

# A Comparative Study of Public Open Space Handling Methodology in Urban Area

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**Abstract.** Public open spaces (POS) handling in urban areas, regardless of their form, can be approached by various methods based on the potential and problems that exist in the POS. The public open spaces here can be in the form of green open spaces in the area, roads, parks, or outside natural spaces that function as public service facilities, including areas of the site developed into POS. Through this article we will look at four different cases for POS in three European cities and one Indonesian city which are carried out with different approaches as presented from the four scientific articles studied. The selected cities are located in Turkey, Cyprus, Montenegro and Denpasar, Indonesia. The reason for choosing four cities in various countries was also based on the physical and cultural character of these countries. By studying the different approaches taken, it is hoped that an understanding of the relationship between POS management results and the POS factual problems will result in the conclusion of the most appropriate approach to choose. Thus, it is expected to also find a relationship between the physical and cultural character of a country with the pattern of handling the city's public space.

## 1. Introduction

This article attempts to describe the pattern of changes in the definition of public open space through the comparison of four approaches to the public open space. Those approaches were presented in scientific articles about public open space studies at three cities in Europe and one city in Indonesia. The three cities are Cypriot Town in Cyprus, Nicsic in Montenegro, Izmir in Turkey and Denpasar in Indonesia. Things that distinguish those four articles were the approach taken for the arrangement of public open spaces and the object types of public open space. In Cyprus, the highway as a public open space in the form of vehicle and pedestrian circulation lines was chosen as the object. It was the same as the one in Montenegro which was also in the form of a road, but it was different with Turkey which took regional or district blocks as the objects. While in Indonesia, the city of Denpasar took an area that has a character as a heritage area.

This review is aimed to find conclusions about handling public space model in European and Indonesian cities as material for public spaces research in urban areas, especially for cases in Indonesia which have distinctive cultural characteristics. As for the goal is to draw conclusions on the results of handling urban public spaces that were influenced by different cultural approaches and characters through comparative studies of various public spaces, as well as understanding the correlation between the approach in handling public space with the results.



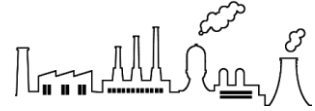
A comparison was done by examining each approach that was carried out on the particular object and then linked to the results and conclusions obtained from each particular approach. The comparative analysis results of those four particular objects in the scientific articles will be summarized as an input for similar approaches to be carried out later. According to Budihardjo and Sujarto (2005) open space is a planned space based on the needs for a joint meeting and shared activity in the open air. The more joint meetings and interactions between people happens, there will be more various activities in the open public space. Open space is just one type of public space. A general space is basically a place that can accommodate certain activities from the community, both individually and in groups.

## 2. Methodology

Comparisons were made of four scientific articles published in different journals discussing each case according to the case study approach presented in 4 (four) different papers. The selection of these papers was based on the following considerations: the object of the study is a public open space, either in the form of roads, squares or regions/districts, the three objects are located in cities that have a strong cultural character in Europe. While the object in Indonesia represents a character that matches with the location of further research in the dissertation, although the location is in Denpasar. Characters in this city are very strong and suitable as study material, each article used a different approach in handling the area and its results showed the suitable approach for the solution to the problems in that public space. Comparative analysis point of view of those four papers was conducted by looking at the approach of each treatment, criteria and parameters used, other objects related to the public open space study as well as the results and findings obtained. Whereas the four articles are as presented in table 1 as follows.

**Table 1.** Articles reviewed

No	Researcher	Title	Goals	Research Methods
1.	Turel, Hatice Sonmez, Emine Malkoc Yigit & Ipek Altug. (2007) [1]	Evaluation of elderly people's requirements in public open spaces: A case study in Bornova District (Izmir, Turkey).	Obtain physical, logical and phenomenological relationships between the needs of the elderly to design public open spaces	Mixed Method (qualitative and quantitative)
2	Jalaladdini, Siavash & Derya Oktay. (2012)[2]	'Urban Public Spaces and Vitality: A Socio-Spatial Analysis in the Streets of Cypriot Town'	Identifying the relationship between Public Open Space (POS) and Regional Vitality	Qualitative Method
3	Svetlana, Perovica, & Nadja Kurtovic Folic. (2012). [3]	'Visual Perception of Public Open Spaces in Niksic'.	1. Obtain the form and purpose of public space identity based on the user's visual perception 2. Explain how visual perception can be the basis for the implementation of public open space design to revive the place	Qualitative Method
4	Tri Anggraini Prajnawrdhi, Sadasivam Karuppannan & Alpana Sivam	'Preserving cultural heritage of Denpasar: local community Perspectives'	1. Identify conservation strategies for the city of Denpasar 2. Capturing the views of the Balinese community towards the right detectors in conserving	Mixed Method (qualitative and quantitative)

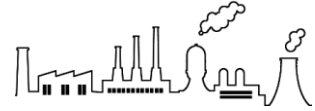


### 3. Results And Discussion

The first article entitled "Evaluation of elderly people's requirements in public open spaces: A case study in Bornova District (Izmir, Turkey)" mentioned that the public open space was created to improve the quality and quantity of public open space for users with age, gender and occupation differences, in order to improve the quality of their lives through the wholeness of each public space which contributes to more interesting and meaningful urban life by creating a livable environment. The object of the study in this article was Bornova district in the city of Izmir, which is a city with not too large population and quite a lot of elderly living in it. The research reported in this article focused on elderly subjects in public open spaces, especially their presence in public spaces and the use of those places for their needs but still be respectful to the others with the same rights. The combination of qualitative and quantitative methods was employed in this study. The first phase of the research was to identify the criteria of the elderly and their needs in public open spaces, including studying the physical factors in public open spaces that affected the elderly. Then review of the elderly users was conducted. Identification and result analysis were concluded and later adapted to the existing theoretical criteria with the field conditions and statistical approach was employed to determine the formula to handle the public space based on the elderly needs. At the end of the study, the suggested solution is to design a new public open space that is tailored to the needs of the elderly by correcting space errors of the existing condition.

In the second article entitled "Urban Public Spaces and Vitality: A Socio-Spatial Analysis in the Streets of Cypriot Town", the main focus was the issue in the vitality of urban public space, particularly roads. There were two stages of the research done. First was to give a theoretical framework for understanding the social values and the role of urban public space in the quality of urban life. The second was to discuss an important component of vitality in the streets which were the object of the study. This research was conducted to investigate the level of vitality on two main roads in Famagusta and Kyrenia, two cities in North Cyprus. Although these two cities were not directly involved in complex urban issues as in big cities, they provided a unique context for socio-cultural analysis. The methodology used was a descriptive method through observing social life in the streets as the object of study in order to reveal the character of life. This research explores the similarities and differences between these two paths to provide a better understanding of the reasons behind this vitality. Then the further study continued by investigating issues such as the type of user, activity, and time of use in a physical context. This article contains the case of the two roads that were observed, namely Salamis Street in Famagusta city and Ziya Rizki Street in Kyrenia city. In each road discussed, the description was completed with an explanation of the road description, type of user, activity and the road use, as well as the general evaluation of the road. The results of the discussion of the two paths were described later in the form of a comparison which found that "vitality" was the general attribute of both paths. The difference was the taste and essence due to the way the activities done in these two paths were different. In terms of the position of the road toward the two cities and city classes, these two roads were equivalent in activating their social space. Finally, the comparison was done and focused on the following points: the type of user, social group, activities and interactions, and the time of the activity on the road.

The third article discussed was an article that examined visual perception in objects of public open space in Nicsic, Montenegro entitled "Visual Perception of Public Open Spaces in Niksic". The visual perception here is the users' visual perception in terms of subjective perspective. This research was based on empirical analysis and semantic differential method. The methodology used in this study was the study of urban space from various aspects of visual perception multidimensionally. The research method was designed and applied in the study of visual perception, as quoted from the article came from the theories about mental maps, experimental methods, visualization methods, computer models, observational methods, semantic differential methods, surveys and interviews. The results of the study showed that functional, dynamic, associative, homogeneous, inclusive, and authentic space relationships with many natural elements create visual effects desired by the user.



The fourth article compared was the article with the title of "Preserving cultural heritage of Denpasar: Local Community Perspectives" which took an object in the city of Denpasar, Bali, Indonesia. In the abstract, it was written that Bali is known as the Island of the Gods, an island of heaven on earth. The existence of unique landscaping and cultural practices attract large numbers of tourists from all over the world to come. In addition, Balinese cultural heritage is the main attraction for tourists and tourism itself is the main source of the local economy.

This development due to the tourism demanded new development in the city of Denpasar to accommodate its growth. Nevertheless, the new development had changed Denpasar's identity. On the other hand, identity is considered important because it can increase the strength of the city and distinguish it from other places. This approach became the groundwork of this article. This was based on the planning element that is important to maintain the character and identity of the city of Denpasar. Denpasar's urban planning aspiration is "Denpasar City Culture based on harmony between God, humans and nature". This article tried to identify the most suitable conservation strategy for Denpasar.

The methodology of the approach taken in the research written in this article was a combined method of qualitative and quantitative. Descriptive analysis as a form of a qualitative method was conducted to obtain information from the place and its community. Then the NVivo 10 software was utilized to help capture the views and perspectives on the importance of cultural heritage and the strategies developed to maintain cultural identity and heritage from Denpasar.

**Table 2.** Result of The Comparative

No	Title	Research Object	Methodology	Data Collecting	Analysis
1	Evaluation of elderly people's requirements in public open spaces: A case study in Bornova District (Izmir, Turkey)'. '	Garden, Public Open Space,, streets and other public spaces	Mixed Method	Questionnaire of the user's age group	1. Analysis of public space element criteria 2. Descriptive analysis of the needs of elderly users
2	'Urban Public Spaces and Vitality: A Socio-Spatial Analysis in the Streets of Cypriot Town' '	Street	Qualitative Method	Description and study objects in user interviews	Descriptive analysis of study object
3	'Visual Perception of Public Open Spaces in Niksic'. '	Garden, Public Open Space, Street and other public space	Qualitative Method	Interview and questionnaire of the user groups	1. Analysis of user's visual perception in every spot of study object 2. Quantitative analysis with criteria of semantic scale
4	'Preserving cultural heritage of Denpasar: local community Perspective" '	Heritage District	Mixed Method	Interview against indigenous groups, observation	1. Descriptive analysis of user perceptions 2. Quantitative analysis based on Nvivo 10 for mapping the results of data collection

#### 4. Conclusions And Recommendations

The conclusions of this study are as follows: For the activities carried out as presented in the four papers, several things that need to be taken into consideration are the locality context originated from the local culture since the users were considered as the subjects of all studies. More detailed mapping regarding the selected respondents as the sources and activity period was carried out in real terms in the field. The methodology used was the mixed method, which is a combination of qualitative and quantitative methods. Referring to the observed object and the intended respondents as well as the criteria used, the mixed method is the most accurate approach methodology in examining the problems related to objects and their interaction with the users. Qualitative methods were used for the criteria used as a study parameter of the respondents, in this case, public open space. While the quantitative method was used to draw conclusions from the results of the study collected from respondents or users of the targeted public open space. This study results can be used to carry out similar research, especially in terms of the approach methodology employed considering the close relationship between objects and users used by the author in conducting research on public open space in a review of cultural and aesthetic meaning.

#### 5. References

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