maps in this research, ranges from 1,000 - 1,200 persons per hour. Considering the fact that Kansas City has a Central Business District and a more populated downtown district, the number of pedestrians that use CCP is sizeable, though not as large as

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[18] Data drawn from Census Report, 1990, and confirmed by J. C. Nichols Company (Developers of CCP) in March, 1993 at Kansas City, Missouri.

[19] Data drawn from Census Report, 1990, and confirmed by J. C. Nichols Company (Developers of CCP) in March, 1993 at Kansas City, Missouri.

[20] Data compiled from Plaza Facts, Equifax Marketing Decision Systems, February, 1992, including 1990 Census Report; CCP Study by Gentleman Associates, December, 1990.

the figures given by Whyte.

In chapter ten of his, The Social Life of Small Urban Open Spaces, Whyte (1980) points out that densities in smaller cities can be improved by concentrating retail developments and using all buildings to the fullest so that there are no vacant or under utilized spaces (p. 92). One notes in figure 2.1 that the physical form of Country Club District is very compactly organized, and primarily attributable to the concentration of retail activities and many residential buildings in the vicinity. Though many of CCP's users are shared by downtown and other commercial districts of the city, the number of people in Country Club District is quite sufficient in itself to generate sufficient numbers of pedestrians and users to make the plaza active and sociable.

Tables 8.1 - 8.4 illustrate the types of users of CCP and their aggregate numbers at different times of the day. A study of the aggregate number of users in Nichols, Broadway and 47th Street Plazas is shown in table 8.1. From this table it can be observed that 47th Street Plaza attracted a larger number of people than Nichols and Broadway Plazas. This behavior is due to the variety of choices in activities offered by 47th Street Plaza and its surroundings to users of all age groups and gender.

From table 8.2, it can be observed that the number of women was larger than men in all three plazas at all

AGGREGATE NUMBER OF USERS IN THE THREE PLAZAS DURING THE SIX OBSERVATION DAYS

	No. of Users on Site, Total								
	Nichols			Broadway			47th Street		
Time	9:00am to 9:20am	12:05pm to 12:25pm	5:10pm to 5:30pm	9:25am to 9:45am	12:30pm to 12:50pm	5:35pm to 5:55pm	9:50am to 10:10am	12:55pm to 1:15pm	6:00pm to 6:20pm
Tue. (Feb. 2, 1993)	35	61	114	44	80	80	54	127	172
Wed. (Mar. 24, 1993)	36	59	110	49	76	84	59	134	172
Thu. (Dec. 17, 1992)	46	92	126	77	110	121	69	171	214
Fri. (Mar. 26, 1993)	43	99	134	54	121	185	77	216	287
Sat. (Jan. 23, 1993)	43	98	123	49	90	92	68	152	182
Sat. (Dec. 26, 1992)	57	114	189	85	170	284	88	199	302

Table 8.1 Comparison of number of users during the six observation days for Nichols, Broadway and 47th Street Plazas.

THE THREE PLAZAS: MALE AND FEMALE USE

Observation Days	Nichols						Broadway						47th Street					
	Morning		Noon		A.noon		Morning		Noon		A.noon		Morning		Noon		A.noon	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Tue., Feb. 2, 1993	11	24	20	41	35	79	16	28	24	56	21	59	21	33	53	74	62	110
Wed., Mar. 24, 1993	10	26	16	43	36	74	17	32	25	51	27	57	23	36	63	71	74	98
Thu., Dec. 17, 1992	14	32	36	56	39	87	33	44	41	69	44	77	31	38	79	92	85	129
Fri., Mar. 26, 1993	18	25	33	66	46	78	19	35	45	76	61	124	34	43	113	103	148	139
Sat., Jan. 23, 1993	9	34	23	45	33	90	18	31	34	56	29	63	29	39	70	82	63	11
Sat., Dec. 26, 1992	20	37	37	77	63	126	28	57	64	106	95	189	29	59	72	127	10	197
********** Summary **********																		
Total per observation	Morning		Noon		A. Noon		Morning		Noon		A. Noon		Morning		Noon		A. Noon	
	82	178	165	328	252	534	131	227	233	414	277	569	167	248	450	549	537	792
Total Male and Female Users	Male		Female				Male		Female				Male		Female			
	499		1040				641		1210				1154		1589			
Total Users	1539						1851						2743					

Table 8.2 Comparison of men vs. women, Nichols, Broadway and 47th Street Plazas, for the six observation days.

COMPARISON OF STREET WATCHERS IN THE THREE PLAZAS

Observation Days	Nichols						Broadway						47th Street					
	Morning		Noon		A.noon		Morning		Noon		A.noon		Morning		Noon		A.noon	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Tue., Feb. 2, 1993	2	0	1	2	5	6	1	4	2	6	2	3	4	1	10	7	21	13
Wed., Mar. 24, 1993	1	0	0	1	5	5	1	0	4	2	2	4	3	3	16	10	16	10
Thu., Dec. 17, 1992	1	0	4	3	6	8	8	2	11	5	7	7	3	2	20	12	22	13
Fri., Mar. 26, 1993	1	1	2	1	11	5	4	2	6	5	10	2	8	5	27	21	42	25
Sat., Jan. 23, 1993	2	2	5	3	6	10	1	1	6	3	7	2	5	2	14	6	16	10
Sat., Dec. 26, 1992	3	4	2	5	4	8	3	3	6	4	10	5	3	5	7	11	13	21
********** Summary **********																		
Total (M, F)	10	7	14	15	37	42	18	12	35	25	38	23	26	18	94	67	130	92
Total per observation	Morning		Noon		A. Noon		Morning		Noon		A. Noon		Morning		Noon		A. Noon	
	17		29		79		30		60		61		44		161		222	
Total Users	125						151						427					

Table 8.3 Comparison of aggregate number of street watchers in Nichols, Broadway and 47th Street Plazas for the six observation days.

observation times. This speaks highly of the sense of security and contentment experienced by women in using Country Club Plaza. William Whyte (1980) and Jane Jacobs (1968) speculate the success of plazas as "safe places" if they are used by women in large numbers at most times of the day.

From table 8.3, it can be noticed that the number of men in the "street watchers" category was more than the number of women during most observation times, in all the three plazas. This is more than likely because men are traditionally known to participate in "schmoozing" activities in open urban places. However, the number of men and women in 47th Street Plaza is almost comparable. This is probably because, unlike the other plazas, 47th Street Plaza is a typical "street plaza" and is used as a thoroughfare, and also because a variety of entertainment and shopping activities are offered in close vicinity of 47th Street Plaza which attract the interest of all age groups and genders.

(b) Mixture of Activities

A second criterion affecting the sociability of urban plazas is that plaza spaces should not only be inviting to a variety of people, but, to maintain the inflow of people, the surrounding of the plaza should provide a mixture of uses and activities (Jacobs, 1960 p. 98; Francis, 1987 p. 29, 1988, p. 57). Jacobs contends that small urban spaces such as parks and plazas are creatures of their surroundings and these

surroundings generate mutual support from diverse uses (Jacobs, 1960, p. 98).

Jacobs argues that the key to urban diversity is a mixture of primary uses, by which she means establishments such as offices, factories, and educational institutions, which necessarily bring people to them for specific purposes. Further, she asserts that there should be more than one primary function in a certain area. The users must have different schedules for utilizing these facilities to insure a consistent flow and presence of people in the area, both during the day and at night (ibid. p. 152). Jacobs argues that in addition to primary uses, there should also be secondary uses, which she defines as uses which emerge in response to the presence of primary uses and serve the people drawn by primary uses. Examples of such uses include restaurants, bars and shops (Ibid., p. 152).

As figures 1.2 and 2.1 illustrate, there is a rich mixture of primary use establishments in the CCP vicinity, such as the residential structures which define the periphery of CCP, the commercial and retail stores, the park on the west of CCP, and so forth. Besides the large number of retail stores, there are a large number of offices and institutions which are knitted together within and around Country Club Plaza which bring people into the plaza area.

It is, however, evident that there are not enough number of secondary uses which will keep the users in the smaller

plazas for a longer period of time. This lack of secondary uses was particularly noticed in Broadway Plaza. Virtually, no secondary uses such as restaurants, bars or coffee shops were identified in the Broadway area in relation to the large pedestrian inflow that this plaza experiences. Near the Nichols Plaza, a few secondary-use shops like Shoeshine, Emile's Cafe, Superlatives Arts and Crafts Store, and the Athletic Plaza were identified. But it was noticed that the outdoor court of Emile's Cafe, which was primarily responsible for drawing many people to this plaza, was open only during warm weather; the other existing stores in this area were not enough in themselves to retain the interest of the pedestrians during all observation times. A need for more places where a user could sit, relax, eat and appreciate the plaza ambience, in spite of seasonal changes, was identified as a key design need for Nichols Plaza.

Table 8.3 presents a comparative study of the user types present in Nichols, Broadway and 47th Street Plazas on three typical days in CCP. From the table, it can be noticed that passersby were present in large numbers in all three plazas during all observation days. A closer study shows that teenagers were present in large numbers, especially in 47th Street Plaza. This behavior is due to the nature of businesses (Street Side Cafe, Hilliyard Gallery, Houston's Restaurant, and so forth) offered around 47th Street Plaza, which attract a lot of teenagers. It is also obvious from table 8.3 that

COMPARISON OF USER TYPES IN THE THREE PLAZAS

User Types		Tuesday, Feb. 2, 1993						Wednesday, Mar. 24, 1993						Saturday, Jan. 23, 1993					
		Nic.		Bro.		47th		Nic.		Bro.		47th		Nic.		Bro.		47th	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Shoppers	A	6	12	11	57	7	36	4	9	10	53	13	33	8	16	13	60	12	36
	T	6	12	3	9	6	14	3	10	5	13	9	14	6	12	6	13	11	22
	C	2	2	2	4	3	3	2	3	2	4	5	7	1	5	4	5	6	6
Passers by	A	33	83	27	36	61	109	33	88	31	42	64	97	25	91	24	38	65	119
	T	6	18	10	21	21	30	10	18	11	19	23	25	7	17	13	24	27	34
	C	5	9	3	3	3	5	4	9	3	3	10	6	6	12	7	4	6	5
Street Watchers	A	5	4	4	5	11	8	4	3	4	3	12	8	8	4	7	3	17	8
	T	1	2	0	4	18	9	0	3	1	2	15	7	3	6	4	2	14	7
	C	2	2	1	4	6	4	2	0	2	1	8	7	2	5	3	1	4	3
********** Summary **********																			
Total (M,F)		66	144	61	143	136	218	62	143	69	140	160	205	65	169	81	150	162	240
Total Users		210		204		354		205		209		365		234		231		402	

Table 8.4 Comparison of aggregate number of user types on typical weekdays and weekend in Nichols, Broadway and 47th Street Plazas.

A - Adults
T - Teenagers
C - Children

Nic. - Nichols Plaza
Bro. - Broadway Plaza
47th - 47th Street Plaza

AGGREGATE NUMBER OF VEHICLES OBSERVED IN THE THREE PLAZAS

DURING THE SIX OBSERVATION DAYS

	No. of Vehicles on Site, Total								
	Nichols			Broadway			47th Street		
Time	9:00am to 9:20am	12:05pm to 12:25pm	5:10pm to 5:30pm	9:25am to 9:45am	12:30pm to 12:50pm	5:35pm to 5:55pm	9:50am to 10:10am	12:55pm to 1:15pm	6:00pm to 6:20pm
Tue. (Feb. 2, 1993)	28	34	36	32	39	35	42	55	37
Wed. (Mar. 24, 1993)	25	38	33	26	35	38	44	62	39
Thu. (Dec. 17, 1992)	32	47	49	33	57	43	35	69	49
Fri. (Mar. 26, 1993)	38	35	40	36	44	42	33	60	65
Sat. (Jan. 23, 1993)	25	28	32	27	36	39	30	42	45
Sat. (Dec. 26, 1992)	33	45	49	40	59	62	46	70	69

Table 8.5 Comparison of number of vehicles observed near Nichols, Broadway and 47th Street Plazas for the six observation days.

women were more regularly present in larger numbers than men in all three plazas. The study of aggregate number of users in the three plazas during the three observation days shows that 47th Street Plaza was the most pedestrianized plaza in terms of numbers of shoppers, passersby and street-watchers.

The number of users in Nichols and Broadway were almost comparable, but considering the size of Broadway Plaza (being larger in area than Nichols), the author would say that Nichols was more popular than Broadway in terms of plaza sociability. As explained in chapter six, the reason for the fewer number of users in Broadway is mainly because of the absence of sitting facilities, a food court, and other street furniture in the close vicinity to this plaza. Table 8.5 illustrates the differences in the number of vehicular traffic observed at the three plazas. It can be noticed that Nichols Plaza experienced the least number of vehicles, and 47th Street was the most crowded amongst the three plazas studied at CCP. The less traffic at Nichols is most likely due to the dead ends on both sides of J. C. Nichols Road and this encouraged activities like horse-drawn carriages, which were observed to be more frequent in this area as compared to Broadway and 47th Street Plazas. 47th Street linked CCP to major highways and hence was more crowded during all observation periods. As explained in chapter seven, the heavy traffic discouraged pedestrians from wandering off to the street and also deterred street-activities like horse-drawn

carriages, vendors, street-artists and so forth.

c) The Plaza's Relationship with Street and Street Corners

A third factor integrally related to plaza location is the plaza's relationship to the street and street corners. This point is especially emphasized by Whyte (1980), who argues that there is a direct relationship between the number of people using a plaza and the pedestrian flow on adjacent streets. He contends that plazas should be located near heavily used streets or street corners. To maintain a constant flow of people, streets near the plaza should be a link between major activities such as offices, shopping areas and restaurants. Whyte also argues that plazas be located near 'choke points' such as subway stations and bus stops, since large numbers of people are often concentrated at these places (p. 12 & 54). Finally, Whyte argues that street corners have a special significance, since, if they are busy, they contribute considerable pedestrian traffic that may use the plaza (1980, p. 54).

As Clare Cooper Marcus interprets in People Places (1984), a street plaza is a small portion of public open space immediately adjacent to the sidewalk and closely connected to the street. Plaza space is sometimes a widening of the sidewalk proper or an extension of the sidewalk under an arcade. Such spaces are generally used for brief periods of sitting, waiting, and watching, and they tend to be used more

by men than women. Successful plazas should have a good seating edge, a widened sidewalk, a place to wait for public transportation, a pedestrian link, a corner sun pocket, and so forth.

In Country Club Plaza, it was observed that 47th Street Plaza was located in one of the "choke points" of traffic (see figure 1.2) which intersected at 47th and Central Streets. This pedestrian flow was mainly due to automobile traffic on Wornall Road, the nearby residential complexes, and the close location of Dillards and parking lots.

In Nichols Plaza, the to-and-fro movement of pedestrians was much less in number compared to the other two plazas. This behavior is because of the dead ends on both sides of J. C. Nichols Road, which hinder the thoroughfare of pedestrian exchange from one street to the other. In Broadway Plaza, the number of passersby was comparably large, but due to the absence of adequate seating and other street-furniture, Broadway failed to hold pedestrians for long periods of time. A study of the aggregates in the three plazas in figure 8.1 exemplifies that 47th Street Plaza attracts a large number of pedestrians.

It was observed that all three plazas were used for cross-street activities (see figures 5.1-5.6, 6.1-6.6 and 7.1-7.6). This behavior was due to the mutually supporting shopping establishments scattered on different sides of the plazas. Similarly the parking lots also link the three plazas and

provide pedestrian flow for each of these (see figure 2.3).

On the basis of behavior mapping, it can be concluded that connections from 47th Street Plaza to Nichols Plaza through Central (see figures 5.1-5.6) or to Broadway Plaza (see figures 6.1-6.6), and from Broadway Plaza to Nichols Plaza (see figures 5.1-5.6) are used more frequently than any other connections in the three plazas at CCP. In Nichols Plaza, the sidewalk adjacent to the central open parking lot is rarely used due to lack of architectural attractions and vendors which might otherwise hold the pedestrian traffic in this space.

Although many pedestrians use the two sidewalks between Central and Nichols, a comparison of the sitting and standing maps (see figures 5.7-5.12, 6.7-6.12 and 7.7-7.12) for the three plazas indicate that Nichols and Broadway Plaza failed to hold a substantial number of people in the plaza at all observation times. This behavior is also manifested in table 4.3 and 8.3 where the aggregate number of users in Nichols and Broadway Plazas was observed to be fewer than the 47th Street Plaza. Three explanations are possible. First, the plaza itself is small in area; second, there is not enough pedestrian flow in this location; and third, the plaza does not have enough architectural attractions (seating, vendors, and so forth) to hold the pedestrian at all times (as in the case of Broadway Plaza).

In 47th Street Plaza, on the other hand, it was observed

that the widened sidewalk and the strategic street-corner location helped retain large numbers of pedestrians who were further held in the plaza by the provision of seating facilities (steps and benches), the landscaped garden, fountain statue, and so forth.

2. PHYSICAL CHARACTERISTICS OF THE PLAZA

If the location of the plaza is a crucial first factor which influences a plaza's sociability, physical characteristics of the plaza itself are also important, since they help to retain the users who come into the plaza. Two major components can be evaluated in regard to a plaza's physical elements: (a) the transition between street and plaza, since a smooth, readily traversable transition facilitates easy access of people from adjacent streets; and (b) sittable spaces, which provide users a place to watch linger, and comfortably converse. The criteria to assess these factors are drawn largely from Whyte's book, especially chapters two and five, which discuss plaza sitting and street-plaza transition (Whyte, 1980).

a) The transition between street and plaza

Whyte contends that the "transition [from street to plaza] should be such that it is hard to tell where one ends and the other begins" (p. 57). He argues that the relationship between the street and the plaza should stimulate 'impulse

use,' by which he means the quality of a space to draw people into it without any hesitation or conscious consideration. In other words, people are in the plaza space before they know it. Whyte suggests two factors which facilitate a plaza's impulse use: first, sightlines or visibility, into the plaza; and second, the use of beckoning devices such as steps, trees and entrance markings to draw people in.

Whyte contends that the sight lines of a plaza are important because people will not enter a space that they cannot see well (p. 58). Whyte believes that a completely sunken plaza or plaza above passersby's eye level will not stimulate impulse use. However, he strongly recommends slight level changes to accommodate a few comfortable steps which work as a beckoning device to enhance plaza use and its image. Similarly beckoning devices like trees and entrance markings, if designed carefully, can stimulate use of a plaza, since they physically and visually draw people in.

In the case of Country Club Plaza, evaluating the transition between street and plaza involves the consideration of movement between various streets and plazas in CCP. The movement of vehicular and pedestrian traffic along 47th Street, which is a through street, aids the cause of 47th Street Plaza in many ways. Being located in the corner of two bifocating streets (Wornall and 47th Street, see figure 1.2), this plaza is naturally benefitted by an abundance of to-and-fro movement between pedestrians.

The traffic along Ward Parkway and Broadway Street helps provide a movement of pedestrians in Broadway Plaza, but the plaza, being a recessed niche, does not come under the direct influence of all the pedestrian circulation in this area. As for Nichols Plaza, as was explained earlier, J. C. Nichols Road, being a dead end on both ends (blocked by Swanson's, Boatman's Bank and the free parking lots), the plaza does not experience much through traffic. The Central Street terminates with Ward Parkway and 47th Street, hence cannot be really considered as a through street. Also, as earlier explained in chapter five, Nichols Plaza being located on the northwest sidewalk (which experiences lesser pedestrian movement), this street-pocket does not come under the jurisdiction of intense pedestrian movement.

On a larger scale, while considering the transition from major highways to the CCP area, one finds that 47th and Jefferson Streets are connected to major traffic routes and act as key entrances to CCP. All other boulevards in CCP are secondary, as they have either parking lots (east and west ends) or stores (Swansons, Boatmens, etc) on their edges, making them only secondary entrances to the plaza. Due to the distinct visibility of the CCP area (tall towers, apartment blocks and red-tiled roofs), the transition from Ward Parkway and Jefferson Street to the plaza area is very smooth, since these streets deviate directly into the plaza area. The same can be said about the 47th Street transition into CCP.

We must next consider beckoning devices in regard to the three plazas. In Nichols Plaza, certain architectural elements, like the "boy and frog" fountain, the plaza-activity poster, the two wooden benches and newspaper stands have been employed to suit the purpose of beckoning devices. To some extent, the steps of Emile's Cafe serve the same purpose. During warmer weather, the umbrellas, tables and chairs laid out in the food court (see figure 2.4) act as a theatrical stage for this otherwise quiet plaza.

In Broadway Plaza, practically no beckoning devices were used to attract pedestrians except for the Mermaid fountain. The few architectural elements that were observed in this plaza, was of a passive kind (trash containers, plaza-activity poster, etc) and did not elicit any impulse use from passersby. The window displays were rather small and uninteresting and did not appear to catch the attention of pedestrians. Considering the area of Broadway Plaza (being larger than Nichols and 47th Street Plazas) and the large numbers of passersby (see tables 6.1-6.6) observed in this area, the researcher would consider the lack of beckoning devices and amenities as a serious design limitation for the sociability of this plaza.

In 47th Street Plaza, beckoning-device efforts were consciously made by the designer to attract pedestrians to linger in this area. Most impulse use in this plaza behavior is probably due to the close location to the main entrance

gate of CCP (see figure 2.1). Some of the beckoning devices used in this vicinity are the landscaped garden, two large fountains (the Boar and Neptune fountains), the open atrium of Hilliyard Gallery flanked by balconies and wrought-iron grill work railings, mosaic murals, sculptured street lamps, bells, newspaper booths, easter bunnies, and so forth. The steps of Hilliyard Gallery, and the tables laid out under the umbrellas in Classic Cup Cafe, also played a big role in attracting pedestrians in this area.

In summary, it can be said that sociability in 47th Street Plaza was seriously reinforced by the provision of certain beckoning devices. On the other hand, in the case of Nichols and Broadway Plazas, the presence of certain attractive architectural elements (sitting spaces, food court, landscaped garden, and so forth) could have effectively contributed in retaining pedestrians in these plazas.

b) Sittable Spaces

In William Whyte's argument (1980), sitting is crucial, since he demonstrates that it is a primary element for keeping people in a plaza. Simply put, "people sit where there are places to sit" (p. 28). Whyte contends that the "sittable" area in a plaza should be physically and sociably comfortable. Whyte's criteria for physically comfortable seating incorporate appropriate height and width of the seating space. Whyte describes sociably comfortable seating spaces as those

spaces which provide a fair amount of choice to people -- 'sitting up front, in back, to the side, in the sun, in the shade, near food stalls, in groups, off alone, and so forth (p. 28).

In Country Club Plaza, only 47th Street Plaza has a fairly sufficient amount of sitting space. Even this amount is inadequate, considering the large pedestrian inflow at this street junction. During warm weather, the Street Side Cafe is a favorite place for pedestrians to relax and sip a cup of coffee or wine. The steps near Hilliyard Gallery are also preferred places to sit and relax, as they are informal in use and offer good viewing-choice to a casual observer. The parapet surrounding the Neptune fountain, however, is sloped and discourages sitting activity. The fixed concrete benches near the landscaped area (see figure 2.6) are immobile and do not provide much flexibility in seating choice and so, if the user is given a choice, they are less preferred over the steps of Hilliyard Gallery. Considering the space occupied by the triangular landscaped garden in this plaza, this area is highly underused. This behavior is partly due to the lack of access into the landscaped area, and partly due to lack of maintenance.

Nichols Plaza has very few seats to hold and retain users in the plaza area. It has practically no seating space looking towards the fountain. The steps leading to Emile's Cafe are well placed and comfortable, but they are narrow in width and

do not seat more than two persons at a time. As explained in chapter five, the wooden benches (see figure 2.4) are awkwardly placed and are not socially comfortable sitting places. The open-air restaurant supports a large number of sitting activity but these are in effect only during warm weather. It was observed that in Nichols Plaza, edges provided better viewing choices and options than interior parts of the plaza.

The design of white and violet mosaic tiles on the external walls of Emile's Cafe, the vivid flapping posters on the wrought-iron post advertizing plaza activities, the colorful umbrellas, the design of wooden benches and the sculptured 'boy and frog' statue as illustrated in figures 2.4 and 5.13 (photographs), add a lively Spanish atmosphere to this otherwise small and lifeless plaza.

In Broadway Plaza, no formal seating is provided and the plaza strictly lacks utilities to hold the pedestrian. The parapet seating around the periphery of Mermaid fountain is functional but looks away from the fountain activity. Hence there is a tendency amongst pedestrians to use the more socially comfortable seating (the two small benches) space provided near the sides of Eddie Bauer's entrance. These benches look towards the fountain area and plaza space and provide good viewing-choice. However, they are insufficient to demand and hence always crowded.

Within CCP area, the visibility is fairly good because of

carefully placed trees, sensitively designed roof heights, sunken central parking lot, and so forth. Beckoning devices such as steps, awnings and arcades are especially evident in 47th Street Plaza where the steps leading to Hilliyard Gallery are favorite places to squat and watch passersby. It appears that the balconies above Steve's shoe store and Laura Ashley (due to their colorful finistrations and inviting appearance) will make good locations for outdoor restaurants since these provide excellent views to the street below, and at the same time serve as private domains for eating and relaxing purposes. In the present context, the umbrellas and awnings in the north and the southeast ends of Classic Cup Cafe are preferred places to pause and relax. The same can be said about the northwest side of the Nichols Plaza, when the weather is warm and the tables are laid out in the food court.

In the last chapter, the author will formulate the findings of the study of CCP to frame conclusions, design recommendations and policy changes for Country Club Plaza and other urban plazas in general.

CHAPTER NINE: CONCLUSIONS AND DESIGN RECOMMENDATIONS

This last chapter of the thesis attempts to identify several factors that future designers and developers might consider in improving, enhancing and further reinforcing the sociability of Country Club Plaza. The following section proposes certain design and policy changes for CCP and its immediate surroundings. It also suggests several more general guidelines for designing sociable urban open spaces, based on the descriptive study of the three small plazas in CCP.

DESIGN RECOMMENDATIONS FOR THE THREE CCP PLAZAS

As illustrated in figures 9.1 - 9.3, the red colored patterns indicate the proposed changes for improving the sociability in the three plazas studied in this thesis. The first and most important of these proposed changes involve appropriate seating. In the preceding analyses of "sittable spaces" in chapter eight, especially for Nichols and Broadway Plazas, it was observed that the plazas lacked physically, as well as, socially comfortable sitting spaces. It is proposed to increase the amount of appropriate sittable space and to provide more sitting choices, as suggested by William Whyte (1980, p. 28). Whyte's criteria for physically comfortable seating incorporate appropriate height and width of the seating space. Whyte describes socially comfortable seating spaces as those spaces which provide a fair amount of choice

to people --"sitting up front, in back, to the side, in the sun, in the shade, near food stalls, in groups, off alone, and so forth."

In Nichols Plaza, more socially comfortable seating space looking towards the plaza space is also identified as a possible design improvement. It is suggested that some of these seating facilities should be provided on the south sidewalk in front of the Plaza Medical Building and Halls Store (see figure 9.1), which offers good viewing choice to the casual user. In addition, the provision of an external stepped entrance to the outdoor food court of Emile's Cafe would greatly facilitate the appeal and access of impulse users in this outdoor open space.

As explained earlier in chapter six, Broadway Plaza has a large uncluttered space in front of Eddie Bauer's entrance which is underused. An effort should be made to design sufficient number of informal, flexible and mobile sitting facilities like inexpensive lounge chairs which users can arrange in this space according to their own convenience and purposes. A stepped seating provided near the display windows looking towards the splashing Mermaid fountain also would have great potential for satisfactory viewing choice and user utilization (see figure 9.2).

In the 47th Street Plaza, the sloped parapet around Neptune fountain should be redesigned as a flat parapet, to encourage comfortable sitting activity. The landscaped area

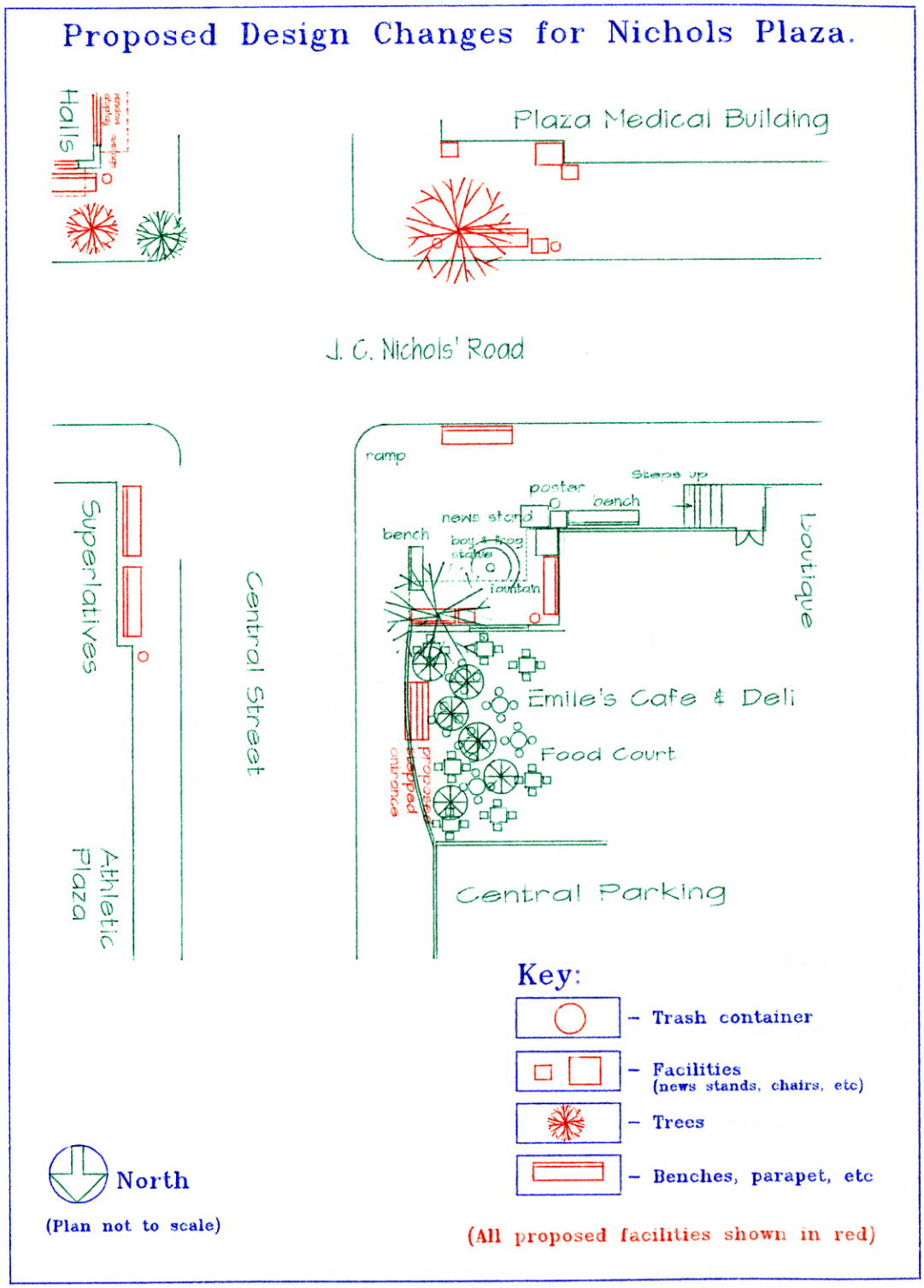

Figure 9.1 Proposed design recommendations for Nichols Plaza.

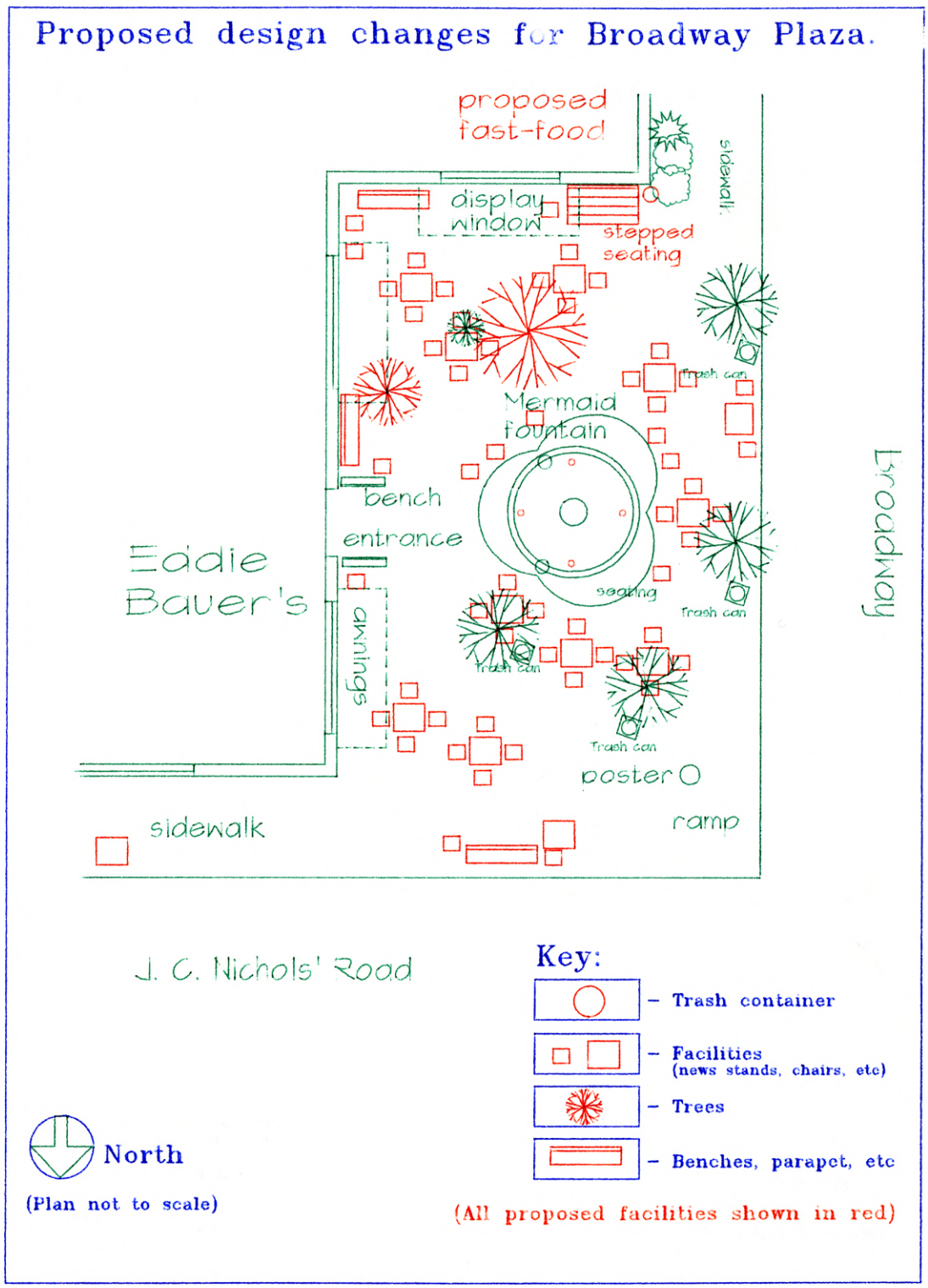

Figure 9.2 Proposed design recommendations for Broadway Plaza.

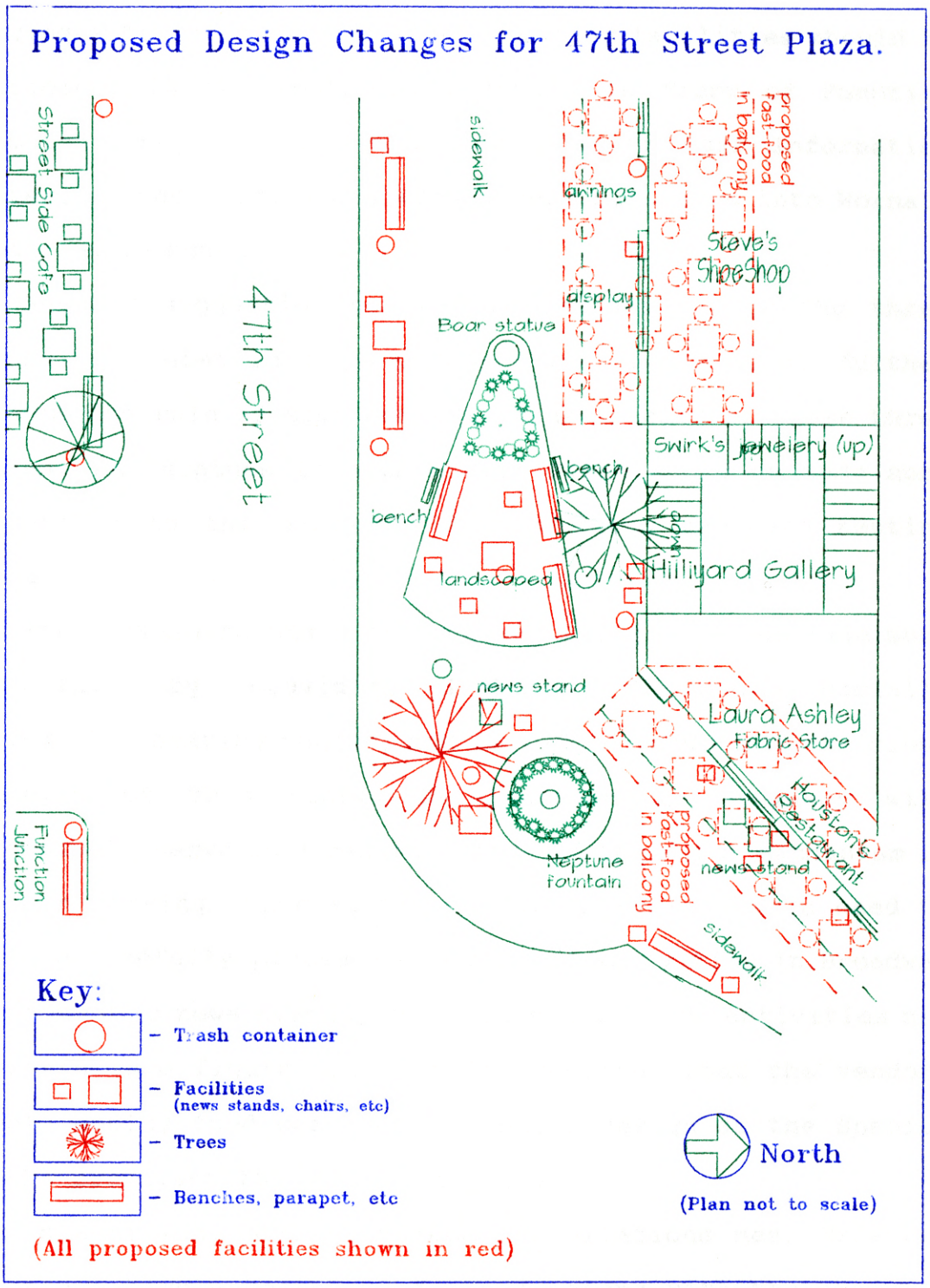

Figure 9.3 Proposed design recommendations for 47th Street Plaza.

east of the Boar fountain should be provided with flexible and movable chairs for pedestrians to relax, engage in brown-bagging activities, and so forth. Seating facilities should be introduced in the southeast sidewalk in front of Function Junction and also near the street-corner near Information Center, at the point where 47th Street bifocates into Wornall Road (see figure 1.1).

Another suggestion to improve sociability in the three plazas, as shown in figures 9.1 - 9.3, would be to further enhance the role of some central stage in each of these three plazas. The statues in 47th Street Plaza could be made more attractive to the passersby by providing adequate seating spaces.

The Mermaid fountain in Broadway Plaza could be made more attractive by providing lighting fixtures, socially comfortable seating spaces, and fast-food vendors in the close vicinity of this area. The fountain in Broadway will effectively serve as a central stage if the water mechanism is kept in working order at all times. There is also a need to provide carefully-placed user oriented activities in Broadway Plaza such as news stands, vendors, street-side activities and so forth (see figure 9.2). It is suggested that the vendors should employ food carts of a similar design as the Spanish kiosks prevalent throughout CCP area.

In addition, permanent food installations near Broadway Plaza are highly recommended. Food, along with the aromatic

smell and clutter of people, attracts people who attract more people. The introduction of an outdoor fast-food restaurant in the vicinity of Broadway could have a definite positive effect on its use and in holding the pedestrians in this plaza. Also provision of entertainment activities and food courts (which have the qualities of being a central stage) invoke group activities which thereby enhance the sociability of a plaza.

In 47th Street Plaza, as discussed earlier in chapter eight, the balconies above Steve's Shoe Store and Laura Ashley should be given serious consideration for establishments such as a restaurant, fast food, cafe or bar (see figure 9.3). This location, if made accessible to the common pedestrian, has a great potential in attracting passersby. Besides the attractive Spanish design of the balconies, this terrace offers great viewing-choice to the plaza and street below, is oriented to receive south-east sunlight, and is also secluded and private at the same time. From the study of food court in Nichols Plaza, it was observed that large numbers of women tended to prefer such secluded and private spaces within a plaza. Also, afternoons were the most popular time in CCP as observed from the study of all three plazas. In essence, the balconies have all the qualities that make successful sociable spaces and hence a redesign of this space should be foremost in future design developments for the CCP to improve its sociability.

Similarly in Nichols Plaza, the introduction of activities

other than the food court would maintain sociability in the plaza through out the year and not just during warm weather. This can be made effective by a carefully programmed shift in activities (after warm weather) from food court to surroundings of Nichols Plaza by introducing activities like fairs, street-artists, and so forth.

Another suggestion to improve sociability in Nichols Plaza is to soften the facade of Halls Store by introducing more visually attractive openings (in the form of large and attractive window displays) in an otherwise monotonous and boring facade. Awnings should also be provided on these windows for shade and design appeal (see figure 9.1). These features would also improve the visual contact between users inside and outside the plaza and thus encourage participation of pedestrians with built form.

As a general observation, it was noticed that the three CCP plazas were used very well during Christmas time and also during the September Art Fair. It can be interpreted from this behavior that special events in plazas attract large numbers of people and also encourage group activities. Based on this data, it is suggested that, in Nichols and Broadway Plazas, small everyday events should be organized to encourage a tradition of community events. These can take the form of scheduling street artists (jazz concerts, small bands, performing school kids and so forth) to perform at these plazas from time to time and also scheduling St. Patrick's Day

parades, Christmas festivities, and so forth through these streets.

Another observation made for CCP in general was the under-use of central open parking lot (at the north of Nichols Plaza) by pedestrians and vehicular traffic. The under use of such a large open space in the heart of CCP raises interesting issues in terms of land-use and value in a big commercial district such as this. Future design development schemes should include an alternate activity program (plaza open air concerts, fairs, exhibits and so forth) for this central parking lot.

RECOMMENDATIONS FOR DESIGNING SOCIABLE OPEN SPACES IN CITIES

Based on the study of the three CCP plazas, the following section identifies several general policy recommendations for designing sociable open plazas in cities. These suggestions are arranged in the decreasing order of influence that these factors typically have on the sociability of a plaza (Whyte, 1980).

(a) The location of plaza near large densities of people and a highly pedestrianized area ensures plaza dynamism. This factor could be supported by locating plazas near primary uses such as residential blocks, offices, institutions and parking lots and also by placing them at strategic points such as pedestrian intersections, street intersections, street corners, and so forth. This will ensure optimum use of plaza

facilities.

(b) Another factor integrally related to plaza sociability is the plaza's relationship to the street and street corners. This point is emphasized by Whyte (1980) and also in this thesis, where there was observed a direct relationship between the number of people using a plaza and the pedestrian flow on adjacent streets. To maintain a constant flow of people, streets near the plaza should be a link between major activities such as offices, shopping areas and restaurants.

For ensuring plaza dynamism, plazas should be located near heavily used streets or street corners -- i.e., 'choke points' such as subway stations and bus stops, since large numbers of people are often concentrated at these places (Whyte, 1980, p. 12 & 54). Also, street corners have a special significance, since, if they are busy, they contribute considerable pedestrian traffic that may use the plaza (1980, p. 54). For attracting pedestrian activity, plazas should have a good seating edge, a widened sidewalk, a place to wait for public transportation, a pedestrian link, a corner sun pocket, and so forth (Marcus C., 1984).

The transition between street and plaza should be such that it is hard to tell where one ends and the other begins (Whyte, 1980, p. 57). The relationship between the street and the plaza should stimulate 'impulse use,' by which it is meant the quality of a space to draw people into it without any hesitation or conscious consideration. In other words, people

are in the plaza space before they know it. Two factors which would facilitate a plaza's impulse use are: first, sightlines or visibility, into the plaza; and second, the use of beckoning devices such as steps, trees and entrance markings to draw people in.

(c) Also important is the provision of socially and physically comfortable sitting spaces. As illustrated by Whyte (1980) and also in this thesis, socially and physically comforting seats are crucial to preferences in sitting. Hence a plaza should have an abundance of spaces that provide adequate sitting facilities as per demand.

(d) Another significant design element is the provision of street furniture such as news stands, posters, statues, benches, fountains and so forth near sidewalks which encourage impulse use and reinforces the sociability of a plaza. Maintenance of such street furniture can also be crucial to activities expected in that area.

(e) Also important is the provision of food in the plaza. As Whyte (1980, p. 50) and this thesis illustrates, food has a great ability to attract people. The recommendation is made that plaza officials allow fair weather vendors, a term which implies temporary installations of food courts when the weather is comfortable. Also, if feasible, plazas should be located in close vicinity of fast-food restaurants, cafes, and so forth to ensure and encourage optimum use of plaza facilities.

(f) The introduction of regular events in the plaza also aids in attracting people to the plaza. A plaza designed to suit the needs of different kinds of cultural and community activities bolsters sociability of a place. If plazas in small cities lack inherent activity, then activity programming and triangulation should be planned to encourage and attract passersby. By "activity programming" is meant the regular scheduling of events and functions involving large crowds (Projects for public spaces, 1984, p. 13). It is suggested that small everyday events be organized at plazas. These events (for example, jazz concerts, small bands, performing school kids and so forth) can be programmed to perform at small plazas from time to time.

(g) Close location of mutually supporting businesses in the vicinity of each other may invoke more business and impulse buying. Also, the nature of businesses offered during specific time-periods, have a direct relationship with the number of patrons observed in that area during that observation period. So the establishments and activities expected in that area should be planned, programmed and spaced accordingly from each other to ensure plaza dynamism at all times of the day.

(h) Lesser vehicular traffic in plaza area promotes pedestrian safety and gives way to activities otherwise infeasible (for example, street-fairs, street-artists, vendors, and so forth).

TOWARD BETTER URBAN DESIGN

The soul of the city is represented not only in the character of its buildings but by the use of the spaces created between and among these buildings -- public urban open spaces. Within these social spaces, one can find a wide variety of people, ranging in ages as well as social status, gathered together to enjoy the weather, food or drink, resting, meeting friends or relatives, participating in political activities, celebrating, enjoying a variety of ceremonial occasions, or just taking pleasure from being in an environment full of people and activities. In short, social urban open space helps make people feel personally secure among strangers (Jacobs, 1960; Whyte, 1980).

After looking at sociability in relation to the three CCP plazas, we can conclude that sociability is a major factor for people to gather in urban open spaces. All the benefits extracted from the modern city are Western placed typically within a grid system, which divides the city into the different activities that people create according to their social needs. These needs can be referred to as primary uses, such as dwellings, institutions, commerce, religion and so forth. The interrelation among such activities create several other activities recognized as secondary uses such as restaurants, shops, entertainment activities and other related activities.

Primary and secondary uses create spaces related to their

buildings, which according to their characters may create private and public spaces, but only few of them are common to the general public. These communal areas include streets, which are the arteries of movement in the city; parks, which offer respite from the city, relieving the daily routine of a city; and plazas, which are the social heart of the city, in which people can interact among themselves. These plazas can only function well, if they fulfill comfort and entertainment to citizens. This comfort and entertainment can only be gained by an adequate social environment in a plaza, in which people can find security and all the benefits of human interactions. In short, sociability is one of the main factors in the existence of a city. In order to keep the city alive, it is necessary to enhance such sociability.

This thesis has dealt with sociability at the level of urban open space and attempted to investigate, if this sociability is of any importance and whether it can be enhanced through physical design. This thesis has found out that sociability is a major element in the success of a city and that a successful urban open space is one that has different people at different times for different reasons, conditions that the author believes can be improved in almost any urban space, particularly through consideration of design elements as they involve the open spaces, district, edge and plaza itself. Certain environmental variables can be manipulated to improve contact opportunities based on

sociability.

Urban open spaces are not the only panacea for solving all of urban sociability problems, but these spaces may contribute if proper planning and design are accomplished. Sociability has been the focus of this thesis not only in relation to the three CCP plazas, but also as it can become the focus of a coordinated work relating to the environmental aspects of human contact. The author hopes that in some way the discoveries in this thesis will contribute not only to a greater knowledge of how to design city spaces, but also to indicate the criteria necessary to derive optimal social benefits from urban open spaces, particularly those such as the three CCP plazas.

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