

/SOCIABILITY AND OUTDOOR URBAN OPEN SPACES:
A CASE STUDY OF TWO PLAZAS IN BOGOTA, COLOMBIA

by

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Thanks to each one of those who quenched my thirst
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CHAPTER 1

The Sociability Of Outdoor Urban Spaces: Introduction and Empirical Focus

This thesis studies two of the most recently built open spaces in the city of Bogotá, Colombia-- Granahorrar plaza, completed in 1982; and Propaganda Sancho plaza completed in 1984. The relative success of Granahorrar and Propaganda Sancho plazas is studied in relation to William Whyte's concept of sociability --i.e., the ability of an open space to bring people together in an informal manner, and thereby generate human activity and a sense of place.¹

To guide this analysis, I develop several premises based on the scholarly literature pertaining to urban open spaces, particularly the works of William Whyte, Jane Jacobs, and Suzanne and Henry Lennard. The methodology for testing these hypotheses includes historical background, direct observation, and interviews. The thesis summarizes the relative success of Granahorrar and Propaganda Sancho in

¹ William Whyte. The Social Life of Small Urban Spaces (Washington, D.C.: The Conservation Foundation, 1980).

terms of sociability, and then asks how the designs of the two plazas could be improved to strengthen their sociability.

Justification for Study

The question of upgrading the quality of city life has been studied by people from many fields. I, too, have been 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. I have thought of sociability as a major element in the successful city, and this thesis proposes to understand sociability more clearly.

One reason that people live in a city is to have a variety of opportunities for easily accessible work and leisure. In addition, there are economic reasons as well as the benefits of living in a community. All these reasons are nothing until people realize these values as good values: "What happens in the city is usually what people want, or better, what people deserve".² Sociability has been, even in the most primitive society, one of the most important human needs. Here, I argue that sociability is one of the most important elements in the city, since in many ways public life affects the life of the city.

² Jere Stuart French, Urban Space (Dubuque, Iowa: Kendal/Hunt Publishing Company, 1983) p. 1.

Besides, when one thinks of the city, the first thing that often comes to mind is human activity and movement, which give civic and social meaning to the city. Thus, in one sense, the meaning of the city is composed of the different components of social public life.

Sociability in the city often occurs in the spaces between and within buildings--i.e., public places in which different kinds of people can gather giving character to the city. These successful public spaces are one of the major reasons why some cities are more popular than others. Successful public spaces gather, in different ways, people and people's attention. Their successful open public spaces are one reason why European cities have a greater public vitality than American cities.

At least in one sense, "open space" is the soul of the city. A good open space is one that has the presence of many people informally interacting at any time of the day, on any day of the week. Colombia, because of its climatic conditions, has a great acceptance of the concept of open spaces. These urban spaces mean a lot to Colombians because they still have the need and the joy of gathering in public for social interaction. In one sense, plazas can be said to be the saviors of Colombian cities because these places show people how safe and amicable their fellow men and women are. If one of these places works at its best, it will be an initial step in bringing more people to the plaza. Thus,

the space will become so popular that large numbers of people will seek it.

As it will be defined in this thesis, a successful social place is one that has different people at different times, a condition that I believe can be improved in almost any open space. What this thesis argues is that the key element in the success of an urban outdoor open space is good sociability which determines the quality of human interaction within these places. Using Granahorrar and Propaganda Sancho plazas, I try to identify which plaza is more successful in terms of sociability and why. The assumption is that the greater amount of people brought into a space to enjoy other human company, the better.

A Brief Description of The Two Plazas

To give the reader a preliminary sense of the study sites, I end this chapter with a brief description of Granahorrar and Propaganda Sancho plazas (figs. 1, 7). These two plazas are open spaces built in Bogota--a city that has many open spaces. Most of these urban open spaces have been forgotten by the authorities in charge, whether governmental agencies or private enterprises. Many of these plazas do not have good maintenance, therefore, people do not use them. One of the possible ways to call the government's attention to this situation is to study open space locations which are under civic jurisdiction. This effort might result in encouraging

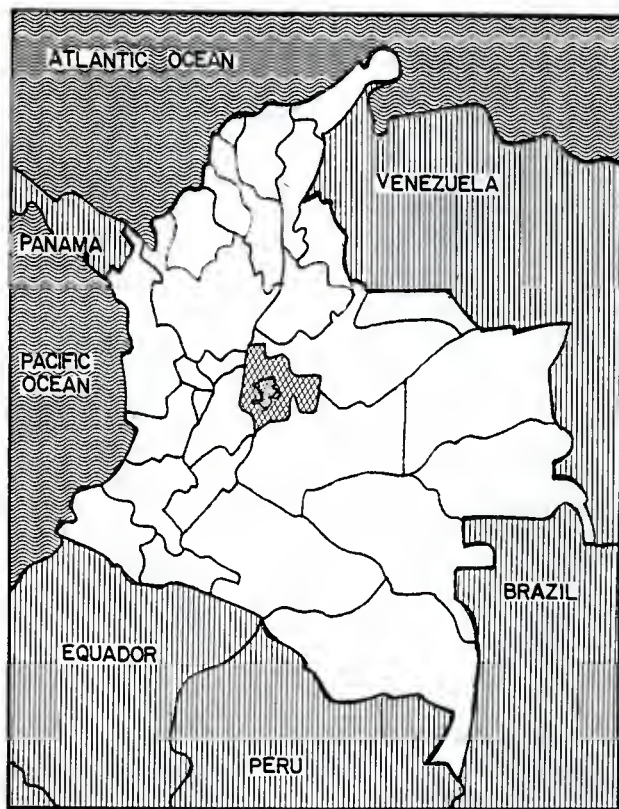
the government and private enterprises to help Granahorrar, Propaganda Sancho and other plazas. With this kind of support, it might be possible to improve the city and its image. Granahorrar and Propaganda Sancho plazas have the conditions to be the first plazas among a series of places to be improved. These plazas are some of the few that have been developed by both government and private enterprises. At the same time, these plazas are located in a new expansion area, which will soon require a new sequence of open spaces. The study of the two plazas will give a better idea to planners and architects for designing new plazas in terms of sociability.


Granahorrar plaza is situated in the heart of one of Bogota's established northern-central business districts (figs. 2, 3). This district is one of mixed use, composed of office buildings, commercial areas, educational institutions, dwellings, sacred buildings, parks, and entertainment facilities. Granahorrar is located at the intersection of two main thoroughfares of the district and dominated by three main structures: a commercial center/office tower, a parish building, and a church. These three elements, along with the plaza constitute one perceived identity, which is known as Granahorrar. The plaza itself offers a variety of focal points: statues, a fountain, planters, sitting places, and a temporary exhibit of a prefabricated-home (figs. 3, 4 and 5).

If the district in which Granahorrar is located is stable, the area of Propaganda Sancho plaza is in the process of transition. At present, this area is mainly residential. Future plans include its development as the northern international center of the city; this development will include hotels, international corporate office buildings, and supporting buildings. Propaganda Sancho plaza is surrounded by a park, sacred buildings, high-density residential dwellings, and an open lot marked for future development. The main elements which dictate the form of the plaza are the building for which Propaganda Sancho plaza is named and a neighborhood park which is bordering the plaza. This park, as it will demonstrate, interferes with Propaganda Sancho plaza's sociability. The plaza and the park are spaces which are controlled by different jurisdictions: the plaza is controlled by the office building in the middle of the plaza, and the park falls under the municipal jurisdiction of the Department of Parks and Recreation. The design for each space is different: the park is a green area for the residential neighborhood; and Propaganda Sancho plaza is an concrete-covered area created by the builders of the office tower, in order to obtain permission from the regional planning office to build the thirteen floors that the constructors needed. The focal points of the plaza are fountains and sitting places (figs. 3, 6 and 7).

I argue that if we learn to take advantage of our small urban open spaces, and design new ones as well as improve existing old ones, we will help keep the city alive. As the thesis proceeds, we will find that Granahorrar plaza induces a greater amount of human movement and sociability than that of Propaganda Sancho plaza. At the same time, findings show that both plazas can be improved through an increase in activities, changes in spatial relationships, and addition of features that will better attract people's attention. The argument on which these findings are based is derived from hypotheses drawn from research and writings discussed in the following two chapters which provide a literature review.

Figure 1: Colombia: Its Departments and Its Capital City



Cundinamarca Department..... 


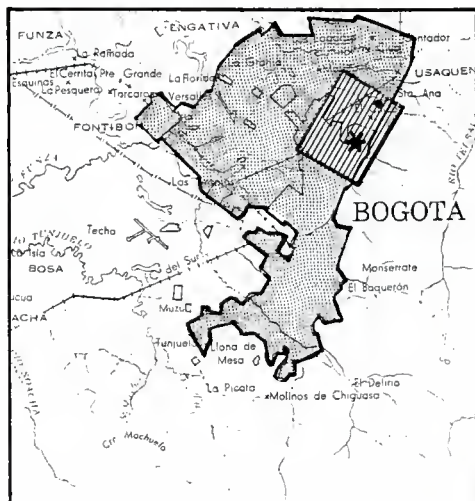
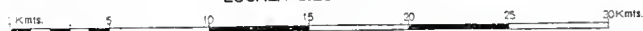
Bogotá, the capital city..... 

Figure 2: Bogotá City and Vicinities

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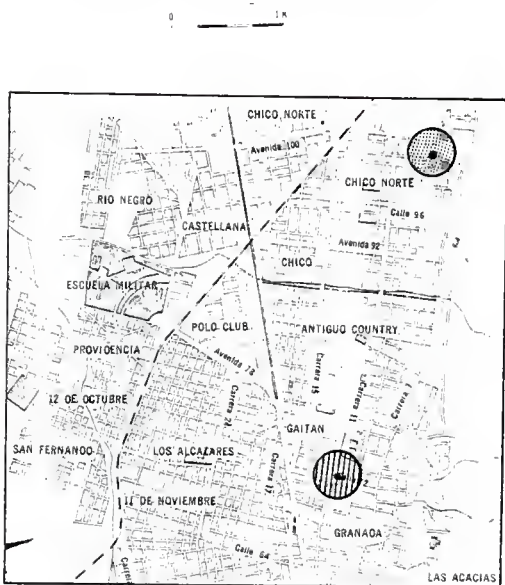
City perimeter..... 


Figure number 3..... 

Propaganda Sancho plaza..... •

Granahorrar plaza..... ★

Figure 3: Plazas Locations



Granahorrar plaza location..... 


Propaganda Sancho location..... 

Figure 4: Granahorrar Plaza: Its Plan

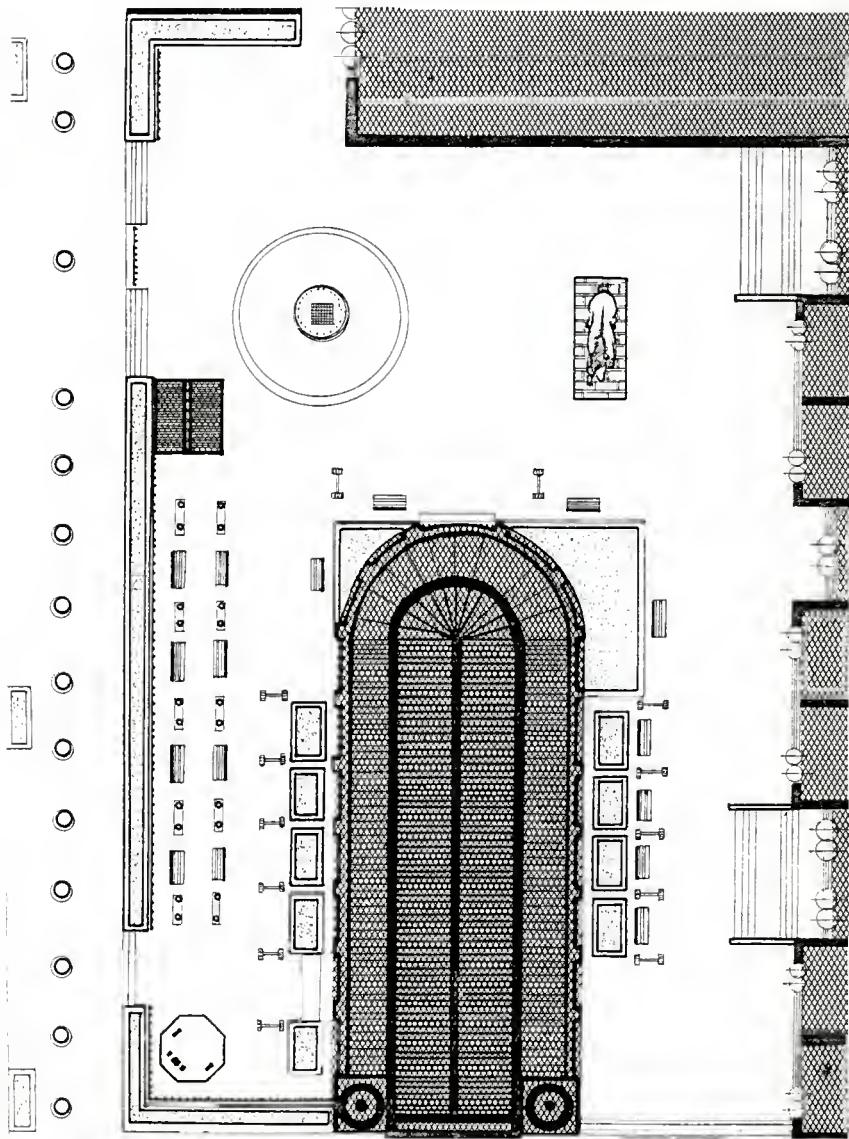


Figure 5: Granahorrar Plaza.



Principle entrance of the plaza

Figure 6: Propaganda Sancho Plaza: Its Plan

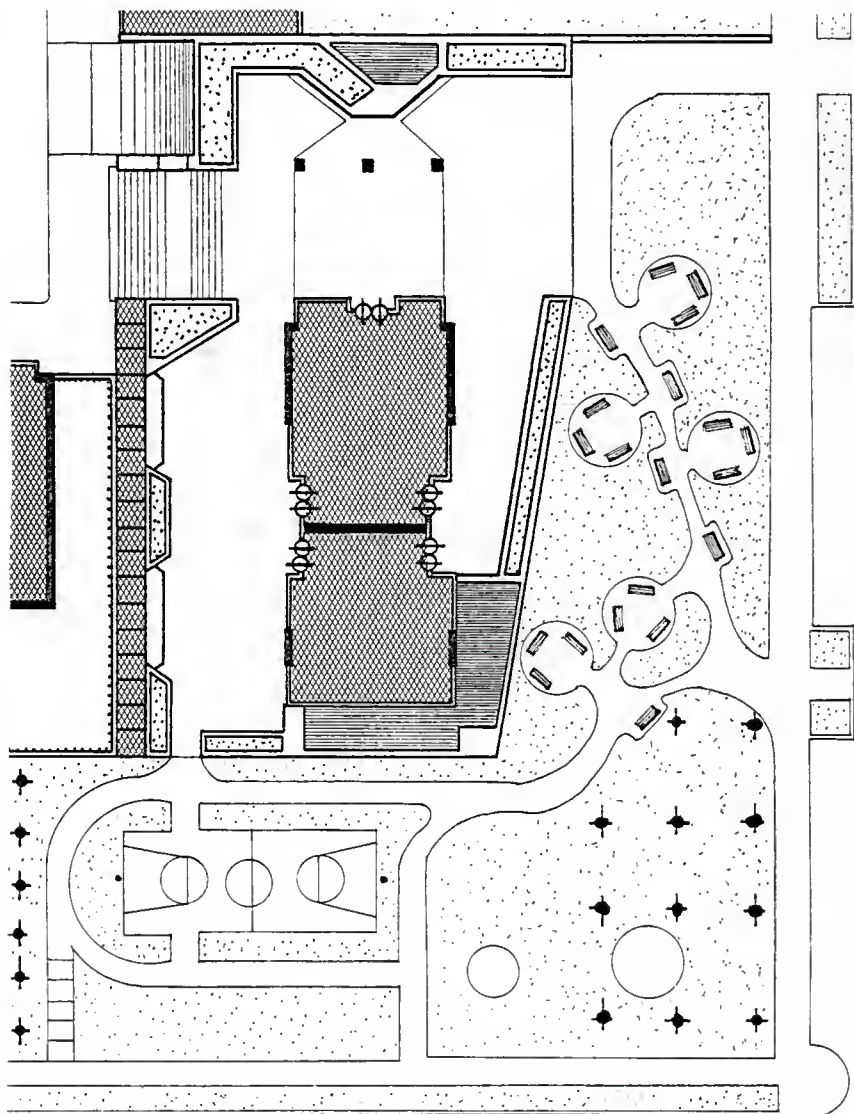


Figure 7: Propaganda Sancho Plaza.



Principle entrance of the plaza

CHAPTER 2

Literature Review of Urban Open Space and Sociability: Definitions and Conceptual Framework

The literature which deals with urban open spaces is vast, although sources dealing explicitly with sociability are fewer. In most works dealing with urban open spaces, sociability has been addressed as a subordinate theme which is used to support a broader issue. For example, in one recent overview, G. Jacobs identifies three broad categories affecting issues of urban design: "first, Positive Image of Place ; second, Orientation for People and third, Introduction of Natural Elements".³ The category identified as Orientation for People, deals with sociability as a supporting issue in understanding the relationship between design issues and historic-building/open space. Instead of using sociability as a supporting element, my thesis argues that this element is a key for the success of urban open

³ Gary Alan Jacobs, Clarifying The Relationship Between Historical Buildings And Urban Open-Space Design: An Evaluative Technique And Three Case Studies (Manhattan, Kansas: Kansas State University, Master's thesis in landscape architecture, 1985), p. 36.

spaces; how people interact with spaces in which natural elements and image are necessary subsets of sociability.

In his work, Jacobs refers to sociability with the words of Nan Fairbrother: "Man is gregarious...we congregate from choice, and do not even spend our leisure recovering in solitude as we could, but gregariously with friends and at clubs and pubs and parties and meetings and celebrations and demonstrations and every kind of communal gathering."⁴ This statement corroborates with Mumford, who states that "an historical antecedent of cities has been the need for people to be with other people."⁵ This need creates the diversity of the city, as well as the services, entertainments, and its livelihoods. The success of the city is in its use, as Fran Hosken says: "a city well used is the happy sight of people enjoying themselves."⁶ The use of the city is represented in one way by the public spaces or squares. These spaces must be known by designers and planners in order to know what it is that makes cities attractive and viable.

A review of the literature dealing with urban open spaces reveals a closer understanding of a successful city. This literature must be related to issues of design and

⁴ Nan Fairbrother, New Lives, New Landscape (London: Architectural Press 1970) p. 194.

⁵ L. Mumford, The City in History (New York: Harcourt, Brace & World, 1961)

⁶ Fran Hosken, The Language of cities (Cambridge, MA: Schenkman Publishing Co. 1972).

sociability and can be grouped into three major study dimensions which are important in bringing more people into the plazas. First, one must study what gives life and spirit to the city in order to support the argument about sociability. Here, Jane Jacobs's The Death and Life of Great American Cities is one important work.⁷ Second, there needs to be study of the patterns with which an open space can be improved. In this regard, I draw on William Whyte's The Social Life of Small Urban Spaces⁸ Third, it is important to consider famous social urban spaces in order to get some ideas of why people get together and what they do in these places. Here, I make use of Suzanne and Henry Lennard's Public Life in Urban Places.⁹ All three of these studies deal with the broad issue of sociability, in which the physical design of a plaza must be accomplished with people's needs in mind; and generally the idea of people wanting to be with, near, and among other people.¹⁰ This thesis will use the arguments of these three studies to analyze "Propaganda Sancho" plaza and "Granahorrar" plaza, developing a set of hypotheses that will help in improving urban open places in terms of sociability.

⁷ Jane Jacobs. The Death and Life of Great American Cities (New York: Random House, 1961).

⁸ William H. Whyte, The Social Life of Small Urban Spaces (Washington, D.C.: The Conservation Foundation, 1980).

⁹ Suzanne and Henry Lennard, Public Life in Urban Places (New York: Gondolier Press, 1984).

¹⁰ Whyte. Ibid.

Open Space in The City

In thinking about the relationship between people and plazas, it is useful to focus on three crucial concepts which I use to clarify the literature on people and plazas, and also to establish concepts which will be the heart of this thesis. These three crucial concepts are: open space in the city, sociability, and sociable open space.

First, I consider open space in the city. The soul of a city is mirrored not only in the character of its buildings. Just as decisive is the relationship of these buildings to each other and the spaces created around them,¹¹ I call these areas open spaces. Open spaces in the city are generally represented by three broad categories: the street, the park, and the square. There are, of course, other kinds of open spaces, like school grounds, college campuses, incidental public spaces associated with libraries, court houses, sports parks, theaters, and the like. These spaces, however, are often secondary to other activities, or their usage is limited and not always accessible to the general public. Streets, parks, and squares have their purpose to the city in generating a sense of civic trust. They are spaces which anyone can enter and not feel a sense of trespass or being out of the place.

¹¹ Lennards, op. cit., p. 3.

The difference between a street and a square may seem obvious, but this obviousness was not always the case. Streets and squares have quite opposite functions: the square as a gathering place, a coming together and stopping; the street as a system of traffic and movement.¹² Squares are a "central formative element, which makes the community a community and not merely an aggregate of individuals", as generally happens in the street.¹³ The street is first of all a transportation channel in which people do not interrelate in a social way as so very often happens in the square.

Parks and squares have the same qualities as gathering places that can be seen to augment a host of urban activities, such as trade, information, recreation, protection, sociability, and worship. Parks are different from squares in many ways that are obvious: they are "a respite from the city, with its attendant complexities of sight and sound. An escape into a green oasis, away from hard edged gray geometry and congestion".¹⁴ The square, in contrast, "thrives on the rich tapestry of civic chaos".¹⁵ In this sense, the square is the heart of the city, and

¹² Jere Stuart French, Urban Space (Dubuque, Iowa: Kendal/Hunt Publishing Company, 1983) p. 11.

¹³ Paul Zucker, Town and Square: From the Agora to the Village Green (New York: Columbia University Press, 1959), p.1.

¹⁴ French, op. cit., p. 11.

¹⁵ Ibid., pp. 11-12.

therefore a principle element in urbanism. The importance of the square is that it has the potential to contribute to the social and civic vitality of the city. These places give form to urban space. Open spaces--both parks and plazas--provide more freedom of access to the city than any other kind of space, giving an experience of the different and the strange, making a positive contribution to the sociability of the cities and towns.

In ancient times, public squares were theaters for the principle scenes of public life, depicting the dramas of daily life.¹⁶ Public squares enhance the value to the public of adjoining or neighboring nature reserves, sanctuaries, or other open areas.¹⁷ Squares provide for a physical and emotional outlet important to the urban system in the city and its community. Even more, squares can give form and shape to cities and identities to individual communities. They are places which can give recreation to a person's mind. This space may refresh because it is in the city, becoming a visual relief from the continued expanse of urban development. In any case, open spaces seem to be places that attract people and help make them free from their problems, because they can share their ordinary behavior which will give the identity to the place.¹⁸

¹⁶ Frederick R. Hiorns, "Antiquity", Town Building in History (New York: Criterion Books, 1958).

¹⁷ French, op. cit., p. 13.

¹⁸ Lennards, op. cit., p. 9.

In Colombia, there is still a tendency to identify these places by the behavior of each neighborhood surrounding the area. But most Colombian squares have one important activity in common--providing places to meet people. This gives an important identity that architects and planners should support and strengthen in order not to lose one of the nicest customs in the country.

Sociability

The need of a more precise definition of public sociability is required at this point. People live together with other people by human association. Human beings are "social animals and not isolated creatures".¹⁹ If all individuals were isolated, there would be no society. When a man interacts, either with other individuals or within a group of individuals, a social relationship may be said to exist.²⁰ This relationship consists of a pattern of interaction, the pattern being the medium in which all social systems perform and carry out their purposes. The medium of human interaction, without which society would not be able to survive, must include the "interchange of ideas, feelings, information, and other behavioral performances."²¹

¹⁹ Ely Chinoy, Sociological Perspective (New York: Random House, 1967), p. 9.

²⁰ Ibid., p.20.

²¹ Arnold Bernstein and Henry Lennard, Patterns in Human Interactions (San Francisco: Josey-Bass, Inc., 1969).

Sociability, therefore, can be defined as living or disposed to live in companionship with others, or in a community, rather than isolation.²² Man must have, at the very least, the opportunity, or choice, to interact, since human interaction is one of the basic human needs which effect built form. The meeting of people is a basic need, since man has been defined as a social animal: "we very badly need natural physical contact between people and the benefits from it".²³

Each individual must define and recognize the amount of human interaction right for him or her. People must be able to define the situation in which they find themselves, and in which these interactions take place. In addition, people must be able to recognize the relationship of the others with whom they interact. Then, they must be able to define their own position, or role within the interaction, and finally they must be able to define the role played by any non-human objects involved in the interaction.²⁴ One should keep in mind that all these responses by people are largely done unconsciously. An unconscious sense of place arises in which person and place are wholly replaced by the relationship itself; in other words, the person is inside

22 The Random House Dictionary of English Language (New York: Random House, 1973), p. 151.

23 Truman B. Douglas and Constantinos A. Doxiadis (Boston: United Church Press, 1966), p. 69.

24 Vernon, op. cit., p. 92.

and belonging to his place both as an individual and as a community.²⁵ Most of these responses have to do with the culture to which they belong. The culture provides "a foundation from which interactions emerge".²⁶

Jane Jacobs suggests that public contact is found on city sidewalks and in open spaces.²⁷ She feels that city sidewalks, by providing the opportunity for public interaction, bring together people who do not know each other in such ways.²⁸ A society can only be healthy if each single person has some intimate contact at every stage of his existence. On the other hand, the Lennards argue that in this style of sociability, "the pleasure of each is contingent upon the pleasure all feel; no one may find their satisfaction at the expense or feelings of others".²⁹

Sociable Open Space

These definitions of open space and sociability can be drawn together to define a third concept-- sociable open space. Whyte describes a good open space as one "with the higher proportion of couples than you find in less-used places, more people in groups, more people meeting people, or

²⁵ E. Relph, Place and Placelessness (London: Pion Limited, 1983), p. 65.

²⁶ Vernon, op. cit., p. 92.

²⁷ Jacobs, op. cit., p. 55

²⁸ Ibid., p. 57.

²⁹ Lennards, op. cit., p. 14.

exchanging good- byes".³⁰ He also says that successful social space means a place full of people who will attract other people who would in turn bring others and so on.³¹ Again, we can see that sociability contributes greatly to the success of an open urban space.

In Jacobs's terms, social spaces are a volatile element that stabilizes the values of urban neighborhood and districts.³² She also points out that a social space is one that has the ability to attract many different kinds of people, with as many different schedules, interests, and purposes as possible.³³ She ends by saying that sociable space is the one that makes people feel personally secure among all the strangers.³⁴

Similarly, the Lennards point out that a real social space has all sorts of users ranging from children to old people.³⁵ They also say that a sociable place is the one that has people together to enjoy weather food or drink, resting, meeting relatives and friends, or participating in political activities, celebrating, or enjoying any variety of ceremonial occasions.³⁶ The Lennards' favorite examples

³⁰ Whyte, op. cit., p. 17.

³¹ Ibid., p. 19.

³² Jacobs, op. cit., p. 89.

³³ Ibid., p. 103.

³⁴ Ibid., p. 30.

³⁵ Lennards, op. cit., p. 8.

are European plazas because such places permit changes in level of involvement, and offer easy transition for people to change from spectator to participant position and back to a spectator status again.³⁷ Finally, sociable open space promotes a wide range of encounters and relationships, of short and long duration, planned and unplanned, mostly without specific goals other than to be sociable.³⁸

If the above points are brought together, one arrives at a conceptual picture of urban sociability which involves the subject matter of this thesis. I came to realise that the plaza is but one of the manifestations of the productive forces of society and inevitably reflects its class structure. Sociability is a crucial reason for plazas to exist. But, in order to understand better the meaning of the plaza, it is necessary to understand the history of urban plazas, especially in Latin context.

36 Ibid., p. 9.

37 Ibid., p. 11.

38 Ibid., p. 18.

CHAPTER 3

Literature Review:

The History of Plazas, Especially The Latin Plaza

Another way to present the literature on urban sociability is to overview the history of outdoor open space, especially as this literature relates to the Latin plaza.

Traditionally, plazas were public squares which acted as a "crossroads for human activity".³⁹ The word plaza comes from the Latin platea or "broad street", and in the medieval European city these larger public spaces brought light and air into the narrow streets. Nowadays, plazas are the open, or partially enclosed, public spaces specifically designed for active pedestrian uses and passive recreation, and readily accessible and adjacent to city sidewalks.

The importance of the plaza varies in degree throughout the world, according to the culture backgrounds of the people in different regions. For instance, in North

³⁹ Don C. Miles. Robert S. Cook, and Cameron B. Roberts, Plazas for People (Washington D.C.: Washington Commission for the Humanities and The National Endowment for The Humanities, 1978) p. 10.

America, "plaza" refers to turnpike toll areas, shopping centers, building complexes, parks, malls, and building setbacks,⁴⁰ which are a result of the American dependence on the automobile, and its network of freeways and highways. The automobile has played a major role in the status and conditions of American cities to the point that pedestrians are confronted with treacherous walking conditions on every front.⁴¹ According to Edward T. Hall everything has gone to the automobile, including parks, sidewalks, and plazas.⁴² Similarly, Rudofsky suggests that pedestrianized streets are a way to humanize and dignify our cities, as protection from the de-humanizing effects of automobiles.⁴³ In referring to the automobile Elizabeth Beazley feels that the Americans have "created some of the most soul-destroying cities yet created".⁴⁴ "The automobile has become an entrenched reality of American life" in such a way that plazas have become sub-spaces of traffic pattern.⁴⁵ While Latin America has not

40 Ibid., p. 10.

41 Gary A. Jacobs, Clarifying The Relationship Between Historical Buildings And Urban Open-Space Design: An evaluative Technique And Three Case Studies (Manhattan, Kansas: Kansas State University. Master's thesis in Landscape architecture, 1985), p.42.

42 Edward T. Hall, The Hidden Dimension (New York: Doubleday, 1966) p. 164.

43 B. Rudofsky, Streets for People: A Primer for Americans (New York: Doubleday, 1969) p. 8.

44 Elizabeth Beazley, Design and Detail of The Space Between Buildings (London: Architectural Press, 1960) p. 195.

45 Gary Jacobs, op. cit., p. 43.

yet reached this dependence, it is only a matter of time until there, too, the automobile may weaken the image of plaza life.

In order to keep alive the plazas in Latin America, we need to understand the cultural background in which the plaza has historically played an important role. It is still not too late to make people appreciate the social value of plazas in urban areas. Since Colombian history is inextricably connected to the plaza both socially and politically, this thesis studies the relationship between plazas and the people's need for sociability. A good example of the importance of the plaza in Colombian history is provided by Eduardo Mendoza Varela:

The history of our independence is the history of the plaza, specifically, when a Creole broke into pieces a flower vase over a Spaniard's head on July 20, 1810. It was enough to fill our 'plaza Mayor' with a crowd. Was this not the scene that would be anticipated through the years? This was an indication of our people's beliefs and desires. Maybe if the plaza had not existed, we would never have known such liberation. This is why the plaza has become of consequence in such a romantic culture....just destroying the plaza or urbanizing it, you can make the tradition of our race disappear.⁴⁶

In order to follow easily the history of the Latin plaza, especially in Colombia, I make use of five eras: classic spatial heritage era, spatial metamorphosis era, restructured sense of colonial place era, defined social

⁴⁶ Eduardo Mendoza Varela, Alabanza y Critica de la Aldea (Bogota: Instituto Caro y Cuervo, 1965), pp. 14-15.

era, and contemporary era.⁴⁷

Classic Spatial Heritage Era

Urban open space started as a gathering place/plaza in the majority of primitive cultures.⁴⁸ In Colombia, the concept of plaza started as the place or stage for Zaque and Cacique chiefs of the Chibcha Indian tribe. At this time, the space was centric because the volume of space was generated from the center, created by a series of sight lines or directional forces beginning at or terminating by central points. This shape is referred to as centric.⁴⁹ This Chibcha indian tribe had its own idea about the sense of plaza which consisted of a group of rooms in which the Zaque lived, joined by some narrow tortuous paths. All these were protected by two strong separated thick wooden poles that were tied by strong cords. There were about twelve feet between fences. The Indian population considered these as a central point, or plaza. From this place, the street system started its semi-circular shape crossing by the priests' houses, the military force, the harems, storage and market places, finishing in the sacrificial area. This idea of -----

⁴⁷ The division of the historical background is made according to the context with some references to Jere Stuart French's book, Urban Space: A Brief History of The City Square (Dubuque, Iowa: Kendal/Hunt Publishing Company, 1983).

⁴⁸ Leone B. Alberti, Ten Books of Architecture (London: Alec Tiranti, 1955) p. 1.

⁴⁹ French, op. cit., p. 20.

plaza continued until the Spanish conquest. This Indian tribe was famous among Spanish people because of the Somomdoco emeralds and the legend of El Dorado which brought the Spanish avarice, giving the reason for the establishment of one of the cities in the new Spanish empire--Bogota.

Until this point, urban space still had a strange sense of mystery and relation to the unreal and unknown. People used to gather in order to share something else--not themselves. The social need was created by reasons different from those needs of today.⁵⁰

Spatial Metamorphosis Era

In the early sixteenth century, Spain began its conquest of the New World. Delegated conquerors established the new cities. These sites were built over the places where the Indians had gathered, thus the locations facilitated the collection of tributes that was exacted from the Indians. By 1539, new structures were in place. These structures had come from the regular medieval plan of Spanish cities that were kept alive through the military encampments, like Foncea, Puerto Real, Cuevas, and the last built, Santa Fe in front of Granada. The idea was to make a plan by "the ruler and cord" measurement system, beginning from the center of the plaza, and going through the principle doors and roads. All these were made with the idea that the city

⁵⁰ Sigfried Giedion, Time and Architecture (Cambridge, Massachusetts: Harvard University Press, 1970) p. 25.

could grow in the same way without breaking the system.⁵¹ The plaza should be situated at the dock if the city were in front of the sea. On the other hand, the plaza should be at the center if the city were land-bound. Most of our cities up in the Andes mountains are, therefore, planned in a perfect net square that goes around to a big central square called "plaza". Any sculptural element were likely to be in line with the axis, symmetrical space, and usually monumental. This space is static in the sense of symmetrical balance, rigid axiality, centric placement of elements, and human scale.⁵² At this time, political and religious power were together, more for convenience than any other reason. Therefore, the plaza was surrounded by the church, the courthouse, and the loyalty houses.⁵³ This arrangement had the purpose of putting the plaza at the center of every activity, as the witness of million of events that brought alive streets, roads, and the blocks. This means that at that time, a plaza created the new cities, and not the city the new plazas, as is happening today. The problem of this space derives from political and religious sources, although its success is in external space

⁵¹ Erne Goldfinger, The Sensation of Space (Michigan: Michigan State University, 1954).

⁵² Federick R. Hiorns, Town/Building in History (New York: Criterion Books, 1958) p. 66.

⁵³ Lewis Mumford, The City in History (New York: Harcourt, Brace and World, 1961).

resulting from a strictly volumetric approach.⁵⁴

As in most Mediterranean cities, these plazas had a tree in the middle because people believed that everything revolved around the cosmic tree, although at that time conquerors did this unconsciously, thinking that the tree would be a useful place from which to dispense justice. The square shape of the plaza came from the great religious sense of this time, because the church should be situated over the sunset facade.⁵⁵ The dimensions were given by law from Spain, which followed Viturbio's ideas that at that time were in fashion. Viturbio said that the plaza should be no less than two-hundred feet wide and four-hundred feet long. In opposition to these dimensions, some Greek planners talked of a square shape, which was used in some cities of the Hispanic-American world to show some kind of power against the crown. Colombia abounds with these "rebel" square-shaped plazas.

By this time, architects governed their work by six principles: spatial unity, limitation of space, measured order, absolute standards, advances in military technology, and condition of health.⁵⁶ The design aims that governed the plaza form were: (1) total planning, which means that the plaza was resolved in plan three-dimensionally; (2) the use

⁵⁴ Zucker, *op. cit.*, pp. 60-62.

⁵⁵ Douglas Fraser, *Planning in the Primitive World* (New York: George Braziller, 1972).

⁵⁶ French, *op. cit.*, pp. 73-79.

of elements that unifies urban spaces; (3) the subordination of enclosing architecture in order to maintain the significance of the whole; and (4) specific organizing elements, such as fountains, obelisks, or sculptures; and the monumental scale.⁵⁷

At this point, the feelings changed from the unreal world of gods into the aesthetic world of artistic feelings. Still, this planning, out of necessity, evolved from an awareness of social needs.⁵⁸

Restructured Sense of Colonial Place Era

It was not until a hundred years later that the specifications of the plaza were given by local officials in reports to the crown. The dimensions of many plazas were distorted during this period, in attempts not to anger the crown, though breeches were committed by square-shaped plazas. The reconciliation of the plazas' reality to Spanish guidelines was a major reason for the transformation of plazas over time. For instance, most churches were built over four generations, which gave them a style that made up what is called pre-independence style in Colombia. Most of the constructions around the plazas did not exceed two stories, and all of the buildings were heavily influenced by traditional Spanish architecture.

⁵⁷ Zucker, *op. cit.*, pp. 110-111.

⁵⁸ French, *op. cit.*, pp. 71-82.

With Colombia's independence in 1810, the plazas' pre-independence style became odious because of the hatred toward the crown. There was the need to change the old colonial style. Also at this time there was increased immigration from England and France. These immigrants brought with them the influences of their countries as well as their artistic talents. The result was that some constructions attained a facade, losing their value. The proportions and uses of many buildings changed drastically from their original plan.⁵⁹ For instance, what was once a private dwelling might become a grocery, or a school, or barbershop. During this same period the plaza itself also changed in function as well as form. Most of the trees and fountains were replaced with statues of the Father of the Republic, Simon Bolivar. Over time the subject of the central statue has remained the same, but the individual statues have been changed according to the whims of politicians and art patrons.

This was the time when the designers took into their plans social needs, and as a result there were means to solve the pedestrian traffic problems of the time. Now, the question would be if this system would solve the traffic problems of today.⁶⁰

⁵⁹ Kenneth Clark, Civilization (London: Harper and Row, Publishers, Inc., 1971).

⁶⁰ French, op. cit., pp. 83-99.

Defined Social Era

By the nineteenth century, the plaza had become a center for commercial and social activity, instead of the traditional roles of the colonial period. If someone wanted to hear news the natural place to go was the plaza. It was like an early version of television and gossip papers in one. The best market, with the best products, was on the plaza three times a week. The great weddings took place on the plaza, as well as fights, sports events, and in general, any other kind of social activity. It is possible to say that during this period the plaza was the focal point of most activities in the city.

Private life was secondary in normal everyday activities. This made control of the city and its citizenry much easier. The priests and the governor were aware of everything. Activities were in the plaza day and night, so the place was an ideal example of Jane Jacob's idea of street ballet. Besides, all sorts of people were mixed within the same place. Every inch of the plaza was utilized during each time of the day. At that time people did not have a strong sense of individuality but more the sense of group. All this happened because the law in that time was so powerful that even the simple feelings were under its power. While it was necessary for the system of power to change, the resulting good use of social open spaces did not need to be changed. The delicate balance here is how to change what

needs to be changed and to keep that which is good within the system--i.e. the use of plazas during this time.

Some other things changed in the plaza in order to receive the new activities that came into the plaza. A good example of this is the plaza's floor. In the beginning, most of the floors were of soil. It was not until the twentieth century that the floor was paved, and even more recently that the plazas took a new contemporary tiled floor. Trees are another element that has changed through time.⁶¹

Contemporary Era

Since Colombia's independence, Bogota has grown into one of the largest urban centers in South America. With this huge, unplanned growth the central plaza of Bogota was no longer at the center of the city. One of the principle things that the new era has brought to the new urban system is density. This density offers an obvious clue to spatial needs. Higher density argues in favor of an increased percentage of open spaces. With the sprawl of urban growth various business centers have come into being, which serve specific

⁶¹ Most of these historical concepts are common knowledge in Colombia, but I draw details from: Eduardo Mendoza Varela, Alabanza y Critica de la Aldea (Bogota: Instituto Caro y Cuervo, 1965).

areas of the city. These areas, or districts, can be likened to cities within the city, for they each contain the elements of a church, a commercial area, and a residential area. Within this context, the role of the plaza has changed drastically. It is no longer the center for everybody's daily activity, but rather a haven from the overcrowding of urban life. As cities become increasingly crowded, the role of these urban spaces becomes more critical. The basic factors which influence urban form nowadays are: first, political factors such as civic centers and government centers; second, economic factors like shopping centers, shopping malls, refurbished town centers, and new town centers; and third, social factors including green squares, city parks, and recreational spaces.

Granhorrar plaza and Propaganda Sancho plaza are a direct response to this need for more open spaces in the midst of intense development. What this thesis proposes to study is how to make these new plazas a combination of the traditional images modern needs.

Granahorrar plaza is a place that started with a Catholic school which worked for a specific district in town when it was mainly residential. The first use of the place was as a monastery which changed into a private preparatory school. The main characteristic of the place was the church, which not only served the students of the school, but the community as well. This church was part of a building that

surrounded a square which was the playground of the school. The church, through time, became a landmark within the city, so that when growth of the city made necessary a new use for this land, the only element to survive was the church.

Religion no longer holds the same place in urbanism as it did in the past. Therefore, churches, like the one in Granahorrar, have passed to a different meaning in urban places.⁶²

When the priests of Virrey Solis sold the plaza land to the Granahorrar business corporation, their agreement stipulated that the church would be part of the new complex. Architects, in charge of the project, designed in such a way that the church is integrated with the surrounding buildings, conforming what is today called - Granahorrar plaza.

While Granahorrar plaza was built in response to a present need, Propaganda Sancho plaza was built with the idea of fulfilling a future need. At present, the area surrounding Propaganda Sancho is still in the transition stage from residential to commercial. This plaza is coming from the same historical tradition as Granahorrar. Propaganda Sancho and its surrounding area was once a large convent. Therefore, the principal components of the area are a church and its parish building. In Propaganda Sancho's, however, the architects and planners did not

⁶² Ibid., pp. 125-165.

integrate these elements into the plaza's program.

A future which includes an inner urban framework of human scale, architectural harmony, and a spirit of individuality without conflict is a future where urban space can be readily integrated--"not as oaseses of relief within a gridiron of cultural and aesthetic dessication, as parts within the changing harmony of balanced whole--a city of life."⁶³

⁶³ Ibid., p. 166.

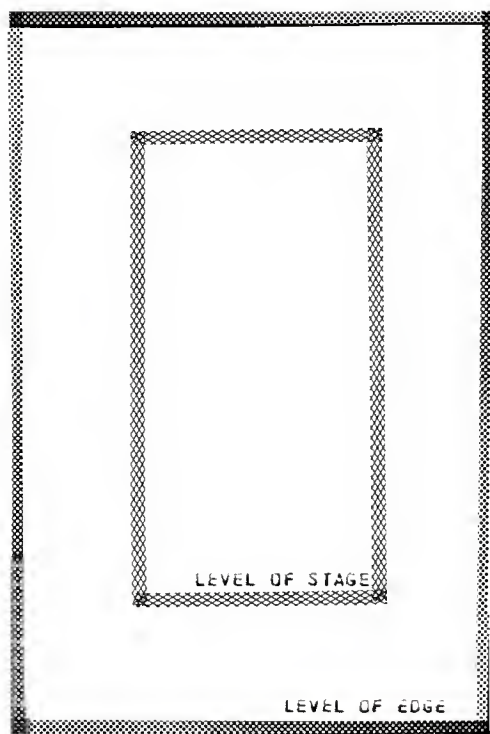
CHAPTER 4

Doing Empirical Research on Urban Sociability: Conceptual Framework and Methodology

In order to understand a plaza as a whole, it is necessary to understand its various components. Here, I study the two Bogota plazas in terms of three conceptual levels that show the hierarchy of spaces composing a plaza, as shown in figure eight. For conceptual purposes, I call these three levels:

- (1) the level of surroundings, which relates to the buildings, activities, and elements that create the district, neighborhood, or part of the city that surround the plaza. These surroundings are the spaces that give proportion, character, and life to the plaza by people and environments that enclose the plaza;
- (2) the level of edge, which relates to the relationship between the plaza and its immediate surroundings--i.e., its edges and boundaries, specially surrounding streets, sidewalks, and the intersection between surroundings and the plaza, creating an environment which invites people to go into the plaza or keeps them away;
- (3) the level of stage, which is the plaza itself as well as its elements that form the plaza stage in which people create the social environment which brings alive the plazas.

Figure 8: Hypothetical Plaza



LEVEL OF SURROUNDINGS

Hypotheses in relation to each one of these levels were developed with the support of the arguments of Jacobs, Whyte, and the Lennards. The result is eleven hypotheses which are used in testing Granahorrar and Propaganda Sancho plazas' sociability. These hypotheses are:

- 1) One of the necessary conditions for a thriving sociable plaza is having a sufficiently dense concentration of people in the area surrounding the plaza.
- 2) The mixture of activities in the neighborhood or district surrounding a plaza is one of the keys to its success or failure in terms of sociability.
- 3) Visibility is an important element in the social success of the plaza. High perceptual visibility helps draw users to the plaza; on the other hand, low visibility can keep potential users away.
- 4) The streets bordering the plaza and the intersection of those streets must have heavy pedestrian flows, if the plaza is to become an effective sociable space.
- 5) A good location on an active street corner or near shopping centers and restaurants, is a key to the high usage for a plaza.
- 6) Ideally, the transition between street and plaza should be such that it is difficult to tell where one ends and the other begins.
- 7) The plaza needs to have a sense of enclosure. This helps define the sense of being in or being out of the plaza space.
- 8) A plaza must provide adequate sitting places. There are many ways in which people can find comfort when they sit in a plaza.
- 9) Festivals, celebrations, street entertainment, markets, and selling food help bring people into the plaza.
- 10) A plaza works best when it is a center stage with fountains, statues, or other physical elements which entice people into the life of the

plaza. Both human and physical factors can contribute to strengthening this sense of center.

11) Sun, wind, trees, and water require unique design solutions to make a plaza work well. These elements provide human comfort, which in turn strengthens the plaza's sociability.

Methodology

In finding how to test these hypotheses to the best advantage, I found the need of methods which could integrate the knowledge of social scientists with the knowledge of designers. I also realized other needs, like the importance of integrating research and design. The requirement is a multifaceted methodology which, used in conjunction with the three conceptual zone levels, provide an ordered way to gather appropriate information on the plazas' degree of sociability.

The methodology used in this thesis is based on the methodological overview of research done by John Ziesel--specifically his book, Inquiry by Design, which describes several different methods of studying environment and behavior.⁶⁴ One significant research strategy described by Ziesel is the "case study", in which the researcher is interested in a particular object or area. This thesis uses the case-study method, since it investigates the two Bogota plazas, specifically, elements in and around these plazas

⁶⁴ John Zeisel, Inquiry by Design: Tools for Environment-Behavior Research (University of Cambridge: Cambridge University Press, 1984).

which effect their sociability. The case-study focuses on such things as the elements which comprise the plazas, relations among elements, the development of the sociability and contextual influences.⁶⁵ This research strategy can be developed especially with participant observation as has been used, with great results, by Willian Whyte and the Lennards. Observation is an approach that helps the researcher see the world more clearly and thoroughly. Here, observation means looking at sociability as it happens in the two plazas. Participant observation is particularly appropriate for diagnostic studies in which "the investigator wants to find out what is actually going on--what elements, relationships, and dynamics are salient."⁶⁶ In relation to the two plazas, this method helped to keep my mind open to commonplace facts and see them as raising problems. By observing what people did in the plazas and taking pictures, I identified the plazas' strengths and weaknesses.

Specific Methods

To focus my case studies more precisely, I used four specific research techniques: mapping, photographing, notating, and interviewing. A study integrating these methods leads to ideas for improving each one of the three zone levels of Granahorrar plaza and Propaganda Sancho

⁶⁵ Ibid., p. 65.

⁶⁶ Ibid., p. 72.

plaza.

A good way to begin almost any environment-behavior research project is to walk around the site looking for physical traces of behavior and recording these indications. In this special case, the most important point is to know whether the plazas are used by people or not. This technique is mapping. Mapping helps understand plazas' locations, circulations, directions, where the people are, and how many people use the plaza. These factors give a clearer idea of the plazas' sociability. One can record the sequences of people's behavior as well as the observations that establish where people are and how they group themselves. Specifically, the mapping used here is called observation mapping ; meaning it was done over a specific period of time. I used the time period between 8 A.M. and 8 P.M. for one week's period of time, in order to see the difference between parts of the day, weekdays and weekends. The business hours of 8 A.M. until 6 P.M. were particularly important because the surrounding activities and the office traffic of the plazas. The hours between 6 P.M. and 8 P.M. were mapped in order to observe the plazas' use, taking advantage of nearby evening entertainments, such as restaurants, cinemas, and nightclubs. 8 P.M. is the hour that Granahorrar plaza is closed to the public because of a curfew. For every hour, there was a map of the plazas showing people's locations (figs. 9 & 10).

In terms of specific procedures for the mapping, I spent from one to two minutes walking one time around a plaza, starting and finishing at the same point. Therefore, the minimum limit of time for a person to be included in the mapping is two minutes, and the maximum--one hour. People were indicated on the maps by different symbols indicating if the person was male, female, teenager, or child. Circles recorded grouping of people. This procedure helps to identify how many people are in a group, what kind of people use the plaza most often, as well as the peak social hours of the plazas.

The second technique used in this thesis was photographs, in order to illustrate the types of events happening in Granahorrar and Propaganda Sancho plazas. These pictures show what people do in the two settings, things people do to the settings, the changes that users make in order to get an environment better suited for something they want to do, changes people make to establish some places as their own, and things people use in Granahorrar's and Propaganda Sancho's environments in order to communicate with a large public audience. Photographing is an effective visual way to point out the strengths and weaknesses of design features of the two plazas. For example pictures show clearly the different ways in which the boundaries of Granahorrar and Propaganda Sancho work in the sense of enclosure. This technique also illustrates how people interact with

Figure 9: Social Mapping Test:
Granahorrar plaza's peak hour in a weekday.

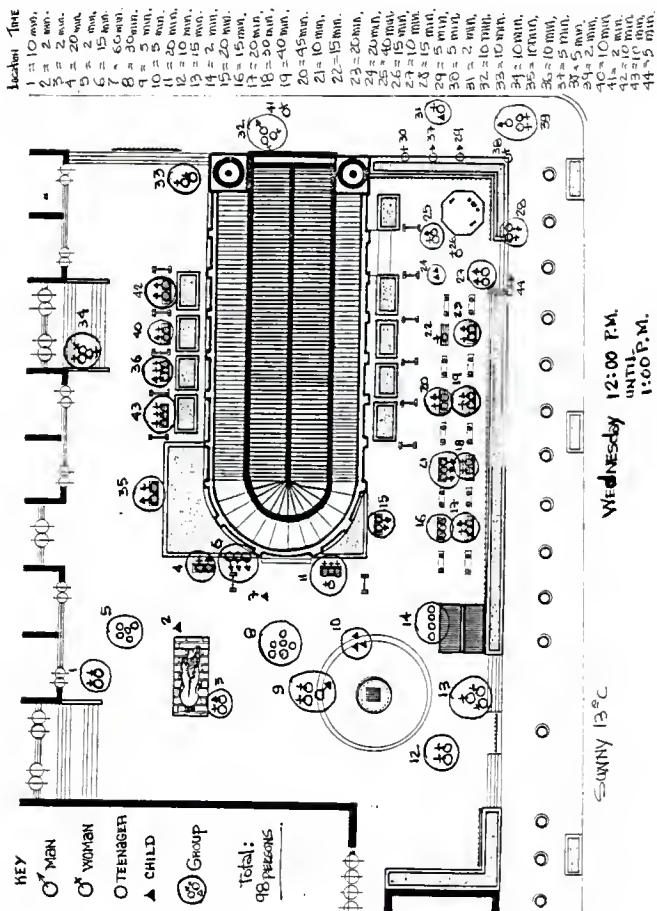
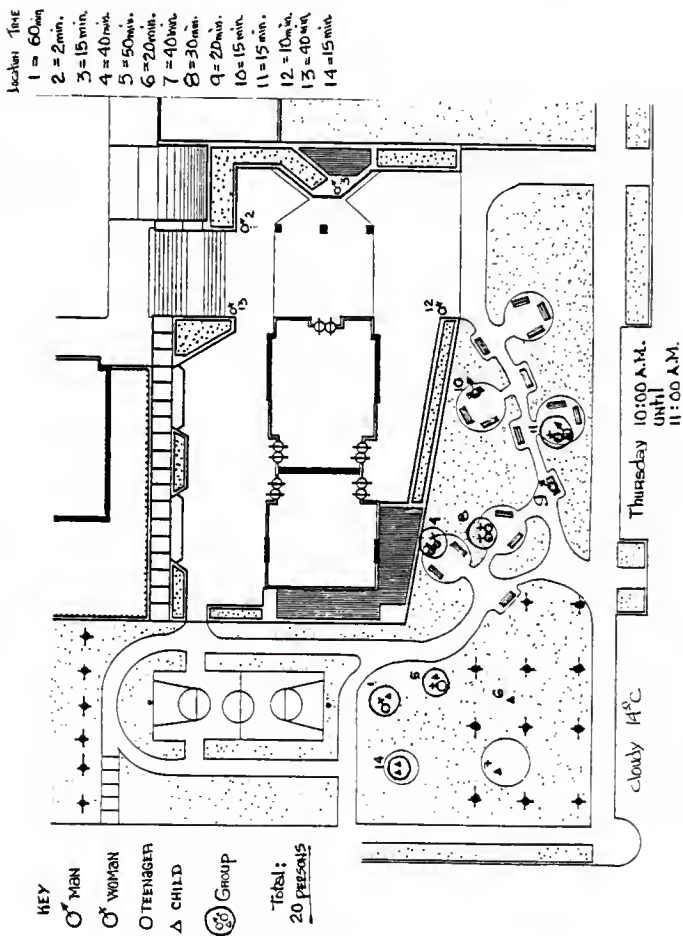


Figure 10: Propaganda Sancho Plaza:
Peak Hour in a Weekday.



landmarks, statues, and fountains. Of the four techniques, this is probably the best one at conveying a sense of each plaza to those not directly involved with the research, thus fostering a greater sense of empathy (fig. 11).

The third specific method is notation, in order to describe what is going on in the photographs. These notations describe how people meet each other and move around the plazas, how people sit and watch others--in general, what people do. While mappings and photographs show much of what is necessary in studying sociability, written notation is necessary to record those things which are either intangible or not recordable by the other two methods (fig. 12).

The fourth, and last specific method is the use of questionnaires and interviewing in order to find out what people think, feel, do, know, believe, and expect of Granahorrar's and Propaganda Sancho's environments. One way to know how people see the world and feel about it is to ask them. Structured questions help discover regularities among groups of the people using, working, or living around the plazas by comparing answers to the same set of questions asked of a large number of people. An example of this questionnaire is found in figure number thirteen. The complete example is found in appendix A.

By using these four specific methods for testing my hypotheses, I could better understand the two plazas. The

Figure 11: Photographic Technique Examples



Figure 12: Notation Technique Examples

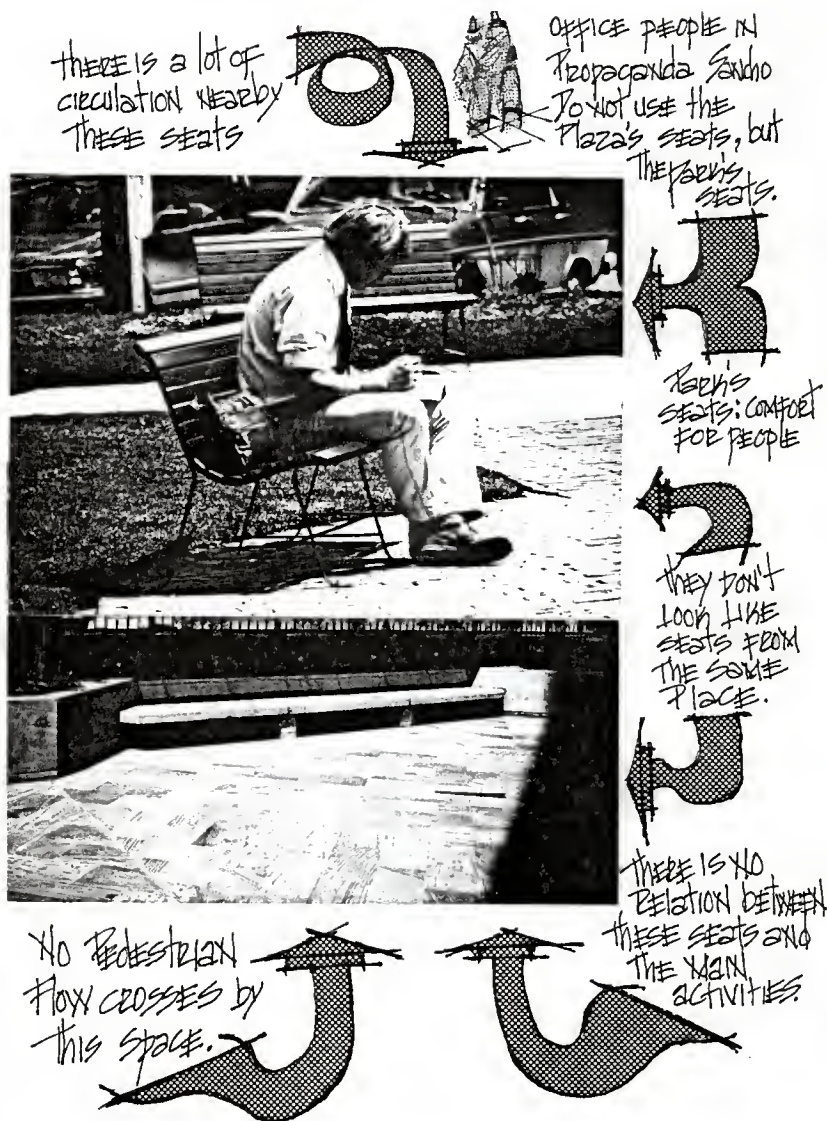


Figure 13: Interviewing Technique Example*

Hombre	Mujer	Edad:	10 - 20	20 - 35	35 - 50	50 -
Man	Woman	Age :	_____	<u>X</u>	_____	_____

1. ¿Qué es lo primero que le viene a la mente cuando otra persona habla de Granahorrar?
What is the first thing that comes to your mind when somebody else talks about Granahorrar?

- A. La Iglesia
The church _____
- B. La plaza
The plaza _____
- C. El centro comercial
The commercial center X
- D. Alguna otra cosa
Other _____

2. ¿Con qué frecuencia va usted a la plaza de Granahorrar?
How often do you usually go to Granahorrar plaza?

- A. A menudo
Frequently X
- B. Ocasionalmente
Occasionally _____
- C. Nunca
Never _____

3. ¿Qué es lo que frecuentemente lo trae a Granahorrar?
What is the reason that frequently brings you to Granahorrar?

- A. Negocios
Business _____
- B. Compras
Shopping X
- C. Misa
Mass _____

*The complete questionnaire is found in appendix A.

reasons why one plaza is more used than the other becomes clear as the conceptual framework and a set of eleven hypotheses are applied to resulting data.

Hypotheses Relating to The Level of Surroundings

The level of Surrounding relates to the buildings, activities, and elements that create the district, neighborhood, or part of the city that surrounds the plaza. There are four hypotheses for this level. The first one is drawn from Whyte's and Jacobs's research:

1. One of the necessary conditions for a thriving sociable plaza is having a sufficiently dense concentration of people in the area surrounding the plaza.

A census is the usual method with which to calculate densities. Unfortunately the most current census available from the Government agencies in Bogotá was taken in 1957, which predates the existence of either plaza. Instead, a surrogate technique was devised to determine density based on the usable area surrounding the plazas, because by knowing how many people can possibly use this area, a close calculation of density can be found. In the search for density the following steps were devised: first, the buildings within the study area were grouped according to the number of floors each contained; second, the total surface area was calculated for each category and then multiplied by the number of floors designated, adding to this the free lands of each district; third, these areas

were then grouped according to their activities and divided by the average area per user, giving us the optimum density for each activity, which when added together gives a close total of potential users for the plazas.

The second hypothesis of this level is also drawn from Whyte's and Jacob's research:

2. The mixture of activities in the neighborhood or district surrounding a plaza is one of the keys to its success or failure in terms of sociability.

Observation is important here in that it identifies what activities are offered around the plaza, and the location of these activities. Some mapping was done in order to site the surrounding buildings with their activities, as well as, to show in a graphical way the findings of the observation days. Some other mappings show the primary and the secondary uses of each plaza. The last technique used to test this hypothesis is the survey given to users of the plazas. Some of the questions, in this survey, are directed to find out what activities bring people to the plazas.

The third hypothesis on the level of surroundings, is supported by Whyte, Jacobs, and the Lennards:

3. Visibility is an important element in the social success of the plaza. High perceptual visibility helps draw users to the plaza; on the other hand, low visibility can keep potential users away.

Observation, mapping, notations, and questionnaire are the elements used in testing this hypothesis. These elements help in understanding the districts, the edges, the paths,

the landmarks, the buildings that make the district special, and the characteristics of the streets surrounding the plazas. All these studies help to know if these elements are working in attracting people's attention.

The fourth hypothesis relating to surroundings is especially emphasized in William Whyte's book:

4. The streets bordering the plaza and the intersection of those streets must have heavy pedestrian flows, if the plaza is to become an effective sociable space.

Mappings show very well the observation data from the walking routine of a normal day. A heavy pedestrian flow is created by the people's going in and out of the primary uses. Only by observing this people's movement during the observation week, the pedestrian flows can be drawn.

Hypotheses Relating to The Level of Edge

This level can be understood in terms of three hypotheses. The level of edge makes demarcations between the district and the plazas. The first hypothesis is taken from Whyte's concept of location. Also, Jacobs describes this hypothesis as a key for the social success of plazas:

1. A good location on an active street corner or near shopping centers and restaurants, is a key to high usage for a plaza.

Mapping allows for a visible evidence of corner's activity for each one of the plazas. Such data shows if the circulations adjacent to the plazas bring people into the spaces, as well as, the activities bordering the plaza. By

these maps, it is possible to know if the activities are shopping centers or restaurants.

The second hypothesis is explained and defended by Jacobs and Whyte:

2. Ideally, the transition between street and plaza should be such that it is difficult to tell where one ends and the other begins.

The transition between street and plaza is shown by the elements that create the boundaries and perimeters of the plazas. A map of these elements, along with pictures and notations, show us how these demarcations work into the plazas.

The last hypothesis at this level is brought into the thesis based on Whyte, Jacobs, and the Lennards:

3. The plaza needs to have a sense of enclosure. This helps define the sense of being in or being out of the plaza space.

Maps show how the buildings shaping the plaza work upon the plazas. Pictures show if there are any enclaves, defining spaces, or multiple enclosures, and help to identify the overall lay-out of exits and entrances to the plaza. Photographs are best able to relay the sense of enclosure a space may have. Image often plays an important part in the sense of enclosure, this is best tested by interviewing. For interviewing and notation, unlike photography and mapping, can record feelings, reactions, and other non-concrete reactions.

Hypotheses Relating to The Level of Stage

This last level of the plaza is examined by four hypotheses that involve the life of the plaza. The first hypothesis at the plaza level relates to the comfort of people, and is based on Willian Whyte:

1. A plaza must provide adequate sitting places. There are many ways ways in which people can find comfort when they sit in a plaza.

Techniques to test this hypothesis involves a map showing the different ways that people like to sit show how many people sit by groups, by singles, by cuples, or any other way. Pictures show how people use them, change them, and like them. Some questions consider how people like to sit in the plazas, and what they expect from such sitting places.

The second hypothesis is part of the Lennards' book:

2. Festivals, celebrations, street entertainments, markets, and selling food help bring people into the plazas.

The testing of this hypothesis is done by photographs and maps that, with some notations, show how people increase in the plazas for activities like those. Looking into the city for possible people that work as street entertainers who can work in the plazas show the difference between the amount of people in the plazas during a presentation of one of these activities and when there is any. Questions help to find out what people are interested in seing over the plazas.

The third hypothesis on the plaza level is derived from Whyte's and Jacobs's works:

3. A plaza works best when it is a center stage with fountains, statues, or other physical elements which entice people into the life of a plaza. Both human and physical factors can contribute to strengthening this sense of center.

There are several elements which create a center in a plaza. A map showing these elements help to understand how they work as centers of the stage. Pictures of these elements, like sculptures, fountains, and clocks show how well these elements work as focal points.

The last hypothesis at the plaza level is derived from William Whyte who talks about four elements important to the plaza design:

3. Sun, wind, trees, and water require unique design solutions to make a plaza work well. These elements provide human comfort, which in turn strengthens the plaza's sociability.

The location of these elements within the plazas show how these elements work. maps and pictures show the observations about the elements, finding if there is shade, if the sun has access, if there is any kind of outdoor or indoor spaces, if the plazas can be used in different climate conditions, if there is any wind-tunnels, or suntraps, if there is any relation between these elements and the plazas, if the water is utilized in proper way.

We now have a thorough conceptual and methodological base for a study of the two Bogota plazas. The next three chapters of the thesis examine each conceptual level of the

two plazas by testing the relevant hypotheses. The overall emphasis is that plazas must be sociable places--i.e., people interacting with other people.

CHAPTER 5

Analysis of the Two Plazas: The Level of Surroundings

If the three zone-levels, through testing the relevant hypotheses, are brought together, a picture of the successful plaza in terms of sociability can be brought to life. The study of the three zone-levels in relation to Granahorrar plaza and Propaganda Sancho plaza helps us to understand the relative social success of the two plazas on the basis of physical and human aspects. While the physical aspects relate to those elements which help a plaza become a successful social open space, the human aspects reflect a plaza's success by the quantity of people using the space. Only by studying the interrelationship between human and physical aspects can the hypotheses for a successful open space be reliably tested. Consideration of these two hypotheses in relation to the two studied plazas helps reveal the difference between which is the successful plaza and which is not. In this regard, we will see that Granahorrar plaza is the space closer to a successful social

urban space. In contrast, Propaganda Sancho is the plaza which needs a greater amount of improvement in order to attain the desired sociability.

As was explained in chapter 4, the two plazas will be studied empirically on the basis of the three zone-levels of surroundings, edge and the plaza itself. Each level has its associated hypotheses. Each hypothesis is examined in relation to both plazas. The first level is the level of surroundings. The hypotheses relating to this level focus on four major themes: (1) density; (2) mixture of activities; (3) perception of the plaza; and (4) pedestrian flows. I look at each of these themes in turn, testing the relevant hypotheses.

(1) Density

Social success of an urban plaza can not exist unless there are sufficient people present. These people are drawn to the plaza from the surroundings, which, therefore, must have a large enough population to support the plaza's life. In other words, the area surrounding the plaza must have an adequate density.⁶⁷ This focus on density leads to the first hypothesis to be tested in relation to the two plazas:

Hypothesis 1. One of the necessary conditions for a thriving sociable plaza is having a sufficiently dense concentration of people in the area surrounding the plaza.

⁶⁷ William Whyte. The Social Life of Small Urban Spaces (Washington, D.C.: The Conservation Foundation, 1980) pp. 17-23.

A dense concentration of people is one of the necessary conditions for "flourishing city diversity."⁶⁸ The residents of a district may form a large share, as well as people employed in the area. It is important to say that density here does not mean overcrowding, but, rather, a good amount of people: "Almost nobody overcrowds by choice. But people often do live in high-density neighborhoods by choice."⁶⁹ In relation to plazas, the places that often carry the most people are the most efficient in the use of space as well as the most pleasant: "It is people who determine the level of density and they do it very well. . . . It is as if people had some instinctive sense of what is right overall for a place, cooperating to maintain it that way, obliquely leaving, or sitting down, or not sitting, to keep the density within range."⁷⁰

Densities should rise slowly rather than suddenly, as Jane Jacobs explains in her research: "densities should be raised--and new buildings introduced for this purpose--gradually rather than in some sudden, cataclysmic upheaval to be followed by nothing more for decades. The very process of increasing densities gradually but continually can result in increasing variety, too, and thus can permit high ultimate densities without
-----"

⁶⁸ Jane Jacobs, The Death and Life of Great American Cities (New York: Random House, 1961) p. 205.

⁶⁹ Ibid., p. 208.

⁷⁰ Whyte, op. cit., pp. 69 and 73.

standardization."⁷¹

A usual way to determine the density of a district is by a commercial and residential census. This census tabulates the number of people working or living in an area. Unfortunately, I did not have the time and finances available to conduct such a census, nor was such a census obtainable from the governmental agencies of Bogotá. The last census taken was in 1957, which predates both plazas and the development of their districts. Thus, I have used a surrogate technique to determine density based on interior square meterage of a three-block distance surrounding each plaza. This arbitrary distance was chosen on the basis of William Whyte, who argues that most urban plazas do not draw users from a distance greater than three blocks.⁷²

In most Latin cities, including Bogotá, the street patterns were laid out in a uniform square-grid system, as stated in chapter three. The dimensions of each square block within these grids measure one hundred meters by one hundred meters, or 10,000 square meters. As chapter 3 explained, this arrangement dates back to colonial times, when city planning was regulated by Spanish royal edict. Therefore, according to Whyte's theory of maximum distance for a plaza to draw users, the total area studied is the block which contains the plaza, plus three additional blocks

⁷¹ Jacobs, *op. cit.*, p. 216.

⁷² Whyte, *op. cit.*, p. 16.

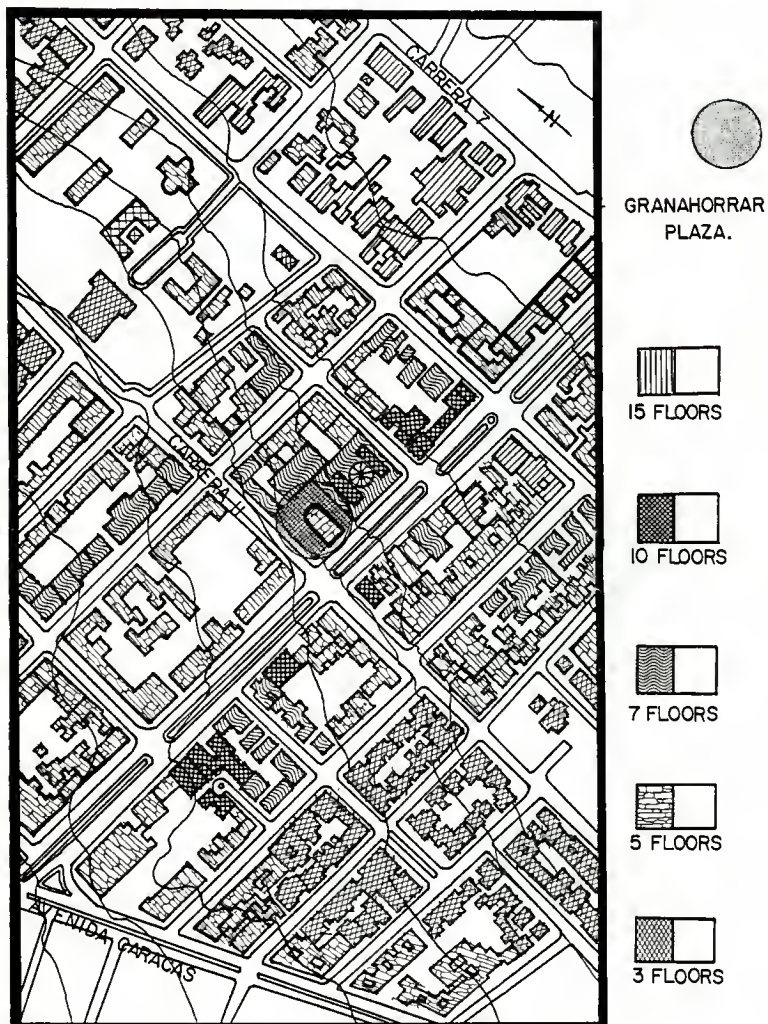
in all directions from the plaza's block. The result is seven blocks square, or a total of forty-nine blocks. Since each block is 10,000 square meters, the total area of study is 490,000 square meters.

In the last thirty years, Bogotá has experienced unprecedented growth. This situation has caused alterations in the original grid system, such as the division of a block in half, or the creation of one block out of two. In addition, as Bogotá reaches its extremities, the mountains surrounding the city have started to constrict the regularity of the outer grid. The districts which contain Granahorrar and Propaganda Sancho plazas have been affected by both of these phenomena. The result is that the two plazas' districts are interspersed with sloping topography, which makes difficult the construction of regular 10,000 square meter blocks in a western direction (see maps of figures 14 and 15).

In order to make an equal district area for both plazas, therefore, I measured districts of 490,000 square meters for each plaza, marking out my meterage on the basis of maximum build-up development in the area. The result, shown in the maps of figures 14 and 15, is that each plaza's surrounding district is encompassed within a rectangle of dimensions 891 meters by 550 meters, equivalent to 490,050 square meters.

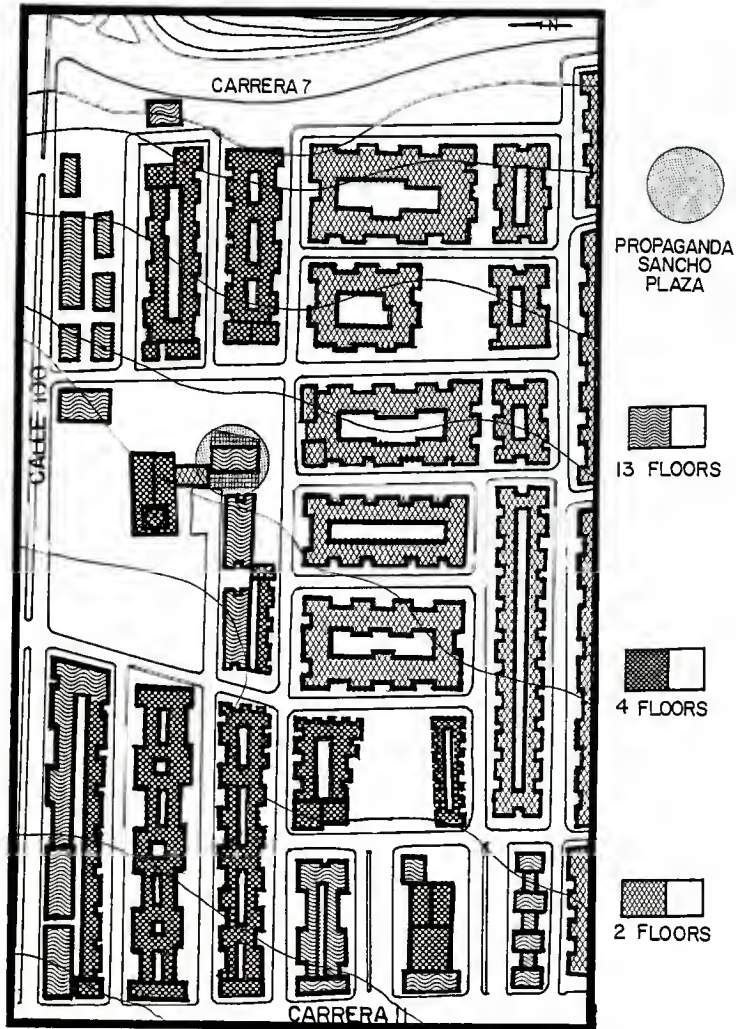
Turning first to the map of Granahorrar plaza's surroundings in figure 14, one notes that the area is edged

Figure 14: Granahorrar Plaza's Surroundings by Floors*



*Floors are set according to Bogota's regional planning office, which specifies particular heights according to the location, adjoining buildings, development plans, and the terrain of the land.

Figure &15: Propaganda Sancho's Surroundings by Floors*



*Floors are set according to Bogota's regional planning office, which specifies particular heights according to the location, adjoining buildings, development plans, and the terrain of the land.

to the west by one of the main avenues in Bogotá--Avenida Caracas (to be found in the lower lefthand corner of figure 14). This avenue is the main artery of the city and divides it into two major sections: a commercial area, in which Granahorrar is located; and a residential area (to the west of Avenida Caracas). The plaza's eastern surroundings are bordered by Carrera 7 (located in the upper right hand corner of figure 14). This street acts as a boundary between the Andes mountains, surrounding Bogotá to the east, and the city. In this area, Government agencies, in an attempt to preserve the natural resources and the naturalness of the landscape, have established strict construction regulations, which do not permit any heavy activity, and only a minimal number of residential structures. This mountainous area does not provide potential users to the plaza because of its terrain and lack of substantial density; thus, it was excluded from the study area.

In terms of relative location in Bogotá, Granahorrar plaza is located at the southern edge of the commercial district of La Porciuncula, and and faces the northern edge of a residential district of Chapinero. From these two districts, many potential users of the plaza are drawn. For this reason, Granahorrar was placed at the center of the map in figure 14, to encompass both districts in equal proportion. In order to include the maximum built up area

within the rectangle, I have tilted the demarcated area slightly. Thus one notices that the street grid base runs diagonally to the sides of the rectangle.

We can now consider the map in figure 15, which refers to Propaganda Sancho plaza's surroundings. Once again Carrera 7 can be seen in the upper part of the figure. In this part of town, Carrera 7 expands its width in order to accommodate the traffic needs and, again, acts as a divider between city and mountains. Thus, I use this street here as a boundary for my study area, since it marks the development crucial to Propaganda Sancho plaza.

The western boundary of Propaganda Sancho plaza's surroundings is delineated by Carrera 11 (located at the bottom of the map of figure 15), which divides the two residential districts of El Rincon del Chico (in which the plaza is located) and Chico. Calle 100 is the third perimeter used for delineating Propaganda Sancho district, marking its north side. This street was chosen for two reasons: first, it divides two residential districts, El Rincon del Chico and Miranda; second, directly beyond calle 100 is located a military complex which has minimal interaction with the larger urban environment. The people who live within this complex are largely self-sufficient, and the one day a month they have free is not enough to make them major users of the plaza or its district.

TABLE 1

Total Usable Area Surrounding the Plazas*

Total usable district space =
surface of bldgs. x number floors + open spaces

	Granahorrar plaza m2		Propaganda Sancho plaza m2
11 to 15 floors.....	397.350	.....	396.435
6 to 10 floors.....	237.990	.....	0
1 to 5 floors.....	675,620	.....	381.060
Open areas.....	15,000	.....	61,000
	-----		-----
Total.....	1,325,960	.....	838,495

*Based on three-block radius/or 490,000 m2 and measurements determined by planimeter.

We next must determine a way for calculating an overall density for the two districts, and the first step is calculating the total amount of available space in the 490,000 square meters area of the districts containing the plazas. This is achieved by multiplying the surface of each building within the 490,000 square meters area by the amount of floors in each building, then adding the total area of surrounding open spaces (table. 1).⁷³ By knowing how many

⁷³ In Bogotá and many South American cities, the height of buildings is predetermined by the offices of regional planning. These heights are determined according to the location, adjoining buildings, development plans, and the terrain of the land. The result of these regulations is that the majority of the buildings have specified heights. Planning has allowed a greater diversity of building heights in Granahorrar plaza's district than in

people can possibly use this estimated area, a closer calculation of real density can be found, because the users of the plazas are drawn from these calculated areas.

Once total surface of usable area has been estimated, it becomes evident that the uses of this area is of prime importance in determining the density. As a second step, therefore, the total area must be divided into the different activities that encompass the district study areas, because each activity has a different spatial capacity per square meter. My observations of the two districts indicates that there are six major activities present: dwellings, office buildings, commercial buildings, recreational areas, educational and religious institutions. This capacity includes not only those who work and live within the surroundings, but also those transient participants in activities--i.e., in a commercial center there exist not only those who work within the stores. theaters. restaurants, and supporting departments, but the number of people who may use each of these spaces for a limited period of time, such as shoppers, movie-goers, and diners. The calculated

Propaganda Sancho plaza's district, because of the two districts' varying character--commercial for Granahorrar; residential for Propaganda Sancho. The result of the difference between a commercial and a residential districts can be seen in tables 1 and 3, which show that the surroundings of Granahorrar plaza have a greater amount of users than Propaganda Sancho plaza's in every category, except dwellings. Usually, in any city, business districts have greater density than residential districts, and this can be seen in the case of Granahorrar and Propaganda Sancho.

total square meters for each activity is shown in table 2.

TABLE 2		
Activities Areas*		
	Granahorrar Plaza m2	Propaganda Sancho Plaza m2
Offices.....	847-120	39,868
Commercial.....	328,176	240,360
Dwellings.....	120.160	507.240
Educational.....	93.600	0
Churches.....	6.300	4,000
Open areas.....	15,000	14,200

*Area based on three-block radius/or 490.000 m2, and multiplied by number of floors- if applicable.

As third step, we must calculate the spatial human capacity for each particular activity. This figure was measured on the basis of personal observation and acknowledged Colombian lifestyle averages,⁷⁴ which are as follows: dwellings were allotted twenty square meters per person, which takes into account a sleeping area and a portion of the communal areas such as cooking, cleaning, eating, and sharing; office buildings were estimated to need four square meters per person, which was arrived at by

74 Miles Richardson, The Spanish American Colombian Settlement Pattern as a Social Expression and as a Behavioral Cause (Baton Rouge, Louisiana: School of Geoscience, Louisiana State University, 1974).

considering the average between private offices, communal office space, and waiting/reception areas; commercial buildings were assessed as needing two square meters per person, a figure based on display space, cashier counter, back store rooms, circulations, bathrooms, and calculated extra spaces; educational institutions were also estimated to need two square meters per person, based on spatial needs for classrooms, administrative offices, and other facilities; churches were assigned one square meter per person, taking into account alter and annex areas; recreational outdoor areas, such as parks, squares, and other urban open spaces, were allotted three square meters.⁷⁵

In the fourth and last step, we use the area figures to determine total density. This is done by dividing the amount of space devoted to each activity by the area allotted per person within that activity in order to find the density of each activity, and the result is table 3, which estimates the total number of possible users by activity.

Table 3 is crucial in terms of hypothesis 1 because the figures show that Granahorrar plaza has three times greater density than Propaganda Sancho plaza--439,976 people vs. 163,242. Therefore, Granahorrar plaza has more

⁷⁵ Indoor recreational spaces were not separately calculated, but- rather, included in commercial buildings.

TABLE 3

Optimum Density of Each Activity*

Density of each activity =
 area of activity / by average area per user

	Granahorrar Plaza People.		Propaganda Sancho Plaza People.
Offices.....	211,780	.....	9,967
Commercial.....	164,088	.....	120,180
Dwellings.....	6,008	.....	25,362
Educational.....	46,800	.....	0
Churches.....	6,300	.....	4,000
Recreational.....	5,000	.....	3,733
	-----		-----
Total...	439,976	.....	163,242

*Population potential based on three-block radius/or
 490,000 m².

possibilities of users, since its district has a larger population to support its plaza's environment than Propaganda Sancho plaza has. This is substantiated by the maps of figures 14 and 15, which show Granahorrar plaza's surroundings to have a greater number and diversity of buildings within a block area of the plaza around Propaganda Sancho. Granahorrar plaza's advantage of users over Propaganda Sancho plaza is also supported by the survey given to the users of the plazas. The maximum number of people to be questioned was one-hundred, in order to facilitate the use of the answers in percentages. While it

was easy to interview one-hundred people in Granahorrar plaza, in Propaganda Sancho only forty people were found to participate in the interview.

In short, one sees that at the start, Granahorrar's surroundings have a greater number of people to draw into the plaza than Propaganda Sancho plaza's surroundings have. Next, we need to consider the kinds of activities these densities are related to, and this concern leads to the theme of mixture of activities.

(2) Mixture of Activities

As I have already suggested, the success of a plaza is at least partially dependent on its district. As Jane Jacobs points out, "places themselves are directly and drastically affected by the way the neighborhood acts upon them."⁷⁶ In other words, a plaza is a "creature of its surroundings and the way its surroundings generate mutual support from diverse uses, or fail to generate such support."⁷⁷ If the district has a diversity of uses, in other words, there is a mixture of users who enter and leave the plaza at different times because of the different users' schedules. Thus, the plaza possesses an intricate sequence and mixture of users. This diversity of use is the heart of the second hypothesis to be tested in relation to surroundings:

⁷⁶ Jacobs, op. cit., p. 95.

⁷⁷ Ibid., p. 98.

Hypothesis 2. The mixture of activities in the neighborhood or district surrounding a plaza is one of the keys to its success or failure in terms of sociability.

Jacobs points out that this mixture depends upon the relative proportion between primary and secondary uses. Primary uses are those "which, in themselves, bring people to a specific place because they are anchorages. Offices and factories are primary uses, So are dwellings. Certain places of entertainment, education and recreation are primary uses."⁷⁸ In contrast, "secondary use" is Jacobs's name for the enterprises which grow in response to the presence of primary uses, to serve the people primary uses draw, such as restaurants, bars, and shops. Jacobs explains that "if this secondary diversity serves single primary uses, no matter what the type of use, it is innately inefficient. Serving mixed primary uses, it can be innately efficient".⁷⁹ In other words, this proportion will work at its best if the surrounding area there is not one prevailing primary use but, rather, two or more.

What is the mixture of primary and secondary uses surrounding the two Bogotá plazas studied here? As table 3 indicates, the heaviest activity around Granahorrar plaza is generated by office buildings, followed by commercial buildings, then educational institutions, with churches, dwellings, and recreational areas supplying the least amount

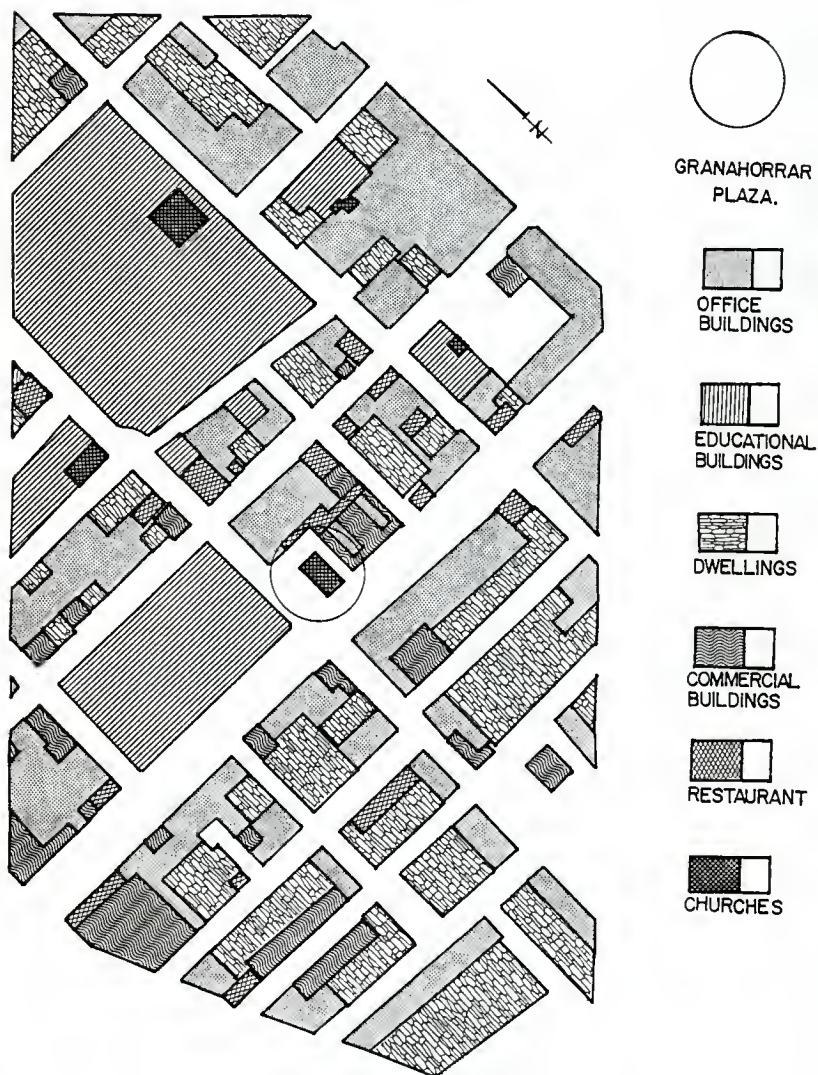
⁷⁸ Ibid., p. 161.

⁷⁹ Ibid.

of people. Granahorrar's surroundings have an enormous amount of buildings, most of which were originally dwellings, since this part of the city was primarily residential until recently. These dwellings were villas into the nineteen-fifties, changing use more recently near the present. For example some of these villas became stores, and more recently have been restored as office buildings, banks, corporations, companies, high density buildings, universities, schools, theaters, restaurants, cafes, camera shops, department stores, drug stores, supermarkets, office supply stores, clothiers, jewelers, and commercial centers (fig. 16).

All these activities create an enormous collection of small elements which provide magnets for a great variety of people who create a movements of going in and coming out at different times of day by different people. This variety of uses in Granahorrar cultivates a mixture of both primary and secondary diversity, as can be seen in figure 16, by its variety of land uses. In particular, secondary uses need old buildings to incubate new primary uses. As Jane Jacobs points out, there are often a set of old constructions existing in each district, otherwise the district would not succeed. The contrast that these old buildings make with the new constructions, like Granahorrar Commercial Center, gives a special character to the district which still keeps changing.

Figure 16: Grananorrar Plaza's General Activities



Having looked in general terms at the relative number of primary and secondary uses surrounding Granahorrar, let us now look at these differences in detail. As was explained in examining hypothesis 1, 490,000 square meters have been chosen as a study area. and we will now consider how the primary and secondary uses of this area works upon Granahorrar plaza's sociability. According to Jacobs, the most important primary uses within a district are often office buildings, commercial buildings, and dwellings.⁸⁰ The interrelationship of these three uses is crucial, for they cover the main aspects of urban life: working, shopping, and residing. These groups of people generally create the heaviest pedestrian flows in an area. and these users' schedules determine the peak social hours within a plaza. Therefore, in order to have a good variety of users, the district surrounding the plaza must have a good distribution of these three primary uses.

Granahorrar's surroundings have an equal proportion between these uses: office buildings--twenty-four percent; commercial buildings--nineteen percent; and dwellings--seventeen percent. In addition to these primary uses, there are several others which play an important role in the sociability of the plaza, for example thirty-five percent of Granahorrar plaza's potential users come from three universities, and three prepratory schools. These

80 Ibid.

different primary uses create secondary uses, which are also invaluable in supporting the plaza's sociability. The principal secondary uses in Granahorrar's surroundings are churches and restaurants. The total numbers and percentages of primary and secondary uses are summarized in table 4.

	GRANAHORRAR PLAZA		PROPAGANDA SANCHO PLAZA	
	%	#	%	#
Office Buildings.....	24	99	2	26
Commercial Buildings..	19	30	5	16
Dwellings.....	17	79	92	204
Educational Buildings.	35	6	0	0
Churches.....	2	5	0.7	1
Restaurants.....	3	34	0.3	4

*Percentages on relative areas; absolute numbers based on numerical count. Based on 490,000 square meters.

Granahorrar plaza's area of study has ninety-nine office buildings, which makes business the heaviest primary activity. Office workers are the most important users of the plaza, because they are most consistently in the area during optimum times for the plaza to be used. It is from this group that the plaza receives its regulars, those who have brought their lunch and want to get out of the office or those that just want some fresh air. Quite often they

may pass the plaza to and from work, or while shopping nearby. It is these office workers, because of proximity and schedules, who become the regulars of the plaza and are a great asset to Granahorrar's sociability, representing a potential of 211,780 people (table 3).

Commercial buildings supply a potential of 164,088 users as shown in table 3, and encompass twenty-nine buildings, plus the Granahorrar Commercial Center, which contains another ninety shops. The people drawn to these stores are not only the people who work in the area, but also people from throughout the city. While these people will not be regulars for the plaza, they can add to its sociability as they walk through it, stop to rest for awhile, or enjoy the company of other people.

The residents of the neighboring dwellings represent 6,008 potential users for Granahorrar plaza (table. 3), and involve seventy-nine houses and apartment buildings. Though this number of people may seem small in comparison to other primary users, it is from this group that loyalty to the plaza may best develop. These users' interest in the plaza will often span years, and be a more personal attachment associated with the neighborhood as a whole. Consequently, these are the people who most often see that the plaza is properly maintained; they will be the most actively supportive of activities that would increase the plaza's social environment.

Granahorrar's district contains three universities: Universidad Pedagógica de Colombia, Universidad de Santo Tomas, and Universidad de la America; and three preparatory schools: El Ginasio Moderno, Elvetia, and Sor Juana Ines de la Cruz. All of these institutions are primary users. Typically, students are prime users of plazas, which are a good place for students to meet and interact with friends, and where they can find a variety of activities without spending a great amount of money. The educational institutions give to Granahorrar plaza an additional number of potential participants of 46,800 (this being the optimum use number estimated for students in table 3). Educational institutions, therefore, can greatly enhance the sociability of a plaza. In Granahorrar plaza, these young people bring a special vivaciousness to its environment (table 4).

Granahorrar Plaza's surroundings also have five Catholic churches within its district, and generate 6,300 potential users for the plaza (table 3). People, especially older people, create a great amount of participants for a plaza when they move to and from Mass. These people often like to spend time in a plaza because they have flexible schedules. On Sundays, Mass creates a great movement of people who like to walk, especially when there is sunshine. These people create a great social potential for Granahorrar. Three daily services at 6 A.M., 12 noon, and 6 P.M. provide possible users for Granahorrar. This group is mainly

composed of elderly people although a fair number of younger people working in the surrounding office buildings also attend. Together, these two groups comprise approximately 150 persons per Mass.⁸¹ On Sundays this potential number of people is increased because services are held every other hour from 6 A.M. until 8 P.M., and each service has an average attendance which can be as many as 1,200 people. These Sunday services also have a greater variety of people who come from other parts of Bogota. This is so because the church located in Granahorrar plaza has the unique quality of not being only a neighborhood institution but of drawing parishoners from districts south of Granahorrar.

Turning to commercial activities, one finds that Granahorrar's surrounding area has thirty-four restaurants. Restaurants are elements that attract different kinds of people at different times of the day. They create a considerable human circulation between themselves and primary uses at lunch or dinner time. A plaza can improve its sociability, taking advantage of such pedestrian circulations, and Granahorrar plaza is no exception. The value of this restaurant activity can be seen through the survey given to users of the plaza, in which out of one-hundred people who were asked, ninety-two explained that they frequently eat in the surrounding restaurants.

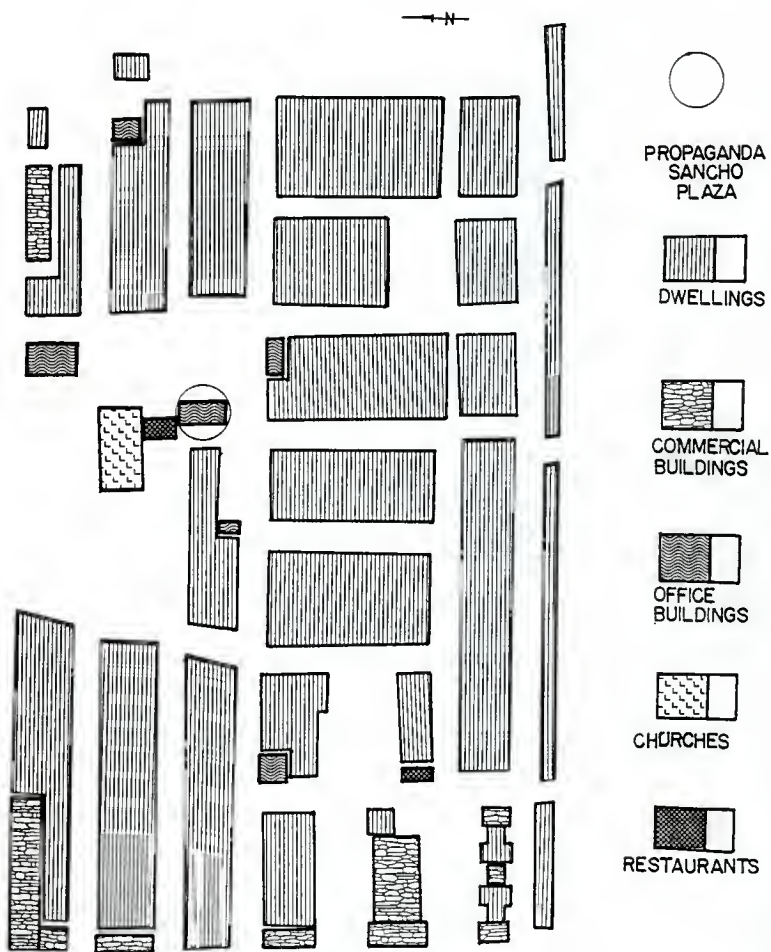
⁸¹ Based on field observations during the studied week.

In dramatic contrast, Propaganda Sancho plaza's surroundings are characterized by only one major primary use--dwellings, as can be seen figure 17. This primary use is not efficient in creating the necessary variety of people who might become major users for Propaganda Sancho: "To be sure, the dwellings of a district (like any other use of the land) need to be supplemented by other primary uses so people on the streets will be well spread through the hours of the day."⁸² Therefore, Propaganda Sancho plaza is frequented most of the time by the same type of people who go to the place at the same time every day, because there is not a large collection of small elements created by primary uses. This plaza does not have a great opportunity to bring new people into the place because of the lack of a good mixture of uses.

Propaganda Sancho plaza's surroundings are mainly residential at the moment, but there are alternative plans for the future and these changes may eventually lead to more diversity and street activity. The amount of new buildings has been increasing, with the construction of hotels, office buildings, restaurants, and commercial areas for a future international center. Some high-density dwellings have started to fill the empty lots of Propaganda Sancho plaza's surrounding areas. Some of the residential houses have been converted into offices and restaurants. New commercial

⁸² *Ibid.*, p. 201.

Figure 17: Propaganda Sancho Plaza's General Activities



industries moving into the district are creating a new image, which is attracting further commercial businesses. This transitional phase closely follows what was experienced in the district surrounding Granahorrar plaza in the 1950s and 1960s. These new changes, hopefully, will bring the necessary mixture of activities into the plaza's zone, consequently, providing more potential users for Propaganda Sancho plaza. It can be said that the variety of buildings is proportional to the variety of primary uses. Therefore, at present, Propaganda Sancho plaza does not have the variety of buildings to sustain secondary uses, nor to promote new primary uses.

Propaganda Sancho plaza's surroundings have an unbalanced proportion between two primary uses: office buildings--two percent; commercial buildings--five percent; and dwellings ninety-two percent. These dwellings are comprised of fourteen apartment buildings and one hundred-ninty individual homes; they contain 25,362 people. The residents of this district are obviously the major potential users of the plaza because of their proximity to the plaza and because of the fact that they make up the largest number of people in the district (fig. 4). Commercial buildings within the district are found in sixteen buildings, and have the potential of supplying 120,180 people (based on the optimum number of users shown in table 3). Though the above figure appears to have great potential for the plaza,

unfortunately, because of its situation, few if any of these people cross the plaza, unless they live immediately adjacent to Propaganda Sancho plaza. The six office buildings in the area, on the other hand, supply 9,967 people who could be considered potential users because of their consistent presence within in the district. Here too, though, because of the layout of the district and the plaza, few if any of the workers other than those that work in Propaganda Sancho office building are aware of the plaza's existence.

The above primary activities are not supported by any other uses. This can be seen in table 4 which shows that this district lacks educational institutions or any other primary activities. The result is that very few secondary activities have been established within the surroundings. The exceptions to this are one neighborhood church and four restaurants. Propaganda has the potential of drawing people from the church only from the three Sunday services at 6:30 A.M., 11:30 A.M., and 7 P.M.. The optimum potential parishoners for each of these services is 2,000 persons, which includes a wide variety of people from the residential neighborhood. While there are two daily services at 6:30 A.M. and 5 P.M., it was observed that they are frequented by no more than twenty to thirty people most of whom are the older people of the neighborhood. Out of the four restaurants, only two are situated to take advantage of the

plaza. One of these is close but not in a traffic pattern that is compatible with the plaza. The other restaurant is located on the first floor of the office building but is so exclusive that it is rarely frequented by area people. Those that do use the restaurant usually go directly from the parking garage under the building into the restaurant. Out of forty people who answered my survey for Propaganda Sancho plaza, none had eaten in these restaurants.

In Granahorrar's neighborhood, there is better diversity of primary uses than in Propaganda Sancho's surroundings, since Granahorrar has a greater amount of primary uses dispersed within a one-block area (figs. 16 and 17), As these figures indicate. the primary uses in Granahorrar include entertainment activities. social activities, business, religious and educational activities that provide the base for secondary uses like stores, restaurants, and out-door activities which fulfill the different moods a person has.

Granahorrar plaza's great mixture of activities creates a good variety of users who determine the varied schedule of the plaza. Through the questionnaire, I found that out of one-hundred users of Granahorrar plaza, nineteen were there for entertainment, eighteen for shopping, sixteen for business, sixteen for Mass, sixteen were waiting for somebody, and fifteen for eating. As these results indicate, the primary activities draw almost as many people

as the secondary activities, because of the great diversity of activities that Granahorrar plaza's surroundings have. These same hundred people were asked about the time they usually go to the plazas. Out of one-hundred people in Granahorrar, thirty-two said they usually go to the plaza during the morning, thirty-five at noon, and thirty-three in the afternoons. It is clear that Granahorrar plaza has users for the different periods of the day.

In contrast, Propaganda Sancho plaza does not have the benefits of a good mixture of activities. Of the forty people interviewed, twenty-nine were in the plaza waiting for somebody, six for entertainment, four for business, and one for Mass. The difference between waiting and the rest of these uses is large, because of the lack of a good mixture of activities within the Propaganda Sancho plaza's surroundings. For the same reason, plaza usage is not continuous throughout the day. Out of the forty people interviewed, two usually went to the plaza in the morning time, twenty-three at noon, and fifteen in the afternoons. This is one of the reasons why propaganda Sancho plaza fails in terms of sociability, which is facilitated by the diverse distribution between primary uses which are supported by secondary uses, as happens in Granahorrar plaza. This variety of users and mixture of activities are the elements which increase density in Granahorrar plaza's surroundings and make it work better than Propaganda Sancho plaza. The

lack of diversity around Propaganda Sancho plaza is one of the key reasons why this plaza is not supported by its surrounding area as well as it might be otherwise.

(3) Perception of the Plaza

Another important characteristic helping to determine whether a plaza succeeds or not in terms of sociability is its perceptual visibility in relation to its larger district. People in cities, with all their interests and duties, can hardly make use of a plaza if the plaza is not well known as a physical entity. Visibility is a key factor here. If people are unable to see the plaza, they may not be aware of it and therefore not use it, a fact which leads to the third hypothesis:

Hypothesis 3. Visibility is an important element in the social success of the plaza. High perceptual visibility helps draw users to the plaza; on the other hand, low visibility can keep potential users away.

In order to understand strong visibility and its qualities, it is necessary to know how people perceive the plaza from a distance as well as at close range. Kevin Lynch, in his book The Image of the City, identifies different elements around which people organize their perceptual image of the city.⁸³ Two of Lynch's elements seem especially important for understanding Granahorrar and Propaganda Sancho plazas' perceptions: paths and landmarks.

⁸³ Kevin Lynch, The Image of the City (Cambridge, Mass.:The M-I-T. Press, 1979).

These elements are perceptible objects that a person recognizes as underlying elements in his or her personal image of the city.

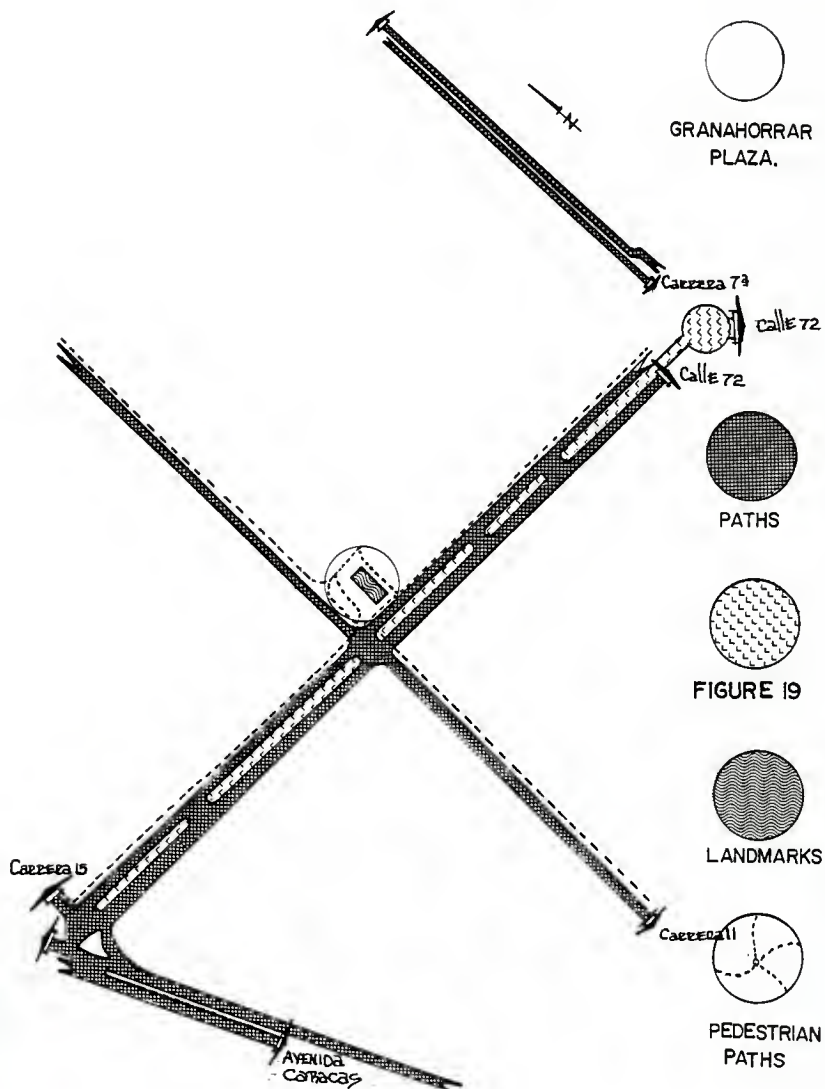
Paths are perceived as the channels along which the observer customarily, occasionally, or potentially moves.⁸⁴ They often furnish important viewing points. Paths can work in a district as channels which move people into an area, or can be used as dividing elements between two different areas. One value of paths is that if they are located near a plaza's boundaries, they may assist in drawing people, since paths are generally a significant part of people's urban image.

In speaking of paths in relation to the two Bogotá plazas, one must first understand the city's street system. Bogotá is composed of squares in which the circulation lines going from north to south are called carreras, which will be referred to here as "streets". Paths running from east to west, which are called calles, will be referred to as "roads." Some roads (calles) and streets (carreras), because of their width, are called avenidas, here "avenues".

Figure 18 shows the streets and roads in the Granahorrar plaza's district that can be defined as perceived paths. 7th street and Caracas avenue are two major paths in Bogotá. Both of these paths run from north to south, and have some of Bogotá's heaviest traffic. A third significant path is

⁸⁴ Ibid., p. 46.

Figure 18: Perception Elements of Grananorrrar Plaza



72nd road, which connects 11th street and Caracas Avenue. 72nd road is especially important because it is recognized as an important path in town- dividing two different areas of Bogota--the district areas of Chapinero and La Porciuncula. The last important path in Granahorrar's surroundings is 11th street, which is used by most east-west public transportation in Bogota. This path and 72nd road are the nearest to Granahorrar plaza, forming its edges (fig. 18).

Now let us concentrate on the most important path within the district--72nd road--because it is the closest to the plaza and the major factor in planting Granahorrar plaza in people's image of Bogota. This path became a natural divider for the two districts by virtue of its width (which ranges from four to eight lanes) and design. The medians of 72nd road plays an important role in its identity as a path, because it contains such physical elements as monuments, statues, obelisks, green areas, and trees--all of which create potential focal points in people's image of the city (figs. 19a and 19b).

Granahorrar plaza is bordered by 72nd road, which works as a major route for public transportation and also as an edge separating a residential district--Chapinero--from a commercial one--La Porciuncula (which contains Granahorrar plaza). One of the entrances to Granahorrar faces 72nd road, which exposes the plaza to the general public who pass

Figure 19a: Granahorrar Plaza: East View of 72nd Road as a Path



Figure 19b: Granahorrar Plaza: West View of 72nd Road as a Path



along this edge in their daily routine (fig. 19). The advantages of this circumstance is shown in the movement of people created by the embarking and disembarking from buses and other public transportation. who come into contact with the environment of the plaza.

For Granahorrar, each of its paths carries important flows of public transportation which with their passing by Granahorrar plaza create a strong relationship between plaza and general public. People who use public transportation in their daily routine must create a mental image of the city, needing to know transfer points important for daily travel.⁸⁵ Because Granahorrar plaza is along important public transportation paths, many people include Granahorrar plaza in their image of Bogota.

In contrast, as figure 20 indicates, Propaganda Sancho plaza has no immediately adjacent paths with a strong image, though the surrounding district does have three major paths--7th street, 11th street, and 100th road, but these routes are not immediately adjacent to the plaza and, therefore do not assist its visibility. 7th and 11th streets are connected to each other by minor paths like the 97A road and 9th street. In addition, the most important path of Propaganda Sancho plaza's district--100th road--is located three blocks away from the plaza. It is along 100th road that a majority of movement occurs, and it is here that the

⁸⁵ *Ibid.*, pp. 1-46.

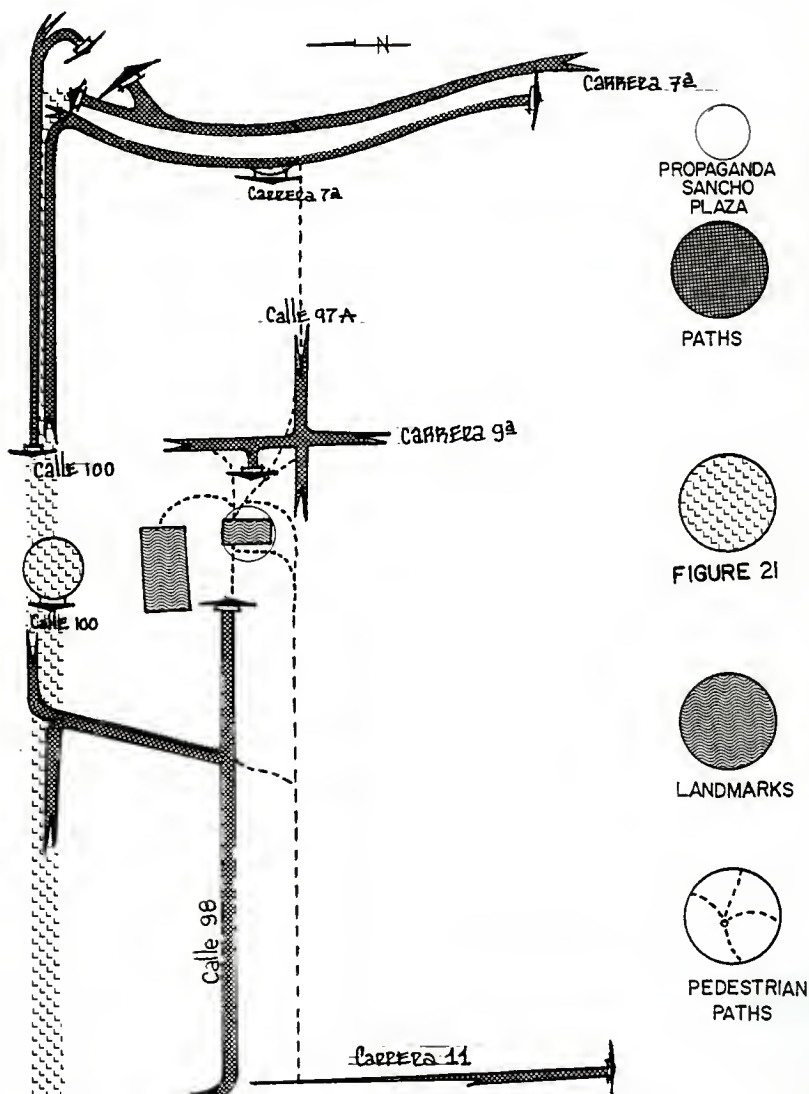
largest portion of the district's future development is planned. This road is also recognized as the dividing path between two residential districts: El Rincon del Chico in which the plaza is located; and Miranda. 100th road became a recognizable path because of its design: all the streets, going from south to the north part of Bogotá, merge at 100th road, and then branch out to the northern most parts of town (fig. 21). This is a handicap, in that Propaganda Sancho can not benefit from the recognition that comes from being situated near paths. Because all the main paths within the district are far away from Propaganda Sancho plaza, they do not contribute to the visibility of Propaganda Sancho plaza.

Paths are important to a strong urban image in that people observe the city while moving along these paths. The paths discussed above carry the heaviest traffic of the two plazas' districts and are used as points of orientation for different parts of the city. Visibility of a plaza from one or more of these paths would increase its identification. This can be seen with Granahorrar plaza, which lies at the intersection of two major paths and is thus recognized by a great number of people throughout the city, since they pass by the plaza frequently. Propaganda Sancho plaza, on the other hand, is located away from any major path, and is thus not as readily recognized by people who do not live or work within its immediate vicinity.

Figure 20: Perception Elements of Propaganda Sancho Plaza



Figure 21: Propaganda Sancho Plaza: 100th Road as an Edge



Second, in understanding the two plazas' images, we must consider landmarks, which are prominent physical objects that people can see at a distance or from numerous viewing points. They are external points of reference such as buildings, signs, stores, or mountains. These elements can attract the attention of people who may move toward the space where a landmark is.⁸⁶

The results of the survey given in Granahorrar plaza reveal that out of one hundred people interviewed thirty-eight identified the commercial center as a landmark, forty-four people identified the horse statue and eighteen the church (question 1 of Appendix 1). This identification helps in bringing people to the plaza. On the other hand, Propaganda Sancho has two landmarks, one within the plaza--The Propaganda Sancho's building--and the other near by--the church (fig. 19). The survey for Propaganda Sancho revealed that out of the forty people questioned, no one identified the plaza with either landmark, but rather with the adjoining neighborhood park. The physical structures in Propaganda Sancho plaza's surroundings work as landmarks for the district as a whole rather than for Propaganda Sancho plaza itself.

In a workable image, not only the spatial relationship and the individuality of the objects in relation to the plaza are important, but these objects must have some

⁸⁶ Lynch, *op. cit.*, p. 48.

meaning for the observer, whether practical or emotional. Landmarks, if effectively identified with a plaza, can help people to recognize that place among other places that are near. Granahorrar plaza is better identified with its perceptual elements than Propaganda Sancho plaza, with the result that Granahorrar has a stronger image than Propaganda Sancho.

(4) Pedestrian flows

The walking routines that people do in a normal day create pedestrian flows. These flows are important in the sociability of plazas and have direct relation to the plaza's mixture of activities and location. This pedestrian movement is the subject of our fourth hypothesis:

Hypothesis 4. The streets bordering the plaza and the intersection of those streets must have heavy pedestrian flows, if the plaza is to become an effective sociable space.

Let us first consider the pedestrian flows in relation to the two plazas. As figure 22 indicates, Granahorrar plaza's two most important pedestrian flows cross each other on the plaza's southwestern corner. 72nd road produces one of the greatest pedestrian flows for Granahorrar plaza, since the road is heavily built up with commercial buildings many of whose employees utilize the mass transit system. In addition, two major bus depots for the whole city can be found near Granahorrar plaza. One is located three blocks west of the plaza at the intersection of 72nd road and

Caracas Avenue, and the other is two blocks east at the intersection of 72nd road and 7th street. Thus, a great number of the workers along 72nd road corridor must pass by the plaza, at least twice a day. The second major pedestrian traffic occurs along 11th street. This flow is created by two activities--restaurants and educational institutions. Most of the popular lunch restaurants of the area are either located on 11th street or within the Granahorrar Commercial Center. Many of the educational institutions are located to the north and south of the plaza along 11th street. Because of the transit centers that exist along 72nd road, many of the students must also pass within Granahorrar's vicinity. Three other nodes exist nearby that detract some potential users from Granahorrar. These nodes are created by the intersections of 72nd road and 9th street, 73rd road and 9th street, and 11th street and 73rd road, and can be seen in figure 22.

Turning to Propaganda Sancho plaza, one finds that the plaza is much less effective in utilizing pedestrian flows. As figure 23 indicates, there are only two pedestrian paths in the vicinity, which do not cross near the plaza, and only one of these touches it. Because of the lack of a good mixture of activities and lower density (discussed earlier), these flows are not nearly as heavy as those around Granahorrar. The only pedestrian flow that borders Propaganda Sancho plaza is created by workers of the

Figure 22: Pedestrian Flows of Granahorrar Plaza
Counts Based on a Week's Observation Mapping.

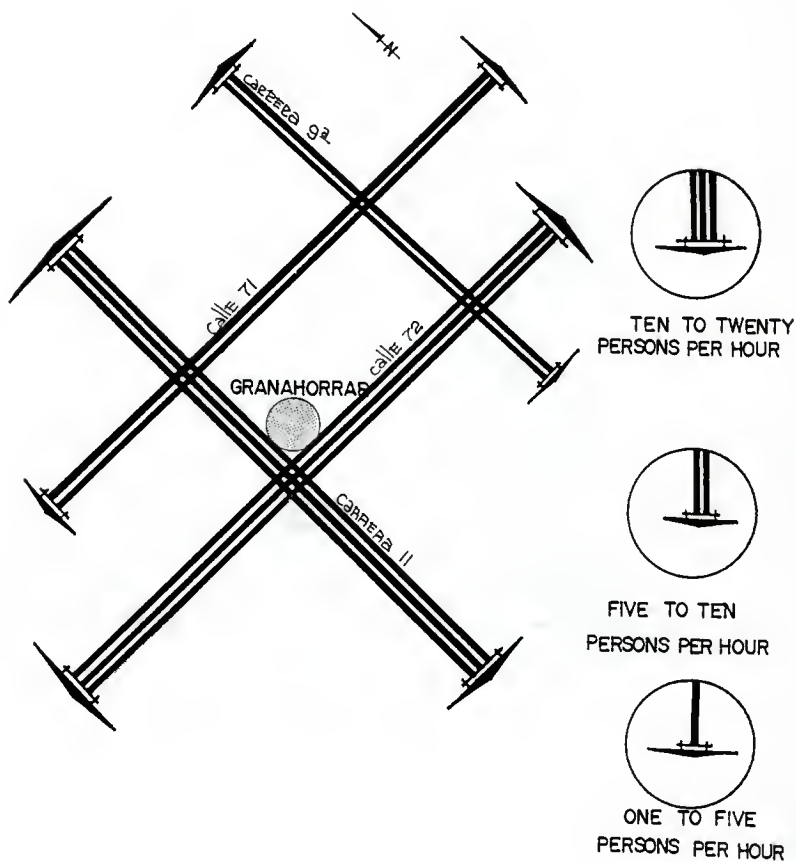
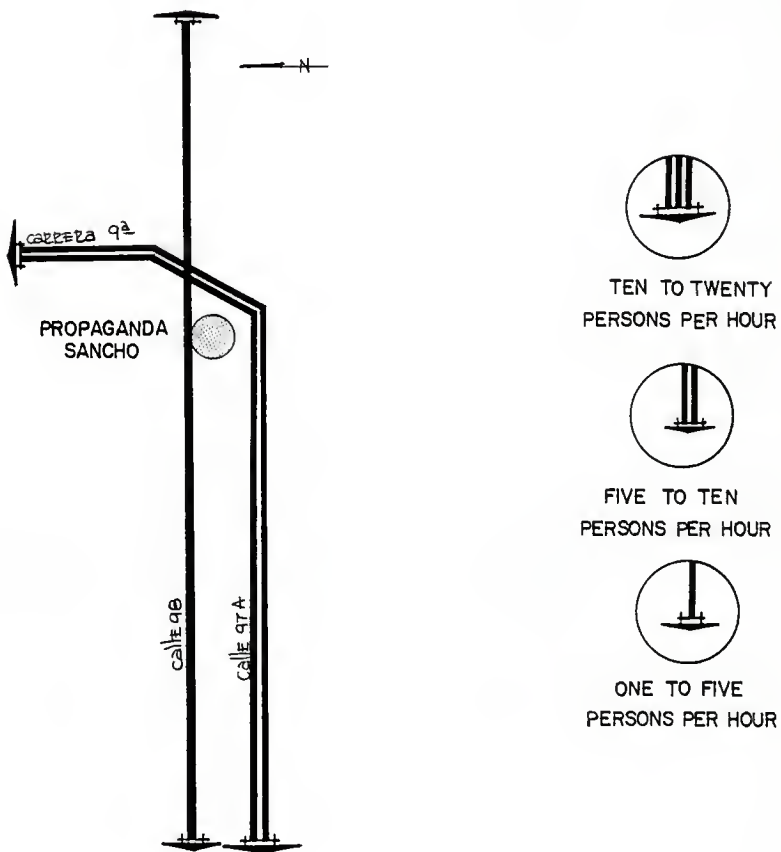


Figure 23: Pedestrian Flows of Propaganda Sancho Plaza Counts Based on a Week's Observation Mapping.



Propaganda Sancho office building and the neighborhood church--98th road (fig. 23). The office workers must pass through the plaza in order to enter and leave the building. Similarly, parishioners must pass through on their way to and from Mass. Both of these flows represent a minimal amount people because of the low frequency with which these groups pass by the plaza. The other major pedestrian path is created by 97th-A road, 9th street, and a neighborhood park which connects them. This one is used by people in order to get to 11th street and 100th road, both of which are major public transit corridors for the northern part of Bogotá. The node created by these two pedestrian flows generates little benefit for Propaganda Sancho plaza, mainly because it occurs in the nearby park rather than at the plaza.

Sociability of a plaza is greatly dependent upon accessibility to those who use the pedestrian paths, walking from one activity to another, in their daily routines--residing, working, and eating. Granahorrar plaza derives more advantages from its pedestrian flows than Propaganda Sancho, because Granahorrar's design took into account the importance of these flows in forming its boundaries. In short, Granahorrar plaza has more opportunities for having more people from the movement created by the pedestrian flows than Propaganda Sancho plaza has, because the quantity of Granahorrar's flows is greater.

Conclusion

In this chapter, the relative social success of Granahorrar plaza and Propaganda Sancho plaza has been looked at from the level of surroundings. This level was examined in terms of four hypotheses that demonstrate the weaknesses and strengths of both plazas in relation to their surrounding districts. Consideration of the first two hypotheses indicated that density is a secondary element to a good mixture of activities, which is more important in a district's achieving good sociability. Granahorrar's district shows a greater diversity of buildings, activities, and variety of people than Propaganda Sancho's. In Granahorrar, these elements have grown regularly, while in Propaganda Sancho plaza they have started to increase its density only recently by providing new activities and buildings. The result is that, because of its diversity of people, Granahorrar plaza has better chances for sociability than Propaganda Sancho.

Consideration of the third hypothesis indicates that if people do not see or perceive plaza's existence, they will less likely use it. A plaza needs visual identification--elements that tell people where the plaza is. Granahorrar plaza has a few of these elements that people identify with the plaza, while on the other hand, Propaganda Sancho plaza is lacking in these identifying elements.

The fourth hypothesis shows that the movement of people created by the interrelation between primary and secondary uses creates flows of pedestrians who are potential users for the plazas. These pedestrians are crucial for a plaza's success, for without them, a plaza would not have human meaning. The routine that these pedestrians create is a great value if a plaza is to have social success. So, if a plaza takes advantage of these pedestrian flows, its sociability can be enhanced. Granahorrar plaza creates a good relation between plaza and pedestrians, which gives greater opportunities for people to enter into the space than Propaganda Sancho plaza provides.

If the four major themes of the level of surroundings--density, mixture of activities, visibility, and proximity to pedestrian flows--work in unison in the location of a plaza within the district or neighborhood, the plaza will be closer to achieving a desired sociability. There are seven additional hypotheses relating to a successful social plaza. In the next chapter, we focus on three hypotheses which pertain to the level of edge; and in chapter seven, four hypotheses which relate to the level of stage.

CHAPTER 6

Analysis of the Two Plazas:

The Level of Edge

While the first level in our analysis of sociability relates to whether a specific part of the city provides effective surroundings for a sociable open space- the second level relates to a plaza's success in relation to its edges--i.e., the way the plaza relates to the immediate surrounding spaces- especially streets, buildings, and sidewalks. Edge elements help to make a demarcation between what the plaza's life is and the rest of the district's life. This level-zone of edge is studied by focussing on three themes: (1) activities along the plaza's edges; (2) transition between street and plaza; and (3) a sense of enclosure. Each of these topics and related hypotheses help clarify how the two plazas' edges contributes to plaza sociability.

(1) Activities along the plaza's edges

In looking at activities along the plaza's edge, a key focus is the street: "The relationship to the street is integral, and it is far and away the critical design factors."⁸⁷ In Chapter 5, we gave some consideration to the street as it was spoken of in terms of pedestrian flows for the two Bogota plazas. Now, we must look at the street more carefully, especially in terms of the activities on it. The result is the following hypothesis:

Hypothesis 5. A good location on an active street corner or near shopping centers and restaurants, is a key to high usage for a plaza.

Because it involves the intersection of pathways, a corner is often crucial in producing large movements of people; the circulation generated at a corner adjacent to a plaza contributes to the possibility of a plaza to be full of life. As Whyte explains, "a good location starts at the street corner. The area where the street and the plaza meet is a key to the success or failure of the plaza."⁸⁸ People's movements on a corner provide two-way traffic back and forth between plaza and corner. People will not only be waiting on a corner for a light to change; some will be fixed in conversation; and others, in some phase of prolonged good-bye. A corner is one of the best locations for people

⁸⁷ William Whyte, The Social Life of Small Urban Spaces (Washington, D.C.: The Conservation Foundation, 1980) p. 54.

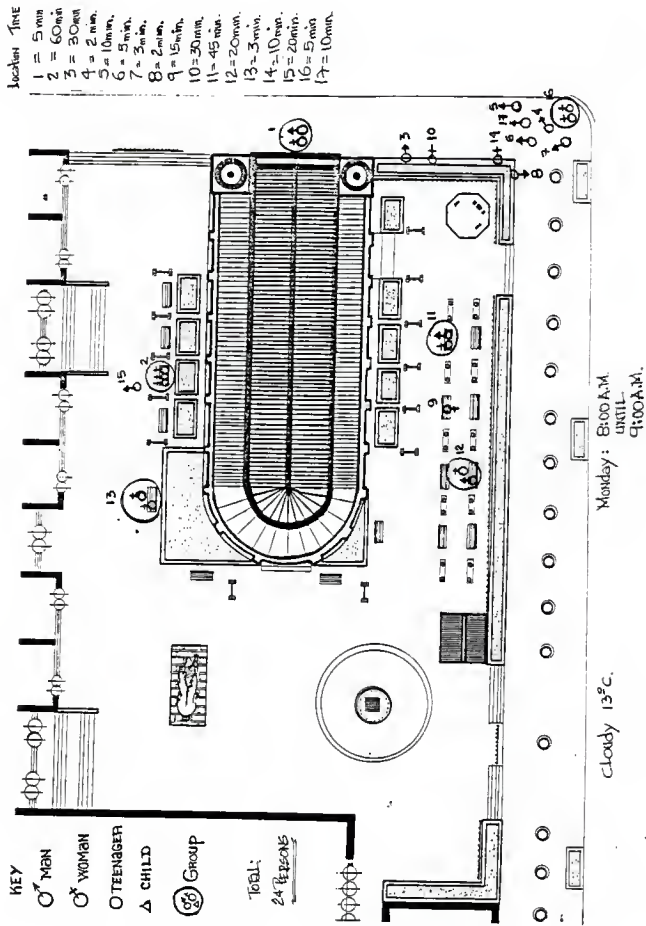
⁸⁸ Ibid., pp. 57-58.

who just pass by to come into the plaza, a place where they can feel and perceive the social environment existing in the plaza.

In the case of Granahorarr, the southwestern corner provides a considerable variety of users who contribute to the plaza's sociability (see the observation mapping of Granahorarr in figure 24). The activities happening at the corner create a movement of people who frequently use the plaza. During the observation days, the activities on the corner at times overshadowed those within the plaza. This can be seen in figure 24, which shows the mapping of these occurrences at 8 A.M., Monday, November 13, 1985. In this figure, the people on the corner outnumber the people within the plaza thirteen to eleven. Notation of these thirteen people at the corner indicates that their social interaction was closer and generally longer than the the eleven users spread throughout Granahorarr plaza. It was also recorded that these people had a tendency to look into the plaza where visibility permitted and often to follow this with entry into the plaza. These observations were not unique to this specific time, but occurred frequently throughout the observation week.

Granahorarr has the possibilities that a corner can offer, since, as chapter 5 pointed out, there are two major pedestrian paths converging at Granahorarr's southwestern edge. This large number of people creates an important flow

Figure 24: Observation Mapping of Granahorrar Plaza
8 A.M. until 9 A.M. Monday, November 13, 1985.



of potential users for the plaza. This potential is created by the fact that people have a tendency to pause or slow down at the corner. Along with the general reasons of crossing the street, waiting for the traffic light, talking, and meetings, there is also the attraction of two public telephone booths located on the southwest corner of Granahorrar (fig. 25). The public telephone is an important element of urban furniture throughout Bogotá, usually situated on a corner. At Granahorrar, these two telephones are frequently used, often resulting in a waiting line. People in this queue are potential participants in the plaza's life, if the environment of the plaza can attract their attention during the time spent engaged in such activity (figs. 26a and 26b).

Another activity of Granahorrar plaza's corner is the congregation of parishioners after Mass or funerals at la Porciuncula Church located in the center of the plaza, composing part of Granahorrar's south boundary (fig. 25). There are three Masses per day: one at 6 A.M., usually frequented by old people; another at noon, involving a mixture of old people and office workers; and a last at 6 P.M., attended by the people who work in the area (fig. 27). At funerals, which are several in a typical week, people gather after the service to discuss the life of the deceased; these funerals usually occur around three in the afternoon, when the plaza is in a low usage period of the

Figure 25: Activities Immediately Nearby Granahorrar Plaza

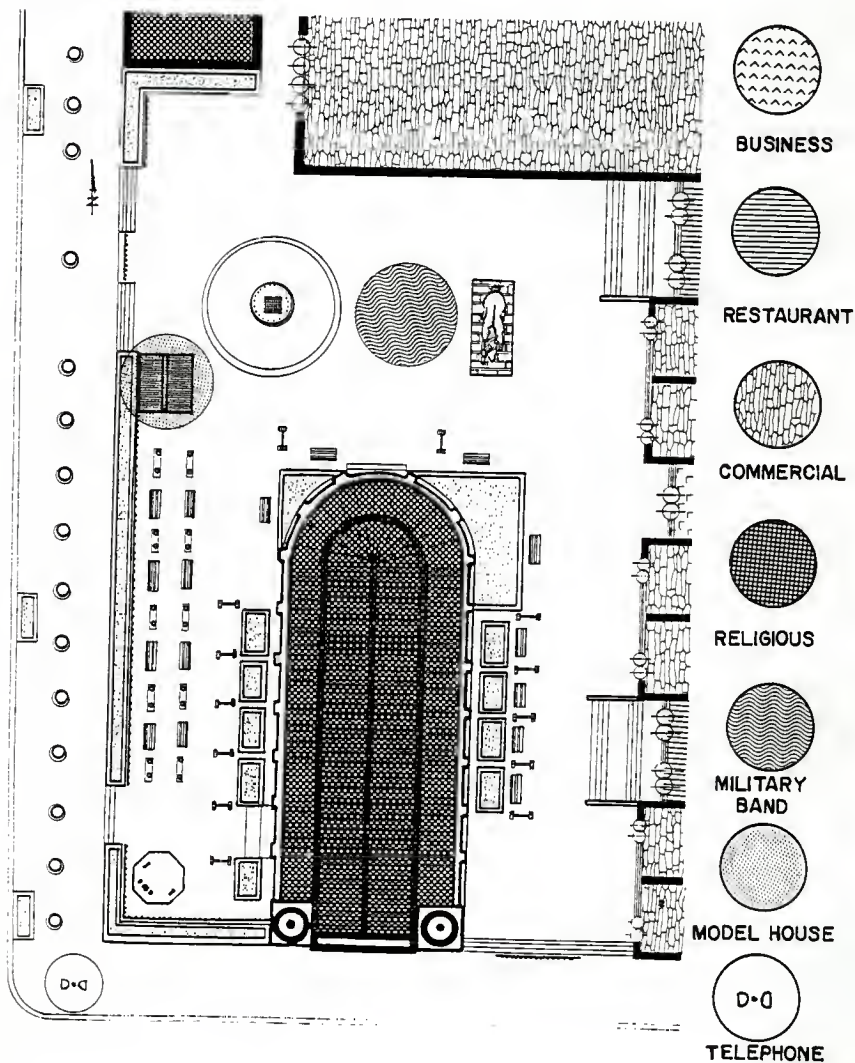
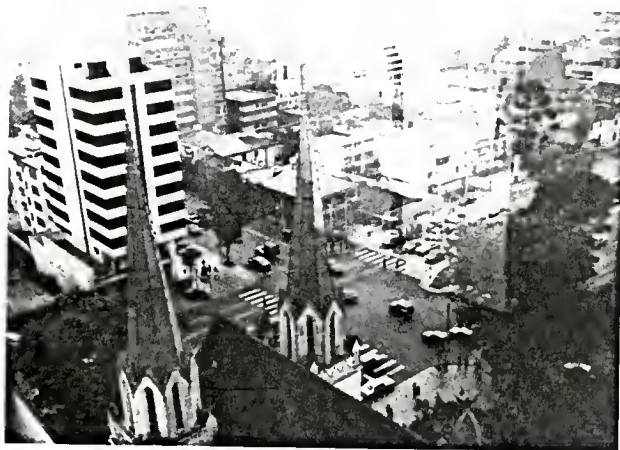


Figure 26a: Granahorrar Plaza's Public Telephones
at Southwest Corner of Plaza



Figure 26b: Aerial View of Southwest Corner of Granahorrar
Plaza



day, and therefore provide people who would otherwise not be in the plaza.

A smaller, but no less important group of people using the corner are those waiting for public transportation (fig. 28). These people wait at the corner because they find comfort in sitting on the flowerpots which border the plaza's corner. As they wait, these people are also likely to be able to participate, on a limited basis, in the plaza, since often they must wait for long periods of time. Observations showed that these people were more observers of the plaza from the corner rather than participants within. This is so because buses do not run on precise schedules in Bogotá, therefore, those who are waiting for public transportation must remain alert in order to catch the right bus when it arrives. In short, while these people enhance the sociability of the corner and are able to savor the atmosphere of Granahorrar, they generally do not become active participants within the plaza.

Now we turn to Propaganda Sancho plaza and consider the benefits from its corner activities. As figure 29 shows, Propaganda Sancho plaza lacks a relation with sidewalks and corners; instead, it is the adjacent park which gets all the benefits of corners and sidewalks. Therefore, the difference in the number of users is great between the park and the plaza. This situation is well illustrated in figure 29, illustrating usage at 10 A.M. on Thursday November 23,

Figure 27: Users of The Church in Granahorrar Plaza



Figure 28: Users at the Southwest Corner of Granahorrar Plaza



1985, in which the plaza has only six users, while the park has fourteen. Unlike Granahorrar plaza, Propaganda Sancho plaza has no active corner, and the possibilities to attract pedestrians are, therefore, limited. There is little activity because, as we saw in Chapter 5, the only regular users of the corner are children playing in the park surrounding the plaza, and an occasional chance encounter between neighborhood residents. As was also pointed out in Chapter 5, the plaza is located in the middle of a block which has a low density of activities.

To further test hypothesis 5, we must next examine another aspect of a good plaza location--i.e., the presence of shopping areas and restaurants. Ideally, there is a relation between the plaza and stores, windows with displays, signs to attract people's attention, doorways and people's going in and out of them.⁸⁹ Curiosity is an important element that makes people move and is supplied by such activities.

Granahorrar plaza is composed of three main buildings--a church, a shopping complex similar to an American central-city shopping center, and a parish house designed in the same style as the commercial center. These three buildings generate a great movement of people because of the activities that such buildings contain (table. 5). During the observation week, one hundred people were surveyed about

⁸⁹ Ibid.

Figure 29: Observation Mapping of Propaganda Sancho Plaza, 10 A.M. until 11 A.M. Thursday, November 23, 1985

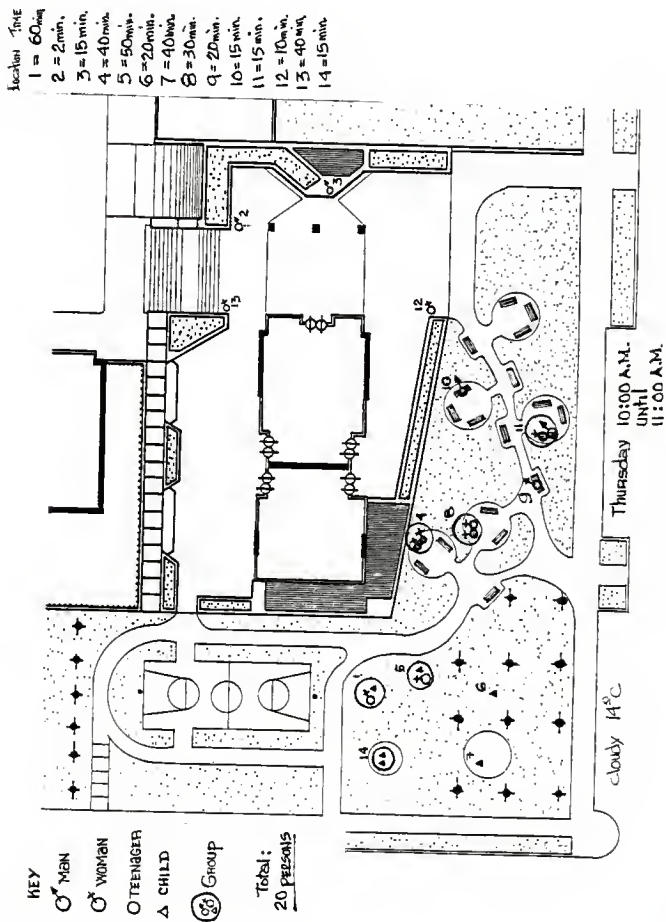


TABLE 5
Breakdown of Plazas Activities*

	Granahorrar Plaza		Propaganda Sancho Plaza	
	%	number of respondents	%	number of respondents
Commercial.....	35	35	0	0
Business.....	23	23	27	11
Resturants.....	14	14	0	0
Reliqious.....	18	18	3	1
Residential.....	0	0	15	6
Recreational....	10	10	55	22
	100	100	100	40

*Based on the total counts of respondents to the written questionnaires given during the observation weeks.

their reactions and perceptions of Granahorrar plaza. One of the questions related to what kind of neighboring activities drew people to the plaza. The responses to this question indicated that the commercial center is the largest attracting activity; thirty-five respondents said they come to the area for that reason; offices attracted twenty-seven respondents; the church, eighteen respondents; restaurants, fourteen respondents; and recreational activities, ten respondents. Although only one hundred people out of the 3,327 total users of the plaza for the one week observation period responded to the questionnaire, it can be assumed that their responses represent a wider pattern.

In short, the commercial center's activities--including six restaurants, two movie theaters, seventy-five stores, and fifty-six business offices--bring a mixture of people who range from children to old people. For Granahorrar plaza, these people supply security, comfort, dense activity, and strong potential for social interactions (fig. 30). The largest building bordering the plaza is the commercial center, which covers the east and the north sides. The east side's facade is made up of windows, stairways, and entrances for the commercial center and other stores. These windows and entrances provide visual entertainment for those within the plaza, and create flows of people going in and out. As figure 31 shows, the north side is composed of a mirrored-glass facade. The plaza benefits from this facade in that people within the commercial center are able to perceive the plaza environment through the glass and are often attracted into it.

There are other buildings bordering Granahorrar plaza that with their activities also contribute to the sociability of the plaza. As was mentioned above, the church generates a movement of people attending Masses. People usually use the west door of the church for attending daily services, and this avails them of immediate access to the seating places on the west side of the plaza, as it can be seen in figure 32. The parish house is another structure that shapes the plaza. Traffic generated between it and the

Figure 30: Granahorrar Shopping Center



Figure 31: Granahorrar Plaza's North Facade



church is another source of sociability. The people who go to the parish house usually have specific reasons such as making arrangements for weddings, funerals and other religious ceremonies, spiritual and social counselling, and catacisms. The activities these people are engaged in often necessitates some contact with the church building (separate from the parish house), which generates a flow of traffic through the plaza. This movement plus the activity of the commercial center, helps to give social activity to the plaza.

In contrast, Propaganda Sancho plaza does not have as many activities as Granahorrar plaza has within its edges. There are a church, office building, restaurant, and park near the plaza's edges (table. 5). During the observation week of Propaganda Sancho plaza, forty people answered the questionnaire. In regard to the query about the activities which brought them to the plaza, it was found out that the strongest boundary activities were: first. recreational, such as relaxing in the sun. taking a break from their daily routine. and watching the surrounding activities (indicated by twenty-two respondents); second, the office building at the middle of the plaza (twenty-seven respondents); third, residents of the neighboring dwellings (six respondents); and last, one person who had come to the neighboring church.

Figure 33 illustrates the relationship between the park and the plaza. The plaza and park are controlled by

Figure 32: People Using Granahorrar Plaza After Mass



different jurisdictions--the plaza is controlled by the corporations that own the office building at the center of the plaza, and the park is under the jurisdiction of Bogota's Department of Parks and Recreation. Therefore, the upkeep of the plaza and the park are not related, resulting in minimal coordination in design consideration between the two. The design for each is different, thus the park is a green area created for the residential neighborhood, whereas Propaganda Sancho plaza was built in order to obtain permission from the regional planning office to build the thirteen floors that the builders needed. Since the designers of the plaza did not take the park into their design considerations, these two spaces are very differently perceived by users. The boundary between park and plaza is created by one solid concrete element containing planters and a fountain, as can be seen in the lower half of figure 33. This boundary element is so strong that it leaves little doubt that park and plaza are two very different environments.

Users of the park are drawn from the neighboring dwellings, but the total number of residents is not enough to bring a good mixture of people at different times of the day, because people are absent during the day, whether working, studying, shopping, or other daily activities. Furthermore, the main groups of people using the plaza are children playing, old people taking sun, and nurses and

maids looking after their charges. Most of the activities in the park are related to children--i.e., swings, slides, monkey bars, and a basketball court. If children or other park users happen into the plaza there is the further deterrent of a guard in charge of building security, whose job is to keep out people who do not have dealings with the office building. These factors explain why, on observation days, people in the park rarely seemed interested in also using the plaza.

We also find in regard to the edge of Propaganda Sancho that the nearby church does not have a spatial relationship with the plaza, so people do not use the plaza in their going in and out of Mass. People walking to church are unable to cross through the plaza; instead, they are forced to go through the park (fig. 33). In addition, as was mentioned in chapter 5, this church does not generate frequent users to the plaza because of its neighborhood character and its limited schedule.

Closer observations indicated that the only people who use both the park and the plaza come to the area because of the office building, in the center of Propaganda Sancho. Here, the plaza works as a "waiting room" for the office building (fig. 34). The function of the plaza as a waiting space creates momentary usage, but this usage is minimal. If someone is waiting for a friend who works in the building, he or she often sits near the fountain in the north part of the plaza.

Figure 33: Activities Immediately Nearby Propaganda Sancho

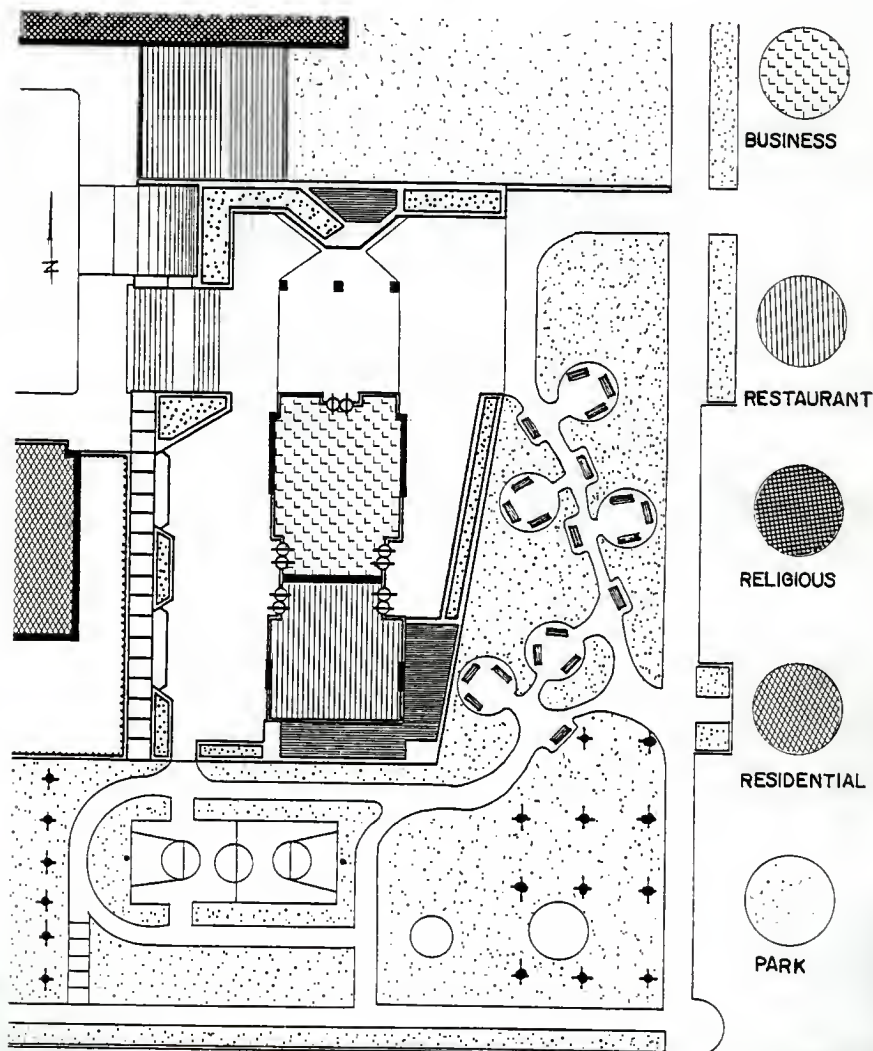


Figure 34: Propaganda Sancho Plaza's Usage



Another activity within the boundaries of Propaganda Sancho is a restaurant. This restaurant draws people in and out but they almost never linger within the plaza. A partial explanation for this is that the restaurant's main traffic is at night, because it is known for its dinner rather than luncheon menu. In addition, the restaurant is expensive and workers from the office building can not afford to eat there regularly, so luncheon use is limited, resulting in few potential mid-day users who use the plaza.

These observations demonstrate that the edge of Granahorrar plaza has greater opportunity for drawing people than Propaganda Sancho's does. This is due to Granahorrar's being situated next to a busy corner and the benefits from the activities immediately bordering the plaza. Propaganda Sancho plaza, on the other hand, is not on a corner nor are its immediate activities sufficient in generating participants for the plaza's sociability.

(2) Transition between street and plaza

Once the corner or streets bordering the plaza are equipped to handle a great amount of pedestrians, an effective relation between street and plaza becomes important. There is a need in creating a sense of invitation between street and plaza. This relation between street and plaza leads to the sixth hypothesis to be tested in relation to Granahorrar and Propaganda Sancho plazas:

Hypothesis 6. Ideally, the transition between street and plaza should be such that it is difficult to tell where one ends and the other begins.

This relationship should stimulate what Whyte calls impulse use --i.e., people are drawn into the plaza without realizing it. In most instances, people find themselves in a plaza without having thought about it: people do a double take as they pass by the plaza, pause, move a few steps, then with a slight acceleration, go into the plaza.⁹⁰ One way to promote impulse use is through clear sightliness: "if people do not see a space, they will not use it."⁹¹ This demarcation must allow for the visibility of the plaza, otherwise people will not see the plaza space, and hence not use it. It helps if people can share visually in both environments. Here, people using one space will be willing to use the other space by curiosity.

Portions of Granahorrar plaza's boundary work as stairs which are used sometimes as seating places. Granahorrar plaza is provided with some stairs which are the point connecting the plaza and the sidewalks, as figure 35 illustrates. These stairs can be found at each entrance to the plaza: one at the southeastern side of the plaza; a second at the southern edge of the western side; and a third at the northern portion of the west side. These stair elements work in making the plaza more inviting, stimulating

⁹⁰ Whyte, *op. cit.*, p. 57.

⁹¹ *Ibid.*, p. 58.

impulse use by creating a smooth transition between sidewalk and plaza. Figure 36 shows the relationship between sidewalk and the plaza by the brick tile used as common floor element. This tile gives the sensation that the sidewalk belongs to the plaza.

A smooth relationship between sidewalks and Granahorrar plaza is also helped by the planters located along the west edge and the southwestern corner of the plaza. The planters draw people into the plaza itself, since they are made of the same brick tile as the sidewalk and the plaza's floor. Sometimes, however, these planters can create a barrier between people and the plaza especially at the southwestern corner. This occurs when the plants are taller than human scale or too densely planted to allow visibility into the plaza, as can be seen in figure 37. Another problem similar to that of the planters is a wall of dense vegetation--shown in figure 38--which blocks the view into the plaza. Not being able to see into the plaza, passersby do not become curious enough to have an interest in its environment.

Propaganda Sancho's demarcations work in different ways from those of Granahorrar's. Some elements, such as the southern fountain, work as a barrier between the plaza and the park surrounding the plaza (map in fig. 39). Figure 40 shows how the transition elements of Propaganda Sancho plaza divide the plaza and the park environments, inhibiting impulse use of the plaza. People using the park do not

Figure 35: Granahorrar Plaza's Boundary Plan

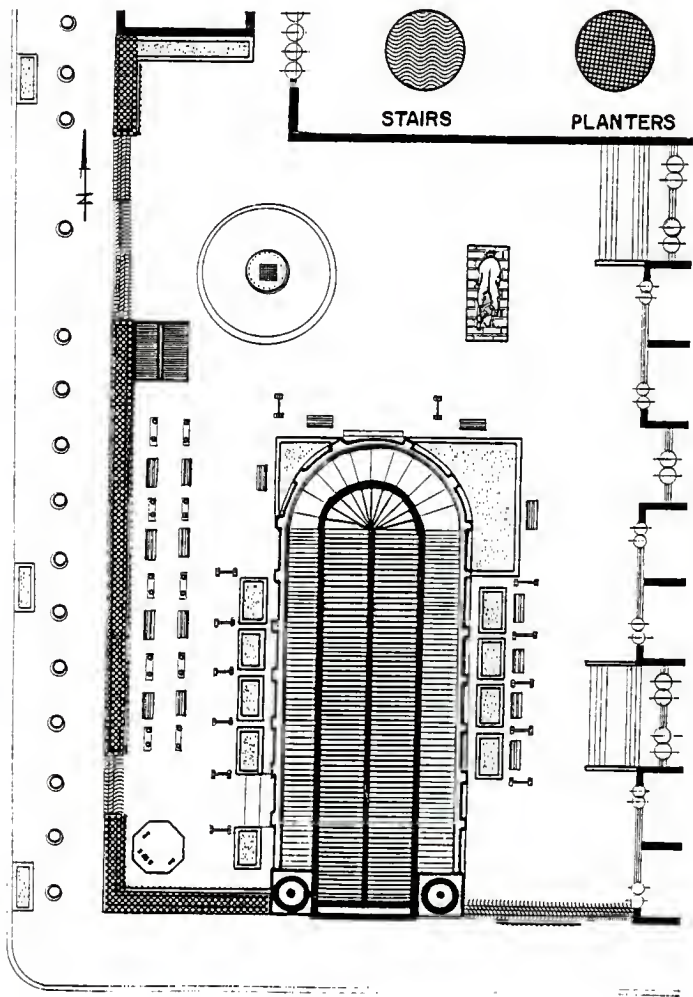


Figure 36: Granahorrar Plaza's Bordering Sidewalk



Figure 37: Granahorrar Plaza's Edge: Planter as Barrier



Figure 38: Granahorrar Plaza's Vegetation Barrier



perceive the plaza's social potential because the fountain and the planters of the plaza work as barriers. For a person within the surrounding areas (the park, the church, or the neighboring apartment buildings), it is very difficult to perceive the plaza's environment between the plaza and sidewalks.

Another element inhibiting impulse use in Propaganda Sancho is a two-foot high planter which divides the plaza from the church, making it difficult for people attending Mass to enjoy the plaza (fig. 41). In addition to this planter there is an adjoining twelve-inch brick divider which lengthens the barrier between plaza and church, Although there is a visual relationship between the plaza and the bordering church, a smooth spatial transition is disrupted by physical barriers--fountain, planter, and wall. These demarcations destroy the impulse use of the people attending religious services.

In addition, there are two other elements in Propaganda Sancho which separate sidewalks from plaza: the first, a stairway on the west side of the plaza, is useful in creating a smooth transition between the street and the plaza; while the second, the office building in the center of the plaza, works to isolate a large section of the plaza. The stairs work as the end of a pedestrian flow that finishes in the plaza and assist in impulse use at the west side of the plaza (fig. 42a). These stairs are effective in

Figure 39: Propaganda Sancho Plaza's Boundary Plan

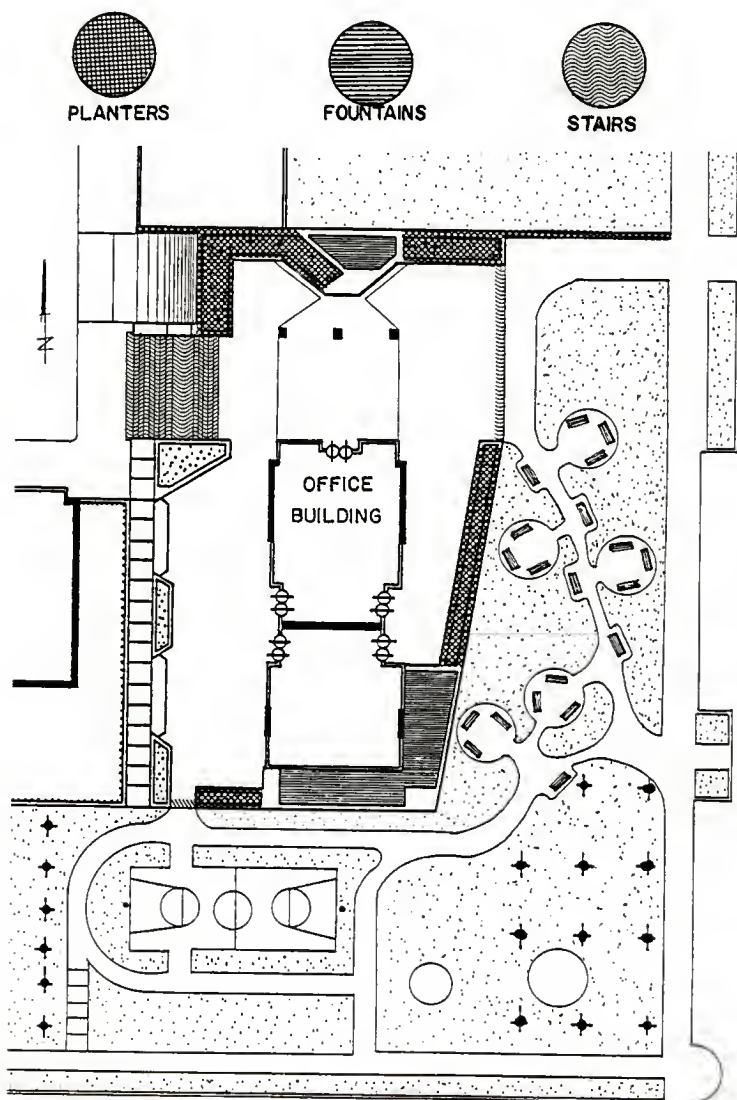


Figure 40: Propaganda Sancho's Edge: Planter Boundary



Figure 41: Propaganda Sancho's Edge: Wall as a Boundary



separating the residential area of the district from the business area, forming a strong landmark within the surroundings. People can identify what the plaza is and how the rest of the district in that direction is defined. There is a smooth transition between one part and the other, creating a funnel into the plaza (see figs. 42a and 42b). On the other hand, the office building divides the plaza into two spaces, isolating the western side from the main stream of the social environment. As figure 43 illustrates, this isolated section has no relationship to the main entrance of the office building or the neighboring park, therefore, this space is not utilized by plaza participants. Out of the total number of users during the one week period of observation--110 people--only two were recorded sitting in this section of the plaza. On the other hand, the east side of the plaza has more possibilities of having people because of its greater accessibility from the office building, as well as, to the stairs and the park (fig. 39).

In short, Granahorrar plaza has a better relationship between plaza and sidewalk than does Propaganda Sancho Plaza. Granahorrar has a better utilization of boundaries and demarcation of the space. These elements invite pedestrians to participate in the plaza's social life. Still, Granahorrar is not perfect in its street-plaza relationship and has problems caused by the dense vegetation along its western boundaries, which inhibit impulse use by people from the sidewalk.

Figure 42a: Propaganda Sancho's Residential Edge:
View Towards the Plaza

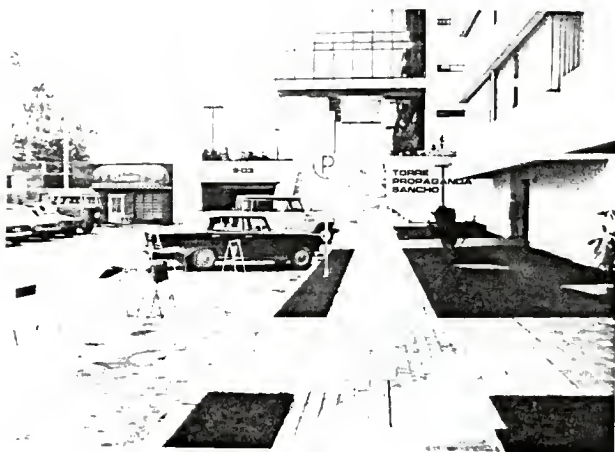


Figure 42b: Propaganda Sancho's Residential Edge:
View From The Plaza.



Figure 43: Propaganda Sancho's Western Section



(3) A sense of enclosure

A public open space gains much of its sense of place from its enclosed character: "ideally the space is surrounded by buildings or other barriers forming the walls which seem to support the sky."⁹² This quality of visual enclosure focusses the attention on the people and events within the space. The presence of buildings around the plaza is important in facilitating a sense of enclosure. They make a definite shape out of the space so that it appears as an important element in the city scene: "a positive feature--rather than a no-account leftover."⁹³ There is a need for a suitable backdrop: "surrounding buildings. . . form an important place in the creation of the stage. . . the essential thing of both room and square is the quality of enclosed space "⁹⁴ This quality is central to the testing of the seventh hypothesis:

Hypothesis 7. The plaza needs to have a sense of enclosure. This helps define the sense of being in or being out of the plaza space.

First, we consider Granahorrar plaza in terms of enclosure. As was pointed out earlier, the plaza is surrounded by a commercial center, a church, and the parish building. They give shape to the plaza, forming a sense of enclosure on the north and west sides, which gives a sense

⁹² Ibid.

⁹³ Jacobs, *op. cit.*, p. 106.

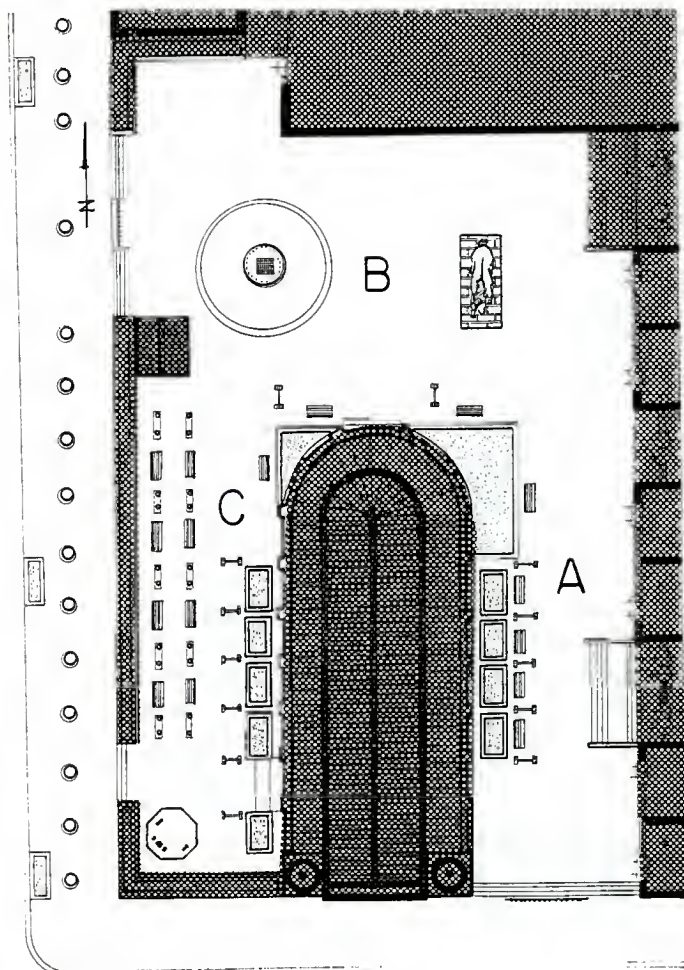
⁹⁴ Suzanne and Henry Lennard, Public Life in Urban Places (New York: Gondolier Press, 1984) pp. 21, 23.

of the plaza's belonging to the buildings (fig. 44). The church divides the plaza into three different spaces: one located on the eastern side of the plaza between the church and the western side of the commercial center (identified as A in figure 44); a second, located at the north end of the plaza and formed by the back of the church and the displaced northern section of the commercial center (identified as B in figure 44); and a third, created by the western side of the church and the planters which comprises the western edge of the plaza (identified as C in figure 44).

Each of these spaces has its own characteristics of enclosure according to the buildings which shape the sub-spaces. The first area to be discussed is sub-area A as can be seen in figure 45, this space has very strong enclosure, giving the sense of an entrance hall to the southeast part of the plaza. Like the hallway of a home, this corridor offers a temporary resting place, an alcove off the activity of the street. This enclosure is framed by the entrance stairs leading from the sidewalk, which create an experience of threshold and raises the awareness of entering into the plaza. All these sensations work to make the sense of enclosure successful for this part of the plaza.

The second space defined by the rear of the church and the displaced northern portion of the commercial center--sub-area B in figure 44--is the space within the

Figure 44: Granahorrar Plaza's Enclosure Elements



Built Elements Contributing to a Sense of Enclosure.

Figure 45: Granahorrar Plaza's South Entrance



plaza with the least sense of enclosure. Although the buildings bordering this section of the plaza have the same characteristics as the space discussed above, the greater width of this space between these two buildings destroys the sense of enclosure. As figure 46a illustrates, this space has little sense of enclosure; the mobile house on the west side provides a sense of edge (fig. 46b), but the resulting sense of enclosure is largely tenuous.

The third and last space within Granahorrar plaza is located between the west side of the church and the planters of the plaza's western boundaries--sub-space C in figure 44. The western bordering planters of the plaza do not work with the western side of the church to create a sense of enclosure. Instead, the environment of the district enlarges the environment of this area, inhibiting the sense of enclosure (fig. 47a). Though not successful in terms of enclosure overall, this space, has within it a smaller space that apportions the best sense of enclosure within the plaza. This sub-space has a seating pavilion which has the necessary elements to give the feeling of being inside or out, created by implied walls made-up of columns, benches, and flower boxes, and an implied ceiling insinuated by cross beams, as can be seen in figure 47b.

In contrast, Propaganda Sancho plaza has a weaker sense of enclosure than Granahorrar. While Propaganda Sancho plaza has some of the same elements--stairs, planters,

Figure 46a: Granahorrar Plaza's Northwest Entrance:
View Without Model House.

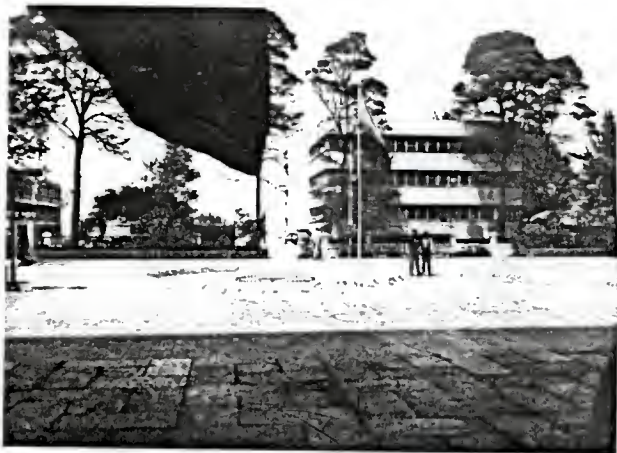


Figure 46b: Granahorrar Plaza's Northwest Entrance:
View With Model House.



Figure 47a: Granahorrar Plaza's Southwest Entrance:
View Without Enclosure Section.



Figure 47b: Granahorrar Plaza's Southwest Entrance:
View With Enclosure Section.



seating places and an office building--they play different roles than in Granahorrar. Instead of the plaza being enclosed by buildings, the tallest structure is at the center of the plaza, with low open areas on most of its peripheries. This situation gives the sense of the plaza enclosing the building, instead of the opposite situation (map in figure 48). The plaza is bordered on three sides by open areas formed by the park. We have already seen that this park is a separate element from Propaganda Sancho plaza. In terms of enclosure, the park is the contact element between the sidewalks on the block and the plaza. The planters which edge the plaza do not work as enclosure elements but as demarcation of path circulations in and out of the office building. This situation occurs because there is a lack of proportion between the elements composing the part of the plaza which faces the park. The stairs frustrate the sense of enclosure upon entering the plaza from the west. This situation is created because one ascends into the plaza from a more enclosed area, and when leaving the plaza, one descends into a corridor created by the residential buildings paralleling the street at the foot of the stairs, as seen in figure 42.

There are, however, two sub-spaces within Propaganda Sancho plaza which have a feeling of enclosure. The first one is located under the jetty of the building's main entrance, identified as A in figure 48. The feeling of

Figure 48: Propaganda Sancho's Enclosure Elements

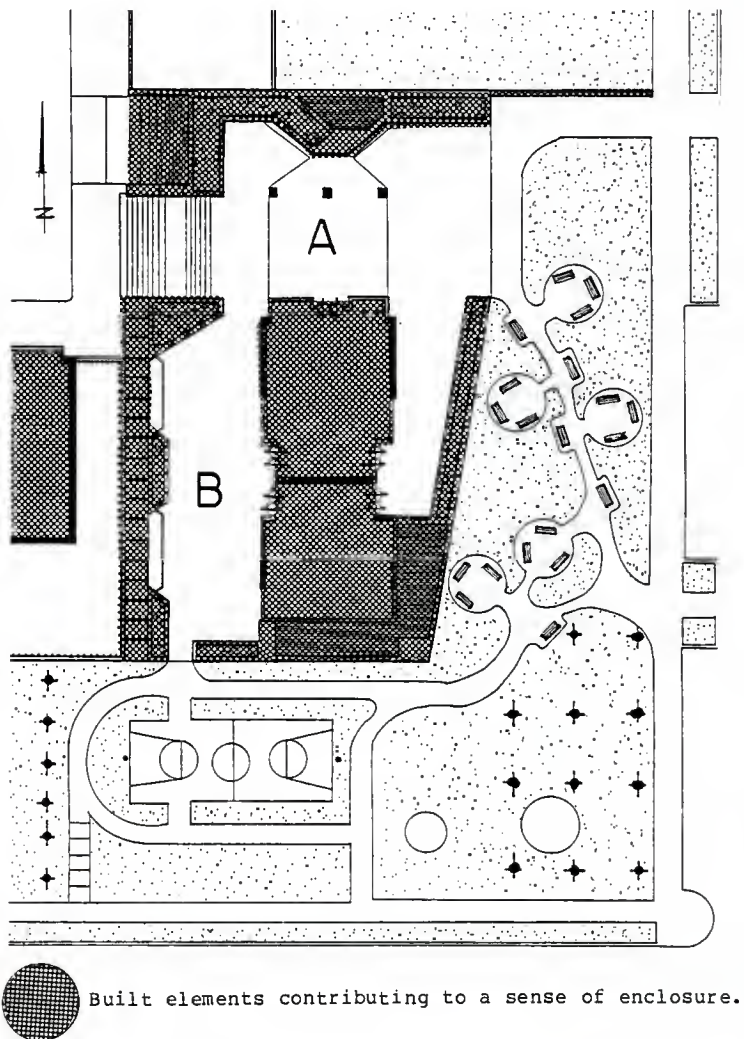


Figure 49: Propaganda Sancho Building's Main Entrance



enclosure is created by the columns that support the far end of the projection and the glass entrance doors (fig. 49). The other enclosed space is on the west side of the building, and is identified as B in figure 48. This space is created by the west facade of the office building and the recessed seating area which parallels the building. The planters, which define the entrances into space B of figure 48, are the only elements that effectively work in the sense of enclosure within the plaza (fig. 41).

Two different senses of enclosure are achieved in the two plazas. In Granahorrar, the surrounding situation of the plaza gives the entire plaza a strong sense of enclosure. Propaganda Sancho, on the other hand, does not have an overall sense of enclosure, but rather two sub-spaces which achieve this feeling, at least partially.

Conclusion

A plaza is shaped by activities along its edges, transition between street and plaza, and a sense of enclosure. Activities along a plaza's edge can include shops, restaurants, offices, recreational facilities, as well as religious institutions and residential areas which bring potential participants of sociability. Granahorrar plaza has an advantage in this aspect over Propaganda Sancho plaza, since the variety of these activities is larger, creating a wider variety of reasons for people to be near

the plaza. A corner is another element that is important in the plaza's sociability, for it creates a heavier movement of people who can be integrated into the plaza. While Granahorrar is able to take advantage of this strategic edge element, Propaganda Sancho lacks the opportunity that a corner offers, since it has no major pedestrian flows adjacent to it.

The transition between plaza and boundaries must provide smooth movement from the plaza surroundings to the plaza proper. This situation is enhanced by boundary elements such as entrances and stairways which generate impulse use. The boundaries of Granahorrar plaza make a fluid transition zone between what is in and what is out of the plaza. At least a portion of Granahorrar's boundary elements work to create impulse use, as with stairways, floors, and planters. Some of these elements work to defeat spontaneous use of the plaza by creating barriers for passersby. This is also the case in Propaganda Sancho plaza, where boundaries often physically inhibit entrance into the plaza. The result is a lack of impulse use for the plaza as well as the neighboring park.

If the elements that define the street from the plaza work at their best, they help create a sense of enclosure for the plaza. In Granahorrar, there are two spaces of enclosure that work with a third open space in giving different alternatives for people to arrange themselves

within the plaza. The planters of Granahorar plaza are effective in creating a sense of enclosure, although the buildings shaping the subspaces of the plaza are the most efficient in focusing attention on the stage and the communal social life created there. Propaganda Sancho plaza also has a sense of enclosure, composed of defined environments in which people can find benefits--shelter from the rain and an environment for closer communication.

Besides the larger spatial levels of district and edge, a third crucial component in creating and maintaining the social success of the plaza is the plaza itself, which is the topic of the next chapter--the level of stage.

CHAPTER 7

Analysis of the Two Plazas:

The Level of Stage

The third level in a plaza's success relates to the elements that compose a fitting stage for the drama of daily life within the plaza. This stage can help maintain a sense of identity and social cohesion by activities and elements that bring people of different backgrounds together. In a successful urban open space there should be a variety of people who are able to enjoy public life in one space together.⁹⁵ There are various activities and elements that produce such variety, connecting participants "in spirit of pure sociability."⁹⁶ These activities and elements create an atmosphere in which features of playfulness, fantasy, joy, and even ecstasy are shared, when participants can step outside their taken-for-granted routines and immerse themselves in a common world. This third zone-level will be

95 Suzanne and Henry Lennard. Public Life in Urban Places (New York: Gondolier Press, 1984) pp. 35-67.

96 Ibid., p. 53.

studied through four hypotheses focusing on the following topics: (1) sitting places; (2) social activities; (3) centering; and (4) sun, wind, trees, and water. These are elements significant for a plaza's stage level, and we need to consider how they work in the two Bogota plazas.

(1) Sitting places

Seatability is the term that William Whyte uses for the places in a plaza where people can sit.⁹⁷ He argues that once design has enticed people into the place, the next step is to keep people there by seating. Seatability is the core of the eighth hypothesis relating to the social success of plazas:

Hypothesis 8. A plaza must provide adequate sitting places. There are many ways in which people can find comfort when they sit in a plaza.

Adequate sitting places must be provided that take into account the various arrangements and alignments made by the people who will use the plaza. The seating must be "physically and, especially, socially comfortable".⁹⁸ This social comfort means choices for people to sit, providing different seating designs so that people can sit in whatever way they want--e.g., front to back, singles, couples, small groups, and so forth. Seatability of a plaza can be

⁹⁷ William Whyte, The Social Life of Small Urban Spaces (Washington, D.C.: The Conservation Foundation, 1980) p. 28.

⁹⁸ Ibid.

enhanced, especially by planning for people who will sit for awhile.⁹⁹ In addition, Whyte points out that people feel more comfortable in a place when they are allowed to move their seats to suit themselves, thus he emphasizes the value of movable chairs. In addition, steps, planters, and green areas, when properly designed can be effective seating places.¹⁰⁰

In the cases of Granahorrar and Propaganda Sancho plazas, it was noted through the observation weeks that there are several typical seating patterns. People situated themselves according to their age, sex, groupings as well as according to the different seating arrangements and the different environments the two plazas offer. Granahorrar can be divided into three major sitting areas, identified as A, B, and C in figure 50. All three sections had overall equal usage during the period of observation. Propaganda Sancho plaza, on the other hand, has two major seating environments, identified as D and E in figure 51. These two sections have unequal usage, the reasons for which will be examined shortly.

First, let us consider the results of the observation mapping in Granahorrar plaza. It was revealed through the observation mapping that the most common duration of stay was twenty minutes, especially during the peak hours--11

⁹⁹ *Ibid.*, p. 73.

¹⁰⁰ *Ibid.*, pp. 24-39.

Figure 50: Granahorrar Plaza: Seating Sub-areas

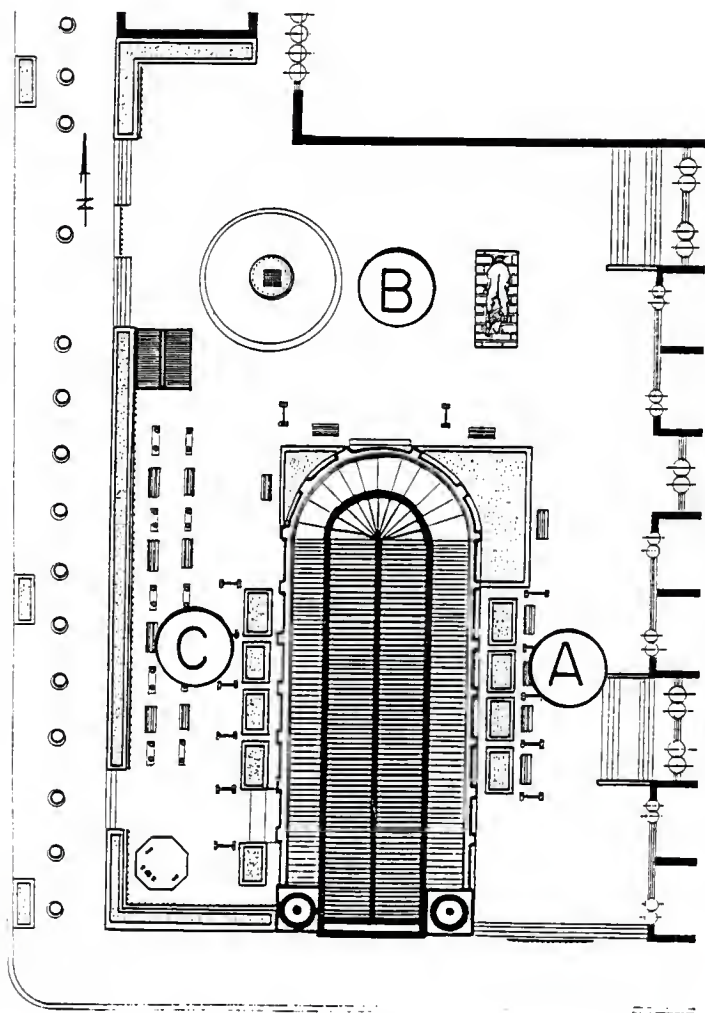
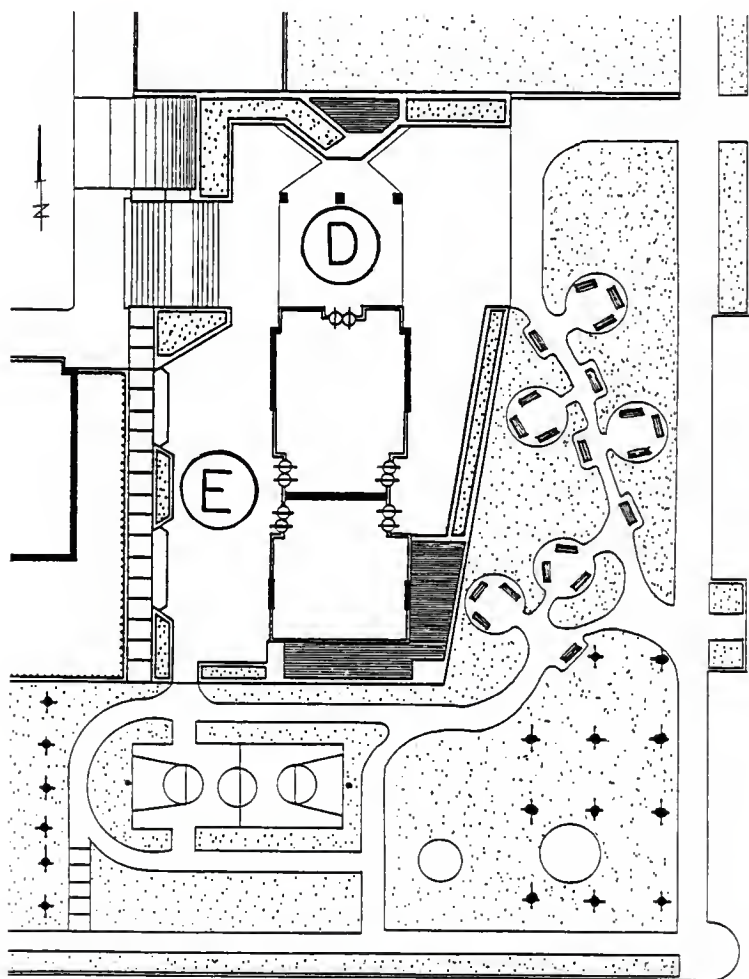


Figure 51: Propaganda Sancho Plaza: Seating Sub-areas



A.M. until 1 P.M.. Though these hours are generally considered lunch hours, very few people were observed eating within the plaza. It would appear that people preferred eating inside the commercial center, at one of the various fast food places, and then spend the remainder of their time outside enjoying the open air that neither the commercial center nor their offices provide (table. 6).

TABLE 6
Average Length of Plaza Use*

	Granahorrar plaza.		Propaganda Sancho plaza.	
	%	number of people	%	number of people
60 Minutes.....	10	332	6	6
30 Minutes.....	16	532	14	15
20 Minutes.....	34	1,445	20	22
15 Minutes.....	21	698	15	16
10 Minutes.....	7	232	28	33
5 Minutes.....	6	199	7	7
2 Minutes.....	6	199	10	11

*Based on the total counted number of users from 8 A.M. until 8 P.M. during observation weeks of 11/13-19/85 for Granahorrar plaza- and 11/20-29/85 for Propaganda Sancho plaza.

The longest recorded seating in Granahorrar was one hour, with couples and readers being the main users of the plaza for this duration of time. Such groups are either engaged

in deep conversation or other intimate activities of couples, or were pursuing other activities such as reading or studying. Though the mapping methods used do not take into account people staying longer than one hour, there were those that did, especially from the two groups mentioned above.¹⁰¹

The smallest percentage of people using Granahorrar plaza were passersby who were drawn into the plaza by curiosity or by impulse use. These people do not usually sit; instead, they were drawn to the plaza by something specific, such as the statue, the fountain, or the actions of other people. They were not concerned with the seating arrangements of the plaza, but were willing to utilize any momentary comfort, such as stair-railings, planters, and steps. This observation, while unrecordable within the confines of mapping, was evident through visual observation, and recorded in notes.

Now, let us turn to the seating patterns of Propaganda Sancho, as indicated by data from the observation maps. The lowest rate of people's duration in the plaza was two to five minutes, represented by passersby. These people do not stay within the plaza for long periods of time because their main purpose is to keep going. As with Granahorrar plaza, these passersby sit in any possible seat, like planters or

¹⁰¹ This one-hour recorded time was established because an increment less than the total twelve daily hours was needed, and one hour was considered sufficient since the vast majority of users stayed less than one hour.

edges. Propaganda Sancho plaza provides good comfort for these kind of people.

In Propaganda Sancho Plaza the most common duration of stay was ten minutes (table. 6). People who use the plaza as a waiting place for meetings with office workers exemplify this length of usage. When people waiting outside the office building were questioned, the results indicated that people were there for specific reasons, usually pertaining to the office building, and that impulse use played no part in their presence. This situation, plus the lack of seating places, influence user's average stay. If the plaza does not provide the comfort and the choice of seating that a person needs in any urban open space, people do not use the plaza. The results of this lack of seating and comfort is very well illustrated in Propaganda Sancho plaza's attractive but uninviting stage, as shown in figure 52.

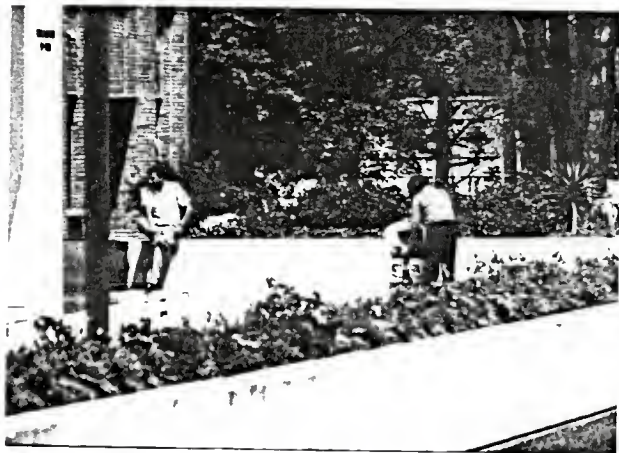
The smallest percentage of stay is one hour (table. 6). This average was marked by people wanting shelter from the sun hitting the park, yet still waiting to observe events in the park. Mostly, mothers with their babies or nurses in charge of childrens were the users who spend this larger amount of time in the plaza (fig. 53).

In short, through these observations of times, one concludes that users of Granahorrar plaza derive greater enjoyment from its seating arrangements because the period

Figure 52: Propaganda Sancho Plaza's Lack of Seating Places



Figure 53: Propaganda Sancho Plaza's Seating Illustration



of time that people expended sitting in these places was longer than those in Propaganda Sancho plaza (fig. 6). It was observed in both plazas that the people staying for the least period of time were passersby, and those who stayed the longest periods were engaged in specific activities such as reading, conversing, or waiting.

Next, let us consider seatability of the two plazas in terms of human groupings, and how the characteristics of these groupings affect seating patterns. Observation days showed that Granahorrar plaza has a variety of sexes and ages (table. 7). People generated, groupings according to age and sex: when Granahorrar had equal number of men and women, the major grouping was couples; when the majority of the people were children or teenagers, the major grouping was larger groups; and if the proportion of sexes were unequal, the grouping was most often singles (tables. 7 and 8). Granahorrar plaza showed through the observation days an equal proportion between men and women, and the preferred grouping was couples.

In Propaganda Sancho plaza, we find that the plaza commands a higher proportion of male users (table. 7). Consistent with these findings, I observed that people using this plaza prefer sitting in singles than in other grouping patterns (table. 8). Throughout the observation week, only two kinds of groupings were seen within the plaza--singles and couples. Those groups comprising three or more people

TABLE 7

Usage of the Plazas by Variety of People*

	Granahorrar plaza. # in a week.	Propaganda Sancho plaza. # in a week.
Men.....	1,431	68
Women.....	1,497	39
Teens.....	266	3
Children.....	133	0

*Based on the total counted number of users from 8 A.M. until 8 P.M. during observation weeks of 11/13-19/85 for Granahorrar plaza, and 11/20-29/85 for Propaganda Sancho plaza.

found greater comfort in the park next to Propaganda Sancho, hence no such group was observed within the plaza, as can be seen in the observation mapping. Most of the time, these groupings of couples and singles were people who had appointments in the office building, or people who had meetings with the office workers. People from the neighborhood preferred the seating elements of the park because of the activities offered there.

On the basis of the above observations, we can conclude that in Granahorrar and Propaganda Sancho plazas the way that people group themselves is not only dependent upon the size and placement of the seating elements, but also on the age, sex, and groupings of the users. These user patterns are summarized in tables 7 and 8, which divide the number of

TABLE 8

Diversity of Grouping in a Week-Study Period*

	Granahorrar plaza #	Propaganda Sancho plaza #
Singles.....	564	84
Couples	724	8
Groups.....	180	0

*Based on the total counted number of users from 8 A.M. until 8 P.M. during observation weeks of 11/13-19/85 for Granahorrar plaza- and 11/20-29/85 for Propaganda Sancho plaza-

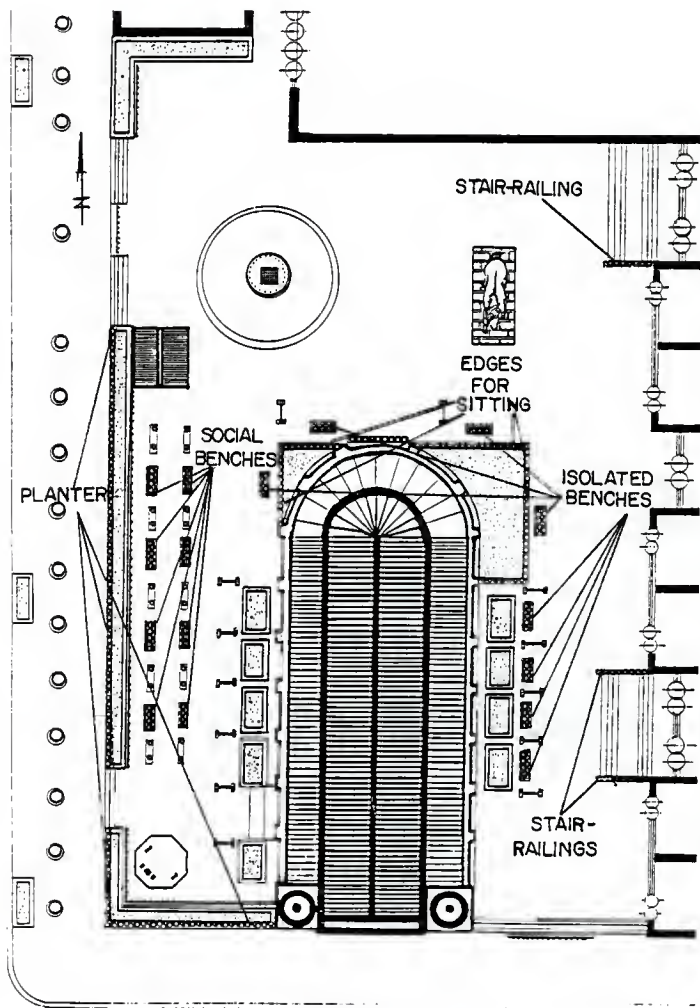
users for each plaza over the week period of observation into types of people and groupings. The observation mapping indicates that young people seem to sit more densely and in a greater variety of positions than do older people. Men sit more formally and place more distance between themselves than do women or mixed groups. Individuals of all ages tend to sit in isolation from other groupings and are to be found on any kind of seating arrangement. It was also evident that groups of more than four had a tendency to stand rather than sit; if they did sit, it was on elements with primary uses other than seating--e.g., planters and stair-railings.

Next, we must consider the seating design of the two plazas in greater detail. Granahorrar's system of seating arrangements can be divided into two elements: first, those

which have a primary use as seats; second, those with other primary uses, such as edges, planters, and stair-railings, that also unintentionally serve as seating areas. Figure 54 shows both of these elements. The first seating type in Granahorrar plaza is standardized benches, which are located around the periphery of the church and set off by a background of green area, as figure 54 shows. All benches of Granahorrar plaza are generously sized and have the traditional park-bench design, as can be seen in figure 55. These benches play different roles according to their position and location within the plaza. The benches are either isolated, in which human interaction is not demanded, or used as an element to promote sociability.

Figures 55(a and b) and 56(a and b) illustrate the isolated benches which are located on the east side of Granahorrar, facing the office towers (figs. 55a and 55b); and on the north side of the plaza, facing the fountain and the statue of the horse (figs. 56a and 56b). People usually sit by singles, couples, or groups of three when they use these isolated benches. Out of 3,327 users of the Granahorrar plaza during the observation week, 987 people utilized these isolated benches in the following groupings: 230 singles; 221 couples; and 105 groups of three. On no observation day was a group larger than three recorded sitting on these benches. The benches on the east side of the plaza form a waiting area for the commercial center and

Figure 54: Granahorrar Plaza's Plan of Seating Areas



the office towers while the benches facing the north side of the plaza are used for resting, watching, and as a meeting place for users of the district.

Those benches especially arranged to promote social interaction are located in two parallel facing rows on the west side of Granahorrar. Figure 57 illustrates this bench grouping, which is mainly used by people who are willing to spend longer periods of time involved in such activities as reading, visiting, talking, or waiting for Mass. People tend to start an informal conversation with those sitting near them, even if they are strangers. Couples are also likely to choose these kind of benches. It seems that this is the right environment for romance. A few other people use this environment for reading, talking, even sleeping, because of the peaceful feeling of the zone.

The survey and the observation days showed that these social benches are popular among the people who frequent Granahorrar plaza. These benches were described by interviewers as the safest place to sit alone because, even though there are often many people seated close together, there is still a sense of privacy. During the observation days, lovers were found on these benches of the plaza. They said that this place provides the privacy they need for a conversation, without missing the fun of observing other users of the plaza. Out of the 3,327 total users of the plaza during the observation week, 1,196 people were

Figure 55a: Granahorrar Plaza's Benches:
Facing South.

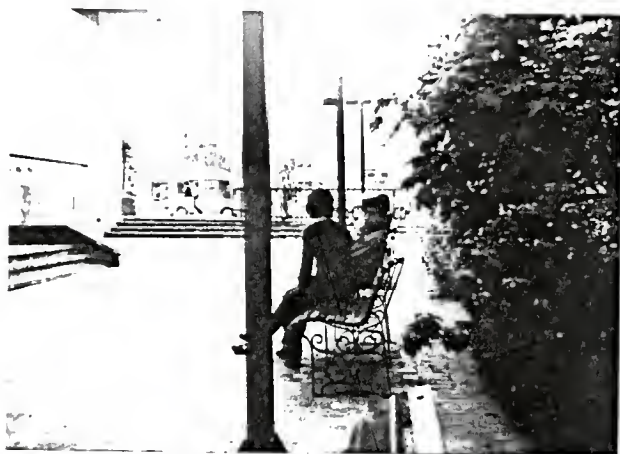


Figure 55b: Granahorrar Plaza's Benches:
Facing North.



Figure 56a: Granahorrar Plaza's Isolated Benches:
East Section.



Figure 56b: Granahorrar Plaza's Isolated Benches:
West Section.



recorded as using these social benches, the breakdown is as follows: 114 singles; 478 couples; and 12 groups of three. Again, no group larger than three was observed sitting on these benches.

This first kind of seating in Garanahorrar gives several choices for seating: the isolated seating is especially good for people who want to sit awhile; the social type is good for people who want to stay for a longer period of time. During observation days, no group larger than three was recorded using either bench arrangement; those groups of four or more primarily stood or used the second kind of seating element, which is the next topic pertaining to sittability.

The second kind of seating arrangement in Granahorrar plaza unintentionally provide sitting places and involve planters and stair-railings (figs. 54, 58a, 58b, 59a, and 59b). People frequently use these ledges as sitting places. These elements are wide enough to be sittable, even though they were probably not designed consciously for this purpose. They create extra spaces of social comfort for people, allowing them to have more choices and perception of choices. In Granahorrar, planters and stair-railings are three-foot-high and one foot wide. The planters bordering the plaza's edges have a wider space for people to sit. People waiting for public transportation are the main users of these planters. The planters accomodate these people by

Figure 57: Granahorrar Plaza's Social Benches



allowing them to sit for short periods of time (figs. 59a and 59b). This second seating type maximizes the sittability of ledges, planters, and stair-railings. The result is a series of flat surfaces with heights and widths that provide comfortable seating places. These surfaces allow for a greater variety of seating arrangements than any other seating place in the plaza, and are therefore used by both groups and individuals.

People find it easy to group themselves around these elements because of their informality. Groups larger than three find this sitting type particularly appealing because of the rigidity of conventional benches. On a bench it is very difficult for a group to interact face to face, therefore, they have a tendency to stand in circles in such a way that each one of the group is able to see the others' faces--the custom of direct eye contact in a conversation is a point of good etiquette in Latin cultures. During the observation days, out of the 3,327 total users of Granahorrar 1,434 people were observed either standing or using alternate seating arrangements and the breakdown is as follows: 320 singles; 25 couples; and 63 groups of four or more people. As can be seen in figure 54, children also enjoy sitting on planters and stair-railings.

Next, we must look at the seating types in Propaganda Sancho, where there are two types of seating elements--those that work primarily as seating areas and those which have

Figure 58a: Granahorrar Plaza's Stair-railings:
Entrance to the Office Towers.



Figure 58b: Granahorrar Plaza's Stair-railings:
Entrance to the Commercial Center.



Figure 59a: Granahorrar Plaza's Planters:
Western Edge.



Figure 59b: Granahorrar Plaza's Planters:
Southern Edge.



another primary function--i.e. planters and fountain edges. In Propaganda Sancho plaza, there is only one kind of primary seating arrangement--concrete slab benches. These benches are found only on the west side of the plaza. They are an element of the plaza's planter-boundary system, and not free standing elements, as can be seen in the bordering elements in figure 60 and the photograph of figure 61. The unpopularity of these benches is best illustrated by the fact that the observation week, out of 110 total users, not one person used them.

As elements that provide seatability, the planters of Propaganda Sancho do not work very well because of their narrow width, although people do use them when there is an activity to watch, in spite of this discomfort. This situation occurs most frequently when there is a soccer game in the park: people will use the planters facing the playing field there. The fountain edges work as the other secondary seating element. The southern fountain's edges are used mostly by children playing in the park, while the northern fountain's edges are occupied by those having some contact with the office building.

One can conclude that in the Propaganda Sancho design, there are not many choices in how and where people can sit. The nearby park has better possibilities than the plaza, and thus people sit in the park more frequently than in the plaza. The benches in the park call people's attention

Figure 60: Propaganda Sancho Plaza's Plan of Seating Areas

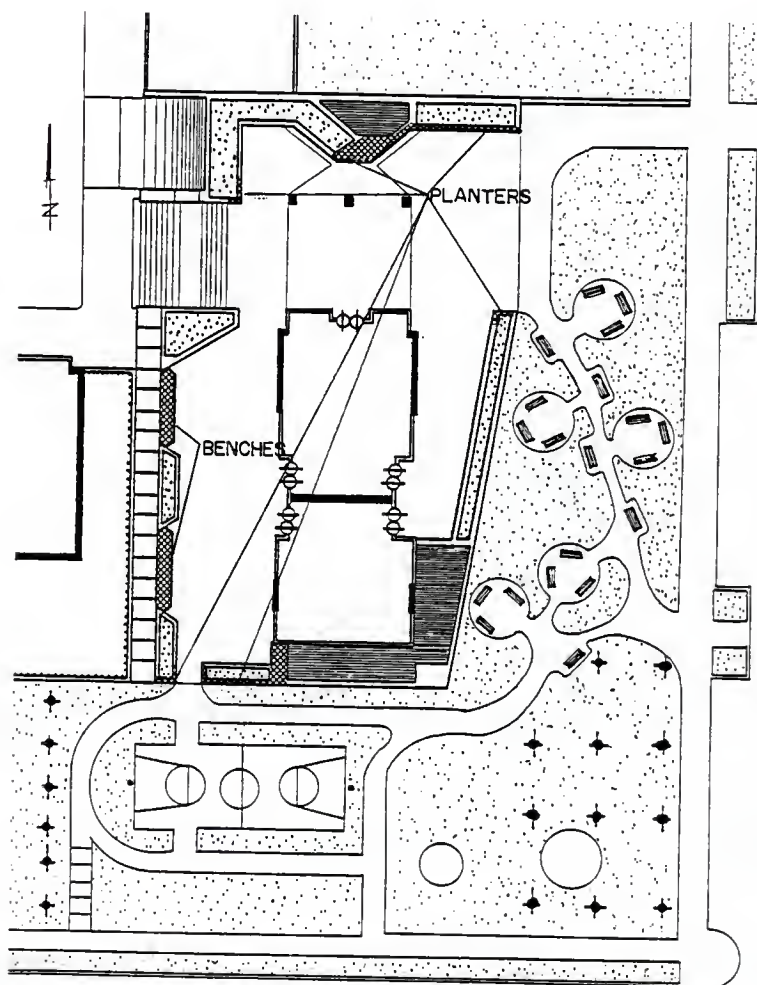


Figure 61: Propaganda Sancho Plaza's Seating Element



better than those of the plaza (figs. 62a and 62b). Besides these benches, people sit on the green areas of the park, especially at lunch time.

Now, we must take into consideration an element that helps in the seatability of the plazas. In order to prolong seating usage in a plaza, it is important to consider a supporting element--light. This element is particularly important in equatorial countries where the sun sets by 6 P.M., year-round. Because it becomes dark in Bogotá by 6 P.M. each evening, it was possible to observe both plazas between 6 P.M. until 8 P.M. due to each plazas' lighting systems. Without light, people are apt to begin to feel unsafe as evening approaches and will completely avoid the area after dark. Both Granahorrar and Propaganda Sancho plazas are well equipped with lighting systems which have been integrated into the plazas. There is a design module composed of planters, bench, and lightpole. With this arrangement, sitting places are used even at night (figs. 63 and 64).

In summary, a variety of seating possibilities is a key in making a plaza comfortable for a variety of people. Granahorrar plaza has a greater variety of seating types than those provided by Propaganda Sancho plaza. Granahorrar plaza gives more opportunities for people to sit in whatever way they want. If Propaganda Sancho plaza could take advantage of the neighboring park, the possibilities of

Figure 62a: Park's Seating Arrangement:
View From the Plaza.



Figure 62b: Park's Seating Arrangement:
View Toward the Plaza.



Figure 63: Granahorrar Plaza's Lighting System



Figure 64: Propaganda Sancho Plaza's Seating Places at Night Time



seating variety would be larger. Design changes providing such an opportunity will be discussed in the last chapter of the thesis.

(2) Social activities

Social activities contribute to the social comfort of a plaza because they induce human interaction, providing a place for communal social life. These activities, in which all kinds of people can participate, evoke deep sentiments linking place and people together and establishing a focus for entire communities. They fulfill the important role of expressing people's togetherness through common experience. These public cultural events and activities appeal to diverse audiences and bring persons of heterogeneous backgrounds together. These kinds of activities are dealt with in the ninth hypothesis:

Hypothesis 9. Festivals, celebrations, street entertainment, markets, and selling food help bring people into a plaza.

These activities help in improving the physical comfort of a plaza. People's joy of being in public is facilitated by this comfort. William Whyte talks about these activities as a key element in bringing people to the plaza when he describes the importance of food sales: "if you want to seed a place with activity, put out food which will attract people who will attract more people."¹⁰² As another example,

¹⁰² Whyte, op. cit., pp. 50-53.

musicians, entertainers, school bands, rock groups, and the like create a situation in which spectators will be drawn together.

Communication and information are other needs supplied in urban public spaces, and both are important in maintaining kinship and friendship. This communication is a reason for people to get together, to enjoy food or drink, to rest, to meet relatives and friends, and to participate in political activities, celebrations, entertainment, and a variety of ceremonial occasions. In other words, people love to be in places in which people can easily change from spectator to participant position, and back to spectator status again: "strangers watching and enjoying such performances and entertainment find it easier to interact with one another around the shared experience."¹⁰³

The number of users in a plaza increases greatly when there is the presence of social activities such as festivals, celebrations, street entertainments, markets, or food vending. It is for this reason that Granahorrar's usage is higher on Sundays than on any other day of the week. as can be seen in table 9. Unfortunately, Propaganda Sancho plaza does not benefit from any of these activities. Therefore hypothesis 9 can not be tested in Propaganda Sancho plaza, but it can be hypothesized that the introduction of new activities would increase the amount of

¹⁰³ Lennards, *op. cit.*, p. 54.

TABLE 9

Peak Use of the Plaza*

	Granahorrar plaza. # of users.	Propaganda Sancho plaza. # of users.
Monday.....	364	25
Tuesday.....	504	11
Wednesday.....	464	15
Thursday.....	103	18
Friday.....	494	9
Saturday.....	365	15
Sunday.....	1,033	17
Weekly.....	3,327	110

*Based on the total counted number of users from 8 A.M. until 8 P.M. during observation weeks of 11/13-19/85 for Granahorrar plaza, and 11/20-29/85 for Propaganda Sancho plaza.

users.

Since hypothesis 9 is not applicable to Propaganda Sancho, the testing of this hypothesis is only concerned with Granahorrar plaza, which has sufficient potential to demonstrate the social benefits from such activities. Granahorrar plaza has two activities which draw people into the plaza. One of them is a military band that plays martial music every Sunday afternoon, and the other a model house. The military band increases the amount of people using the plaza by the greatest amount. Even though the event is not officially advertised, it is traditional and a

popular event associated with the plaza (figs. 65 and 66). It is this activity which leads Sunday's having one third of the total weekly users of Granahorrar.

As figures 67 and 68 show, when the military band plays between the hours of 3 P.M. and 5 P.M., the population of Granahorrar increases to a maximum of 608 people. Their presence solely for this activity can be verified by examining the hours of 2 P.M. and 5 P.M., the counts of which are sixty-four and thirty, respectively. The concert stage is located between the horse statue and the fountain which explains the concentration of grouping. During this two-hour period, the band is not the only form of entertainment being provided. My observations indicate that many, if not most of the audience was as busy watching other people and socializing as they were listening to the band. These people were observed in the playful activities of humming and keeping beat with the music, laughing, sharing impressions, and generally being more spontaneous than they would ordinarily in the course of their work-a-day lives. All these observations make evident that this kind of plaza activity is one of the best conductors of sociability.

The other source of attraction in Granahorrar plaza is the temporary pre-fabricated, thatched model-home, located on the west side of the plaza and which people regularly tour (figs. 65 and 69). The social benefit of this attraction is constant through the day. The relationship between the

Figure 65: Granahorrar Plaza's Plan of Stage Activities

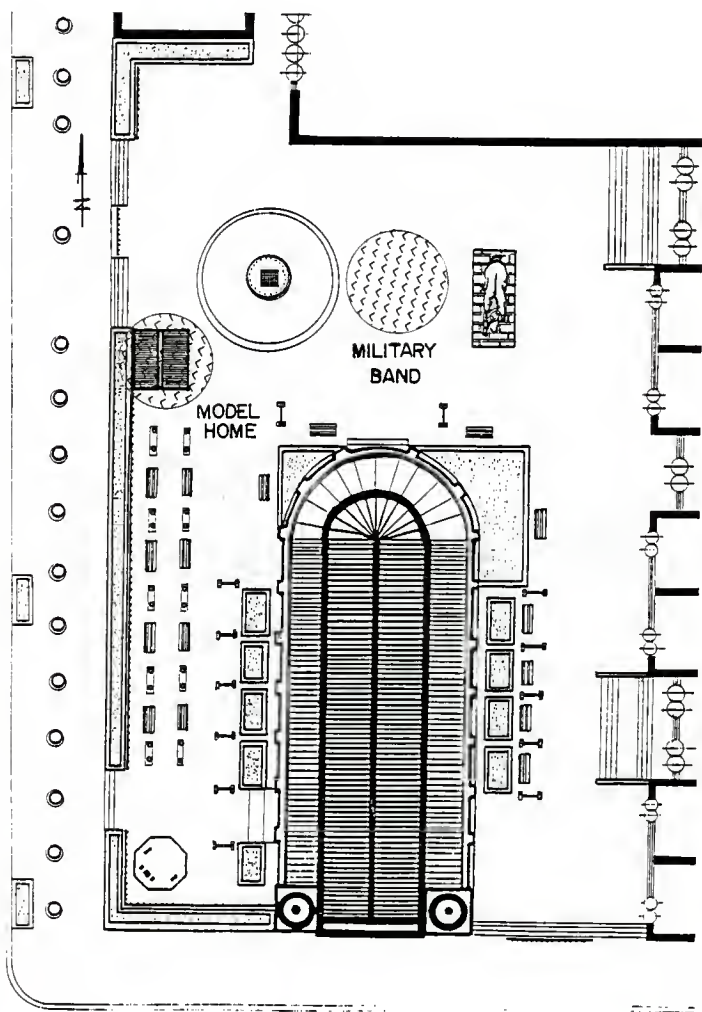


Figure 66: Granahorrar Plaza During the Military Band Presentation



Figure 67: Granahorrar's Sunday Observation Mappings
November 19, 1985, from 2 P.M. until 4 P.M.

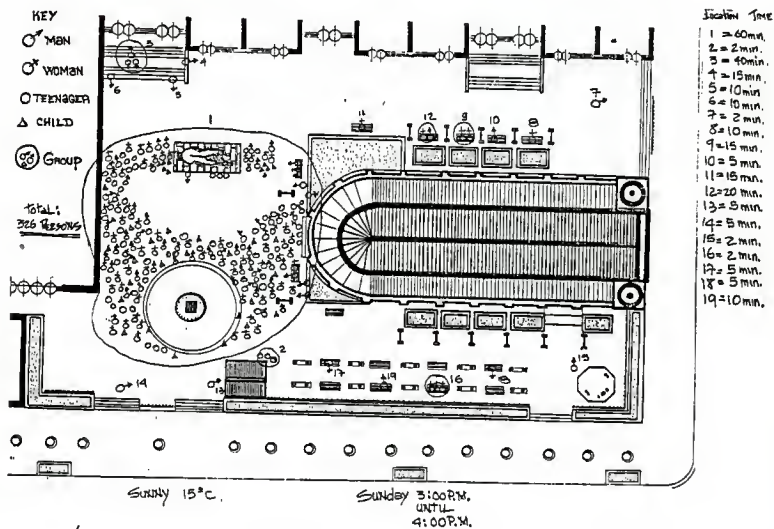
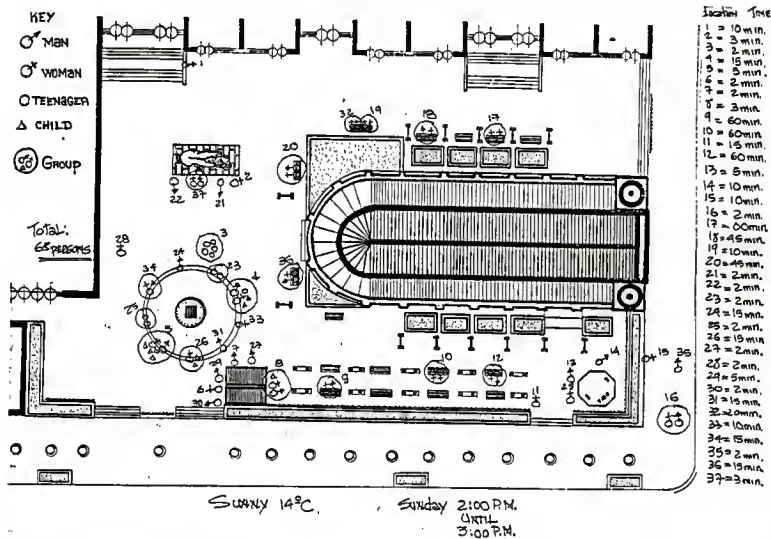


Figure 68: Granahorror's Sunday Observation Mappings
November 19, 1985, from 4 P.M. until 6 P.M.

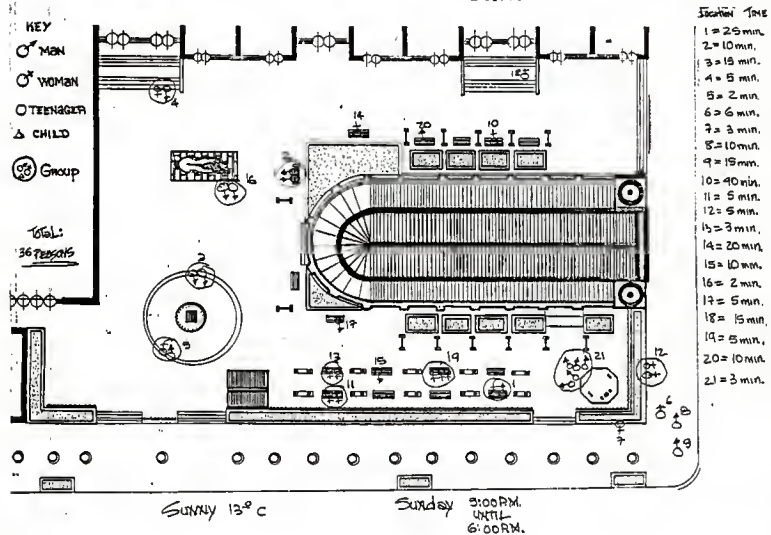
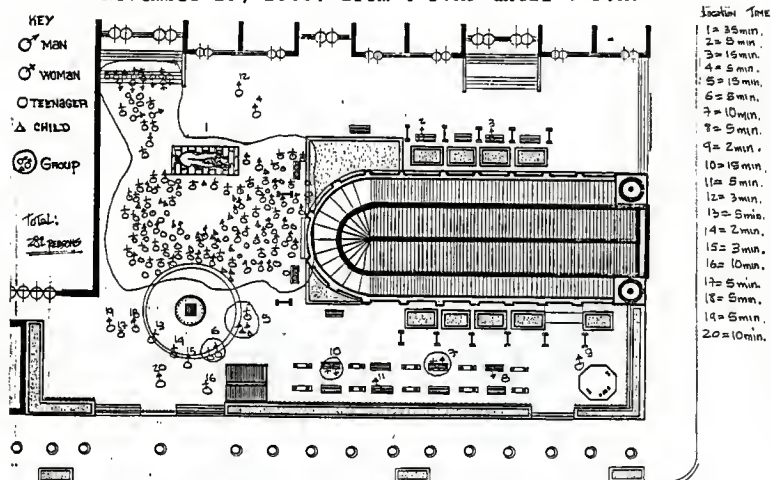


Figure 69: Granahorrar Plaza's Pre-fabricated Model-home



entrance of the plaza and the entrance of the commercial center give an ideal location for this house, since people must pass it as they enter. People going in and out of the commercial center from the west gate often experience a sense of curiosity about the house, and the result is considerable movement of people. This activity, because it is an exhibit and not a performance, does not create the large amount of social interaction that the military band does. Still, even though this element is static, it creates one kind of centering, which is the context of the hypothesis tested in the next section.

(3) Centering

As crucial as sitting and activities are to sociability, there are also physical elements which attract people into a plaza. These elements can help create a sense of center for any open urban space, and create an environment in which strangers may smile and share in informal social interaction. The quality of these elements help create plaza activity, which leads to the third hypothesis relating to the stage level of a plaza:

Hypothesis 10. A plaza works best when it is a center stage with fountains, statues, or other physical elements which entice people into the life of a plaza. Both human and physical factors can contribute to strengthening this sense of center.

Physical elements which contribute to centering are

called by Jacobs intricacy.¹⁰⁴ Examples of intricacy include a change in surface elevation, groupings of trees, openings leading to various focal points--in short, subtle expressions of difference. The most important element of intricacy is a sense of center.¹⁰⁵ A plaza works best when it is a center stage with some fountains and statues that draw people who will be encouraged to return time after time:¹⁰⁶

Squares which function as gathering spaces for local community do not need large dramatic background but are better able to use small centralized points as a focus of their social life. Sculptures, fountains and clocks, in addition to their obvious functions, are identified as center-stage locations at which people become actors rather than audience.¹⁰⁷

Similarly, Whyte argues that centering is related to triangulation: "a process by which some external stimulus provides a linkage between people and prompts strangers to talk to each other as though they were not."¹⁰⁸ For example, sculpture can have strong beneficial social effects on pedestrian activities. People can be drawn to sculpture; they stand under it, beside it, touch it, and may even talk about it to other people in the vicinity. Sculptures, fountains, and clocks can work as central points that focus

¹⁰⁴ Jacobs, *op. cit.*, p. 103.

¹⁰⁵ *Ibid.*, p. 104.

¹⁰⁶ Lennards, *op. cit.*, pp. 21-27.

¹⁰⁷ *Ibid.*, p. 26.

¹⁰⁸ Whyte, *op. cit.*, pp. 94-101.

social life and act as a stimulus for social interaction. A central point, coupled with enclosure, confirms that "this is the spot," showing to the public where the plaza is.¹⁰⁹

Granahorrar plaza has several different focal points. From a distance, the towers of the church draw people's attention and indicate a potential place of significance. At the block level, the statue of St. Tomas de Aquino attracts people's attention from the corner--an important point of pedestrian crossing, as shown in figure 70. Within the the plaza, there is a fountain and a statue that both work well at attracting people's attention. My observations indicate that most of the people sitting in the plaza situate themselves in such a way that they face one of these focal points.

The statue of the horse is the element that most characterizes the plaza, since it is named after the Granahorrar Corporation Bank, for which the horse is the symbol (fig. 71). The horse motivates people's curiosity, creating circulation around the statue. While the attraction to the statue of the horse is perhaps greater than that of the fountain, it was observed that people are much more self-conscious about their interaction with it. This point was made clear by people's reactions to attempts at photographing these activities--touching and talking. During the observation week, it was noted that there was not

¹⁰⁹ Gordon Cullen, The Concise Townscape (New York: Van Nostrand Reinhold Company, 1983) p. 26.

Figure 70: Granahorrar's St Tomas de Aquino Statue at the Corner



a day in which people did not interact among themselves, often talking about the statue of the horse or commenting on other physical elements of the plaza.

There is a difference between the spaces that surround each of these center elements. The fountain works as a public place, from where people may view and be viewed from the other two center points. The fountain is the welcoming element of the plaza, especially when it functions. Figure 72 illustrates that when the fountain is turned on, people slow down, or stop momentarily, to look at the water. This fountain works according to the time of the day and the weather--for sure on a sunny day and in the afternoons between 12 P.M. until 6 P.M. When the fountain is on, many people crossing the sidewalk see the water, stop, stare for a few seconds, go inside the plaza, stare some more at the water, then continue on. The people who entered the plaza solely to see the fountain did not stay long enough to be counted in the observation mapping, since their stay did not usually exceed thirty seconds (this was timed for ten people and the average was twenty-four seconds). In Granahorrar, the fountain also serves as a centering device when it is off, because it becomes a circular arena--a theater-in-the-round used by people as a stage for different activities. Figure 73 shows how children enjoy playing in it

Figure 71: Granahorrar Plaza's Statue of the Horse

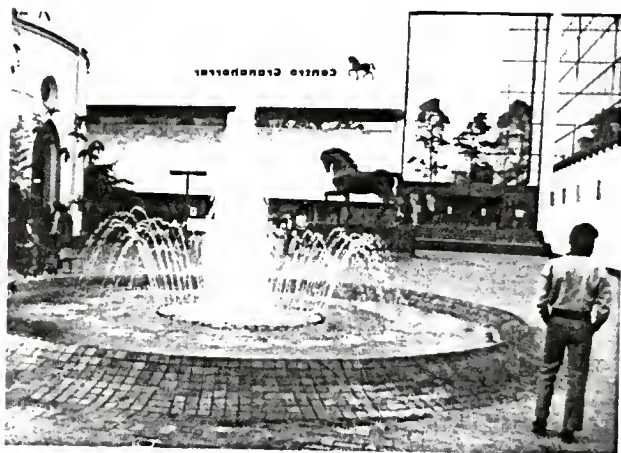


Figure 72: Granahorrar Plaza's Fountain



Figure 73: Granahorrar Plaza's Fountain Use



Over the week of observation 3,327 people were recorded using the plaza, of which one hundred were interviewed. Eighty-four of these one hundred users commented on the enjoyment they received from the fountain or the statue of the horse, because they thought that these elements were unique to Granahorrar plaza as well as being beautiful. Because of these elements' location, anyone entering the plaza from the northwest entrance is confronted by the fountain and the horse. Therefore, these elements became clear images associated with the plaza.

With the statue of St. Tomas de Aquino in Granahorrar plaza, something different happens. The statue is facing out in such a way that it is very difficult to see from within the plaza, and the image perceived is very different. Figure 74 clearly shows the view of the statue from the plaza; one notes that it appears to be more a pointed arch with an inscription than a figure of St. Thomas de Aquino. The statue is surrounded by plants, creating a place which is isolated from the rest of the plaza (fig. 74). Most of the time, this part of the plaza is only perceived by those going in or out of the church.

As was indicated in the preceding section, the pre-fabricated house at the northwestern entrance of the plaza is another element that works to promote triangulation in Granahorrar plaza. People usually go around this house trying to look inside, and finally entering it. This

Figure 74: Granahorrar's St Tomas de Aquino Statue--Back View



element became part of the plaza in 1985, as a commercial promotion for the Bogota manufacturer that makes these houses. The contract for this house is renewed each year, therefore its situation within the plaza is tenuous. For the time being, however, this element is a strong focal point that works very well at centering people's attention (fig. 75a). Figure 75b shows how people's curiosity draws them to the windows of the house.

The four focal elements of Granahorrar--the fountain, the two statues, and the pre-fabricated house--work in attracting people into the plaza and giving it identity, as was indicated in the interviews. The importance here is that these elements do work, even though the exact number of people attracted is difficult to calculate, because the interaction time was often too short to record.

In Propaganda Sancho plaza, the focal points work in different ways from those of Granahorrar plaza. At the district level, the office building in the middle of the plaza works as a central point. Although this building is not something that identifies the plaza, it can be seen from a distance, since the surroundings do not have many tall buildings. There are two focal points bordering the plaza and they are both fountains: one borders the northern end of the plaza, while the other borders the southern end. Neither fountain works as a central point, since neither is at an intersection or resting point. This means that

Figure 75a: Granahorrar Plaza's Pre-fabricated House:
East Facade.

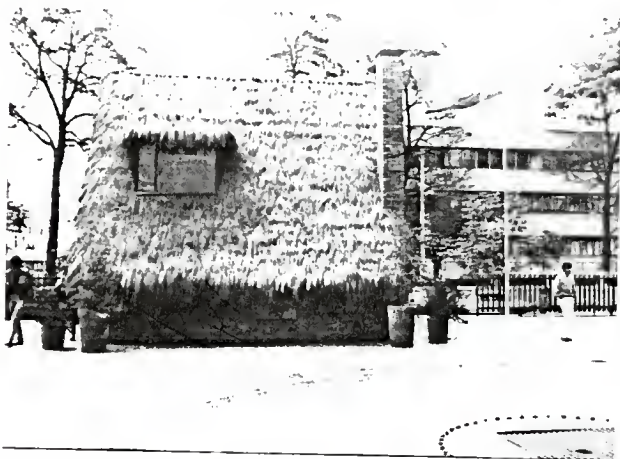


Figure 75b: Granahorrar Plaza's Pre-fabricated House:
Movement Along South Facade.



neither fountain creates intricacy, since they are not stage settings for people, as is the fountain in Granahorrar plaza. The fountain at the north end of Propaganda Sancho plaza forms part of a planter set, which acts as a barrier to the circulation between church and plaza. Because of the material and the way that this planter is designed, the fountain can be perceived only when it is on. Otherwise, the fountain looks like another section of the planter, only without plants. People only perceive the fountain when they can hear or see the water, as figure 76 shows.

The other fountain in Propaganda Sancho plaza is located on the southern side usually used as a resting place by children playing in the park. This fountain is integrated into the building design, and does not allow circulation around it, because one side is the building and the other sides are surrounded by green areas which are not conducive to pedestrian flows. Figure 77a shows that this fountain looks more like a part of the park rather than a part of the plaza, since it does not face any of the plaza's spaces. People see this fountain from the park or the restaurant inside of the building, but people using the plaza do not.

In Propaganda Sancho plaza, the focal points can not be perceived well by users of the plaza, inhibiting the sense of centering in the plaza. The curiosity of plaza users is only activated under special conditions--when the fountains are on or when people get close enough to realize that these

Figure 76: Propaganda Sancho Plaza's North Fountain

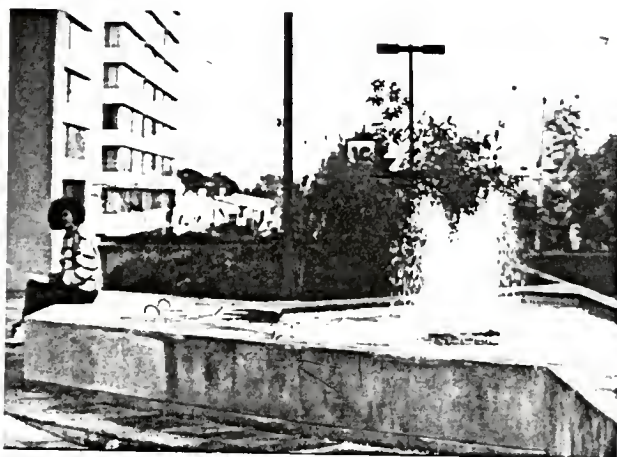


Figure 77a: Propagasnda Sancho Plaza's South Fountain:
View With Fountain On.



Figure 77b: Propagasnda Sancho Plaza's South Fountain:
View With Fountain Off.



elements are fountains (fig. 77b). These circumstances make the fountains weak elements in attracting people's attention.

(4) Sun, wind, trees, and water

It is imperative that the designer consider sun, wind, trees, and water in a plaza's design. These elements provide human comfort and therefore indirectly strengthen the plaza's sociability. Each of these elements work in different ways, but, if all of them work together, the result will be an improved plaza. These natural elements are the main points to be discussed in the last hypothesis at the level of stage:

Hypothesis 11. Sun, wind, trees, and water require unique design solutions to make a plaza work well. These elements provide human comfort, which in turn strengthens the plaza's sociability.

There are innumerable reasons for these natural elements to be considered in relation to a plaza. Sun is an important part of the plaza setting for people, but it must be accompanied by shade in the summer.¹¹⁰ Sunlight must be present, even borrowing the light, if necessary, through the use of mirrored walls, glass, or steel. The reflections of some buildings can create large amounts of light, often into areas that never received it before. The more access to the sun, the better; and if there is a southern exposure, it should generally be used to the fullest.

¹¹⁰ Jacobs, *op. cit.*, p. 105.

Figure 78: Granahorrar Plaza's Westside Exposure

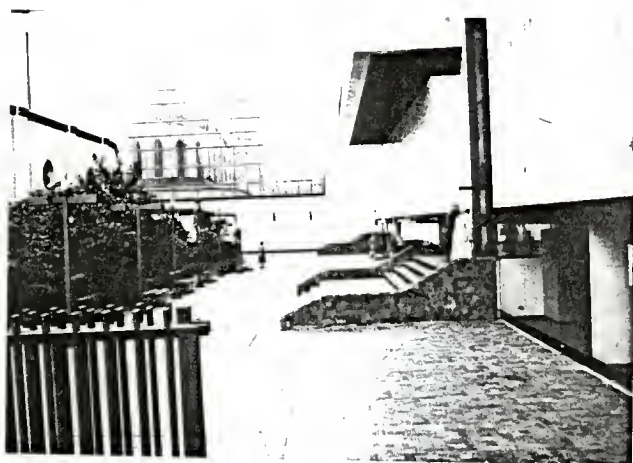


Figure 79: Granahorrar Plaza's Shaded West Side



Granahorrar plaza has access to to the sun in several different ways. The buildings surrounding Granahorrar do not block out the plaza's sun, and thus the plaza receives direct sunlight most of the day (fig. 78). Some of the sub-spaces, though, are partially shaded by planters or the building surrounding Granahorrar plaza, as can be seen in figure 79. Another access to the sun that Granahorrar plaza has is especially well shown in figure 80. The facades of the surrounding buildings reflect light into the different spaces by the use of mirrored walls, according to the time of day. Having a western exposure, Granahorrar is unable to maintain the same intensity of direct sunlight and warmth throughout the day.

Overall, there is in Granahorrar plaza a sense of "insubstantial space"¹¹¹ created by dissolving the walls of enclosure with reflected sunlight. The mirrored walls of Granahorrar plaza have the property of seeming to recede as one advances toward them, while at the same time giving the sensation of closing up after having passed. The sense of space is well illustrated in figure 81, in which this illusion is not particularized by enclosing walls, but exists throughout like a scent which hovers in a particular place. Figure 82 shows another facade of the commercial center surrounding Granahorrar plaza, in which a sense of widening and expansion occurs, again making the space seem

¹¹¹ Cullen, *op. cit.*, p. 31.

larger than it would otherwise.

Turning to Propaganda Sancho plaza, one notes that the office building within the plaza acts as a barrier to the sun. The height of this building is not in proportion with the size of the plaza, the result being that most of the time the plaza is shaded. The building creates the only element that supplies shadows over the plaza (fig. 83). The plaza's only space to receive continuous sunlight is the northern section, directly in front of the entrance to the office building (fig. 84). Although the office building's facades are made of smoked glass, the sense of an insubstantial space is weak, because the quality of the building's glass is not as good as that in the buildings of Granahorrar plaza. As figure 83 shows, the facades of the building only give a tenuous reflection of the surrounding landscape, creating a limited sense of insubstantial space.

In short, Granahorrar plaza profits greatly from the sun through direct and reflected light, while Propaganda Sancho plaza does not possess such benefits. People appreciate fantasy in plazas, and Granahorrar contributes to it by the illusionary pictures that its buildings' facades reflect. Most portions of Propaganda Sancho are shadowed, while Granahorrar is able to offer its users a variety of sun intensities.

Besides sun, there is a need for wind and also protection from it. On sunny days, wind can be appreciated by the

Figure 80: Granahorrar Plaza's Reflected Light from Buildings



Figure 81: Granahorrar Plaza's Insubstantial Space

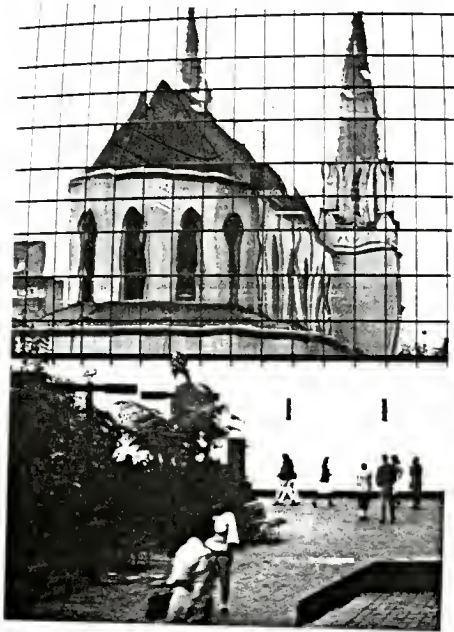


Figure 82: Granahorrar Commercial Center's Mirrored Walls



Figure 83: Propaganda Sancho Plaza's West Side Exposure



Figure 84: Propaganda Sancho Plaza's Northern Exposure



users of plazas. It is also appreciated if in cold weather, people can be protected from the wind. As well as the physical comfort provided by wind, there exists also the psychological impact. It is very relaxing on a pleasant day to sit and listen to the wind rustling through the surrounding vegetation. Another aspect of wind is the need of protection from drafts created by very tall buildings or free standing towers. Bogotá does not have a windy climate, therefore, the only factor design to take into account is not to create tunnels of wind by the buildings shaping urban open spaces.

Most new urban spaces are either all indoor or outdoor; more should be done to encourage spaces in between: "Within the use of glass canopies, or small pavilions, semi-outdoor spaces could be created in such a way that they would be usable in even the worst weather".¹¹² In-between places--outdoor/indoor--give comfort to users year-round. This comfort is created by protecting them from the rain, sun, and inclement weather often occurring in mountainous tropic regions like Bogotá. These indoor/outdoor spaces can also provide protection from undesirable winds or help to make the most of beneficial breezes. Granahorrar plaza is largely an outdoor open space, although as figure 85 shows, there is a western space that infers the presence of a covered area. This seating area is edged by columns and

¹¹² Whyte, *op. cit.*, p. 46.

flower-boxes. These columns are connected by beams that simulate a roof. Even though there is not full protection from wind or rain, the benefit of this space is to give the feeling of being inside an outdoor open space. The sleeping figure in figure 86 illustrates how people forget they are in a public area, because this in-between space makes them think they are inside of a building when they are not.

The height of the commercial center and the parish buildings of Granahorrar plaza are not tall enough to create the strong drafts of wind down their sides. The west side of Granahorrar, its adjoining sidewalk, and 11th street create a wide enough corridor to gently direct wind past the plaza. This western current enhances the peaceful feeling of Granahorrar's in-between space as shown in figure 85. The proportion of the surrounding buildings to the plaza is such that only a beneficial slight current is created (fig. 87). This helps in enhancing the comfort for users of Granahorrar, particularly on warm or very still days.

In contrast, Propaqanda Sancho plaza's design does not have a workable proportion between the height of the surrounding buildings and the width of the plaza. The result is that a strong flow of wind exists on the west side of the plaza (fig. 83). Propaqanda Sancho plaza has only one area which creates a sense of semi-indoor space. This space is created by the office building's overhang (figs. 88a and 88b). This building, in proportion with the plaza's

Figure 85: Granahorrar Plaza's In-Between Space:
Western Aerial View



Figure 86: Granahorrar plaza's In-Between Space- West Side

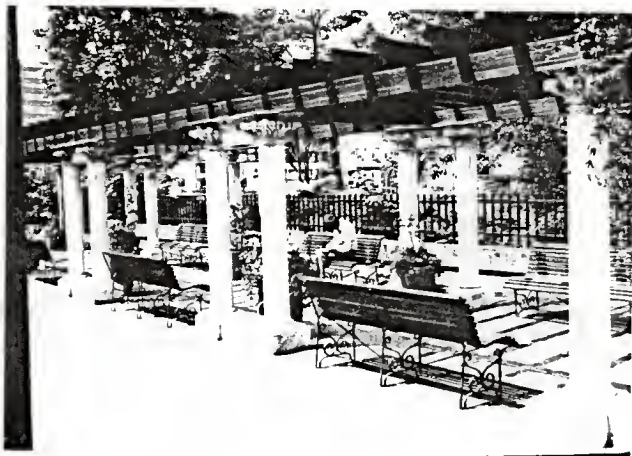
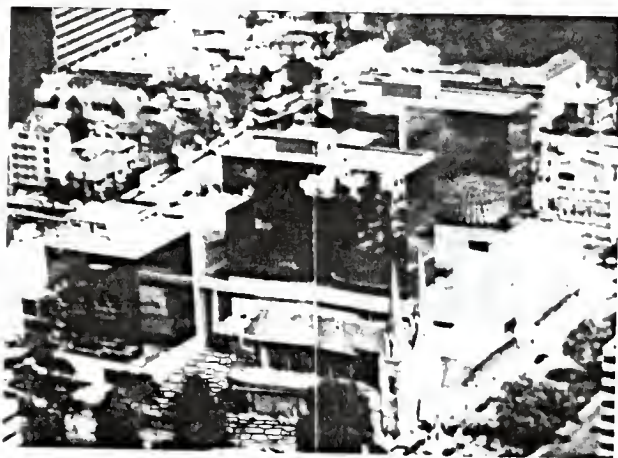



Figure 87: Aerial View of Granahorrar Plaza



Granahorrar plaza..... 

space, creates drafts of wind down its sides. The west side, with the neighboring building, creates a very strong wind that is unpleasant to potential users of the plaza. This wind is created because the apartment building and the office building were built too close together in proportion to their height, as can be seen in figure 83.

The creation of in-between space is not fully developed in either plaza. In Granahorrar the in-between space gives the illusion of shelter, but is useless in rainy weather. Propaganda Sancho plaza's outdoor/indoor space provides adequate shelter from precipitation, but does not allow any sunlight into the main entrance area of the office building.

Next, we need to discuss trees in the two plazas. There are all sorts of reasons for trees in a plaza. As related to sitting spaces, circulation, and creating light and shade- trees ought to be linked much more closely to sitting spaces than they usually are: "the best time to sit beneath a tree is when there is sunlight to be shaded from."¹¹³ Trees can create a sense of enclosure in which people feel cuddled and protected.

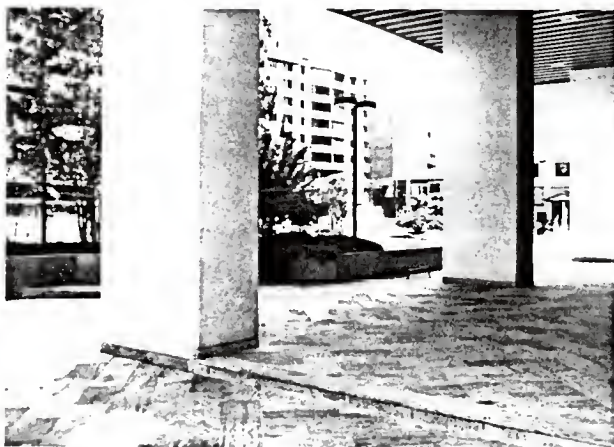
Figure 89 illustrates the biggest trees in Granahorrar plaza, which are planted in a row along the western sidewalk bordering the plaza. These trees, in conjunction with adjacent vegetation, create a corridor that runs along side the plaza's western side. This is the only instance in both

¹¹³ Ibid., p. 42.

Figure 88a: Propaqanda Sancho Plaza's In-between Space:
Beneath Overhang of Building.



Figure 88b: Propaqanda Sancho Plaza's In-between Space:
View From Within.



plazas where trees act to create a sense of enclosure or protection. The other vegetation on the site is composed of tropical plants and shrubbery (fig. 89). The relationship which exists between the planters and the benches, enhancing the seatability of the area can be seen in figure 81. These planters and their vegetation give some shade and also work as backdrops for the benches.

There is a lack of trees within Propaganda Sancho plaza, although the park bordering the plaza has a corner grouping of trees which provide a sense of enclosure. My observations indicate that this area is a favorite for office workers to spend their lunch time. Another area of trees surrounding Propaganda Sancho plaza is the green space of the neighboring church, shown in figure 90. Within the boundaries of Propaganda Sancho plaza, the only elements that contain vegetation are the planters which are the boundaries of the plaza. As can be seen in figure 91 this greenery is not tall enough to produce shade.

Neither Granahorrar or Propaganda Sancho plazas contain trees within their stage, thus, the benefits derived from trees cannot be discussed for either plaza. As I have said, the only trees which exist are along the plazas' peripheries. This greenery adds a limited amount of comfort to the seating places, but the protection and shade that would normally be supplied by trees is instead provided by the buildings surrounding the plazas. In Granahorrar and

Figure 89: Granahorrar Plaza's Trees and Vegetation: West Side



Figure 90: Propaganda Sancho Plaza's Neighboring Trees



Figure 91: Propaganda Sancho Plaza's Vegetation



Propaganda Sancho plazas, vegetation works efficiently only in providing a sense of enclosure.

Water is another element we need to consider in relation to the two plazas, which must have accessibility in order to be enjoyed. The look, the feel, and the sound of water are the most important things about it, and these qualities often draw people into a space. Water should not only be looked at, but accessible: "it is not right to put water before people and then to keep them away from it".¹¹⁴ Creative designs have demonstrated that there are many ways to make water safe without keeping people away. Water should be audible, touchable, and splashable. The sound of water has the power to put people in a relaxed state of mind. This sound "makes people enjoy a feeling of privacy".¹¹⁵ The touch of water refreshes on hot days; it makes an effective plaything for children and a useful excuse for people who do not know each other to interact--Whyte's triangulation.¹¹⁶

As was explained earlier, the fountain in Granahorrar is accessible to users, as seen in figure 92. When the fountain is on, people tend to sit on the surrounding benches. People can often be found just standing and staring at the water. Kids play, placing their hands in the

¹¹⁴ Ibid., p. 48.

¹¹⁵ Ibid.

¹¹⁶ Ibid., pp. 94-101.

water or running around the fountain. The fountain is safe, since it is shallow and its edges are low to the ground. The design invites people to enjoy the water without fear. The shallowness limits the possibility of its being used as a swimming or wading area, but still gives the opportunity to experience the water through touching it, splashing it, hearing it, and feeling it.

In contrast to Granahorrar, the two fountains of Propaganda Sancho work as a decorative elements only. Their water is not easily accessible to people using the surrounding areas. The northern fountain becomes a part of the planter system, bordering the end the plaza (fig. 93). The height of the planter makes the water unreachable. The sound of this fountain works as a relaxing element for people going in and out of the office building and is helped by the echo created by the overhang of the office building. On the other side of the plaza, the southern fountain, seen in figure 94, provides even less enjoyment to those around the plaza. This fountain is only reachable from the park side. There are no pedestrian paths bordering this fountain, hence children are the only people interested in touching, playing, splashing, and feeling the water. Kids always try to play with it, but the height of the fountain makes the water an unreachable element for the little people.

Figure 92: Granahorrar Plaza's Fountain- North Side



Figure 93: Propaganda Sancho Plaza's Northern Fountain



Figure 94: Propaganda Sancho Plaza's Southern Fountain



In Granahorrar plaza's fountain, people can enjoy the wonders of water, by touching, hearing, seeing, and playing without danger. The fountain also helps in impulse use of the plaza. The fountains of Propaganda Sancho plaza can be seen and heard, but they are inaccessible to the children within the park. The northern fountain possesses a feeling of peacefulness created by the echo of the sound from the main entrance into the office building.

Conclusion

This chapter has been concerned with those elements which provide the social comfort that a plaza itself as a stage must have in order to sustain people's attention and continued interest. A first major factor in creating a strong plaza stage is sittability, which helps to retain those people who have entered the plaza because of impulse use. The factors affecting good sittability work according to grouping patterns. A second factor contributing to the success of the plaza itself is to provide the users with some form of activities and physical elements that focus their attention during the time they desire to be in the plaza--what Whyte calls triangulation and Jacobs, intricacy. Activities such as street entertainments, musical performances, food vending, markets, festivals, and celebrations provide such attractions, as do fountains, statues, vegetation, and other elements that add to the life of the plaza.

At the level of stage, Granahorrar plaza is better at providing social comfort than Propaganda Sancho, in both the areas of sittability and activities. The grouping patterns within Granahorrar allow a greater variety of seating possibilities for its users, with both primary and unintentional seating elements being utilized. In Propaganda Sancho, on the other hand, the benches are uncomfortable and situated in out-of-the-way places, which make planters the primary sitting places.

In examining activities, we were only able to look at Granahorrar, because Propaganda Sancho does not have any activity with which to draw users. Here we found that the two activities Granahorrar offers--the military band concert on Sundays and the pre-fabricated model home--work well, but additional activities would create an even greater sociability. Both plazas have fountains, and we saw that Granahorrar's is more successful than the two in Propaganda Sancho, primarily because Granahorrar's are accessible to its users.

In order for a plaza to attain true success in sociability, it should fulfill the conditions of the eleven prerequisites, which have been presented as hypotheses and are the backbone of this thesis. Having tested these hypotheses in both Granahorrar plaza and Propaganda Sancho plaza- the next step is to recommend design improvements for each plaza in order to improve sociability. These

recommendations are described in the last chapter of the thesis.

CHAPTER 8

Conclusion:

Design Improvements for the Sociability of the Two Bogotá Plazas

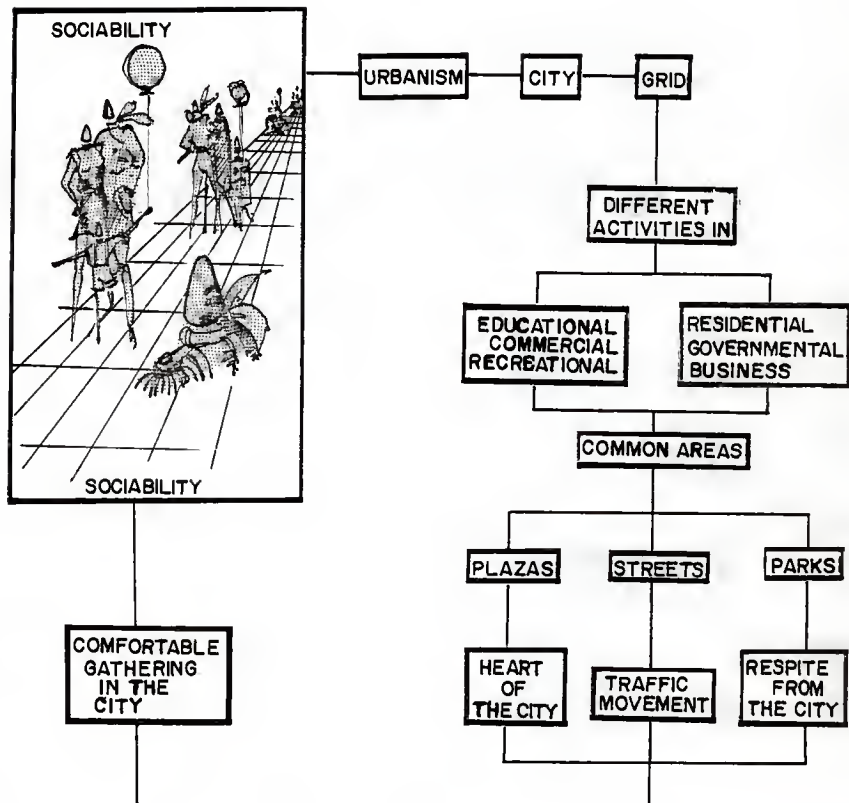
After looking at sociability in relation to the two Bogotá plazas from the conceptual framework based on William Whyte, Jane Jacobs, and Henry and Suzanne Lennard, we can conclude that sociability is a major factor for people to gather in urban open spaces. All the benefits extracted from the city are placed 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 governmental institutions, dwellings, business, commerce, education, and religious activities. The interrelation among such activities create several other activities recognized as secondary uses such as restaurants, specialty shops, recreational 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 the main factor in the existence of a city. In order to keep the city alive, it is necessary to enhance such sociability (fig. 95).

This thesis attempts to enhance this sociability through recommended improvements to the two Bogotá plazas studied in the first seven chapters. As has been seen throughout the study, Granahorrar possesses a stronger foundation for good sociability than Propaganda Sancho plaza. From its inception, Granahorrar plaza has been a reaction to the needs for an open space and the public needs of the surrounding district. Because it was built in a developed district, the layout of the plaza more frequently took into account major factors of design in relation to the comfort of the people and their welfare. Therefore, the improvements to be suggested for Granahorrar plaza do not

Figure 95: Sociability in the City



involve major changes but pertain to increasing the plaza's sociability through small modifications.

On the other hand, Propaganda Sancho plaza was built in order to obtain permission from the regional planning office to build the thirteen-floor office building in its center. This situation separates the design from the needs of the people, resulting in a socially-deficient plaza which does not cater to the social life of the surrounding district. From the design stage onwards, the planners of Propaganda Sancho have not taken into account the population surrounding it. Therefore, in order to increase the plaza's sociability, some basic design changes are required.

In order to clarify the different improvements required for enhancing each plaza's sociability, each will be discussed according to the three plaza zone-levels already discussed: the level of surroundings; the level of edge; and the level of stage.

The level of surroundings

As was pointed out in Chapter 5, this level relates to the buildings, activities, and elements that create the district and give life and character to the plaza. These surroundings increase the sociability of a plaza through the population which supports the plaza's life by generating a diversity of activities within the district. This diversity is represented by a good variety of primary and secondary

uses, which determine the varied schedule of the plaza. Density and mixture of activities, however, are not sufficient if the plaza does not have visibility within its district and is not a part of people's image of the city. If people do not see the plaza or are not aware of its existence, they will not use this space. It is also helpful if a plaza has a strong image among not only district populations, but those throughout the city who come in contact with the plaza's surroundings in their daily routine. Finally, pedestrian flows created by daily routines is a significant element supplying sociability to a plaza.

Now, let us consider the design improvements at the level of surroundings, referring to Granahorrar plaza, its activities, density, and pedestrian flows. It was demonstrated that density can only be increased in terms of sociability by a good mixture of activities within the surrounding district of the plaza. Granahorrar plaza surroundings have the potential amount of activities to support the social life of its plaza. In this respect, Granahorrar does not need fundamental changes in the life of its district. If the increasing growth of the district continues eliminating residential buildings to create new activities, the benefits from dweller participation in the plaza would disappear. I recommend stopping the consumption of residential areas, and instead, recommend preserving

existing residential areas in order to support the plaza's sociability. As figure 96 shows, the areas shaded in black are the existing residential buildings which must be maintained or enhanced in order to keep a balanced mixture of activities within the district. If one of the primary uses is eliminated, the diminished variety could negatively effect the sociability of Granahorrar plaza.

Turning now to Propaqanda Sancho plaza and its level of surroundings, we can see that the district is primarily dwellings, but is in a period of growth and transition with an increased variety of activities planned. The activities of figure 97 within Propaganda Sancho's immediate surroundings include a convention center, a hotel complex, and numerous office buildings planned. It is these new activities which will bring with them greater variety of usage to the area, therefore, it is recommended that secondary activities which will complement these facilities be included in the area. Such activities as restaurants, boutiques, office-support shops, and various other secondary activities, if situated properly, can create the necessary diversity which will enhance Propaqanda Sancho plaza's sociability (fig. 97).

In relation to the visibility of Granahorrar plaza, there is already a well defined perception of the plaza within people's image of Boqotá. The recommended improvement would be to make 72nd road even more prominate in people's minds

Figure 96: Granahorrar Plaza's Surroundings

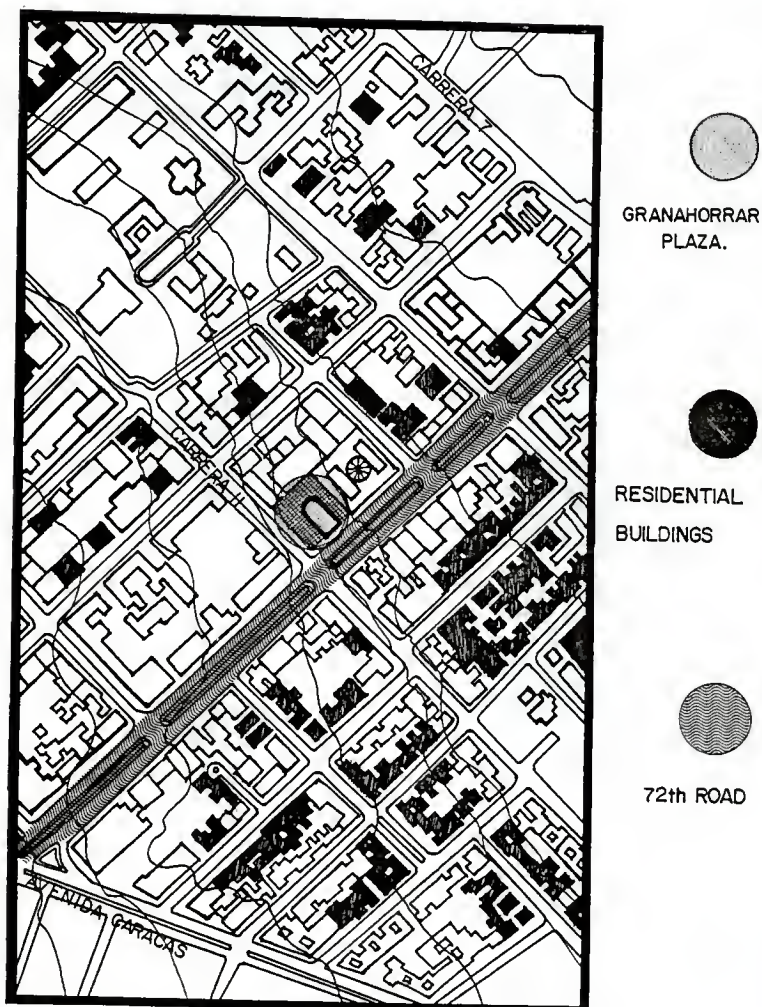
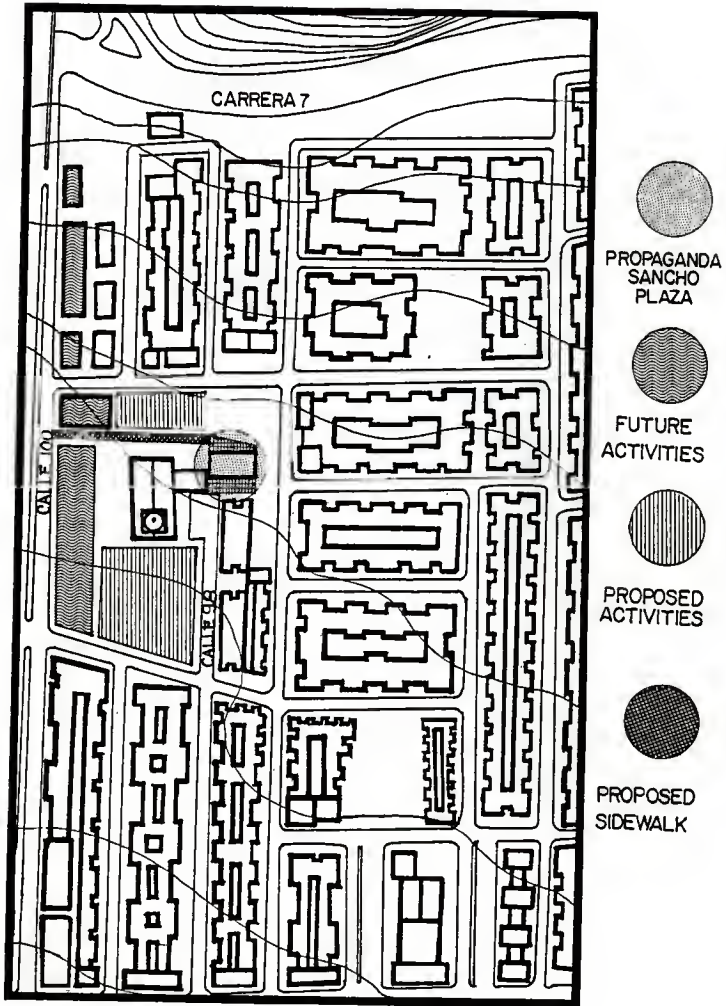


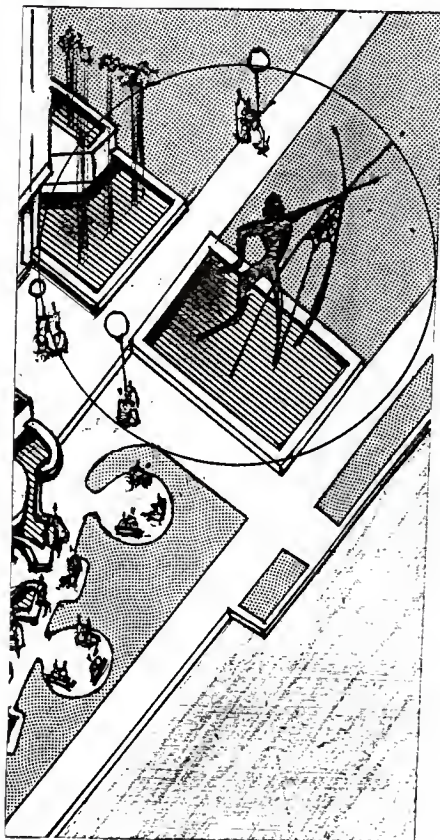
Figure 97: Propaganda Sancho Plaza's Surroundings



by the construction of new monuments, statues, and other landmarks along its medians (fig. 96). In contrast, we have found that Propaganda Sancho plaza has a lack of recognition within people's image of the district as well as that of the city. I recommend that a landmark of sufficient visual power be created to evoke a stronger image of the plaza in people's minds. Figure 98 illustrates a possible design for this landmark, which can be seen from the different cardinal points of the plaza. The idea here is to call people's attention from the distance as well as to identify the plaza with such sculpture.

The last improvement in relation to surroundings refers to major pedestrian flows around the plaza. In Granahorrar's case, the existing pedestrian flows are good enough to contribute to a strong plaza sociability. On the other hand, Propaganda Sancho plaza's sociability can be improved if a better relationship between the plaza and the major paths--100th road and 11th street--is created. In order to attain this relationship, figure 97 shows a proposed sidewalk between 100th road and the plaza as well as the creation of new activities along 98th road. These two propositions would increase the pedestrian flows in these two directions so the plaza can benefit from them.

Figure 98: Proposed landmark for Propaganda Sancho Plaza

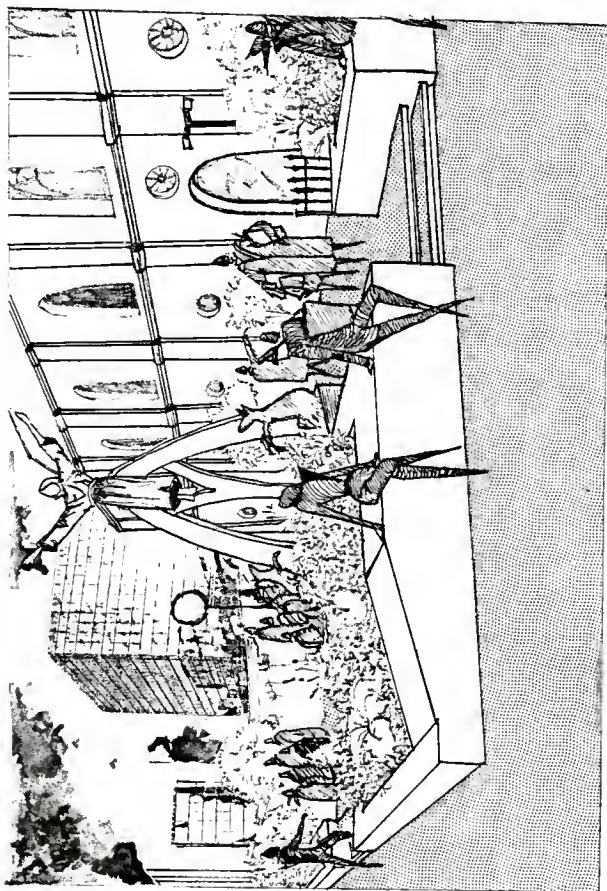


The level of edge

As described in Chapter 6, this level relates to the relationship between the plaza and its immediate surroundings especially streets, buildings, and sidewalks. The sociability of a plaza can be strengthened by taking into account the activities immediately adjacent to a plaza. These work their best when they are represented by corner activities as well as shopping areas and restaurants in the immediate vicinity of the plaza. These activities generate people who are potential users of the plaza. Users need a special transition between street and plaza in order to succumb to impulse use, which is the best invitation between street and plaza. A plaza needs to contain some sense of enclosure in order to define when the users are in and when they are out.

In the case of Granahorrar plaza, the activities on its southwest corner create potential users for the plaza. The weakness here is poor visibility of the plaza from this corner. Therefore, a design recommendation to create greater accessibility to the plaza is to trim the vegetation in the planters which shape the corner as well as to cut an entrance into the plaza near the St. Tomas de Aquino statue. This would help extend the environment of the plaza out onto the corner, as seen in figure 99. By making these small changes, the accessibility of the plaza will be increased, particularly for people waiting for

Figure 99: Proposed Design of Granahorrar's Southwest Corner



transportation and users of the corner telephone booths. The difference in corner designs can be compared in figures 100 and 101, where an additional entrance has been added along Granahorrar's southern boundary, the vegetation has also been cut-back to allow greater visibility into the plaza.

Turning to Propaganda Sancho plaza and its relation to its corners, one realizes that there is no relationship between the plaza and its corners. Therefore, design recommendations are made which not only enhance pedestrian flows but also create a corner. A proposed sidewalk illustrated in figure 97 is supported by the new activities proposed along this sidewalk and the increased pedestrian flow along 98th road. The intersection between these two flows are proposed to converge over Propaganda Sancho plaza's stage, as can be compared in figures 102 and 103.

Next, we must consider the role of adjacent activities which shape the plaza's edge. Although in Granahorrar there are three primary activities which immediately surround the plaza and give it a variety of users who enhance the plaza's sociability, there is good opportunity to increase these activities even more. On the ground floor of the commercial center facing the plaza, there are presently two empty retail spaces with entrances directly onto the plaza and in close proximity to the southern sidewalk (fig. 100). If these two spaces are carefully developed to enhance the

Figure 100: Actual Design of Granahorrar Plaza

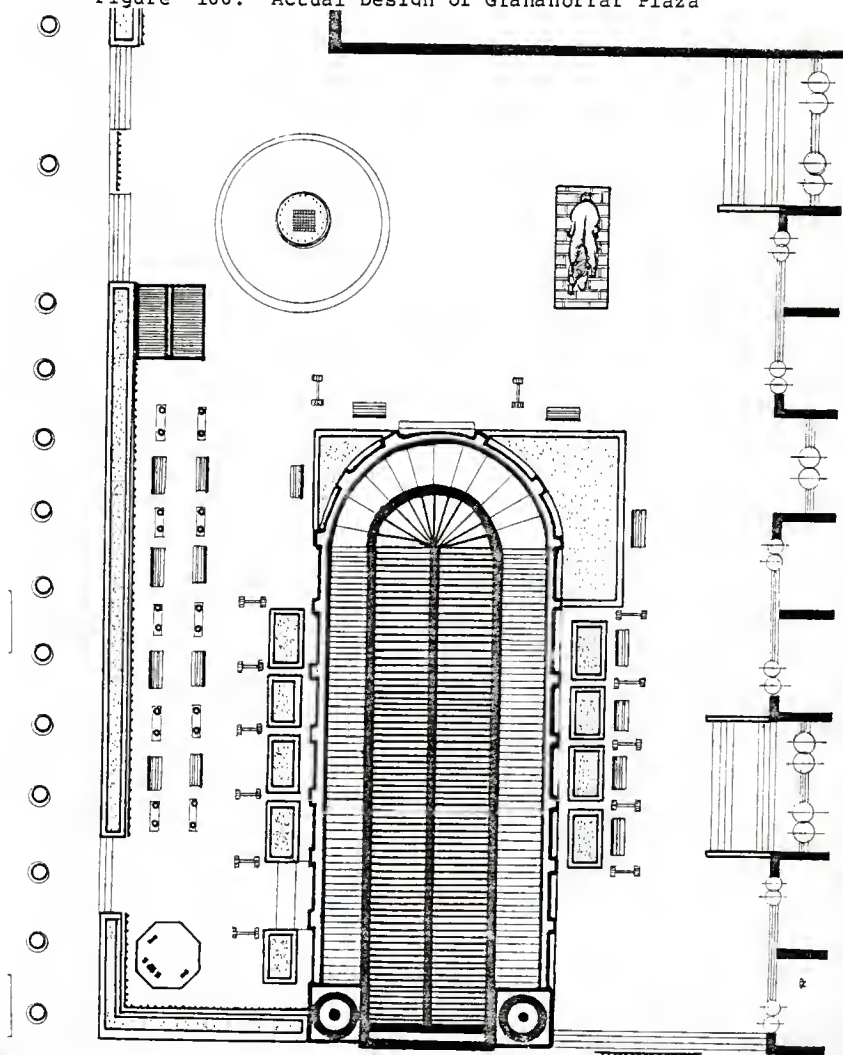


Figure 101: Proposed Design for Granahorrar Plaza

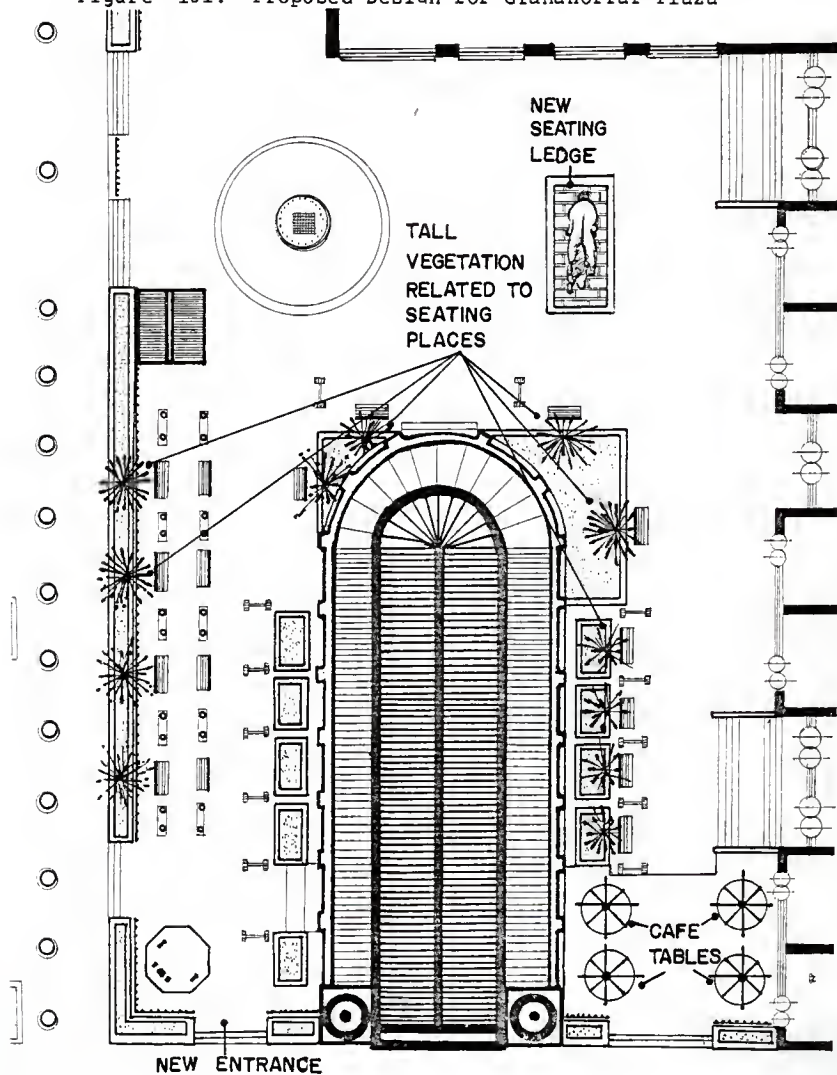


Figure 102: Actual Design of Propaganda Sancho Plaza

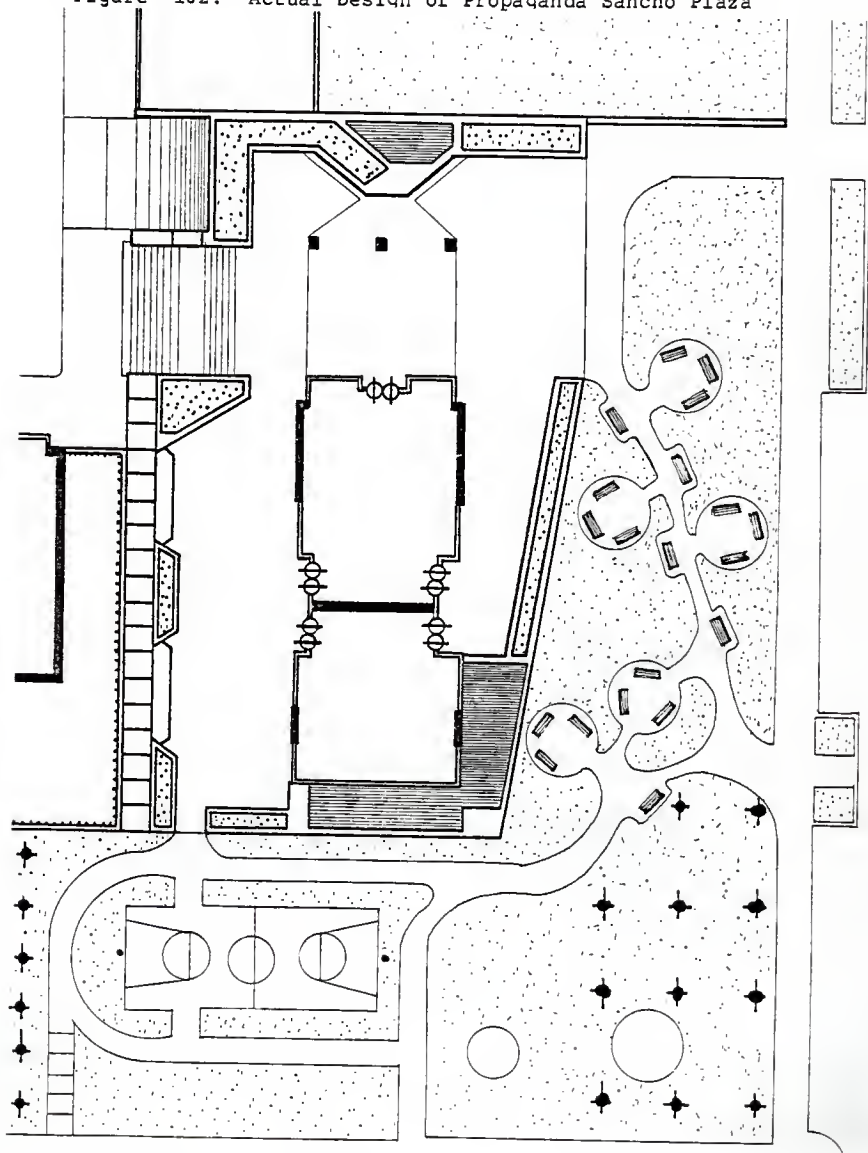
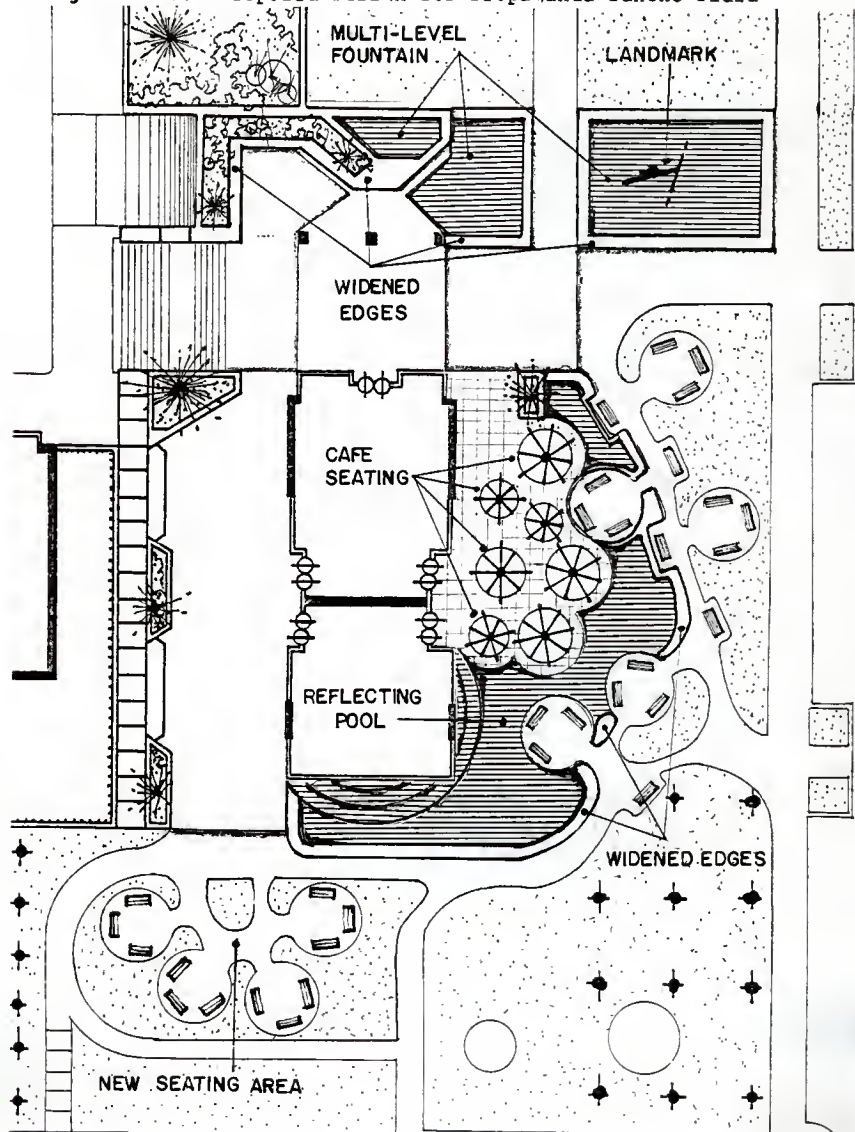


Figure 103: Proposed Design for Propaganda Sancho Plaza



sociability of the plaza, they would bring vitality to the plaza. Especially good will be food sales to bring people into the plaza. It is therefore proposed that these two spaces be turned into a sidewalk cafe that will extend out into the plaza. In order to create a transition between the sidewalk and the plaza, the floor of the cafe should at an intermediate level between these two other spaces (figs. 101 and 104).

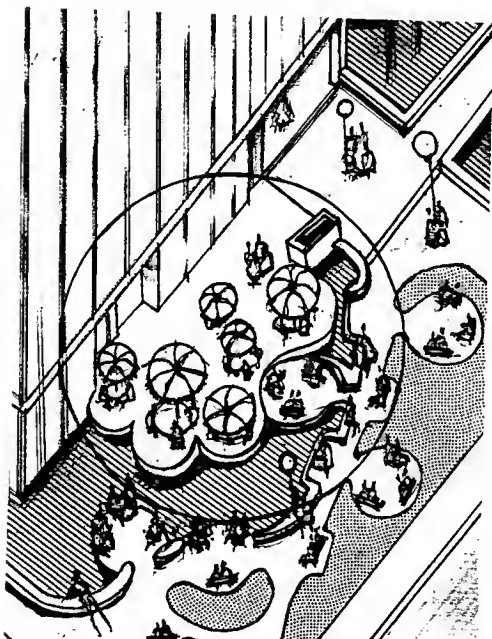
A similar scheme is recommended for Propaganda Sancho plaza. Along the eastern side of Propaganda Sancho's office building there is also empty space, which could be a prime location for an outdoor cafe that would work as an integration element between the park and the plaza, as can be seen in figures 103 and 105. The creation of this food sales would increase the sociability of Propaganda Sancho plaza by drawing people from the surrounding activities. It is proposed that this restaurant not be as exclusive as the one already in the plaza particularly during lunch hours. This cafe will be on the extension area on the east side of the building which will be integrated with the park through water and visual contact, as if the park and the plaza were one unique environment instead of the two separate entities as exist now.

The transition from sidewalk to plaza is another element to consider when looking at potential improvements for both plazas. In the case of Granahorrar plaza, this transition

Figure 104: Proposed Cafe for Granahorrar Plaza



Figure 105: Proposed Cafe for Propaganda Sancho Plaza

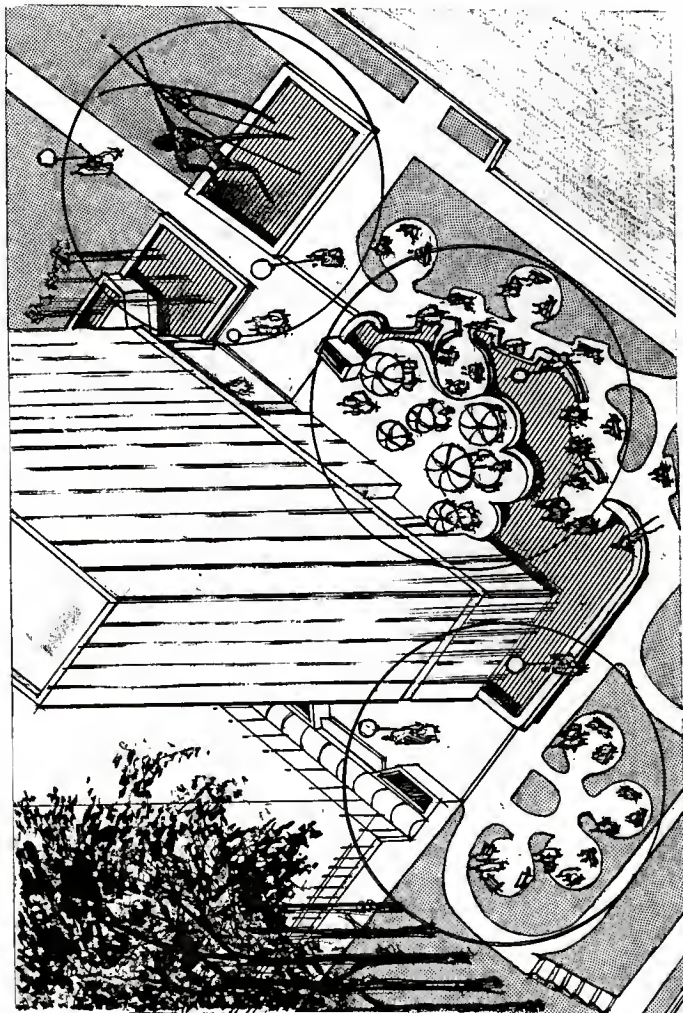


is partially blocked by overgrown vegetation. I have already suggested above that trimming the vegetation and installing a new entrance over the south part of the southwestern corner of Granahorrar would generate impulse use for those pedestrians on 72nd road (fig. 101). In figure 99, one can see how these two improvements will create a smoother transition between the sidewalk and the plaza as well as increasing the identifiability of the St. Tomas de Aquino statue.

In Propaganda Sancho plaza, the key to a good transition between sidewalks and plaza is the integration of plaza and park. This can be achieved through the design proposals shown in figure 103, in which the restaurant is the main transition element at the east side of the plaza and the park. To the south of the plaza the transition element will be a new grouping of park benches which face the western seating area in the plaza. As can be seen in figure 106, these two seating elements will be perceived as one unit, again merging park and plaza.

The last transition improvement is located on the north side of the plaza, in which the proposed sidewalk will integrate the neighboring church and plaza. This sidewalk gives greater accessibility to the plaza by parishoners, plus the proposed sculpture which is integrated with the fountain will create a good point of impulse use for the plaza, as seen in figure 106.

Figure 106: Transitions Between Propaganda Sancho and Boundaries



Level of stage

As Chapter 7 explained, this level relates to the plaza itself as well as the elements that form the plaza's stage. Sociability can be increased at this level through providing adequate sitting places, social activities which bring people into the plaza, centering elements, and design elements which support sun, wind, trees, and water. Each of these activities and elements helps to give comfort to users and to immerse them in the social atmosphere which is the heart of the city.

As it was seen in chapter 7, Granahorrar plaza is equipped with adequate sitting choices in which people can find comfort when they use the plaza. The plaza contains both intentional and unintentional sitting places, and I offer some recommendations in order to improve the choices of seatability. The first recommendation pertains to notations made during the observation week which indicated that many people attempted to sit on the pedestal of the horse statue. Because of its height, people found such sitting very difficult, therefore, it is recommended that a brick sitting ledge be constructed around the pedestal at a comfortable sitting height (fig. 101). In addition to the brick ledge, the restaurant proposed above will offer another seating possibility in the plaza.

In Propaganda Sancho, seating possibilities will be improved by widening the edges of the planters, especially

the ones located at the north part of the plaza, as seen in figure 103. This widening will make the space on the northwestern corner of the plaza a better place for social interaction. As in Granahorrar, the proposed restaurant will offer additional seating possibilities. The last improvement to Propaganda Sancho seating is at the southern end of the plaza, where it joins the park. Here, a new seating arrangement has been created by grouping benches in a closer pattern than elsewhere in the park. Because close proximity of people often promotes interaction, it is hoped that such activities will be promoted by this spatial area.

Turning to new improvements for the two plazas, social activities that contribute to the social comfort of the plaza became the subject of the next design suggestions. In Granahorrar plaza, the best thing to do is to promote the already existing activities and to bring in new ones such as mimes, clowns, and street entertainments in general. With this we can assure the gathering of people from all ages and backgrounds, thus creating a similar environment to that found during the military band which plays on Sundays. In Propaganda Sancho plaza, activities are needed which draw residents as well as workers. One suggested activity is a marionette show for the neighborhood children on Sunday afternoons. Although this would be primarily directed toward youth, such activities inevitably attract people from all age groups. An ideal stage for these activities is the southwestern side of the plaza.

As we also found in Chapter 7, the elements that initially attract people into the plaza are as important as those that keep them there. The next design recommendations, therefore, are related to these elements which have been referred to in this thesis as centering elements. In Granahorrar plaza, the centering elements work effectively in drawing people into the plaza, therefore, no recommendations will be submitted for this plaza. However, the case in Propaganda Sancho plaza is quite different. The first design improvement recommended is the construction of a sculpture discussed earlier in the need for landmarks and shown in figure 98. The benefits of this sculpture will be to focus people's attention on the social life of the plaza. Similarly, it is proposed that the fountains be redesigned in order to increase their perception by plaza users. As figure 106 shows, the main changes are in cutting down the heights of the fountains' ledges and varying the heights of the northern fountain in order to add interest and dimension to this fountain.

Sun, wind, trees, and water are summarized in the last design recommendations in regard to the plaza as stage. No recommendations are made for the improvement of sun in either plaza, because in Granahorrar sun access, both directly and indirectly, works very well, and the obstacle to improved sun usage in Propaganda Sancho plaza can not be corrected without dramatically reducing the size of the

building at its center. Something similar occurs with wind, in that in Granahorrar the initial design took wind into account while Propaganda Sancho plaza did not. Therefore, the problems Propaganda Sancho plaza has with currents of wind can not be corrected at this point, unless there were major construction changes.

Trees are elements that are lacking in both plazas. In Granahorrar, I suggest that they be planted along the western bounding planters as well as in the planters bordering the church (fig. 101). The design of Propaganda Sancho plaza does not facilitate the addition of trees, therefore, the ones in the neighboring park and church will have to be sufficient in bringing psychological comfort to the plaza environment.

Water, as was discussed earlier, is an element which must not only be seen to be appreciated, but must also be accessible. The fountain in Granahorrar plaza is good in that it is visible from the street and accessible to people. It requires no changes. In contrast, several of the major design improvements for Propaganda Sancho plaza pertain to water. On the northern side of the plaza, an enlargement of the fountain into three sections of varying heights is proposed. The tallest section will maintain the previous relationship with the building's overhang in which the echo produced here will give comfort to the users of the plaza. The middle section will be the most accessible to people

along its edges and which will be designed to facilitate seating and interaction with the water. The third and lowest section of this fountain will act as a reflecting pool and as a reinforcement of the impact of the sculpture working as a landmark (figs. 103 and 106). This fountain will act as the welcoming element for the proposed sidewalk that connects the plaza and 100th road. The portion of the sidewalk between the second and third sections of the fountain will create a bridge sensation between sidewalk and plaza.

In turning to Propaganda Sancho's southern fountain, improvements are more related to integrating the plaza and park into one space. This is attempted by extending the water out to the bordering line of seating places in the park. This fountain's height will be minimal so that children can play with the water without fear. The plaza floor has also been extended out into the water and the park. The benefit of this is that the two separate entities join in the reflections of this pool (fig. 106).

Conclusion

The city is a human institution which dates back to prehistory and no doubt arose to make more easily accessible work, trade, and leisure. One of the most important bases for cities was the need for people to be with other people. This thesis has dealt with sociability in the city, whether

this sociability is of any importance- and whether it can be enhanced, especially through physical design. Giving a social stage to the city is a special kind of design problem which helps give to the urban environment the true meaning of a city--a place for living in companionship with others, in community rather than isolation.

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.

After studying the two Bogotá social urban open spaces--Granahorrar and Propaganda Sancho plazas--through the eleven hypotheses examined in the preceding chapters, we can conclude that each is partially reliable in identifying elements that promote sociability in an urban open space. When these hypotheses are used in examining open urban spaces, various social and design improvements can be found. If these hypotheses or others like them are applied to urban

spaces in a city, we might be closer to improving not just the open spaces but the city as a whole. This thesis has found out that sociability is the 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 I believe can be improved in almost any urban open space, particularly through consideration of design elements as they involve the open spaces district, edge, and plaza itself.

Urban areas are not always in ecologically proper balance in respect to human contact. Certain environmental variables can be manipulated to improve contact opportunities based on sociability. Urban open spaces are not the only panacea for solving all ills of the urban sociability problems, but they may contribute if proper planning and design are accomplished. Sociability has been the focus of this thesis not only in relation to the two specific plazas, but also as it can become the focus of coordinated hypothetical work relating to the environmental aspects of human contact. I hope that in some way the discoveries in this thesis will contribute to a greater knowledge of not only how to design city spaces, but also to indicate the criteria necessary to derive optimal social benefits from urban open spaces, particularly plazas like the two in Bogotá.

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Appendix A
INTERVIEWING QUESTIONNAIRE
Granahorrar Questionnaire

Hombre	Mujer	Edad:	10-20	20-30	35-50	50 or more
Man	--- Woman---	Age:	___	___	___	___

1. Qué es lo primero que le viene a la mente cuando otra persona habla de Granahorrar?
What is the first thing that comes to your mind when someone else talks about Granahorrar?

- A. La iglesia
The church _____
- B. La plaza
The plaza _____
- C. El centro commercial
The commercial center _____
- D. Alguna otra cosa
Other _____

2. Con qué frecuencia va usted a la plaza de Granahorrar?

How often do you usually go to Granahorrar plaza?

A. A menudo

Frequently

B. Ocasionalmente

Occasionally

C. Nunca

Never

3. Qué es lo que frecuentemente lo trae a Granahorrar?

What is the reason that frequently brings you to Granahorrar?

A. Negocios

Business

B. Compras

Shopping

C. Misa

Mass

D. Diversión

Entertainment

E. Algún otro motivo?

Other

4. Cuando viene a Granahorrar come en sus restaurantes?

When you come to Granahorrar. do you eat here?

A. Si

Yes

B. No

No

C. Alguna razón en especial?

For a special occasion

5. Qué clase de comida le gusta comer en Granahorrar?

What kind of food do you like to eat in Granahorrar?

A. Comida rapida

Fast food

B. De los restaurantes

From the restaurants

C. Algún otro lugar?

Other

6 Usualmente viene usted por las mismas razones?

Do you usually come for the same reasons?

A. Si

Yes

B. No

No

C. Cuales

What kind of reason

7. Viene usted usualmente a la misma hora?

Do you usually come at the same time of day?

A. Mañana

Morning

B. Medio Dia

Noon

C. Noche

Night

D. Por cuanto tiempo?

For how long?

8. Como ha venido usted aqui?

How do you get here?

A. En carro

- by car _____
- B. En transporte público
By public transportation _____
- C. A pie
On foot _____
- D. De alguna otra manera
Other _____

9. Le gusta la clase de gente que usted ve en Granahorrar?

Do you like the people who frequent Granahorrar?

- A. Bastante
A lot _____
- B. O.K. _____
- C. Nada
Not at all _____

10. Se siente usted seguro en la plaza?

Do you feel secure in the plaza?

- A. Si
Yes _____

B. No

No

C. Alguna razon en especial

A special reason

11. Con quien suele usted venir?

With whom do you usually come?

A. Amigos

Friends

B. Novia, Novio

Girlfriend, boyfriend

C. Familia

Family

D. Solo

Alone

12. Usa la plaza cuando va al centro commercial?

Do you use the plaza when coming to the commercial center?

A. Si

Yes

B. No

No

C. Algunas veces

Sometimes

13. Por qué razones?

For what reasons?

A. Descansar

To relax

B. Hablar

To talk

C. Algún otro motivo

Other reasons

14. Como se siente en la plaza?

How do you feel in the plaza?

A. Bien

Good

B. Mal

Bad

C. Extranó

Strange _____

D. De alguna otra manera

Other _____

15. Qué es lo (la) que lo hace sentir de tal manera?

What is it about the plaza that makes you feel this way?

16. Cual es la parte de la plaza que mas le gusta?

What do you think is the nicest part of the plaza?

A. La fuente

The fountain _____

B. La estatua del caballo

The horse statue _____

C. La estatua de St. Tomas de Aquino

The statue of St. Thomas of Aquino _____

D. Alguna otra cosa

Other _____

17. ¿Cómo le gusta sentarse en la plaza?

How do you like to be seated in the plaza?

A. Solo

By yourself

B. Acompañado

Accompanied

C. De alguna otra manera

Other

18. Se divierte usted en la plaza?

Do you enjoy the plaza?

A. Si

Yes

B. No

No

C. O K.

D. Algún' veces

Sometimes

19. Por qué?

Why?

20. Hay alguna otra actividad que le gustaria ver en la plaza?

Is there any other activity you would like to see in the plaza?

21. Atendería usted a un concierto en la plaza de Granahorrar?

Would you attend a concert in Granahorrar plaza?

A. Si

Yes

B. No

No

C. Tal vez

Maybe

22. Si contestó si en la pregunta anterior, a qué clase de concierto le gustaría asistir?

If yes, what kind of concert would you like to see?

- A. Música clásica
Classical music _____
- B. Música Rock
Rock music _____
- C. Música típica colombiana
Colombian folk music _____
- D. Alguna otra clase
Another kind _____

Propaganda Sancho Questionnaire

Hombre	Mujer	Edad:	10-20	20-35	35-50	50 or more
Man	--- Woman---	Age:	___	___	___	___

1. Qué es lo primero que le viene a la mente cuando otra persona habla de Propaganda Sancho?
What is the first thing that comes to your mind when

someone else talks about Propaganda Sancho?

A. La iglesia

The church

B. La plaza

The plaza

C. El parque

The park

D. Algúna otra cosa

Other

2. Con qué frecuencia va usted a la plaza de
Propaganda Sancho?

How often do you usually go to Propaganda Sancho
plaza?

A. A menudo

Frequently

B. Ocasionamente

Occasionally

C. Nunca

Never

3. Qué es lo que frecuentemente lo trae a Propaganda Sancho?

What is the reason that frequently brings you to Propaganda Sancho?

A. Negocios

Business

B. Compras

Shopping

C. Misa

Mass

D. Diversion

Entertainment

E. Algún otro motivo

Other

4. Cuando viene a Propaganda Sancho come en sus restaurantes?

When you come to Propaganda Sancho, do you eat here?

A. Si

Yes

B. No

No

C. Alguna razón en especial

For a special occasion _____

5. Usualmente viene usted por las mismas razones?

Do you usually come for the same reasons?

A. Si

Yes _____

B. No

No _____

C. Cuales

What kind of reason _____

6. Viene usted usualmente a la misma hora?

Do you usually come at the same time of day?

A. Mañana

Morning _____

B. Medio Dia

Noon _____

C. Noche

Night _____

D. Por cuanto tiempo?

For how long? _____

7. Como ha venido usted aquí?

How do you get here?

A. En carro

by car _____

B. En transporte público

By public transportation _____

C. A pie

On foot _____

D. De alguna otra manera

Other _____

8. Le gusta la clase de gente que usted ve en

Propaganda Sancho?

Do you like the people who frequent Propaganda

Sancho?

A. Bastante

A lot _____

B. O.K. _____

C. Nada

Not at all

9. Se siente usted seguro en la plaza?

Do you feel secure in the plaza?

A. Si

Yes

B. No

No

C. Alguna razón en especial?

A special reason

10. Con quien suele usted venir?

With whom do you usually come?

A. Amigos

Friends

B. Novia. Novio

Girlfriend, boyfriend

C. Familia

Family

D. Solo

Alone

11. Usa la plaza cuando viene a las oficinas?

Do you use the plaza when coming to the offices?

A. Si

Yes

B. No

No

C. Algunas veces

Sometimes

12. Por que razones?

For what reasons?

A- Descansar

To relax

B. Hablar

To talk

C. Algún otro motivo

Other reasons

13. Como se siente en la plaza?

How do you feel in the plaza?

A. Bien

Good

B. Mal

Bad

C. Extranó

Strange

D. De algúna otra manera

Other

14. Qué es lo (la) que lo hace sentir de tal manera?

What is it about the plaza that makes you feel this way?

15. Cúal es la parte de la plaza que más le gústa?

What do you think is the nicest part of the plaza?

A La fuente

The fountain

B. La parque

The park

D. Algúna otra cosa

Other _____

16. Como' le gusta sentarse en la plaza?

How do you like to be seated in the plaza?

A- Solo

By yourself _____

B. Acompañado

Accompanied _____

C. De alguna otra manera

Other _____

17. Se divierte usted en la plaza?

Do you enjoy the plaza?

A. Si

Yes _____

B. No

No _____

C. O.K.

D. Alguna veces

Sometimes _____

18. Por que?

Why?

19. Hay alguna otra actividad que le gustaría ver en la plaza?

Is there any other activity you would like to see in the plaza?

20. Atenderia usted a un concierto en la plaza de Propaganda Sancho?

Would you attend a concert in Propaganda Sancho plaza?

A. Si

Yes

B. No

No

C. Tal vez

Maybe

21. Si contestó si en la pregunta anterior, a qué clase de concierto le gustaría asistir?

If yes, what kind of concert would you like to see?

A. Música clásica

Classical music

B. Música Rock

Rock music

C. Música típica colombiana

Colombian folk music

D. Alguna otra clase

Another kind

Appendix B
FORMULATION FOR DENSITY

The optimum total density for a district was calculated by the four steps that follow:

1. Total usable district space = (surface area of buildings x number of floors) + area of open spaces.
2. Total area divided into the different activities that encompass the study area--i.e., dwellings, office buildings, commercial buildings, recreational areas, educational facilities, and religious institutions.
3. Calculations for optimum spatial human capacity, by activity is as follows: Dwellings--twenty square meters per person; office buildings--four square meters per person; commercial buildings--two square meters per person; educational facilities--two meters per person; religious institutions--one square meter per person; and recreational outdoor

areas--three square meters per person.

4. Optimum density of each activity = area of activity / average area per user.

SOCIABILITY AND OUTDOOR URBAN OPEN SPACES;
A CASE STUDY OF TWO PLAZAS IN BOGOTA. COLOMBIA

by

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B. Arch., Pontificia Universidad Javeriana, 1982

AN ABSTRACT OF A MASTER'S THESIS

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MASTER OF ARCHITECTURE

Department of Architecture

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This thesis studies two of the most recently built open spaces in the city of Bogotá, Colombia: Granahorrar Plaza, completed in 1982; and Propaganda Sancho Plaza, completed in 1984. The relative success of Granahorrar and Propaganda Sancho plazas is studied in relation to William Whyte's concept of sociability --i.e., the ability of an open space to bring people together in an informal manner and thereby generate human activity and a sense of place.

To guide this analysis, several premises were developed based on the scholarly literature pertaining to urban open spaces. particularly the works of William Whyte, Jane Jacobs, and Suzanne and Henry Lennard. The methodology for testing these hypotheses includes historical background, direct observation, and interviews. The thesis summarizes the relative success of Granahorrar and Propaganda Sancho in terms of sociability, and then asks how the designs of the two plazas could be improved to strengthen their sociability. This thesis argues that if we learn to take advantage of our small urban open spaces, and design new ones as well as improve existing old ones, we will help keep the city alive.

The results of this research found that Granahorrar plaza induces a greater amount of human movement and sociability than that of Propaganda Sancho. At the same time, findings show that both plazas can be improved through an increase in activities, changes in spatial relationships, and addition of features that will work to draw more people into the two plaza spaces.