

CHAPTER IV: RESEARCH METHODOLOGY

The literature review, what authors and researchers have said about the different topics related to plaza comfort, sociability, use, security, and other factors, has orientated the methodology of this research. The theoretical basis of this research has shown that the work of William Whyte and PPS has been very valuable in orientating the choice of survey methods for this study. The Methodology provides an understanding of how the research was conducted and organized in order to obtain information that could be helpful for developing design implications for plaza settings in Maracaibo. The methodology is based in interviews with both plaza users and professionals involved in the renovation processes and observations. The following chapter will provide the characteristics of the research developed, explain the survey methods used to obtain information from plaza participants, describe how the data was collected and processed, detail how participants were selected and approached, provide some characteristics of the interview scripts and describe how the data obtained was analyzed.

13. Characteristics of the Research

The research consisted of a social study to address problems of plaza design that have been scarcely addressed in the professional and academic institutions Maracaibo but studied to a great extent in North America. Although social research of public spaces has been widely developed in many U.S. cities and supported by a tremendous amount of literature and case studies, this approach has not been applied in other countries such as Venezuela. Particularly, concerning the study problem, no research has been developed in Maracaibo concerning public life and sociability in plazas. There have been many urban studies related to Maracaibo's historic urban development, urban identity, vernacular housing, and plaza typology and its urban value, but almost no attention has been given to human issues in outdoor public spaces.

The research involves a study of plazas in which observation and taped-recorded interviews and some note taking were developed in order to obtain information from different plaza users. A total of eighty interviews were developed randomly at different hours of the day among different age-group users. Fifty interviews were conducted in Plaza de la República and thirty in Plaza de la Madre. Fewer interviews were developed in Plaza de la Madre because of the absence of people during noon hours.

14. Survey Methods

In order to provide an understanding of how this research will be conducted and how information was obtained from plaza users, the following will explain the research methods used and the criteria for selecting participants for this study. This topic will also present the reasons why Plaza de la Madre and

Plaza de la República were selected and describe some characteristics of the interviews and observations that were used.

14.1 Survey Criteria

Criteria for choosing plazas for this study

- Downtown plazas or parks in waterfronts were not considered for this study-only urban plazas. Parks and downtown plazas have a different role in community life; the physical dimensions are bigger and therefore demand that more participants be interviewed. Also those spaces were not perceived as secure environments for developing this study.
- Both plazas selected, Plaza de la Madre and Plaza de la República, are urban plazas, which have similar amenities, uses and maintenance. Some slight differences were found in their social life structure, physical dimensions and typology. The study was also intentionally focused on plazas that were renovated and had a landscape arrangement. Plaza de la Madre and Plaza de la República were selected among other plazas in Maracaibo because both experienced similar activities, amenities such as fountains and monuments, and both were connected through Dr. Portillo Street and therefore relatively close. The plazas are squares, which are defined by street blocks on all their sides; the dimensions are somewhat similar and both have experienced different renovations over time. Despite their similar conditions, both plazas are used differently: Plaza de la Madre is less used and less livable than Plaza de la República. Similarities and differences allow making a comparison among other factors that influence their livability and use. Factors such as climatic comfort, security, surrounding activities and the number of people present in the sector are all factors that therefore need to be explored in order to understand why the difference in livability occur. Through this comparison, an understanding of positive and negative factors that affect the livability of these spaces can be understood. This will also further inform the design implications that could provide possible solutions to the research problems being addressed.
- Plaza Reina Guillermina although located in the same sector and along the same Dr. Portillo street, was not selected because it has not been renovated and does not present the degree of social life that the other two plazas experience at peak hours.

Criteria for selecting interview participants

- Random selection of users for interviews in order to eliminate bias and survey a variety of users engaged in different activities in the plazas.
- Users of different ages and socio-economic status were interviewed in order to assure a representative cross-section of the plaza population. Children were also interviewed for this study in order to understand their impressions, likes and dislikes, and their needs in the public space.

- Sometimes groups of two to three people were interviewed (these were usually romantic couples, groups of friends and families), which allowed capturing different impressions and information from users at the same time and shortened the interview sessions in both plazas.

14.2 Data Collection

Pilot study: A total of four interviews and casual observations were developed as a priority before applying the survey methods. Three interviews were developed in Plaza de la República and one in Plaza de la Madre. During this pilot study, each plaza user was asked their opinion in relationship to the length and quantity of the questions asked. These users mentioned that they did not feel uncomfortable with the number of questions and that it was fine with them. After the pilot test was made, only one question was identified as imprecise and redundant and was therefore eliminated. Question number 23 in the interview script was modified as an open question, instead of being specifically oriented toward security issues from “Under what conditions would you not feel secure visiting this plaza?”, to “Under what conditions you would not visit this plaza?” This question also had to be modified due to translation imprecision into Spanish.

Two survey methods were used; one was a taped-recorded interview with both design professionals and plaza users. Interviews with professionals provided information related to both plazas historical background and renovation processes and were unstructured (no interview script). User interviews were recorded in order to obtain answers from open-ended question faster. This will be discussed further in the following section. The other method was making observations (supported with some map tracing and note taking).

14.2.1 Interviews

Observation and interviews conducted during the pilot study orientated the different session and the number of visits required during a day for conducting interviews in both plazas. The interviews were developed in a very flexible way, but were generally made every Monday, Wednesday and Friday as representative days of the week. The interviews were made through multiple visits to Plaza de la Madre and Plaza de la República and developed through four sessions or periods of the day: morning, noon, afternoon and night. Participants were interviewed at different hours, because the plazas had different conditions along the day. It was believed that people’s behavior and attitudes were also different as a result of different climatical, social, activities and security conditions at different hours. This would allow gathering information about why people visit and use the plazas at certain hours and detect problems or preferences according to existing conditions of plazas associated with time. The changing climate conditions, the different activities available at different hours, as well as other were assumed to influence people’s comfort and enjoyment of the plazas at different hours of the day. Also, the number of interviews

in each session varied according to the presence of people at these different hours of the day. Therefore, the number of interviews for each session varied.

Interview sessions for the different periods of the day (morning, noon afternoon and night) in both plazas were developed simultaneously. After interviewing participants in one plaza, the other plaza was immediately surveyed. This was possible because both plazas were 12 to 15 minutes apart depending on the traffic. This short distance between the two plazas allowed for making interview sessions at the same period of the day but in different lapses. Generally Plaza de la Madre was surveyed first, since use patterns and peak hours were shorter. Peak hours in Plaza de la República were longer, which compensated for the time lost while surveying Plaza de la Madre. For example, in Plaza de la Madre at 8:00 a.m., most users started to leave while in Plaza de la República, most users stayed until 9:00 a.m. Therefore this difference in frequency of use allowed both plazas to be interviewed in the morning session.

Interviews were tape-recorded because most questions were open ended. This meant that most answers were extensive, and therefore writing them down would both take too much time and reduce people's time quality in the plaza. Tape-recording allowed having people's explanations and opinions obtained in a faster way, and therefore, helped obtaining the most information from participants in a shorter period of time. This represented a fast way to obtain a higher number of interviews with less effort and demand from users. Also, the time allowed to conduct interviews was limited, (one month), and because the interviews were going to be developed in a setting different than the United States. Interviews began in December 2000, which was a holiday season, but most were developed during January when regular activities in the city and the plazas were re-activated. Both Plaza de la Madre and Plaza de la República experienced less use during the month of December. Particularly, the livability in Plaza de República decreased during this holiday season because the Colleague Institution CUNIBE was out for holiday vacations.

14.2.2 Observations

The observations provided and reconfirmed important information that supported the interview results. The combination of observation and interviews was a key methodological approach for this study because it allowed perceiving people's attitudes and behavior among others, understanding how people socialize and observing how the existing conditions of the plaza (functional, security, climatic comfort) influenced people's behavior in and the use and livability of the plaza. Note taking was initially the method for recording observations, but evolved into tape-recording the events and perceived attitudes of people. This method proved more practical for this study. Also, observations were initially developed every Tuesday and Thursday, which were different days than those used to conduct interviews. Finally observations were developed the same days as the interviews and taped-recorded because the day of the week was not considered to be a mayor factor in determining people's use and pattern of behavior.

The only days that pattern of use were different were during weekends or when special events occurred in particularly Plaza de la República, but generally people behaved practically the same every day and engaged in the same activities. This change in the observation session also avoided making so many visits to the plazas, which was becoming overwhelming for one person to develop (in this case the researcher of this study). The observations and interviews are preferable if developed by a team, not by a single person. Observations were also taped-recorded because it allowed for making more observations and reporting events and attitudes in the plaza as they occurred. Observations were based on a chart, which contained a list of items and conditions to take into account. People's behavior, important spots and highly frequently areas, traces, gender and age of users, for example, were obtained through this method and reported on a base map for each plaza. A combination of tape-recorded interviews, tape-recorded observations, casual note taking and map tracing were the methods of this study.

Some important issues that were observed in the plaza were the following:

- Users' spatial behavior (mapping)
- Observed physical qualities
- Amenities present
- Regular and optional activities
- Presence or absence of natural and organized surveillance
- Gender and age
- Sociability

14.3 Participant Study

The individuals selected for this study were users from Plaza de la Republic and Plaza de la Madre and also, professionals involved in the renovation of plazas as well. In both plazas neighbors were also interviewed with the purpose of obtaining some background information of the plazas studied. The following will provide more detailed information of why plaza de user and professional were interviewed for this study.

The Plaza users were the main subjects of this study. Knowing about their experiences, impressions, opinions and feelings in relationship to the plaza was very valuable way to understand their preferences, activities, levels of comfort and enjoyment. This was particularly important for understanding what plazas demanded in order to be more livable and dynamic public spaces according to people's needs in plazas. Therefore, knowing directly from user their opinion of the plaza would inform directions to satisfy people's needs in public spaces. In order to obtain information from them in a systematic way, a structured interview with both open and close-ended questions were necessary for this study.

The professionals involved in the renovation processes of both plazas were also interviewed but with no script for the purpose of knowing about their work and the renovation processes of both plazas as part of the background of this research. This was undertaken to support the research and obtain information from the both plazas' background but was never intended as the most important task in the study.

The number of participants surveyed for this study was 30 users in Plaza de la Madre and 50 in plaza de la República. Plaza users were approached while doing their regular activities in the plaza. If they were exercising, permission was asked if interview could be developed while walking or jogging, which they agreed. This was a great opportunity to also exercise while interviewing users. People that were generally sitting, watching or conversing and even resting were approached for interviews in a cordial way. When approached, the academic purpose of the interview was explained: it was mentioned that the interviews were being developed for a Master's thesis, that their impressions and information would be helpful for the development of research and that the interview was only to know their impressions and feelings about the plaza. They were also told that interviews were completely anonymous.

Most people that were interviewed were receptive. Often people provided more information than expected, which was very helpful for the research. Only three people out of eighty interviews in both plazas refused any kind of interview. People were much more receptive in Plaza de la República than Plaza de la Madre. This may be because Plaza de la Madre users have experienced more criminal events in this public space and therefore people feel more threatened and act in a defensive way.

14.4 The Interview Script

An interview script was developed in order to guide the interview sessions in both plazas and obtain reliable information from the participants in a structured way. The titles and questions included in this script were not shown to the users that were being interviewed in order to avoid bias in the answers given by participants. The types of questions were selected according to the research objectives and to identify the factors that influenced the vitality of urban spaces. The interviews were face to face, which helped the researcher observe people's complex feelings and attitudes towards the different topics asked. The interviews were composed of both open and closed questions. Closed questions were made according to the pre-established selection of possible answers. Open questions, on the other hand, allowed users to express their reasons and impressions according to their attitudes and personal beliefs.

Some strategies for making the interviews were to ask similar questions but in different ways in order to verify the information given by the plaza users and therefore assure validity and coherence. This strategy is useful for verifying the reliability of answers given. Another important strategy, which was

mention above, was tape-recording the answers given by the respondents. This was very practical, especially for obtaining the information of open-ended questions made through the interviews. This also allowed paraphrasing the information given by people in order to better categorize what the respondent said. Tape-recording also shortened the amount of time required of each respondent.

The interview script (see Appendix II: Survey Methods) consisted of 24 questions that were sometimes extended by follow-up questions in order to explore additional information. The complete number of questions, including the additional follow-up questions was 28. These follow-up questions were related to safety and climatical satisfaction when users did not provide enough information about these variables.

The interview script was broken into seven parts that coincided with the variables being researched. The research variables were obtained based on both literature reviews (the historical background and theoretical base) and because they represented significant factors capable of influencing the livability and use of Plazas in Maracaibo. It was also considered that these variables were able to provide important information that could explain what makes Plaza de la Madre and Plaza de la República work as public spaces. The variables were also obtained according to the research questions and the objectives of this study. These variables are: **frequency of use, uses and activities, accessibility, sociability, user’s preferences and needs, climatic comfort, security comfort and the participant’s profile.** The variables studied in this research will be defined as followed.

Table 3 The variables and factors to be explored through the interviews and observation

Variable	Use definition	Category	Conditions to explore	Survey method
Frequency of use	Number of times a person visits the plaza on a weekly basis. This is also defined in terms of time spent in the plaza and moment of the day visited.	Functional	<ul style="list-style-type: none"> • Frequency of visit • Time spent in the plaza • Time of day plaza is visited 	<ul style="list-style-type: none"> • Interview • Observation
Uses and activities	Functions that encourage people to visit and remain in the plaza. This will depend on plazas configuration, number of amenities, programmed events and location characteristics.	Functional	<ul style="list-style-type: none"> • What people do in the plaza • Activity location in the plaza • User's favorite spots in the plaza 	<ul style="list-style-type: none"> • Interview • Observation • Plaza's description
Accessibility	Physical and functional capacity of a place to be used by a diversity of users with no limitations. Accessibility includes adequate transportation system to a place, barrier-free environments for children, the elderly and the physically challenged.	Functional and physical	<ul style="list-style-type: none"> • How user arrived at the plaza • How far away user lives from plaza • Perception of barriers in the plaza 	<ul style="list-style-type: none"> • Interview • Plazas' descriptions • Observation

Variable	Use definition	Category	Conditions to explore	Survey method
Sociability	Degree of social interaction developed in the public space. It can be also understood by looking at the number of isolated individuals and the number of people engaged in groups. Sociability occurs between known people or strangers.	Social	<ul style="list-style-type: none"> • Number of people engaged in groups • How other users are perceived in the plaza • How interaction takes place in the plaza • The sensation of threat from others 	<ul style="list-style-type: none"> • Interview • Observation
User's preferences and needs	Needs are related to the requirements or demands that individuals have towards public spaces that will allow fulfillment or satisfaction. Preferences are related to what people like and dislike about the environment. Needs and preferences are subjective and particular to each individual and will depend on the person's own background.	Social and psychological	<ul style="list-style-type: none"> • What conditions that attract users to the plaza • Users perception of what can be added or deleted to improve the plaza • Which other plazas are also visited and preferred by people • People's preferences of the plaza. • People's favorite spots in the plaza 	<ul style="list-style-type: none"> • Interview
Microclimatic Comfort	Degree of acclimatization and adaptation of the individual to the microclimatic conditions of the plaza. This will depend on the level of activities of the person and the climatic condition of the space: temperature, humidity, intensity of sun and shade, wind speed and characteristics of the surfaces of the plaza, etc.	Physical Psychological	<ul style="list-style-type: none"> • How comfortable user feels being in the plaza • How climate affects people's perception of comfort • How comfortable is to be at noon in the public space • Would plaza be visited if it had no trees 	<ul style="list-style-type: none"> • Interview
Security comfort	Degree of freedom and control users can experience in the plaza without feeling any fear or threat from vandalism and assault.	Physical, social and psychological	<ul style="list-style-type: none"> • How secure user feels being in the plaza • How users visit the plaza: alone or in groups • What conditions influences insecurity in plaza • What hours of the day are perceived as insecure in the plaza 	<ul style="list-style-type: none"> • Interview
User profile	Personal data from users that were interviewed: perceived characteristics through observation	Social	<ul style="list-style-type: none"> • User's profile: age, gender, occupation and highest grade of education completed • User's perceived attitudes and behavior 	<ul style="list-style-type: none"> • Interview • Observation

Since the interviews were based on open-ended questions, the results were transcribed, tabulated and codified in order to develop the data analysis. Answers were codified according to the most common responses provided by users; therefore, the information was classified into answer categories and expressed as percentage frequencies.

The method for analyzing the information was content analysis. Through content analysis, which is based on data codification, the key elements contained in a message or information given (in this case given by the plaza users) are transformed into units that facilitated their description and analysis. This method was very useful to infer objective and reliable statements based on the data provided by the interviews and based on the context in which they were made.

It is important to state that the results that will be further presented are based on the number of answers given by the users in Plaza de la Madre and Plaza de la República. Therefore, percentages given to each answer category are based on the number of answers given by the user, not the total number of interviews done for each plaza (there were 30 interviews in Plaza de la Madre and 50 in Plaza de la República). Sometimes, the user had more than one answer to an open-ended question and therefore percentages for answer categories were calculated upon the frequency in which they were mentioned. Another important issue was that the category of answers also varied according to the different hours of the day in which the interviews were conducted.

The methodology used in this study was based on the research questions, the problems to be addressed and also based on the theoretical base. The survey methods used were interviews, observation and some note-taking which were considered to be useful methods used by many authors in the theoretical base of this study. With the data collected from this research, information is expected to be obtained that could provide directions for developing design implications for plaza design and redesign in Maracaibo can be developed. The methods used in this study are also expected to provide many lessons for this study based on the study of people.