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Designing for Interaction: The role of Architecture in Bridging Tourists and Local Communities, Case study of Kalasha Valley, Pakistan

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Chronicle**Abstract****Article history****Received:** Sept 21, 2024**Received in the revised format:** Oct 20, 2024**Accepted:** Nov 2, 2024**Available online:** Nov 7, 2024**Shazia Hanif***, **Shariyeh Hosseininasab**,
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Tourism is a key source of employment and income today, and different parts of the world are heavily dependent on it as travel and tourism's contribution to GDP has been considerable worldwide. Pakistan's tourism industry has the potential to grow tremendously in the coming years, however, there has not been any sustainable and unified approach towards the development of tourism in Pakistan despite a high potential for growth. Among many aspects which can impact a successful and sustainable tourism, the quality and identity of architecture and urban planning of the area is of crucial importance. Not only architecture of the area can be a source of attraction itself, but it can also be a cause of social integration between tourists and local community. This paper delves into the role of architecture and architects to make determined efforts to deal with the rising stimulation of social tensions in tourist destination areas and study how architecture can deal with social divisions and provide integration between diverse communities, empower the local community and likewise provide a platform to sustain tourism in the area. The case study selected for this study is Kalash Valley in Chitral district of Pakistan. A qualitative methodology leading design was adopted to conduct the research. After mapping the case study area and diagnosing the issues regarding the tourism development in the area, solutions were proposed in the form of design proposals. Moreover, a series of design policies have been suggested for a more sustainable tourism in the area. Data gathering was carried out through a series of observations during the site visits, interviews with the stakeholders specifically the local community (Kalasha and Muslims), civil society activists, tour guides and Kalasha Qazi. Moreover, Secondary Sources of information including Reports, Research papers, books and articles were used to make the theoretical framework of the research, as well as building upon the research precedents.

Corresponding Author***Keywords:** vernacular architecture, sustainable tourism, social integration, Kalash valley, Chitral, Pakistan.

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INTRODUCTION

Tourism has become a vital source of both employment and revenue globally, contributing significantly to the economy. In 2019, the travel and tourism industry accounted for approximately US\$ 2.9 trillion of the global GDP (World Travel and Tourism Council, 2020). According to predictions by the World Travel and Tourism Council, Pakistan's tourism sector has the potential to grow to around US\$ 42.8 billion over the next decade (WTTC, 2018). Additionally, it is forecasted that the tourism industry in Pakistan could witness a 5.6% annual growth rate by 2027 (WTTC, 2018). In recent years, Pakistan has experienced a relative growth in local and international

tourism. This is particularly very uplifting for a country like Pakistan which has suffered a challenging time due to terrorism in the past. (Baloch et al., 2020). This progress has had several advantages for Pakistan including, economic growth for the local community as well as, shaping a better reputation for Pakistan internationally. Nonetheless, due to the lack of appropriate planning, especially in the northern areas of Pakistan, over-tourism has caused several problems (Butler, 2019). In the long run, however, Pakistan needs a proper planning based on sustainable tourism agendas to take the maximum benefits from tourism without exhausting the available infrastructure and at the same time taking benefit from the economic development of local communities as well as, cultural improvement. (Sharpley & Telfer, 2015).

Despite a considerable potential for tourism in Pakistan, most of the initiatives get failed based on the sustainable tourism standards. One of the reasons for this failure is a noticeable disconnect between visitors (domestic and international) and the local community (Armughan, 2023). The roots for such a disconnect lays on the lack of awareness or sensitivity for local culture and social norms. Tourists often may violate these norms and values unintentionally which, maybe perceived as disrespectful. The main cause of this tension is the absence of communication and positive interaction between the visitors and the local community. Architecture has a potential to make an impact on the interactions between tourists and local communities, playing a strategic role in reducing miscommunication and avoiding the conflicts between them (Gospodini, 2001).

Architecturally well-designed spaces can serve as mediators, which can result in a positive interaction between the visitors and local community. The architectural style itself can display local traditions and can employ indigenous materials which can provide tourists with insights into the region's heritage, facilitating deeper cultural engagement. By emphasizing culturally sensitive and inclusive architectural strategies, tourism development can promote environments that enhance communication and understanding, thereby reducing the social tensions frequently related to tourism (Richards & Hall, 2000). The objective of this study is for architecture to play its role in improving living conditions of the kalasha, provide them with economic sustainability and to create a bridge for local and tourist interaction through dialogue and cater to over tourism in the future, which effects lives of the kalasha towards the economic sustainability and betterment of lifestyle.

METHODOLOGY

This paper delves into the role of architecture and architects to make determined efforts to deal with the rising stimulation of social tensions in tourist destination areas and study how architecture can deal with social divisions and provide integration between diverse communities, empower the local community and likewise provide a platform to sustain tourism in the area. The case study selected for this study is Kalash Valley in Chitral district of Pakistan. A qualitative methodology leading design was adopted to conduct the research. After mapping the case study area and diagnosing the issues regarding the tourism development in the area, solutions were proposed in the form of design policies and potential design proposal. Data gathering was carried out through a series of observations during the site visits, interviews with the stakeholders specifically the local community (Kalasha and Muslims), civil society activists, tour guides and Kalasha Qazi. Moreover, Secondary Sources of information including Reports, Research papers, Books and Articles were used to make the theoretical framework of the research, as well as building upon the research precedents. The goal of this study is to design a hospitality centre in the Kalash Valley

that embodies the region's traditional architectural styles while serving as a hub for cultural exchange and social interaction between the Kalasha community and tourists. The facility's architectural concept will be deeply rooted in the local vernacular, incorporating elements such as indigenous construction techniques, materials, and spatial arrangements that reflect the unique character of Kalasha architecture. As a result, the architecture style of the proposed design seeks to set a standard for the future architectural development in the area. The proposed centre which its main function is to serve as a hospitality centre, will also act as a place to connect both local and visitors to socially harmonize the area and hence, delivering economic advantages to the community.

Case Study: Kalash Valley, Chitral District, Pakistan

The case study for this research is the Kalasha Valley in Chitral district of Pakistan, Khyber Pakhtunkhwa (KPK) province. Pakistan is a culturally diverse country and is a home to a large variety of ethnic groups. The Kalasha community is one of the ethnic groups in Pakistan with a distinct culture and tradition despite socio-economic problems and pressures. The Kalasha community is mainly situated in three valleys: Rumbur, Bumburet, and Birir (Parkes, 2001). The Kalash Valley, approximately 255 kilometers from Islamabad, can be reached via a two-hour flight to Chitral, succeeded by a two-hour drive on a challenging 4x4 route to Bumburet. The challenging and adventurous accessibility of Bumburet makes it a more desirable destination for the youth.

For this study, Bumburet Valley is the most suitable site as it is facing more challenges of Kalasha community and logistically it has the potential for a sustainable tourism practice. Bumburet is easily accessible for pedestrians by the nearby valleys and villages and at the same time it is distanced from polluted and congested urban areas, hence, it is an ideal location for a peaceful tourism destination (Ayub, 2010). The Kalasha community currently faces economic challenges, with a significant portion of the population living below the poverty line (Bashir & Israr-ud-Din, 1996). Additionally, the risk of cultural erosion is a concern due to external pressures. Some community members have reported avoiding interaction with tourists because of instances of disrespectful behaviour. The proposed project seeks to address these issues by establishing a platform for respectful cultural exchange, setting a precedent for sustainable tourism development that other regions in Pakistan could follow. (Figure1, Figure2, Figure 3)

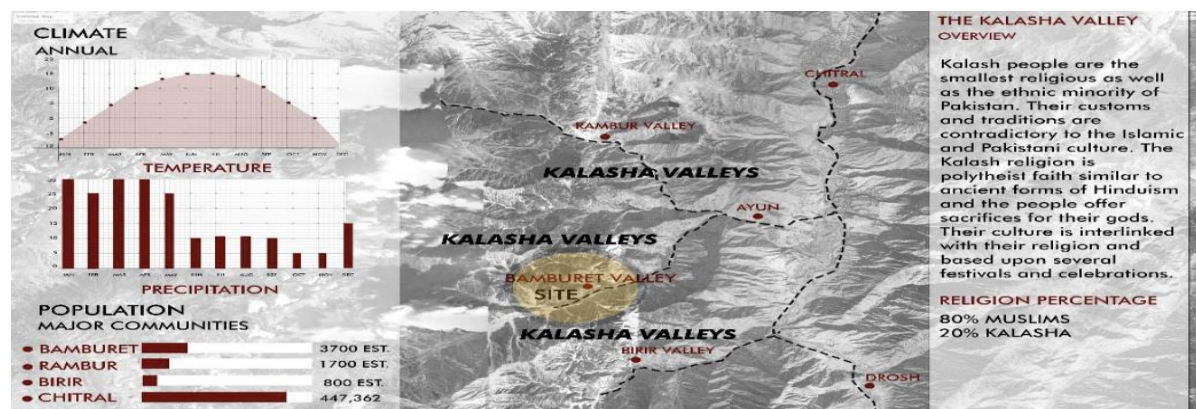


Figure 1.
Climatic analysis of Kalasha Valley (Source: authors' own construct)

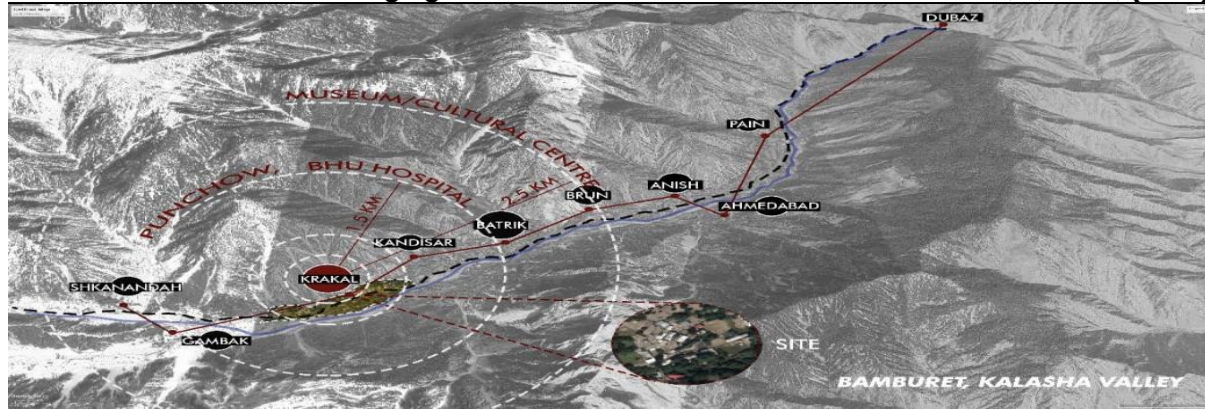


Figure 2.

Location of Bamburet, Kalasha Valley (Source: authors' own construct)



Figure 3.

Land use map around the proposed site (Source: authors' own construct)

DISCUSSION AND ANALYSIS

Vernacular architecture of Chitral

The construction technologies found in vernacular architecture are considerably influenced by the climatic and environmental ecology of their respective regions. In Chitral, located in North-West Pakistan and characterized by high seismic activity, the use of earthquake-resistant local techniques utilising timber-frame structures has been recognized for centuries (Nafees & Kuroiwa, 2011). Diyar (*Cedrus deodara*), is a traditional construction material in this region which is a locally sourced timber identified for its structural strength, resilience, and suitability for building (Shah & Iqbal, 2011). Moreover, the architectural forms and construction techniques in Chitral have traditionally focussed on three major criteria: thermal efficiency in a climate that experiences harsh winters, seismic resilience through well-founded structures, and affordability for mainly low-income people (Siddiqui & Parvez, 2012).

Vernacular architecture in most regions is basically designed to cope with the extreme climatic conditions of its environment. In Chitral, the most critical situation is the severe winter, significant by considerable snowfall and night-time temperatures that can fall to -12°C (Khan & Mahmood, 2014). To ensure thermal comfort for residents during winter, heating the indoor spaces with 'bukhari' (firewood heaters) is essential to preserve the indoor temperature. Additionally, buildings need to retain heat for longer duration while reducing heat loss to achieve such level of comfort. Such retention is possible only when the building envelope has a high thermal mass,

which is usually achieved using materials that have appropriate insulation properties. (GhaffarianHoseini & Berardi, 2015). (Figure 4)

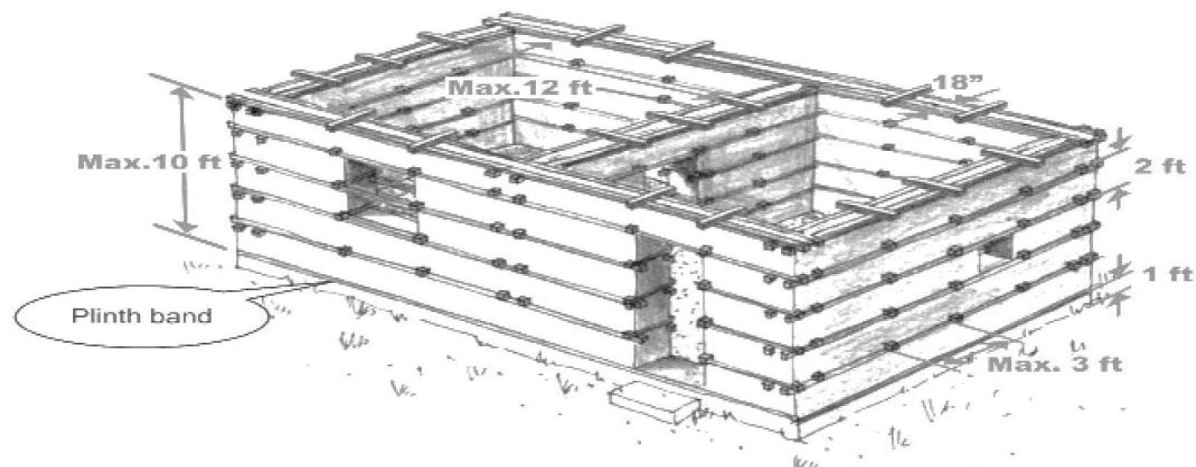


Figure 4.

Traditional grein technique or timber reinforced masonry (Source: An illustrated guide for craftsmen, SDC, FRC, in collaboration with UNHabitat, ERR, 2007)

Building typology and spatial organisation in Chitral

Traditional buildings in the Chitral region are mainly built from local materials, such as rubble and dressed stone, adobe blocks made from soil, rammed earth, and timber—using softwoods today, though traditionally, deciduous hardwoods were mostly used (Kazmi & Chohan, 2014). For everyday structures, these materials were used in an exposed way, while significant buildings were constructed by nonlocal artisans who created extraordinary structural skills and sophisticated wood carvings. Many older monuments contain native design elements, along with cultural influences coming from both the west—often through Afghanistan, and seldom as far as western Turkey—and the southeast, from areas such as Ladakh and Kashmir (Khan, 2000). The construction technique known as 'cator and cribbage' got highly advanced in this area, showcasing refined timber technique.

Moreover, the layout of a traditional house, along with features like the 'ha' (house), 'door,' and 'khounor go'at,' stands as a strong cultural symbol. Traditional houses are called 'Khoun', 'Ha', 'Go'at', 'Door' in local language and usually there is a small courtyard outside the house. There is a semi-open space or a veranda which is in the front part of the house. In the traditional houses, there are no openings on the outer walls, and the natural light for the inner spaces are provided via central skylight in the ceiling called 'sagam', 'som, sum', 'komal' or 'eyechan' in local language. This window is to capture light and air, as well as an exhaust for the smoke. In some historical houses, there is a small foyer near the entrance, used for sitting, eating or sleeping in hot seasons. This small lobby is called 'Dahlanz'. From dahlanza door is connected to the main room. (Figure 5, Figure 6).

It is not only the layout but even the details and ornamentations which are climate friendly and in line with the context. In old houses the traditional lock called "Naghli", "Sarikuch" or "chayeish" was made of a wooden bar, which could lock the door from inside as well as the outside. The size of the doors of historical houses are relatively shorter in order to preserve the heat. Woodcarving is found on the doors of the old houses which is based on the traditional motives. (Figure 7) (Figure 8).

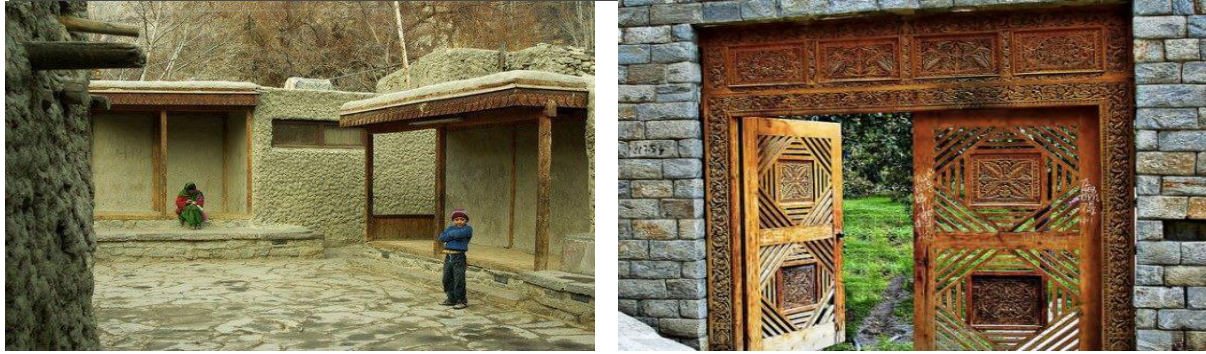


Figure 5.

Central courtyard of a traditional house (Source: authors' own construct)

Figure 6.

Craftsmanship at entrance door (Source: authors' own construct)

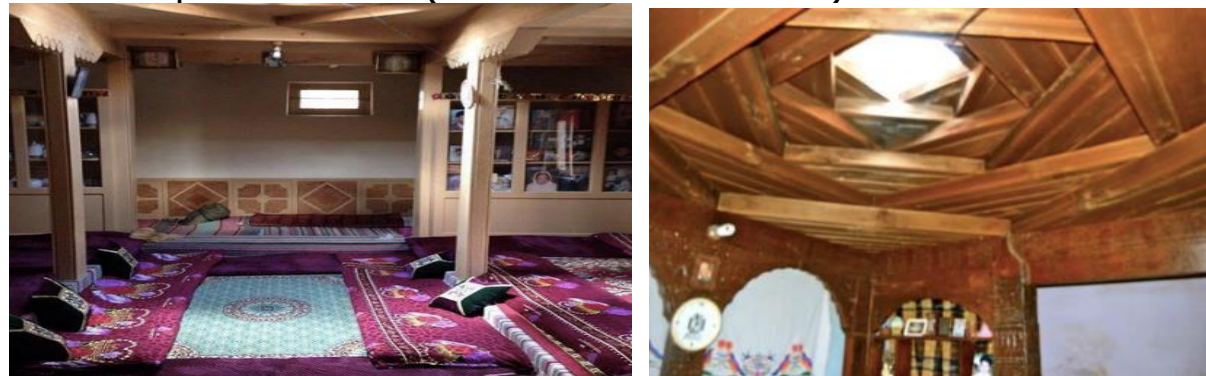


Figure 7.

Structural composition inside the house (Source: authors' own construct)

Figure 8.

Roof structure (Source: authors' own construct)

Bazaar is another main structure in the formation of the settlements in Chitral. The unique nature of the bazaar in Chitral is because it serves not just the town itself, but the entire surrounding region. This broader role gives it distinct characteristics compared to a typical market that only caters to a local population. The bazaar functions as a central hub where a variety of goods are exchanged. In this bazaar, trade is a two-way activity, meaning that both consumers and shopkeepers engage in buying and selling. For example, a consumer might sell local produce or handicrafts to a shopkeeper and then use the proceeds to buy other items, blurring the lines between the roles of buyer and seller. This dynamic creates a more interactive and versatile marketplace, different from a standard retail environment where shopkeepers solely sell products to customers. Some shops have extended depth to provide living space for the shopkeepers who are from distant valleys. The extension also acts as a warehouse to collect and store the products during winter for sales and export during the summers. (Figure 9).

In Chitral's traditional architecture, the design of open, semi-open, and closed spaces helps both cultural and functional purposes, fulfilling social, climatic, and household needs. The open courtyard is used for daily life and for seasonal activities like cooking, sleeping, and socializing, with additional space kept for livestock. The semi-open verandah (or dalaanis) functions as a transitional zone, used for cooking, storage, and protection from weather, while the closed rooms are reserved for valuable items and sleeping in winter, providing flexibility for several family needs. Together, these spatial

divisions reflect an adaptive architecture that meets the region's social and environmental demands.

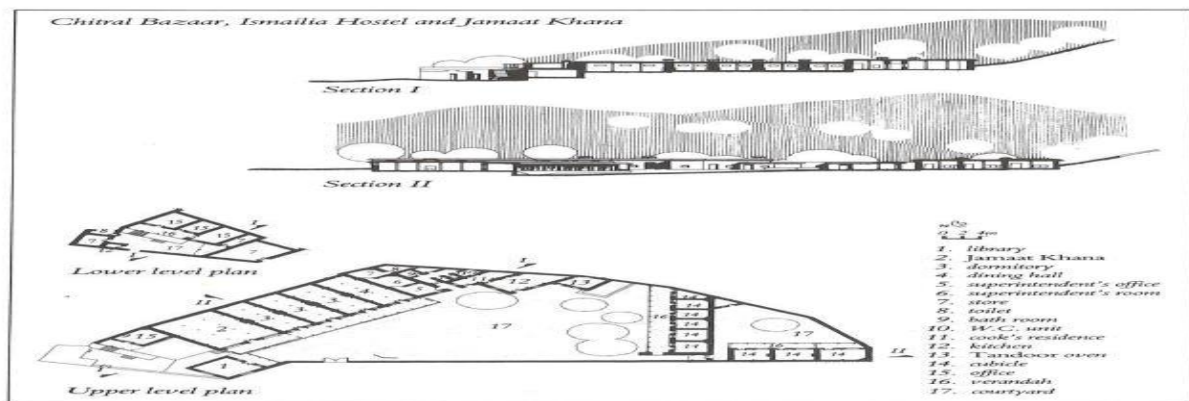


Figure 9.
Spatial Planning of Chiral bazaar (NCA research, 1980)

Design concept and development

The implementation of the design process starts by proposing programs that will generate economy, cultural appropriation and social spaces and they will be working together in a trialectic yet will hold a separate identity. These programs will exist in their separate components and at multiple points will be physically and visually connected, transforming and facilitating one another. All the programs will be further linked by a nexus of connections. This space is the 'Ratnat' Courtyard that will act as a catalyst in fuelling the social spaces and connect them with the program that is being proposed of a hospitality centre. The idea is to provide a space that facilitates local community and in no way, overshadows the local context, instead blends in with the existing town of Krakal. (Figure 10).

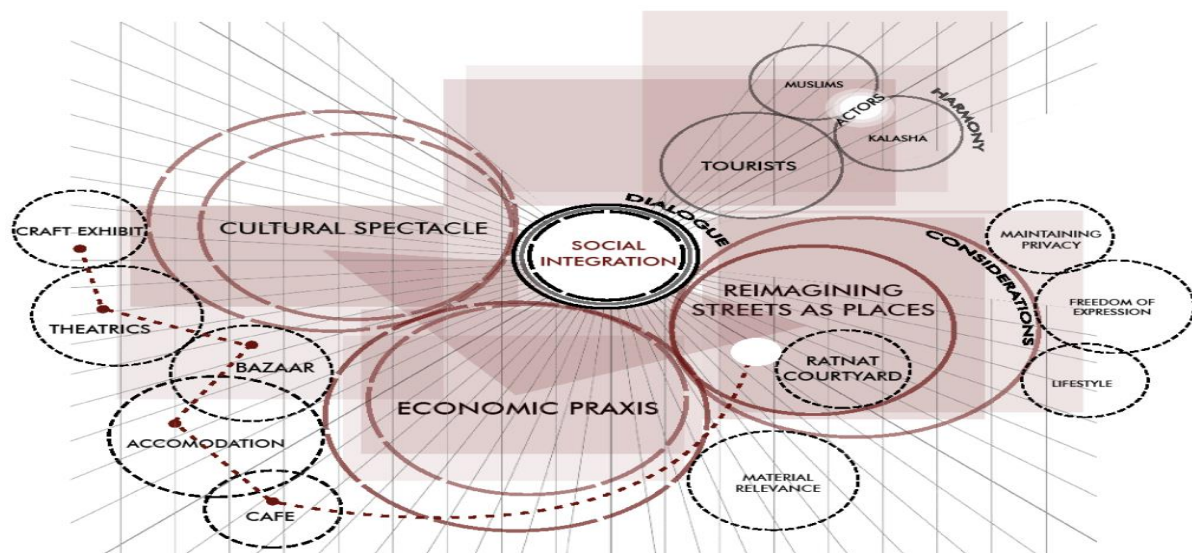


Figure 10.
Architectural program proposed for the catalyst project (Source: authors' own construct)

Programming is developed in such a way that it provides multiple pockets for social interaction, as well as it keeps designated program for the tourists to enjoy cultural performances through performing arts. It also acts as an extension of the existing town

towards the site in the form of passages at different contour level yet keeping the view of spectacular mother nature in the focus. Economic Praxis basically involves the facilitation factor in the form of accommodation of the tourists, Retail for Gallery for display of local jewellery and knitted attire, Wood Workshop for wooden crafts and a home kitchen-based food court to provide local cuisine. An Amphitheatre space will act as a platform to encourage celebrations and festivity from the locals to have a designated space to encourage performing arts in the area which further leads to social harmony. A Sarai courtyard is a designated space for social interaction, that also acts as a resting spot. Design is oriented in such a way that it further extends the narrow alleys down the contour located at the North of the site, while these alleys have extending sitting spots for social gathering and interaction of residents and tourists.

The design concept of this study emphasizes the need for tourism to reflect the cultural richness of the Kalash people while upholding their personal dignity and cultural heritage. The project aims to create a platform that facilitates interaction among stakeholders, enabling collaboration to improve both the local community and the tourism sector. The selected site for this study is situated in Krakal Village, located at the heart of Bamburet Valley, surrounded by key tourism landmarks and serving as the most frequently visited area in the region, with a significant population of the Kalasha. The proposed intervention seeks to enhance the narrow streets leading to Ratnat Courtyard by not only providing a space for cultural performances and dialogues but also revitalizing the entire Krakal area. This approach aims to establish a cohesive route connecting various landmarks, thereby integrating the site into the broader cultural and tourism network. (Figure 11, Figure 12)



Figure 11.

(Left) Ratnat courtyard (Source: authors' own construct)



Figure 12.

(Right) A view of passages connecting to Ratnat (Source: authors' own construct)

Proposed Design

According to the objectives of the study, the design proposal is based on three main concepts:

- Cultural spectacles: To provide residents with an opportunity to interact with the tourists and be tolerant towards each other's beliefs and live in harmony through socializing.
- Economic praxis: A design with potential to financially support the residents and to act as a catalyst for the empowerment of local market.

- Reimagining street as a place: To consider the streets' function beyond a passage, instead, considering them as a space to provide the opportunity for socialization of local inhabitants and the tourists.

To achieve the above concepts, following design strategies were opted:

- Using the contoured site as an opportunity and placement of programs according to the site's topography. (Figure 13)
- Zoning of the programs based on the site situation and land uses around it. Accommodation for tourists was placed on the upper floors and closer to the residential areas around the site. (Figure 14)
- Ground floor was consisted to the communal and social activities to create continuity in socialization as well as, more financial revenue for local stalls and businesses.
- Using the site contours to create visual connection between locals and the hospitality centre. This may enhance the interaction and harmony among them. (Figure 15)
- A precise integration of open, semi-open, and built forms across various levels to cultivate a dynamic and cohesive communal space. (Figure 15)
- Incorporating landscape within the design which can be adjusted with the local plantation and nature around the site. (Figure 16, Figure 17)
- Utilizing ramps throughout the site to manage the contours, ensuring smooth circulation and creating a relaxed, open, and engaging walking experience. This policy also enhances the accessibility for people of all age groups and those with limited mobility.

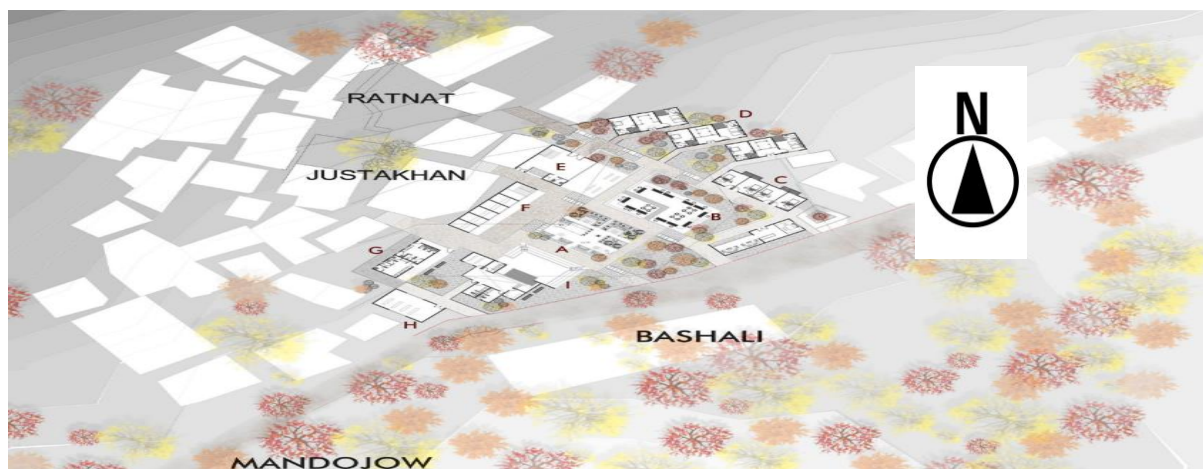


Figure 13.
Proposed design- Floor plans at +00, +5'-0", +10'-0"

- A: SARAI
- B: ZHUN FOOD COURT
- C: KAMRA-UNA
- D: DUR VILLAS
- E: RETAIL PAVILION
- F: BAZAAR-UNA
- G: PUBLIC TOILETS
- H: WOOD WORKSHOP
- I: NAT-IK THEATRE
- J: INFORMATION CENTRE



Figure 14.
Master plan for the proposed design (Source: authors' own construct)



Figure 15.
Aerial view of the site for the proposed design, utilizing the topographic conditions and contours to create a dynamic and visually interconnected space (Source: authors' own construct)



Figure 16.
Proposal for Dur villas on different levels and the use of vernacular materials



Figure 17.
View of the proposed Sarai and vertical connections in the site



Figure 18.
Aerial view of the proposed design, showcasing the use of vernacular materials and design principles that harmonize with the site's ethnic and natural context. (Source: authors' own construct)

CONCLUSION

The design of the hospitality centre in Kalasha Valley illustrates the transformative role of architecture in fostering sustainable tourism while bridging cultural divides and supporting economic stability. The design honours regional customs while satisfying modern requirements by utilizing local materials and the vernacular architecture of the area. A mix of open, semi-open, and enclosed areas, along with the careful use of the site's natural contours, improve connectivity and promote interaction between visitors and the local population, resulting in a lively and welcoming social environment. The focus of this study was to examine the role of architecture in bringing cultural gaps between the users and set an example of a culturally aware architecture. The proposed spaces and program in the design are not only linking the culturally different members of community and the tourists, but they also accommodate all users including physically less able users via providing main circulation in the form of a ramp. Finally, this study seeks to recommend a set of design principals and strategies suitable for a culturally aware architectural practice that can promote tourism in the area and economically develop the local community. The design proposal indeed can vary in different contexts, however, addressing the design solutions and setting the framework for a successful architectural design is essential.

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