

Social Dimension for Evaluating Urban Public Spaces - A case of Bhaktapur City Core

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Abstract

Urban public space performs a substantial role in nourishing the socio-cultural public realm. It is also essential for the social and human behavioral well-being of communities. Besides, good urban public space depicts the characteristics of reactivity, communality and purposefulness. Thus, based on literature review and empirical work, this paper evaluates the salient features of urban public space by observation through social dimension viz. activities, safety and accessibility. Urban public space (particularly square) in Bhaktapur city core namely Golmadhi is examined through its activities, safety and accessibility. In order to learn from historical precedents this case study is conducted because this traditional urban public space reveals a constructive design with their excellent capacity, not only to support the daily life but also the socio-cultural and religious events during special occasions throughout the year. Such traditional characters of urban public spaces are being lost in contemporary urban neighborhood settlement. Therefore, this study attempts to explore the historic urban public space particularly square with regards to its activities, safety and accessibility in order to learn from it and attempts to put forward some applicable suggestions for the new urban public space design.

Keywords

Urban public space, socio-cultural public realm, historical precedents, contemporary urban neighborhood, social dimension

1. Introduction

Urban public space particularly square being a fundamental part of urban life, not only covers a significant amount of urban fabric but also a place for the interactions of human [1]. It is a venue where the public life takes place in a complex set of forms and functions. Besides, it also has diverse behavior, uses and activities viz talking, shopping, walking, entertaining, relaxing or even passing the time as daily activities along with occasional cultural and religious events [2]. According to Madanipour's terms "they are controlled by a public agency, and are provided and managed in the public interest" [3]. This outdoor room of urban fabric being an important element in the design of urban environment and the success of urban design depends upon a good public realm design. Urban fabric having physical as well as visual accessibility of public are meant to be public realm [4]. Squares are one of the major forms of Urban public spaces. Thus, the quality of urban life can be

enhanced only through the essential role of public squares. Squares are the focal points of city events and social nodes due to their openness and robustness. Moreover, they not only act as physical vacant space but also acts as breathing space amid the buildings [5]. According to Kevin Lynch in his book called "image of city", the city can be categorized into five elements namely roads, borders, regions, landmarks and nodes. The fifth element, node represents the square which is the focal point of integrating, pausing, converging and orientating the streets [17]. In line with this, the historical city squares form an outstanding urban public space. It is only after the advent of modern movement in architecture and city building that the design of public realm had been severely criticized for lacking "human quality" [1].

Trancik, in his book called "finding the lost space" defines a new term: 'lost space' which is distinct from well-defined and enclosed space (positive space) of historical precedent by considering the present problems with the definition and use of urban spaces

in the contemporary city. He accentuates the issues related to the contemporary approach of city design without considering the pedestrianization. He also defined the image of these contemporary spaces as objectionable urban areas i.e., anti-spaces that don't make any positive contribution to the surroundings or users. Therefore, these spaces have to be redesigned [6].

Tiwari (n.d) highlights that "learning from history and historical situations is not given due space in the modern urban planning". He also suggests that "reconsider how and why planning and design of traditional towns, particularly the way their spaces and network are designed and managed for changing multicultural heterogeneity of urban living, so that towns for our own times will also be able to provide the base for contented urban life now and continue to do in its own un-forecasted future" [7].

On regards to aforementioned, modern cities confronted wide disapproval for having lost the traditional spatial qualities in the creation of ill-defined urban spaces, and modern planners and designers were blamed for lack of concern towards the historic precedents. This is very much true with Kathmandu Valley, too, if we closely examine its contemporary urban fabric. The modern urban fabric of cities in Kathmandu Valley doesn't express any substantial features of urban design. The newly developing urban areas are those along the periphery of historic city cores, which are consuming the suburbs. Despite the proximity with the historic cores, the contemporary urban design and development attempts seem to discard the outstanding urban design features of the cores, resulting the chaotic urban scenario which does not exhibit a "sense of place". This condition prevails in almost all parts of both planned and unplanned new urban development [1]. On the other hand, and in contrast, the historic cores of Kathmandu Valley cities are found to be enriched with quality designs in their physical settings and spatial configurations. It is very interesting to observe the fine-grained network of streets and squares and their careful interweaving in the city's urban fabric that make them with, no doubt, the parallel of the medieval towns in Europe. The urban spaces are human in scale and they never failed to respond to the various modes of life of the people.

Among the three historic cores of Kathmandu Valley cities, Bhaktapur is one of the ancient and the first capital town of the Malla. So, Tiwari (n.d) highlights

that "since its founding as the first capital town of the Mallas in the mid-thirteenth century, it has not grown beyond its original boundaries and its overall physical shape and size have remained similar" [7]. Because of these reasons, Bhaktapur city core is selected for the study area. Therefore, Bhaktapur might be a good case study area for the study of social dimension in terms of activities, safety and accessibility of the urban spaces particularly squares.

2. Literature Review

2.1 Defining Public Space

Public space can be defined through multidimensional perspective like ownership, control, access and use. Some authors define it as the "space that is not controlled by private individuals or organizations, and hence is open to the general public" [3]. Others base their definitions on issues of access and use, and public space is defined as "publicly accessible places where people go for group or individual activities" [8]. The definition of public spaces for this study is limited to the activities, safety and accessibility rather than its ownership. Therefore, public spaces are those spaces which are accessible to public even though they are privately owned while those spaces which are publicly owned but have no access to public are termed as private space. The motive of this paper is to evaluate public space to (particularly squares) in Bhaktapur city core. Mehta (2014) points out that "Public space not only define the spaces between buildings but also the objects and artifacts therein, and the building edges that help define the physical boundaries of the spaces" [9]. Thompson (1995) mentioned that "the Concise Oxford Dictionary defines the term public as concerning the people as a whole, open to or shared by all the people, a section of the community having a particular interest or in some special connection" [10].

Urban spaces can be conceived of as public if they are unconstrained areas with permissible boundaries that allow the public to have physical and visual access to them [8]. Though there are various dimensions of urban public spaces viz. morphological, social, phenomenological, aesthetic, visual, perceptual, functional etc. but this paper focus on social dimension only and is limited to its activities, safety and accessibility aspects of social dimension as these are desired measures to analyze urban public spaces.

2.2 Social Dimension of Public Space

Activities

According to Gehl, the activities conducted within the urban public spaces can be categorized as necessary, optional and social in order to analyze humanistic behavior in public spaces [12]. Necessary activities include activities such as going to work or school, waiting for person or vehicle which occur almost regardless of the quality of the environment; similarly optional activities, such as standing, sitting, watching, taking a leisurely walk or lingering only occur when the environmental conditions are optimal; and social activities such children playing, greeting, conversation between public for a long time are a result of a high level of optional activities requiring a high environmental quality. High significance of urban public spaces not only depends on how these spaces work, used and favorable for users but also depends upon the public preference to spent maximum time in the spaces [12].

Accessibility

Accessibility is the key element of public realm. Carr et al. (1992) points out that “there three forms of access: visual, symbolic and physical” [8]. Visual access or visibility is defined when people can see into a space before they enter it so that they can judge whether they could feel comfortable, welcome and safe there; symbolic access can be animate or inanimate, for example individual or group perceived either as threatening, or as comforting or inviting, may affect entry into a public space; and physical access concerns whether the space is physically available to the public, physical exclusion is the inability to get into or to use the environment, regardless of whether or not it can be seen into.

Safety

Safety is often considered as the first concern in urban public spaces. The public could feel safe in the urban public spaces only when there is constant presence of people and ‘the number of effective eyes on the public spaces’, this surveillance can be enhanced by diversity of activities and functions [12]. Perkins (1993) mentioned that “people perceived public space to be safer where there was a presence of stores and other non-residential properties” [14]. Newman put forward that the presence of people increases the perception of safety [15]. Jacobs (1961) identified that “stores, restaurants as basic components of surveillance and safety” [13]. Therefore, in the context of public space,

safety is a person’s ability to feel safe from the social and physical factors—from crime and traffic.

3. Theoretical Framework

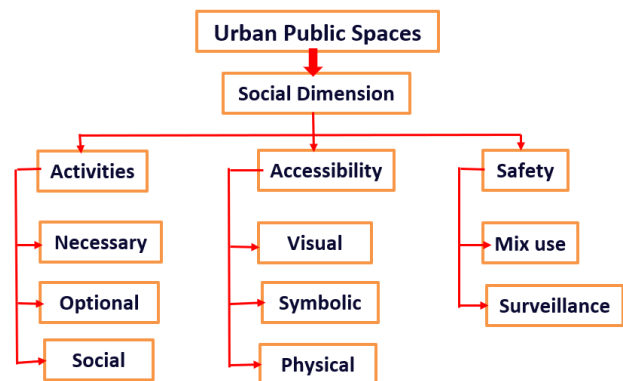


Figure 1

4. Methodology

This research takes qualitative as well as quantitative approach and utilizes a case study strategy within the post positivist paradigm to study the urban public spaces in Bhaktapur city core. Observation was carried out at site for quantitative method while for the qualitative method, photographs and maps were studied. Literature review of urban public spaces was carried out to evaluate good urban spaces through social dimension perspective.

5. Site Study

Golmadhi is an important historical area of Bhaktapur city core. Different land revenue papers of the Malla period mention the tole name of Sivagalsthan. The history of Golmadhi has records of 7th century. The use of the word Makhopring sattal dranga (pringa and dranga are the Lichchhavi names of a place) in the wall of Gahiti shows that the area is the central part of the town at the Lichchhavi period. [16].

Activities

Activities mapping, through observation was carried out in the sites of Golmadhi during different time periods at 7am in the morning, 2pm in the afternoon and at 7pm in the evening in week days and weekends in order to determine the differences of activities and users in the specific time period. The site was observed for 10 minutes in each observation period.

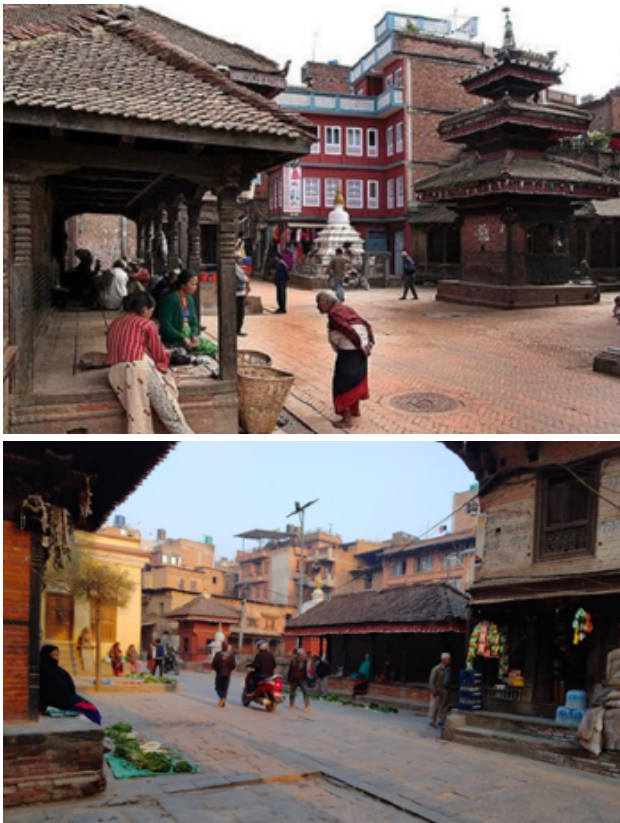


Figure 2: Urban public space at Golmadhi

The age of users performing different activities are also categorized as child, young or adult, middle-aged and elderly. During observations in the site, activities conducted were noted through different symbols on the plan sheet that reflected the current status in the study area. Photographs were also taken to reflect usage of spaces on each day of observation.

The use of the space in the neighborhood square of Golmadhi can be categorized into necessary activities which include going to school or to work, shopping, waiting for a person as These activities take place throughout the year in any conditions and are independent of the exterior environment. Similarly, Optional activities observed include sitting in the pati, plinths, vendor shops, worshipping in chaityas and temples. These activities occur only when exterior conditions are favorable and when weather and place invite the users. These activities are dependent on exterior physical conditions. Finally, Social activities observed include those activities that depend on the presence of others in public spaces like children at play, greetings and conversations. The activity mapping showed the use of nodes and junctions in maximum in morning and evening time.

Vendor shops are added in such places for the buying

and selling of fresh vegetables necessary for the daily consumption. Pati and plinth of temple are used by the locals as the resting spaces and places for interaction. Chaityas and temples can be seen worshipped by people during the morning and evening time.



Figure 3: Activity mapping at 7am in working day



Figure 4: Activity mapping at 2pm in working day

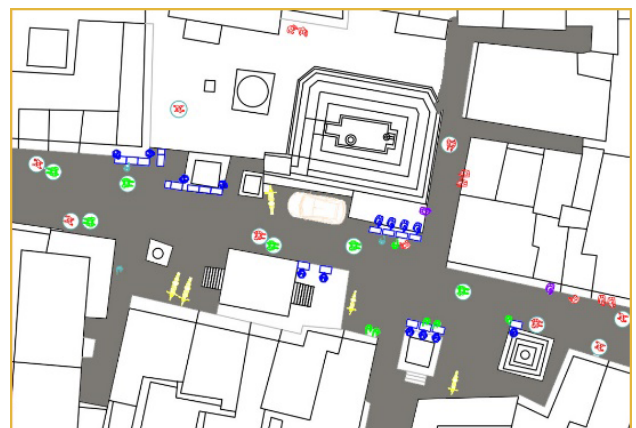


Figure 5: Activity mapping at 7pm in working day



Figure 6: Activity mapping at 7am in Saturday



Figure 7: Activity mapping at 2pm in Saturday



Figure 8: Activity mapping at 7pm in Saturday

It is observed that this square exhibit high quality public space because along with the necessary activities like walking, going to work, shopping wide range of optional and social activities of people (watching, standing, seeing, hearing, sitting, taking) tends to occur in high range.

Accessibility

Golmadhi Square is about 24m x 22m. It can be approached from five streets – from Chandeshwori, Inacho, Sukuldhoka, Chorchha, and Yachhen. Three small squares are available in this neighborhood square adjoining to be a larger neighborhood square where different communities are involved in the jatras and processions occurring there. Two squares are located to the left and one is located right of the main street. Thus, the square has physical, visual and symbolic access.

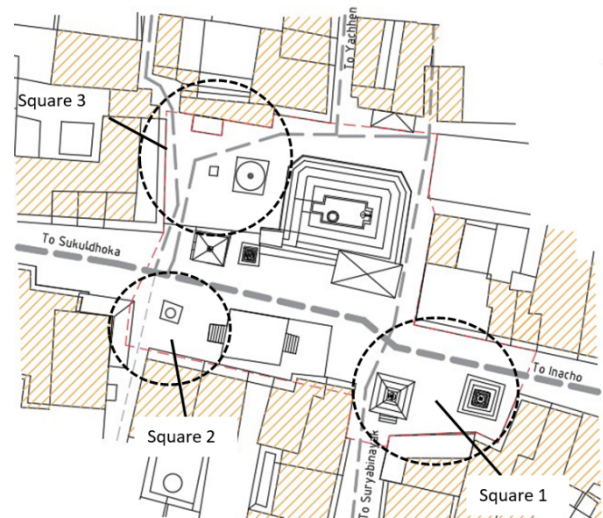


Figure 9: Movement pattern and squares in Golmadhi Square

Safety

Through the observation of the site and interview taken, a feeling of safety is achieved in this place due to presence of people. Similarly, surveillance is also achieved as there are diversity of activities and functions.

6. Conclusion

This paper has outlined a method to empirically evaluate urban public open space. By providing a clear outline of the social dimensions and important variables of activities, safety and accessibility, the study will be useful to design new urban public spaces to improve the quality of space through providing opportunities of outdoor activities of varied categories, multiple accesses and safety from social and physical factors.

Acknowledgments

The authors acknowledge Ms. Rabina Shilpakar for the drawings, maps, photos and relevant information.

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