

The Preferences of Foreigner Tourists for the Environment In Front of Ngan Gate of the Hue Citadel in Hue City, Vietnam

Karuna Raksawin¹, Supagtra Suthasupa², Pham Manh Hung³

¹ Assistant Professor Dr., ² Assistant Professor Dr., ³ Instructor

¹Faculty of Architecture, Chiang Mai University, Chiang Mai, Thailand

²Faculty of Architecture, SilpakornUniversity, Bangkok, Thailand

³Department of Architecture, College of Science, Hue University, Hue, Vietnam

Abstract: The aim of this research is to examine the preferences of the foreigner tourists to the environment of Ngan Gate of the Hue Citadel which is the heritage site in Hue city, Vietnam. A photographic observation was conducted in the study area by using the digital camera captured photos in human normal visual view. Fifty photos were selected as the media which were represented the variations of the feature attributes of the environment of Ngan Gate from a parking area to the entrance of Ngan gate. The research had obtained the preference evaluations with 1-5 Likert-scale. 404 participants who are considered as potential foreigner tourists evaluated the photos by convenience sampling technique. The data were analyzed by mean. The results indicate that respondents prefer environment with the appearance of the heritage with more trees and shading images before approaching the entrance to the citadel.

Keywords: Preferences, Foreigner tourists, Ngan Gate, Hue citadel.

I. INTRODUCTION

The introduction of paper contains the nature of research work, purpose of work, and the contribution of this paper. It contains the references of the previous work done. This template is in Word document, provides authors with most of the formatting specifications required by the author for preparation of their research paper.

The Hue Citadel is one part of the complex of Hue monuments. UNESCO acknowledged the world heritage to the complex of Hue monuments since 1993 under the criteria IV. This historical place and important preservation is not only including plenty of heritage buildings inside but also be located in the centre of the city (Fig. 1). Nowadays, Hue citadel is the most famous destination for tourists at Hue city.

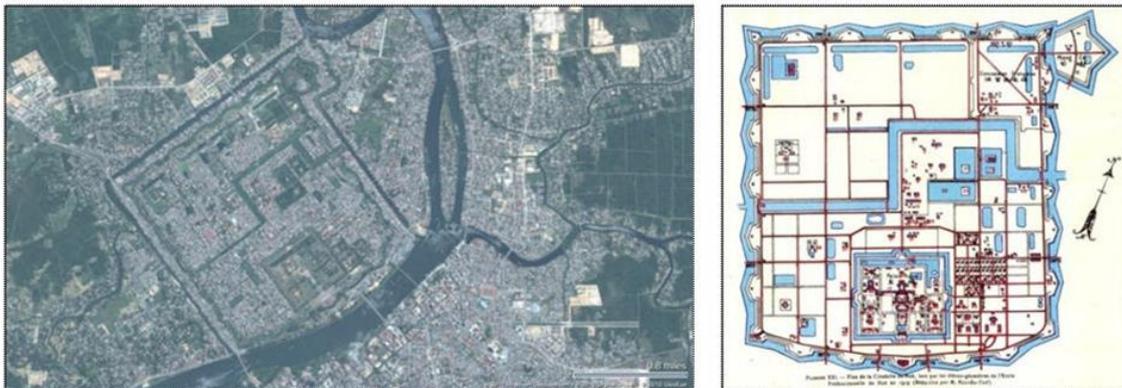


Fig. 1. The Hue Citadel in Hue city

Foreigner tourists enter to the citadel via Ngan gate. This gate plays the role as a face of the Hue citadel. However, the arrangement of building attributes around Ngan gate doesn't promote to tourist attractions. Even though, millions of tourists confirm a good experience to the citadel. By those arguments, this study proposed to examine what characteristics enhance this environment.

II. LITERATURE REVIEW

This study scoped in the perceptions and preferences of built environment. According to Rapoport (1977) [22] "perception" can be classified into three usages as followings:

- Firstly, people perceive or experience through all sense modalities which are hearing, sight, smell, taste, and touch. It is called environmental perception.
- Secondly, the term of perception is applied to the environmental cognition. This usage can be understood that when people come to know the environment through information which is not experienced directly, people understand, learn, and apprehend the environment by messages from media and other information systems.
- Lastly, people evaluate the perceptions in term of preference. The preference can be evaluated the experience and indirectly known environments as advantage or disadvantage, desirable or undesirable, good or bad. This usage accounts for environment evaluation or preference.

Rapoport's categorization shows that perception, cognition, and preference are intertwined process of people's response to the environment which can explain how the environment is perceived, remembered, and valued [1]. The study of perception, cognition, and preference are intertwined and it is hard to separate each process. Perception and evaluation of urban environments are a two-way process. Environmental images arise as a result of this two-way process and these images. Lynch (1960) [23] asserted comprise three components: identity, structure and meaning. Identity has to do with the notion that each environmental image is a separate entity and distinct from other environmental images. Structure relates to the spatial and relational patterns inherent in an environmental image. Meaning relates to the practical or emotional meaning that the environmental image holds for the observer.

The role of vegetation in a landscape is claimed in many studies [2]-[7]. According to Ulrich (1986) [8], liking for urban scenes is usually increased when trees and other vegetation are presented. Views of nature, compared to most urban scenes lacking natural elements such as trees, appear to have more positive influences on emotional and physiological states. The benefits of visual encounters with vegetation may be greatest for individuals experiencing stress or anxiety. His research demonstrates that responses to trees and other vegetation can be linked directly to health and in turn related to economic benefits of visual quality [8]. People perceive green spaces in terms of certain dimensions, some of which are more important and preferred compared to others with respect to helping people recover from stress [9].

Gilbert (1989) [24] said that factors such as the size, shape, diversity, history, and distribution of green spaces within a city as well as the design and management of the green spaces individually, play a decisive role in defining the functions of them.

III. RESEARCH METHODOLOGY

After the observation, the focused area is decided on the path from the tourist parking to the Ngan Gate (Fig.2). Five photos are aided to a set of photograph book of environmental attributes with rating scores are provided for the evaluations [10]. All photos are taken in a landscape format consistency [2], [11], [12] and conducted at the same period of days with very similar light conditions [13].

The photos represent 5 prototypes of physical attributes (Fig. 3-7) which are taken from the points of views as shown in Fig. 8. Fig. 3-7 are named sequencing from P1 to P5. These names are custody to the discussion.

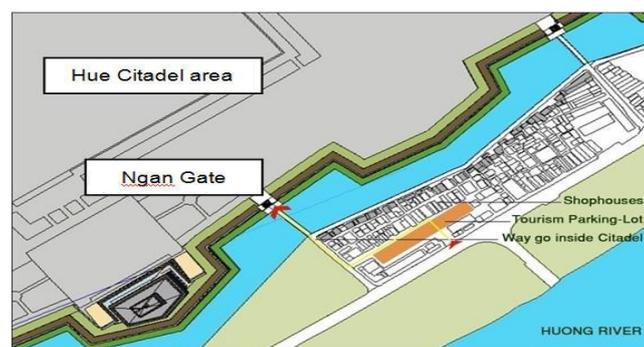


Fig. 2. The Ngan Gate as the access of Hue Citadel



Fig. 3. P1



Fig. 4. P2



Fig. 5. P3



Fig. 6. P4



Fig. 7. P5

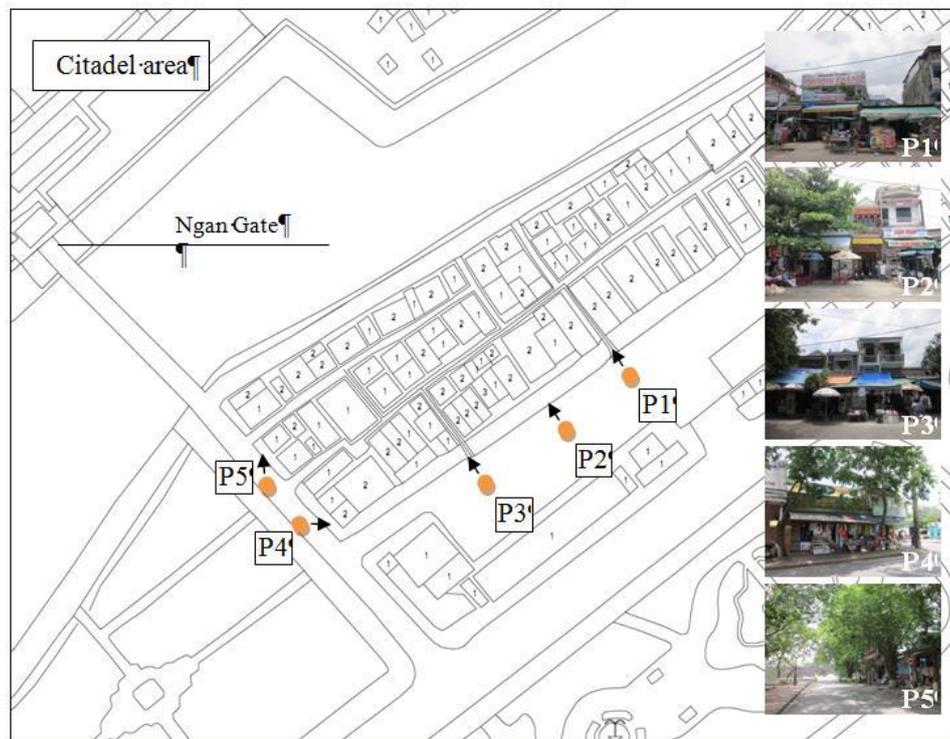


Fig. 8. Points of views

The first set of questionnaire was contributed. P1 to P5 were colour printed by 4x6 inch. The questionnaire was designed, in which the main part uses Likert-Scale [14] with 5 scores. The preference of each photo is evaluated through rating the score from 1 to 5 with rating 1 for the least preference and 5 for the most preference.

From the literature review, the preferences are chosen to evaluate the environment by the first question of like and dislike. Response to the environment in front of the Hue Citadel can be realized by many groups of people in general and tourists in particular. This research chooses foreigner tourists who are considered as particular samples. Participants of the study are 404 foreigners [15] with interviewing face to face on each person normally is not over 15 minutes, so it is consistency with an amount of time for obtaining information without fatigue the respondents [16]. This research chooses the places to survey at the public spaces. The survey is carried out since 08:00 am till 04:00 pm without rainy days to keep the good natural light to see the photos.

IV. RESULTS AND DISCUSSIONS

The descriptive analysis is conducted and results are the scores of preferences of five selected photos (TABLE I and Fig. 9).

TABLE I: RESULTS OF PREFERENCES

Photo name	P1	P2	P3	P4	P5
Score	1,112	1,318	1,157	1,372	1,731

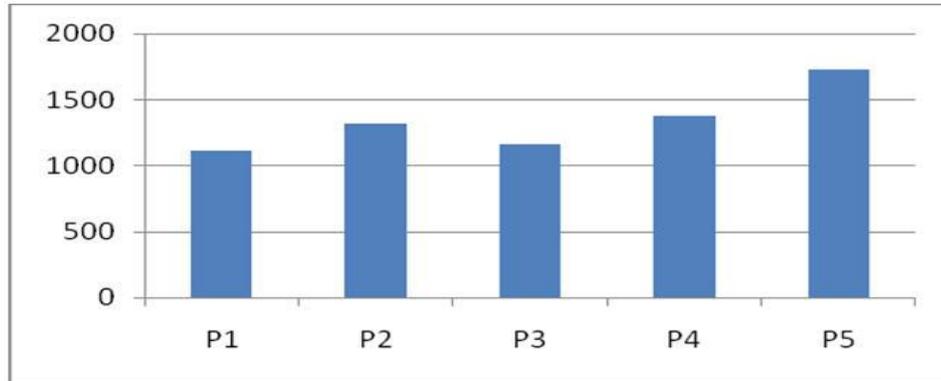


Fig. 9. The respondents' preferences on the access' environment of Hue citadel

The photo-P5 has the highest preference (1,731 scores), on the other hand, the photo-P1 has the lowest preference (1,112 scores) is considered as the least preference (Fig. 10).

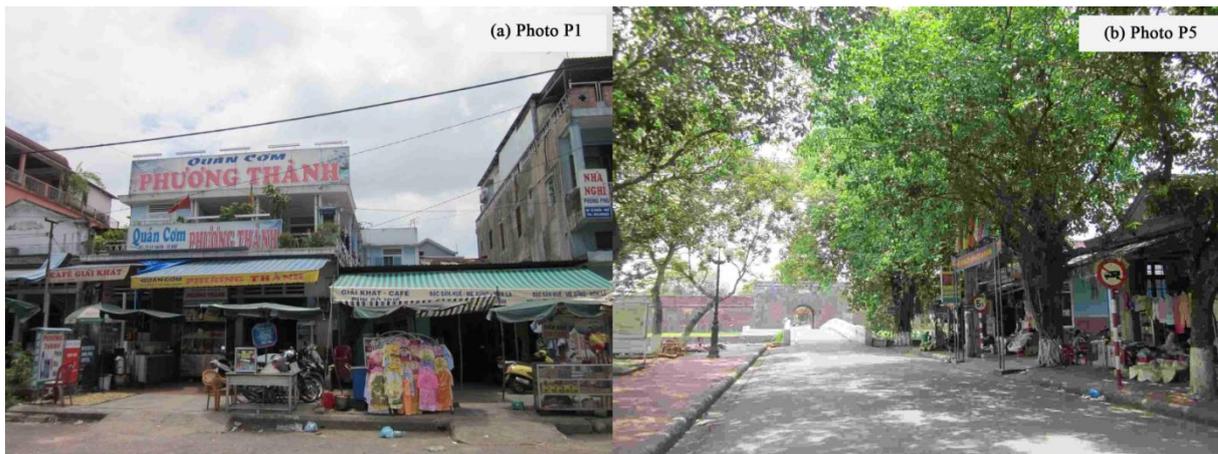


Fig. 10. The least preference picture (a) and the most preference picture (b)

Im (1983) [19] suggests the visual preferences are the consideration product of the interaction of the respondents to the environment or the responses to the environment stimuli which include a complex interaction of affective and cognitive responses to environmental stimuli. In this study, trees and buildings are considered to the major environmental feature attributes, thereby; other environmental characteristics of the pictures such as pavement, the buildings skyline, goods, electric equipment, advertising sign, vehicles, and the others are affected by the visual preference also [17],[18].

Comparison between the P1 and P5, as the results, the P5 of the Ngan Gate is contained a part of the heritage that can stimulate the tourists. This also discriminates clearly the perception among historical tourism, eco-tourism, and social tourism. Consequently, to build the environment of the main entrance to a heritage, the appearance of the historical place is important.

Vegetation is one of the important attributes of this study. P5 obtained the response of the most vegetation that shaped shading. The role of vegetation in a landscape is claimed in many studies [2]-[7]. According to Ulrich (1986) [8], the preferences for urban scenes are usually increased when vegetations are seen. The greatest benefits of vegetation may obtain the delightful pleasure and expectation to recover from stress. The P1, unlike the P5, the vegetation appeared very few that comprehended to a hot temperature. Lacking of the green tree of P1 may impress to the participants feeling hot and dazzling.

It can be concluded the relationship between preferences and vegetation that more vegetation, more preferences. From the result of preference scores, it can make a sequence of preferences from the least to the most which are P1, P3, P2, P4, and P5. Similar sequence, the vegetation appearances from the least to the most are P1, P3, P2, P4, and P5.

Shading is one of feature attributes in landscape and urban design. Many studies have investigated about the decrement of temperature due to the shading [20], [21]. The support of shading, in this case, may effect to the participants in the experienced evaluation of the climate of a tropical country. Thus, people prefer more outdoor shading in the environment, particularly the shading as a shadow of the vegetation, than the shading of buildings.

According to other spatial configurations, Im (1987) [18] also proposes that visual preference can be affected by physical variables, including texture, color, and shape of space components, as well as ratios of various dimensions. In this research, those elements occur differently in each photo. In the P5, the contents of other spatial configurations are overlaid by trees which are introduced to the preferences. Meanwhile, the other spatial configurations of P1 demonstrate the inconsistency of texture, color, and shapes that can decrease the preferences. In addition, contents the images of the shophouses with lacking of identities: difference of the height and the width among each of shophouses; uneven skyline; and inhomogeneous number and height of storey, seem to intend lower preferences.

Street furniture for public authorities such as traffic poles, telephone boxes, moving the public toilet, electric poles, aggregates to the environmental perceptions. In addition, goods and advertising equipment are also the impulse to the environmental perceptions. The P5 scene hides those appearances by the canopy of the trees. Inverse to P1, those clearly appeared. The characteristics of commercial activities can merge to the environmental perceptions. Types of goods and numerous of the form of advertising signs may interfere the preferences if there is no arrangement.

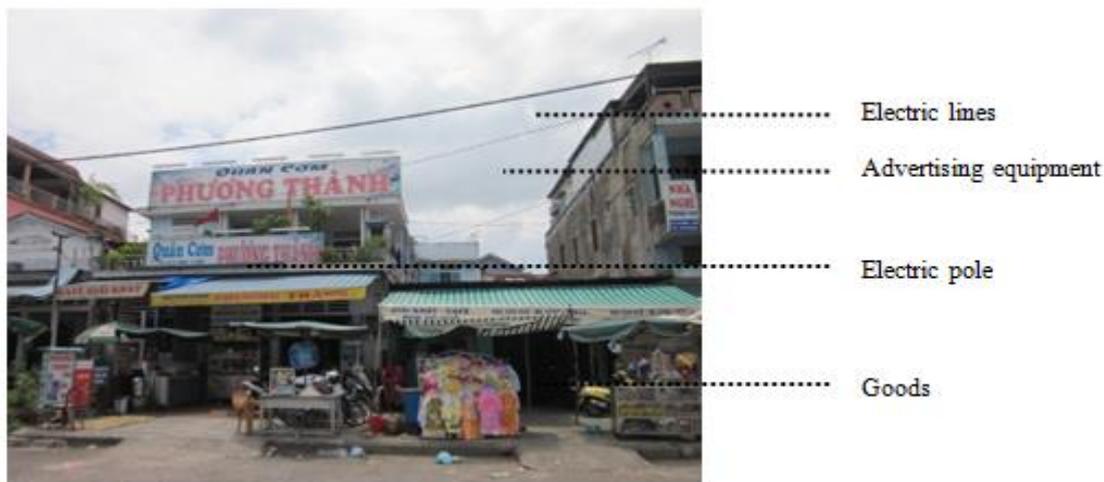


Fig. 11 The spatial configuration of the environment of the access to the citadel

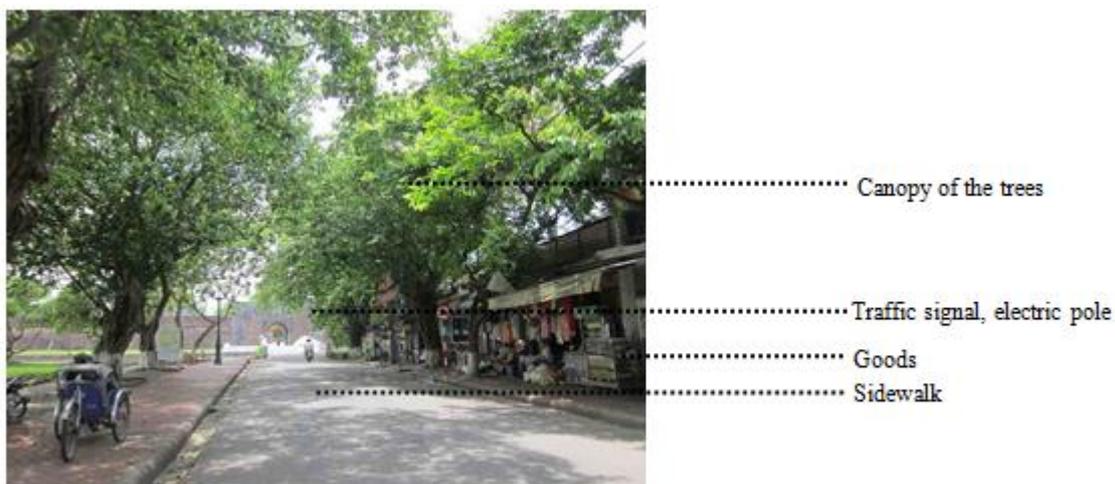


Fig. 12 The spatial configuration of the environment of the access to the citadel

V. CONCLUSIONS AND SUGGESTIONS

The research has obtained the perceptions of the built environment in front of the Hue Citadel base on a gathering of preference evaluations. The preferences to the environment have carried out to investigate through surveying the respondents' evaluations follow to Likert-scale method. Area of study is limited to the route from a tourist parking area to Ngan Gate of the Hue Citadel, and the participants are the foreigner tourists who are considered as the potential tourists of this heritage. The results of this study reveal that respondents prefer the environment with the appearance of the heritage, more vegetation and shading image before approaching the entrance to the citadel. Besides, spatial configurations of the environment also influence the respondents' preferences. People prefer a neat and clear space for the environment; buildings and its attributes which have the strong identity; and the public service equipment should be used and adjusted to its right functions and place.

It tended to have a suggestion to public sector. To improve the environmental preferences in the public area, vegetations are the most appropriate factors with a budget. Therefore, it needs more determinations to judge which form or type of vegetations is fit.



Fig. 13. Before-after simulation of P1

REFERENCES

- [1] Rapoport, A. (1976) 'Environmental Cognition in Cross-Cultural Perspective'. In G. T. Moore and R. G. Golledge (eds) Environmental Knowing, Stroudsburg, PA: Dowden, Hutchinson & Ross.
- [2] Rogge, E., Nevens, F., Gulinck, H. (2007) 'Perception of Rural Landscapes in Flanders: Looking Beyond Aesthetics'. Landscape Plan, 82: 159-174.
- [3] Wolf, K. L. (2004) 'Trees and Business District Preferences: A Case Study of Athens'. Georgia, U. S. J. Arboricult, 30: 336-346.
- [4] Herzog, T. R., Herbert, E. J., Kaplan, R., Crooks, C. L. (2000) 'Cultural and Developmental Comparison of Landscape Perceptions and Preferences'. Environ. Behav., 32(3): 323-346.
- [5] Coeterier, J. F. (1996) 'Dominant Attributes in the Perception and Evaluation of the Dutch Landscape'. Journal of Landscape and Urban Planning, 34: 27-44.
- [6] Kaplan, R., Kaplan, S. (1983) 'Cognition and Environment'. Functioning in an Uncertain World. New York: Praeger.
- [7] Purcell, A. T., Lamb, R. J. (1984) 'The Prediction of Scenic Beauty from Landscape Content and Composition'. Journal of Environmental Psychology, 4: 7-26.
- [8] Ulrich, R. S. (1986) 'Human Responses to Vegetation and Landscapes'. Original Research Article Landscape and Urban Planning, 13: 29-44.

- [9] Grahn, P., Stigsdotter, U.K. (2010) 'The Relation Between Perceived Sensory Dimensions of Urban Green Space and Stress Restoration'. *Journal of Landscape and Urban Planning*, 94(3-4): 264-275.
- [10] Stamps, A. E. (1990) 'Use of Photographs to Simulate Environments'. *Ameta-analysis Percept. Mot. Skills*, 71: 907-913.
- [11] Hull, R. B., Stewart, W. P. (1992) 'Validity of Photo-Based Scenic Beauty Judgments'. *Journal of Environmental Psychology*, 12: 101-114.
- [12] Wherrett, J. R. (2000) 'Creating Landscape Preference Models Using Internet Survey Techniques'. *Landscape Res.*, 25: 76-96.
- [13] Bernasconi, C., Strager, M. P., Maskey, V., Hasenmyer, M. (2008) 'Assessing Public Preferences for Design and Environmental Attributes of an Urban Automated Transportation System'. *Journal of Landscape and Urban Planning*, 90: 155-167.
- [14] Sommer, R. & Sommer, B. (2002) *A Practical Guide to Behavioral Research: Tools and Techniques*. Oxford: Oxford University Press.
- [15] Yamane, T. (1967) *Statistics: an Introductory Analysis*. New York: Harper and Row.
- [16] Zeisel, J. (1981) *Inquiry by Design*. Cambridge, MA: Cambridge University Press.
- [17] Peterson, G. L. (1967) 'A Model of Preference: Quantitative Analysis of the Perception of the Visual Appearance of Residential Neighborhoods'. *Journal of Regional Science*, 7: 19-31.
- [18] Im, S. B. (1987) 'Optimum W/H Ratios in Enclosed Spaces: The Relationship Between Visual Preference and the Spartial Ratio'. *The Journal of Architecture and Planning Research*, 4(2): 134-148.
- [19] Im, S. B. (1983) 'Visual Preference in Enclosed Urban Space: An Exploration of a Scientific Approach to Environmental Design'. *Environment and Behavior*, 16(2): 235-262.
- [20] Papadakis, G., Tsamis, P., Kyritsis, S. (2001) 'An Experimental Investigation of the Effect of Shading with Plants for Solar Control of Buildings'. *Journal of Energy and Buiding*, 831-836.
- [21] Porta-Gándarab, M. A., V. M. Gómez-Muñoz, V. M., Fernándezc, J. L. (2009) 'Effect of Tree Shades in Urban Planning in Hot-Aridclimatic Regions'. *Jounal of Landscape and Urban Planning*, 94: 149-157.
- [22] Rapoport, A. (1977) *Human Aspects of Urban Form: Toward a Man-Environment Approach to Urban Form and Design*. Oxford: Pergamon Press.
- [23] Lynch, K. (1960) *The Image of the City*. Cambridge, MA: MIT Press.
- [24] Gilbert, O. L., (1989) *The Ecology of Urban Habitat*. London: Chapman & Hall.