

# CHAPTER I: INTRODUCTION

## 1. The problem statement

Ideally, urban environments, specifically well-designed plazas, should provide significant functional and physical qualities and affordances to people, which induce the fulfillment of physiological, psychological, and social needs. Livable plazas are generally attractive urban environments, which are highly active places and continuously visited by people during significant periods of the day. Generally, these plazas promote social gathering, interaction and comfort, but also invite a diversity of users and activities. Plazas that provide opportunities for comfort, relaxation, active and passive engagement, discovery and mystery (Carr and others, 1992), are generally more livable and stimulating places for people. These favorable conditions create a sense of place and belonging, which helps people retain satisfactory memories as cognitive maps<sup>1</sup>, promoting higher frequency of use. The list of favorable qualities that a plaza should have is endless, but in general, requirements will depend on socio-economic, cultural, political, functional, physical and contextual conditions.

Figure 1 Location of Venezuela and Zulia State



Figure 2 Location of Maracaibo within Zulia State



Maracaibo, the capital city of Zulia State is not an ideal urban environment with ideal plaza settings. Maracaibo, the second largest city in Venezuela with a population of 1.6 million inhabitants (located on the northwestern shore of Lago de Maracaibo), is the capital of Zulia State, the most important oil-producing state of the country. Maracaibo, located in a hot, humid climate, is one of the

<sup>1</sup> According to Stephen and Rachel Kaplan (1981), a cognitive map is a mental representation or model of the environment stored in people's mind based on that person's familiarity, knowledge and experience of a certain environment. Therefore it represents map-like conceptions and schematic knowledge a person has about a familiar environment (Kaplan and Kaplan 1981, p. 5).

hottest cities in the country. With such extreme weather, one would think that its architecture and urban settings would be designated to respond to these conditions, but this is not the case. Maracaibo's urban environment presents one of the most challenging environmental conditions for designers. Unfortunately, most regional designers resort to mechanical cooling systems to increase the levels of thermal comfort for people and to mitigate the intense heat in indoor spaces. This increases the levels of CO<sup>2</sup> in the atmosphere and subsequently causes a microclimatic warming effect in Maracaibo. During the last twenty years of urban development, Maracaibo has experienced rapid population growth and uncontrolled urban expansion, all of which have negatively affected the environmental quality of many urban spaces. Maracaibo displays complex urban conditions: extreme temperatures and humidity, high levels of crime, poor infrastructure maintenance and a lack of many physical amenities. These conditions make Maracaibo extremely difficult place for people to use outdoor urban spaces. Consequently, such a hostile urban environment demands more knowledge and specialized skills from designers in order to address and mitigate these problems. Based on the existence of such conditions, it is logical to assume that architects and urban designers- even municipal governments-have not been making efforts to ameliorate these conditions and are giving little consideration to users and their needs in public spaces.

Prior research developed at the School of Architecture and Design - Universidad del Zulia (Maracaibo – Venezuela), reviewed the design emphasis in senior student's projects and demonstrated the presence of certain design gaps. The deficiencies found included not specifically addressing human variables in design. There was poor consideration of the users and a tendency to presuppose their needs. It was also found that research on the potential users of their projects was not performed. On the other hand, although bioclimatic design tools are included in the academic education of most students (due to Maracaibo's inclement weather conditions), they do not apply them sufficiently in their design projects, and many design professors do not demand this knowledge. Some reasons for this were that it increased the difficulty levels of the design task, it demanded more effort and time from students and it required more knowledge and skills from the professor. It was also noted that most design emphasis relied on aesthetic and functional aspects (Montero, 1998). If climatical and human issues are not addressed in a precise way in academia, this situation may also occur in professional practice, perhaps as a reflection of the emphasis made in the academic work. Therefore, it is logical to conclude that many professionals still design based on modern ideals, in which the built environment's formal qualities and aesthetic values are the main goals of design. This attitude toward design has resulted in a negative impact on the consideration of human needs in design and many uncomfortable environments for the people of Maracaibo.

Plazas, which are important gathering and community spaces in Maracaibo, will be studied in this thesis with the purpose of exploring the physical, functional, social, comfort and security characteristics in public spaces. It is anticipated that by researching these problems important information can be obtained

and used to develop better designs for public spaces in Maracaibo. The study provides a basis for design implications for public space design in the city of Maracaibo based on this social research. The research involved conducting user interviews and observing the spatial behavior in two plazas that were selected among many existing plazas in Maracaibo. The plazas studied in this research were Plaza de la Madre and Plaza de la República. This research focuses on the users of public spaces in order to identify their needs and understand what attracts them to plazas. Thus, addressing people's needs in the urban environment and adapting design to climatic conditions are critical issues that many designers in Maracaibo have left behind in favor of aesthetic values. This is one of the main issues that motivated the author of this research. The research undertaken as part of this thesis examines social factors in urban public space as a way to regain user satisfaction and improve the relationships between people, the built environment and the natural environment. Similar studies in the United States have shown that public spaces better suit people's needs when social analysis and research have been developed in support of urban design (Marcus and Francis, 1998).

## **2. Research Questions**

The purpose of this research is neither to focus on the study of all the problems that affect public spaces nor to address all the plazas in Maracaibo. Instead, in order to explore the problem in a practical way, two plazas have been selected to study the factors that influence the livability of public spaces in Maracaibo. These plazas are Plaza de la Madre and Plaza de la República, which are two significant urban plazas in the city. They exist in similar urban conditions, but their livability and patterns of use differ. In order to have a precise idea of the problem to be addressed in these two plazas, the following research question arises:

What set of urban physical, functional and social attributes attract people the most to public plazas and influence their enjoyment, use, sociability, satisfaction and comfort in those settings?

More specific questions are:

1. How frequently are plazas used in Maracaibo?
2. What uses and activities occur in plazas?
3. How are people able to access the plazas?
4. Do people socialize in these plazas?
5. What human needs are most satisfied in existing plazas in Maracaibo?
6. How do security and climatic factors affect people's comfort in plazas?
7. Who are the users of the plazas?

## **3. Significance**

Most academic design and research efforts in relationship to Maracaibo's built environments are oriented towards bioclimatic construction materials and design strategies for improving the thermal quality in indoor and outdoor spaces. Although most research findings and literature focus on bioclimatic issues, designers, developers and municipal entities are still not applying this knowledge to their work. Even worse, no research exists regarding human needs with regard to architecture and the urban setting in Maracaibo. Research developed at Universidad del Zulia in the architecture field and specifically related to plazas in Maracaibo has only focused on historical or typological issues. Therefore, no research regarding people's needs and preferences in public spaces has been undertaken. This lack of research has resulted in a scarce amount of theory to advise urban design processes and create better public places in Maracaibo. The purpose of this thesis is to investigate design implications for improving the conditions of Maracaibo's plaza settings through the observation and interviews of their users. The research will address problems that are affecting the enjoyment and livability of public spaces. One of the objectives of the current research is contribute to the knowledge critical to recovering the lost vitality in the plazas and other underutilized urban spaces. This research could also provide directions for plaza design and re-design and guide future urban policies for public spaces in hot climates like Maracaibo.

The main focus of this thesis is the study of plazas. It is perceived that many urban and downtown plazas in Maracaibo provide poor climatic comfort, a deteriorating appearance, poor maintenance and a lack of security, all of which create unfavorable conditions for users' enjoyment and comfort. The previous statements, which are the starting point of this research needs to be studied in more depth and verified through social research. Although there are some examples of successful urban plazas in the city, most are misused environments with a poor social life because they do not effectively provide shelter for human use nor satisfy a wide range of needs. According to Velásquez (1999), plazas represent an important part of a city's cultural heritage and reflect important historic information and community values. Currently, plazas in Maracaibo are the opposite of this concept. Velásquez has stated that Maracaibo has approximately 100 public spaces in a state of abandonment. Many have become home to delinquents and "undesirables" (Whyte, 1980) and areas of unregulated commercial activities. These conditions make many plazas "unsuccessful public spaces" (Marcus and Francis, 1998), with no social role as community gathering spaces in the city, causing a loss of community identity and sense of belonging for people.

Currently in Maracaibo, efforts are being made to renovate plazas. Maracaibo's Mayor, Mr. Manuel Rosales, has recently promoted legislation that designates responsibility for plaza renovation and management to different para-municipal entities. This represents a positive step, which is improving Maracaibo's physical quality and drawing people back to many plazas. However, aesthetic renovations do not assure use, livability and comfort in public plazas. Consequently, many public spaces are not

providing comfortable conditions for people and ensuring the purpose for which they exist, nor are designers and urban authorities approaching these problems in appropriate ways. Therefore, plazas have lost their livability and community role and become residual spaces of the city. The functional, physical, social, comfort and security problems stated above inevitably need to be addressed in order to ensure a better quality of life and experience in Maracaibo's plazas.

In order to study the problem stated above and develop an understanding of the current research, it is necessary to provide the historical background of plazas in Venezuela, present the socio-cultural profile of Venezuelan's and Maracaibo citizens (users) and describe the urban conditions of Plaza de la Madre and Plaza de la República. This information is addressed in Chapter II and will provide the cultural background of this research; chapter III will present the literature review regarding theories related to public spaces according to different North American authors. The methodological approach developed in this research will be addressed in Chapter IV. After the methodology is presented, the research results will be provided to the reader (Chapter V), and finally, the conclusion and design recommendations will be stated (Chapter VI).