

Socio-cultural and Physical Transformation of Religious Squares in Kathmandu: A Case of Lakhe Nani

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Abstract

Abstract The role of religious squares in traditional residential neighborhoods, their physical form and character and their use perceived by people carries great importance. Supporting the distinctive individual use and character of religious squares and the identification with traditional neighborhoods is fundamental. Religious squares carry great social significance in that sense. Residents identify themselves with the residential neighborhood they live in via arrangement of physical spaces and their use. Socially active spaces is also an important determinant to identify the use value of religious squares. Quality of public spaces, including religious squares are significant to conserve historical, cultural and religious values of the place. The cultural surroundings and the feeling of belonging to a specific place represent another significant dimension. Religious squares are understood as open spaces which function as a cultural space that exhibit many activities and events that transforms as per the changing precedence of the users, neighborhood and the nation as a whole. Every square possesses distinct physical and socio-cultural traits that distinguish it from others, stemming from its connection to the socio-cultural values.

The research concentrates on evaluating and analyzing the religious square, Lakhe Nani in Kathmandu, with a focus on its socio-cultural utilization and the transformation of the physical and architectural features of the adjacent significant building/s, particularly Lakhe Ghar. The findings indicate that for traditional religious squares to function successfully as open spaces, it is crucial to incorporate a diverse range of activities that significantly attract and engage people, such that the religious squares become constantly used at all times of the day. Continuous and consistent usage is achieved through daily maintenance, and the presence of various functions around the square enhances vitality, benefiting both the square and visitors visiting the religious square and building.

Keywords

Religious Square, Nani, Socio-cultural use, Transformation, Cultural heritage

1. Introduction

There exists a strong relation between traditional spaces and society, encompassing both the physical and socio-cultural aspects. Various types of traditional spaces are linked to the specific activities of diverse social groups. The use value of public spaces is guided by the form and vice-versa. If the open spaces remain unused, the space will lack vitality in its physical form. Challenges such as disorganized parking and lack of timely maintenance diminish the usability and appeal of these spaces. Highly functioning, well-defined public spaces are essential for supporting visitor flow in any public space. There is a strong relationship between people and space, which is encapsulated in the idea that people create the space that they live in, and simultaneously the space they live in create them. While creating or conserving public spaces, the essentiality of human activities need to be considered to foster the use value of the public space, which eventually fosters the form value too [1].

The transformation in the public spaces of Kathmandu is seen to be prominent in the past decades. The traditional neighborhoods has not been able to dodge the forces of urban changes [2]. Notably, we can see that the neighborhoods in the valley today display a high-density inhabiting the neighborhood supportive of the compact settlements found in traditional towns. The traditional towns significantly comprise of open courtyard planning, giving way to Bahas, Bahis,

Chowks in the form of religious squares in the valley. Beyond physical changes in the structure, materials and facade of the religious squares and religious buildings in the valley, various socio-cultural and demographic changes are also evident in the religious squares and courtyards within the valley [3], referring to it as the 'transformation' of religious squares.

The Kathmandu Valley has long been renowned in Nepal for its courtyard planned religious squares. Particularly, the old settlements in Kathmandu, Lalitpur and Bhaktapur are considered representative or archetypical of the medieval period architecture. The Kathmandu Valley stands out for its notable religious squares and courtyards, which not only define the valley's identity but also contribute to the maintenance of everyday life. A distinctive feature of these traditional settlements and squares is the design and purpose of open spaces; both public and private areas are shaped by socio-cultural and religious influences [3].

2. Objectives

The main objective of this research is to study and analyze the physical transformation over time and the socio-cultural uses of the religious square and adjacent significant building. It aims at studying the religious square of Lakhe Nani at Kathmandu and the adjacent significant religious building, Lakhe Ghar of Kathmandu. The research also aims at

documenting the tangible and intangible architectural aspects of the case areas. To accomplish the purpose of this study, the following research question is analyzed. What are the socio-cultural uses of the Lakhe Nani and physical transformations that have occurred in the Lakhe Nani? The findings of this study could be useful to researchers, architects and conservationists for the conservation of the research area.

3. Research Methodology

The research topic, “Socio-cultural and Physical Transformation of Religious Squares in Kathmandu Valley: Cases of Kumari Bahal and Lakhe Nani” to be discussed is within social dimension and deals with a more subjective form of information collection and analysis; hence the and the physical transformation of the spatial system, i.e. social use/ activities in religious squares and physical transformation in traditional neighborhood, and its socially constructed reality require practical approach to the problems and solutions, and hence belongs to pragmatic paradigm.

This research pre-dominantly employs a qualitative approach and adopts a case study strategy to explore the evolving uses of the neighborhood squares within traditional residential areas. The case study constitutes a significant component of data collection for this research. Before this phase, an examination of public spaces in traditional residential neighborhoods was carried out using secondary data sources, primarily archives. Additionally, firsthand observations of the residential squares were conducted to complement and validate the information obtained from secondary sources, ensuring the credibility of the research data to be found. The review was done to comprehend the physical and socio-cultural characteristics of religious squares. The data collection tools like, semi-structured and open-ended interview, direct on-site observation, discussions with stakeholders and review of available documents of and regarding the religious square, Lakhe Nani has been adopted to explore its physical transformation and socio-cultural uses. Since the research essentially requires members of a particular community to participate for their knowledge on the residential square they are living in, the research shall undertake ethnographic approach for data collection.

The study employed research methods such as: a) surveys (Household Survey - HHS, Public Space User Survey - PSUS); b) interview with professionals; c) observations; and d) secondary data sources. The researcher surveyed 14

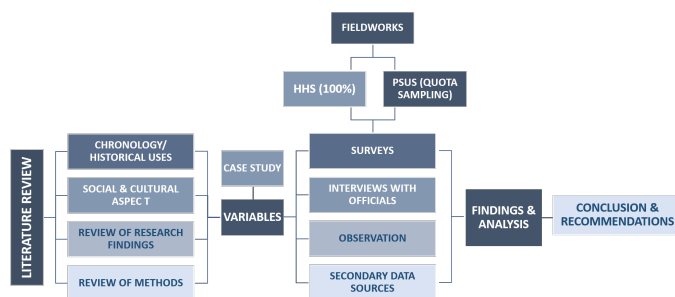


Figure 1: Schematic framework of the methodology adopted for the study

households in total from Lakhe Nani as part of HHS, i.e. no sampling was done as the Nani consisted of 14 households only. Whereas, 15 people/visitors were surveyed in total from the case area for PSUS undertaking quota sampling including visitors of all ages, gender, caste and religion. The interview with professionals included interviews with Architect and Conservationist Ar. Amit Bajracharya, Journalist Kumar Ranjit and Architect and Conservationist Ar. Shova Maharjan.

4. Scope and Limitations

The scope of study is to understand the utilizations of religious squares: Kumari Bahal and Lakhe Nani and identify the socio-cultural uses, while being familiarized with the physical transformations over time of the Kumari Ghar and Lakhe Ghar. The study shall focus on how these religious squares are changing through time and its changing uses due to change in social aspects. The study will be carried out in traditional residential neighborhood of Lakhe Nani of Kathmandu and Kumari Bahal of Kathmandu.

The study is limited to the religious squares catering to the Kumari Bahal and Lakhe Nani of Kathmandu; the religious, cultural and social nodes accessible to everyone and the change in socio-cultural activities and physical transformation within these squares and nodes. The research is based on the site study, literature review on different documents associated to traditional residential neighborhood principles and doctrines, articles relating the religious squares.

5. Study Area

Lakhe Nani is a residential neighborhood located in ward no. 20 at the heart of Kathmandu Metropolitan City (KMC). It is located 4 km towards the south – west of the city core of Kathmandu, and 6.5 km towards the north of the city core of Lalitpur. It is encircled by houses on all 4 sides. The nearby periphery includes Hanuman Dhoka Durbar Square, Bhimsensthan and Jaisedegal Temple. Because the Lakhe Nani is a small neighborhood, with only 14 households surrounding the courtyard, it was considered apt to carry out the Household Survey (HHS) in all the households, alongside Public Space User Survey (PSUS) for the visitors and other users of the space.

The impact of socio-cultural uses involved in this residential

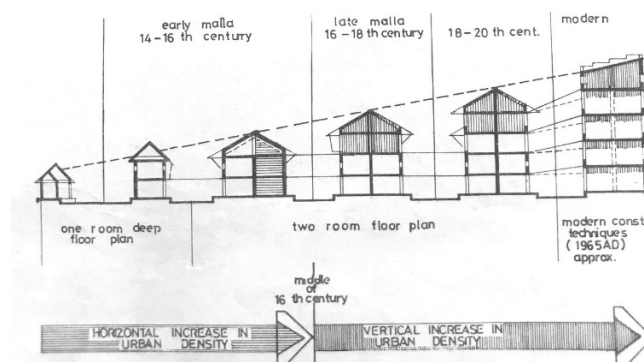


Figure 2: Location map of Lakhe Nani, Kathmandu

square, Lakhe Nani is more vibrant as compared to other residential squares due to the presence of Lakhe Chhen (Lakhe Ghar). And the implication of such vibrancy has direct effect on the usage of open community space due to ethnic social behavior. Hence, this religious residential square is chosen as the case for data collection.

6. Literature Review

6.1 Introduction to Squares

A square is a space defined by buildings and intended to showcase its architectural structures most effectively. Squares can be categorized based on function and form [4]. In many recent plaza designs, there are instances where one of these equally significant criteria for effective square has been overlooked.

Small, private spaces surrounded by two to three-story sloped-roof buildings define residential squares. The buildings that surround these courts are mostly residential, though some that have direct access to the road may contain businesses. These courtyards are connected by narrow alleys that eventually lead to larger community or palace squares or main streets. With their central green areas and public facilities like water spigots, rest areas, and temples, these squares function as autonomous, fully fledged social entities. Numerous residential squares, referred to locally as "Chowks," are interwoven into the densely packed structure of larger neighborhoods in traditional cities. These religious residential squares have traditionally functioned as intimate, private areas for members of the same caste or extended families. Locals use these courts for recreational purposes as well as for social events like marriage and other celebrations. [5].

There are many extended families in the Residential Neighborhood Square, most of them are from the same caste. Aside from its size, the square is visually distinct from the Private Residential square because it is intersected by more than two streets. In addition to displaying basic order nodal properties, this square is home to a few publicly owned religious structures, including temples and a sizable water feature. When the square is basically residential, the temple volumes do not dominate these squares and the element of surprise, changing visual axis, is barely there. Occasionally, the larger of these squares do not even create an enclosed space because the first order square's scale and arrangement are preserved by the height and treatment of the surrounding elevations [6]. Squares have pre-established notions of scale, symmetry and order.

6.2 Physical Transformation of Religious Nepalese Architecture

Discussions about transformation are pervasive, particularly in the context of societal changes, among other considerations. The term "transformation" carries various meanings, primarily indicating a specific kind of change, in form, nature or appearance [7].

As we navigate through the multitude of diverse and heterogeneous instances of transformation, various paradigms become evident, including change of shape

(metamorphosis), social change, lifestyle improvement and changes, textual changes and transfer [7].

There has only been very limited research done on the development of Nepalese Architecture, e.g. the typology of buildings and their change in style during the past centuries. This account likely draws from the records documented by Wang Hiuen-tse around the year 657 AD. According to this narrative, the Nepalese houses during that time were constructed from wood, featuring intricately carved and painted walls. The Nepalese were skilled artists in sculpture work, adorning their dwellings and the palaces with exceptional richness [8].

The second basis for the theory of a lack of stylistic changes is the supposition of a static society. A respect for tradition and the praxis of reconstruction of temples according to the original guidelines has prevented innovations and developments in style. The precondition of the increase of building height was the "vertical extension" of the "house of gods" from two to five storeys from the 14th - 18th century A.D. [8].

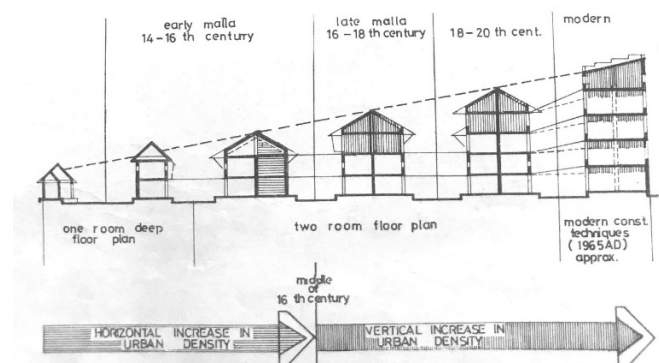


Figure 3: Transformation of building height in Traditional Nepalese Architecture (Source: Sturtzbecher, 1978)

6.3 Socio-cultural uses of Religious Squares

Religious squares not only serve a functional purpose but also plays a role in conveying the spiritual and cultural identity of a community. The design and symbolism incorporated into religious structures can carry deep meaning and contribute to the overall religious experience. The uses are also guided by the socio-cultural values deep rooted in the society.

Public spaces, including religious squares, were commemorated through a variety of celebrations and the addition of monuments to enhance their importance [9]. In Kathmandu, cultural events are an integral part of the yearly cycle. The deep social and cultural significance of these cultural practices has greatly influenced the structure of religious squares in traditional residential neighborhoods. During Indraajatra, for example, there is a chariot procession that goes through the periphery of several residential squares.

According to Prof. Dr. Sudarshan Raj Tiwari, the Durbar square, neighborhood courtyards, and the communal life philosophy of the Newar people all require far more space for interaction than was provided in the traditional Hindu town pattern. The historic town's structure and the communities around it were thoughtfully planned to support a variety of

cultural activities. These included customary events like communal feasts, ceremonial dances, and Jatra (chariot processions). The streets were designed with public processions in mind, with key stops placed at different public spaces such as residential squares and neighborhood squares. This made it possible for the occupants of particular houses or areas to pray as part of their ritual. The procession acted as a unifying factor, drawing people together, boosting overall event participation and fostering social interaction as it made its way through various neighborhood spaces. Later, the local population and culture became a minority due to the rapid in-migration. Soon, "local culture was considered old and irrelevant, not understanding that it had resulted from hundreds of years of interaction with natural ecology, local economy and social relationship" [10].

7. Research Findings

7.1 Socio-demographic Data

The Lakhe Nani comprises of 14 houses, where one member from each of the houses were surveyed. The socio-economic data of the population, residential status and their opinion on the neighborhood, residential square and its utilization were gathered through the interviews.

Findings from the HHS conducted in the 14 houses surrounding the Lakhe Nani reveal that the households are comprised of mostly Ranjitkar caste of the Newar community from within Kathmandu. However, the rental population belong to diverse ethnic groups with distinct caste backgrounds, primarily comprising of Brahmin, Newar, and Chhetri communities. Most families (85.7%) speak Newari language at home, with the remainder speaking Nepali language; and follow Hinduism (100%). The household heads of the Nani are engaged in business, media, journalism, education and service sector.

Results from the HHS (Household Survey) reveal that merely 62.3% of households in Lakhe Nani are homeowners, while the rest consist of rental properties. This implies that rental residences play a substantial role in the local residential population, with over half (59.6%) of households accommodating one or more families through renting.

7.2 Physical Features of Lakhe Nani

The neighborhood of the Lakhe Nani is tentatively a square shaped courtyard, measuring about 350m X 400m. Its physical form reveals spatial organization with the traditional blocks and streets developed passing through the courtyard. Consequently, the physical plan portrays a cohesive structure with clear and distinct boundaries. There are 14 residential blocks surrounding the Lakhe Nani, most of which are 3 to 4 storeyed.

Being placed in a courtyard, the orientation of these blocks are differing in nature. The Lakhe Nani is an open courtyard with a chaitya (known as the Chiba locally) in the center. The stone chaitya is made with Pancha Buddhas, also known as Five Buddhas, just like many other chaityas in the Nepal Mandal. A stone statue and a water spout are also located in the Lakhe Nani.

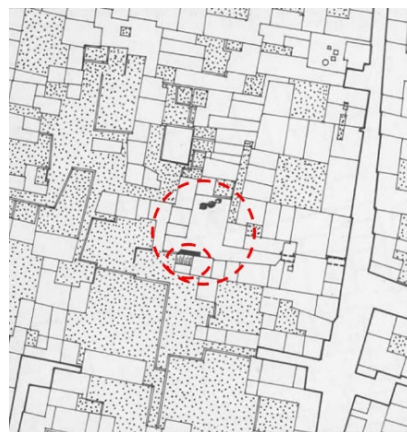


Figure 4: Drawing showing location of Lakhe Nani and Lakhe Chhen (Source: Pruscha, 1975)

7.3 Physical Transformation of Lakhe Ghar

Lakhe Chhen lies adjacent to Lakhe Nani - a small building that was crowded between two larger houses. It houses the Majipa Lakhe which is worshipped mainly by the Ranjitkar family and its chief festival is in Bhadrasukla-12 during Indrajaatra.

The residence was four storeyed, pre-dominantly made up of mud and brick. The residence inculcate wooden carved doors on the main entrance to the right. The house is a row house like every other building in the Lakhe Nani. Above the wooden main entrance was a lattice window on the first floor. The brick walls are whitewashed. A stone plinth was present. During the reconstruction of 2070 B.S., similar architectural details were followed. The brick walls were not whitewashed.



Figure 5: Lakhe Ghar

- a) before reconstruction [left (source:Ranjit, 2009)]
- b) after reconstruction [right (source: Research candidate)]

The building materials used are those used in our general Newari House of Kathmandu: stone, brick, wood, jhingati tiles and flooring tiles. Before, only sun-dried bricks were used, with little fire-burnt bricks and mud plaster was done and white-washed. Similar materials have been used, without the white-wash during reconstruction. The materials used inside are also same: brick, dalin, wood. Mud flooring was present before reconstruction; now, Telia tiles have been used.

The ground floor comprise of storage space, bedroom in the first floor and Majipa Lakhe of Kathmandu is housed in the

second floor, where visitors come for offerings and pujas, followed by Baigah (kitchen) in the top floor. The facade of the Lakhe Chhen is maintained to be consequently similar to that before reconstruction. Architect Bajracharya in the interview reveals that except for broadening the windows in the upper floors, no major change has been exhibited in the new building's windows. The gajur has been positioned exactly above the Aasan of the Lakhe during reconstruction, inhibiting Architecture semiotics. The Muldhoka and torana on the ground floor, Tiki Jhya on the first floor have been kept intact.



Figure 6: North and south elevations of Lakhe Chhen after reconstruction

According to the inscription, the reconstruction of Lakhe Chhen took place around 10 years ago. It says that the reconstruction started with the digging for laying foundation on Monday, Falgun 5, 2070 B.S. in the presence of Shatabdi Purush Dr. Satyamohan Joshi and members of Shree Lakhe Aaju Guthi. The religious building remains intact in its form since its reconstruction.

7.4 Socio-cultural uses of Lakhe Nani

To understand the continued and transformed uses of the religious square of Lakhe Nani, the users of the space were surveyed, dividing the users into primary users who are inhabited within the Nani and secondary users who visit the Nani. People are found socializing in the winter sun for warmth and during summer for shade in the Lakhe Nani. The residential square is also utilized for other household activities. The Lakhe Nani is inhabited by the Ranjitkars. The Nani was previously used by the ethnic group for dyeing of clothes. However, the use is seen to be diminishing in the present.

The Lakhe Nani was used by the locals for shelter during the earthquake of 2017 B.S. The conservation of the residential square is deemed important from a disaster shelter point of view. The prime utilization of the Nani is represented in the use of it during Indraajatra. Besides cultural celebrations, festivals and jstras, public feasts are also conducted in the Lakhe Nani. Lakhe Nani is exuberantly visited for the purpose of pujas and worshipping by the visitors near and around Kathmandu, most or all of whom are Newars, particularly from the Ranjitkar community. Since the Lakhe Chhen has limited space for puja, the puja preparations are also sorted in the ground floor of the residence or in the open public space of the residential square

itself. Lakhe Nani is also a path/ street as it is connected on two sides with streets. While social interactions between the household members usually occur in this courtyard, children are also seen to be playing in this residential square sometimes.

7.5 Intangible heritage of Lakhe Nani

Yenya Punhi or Indra Jatra is the main festival celebrated in the Lakhe Nani. The place is called "Yen" (Kathmandu), the month "Yenla" and the festival "Yenya" (Yen - Kathmandu, Ya - festival). It is a unique festival of different legends and different timelines coming together once a year to share common space and time. The Nani is a diverse culmination of melting pot of civilizations formed not by replacing a culture but by adding different flavours to create a unique tradition. Whether it be Indra's journey to Kathmandu, tradition of Pulkisi, legends of Majipa (Lakhe, different Devi and Bhairav Naach, Kumari and other rath yatra), Lakhe Nani is the common ground for all these culture and traditions to take place. Legends tell that the festival Indraajatra is the celebration of the unification of two villages: Thane and Kwane into a grand city, respecting and presenting traditions of both villages.

Lakhe dance is widely practiced in the Lakhe Nani and surrounding neighborhood during Indraajatra. The Lakhe stops at major crossroads and market squares, with Lakhe Nani being the most important square, to give a performance. The intangible heritage associated with Lakhe such as Lakhe dress and mask of the Lakhe are kept in the Lakhe Ghar.



Figure 7: Lakhe Naach and Jatra Feast taking place at Lakhe Nani and Lakhe Ghar (Source: Anishakya photography, 2020)

8. Data Analysis and Discussion

8.1 Physical Transformation

In any heritage conservation work, it is apt to not create changes in the building materials and construction technology as well as the overall aesthetic of the heritage building. Post-disaster, structural analysis of the building materials and building parts is important to negotiate any changes or retrofitting in the Lakhe Ghar, which should be done timely. Current data reveals that the renovation works were done very late after the disaster occurred. At past, the construction materials used for traditional buildings were

mud, brick (Dachi Appa), wood, Jhingati tiles binded together by mud mortar. At present, similar materials are used with a change in the binding materials - lime surkhi, mud and sand mortar. Conservation and reconstruction works such as the Lakhe Nani demand for brick pavements to be replaced by stone pavements; however, the negative impacts of stone pavements must not be overlooked. Structural binding wood continue to be the construction technique in traditional building like Lakhe Chhen.

Architecture semiotics also comes into play in the process of transformation during reconstruction. Being a Dyochhen, the placement of the Aasan is linked to the cultural and religious needs and beliefs. The gajur was not present before reconstruction. During reconstruction, it was placed exactly above the place inside the building where the Majipa Lakhe is kept (Majipa Lakhe Aasan), for a respect to the God. In order to give temple like looks, the Bhau-pwa and Gajur was added during reconstruction.

Lakhe Ghar is facing North, where alignment is not orderly and door position is also cornered. Windows are not kept where the Lakhe Aasan rests, because it is prohibited. The front facade is prioritized. However, to create effectiveness in the usable living spaces, large windows are kept in the back side during reconstruction, i.e. South and West for cross ventilation. The changes in building height is another transformation that has occurred addressing the large number of people that may be present in the Puja room during jatras and festivals. The Lakhe Chhen has similar material characteristics to that of a structural system of a residence, with minimal transformation abiding by the rules of reconstruction. According to interviewee Ar. Bajracharya, "In the fiscal year of 2069/70, during the reconstruction of Lakhe Ghar, the houses in the Lakhe Nani were also undergoing changes to RCC building. Post-earthquake, few of the houses in the periphery that were destroyed have been reconstructed. The vertical increment of buildings have increased, leading to more rental population comprising of in-migrants, more users, more consumption and scarcity of water. Vehicle movement have increased within the Nani, which has led to the physical damage and decrease in span of the pavement. The negative impacts of using stone as a paving material like lack of ground water percolation, rain water/ surface water not draining out and drying up of wells can be seen."

"Increased vehicle movement degrading the physical condition of the Nani is found as a spatial issue due to the construction of ramp instead of staircase to access the Nani. Physically, the challenge is maintenance." The Newari Architecture is a sustainable architecture, where materials can be re-used. Timely maintenance would help in preservation. Brick, wood, tiles and flooring/ paving materials can be re-used to help foster sustainability in construction. History and inventory should have written documents as a proof. If the building collapses again, there should be recorded evidence for reconstruction including building drawings, physical dimensions, building materials and building style.

8.2 Socio-cultural uses

The primary use of Lakhe Ghar is a residence, secondary use carry historical and cultural significance. These are parallel in

function. The activities are running till date. The residential square/ Nani is used as in earlier days in most aspects and the cultural and religious activities has been continuing, which broadly includes festivals/ jatras, cultural dances, public feasts, pujas and offerings. The diminishing uses include indulgence in cottage industries in the religious residential square, which took place in the past. The religious square was confirmed as having a declining character in this sense and not being utilized well. The square has been witnessing underutilization (cottage industries), inappropriate use (parking and as street) and emergence of new use (political programs). The results of the questionnaire survey and interviews indicated that the causes of underutilization and diminishing use of residential square are:

- Migrating people of varying ethnicity; diminishing ethnic use
- Lack of understanding regarding values of traditional open spaces
- Lack of maintenance of the religious residential square and its physical character
- Lack of cleanliness

The X-axis in the graphs, viz. Figure 8 and Figure 9 represents the variation of use and activity in Lakhe Nani, whereas, the Y-axis represents the number of people showing frequency of use, amongst the 14 primary users inhabiting the Nani surveyed.

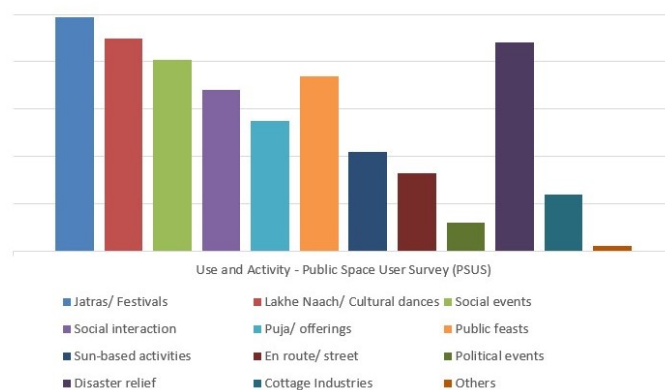


Figure 8: Graph showing past uses of Lakhe Nani

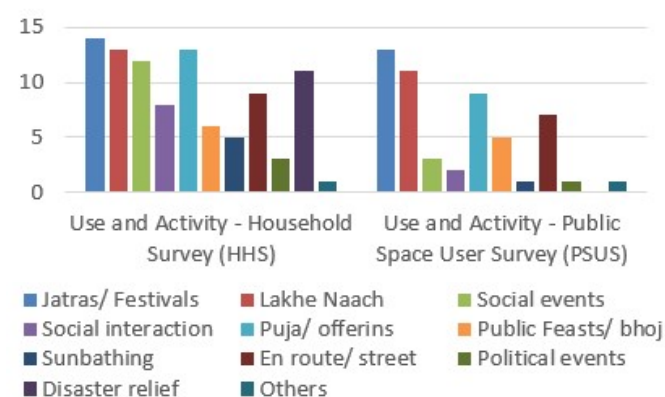


Figure 9: Graph showing present uses of Lakhe Nani

“There are numerous social activities that occur in the Lakhe Nani like bhoj and puja. At present, the social activities are expanding. While in the past, the dominating activity in the Nani was activities related to Lakhe like Lakhe Naach during the 15 day Indraajatra and feasts.” Architect and Conservationist Ar. Bajracharya who designed Lakhe Ghar also added, “On the backside of the house, Keba (kitchen garden and open space is present), where bhoj and feasts take place during festivals. The Keba on the backyard was in worse situation before, whereas, now it is much utilized.” It is evident that the reconstruction of Lakhe Ghar has brought about positive changes because of the planning to promote the designated uses.

The religious square has also retained its physical elements associated with the cultural practices such as 'Chibaha', 'Lukmadyo', which is a stone statue present below a slab of the pavement, that is worshipped at certain times of the year, well and other stone statues. This has consequently preserved the socio-cultural values and tradition of the community.

According to this research, the majority of people who live in traditional residential neighborhoods are aware of the value that open space has in local communities. The locals are conscious of the advantages using open space has for their physical and socio-cultural well-being. However, these perceptions are mostly derived from the residents' prior experiences rather than from how the public spaces are actually used. As a result, the use of religious square of Lakhe Nani, on an everyday basis, other than festivals and jatras, is gradually diminishing, and in many interview cases, has been limited to being used for en route purposes only.

8.3 Problems in Conservation of Lakhe Nani and Lakhe Ghar

In case of damage, the Ward is responsible for the renovation of the Lakhe Chhen and Lakhe Nani. The Ward also looked after the water and sanitary (drainage) issues, without the owner of Lakhe Chhen having to bear the cost. However, at present, there are no adequate funding for the development of the Lakhe Nani and Lakhe Chhen. Future conservation may require financial reach and outsourcing. Sanitation and improper management is a problem in Lakhe Nani. It is necessary to have awareness on keeping the Nani clean.

The Nani is seen to be used as parking for two wheelers every day. Over the course of time, the stairs in the landscape of Lakhe Nani was converted to a ramp. This has led to the Nani's use as a parking space in present day. Vehicle movement have increased within the Nani, which has led to the physical damage and decrease in span of the stone pavement. The negative impacts of using stone as a paving material like lack of ground water percolation, rain water/ surface water not draining out and drying up of wells can be seen. Increased vehicle movement degrading the physical condition of the Nani is a major spatial issue.

Physically, the challenge is maintenance. The Newari Architecture is a sustainable architecture, where materials can be re-used. Timely maintenance would help in preservation. Brick, wood, tiles and flooring/ paving materials can be re-used to help foster sustainability in construction.

9. Conclusion

The objective of the research was focused on the relation between religious square in traditional residential neighborhood and their physical modifications, likeliness and intensity of the socio-cultural use. The aim of the research was to evaluate and analyze the physical transformation and architectural features of Lakhe Nani and Lakhe Chhen. The research exhibit results focused on analysis and problems of the religious squares and its current activities in the open space in Lakhe Nani. The activities and uses prevalent at the religious squares must be given continuity, so that the cultural and religious happenings are retained. However, the use and function of religious square at Lakhe Nani is inevitably impacted by the changing neighborhood scenario. The use of religious squares and residential neighborhood in the Kathmandu valley has . Hence, the intangible heritage should also be conserved in order to conserve the tangible heritage.

This research presents that the reconstruction and renovation of the Lakhe Chhen presented problems and errors from an architectural point of view. Despite the DOA's involvement, the reconstruction emits conjecture in few places. Despite technical and financial involvement of DOA and the ward, there is need of conservation awareness among the people. In cases where reconstruction is done where changes are preferred, the balance between the changes allowed and done in terms of the physical character and the materials used needs to be maintained instead of out ruling them all.

A suitable conservation and maintenance of Lakhe Ghar seems possible in the future since people and the local community feel responsible towards the historical residences cum community buildings, since it also belongs to the ethnic similarity and cultural inclination of most dwellers of the neighborhood.

10. Recommendation

The ongoing practice of prioritizing modern interests over traditional values is reshaping societal mentalities and values.

Many local residents now view traditional spaces and values as obstacles to their contemporary lifestyles. The maintenance and conservation of Lakhe Nani and Lakhe Ghar will be essential in the future. The current challenges involve ensuring the sustained utilization of religious squares and historic buildings, akin to their historical use, and enhancing the quality of the physical environment within the squares for designated activities. Addressing these problems require the following immediate and long-term actions:

- Pedestrianization of the streets and the Nani
- Improvement of physical environment to ensure compulsory activities in daily basis and encourage more activities in the squares
- Revitalization of inner core neighborhood of Lakhe Nani
- Avoiding material change and conjecture in Kumari Ghar and Lakhe Ghar
- Facelifting of the elevation of houses at Lakhe Nani
- Mobilization of local people and organizations
- Drafting a management plan for future conservation

- Proper documentation in detail of the religious square and adjacent building
- Further conservation work focusing on the religious squares surrounding

The general recommendations are for improvement of future conservation works in Lakhe Nani. The conservation should apprehend the culture of a place and understand the general circumstances of heritage conservation requirements. The stakeholders for conservation should be identified and participants in decision making levels that can communicate effectively to the community and are knowledgeable in heritage and conservation. While community is a stakeholder that values cultural, religious and social values, it could be seen that the scientific and some historic values were less prioritized due to lack of knowledge among the neighborhood dwellers. Also, it is equally important for the conservation authority to identify the need of conservation of Lakhe Nani, which has not been done, such that proper regulation and decision making by the conservation authority can mitigate such problems.

The elements of the religious building Lakhe Ghar such as the tha, doors, windows need timely cleaning and maintenance. Proper monitoring is essential to retain the heritage value of the Nani and the adjacent religious building. The aspects of Nepalese culture can be preserved by showcasing the intangible heritage such as the Lakhe dress, mask and musical instruments in the Lakhe Nani, creating a museum-like space. This would encourage people to visit the Nani more often, rather than leaving it in a dilapidated situation. The conservation of the intangible heritage is necessary. In the case of conservation of Lakhe Ghar, conserving the Lakhe mask, ornaments, dress and cultural dance can itself uplift the conservation of the building. Even a normal house may carry history regarding which things are placed where. A religious building such as Lakhe Ghar entails stories of particular things being placed or positioned a certain way too. This is where the Architecture Semiotics come into play. Such particularity in religious buildings must be continued for its future conservation. Hence, further investigation on Lakhe Nani is necessary for generations to withhold the culture, traditions and continuing uses of the religious square.

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