

TRANSFORMING SPACES INTO PLACES: PLACEMAKING OF TUDIKHEL

Navin Parajuli

ABSTRACT

In the process of planning and developing public spaces in cities, place-making is a people-centered approach. This approach considers the perspectives of the people who live in a given location in order to learn about their needs and goals for that location or particular space. In this research, both qualitative and quantitative methods are used to find out the perception of people towards Tudikhel. Data collected from questionnaire survey of the people under various categories around Tudikhel involves qualitative aspects of the research. Under quantitative approach, the key variables of the study are correlated with each other to find the strength of relationship between the variables. Finally, suitable conclusions are reached regarding strategies including elements and activities of placemaking at Tudikhel. Hence this study emphasizes in restoring of Tudikhel back to 'place' in the contemporary urban context using the activities and elements of placemaking, to ensure the sustainability of Tudikhel as a national public space of Nepal.

Keywords: Space, Place, Place attachment, Placemaking

1. INTRODUCTION

Urbanization is a global phenomenon that has changed people-environment interactions dramatically in recent decades and is projected to continue to be one of the primary drivers of global change in the future. More stringent building and land use rules are predicted to result in a change or loss of social pattern, leaving less alternatives to shape and appropriate the place, resulting in a diminishing sense of place. (Bruechecker, et al., 2020).

The Kathmandu Valley is one of South Asia's most densely populated and fastest-growing urban agglomerations. (Muzzini, 2013). The Kathmandu Valley is home to 24% of the total urban population in Nepal, with Kathmandu Metropolitan City accounting for 9.7%. The Kathmandu Valley has the biggest net intake of lifetime migrants, accounting for 36% of the valley's population. This is more than twice the net level of migration to any other urban region in Nepal (Bakrania, 2015). Hence, these data clearly indicate that the rate of urbanization for Kathmandu valley is very high. Accordingly, the pressures created by this high rate of urbanization will also be great on the public spaces, for eg. encroachment, pollution, mismanagement of spaces etc. Tudikhel is a major open space in the heart of Kathmandu city and is one of the largest public open space in Kathmandu. In the compact settlement of Kathmandu core city, this public space has a great importance for public, socially, culturally or environmentally. It is used by the communities for various festivals and activities such as Ghode jatra, Lhosar etc. Since history, Tudikhel has been a symbol of democracy for Nepalese public, and one of the most important public spaces for Kathmandu valley (Kayastha, 2017).

Tudikhel is a public space that is and was used for celebration of various festivals and activities by the Newari community and other communities of Kathmandu Valley since history. Tudikhel is a national public space, a place for various processions and public assemblies. However, the net land area of Tudikhel has been shrinking through time for various purposes, but purposes that do not benefit the public. (Kayastha, 2017). This constant shrinking can be attributed to weak government practices and policies that are responsible towards its protection. Due to this, the cultural activities that once made

Tudikhel vibrant are now on the verge of collapse, along with the community belonging, attachment and sense of place that the communities around Kathmandu once associated with Tudikhel.

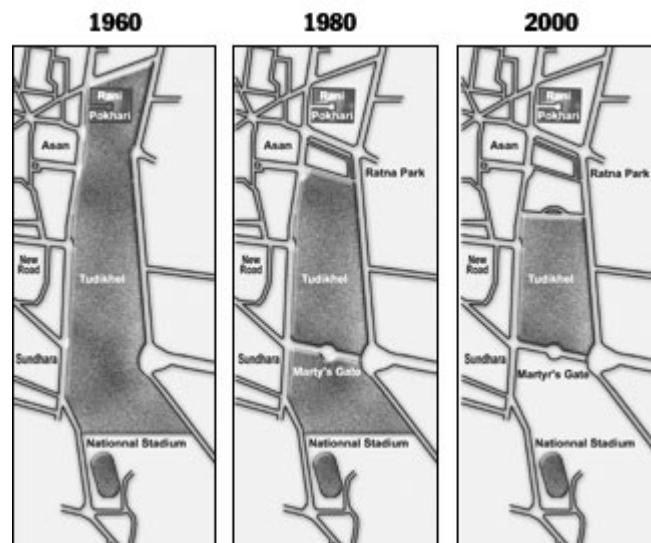


Fig. Physical transformation of Tudikhel

Tudikhel originally spreaded from Rani Pokhari to Dasarath Stadium. It measured two-three miles in length and about 300 yards in width, making it one of the Asia’s biggest parade ground at the time. With the passage of time, a number of transformations occurred in Tudikhel such as decrease in size, change in activity, change in sense of belongingness, landuse etc. At present, Tudikhel consists of Dasarath stadium, Army Club, Shahid gate, Khulamanch, Ratnapark and Rani Pokhari. So, the open space area of actual Tudikhel has decreased over time to make it diminished in size at present. Additionally, for the construction of Kathmandu view tower, the old buspark had been shifted to Khulamanch, thus diminishing the size of Khulamanch. Just recently, the buspark that was shifted to Khulamanch has been removed from that area. However, the preservation and maintainence of the space has not been done. The area covered by army club is totally restricted for public. It is also used for gaining profit, as it is occasionally rented as event area for wedding parties or other functions. That area is now controlled by government thus restricting the access of people and decreasing the publicness of the public space. Similarly, management committee of Ratnapark charge fees to the public on the entry to the park, so low-income population are excluded from the place which is actually public. The presence of buspark at Khullamanch has also diminished the size and value of the space, as the area is just used as parking. Currently, the buspark has also been removed. So, the various development and transformation works that were carried out changed the originality of the place. (Kayastha, 2017). Hence, once a historically and culturally important site, Tudikhel, is slowly losing the sense of place and its value due to political or other reasons, which has to be restored to renew a sense of community and public attachment.

2. LITERATURE REVIEW

In the process of planning and developing public places in cities, place-making is a people-centered approach. This approach considers the perspectives of the people who live in a given location in order to learn about their needs and goals for that location. The basic goal of adopting place-making in urban planning is to create locations where people feel connected. Landscape architects, architects, and urban planners coined the word in the 1970s to describe the process of designing squares, plazas,

parks, streets, and waterfronts that will attract people because they are delightful or fascinating. Placemaking is a multi-faceted approach to public space planning, design, and management. Placemaking aims to create public spaces that improve people's health, happiness, and well-being by using a community's assets, inspiration, and potential (Whyte, 1980). Placemaking is a method and a philosophy for implementing urban design concepts. The concept of placemaking dates back to the 1960s, when writers such as Jane Jacobs and William H. Whyte proposed ground-breaking ideas about how to construct cities that appeal to people rather than cars and shopping malls. The value of vibrant neighborhoods and welcoming public areas was emphasized in their work. Placemaking is a human-centered urban change process that aids in the strengthening of people's bonds with the places they share (Project for public spaces, 2015). "Placemaking" is a bottom-up, asset-based, person-centered strategy for improving the livability of towns and cities that promotes collaboration and community participation (Markusen, 2009).

Placemaking's "revitalization" attempts usually focus on beautifying, cleaning, and rejuvenating public places in order to promote development and attract investment, while ignoring economic and racial inequality factors (Bedoya, 2013). Placemaking include efforts that attend to inequities and work to promote social justice by disrupting systems of domination and creating public places that are accessible and inclusive, plural, and participatory. In the 90s placemakers started realizing the role of art and culture in rejuvenating public places. The practice of placemaking has also been influenced by globalisation. Standardized landscaping and applying what designers refer to as best practice to diverse sites without incorporating local knowledge or involving local people has resulted in a loss in the sense of place and social capital in metropolitan settings in most placemaking projects (Arefi, et al., 2005). The technique, model, or policy associated with a well-known set of benchmarks has been adapted to another context in order to attain the same results (Beza, 2016). The social context of the new environment is frequently ignored throughout this transition, and the designer just transfers a set of designs focused on aesthetic consequences.

Placemaking is an assimilation of smaller goals to achieve the bigger ones (Project for public spaces, 2015). These goals do not have to physical designed spaces but can also be getting two new stakeholders on board and sit together to brainstorm. Smaller goals are easy to achieve, in smaller frame of time and limited budgets – lighter, quicker, and cheaper (Project for Public Spaces). Achieving smaller goals can also create a domino effect and help to increase the network and outreach (Rondon, 2017) generate interest among the naysayers or Nimbyists, accelerate funding, improve faith with the participating agencies and funding sources, and encourage future funding opportunities. These smaller steps get easily tested, and if necessary refined or reverted or modified. Unlike other planning and design processes, placemaking doesn't have a fixed set of strategies or procedures (Rondon, 2017). It acknowledges every community to be unique, with different political systems, socio-cultural and economic dynamics, and concerns. These differences are the strengths for a placemaking process. A successful placemaking process can assimilate these differences. It may not solve all issues, but, if done in the right way, it has the potential to address the concerns of the community in a collaborative manner (Behera, 2017).

3. METHODOLOGY

This research is 'exploratory' in nature. An exploratory research explores the reality to be familiar with the social, cultural, economic and other dimensions. In this research, placemaking is a central concept, and exploration of reality of Tudikhel through the past till present is done within the context of placemaking. This research is situated in 'Post-positive' paradigm of research. The ontology

behind a post-positive paradigm believes that reality is “real”, but only imperfectly and probabilistically apprehendable. In this case, the needs and aspirations of public towards Tudikhel may not be the same after a significant number of years. The methodology involved behind a post-positive paradigm is modified experimental, which means that it may involve both quantitative and qualitative approaches, as opposed to positive paradigm which involves only quantitative approach.

Calculation of sample size

For the calculation of Sample size for both Tudikhel and Sallaghari Tinkune space, firstly, the sample population was determined. For Tudikhel, the sample population was taken as the whole country’s population, as people from all over Nepal may visit the space being a national level public space. For calculating the required sample size, Raosoft tool was used. This tool employs the following formula for calculation of sample size. The sample size n and margin of error E are given by

$$x = Z(c/100) 2r (100-r)$$

$$n = N x / ((N-1)E^2 + x)$$

$$E = \text{Sqrt} [(N - n)x/n(N-1)],$$

where N is the sample population, r is the fraction of responses, and Z(c/100) is the critical value for the confidence level c. In case of Tudikhel as it is a National public space, national boundary was taken because people from all over Nepal visit Tudikhel. For Tudikhel, the margin of error E was taken as 5%, the confidence level was taken as 95% with an expected response distribution of 90% for the population size N of Nepal (2011 census) is 2,64,94,504. In this way, the sample size for survey was calculated to be 139 samples.

Raosoft	
What margin of error can you accept? <small>5% is a common choice</small>	5 %
What confidence level do you need? <small>Typical choices are 90%, 95%, or 99%</small>	95 %
What is the population size? <small>If you don't know, use 20000</small>	26494504
What is the response distribution? <small>Leave this as 50%</small>	90 %
Your recommended sample size is	139

Figure. Tudikhel’s sample size calculation using Raosoft software

Result and Discussion

In the survey, a total of 95 males and 44 females were sampled. For only the people visiting Tudikhel category, almost 80% of the samples were male population. This denotes that the female visitors to Tudikhel are in minority. Lack of women friendly infrastructures (or even basic services and infrastructures) inside Tudikhel might be an important factor behind such minimum number of women visitors to Tudikhel.

Table 4. Number of people in all three categories surveyed around Tudikhel by Gender

	Male	Female	Total
People visiting the space	59	15	74
People from Businesses around Tudikhel	21	9	30
People from Households around Tudikhel	15	20	35
TOTAL	95	44	139

Around 60% of the Sampled Households around Tudikhel consisted of Newars. This representation of Newari population among the households around Tudikhel might be because the surveyed areas around Tudikhel like Sundhara, Newroad, Asan, Bhotebahal etc. consist of large number of Newari population since Malla period in Nepal till now. On the other hand, for the people visiting the space and people belonging to local businesses, the respondents belonged to different ethnicities and came to visit Tudikhel from all over Kathmandu Valley, chiefly for recreational purposes.

Table 5. Number of people in all three categories surveyed around Tudikhel by Ethnicity

Ethnicity	People visiting the space	People from Local Businesses	People from Households
Newar	11	7	21
Brahmin	15	5	5
Chhettri	13	6	3
Madhesi	14	6	1
Marwadi	0	1	3
Tamang	4	0	0
Gurung	4	1	0
Rai	5	1	0
Sherpa	0	0	1
Magar	2	2	0
Other	6	1	1
TOTAL	74	30	35

After responses from all three categories of respondents were collected by gender and ethnicity, these responses were added together to get an overall glimpse of the public attachment towards Tudikhel.

Public attachment towards Tudikhel = People visiting (all over the valley) + People from Households (within 250m) + People from local businesses (within 250m)

The questions from the questionnaire were transformed into variables of this study by giving appropriate variable labels. Some of these variables were discussed in the methodology section. These independent variables were correlated with each other to determine the level of significance between them, in order to understand the inter-relationship between these variables. The correlation was carried out in SPSS software. The correlation coefficients with the level of significance of 1% and 5% between the variables were only considered as meaningful output of relationship between the variables.

Many significant relationships regarding the public perception towards Tudikhel were found in this research. From the responses of the households around Tudikhel, the relationship between the variables “Satisfaction towards the space” to both “Willingness to contribute in cultural/non-cultural activities” and “Willingness to contribute in community level programs for improving the quality of space” was found to have strong negative correlation. This means that the people from the immediate community around Tudikhel were not satisfied with the space, but nevertheless were willing to contribute to the future cultural, non-cultural and community level programs inside the space. For the local businesses around Tudikhel, strong positive correlations were found between “Frequency of visit” with the variables “Willingness to contribute in community level programs for improving the quality of space” and “Interest for opening up vendor stalls (if allowed) inside the space”. This means that for businesses owners who go inside the space frequently, the willingness to contribute in community level programs inside the space, as well as the interest to open their own vendor stalls inside the space was high. When taking sum of all three categories to understand overall public attachment, the relationship between “Age” and “Frequency of visit” variables had negative correlation which was found significant within 1% significance level. The strong negative correlation indicated that people with lower age overall tend to visit the space more often. The correlations between variables with “age” also showed strong negative correlations. This meant that lower age public were willing to contribute towards placemaking activities in Tudikhel in the future, which may involve various kinds of cultural, non cultural and community level activities. Other variables also had strong negative correlations with age, for example, between “age” and “Satisfaction with quality of public space”. It can be inferred from the correlations that as the age progressed, the satisfaction with the quality of space has decreased. Hence, older age users from the survey did not find the quality of public space inside Tudikhel to be satisfactory.

However, many other variables showed positive correlations with these two variables of “Willingness to contribute in cultural/non-cultural activities” and “Willingness to contribute in community level programs for improving the quality of space”. These variables were “Frequency of visits”, “Satisfaction with level of infrastructures and facilities” and “Previous participation in space activities”. It means that people that visited the space more often were more willing to contribute towards various space activities in the future. Also, the people who were satisfied with the level of infrastructures and facilities of Tudikhel were more likely to contribute in the space activities in the future. Finally, previous participation in activities in Tudikhel also indicated that the same people have higher probability of participating and contributing towards space activities in the future. When the total of respondents were asked “What activities do you want to see get added to Tudikhel?”, 24%

of the respondents answered ‘walking and running areas’ followed by 23% who responded ‘sports play multipurpose area for adults’. This indicates that a majority of people visiting and living/working around Tudikhel feel the importance of the space for playing, running and other activities associated to physical fitness. When the respondents were asked, “How do you like to imagine this ground in the future?”, 30% of the respondents answered ‘playing ground with some recreational space’ followed by 25% of the respondents who answered ‘a place where cultural/ non cultural programs of the community take place’. This indicates that both the activities and future vision of the space of Tudikhel by the public involves playing ground or playing areas. Additionally, the areas inside Tudikhel for cultural/ non cultural/ community level programs also seem to be a very crucial element to be incorporated for successful placemaking of Tudikhel.

The activities that happen inside Tudikhel on a regular basis includes (i) Playing (ii) Running and exercise (iii) Yoga (iv) Sitting and relaxing. Many different festivals are celebrated inside around the year like Ghodejatra, Lhosar, Shivaratri, Holi and Republic day. Some cultural rituals of Newars like “Bhoot panchaune” ritual and Kul puja are also celebrated inside few times a year.

The area of Tudikhel has been constantly shrinking through time. It has diminished from 50 ha area to 7 ha in a span of 70 years, which is 14% of its original size. Hence the variable, “sense of objection”, signified the intensity of objection of the public in a hypothetical scenario where Nepal Army or the Government further tries to encroach upon the remaining area of Tudikhel. The correlation results indicated strong positive correlations between “sense of objection” and willingness of people to contribute in cultural/non cultural/community-level. This means that people who have objection towards encroachment also have a willingness to contribute towards space activities. The correlations also indicated strong positive relationship between satisfaction with infrastructures and quality of space and “sense of objection”. It means that people who are already satisfied with the space tend to step forward for the protection of the space in times of further encroachment activities by the government. This indicates that it is essential to raise the satisfaction of the general public towards Tudikhel to install a sense of protection and attachment towards the space.

Table. Correlation analysis between independent variables of study

	Frequency of visits	Perception of losing sense of place	How do you like the space in terms of following factors? Ordinary to Memorable	Satisfaction with infrastructures and facilities	Previous participation in space activities	I am willing to contribute and participate in the cultural activities and programs happening inside space in the future.	I am willing to contribute and participate in the community level program to improve the space	Satisfaction with quality of public space	Sense of protection
Age	-.413**	-0.115	-0.147	-.429**	-0.015	-.339**	-.287**	-.293**	-0.161
Frequency of visits	1	.170*	0.132	0.131	0.087	.256**	.228**	0.010	-0.113
Perception of losing sense of place		1	.183*	0.141	0.124	.259**	.254**	-0.058	0.085
How do you like the space in terms of following factors? Ordinary to Memorable			1	.317**	0.122	.349**	.379**	.191*	0.050
Satisfaction with infrastructures and facilities				1	0.063	.445**	.438**	.395**	.233**
Previous participation in space activities					1	.425**	.433**	-0.152	0.011
Willingness to contribute and participate in the cultural/non cultural activities and programs happening inside space						1	.952**	0.103	.309**
Willingness to contribute and participate in the community level programs to improve the space							1	0.087	.273**
Satisfaction with quality of public space								1	.254**

** Correlation is significant at the 0.01 level (2-tailed).

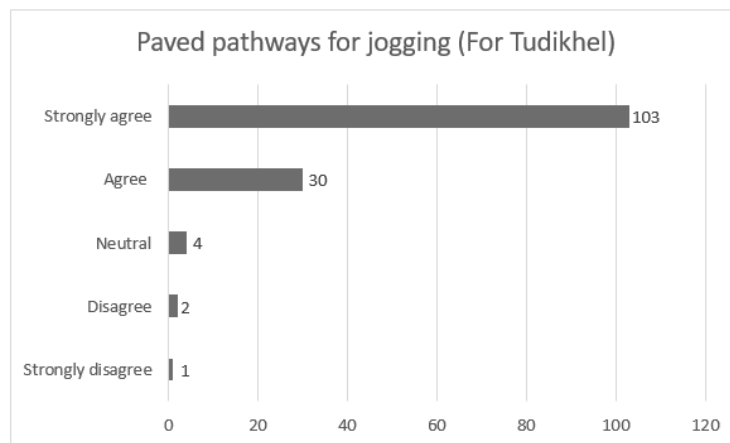
* Correlation is significant at the 0.05 level (2-tailed).

4. FINDINGS FROM OPINION SURVEY

From literature review and case study undertaken for this research, some elements that are utmost for basic functional requirements for a space to support placemaking of a space are listed below. These elements ensure pedestrian flow in a space, create areas where people are attracted to and enhance the functionality and safety inside the space. These elements in conjunction with place meanings must be embedded in the residents for successful placemaking.

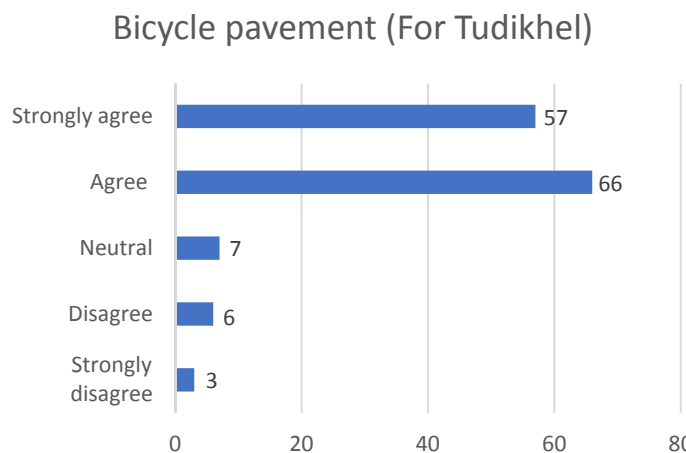
(i) Paved footpaths and jogging track

From the literature, it can be inferred that if the length of footpath increases by 10 m, the number of visitors in the area is expected to increase by 7 (Chen & Liu, 2016). Various activities like walking, jogging etc can be performed in the paved footpath. Hence the presence of paved footpath is an important requirement in place design. In the survey, 103 out of 139 respondents strongly agreed that “Paved pathways for jogging” should be installed inside Tudikhel.



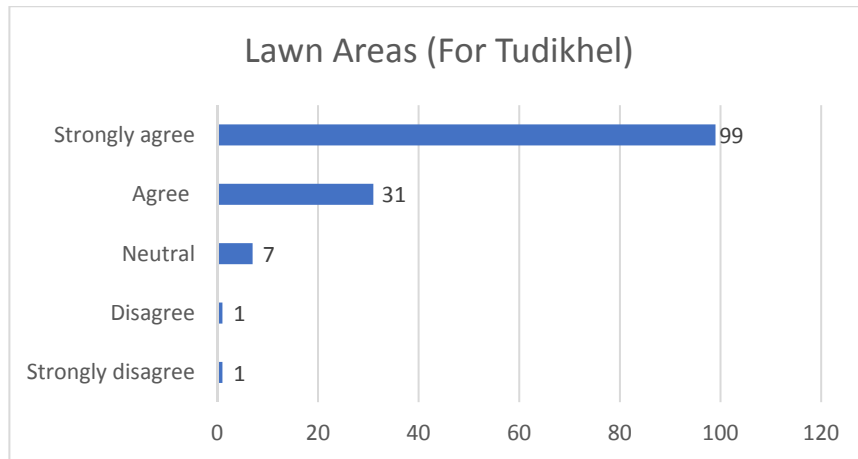
(ii) Bicycle pavements

Due to the presence of pavement for bicycle riding, it attracts children and teenagers the most, as well as all other age groups. In the opinion survey, 66 out of 139 people agreed that “bicycle pavement” is required for Tudikhel. Hence pavement for bicycle riding is also a crucial element supporting an equally important activity towards placemaking from the results of the survey.



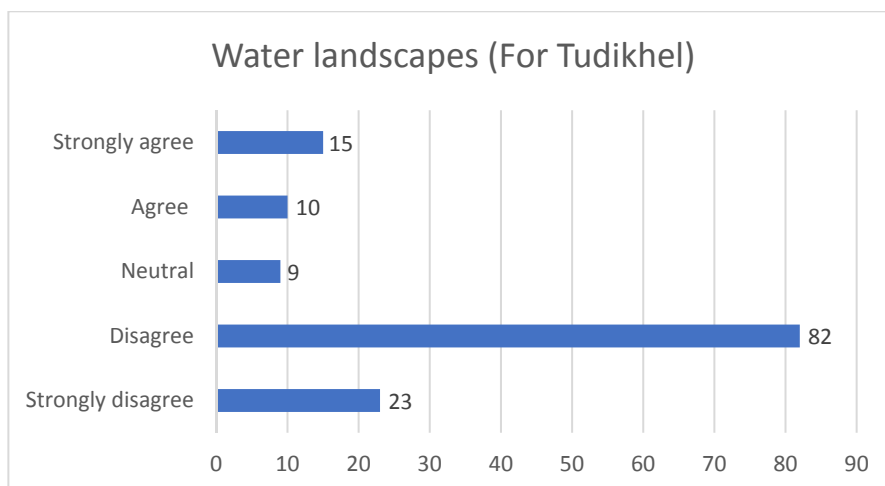
(iii) Lawn area

When the lawn area increases by 100 sq. m, the number of visitors in this area is expected to increase by 4 and 9 during weekdays and weekends, respectively (Chen & Liu, 2016). This means that the lawn area plays a crucial role in design of public spaces. The lawn area can be used by the people for sitting and relaxing. Provision of benches can also be accommodated in small number in the lawn area. These areas can also contain few children playing equipments temporarily installed. If permanently installed, they should be in conjunction with place design of the overall area. In the opinion survey, 99 out 139 people strongly agreed that “lawn areas” for sitting and relaxation is required for Tudikhel.



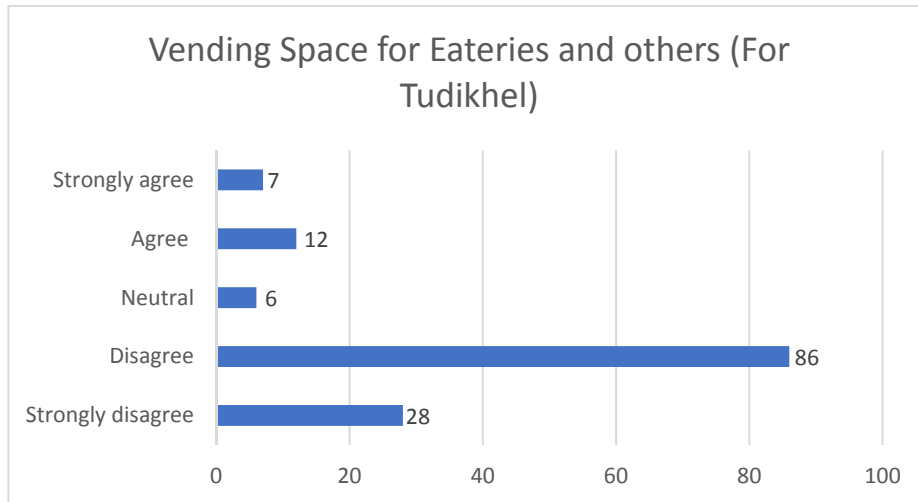
(iv) Water landscapes

Each increase in water landscapes is expected to attract 73 and 88 visitors to stay on weekdays and weekends, respectively (Chen & Liu, 2016). Water landscapes mainly include lakes, pools, fountains etc. In the opinion survey, 82 out 139 people disagreed that “water landscapes” is required for Tudikhel. This may also be because the people visiting Tudikhel want the space open for multi-purpose use.



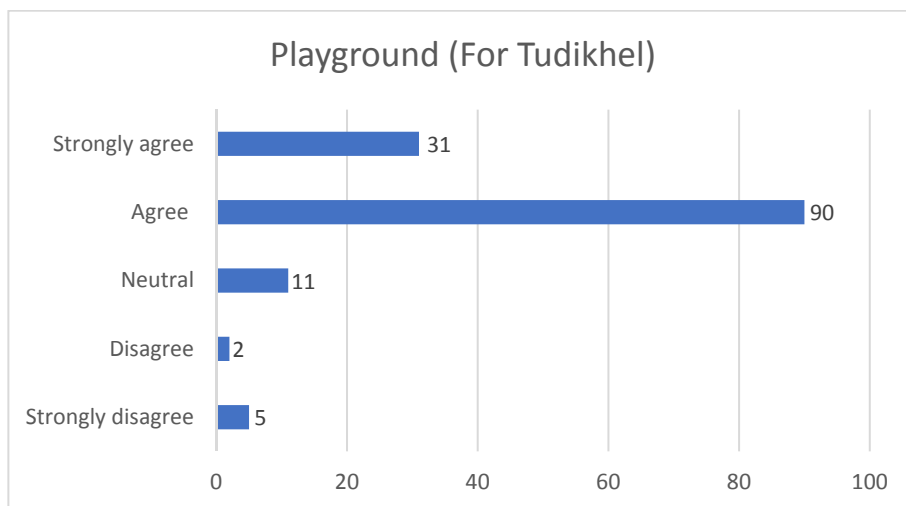
(v) Vending space (For Eateries and other Commercial facilities)

The presence of eating areas in the form of vendor stalls has been known to attract people. The addition of one commercial facility is expected to attract 4-10 additional visitors to play in an area on weekdays and weekends, respectively. For example- eateries in front of Bhatbhateni supermarket, Durbar squares etc. Street vending space should be allocated to make the spaces lively with people. However, in the opinion survey, 86 out 139 people disagreed that “vending space for eateries and other commercial facilities” is required for Tudikhel.



(vii) Playground

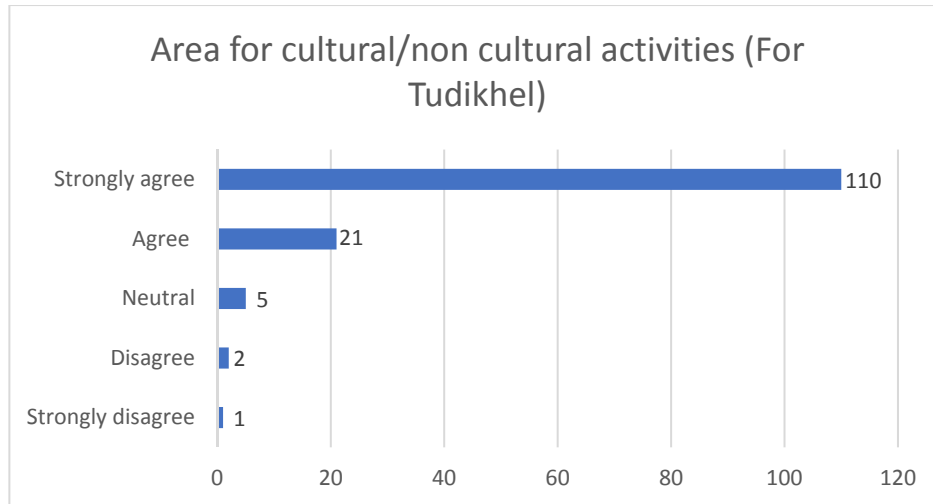
The presence of playing areas is a crucial requirement to placemaking of Tudikhel. In Tudikhel, games like football, cricket, volleyball etc. are played mostly during weekends in the morning and evening time. Hence, the sports area in both Tudikhel and Sallaghari-Tinkune can be designed to accommodate sports multipurpose area for both children and adults. In the opinion survey, 90 out 139 people strongly agreed that “playground” for playing various games like football, cricket, volleyball, badminton etc is required at Tudikhel.



(viii) Area for cultural/non cultural activities

In the placemaking of Tudikhel, multipurpose areas for showcasing local/community/cultural dance, performances and exhibits can be allocated. Common areas for hosting community events, celebrating

festivals like Holi, Dashain etc. can also be allocated for bringing the community together. In case of Tudikhel, a common open multipurpose area may be designed in the centre for playing and for performing cultural/non cultural activities, along with the side tracks for jogging and cycling. In the opinion survey, 110 out 139 people strongly agreed that “areas for exhibits and performances” for conducting various cultural/non cultural programmes is required for Tudikhel.



Suggestion and recommendation

Placemaking had been taking place at Tudikhel from History, as placemaking is a continuous process. However, due to the negligence of government authorities in realizing the need to conserve this national public space, the physical area of Tudikhel had been encroached time and again. This has resulted a loss of attachment of the public towards Tudikhel as many cultural/ non cultural activities of the people belonging to different ethnicities have been severely reduced. This can be confirmed from the correlation analysis in this study that the people visiting Tudikhel perceived that Tudikhel is losing sense of place. However, the willingness to contribute to space activities among these people was high. Also, for people who participated in previous activities at Tudikhel, the willingness to contribute was found high. Thus, participatory activities on a public level like tree plantation, cleaning etc. inside Tudikhel can be conducted at government or non-government level to promote participation and eventually to instill a sense of contribution towards Tudikhel among the public. Finally, the recommended elements of placemaking for Tudikhel from this study should include, (i) Paved footpath for jogging (ii) Bicycle pavement (iii) Lawn areas (iv) Playground (v) Area for exhibits and performances.

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