

THE STUDY ON ATTRIBUTES OF URBAN PLAZA AND DESIGN  
IMPLICATIONS

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## **DEDICATION**

To my beloved father, who taught me the best kind of knowledge, supported me in my life, and encouraged me to find my potentials.

And

It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time.

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## ABSTRACT

The city plaza is an important element in the public realm part of urban public place and a city's symbol; it reflects historic culture and artistic style in a city. The place of relaxation and interaction for people is provided by the plaza. At the same time, the city plaza plays an important role in enhancing communication and enriching the citizen life. The city plaza serves for people, and people play leading roles in plaza. The aim of the study is to generate the urban plaza which people aspire, and serving as a welcoming node in the urban environment. The study reviewed the development history of urban plaza and identified the difference between eastern and western plazas of the countries. The research works of humanized design about city plaza concern the areas of psychology, behaviorism, and social culture. Based on the knowledge of environmental behavior, the study puts forward applied principles of environmental consciousness and place cognition in urban plaza design. After the behavior regularity and psychological feature were analyzed, the peoples' activity types were induced into individual activity, group activity and community activity. The urban plaza represents a social space. In the study of the People's Square, the affection of eastern traditional culture was put forward, which emphasized the importance of 'nature and human', 'feng shui' and 'multi-religious coexistence'. Research on the characteristics of modern urban plazas was analyzed. In case study, the People's Square of Shanghai was analyzed by questionnaire and onsite observation. The People's Square of Shanghai can therefore be enhanced, to serve socially and functionally its role as the major urban green space in the city.

## ABSTRAK

Dataran bandar adalah salah satu elemen penting;sebahagian daripada bandar awam dan simbol bandar;ia menggambarkan budaya sejarah dan gaya artistic sesebuah bandar. Dataran Bandar juga menyediakan tempat istirehat dan komunikasi untuk orang awam. Pada masa yang sama dataran bandar juga memainkan peranan penting dalam meningkatkan komunikasi dan kehidupan masyarakat. Dataran bandar disediakan untuk orang awam dan orang awam memainkan peranan dalam penggunaannya. Tujuan kajian ini adalah untuk menggalakkan penggunaan dataran bandar yang merupakan keperluan orang ramai dan satu tarikan bagi kegiatan aktiviti di dalam persekitaran bandar. Kajian ini mengulas sejarah tentang pembangunan dataran bandar dan perbezaannya di antara negara timur dan barat. Kajian rekacipta bercirikan kemanusiaan mengenai dataran bandar ini merangkumi aspek psikologi, perilaku dan budaya sosial. Berdasarkan pengetahuan tentang perilaku persekitaran, kajian ini mengaplikasikan prinsip kesedaran terhadap persekitaran keperluan ruang untuk dataran bandar ini. Setelah analisa mengenai sifat dan ciri-ciri psikologi aktiviti kebiasaan orang awam, ia boleh dikategorikan sebagai aktiviti individu, aktiviti berkumpul dan aktiviti komuniti. Dataran bandar melambangkan sesuatu ruang sosial tempat tersebut. Berdasarkan analisis tentang dataran awam, kebudayaan, kesan tradisi budaya ketimuran diberi keutamaan di mana ia melambangkan kepentingan di antara manusia dan alam semulajadi, “feng-shui” dan kepelbagaian agama yang wujud di dalamnya. Dalam kajian kes, penduduk Shanghai dianalisa melalui soal jawab dan pemerhatian di tempat itu sendiri. Peranan dataran awam penduduk Shanghai itu juga dapat ditingkatkan dari segi sosial dan fungsi dalam memainkan peranannya sebagai kawasan hijau yang paling utama di sesebuah bandar.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Overview

The urban plaza is an important part of urban public place; it reflects historic culture and artistic style in a city. At the same time, the urban plaza plays an important role in increasing communication and enriching citizen life. The urban plaza serves for people and people play leading roles in plaza. A plaza is an urban form that draws people together for passive enjoyment (J. B. Jackson, 1985). A plaza is intended as an activity focus, at the heart of some intensive urban area. Typically, it will be paved, enclosed by high density structures, and surrounded by streets, or in contact with them. It contains features meant to attract groups of people and to facilitate meetings (Kevin Lynch, 1981).

The definition of plaza in “people places design guidelines for urban open space” points out the plaza is defined as mostly hard surfaced, outdoor public space from which cars are excluded. Its main function is as a place for strolling, sitting, eating, and watching the world go by. Unlike a sidewalk, it is a place in its own right rather than a space to pass through. Although there may be trees, flowers, or ground cover. If grass and planted areas exceed the amount of hard surface, the place is defined as a park rather than a plaza.



The plaza is an open space designed for public use and defined by surrounding buildings and streets. Its primary functions are to encourage a diversity of opportunities for social interaction and activities, to provide relief and relaxation, to expand and reinforce the public realm and to contribute to the livability and general amenity of the downtown and other developing parts of the city.

The attributes affecting design are according to people's behavior habits, the physiological structure, the psychological situation and people's way of thinking during the design process, to make the user comfortable and to satisfy people's psychological and spiritual needs. It penetrated the peoples' life in an environment designed to have a kind of familiarity, identity and departure from the person but also the termination of the cycle of design patterns in people. Therefore, our design must reflected human nature, because life reflects the humanity, and only the design that reflects peoples' life is the humanized design.

Environmental psychology is the science which to study relationship between the people and their surrounding physical and spiritual environment, it as a new concept of the architectural theory, has been established during the years since the first century so far has gradually developed. It is based on architecture, psychology, ecology, and many other related subjects and inheriting the environmental design experience, to reflect peoples' psychological in the design of the space environment. It is the main course of the study is through analysis awareness of the environment, seeking the best stimulus, and according to psychological needs, to improve the surrounding environment. Therefore, the design of urban plaza shall help to create a real comfort, health, people oriented environment.

## 1.2 Statement of Problem

It is indicative that we call them plazas or sometimes piazzas. The English word “place” won’t do. “Place” is derived from the Latin word “platea” meaning an open space or broadened street as in the Spanish “plaza” and the Italian “piazza”... The word is at once too common and too diverse in its meaning to designate what we want in an urban center downtown. So we turn to Spanish and Italian. That is what we want (Jensen, 1979)

The modern plaza is not the piazza of days gone by, yet it does have some relevant contextual and functional parallels. Is it farfetched to consider the corporate skyscraper the modern equivalent of the medieval cathedral, each symbolizing, for its era, the seat of power? The public outdoor space next to each is, or was, crowded at certain times of the day because that particular building function attracted people.

The modern urban plaza environment seems to have ignored an important part—the environmental users, peoples’ needs of behavior and psychological. It also does not pay attention to local character and historical and cultural value. The lack of the cognitive for people—the master of city, it is not people oriented place.

The issues of plaza design in China are the following:

In terms of size, most cities only pay attention to large-scale, established grand city centre square, and neglected the residential district, and district-level square construction.

In terms of planning, most urban planners just complied with the government's intentions; there is lack of the participation of users. The key to successful plaza design is satisfying peoples’ needs, but the decision-makers will often affect the results of design; it deviated from the essence of the plaza.

In terms of the facilities, they do not consider users' needs. In terms of the local cultural characteristics, many parks or plazas demonstrated a lost characteristics of local history and culture, thus they lost the unique character design.

### **1.3 Research Gap**

The western urban plazas were studied extensively. Such as their architectural layouts and spatial distribution, the information on construction details, current standards and materials. They consider user behavior in some forms of open space (playground, housing site) but ignore it in others (urban plaza, mini-park). The studies on human needs were rarely done. This study explores human's needs in urban plaza and how people use this place.

### **1.4 Purpose and Objectives**

The aim of the study is to generate the urban plaza which gives expression to humanized care, and accords with people's behavior feature and environmental consciousness. To achieve this aim, the following study objectives are set:

- i) To identify the character of modern urban plaza.
- ii) To determine people's demand in terms of behavior, psychology and culture in urban plaza.
- iii) To determine the attributes affecting urban plaza design to achieve humanized design.

## **1.5 Research Questions**

There are two research questions:

- i) What are the aspects of humanized design reflects and care in urban plaza?
- ii) How these aspects impact on people oriented place?

## **1.6 Research Methodology**

The research will involve those methods which are referring to on-site observation, semi-structured interview and behavior mapping.

Base on the knowledge of environmental behavior, to indicate the implantation of environmental perception in urban plaza design by the open-ended questionnaire survey, and analyzed the behavior regularity and psychological feature by making the on-site observations. The peoples' activity types were induced into individual activity, group activity and community activity. The peoples' associated types were lineal association and net association. The urban environment is a kind of social environment. According to the associated characteristics through activity mapping method pose the concepts of active place and negative place. At the base of analysis of the culture, define the impact of culture on human behavior and psychology.

In identifying the satisfaction level, the survey will include the locals as well the tourists. Because of various activities happening in different times, survey will be undertake at different time. The random sampling method will be used in this survey.

## **1.6.1 Data Collection**

### **1) Onsite Observation**

The study employed the observation and photography techniques. The observation technique is effective in obtaining data in situations where it is difficult to gather information by any other techniques. Photographs are useful throughout a research project because of their illustrative quality and discussion on them can quickly generate hypotheses about issues that may be fruitful for further study (Zeisel, 2006).

### **2) Semi-structured Interview**

To get a deeper response of users' perception, interview was done. It involves the systematic collection of information from population using standardized questionnaires (see Appendix A). The information can cover a wide range of topics, people engaging to answer questions about "who", "how", and "what". These data from interview can make it possible to describe the population under investigation in very precise terms; also can help explain why there may be variations among the reported behaviors or feelings of a population. "Who" data can show how a study population differs from or is similar to other populations, the "how" and "what" questions deal with peoples' thoughts and feelings, their behaviors, and their understanding and awareness of situations and places. It can be used to find out what goes on in people's minds in terms of how they feel about a particular environment they use or know. For the most part, expressions of approval and disapproval, statements of preference, likes and dislikes, and positive and negative evaluations, as well as the rationale for these sentiments can contribute to our understanding of why people behave as they do how strongly they will support a new idea. Questions about

what people do in an environment or what they do to an environment can be asked in surveys. In addition to data about people and how they feel about, use, and perceive the environment, surveys can produce information about the objective environment. The objective environment, which refers to the environment as it actually is, may be described in physical, sociocultural, or organizational terms. It will give information of what people think, feel, do, know, believe and expect from the existing social spaces (Zeisel, 1984).

For this study semi-structured interviews were carried out. The respondents were interviewed and their answers recorded (see Appendix A). The purpose of this interview is to find out their real expectation on how the urban plaza should serve the users within the humanized design from three dimensions i.e., behavior, psychology and culture.

### **3) Behavior Mapping**

A behavioral map is actually an observational tool. A critical point in behavioral mapping is to decide on the categories of behavior needed and to pre-test these in an actual environment. Behavioral mapping was developed by Ittelson (1970) to record behavior as it occurred in the design. In this way design features and behavior were linked in both time and space. It is usually used on a micro scale for an environment such as a room because it is a convenient space for one person to observe. It can, however, be used on a wider scale with proper techniques for observation. Most research has attempted to assess and map activity in specific settings such as plazas, parks, and other public spaces. William Whyte's (1980) observation of use in downtown plazas in New York City has become a widely recognized approach to understanding the relationship of people and public spaces. Other researchers have focused on assessing use of neighborhood spaces such as parks, playgrounds and street fronts. Hester (1975) has undertaken several studies of public open spaces in neighborhoods and he has developed useful "social ecology" mapping methods that spatially present observational data. This method includes

preparing a scaled map of study area. By used of this base plan, various observational information can be spatially mapped, including use density, activity settings, etc.

### **1.6.2 Instruments**

In order to collect the data, the following instrument will be used:

Map – site plan map and land-use map are conducted to find basic data and understanding the site context. Map will be used to record different activity happening in different areas, the map of the site also will be used to show the different activity at different time. Moreover, the map will be a tool for the research method which is activity mapping.

Photo and Video - It will be useful in order to observe the condition of physical and cultural landscape of the site context. The experience of moving through peoples' behavior can be recorded along the way. It will be used throughout the research process especially at different sequences from different time.

Survey form - The survey forms that include checklist, guidelines and also open-ended questionnaires will be used to obtain the users responds and to guide the researcher during the study.

### **1.6.3 Data Analysis**

The main aim of the analysis is to determine these attributes affecting urban plaza design in order to achieve humanized design that could establish people

oriented urban plaza. This study analyzes the data by the combination of descriptive statistic and summary map.

The first step of the data analysis was to transcribe the interview recordings into verbatim descriptive accounts of respondents. These accounts were reviewed by this researcher with the intention of ‘seeing through the particulars to discover what the essential elements of the People’s Square. The transcripts were then reviewed to derive the general experimental structures and patterns. These analyses were facilitated by transferring all of the transcripts into a text database.

In the next phase of analysis, descriptive statistic of the data from interview and questionnaires will use SPSS (the Statistical Package for the Social Science). The information will be obtained from these dimensions such as people’s behavior, people’s opinion about the square facility, their satisfaction level and perception on certain aspects.

The analysis will attempt to recognize all the activities in this square by means of a summary map. This attempt to disclose the phenomenon of this space that their meanings and interpretations, as well as to explore the underlying behavioral and experimental structures of the square that influence each respondent’s choice.

### **1) Descriptive Statistics**

Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphics analysis, they form the basis of virtually every quantitative analysis of data. It will include the technique that will summarize and describe the numerical data that can be show by using graphical or could involve computational analysis. The graphical description of the data could be shown by the usage of bar charts, while in can be also using computation such as percentages, frequency, ratio and range. It performs exploratory data analysis and descriptive statistics by SPSS. It



can extract information from data and use the basic commands of SPSS to manipulate dataset.

## **2) Summary Map**

While these initial summary maps provide a useful snap-shot of use in urban plaza, a data-summary technique is needed to allow more detailed and systematic analysis. An overlay drafting system was chosen to allow for both spatial and numerical analysis of data. The system, now available at many larger blueprint companies, the overlays can then be transposed in any combination on the base map. These spatial summaries could be prepared for four different zones in people's square such as open square, the people's park, underground, and surrounding commercial zone. The maps could also be overlaid on top of each other to form a composite picture of activity for different time periods.

### **1.7 Scope of Study**

The study will focus on the urban plaza in Shanghai. The main reason for selecting the site is because Shanghai is one of the fastest growing cities in the world with a very impressive architecture. The People's Square is one of the most important places. It is the cultural, political and commercial center of Shanghai. There are opportunities to explore people-oriented urban space.

The study of humanized design in urban plaza is concerned with psychology, behavior and social culture. The research will investigate the spatial environment system, behavior environment system and cultural impact. Based on the analysis and the reflections of the people, some ideas on the humanized design guidelines of modern urban plaza can therefore be recommended.

## **1.8 Significance of Study**

In recent years, along with economic development, and the dynamic urbanization process, the urban public space especially the urban square had received increasing attention. "Square design" has become a new cultural phenomenon of Chinese social life and urban construction nowadays. The urban square design also has a number of specific criteria, so that the design process prepared standards. However, the quantificational science would not instead of peoples' feeling; it also cannot create a real human living space environment with people oriented.

The study therefore highlights that the modern urban plaza space environment design should people oriented. The physical elements that relate to the humanized space will be based on peoples' behavior needs, psychological needs and cultural needs, to create the urban plaza space environment which is full of vitality.

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