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TIME RUPTURE IN URBAN HERITAGE AND REFLECTION ON CITY WEAVING: BASED ON THE CASE OF SHANGHAI

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TIME RUPTURE IN URBAN HERITAGE AND REFLECTION ON CITY WEAVING: BASED ON THE CASE OF SHANGHAI

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There is a rupture between the past symbolized by urban heritage and the modernity symbolized by urban development. In the context of rupture, the concept of urban weaving has been developed in urban planning as a more holistic and sustainable approach to planning the connection between historic area and new urban area. This paper aims to discuss the urban heritage and its protection from the perspective of time, and puts forward the concept of time rupture. A 'time rupture' refers to a fault in the expression of time in urban heritage and a discontinuity of people's sense of time. Based on a case study of Shanghai's urban heritage, this paper reveals that the internal cause of time rupture is that heritage time surpasses real time. The related reflections triggered by time rupture include the paradox between nostalgia and modernization, the dispute between the native and the other, the mobility of urban space, the amnesia and pseudo memory of heritage development, the multiple dimensions of heritage time and the contradiction between the accumulation of heritage and the fragmentary nature of individual life. After reflection and discussion on the concept of time rupture, this paper argues that time rupture provides new possibilities for urban heritage and inspiration for urban weaving.

1. INTRODUCTION

This is an age of rupture. Ongoing pandemic is restructuring traditions and unprecedented changes are creating ruptures in cultural aspect of society. As the notion of rupture is to rethink of any events that make the difference between a before and an after, which is exactly in line with the past - present - future ternary framework of heritage, it has been used to discuss essential topics related to heritage in the present-living city.

This paper utilizes a time perspective to analyze rupture in urban heritage. Time has played an important role in the concept of heritage. Heritage preservation always deals with the effects of time, and time can be considered as an implicit and discriminating factor in three aspects of heritage conservation: the concept of restoration, the sense of time and the development of heritage.[1] Using a trans-temporal approach helps to explore the interface of urban environment with heritage perspective through the lens of sustainability development. City is a typical place where new things emerge in the traditional environment or the unexpected phenomenon appear in the formed habit of daily life, so this paper focuses on the urban environment and explores the possibilities that time rupture creates in the context of heritage.

Shanghai was chosen as the focus of this research for the following reasons. First, urban changes in Shanghai have been quite intense in the past few decades, and the current degree of modernization is high. These factors indicate Shanghai is suitable as a sample to explore the relationship between cultural heritage protection and the dynamic urban landscape. Second, due to the high overall level of education, economy and culture, the establishment of the heritage protection system in Shanghai has brought together various forces. After repeated discussions, Shanghai has become a model for many small- and medium-sized cities in China.

In-depth study of Shanghai will help to quickly cut into the problems faced in China's urban heritage protection and development as well as providing constructive reflections.

2. TIME RUPTURE AND URBAN HERITAGE

The concept of rupture is rebuilding how heritage is understood. Towards the sustainable development goal, focusing the time rupture emphasizes the complexity of temporal layers of urban heritage. The occurrence of a time rupture is closely related to urban development. The history, development and cultural accumulation of a city affect the relationship between man and land and determine the degree of local uniqueness. As an important part of the urban context, urban heritage conveys a local consciousness and communicates collective memory. When urbanization and heritage coexist, the sense of place and time are weakened and blurred, thus gives birth to the phenomenon of time rupture.

A time rupture refers to a fault in the expression of time in urban heritage and a discontinuity of people's sense of time.[2] Hartog proposed that heritage is a sign of rupture between the present and the past, which is the actual experience of accelerating the transition from one memory state to another. Besides, the transformational events can be incorporated into traditional environments through the stories they carry and the social status they disrupt. Thus, a time rupture provides new ways to produce meaning and new interpretations of heritage.

According to previous research, there are three temporal markers of time rupture: the fading of local uniqueness, discontinuity of urban landscape, and the alienation of the man-land relationship. When gentrification and commercialization swept through urban heritage area, the original functions of many traditional buildings have been transformed into commercial areas or tourist attractions, the residents who once lived in one place were moved to other places due to city renewal and relocation. Once the time trajectory of a specific region is interrupted, the uniqueness would be gradually reduced. Regarding to the urban functional zoning, there is almost no boundary between tradition and modernity in many cities, interweaving scenes that represent different temporalities and different speeds of time form the rupture of urban landscape. As for man-land relationship, in modern cities, most of the buildings lack human nature and temperament, the result of an over-emphasis on architectural form is that it hinders the understanding of language, establishing a language interval between architects, designers and users. The former suburbs may become today's urban areas, and the former residential area may become today's commercial centers. The urban space is challenging to grasp, and the relationship between people and space is fragile.

3. HERITAGE AS HETEROGENEOUS URBAN SPACE

Archaeology approach can be utilized to think about the use of past as a heritage resource in developing urban environments in present city. As Guttormsen states, the invention of stratigraphic excavations as a field method promoted the metaphor of time depth in wide range of disciplines.[3] We can explore our ideas about the city through the multi-layered urban archaeological context, as there is an intimate relationship between ideas on urban heritage and metaphorical thinking in society.

Using an archaeology thinking, a theoretical framework can be established to examine the long-term, temporal and transformative character of urban heritage. In urban environment, new cultural imprints appear with the deep historical continuity, thus form a heterotopic place. An analogy may be found by considering time layers in urban heritage through an excavation process in archaeology. Just as there are different layers of land, there are different layers of time in an urban heritage environment, indicating the depth of history in certain place. Some time layers are presented through material, based on the aesthetic qualities of a historical place defined by unity and coherence. In addition, the other time layers are invisible, embodied in incomplete, tactile and anecdotal storyteller potential associated with fragmented traces of past.

In terms of the time depth and urban change, the heterogeneous elements of heritage provide a productive way to describe complex spaces in city. In a heritage environment, urban heritage exposes the abandonment of place, the fragments of things and the disordering traces from the past, which represent juxtaposing time layers and urban changes in different time period.

Foucault considers spaces such as cinemas, gardens, theatres as heterotopia because they are capable of juxtaposing several spaces in a single real place. According to principles that characterize heterotopic places including deviation, temporality, multivocality, heterochrony, liminality and illusoriness and compensation, urban heritage defines heterotopic places in city. Heritage is experienced as deviant and temporally separated places of the past, alienated from current urban life. The reconstructed building elements, remain of historic traces, and stratigraphic layers are all containers of time at a single site. Besides, heritage contains fragments and traces that symbolize the long-term footprints or stratigraphic layering of old cities, providing materials for the imagination and consumption of the past in the present-day city environment.

4. TIME RUPTURE AND UNDERSTANDING OF HERITAGE

The internal cause of time rupture is the continuity of heritage, which conflicts with the change law of various material and non-material elements of heritage, making the occurrence of time rupture inevitable. Rupture has played an important role in the making of heritage and urban landscape, and its manifestations has shaped (or

reshaped) some understanding of heritage issues. The rupture context provides new possibilities for thinking about heritage issues. Here I propose six typical reflections: (1) the contradiction between nostalgia and urban modernization, (2) the argument between the native and the other, (3) the mobility of urban space, (4) the amnesia and pseudo memory of heritage protection, (5) the multidimensionality of time in the city, and (6) the accumulation of history and the fragmentary nature of the individual.

4.1. The Paradox between Nostalgia and Urban Modernity

Tianzifang is a famous historical district in Shanghai. Located in the center of the city, it is a rare shikumen building complex that still retains its residential function. Its formation can be traced back to the French concession period in the 19th century. During more than 100 years of historical changes, it has formed the architectural pattern of integration of Chinese style and the western style, with various spatial forms. It not only records the process of Shanghai's urban construction but also carries the memories or imagination of the local people to the traditional life of old Shanghai. Today, high-speed commercialization has influenced Tianzifang, and the old buildings are full of creative shops, artists' studios and restaurants. Compared with Xintiandi, Tianzifang only carried out partial development of the old Longtang, and houses and lanes remained intact, and part of residents still lived here, while Xintiandi experienced a comprehensive renovation of the old houses, and all residents were moved out. Yu even called Xintiandi a 'pseudo Shanghai nostalgia', aiming at its lack of residents and city sensibility.[4]

The development and transformation of Tianzifang ensured that part of the cultural core and surface structure remained unchanged, thus creating an illusion that people could look for the past, so it was regarded as a nostalgic field of old Shanghai life. However, driven by urban development and economic benefits, nostalgia is contrary to development thinking. The superior geographical location and cultural background of Tianzifang gave birth to high housing rents. Many creative enterprises and businesses vied to settle in, and the aborigines were more willing to rent their houses for a profit. With the alternation of house owners and functions, the time order of traditional architecture is no longer complete, the flow direction and rhythm of time are completely changed, and the time rupture occurs.

When further discussing the nostalgia and the modernity of the city, we will find that the relationship between them is subtle. According to Foucault, the most significant confusion in the 19th century was the theme of development and stagnation.[5] Since 1970, the destruction of World War II and the holocaust has brought about an upsurge of nostalgia, and rapid social changes have made people fall into intolerable anxiety. This kind of anxiety is a typical rupture, especially in the urban environment. Kant described nostalgia as a desire for an earlier and simpler era, resulting from a failure to accept the present.[6] Marx thinks that nostalgia is a kind of attachment to the disappearing world, which comes from the economic uneasiness brought by the

development of capitalism. Boym defined nostalgia as 'the ache of temporary distance and displacement'.[7] New buildings and new facilities constantly appear, which destroy or even replace the original buildings and landscapes. Relics, restoration and historical fragments are concrete and vivid, which remind people that the past is irrecoverable. Therefore, a sense of deprivation is produced.[8] This sense of deprivation causes people's emotional discontinuity and unfamiliarity.

Most of the nostalgic experiences brought about by urban heritage come from the relationship between individual and collective memories, which involve a more general process of constructing a coherent narrative of the past. This process has been accepted but may not have been directly experienced. At this level, personal cognition of the past does not come from the actual memory of personal experience, but from the cultural representation of events presented by texts, videos, pictures, and more. In modern society with various cultural forms, it is easy for individuals to connect themselves with the historical narration of the past in experiential places (such as theatres or museums). Landsberg describes this experience as 'a person sutures himself into a larger history'. In this context, urban heritage is extended to its greatest extent.[9] As Hartog proposed, the heritage of the environment marks the maximization of the concept of heritage.[10] The scope of urban heritage is growing, and time is also extending. The past represents people's recollection and yearning for former times, while urban heritage meets people's impulses to go beyond the past.

Urban heritage is increasing rapidly, and its scale has reached the level of 'everything is heritage'. With the growing demand for memory, everything may be regarded as or may become heritage.[11] Heritage does not mean history but a collective memory based on a strong emotional connection with the past.[12] As a form of social memory, urban heritage provides a framework for a collective narration of the past. It is not only the sustenance of nostalgia but also the object of nostalgia. Nostalgia is characterized by the old, while development is characterized by the new. Under the condition of coexistence, even if there is no obvious contradiction between the two, at least there will be a tension. The tension of this relationship is directly related to the rupture of time as it reflects the discontinuity caused by the collision between the new and the old in the same social background.

4.2. The Dispute between 'the Native' and 'the Other'

In cultural heritage research, 'whose heritage' and 'who is the protection for' are often raised. The time rupture in urban heritage also grows in the dispute between 'the native' and 'the other'. 'The native' refers to the group with common cultural identity, and the converse is 'the other'. Contemporary cities face large-scale population flows, which dilute the most direct inheritor of urban heritage.[13] In Shanghai, this is manifested in the collective relocation of residents in the old urban areas, the marginalization of the Shanghai dialect, culture and more. In history, the development of large cities is mostly due to the inflow of population, goods

and ideas, so it can be argued that the city is a strange concept.[14] Differences and integration constitute the vitality and potential of Shanghai and bring about the heterogeneity of urban time.

In the concession period of Shanghai, the population of native Shanghainese in the public concession area only accounted for a small part. Many immigrants brought mixed accent of north and south and even foreign languages. Haipai Culture (Shanghai regional culture) was born in such an environment. As mentioned above, the Shanghai dialect is a kind of Wu Chinese and has thousands of years of history. The phonological changes of Shanghai dialect are slower than those of northern Chinese dialects, leaving traces of ancient Chinese. Some ancient poems and articles read in the Shanghai dialect could reproduce the ancient rhyme better than Mandarin. The words used in Shanghai are often taken from other languages or dialects, such as shuimenting [cement] borrowed from English, and ala [we] from the Ningbo Dialect. Qian proposed that the Shanghai dialect has a strong cultural expression, which can bring the appearance, folk culture and social changes to life. Thus, the Shanghai dialect has a long history of accumulation.[15]

The new Shanghainese and the old Shanghainese are two groups that once caused waves in the cultural context of Shanghai. Although this type of observation is becoming less common now, I think it could still be used as coordinates to observe the different views of time for Shanghai residents. Today's new Shanghainese are generally young people from other places who are working in Shanghai. They are exposed to the new look of the city. Shanghai natives are generally defined as long-term residents who speak the Shanghai dialect and whose ancestors of at least four generations or above have lived in Shanghai. The fact remains, however, that among the new generation of Shanghai natives with a local family background, many are not familiar with the culture of old Shanghai and cannot or do not often speak the Shanghai dialect. Many new Shanghainese working in Shanghai have brought different local accents. The staff of enterprises all over the high-end office buildings speak standard and fluent Mandarin and freely switch in multiple languages, leading to another language trend. The continuity of the local dialect has been significantly reduced, and the various accents in the city have brought a fragmented sense of time. The close relationship between the local dialect and regional culture has also been destroyed, resulting in the time rupture.

That is, regional dialect and culture depend on local uniqueness, reflecting the exclusiveness of the cultural heritage. According to the statistical bulletin of Shanghai's national economic and social development in 2019, the ratio of the population from other provinces to Shanghai's registered population is about 2:3.[16] Due to the high-level talent import policy in Shanghai, ever more outsiders choose to stay in Shanghai; thus, the integration of culture and language is inevitable. It is difficult to reach an agreement between the feelings of the other and the native. The cognition of the other to Shanghai is trendy, cutting-edge and international. It forms a parallel universe like a second time alongside the time view of the old Shanghainese with nostalgia

and experience-related places. With the rapid development of Shanghai, the other has increasingly become the primary force shaping the overall urban time state. Under the background of spatial heterogeneity, the concept of time is misplaced, which aggravates the time rupture of the heritage environment.

4.3. The Mobility of Urban Space

Historically, Shanghai was a city formed by immigrants. It has a history of nearly one hundred years of concession and has been on the edge of Chinese and foreign power. This formed the flow of Chinese and foreign immigrants. The colonial culture left over from old Shanghai is everywhere. After the reform and opening, various types of settlement areas have been formed by the immigration of foreign immigrants. In addition, Shanghai has also absorbed many immigrants from mainland China. In the 1920s, the national government incorporated 17 cities and townships of Jiangsu Province into Shanghai. After the founding of new China, ten counties in Jiangsu Province were included in Shanghai. During the development period, Shanghai gradually gathered immigrants from Jiangsu, Zhejiang, Guangdong and other provinces. They also brought the lifestyle of their hometown, which together constituted the diversity of the Shanghai urban space.

Of course, globalization has accelerated the flow of other social elements. The mobility of urban space has weakened the administrative boundaries and social relations, and human activities have also broken through the limitations of fixed geographical space. The social function and power of mobility in flowing space fundamentally changes the meaning and dynamics of place. This implies a contradiction between the flow space and the actual space. The non-historical and networked flow space has become the mainstream trend, and its logic is imposed on the scattered and fragmented places, and the relationship between them is increasingly lost.

In addition, there is the phenomenon of disconnection between places and people. The relationship between place and people is expressed as a sense of place. The nature of place is different from that of landscape and space.[17] The latter two types are part of any direct contact with the world. As long as the eye can see something, it can be called landscape and space. Place is constructed in personal emotion and memory through repeated encounters and complex associations. In Shanghai, the relationship between individuals or groups and places has become ever looser. People tend to be in many different discourse groups, so the sense of place tends to be unstable and produces several different, overlapping and mutually conflicting place attitudes.[18]

The mobility of a city is a post-modern attribute. It represents a rapid transformation or intensification, which means the reestablishment of the boundary between emic and epic perspectives, and reveals the flow of expressive power.[19] Globalization has turned the city into a space for capital accumulation. Advanced

communication and transportation have accelerated the speed of production, consumption and capital flow, and promoted the restructuring of the urban industrial structure, the transformation of social structure and the change of physical space.[20] Therefore, time rupture always appears in the urban heritage, which firmly solidifies the historical time.

4.4. Amnesia and Pseudo Memories of Urban History

The vital role of urban heritage is to preserve urban culture and identity. Heritage space does not have memory, but it is of great significance for the construction of cultural memory. Mumford called urban space the best memory organ and believed that it could condense, store and spread human civilization.[21] The spread here is a function in the sense of time, which forms the continuation and spread of urban context through the connection between historical elements. The process of urban transformation will significantly destroy this kind of spread, and the delocalization and symbolic simulation of urban memory make time appear to dislocate and distort urban heritage.

The so-called urban amnesia refers to the transplantation of space and local production by modern means in the urban environment, usually transplanting the construction system from other places to the local space. This 'amnesia' transformation process presents a trend of delocalization, which makes the local quickly lose original characteristics while reconstructing new characteristics, including architectural structure, development direction and a cultural symbol system.[22] The multi-center trend of Shanghai causes the abandonment of the original historical memory of the city and recodes the landscape and culture into commercial open space. This commercial space has lost the root of local culture and become a false image and symbol of consumption culture, full of performance and display. This kind of stage-setting construction has destroyed the original time continuity, and the newly built space-time relationship becomes all outer show and inward emptiness.

In the process of urban heritage protection at the present stage, it is common to intercept historical memories in fragments, rearrange historical data according to needs, and produce commercialized heritage that meets the needs of the times and people's preferences. However, this kind of transformation of memory cannot occupy all the individual memory, so it can only be called the simulation symbol of memory. This mode of production of urban heritage could be considered as the pseudo memory of urban history. In Chinese cities, many urban heritage conservation actions are aimed at attracting tourists, promoting economic growth and shaping a positive image. Historical buildings and characteristic blocks are protected and rebuilt around the goal of establishing cultural landmarks. Over time, the protection of much of urban heritage has become the protection of symbols.

For Shanghai, shikumen architecture is regarded as the cultural symbol of the whole city. There are two different ways to protect shikumen architecture. The first is the renewal and renovation represented by Xintiandi. The principal method is to intersperse modern buildings with traditional local buildings. In the process of reconstruction, some of the original style and building materials of shikumen architecture are preserved, which changes the living function of the shikumen building and transforms it into a commercial leisure center. The second is the soft transformation represented by Tianzifang, which avoids land acquisition and relocation, retains the original form of the block, and creates a brand of fashion and creative landmarks by attracting cultural and creative enterprises and shops. However, both paths gentrify the heritage area. The exterior of the shikumen building is still there, but the interior has been occupied by commercial activities. Famous brands and chain stores have replaced the local characteristic snacks and small shops. Visitors cannot help feeling the homogeneity of commodities in the scenic spot. From this point of view, the existing heritage development and protection methods artificially aggravate the time rupture.

4.5. Multidimensional Time in the Urban Environment

Time is a historical construction of social practice. Galileo abstracted human subjects, spiritual elements and cultural characteristics from the point of view of geometry and mathematics.[23] In the urban environment where parallels and differences coexist, the time dimension of heritage is not solitary. For example, physical time is opposed to social and historical time. Physical time is time in the natural sense. In contrast, social and historical time is participated in by people. Historical time reflects the whole process of human society, but it is an experience free of time because it happened in the past.[24] Social time is closely related to the present. It is the time that people directly experience as individuals in reality, which is internalized in human perceptual practice. Social time is usually closely related to human landscape changes.[25]

Private time and public time coexist. Cities need a set of time orders that govern social groups to coordinate production and life in cities, such as seasons and markets in traditional cities. People must follow the arrangement of public time to improve the efficiency of production and life.[26] Due to the diversification of industrial structure and the refinement of the division of labor, a prominent feature of modern social organizations is the deviation between private time and public time.[27] While modern urban people stress time efficiency, private time occupies a dominant position, which will inevitably lead to the anomie of production and life rhythms. Some scholars audaciously argued that public time is dead and that the concept of time no longer exists in the public space.[28]

Significant events and special historical periods will also invite changes in the time dimension. Famous historical moments establish new relationships between the present and the past, and relocation always leads to separation.[29] This separation may refer to new ideas, new expressions or new interpretations. For example,

war will strengthen the instability and dynamics of urban time, and the uncertainty of the future will be magnified. The present no longer is the hub connecting the past and the future, but the rupture between the two.[30] The passage of time is no longer merely a quantitative change in physical dimensions, but a shift between the desire for existence and the fear of death. Taking the traditional Chinese expression of time as an example, in the old society where production technology was not advanced, the operation of the entire society depended on a set of unified time order, so the division of seasonal solar terms was generally recognized and observed. For today's urban residents, measuring time gradually takes the place of natural time, and private time gradually replaces public time.

Urban heritage has its own unique space-time background, which not only retains the traces of history but also has different development possibilities that display prominent heterogeneous characteristics. Just as Bhabha understood, in the modernity time dimension, symbols of modernity depend on specific historical and cultural conditions, and each repetition is different.[31]

4.6. The Accumulation of History and the Fragmentary Nature of the Individual

Foucault said in Des Espaces Autres [of other spaces] that our experience of the world is not so much the experience of a long life growing up in the process of practice, but rather the experience of the network connecting various points and crossing with itself.[32] Similarly, individual memory and experience are limited, but heritage is the collection and presentation of many individual experiences and narratives. Foucault called places such as museums 'heterotopia'.[33] In these kinds of places, time has been gathering and inhabiting the peak of time. This place is independent of time but contains all times and forms. It is an infinite, continuous accumulation of time.

Foucault's perception can be applied to the practical discussion of urban heritage. It is generally believed that heritage comes from the past, which influences the present and leads to the future, existing throughout all time and space.[34] In essence, heritage has the nature of accumulation and continuity. Both tangible and intangible heritage must have experienced a long time of inheritance and accumulation before it is handed down to the present. Their depth and breadth are far greater than each individual can grasp the time and experience. In other words, the time expression of heritage is macro, just like a continuous network, running through different individuals, times and cultures. The death of an individual represents the disappearance of a narrative subject and personal memory. Although memory can be preserved by oral or written words, the breakpoints formed by the fragmentation of individual life have occurred. Giddens proposed that although individual time is limited and irreversible, the flow of events and routine activities in daily life is not unidirectional.[35] From this point of view, the flow of individual time is different from that of heritage times.

In the Shanghai dialect, Wulixiang [Open House] means home. At the same time, it also represents a kind of culture, symbolizing the unique living ecology and lifestyle of Shanghai people. At the beginning of the last century, the Longtang houses were the places where most residents lived. Due to the high population density, narrow housing space and close arrangement, it was quite common for several families to share kitchens and toilets. The zero-distance contact between neighbors breeds the unique neighborhood culture of Shanghai, and the traditional ideas and family order implied in the street layout and housing structures are the material sources of many literary works and films. For example, Eileen Chang's novels often take Longtang life as the background of the story, depicting various characters and vivid interpersonal relationships. Currently, commercial residential housing has replaced the shikumen houses, and the 'open house' culture has lost its original tangible carrier and only exists in the memory of a few people.

To continue this culture, the Open House Museum and the exhibition of old articles have been opened to the public for people to look for the memories of the 20th century. However, it is more like a 'screen memory'. Freud described 'screen memory' as a context of continuous details covering a forgotten situation. The record of memory is unfolded through a clue, a detail, a narrative or a metonymy of implication, so it cannot be completely traced back. Only the false memory can be completely traced back.[36] The reason why open house culture has continuity is that it connects historical fragments according to collective memory, which makes the breakpoint of individual life and death no longer obvious. Through the display of old furniture, old appliances and old photos with the mark of the old Shanghai, attempts are made to retrieve the historical memory that is about to disappear. In the face of the continuous heritage time, individual memory is always difficult to fit with it completely, which aggravates the occurrence of time rupture.

5. DISCUSSION

In this section, I discuss the protection of urban heritage from the perspective of time rupture, such as how to meet the nostalgia of heritage protection, the empowerment of urban heritage subjects, the impact of urban mobility on heritage, the time representation of heritage and how to manage the latest context. These controversial topics motivate me to carry out related research in the future.

5.1. How Does Heritage Protection Meet Nostalgia?

As mentioned above, people's nostalgia is contrary to urban modernization. Nostalgia is romantic entanglement with the past, and modernization means that the regional civilization is becoming a global culture. When there is no place for nostalgia, ruins and sites being constructed are erected to commemorate an imaginary past. Boym proposed that in order to change the fate of the past that was not or could not be recognized, the past becomes heritage.[37] The 'heritagization' of the past can be said to be a nostalgic public

structure. The temporality of nostalgia for the old time is framed and placed in museums and memorial halls, becoming a unified ceremonial commemoration.

Throughout Shanghai, the original regional buildings exist in the cracks of high-rise buildings. As the most common living space and important part of local culture in Shanghai, the remains of Longtang and old shikumen buildings have become the objects of reminiscence of old Shanghainese in the face of rapid urban changes. Lowenthal proposed that nostalgia requires a sense of estrangement and that the object of nostalgia needs to be anachronistic.[38] The current status of Shanghai's urban heritage simply presents a kind of dislocation of the times. With the heterogeneity of space, time is also full of heterogeneity. The melancholy mood of being unable to grasp and losing the past has become a fashion, which is melted into the narration and presentation of heritage.

In my view, nostalgia in a broader sense is no longer limited to nostalgia for one's hometown or familiar places, but a desire for transcendental landscapes. Therefore, in the experience and evaluation of urban heritage, the boundaries of time and space have become more ambiguous. The past and the modern are in a mixed state. As Bergson proposed, the past may play a role by inserting itself into the present feeling, because it borrows vitality from such events.[39]

5.2. Protection for Whom?

This paper mentioned the dispute between the native and the other. So who is the main body of urban heritage, aborigines, immigrants or tourists? There is a deviation between the understanding and cognition of urban heritage between tourists and locals. With the arrival of large-scale mass tourism, there is a certain degree of subjectivity inversion of urban heritage.[40] In the short-term tourism process, tourists usually have no opportunity to understand the complete culture and can only be exposed to fragmentary and scattered scenes and events. Buttimer proposed the concepts of insider trap and outsider trap, which means that when people are immersed in the details of their daily life and behavior, they may not question the significance of home or the things taken for granted in the broader environment and social space.[41] On the contrary, when people enter a new space as 'outsiders', they tend to observe from an abstract perspective and read landscape and public behavior texts through concrete languages such as maps and models. For example, for the Longtang houses in Shanghai, the aborigines and the local people can be seen as insiders. Longtang life is familiar and daily for them, and the time they feel is continuous and homogeneous. For tourists and strangers as outsider, the alley is brand-new and strange. They have no childhood memories or unforgettable times in it. Therefore, they only use an abstract and imaginative psychology to interpret the fragmented information. They cannot help but restore the hidden side of urban heritage through imagination and analogy and connect them into subjective cognition.

Tourists' views and experiences are a subject in the development process of urban heritage. For example, a variety of display means and explanation methods make tourists better understand the history and value of heritage. In the scenic spots where tourists gather, heritage is commercialized, and the expression of time is deliberate and purposeful. This is a kind of artificial transformation and destruction of the time order, for tourists who are unfamiliar with the history and customs of Shanghai, what they experience is a pseudo nostalgia. The experience of connecting oneself with the past by heritage sites is separated from real and continuous time.

In the overall growth environment of urban heritage, the local community, as the witness of the spread and development of heritage, is the most closely related group to heritage. This local community requires more attention. However, the common top-down heritage management in Chinese cities has gradually marginalized local communities, resulting in a gap between unique public needs and exclusive, authoritative decision-making.[42] The government's protection and restoration plan mainly reflect the intervention of administrative and market forces, and rarely comes from the collective results of joint efforts of comprehensive participants, including residents. This mode breeds contradictions between the government and the grassroots, such as over the use of funds, the priority of implementation and the consideration of public interests. Therefore, a reform of the urban heritage management system is imperative. It is requisite to give communities authority and responsibility in a gradual way, so that autonomy covers more stakeholders.

5.3. What does the Flow of Urban Elements Bring to Urban Heritage?

Sassen proposed the concept of the global city, emphasizing the flow of information and capital.[43] The core of a global city lies in the mobility and aggregation of elements. A typical structural feature of global cities is that the population presents obvious international characteristics, with high-speed mobility.[44] In this process, heritage protection is facing new challenges.

First, the decentralization of urban functions aggravates the limitation of heritage protection. A single spatial pattern cannot meet the needs of cities as global production network nodes, and cities have changed from single centers to multiple centers. In Shanghai, the geographical center is in the People's Square of Huangpu District. The Park Hotel in this area is currently open to the public as the origin of Shanghai city coordinates. The commercial centers include the Xuhui District, Jing'an District, and more. Additional business circles sparked the emergence of new commercial centers in Shanghai. The financial centers are regarded to be Lujiazui and the Bund area, but they are also expanding to Pudong at a visible speed. Just as Castells remarked, the function and social class of big cities are vague and mixed in space.[45] He named big cities as a discontinuous collection of space fragments, functional fragments and social fragments. Due to the low

mobility of its attributes and positioning, urban heritage changes little compared with the surrounding environment even in a dynamic context. Urban construction either directly demolishes and occupies the urban heritage area or changes the original environment or surrounding landscape that breeds urban history.

Second, the regional process of global cities has become a key form of spatial organization. The spatial expansion of cities has broken through traditional boundaries, and the overall strength of regional cities can be enhanced by means of regional alliances and functional integration. For instance, the Yangtze River Delta urban agglomeration, which centers on 27 cities such as Shanghai, Nanjing, Hangzhou and Suzhou, aims to promote the high-quality development of the whole region through the radiation of the dominant forces of each city. Although this initiative has crossed various barriers and established functional connections, urban construction is divorced from local culture. Urban heritage is affected by this dichotomy and faces disintegration in the context of regionalization and globalization. Cantillon vividly points out that urban heritage is walking in the city of dramatic changes.[46] The city points to the future, full of high-speed mobility and variability, yet dilutes the cohesion of heritage, blurring the inherent cultural and historical value of heritage and weakening the local color and exclusiveness of heritage.

5.4. What Kind of Time Does Urban Heritage Represent?

Time is a multidimensional concept. The issue of what kind of time heritage represents is controversial and difficult to avoid. Taking the present as a reference, heritage comes from the past, which is historical time. Taking the source as the reference, heritage originated in a specific historical period and is social time. Mircea Eliade divides time into secular time and sacred time.[47] Secular time is fleeting, while sacred time is eternal. The original architecture is the existence of sacred objects. In Latin, templum (temple) and tempus (time) have the same etymology. Therefore, hallowed architecture is a symbol of sacred time. These works stand out from the general urban space and communicate with gods through certain channels (such as doors, windows, pillars, etc.). Some scholars put forward the concept of 'interior time architecture' to interpret the internal temporality of architecture, which respects people's understanding of cognition in architecture.[48] This concept is not a specific architectural type, but a flow of consciousness of individuals in space. When we examine the visible side of a building, we tend to feel a halo that is potential but absent in reality.

As a continuous creation of life, traditional architecture can play its own role in various regions and periods. Traditional buildings tend to follow an independent architectural system, thus showing clear boundaries.[49] From the perspective of architectural development, traditional architecture is based on initial small units that are expanded to meet the requirements of different owners to achieve the final form. Thus, traditional architecture is always in accordance with space and function to obtain continuity and permanence.

However, for most of the urban expansion, additions and transformations will interrupt the continuity of traditional structures. These actions will change the form of heritage, and sometimes cause it to adopt a completely new look. Kees van der Ploeg mentioned that the world has changed dramatically in the past few centuries.[50] However, all the restored facades are bright and novel, giving us the illusion that we still live in the 18th century. Looking at the actual situation of urban heritage, many historical sites are artificially immortalized to meet the mediocre expectations of tourists and have been simplified as tourist attractions. In this case, the time order in urban heritage has been destroyed.

5.5. What Is the Latest Context of Urban Heritage?

As mentioned earlier, major events can result in changes in the time dimension. At present, the world is experiencing the impact of the COVID-19 epidemic, which limits the mobility of time and space. This special historical period has brought severe challenges to all walks of life. Under the epidemic situation, lockdown makes the urban time seem to slow down or even stagnate. The closure and restriction of the heritage sites and museums block the field relationship between people and urban heritage, and the protection and development of urban heritage are facing a new context.

First, urban heritage is breaking through the limitations between presence and absence. In the post-epidemic era, barriers caused by absence could be eliminated in cyberspace, and the regional constraints on human behavior could be weakened. Various means of communication will also further invade the urban heritage. In most cases, joint presence is no longer a necessary condition for communication behavior. People can be exposed to a large span of multidimensional information in an instant. The history that people perceive is no longer the interpretation of teleology, but a multi-channel presentation of many events. Distant things can suddenly be close, and the nearby things will suddenly appear far away.

Second, urban heritage allows new concepts of time to coexist. With the help of modern technology, it seems easy to preserve information and recall memory. Individual perceptions of time have been given greater flexibility as the real span of time has been narrowed down by new analogies. Even the most ancient sites and civilizations can be presented by modern media in a few seconds. In addition, individual time is non-directional. When facing urban heritage, individuals do not need to follow the rhythm of traditional time to harvest a realistic experience, and even have the aid of technical means to meet their own needs to feel and interpret. People can perceive time in a continuous reorganization of time and space without the explicit constraints of time and space.

6. CONCLUSION

In the urban environment, cultural heritage faces a broader development space and greater uncertainty. From the perspective of time, there is a collision and interweaving of different time concepts and expressions between urban heritage and the modern city. Therefore, this paper proposes the concept of time rupture, defined as the discontinuity on dual levels of the heritage landscape and heritage cognition, time rupture entails a rethinking of urban space, using time to visualize the heterogeneity of urban heritage. In the wave of urban renewal and old city reconstruction, urban heritage confronts the developing trends of commercialization and gentrification. The phenomenon of homogenization is challenging, and there is tension between the sense of place, or nostalgia, and modernization, which engenders feelings of separation or otherness that confound the interpretation and cognition of urban heritage. This paper seeks to strengthen the issues of place, nostalgia and memory, and arranges the reflections of time rupture. Exploring the changes of the urban environment whilst considering the nature of heritage from multiple perspectives will aid in scientifically assessing the impact of time rupture and provide appropriate restoration strategies for urban heritage.

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URBAN RUPTURES AS CULTURAL CATALYSTS FOR SOCIO-ECOLOGICAL INNOVATION IN THE METAVERSE

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URBAN RUPTURES AS CULTURAL CATALYSTS FOR SOCIO-ECOLOGICAL INNOVATION IN THE METAVERSE

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The global spectacle of blue and yellow lights on civic and cultural monuments in support of the Ukrainian resistance shifts the narrative on rupture in urban architecture from tangible geographies to intangible virtual space. In parallel, disruptive technologies create innovation in the metaverse. Technological innovation inspires the creation and development of cyber-urban utopias. Both Telosa (Bjarke Ingels Group, BIG, 2021) and Liberland Metaverse City (Zaha Hadid Architects, 2022) focus on civic centers as cultural catalysts for socio-ecological innovation in a technological shift towards the metaverse.

1. INTRODUCTION

As explosions reverberated around Kyiv during the Russian-Ukrainian conflict on February 24, 2022, illuminated iconic cultural landmarks radiated solidarity in capital cities from the Eiffel Tower in Paris to No. 10 Downing Street in London to the Brandenburg Gate in Berlin to the Opera House in Sydney. Civic monuments were ablaze in the colors of Ukraine's flag, symbolic of a blue sky and yellow sunflowers. In the cultural landscape, this iconic momentum indicates that under extreme duress, human agency, civic pride, and cultural spontaneity symbolically unify diverse traditions.

Advances in architectural technology in the Machine Age triggered a shift in modernist architecture from Classicism to Futurism. Historically, ruptures in urban architecture include Futurist Antonio Sant'Elia's *La Citta Nuova* (The New City, 1913-1914) that was a manifesto for a machine age city envisioned in steel, glass, and reinforced concrete with an explicit abhorrence of classical and neo-classical architecture. Sant'Elia's declared in his manifesto, "We must invent and rebuild the Futurist city like an immense and tumultuous shipyard, agile, mobile and dynamic in every detail; and the Futurist house must be like a gigantic machine."[1] The maxim of "The house is a machine for living in," (Le Corbusier, Towards a (New) Architecture, *Vers Une Architecture, 1923*) emphasized a streamlined-international style based on form, function and movement, rather than historic cultural traditions of classical architecture.[2] Le Corbusier (Charles-Édouard Jeanneret) and Pierre Jeanneret's unbuilt project, *Plan Obus*, (1930-1933) proposed a Modernist urban megastructure overlaid on the traditional urban fabric of Algiers, composed of the Casbah (citadel or fortress) and market as the indigenous city and the French colonial city with its militaristic planning of a boulevard and a plaza for marching, royal events and governance. The scale of buildings and the grandeur of the colonial space was monumental to convey power. The disruptive notion of obliterating the Arab souk and the French colonial past to create a modern city is apparent in Le Corbusier's *Plan Obus* (1931-1942). Paula Antonelli, (2002)

analyses the master plan sketch (Plan for Algeria and Barcelona and the "*cité-jardin verticale*" (vertical garden city), November 27, 1935, MOMA) as follows: "Even in its several later incarnations, the plan was also a loud demonstration of the disruptive effects of his architecture, which tended to obliterate the past in order to build a better future. Well aware of this quality, the architect called his plan the "*Obus*" or "shrapnel" plan."[3] Le Corbusier's sketch includes both traditional street grid patterns and curvilinear megastructures.

In 1931 Le Corbusier visited Algiers during the centennial celebrations of French colonial rule. Inspired by the landscape, the coast, the mountains and Arabic culture, Le Corbusier perceived the potential for a monumental modern urban project. The master plan involved into three urban elements, namely, a Business City, a Residential City, and an Elevated City of Shops and Housing for 180,000 workers. A bridge spanning over the Casbah of courtyard houses, mosques, and shops would preserve the Upper Casbah as a relic, whereas the Lower Casbah, known as the *Quartier de la Marine*, would be developed as a Business Quarter. Michele Lamprakos (1992), in evaluating Le Corbusier's *Plan Obus* through the lens of colonial urbanism, analyzes the monumental megastructures as follows: "As such the curves of *Plan Obus* were only superficially different from the Cartesian geometries he sought to avoid: they were equally abstracted and imposed, the reaction of a single individual to the formal conditions of the landscape."[4] Brian Ackley (2006) adds further criticism, stating "Clearly disaster loomed in the project's disregard for Algerian social and religious traditions, the segregation of workers and European communities, and of course the abrupt change in spatial arrangement brought on by its brutal scale."[5] Public and political reactions were negative concerning the perceived bombardment of Modernist ideals on Algeria's traditional and colonial neo-classical urban space. Le Corbusier abandoned the project due to World War II and the Algerian Revolution. Foreshadowing the devastation and simultaneous with the design of *Plan Obus,* the International Exposition of Art and Technology in Modern Life (*Exposition Internationale des Arts et Techniques dans La Vie Moderne*, 1937) in Paris manifested the political rupture between Germany and the Soviet Union with two colossal pavilions poised in a symbolic confrontation on either side of the Eiffel Tower, (Chandler, 1988).

Besides war and cultural changes in society, extreme weather leads to physical disruption. After 5-meter-high floodwaters from the River Turia on October 13-14, 1957, three-quarters of Valencia in Spain were flooded and 60 people died. Ten days after the flood, General Francisco Franco visited the city and out of the crisis arose the opportunity to revitalize Valencia's urban infrastructure. *Plan Sur* (South Plan) was instigated from 1962 to 1969 to re-route the river and create a 5-mile-long green park in the heart of Valencia. Inspired by citizens' action in the 1970's and the *Cité des Sciences et de l'Industrie* (City of Science and Industry) in Bernard Tschumi's master plan for *Parc de la Villette* in Paris (1980-1987), the Valencian city government appointed engineers Antonio Calatrava and Félix Candela to evolve a techno-cultural identity for the City of Arts and Sciences *(La Ciudad de las Artes y las Ciencias)* urban redevelopment, (1996-2009). In a

criticism of massive urban infrastructure projects, journalist Brian Phelps (2012) opines: "While the heavy-handed conception of the *Jardin del Turia* might be problematic, the project is a fascinating modern example of the transformative effect of landscape infrastructure on a city's identity and well-being."[6] Consequently, environmental crises, social change and cultural innovation trigger urban rupture and transformation.

In the generative cycle of rupture and continuity, Jacques Derrida (1967) asserts that new structures appear when there is a rupture with the past, its origins, and its cause. In the rupture between cities and the biosphere, sociologist Saskia Sassen (2016) contends that the urban produces diverse instantiations of space, time, and 'new natures.' To overcome the likelihood of urban dystopia due to climate change, a new sustainable city Telosa, based on equity and inclusion, targets 5 million people on a 150,000-acre (62,000-hectare) site planned in 2050. With courtyard houses and green space, Bjarke Ingel's master plan focuses on a landmark "Equitism Tower," replete with photovoltaic roofs and aeroponic farms. Derived from disruptive technologies of blockchains, gaming, and bitcoins, the metaverse triggers innovation from a real economy to a digital economy. Liberland is physically located in an aspiring micronation in-between Serbia and Croatia, (Patrik Schumacher, Zaha Hadid Architects, 2022). As the locus of Liberland's cultural identity, a DeFi (Decentralized Financing) City Hall, a NFT (Non-Fungible Token) Gallery and a DeFi Innovation Hub define public space in a virtual world. Conclusively, civic landmarks are becoming urban cultural catalysts for socio-ecological innovation, whether in the public sphere or the metaverse.

The paper investigates urban rupture, cultural catalysts and urban innovation to imagine how the cycle of rupture and continuity will lead towards a virtual reality in the metaverse.

2. UNWRAPPING URBAN RUPTURE

Philosophically, Jacques Derrida (1967) asserts that new structures appear when there is a rupture with the past. Derrida proposes, "For example, the appearance of a new structure, of an original system, always comes about— and this is the very condition of its structural specificity—by a rupture with its past, its origin, and its cause."[7] Furthermore, Derrida remarks that concepts of chance and discontinuity are indispensable in this process of neutralizing the event of rupture. Derrida describes the removal of content from a structure, such as in a cataclysmic event like a war or an earthquake as follows: "Somewhat like the architecture of an uninhabited or deserted city, reduced to its skeleton by some catastrophe of nature or art. A city no longer inhabited, not simply left behind, but haunted by meaning and culture."[8] The haunting images of the bombing of Mariupol, the pivotal port city on the Sea of Azov in Donetsk Oblast (Province), Eastern Ukraine, starkly reveal damaged and burning buildings set within the city grid.[9] On March 16, 2022, CNN reported that Russian forces reputedly bombed the Donetsk Academic Regional Drama Theater,

where 1300 people sought refuge in the theater converted to a bomb shelter. Indicative of the cycle of creation and rupture, the site originally housed the Church of St. Mary Magdalene (1862-1930). Various theatrical troupes performed at this location for over a hundred years from 1847 to 1947. In 1959, the architects A. Krylov and S. Malyshenko designed the Drama Theater using Crimean Inkerman grey stone in a monumental classical style with a decorated pediment, (Fig. 1). The symbolic relationship between the people and culture is described as follows: "On the façade of the building there is a sculptural composition, where the main role is given to metallurgists and farmers as the main professions of the Azov region."[10] The adjacent Mariupol Chamber Philharmonic opened a 400-seat hall on September 3, 2018.

In the conflict in Mariupol between Russian and Ukrainian forces in 2022, both the Drama Theater and the Mariupol Chamber Philharmonic served as civilian air raid shelters, exemplifying the cataclysmic relationship between rupture and culture. Ironically, the pediment of the Drama Theater survived as a symbolic indication of Ukrainian resilience. As of August 21, 2022, the restoration process for the Drama Theater is scheduled to start with a roof restoration. An advisor to the mayor of Mariupol, Petro Andryushchenhko announced, "The occupiers are starting to restore the building of the drama theater. Yesterday the first metal structure for the roof and fortifications were imported."[11] The act of rebuilding begins the cathartic process for healing the wounds of conflict in the re-iterative cycle of rupture and continuity. However, embedded in these reports is the potential for future ruptures and further bellicose repercussions from divergent Ukrainian or Russian perspectives over ownership of cultural traditions.

During the bombing of the Drama Theater, conflicting reports indicated that: "Russia has denied its forces hit the theater, claiming instead that the Azov battalion, the Ukrainian army's main presence in Mariupol, blew it up."[12] In May 2022 an Associated Press (AP) investigation revealed that over 600 people may have died. One survivor's compelling and ironic account indicates: "I wasn't killed in the theater, but I'm going to die in the philharmonic," Maria Kutnyakova told herself bitterly. "God, this is my cultural program for the day."[13] As evidence of the role of architecture in the cycle of rupture and tradition, the methodology used in the AP investigation included photos, videos, preparing two sets of floor plans, constructing a 3D model and comparing reports of 23 survivors and respondents who described in detail where people had sheltered in the building. The report states there were between 500-1300 people in the theater functioning as a bomb shelter, or an average of one person per 3 square meters of free space. The theater is a symbol of devastation and resistance and a yet to be realized cessation of conflict, re-construction and eventual cultural continuity (Fig. 2).

In response to endangered heritage in the Ukraine, UNESCO Director-General Audrey-Azoulay declared, "We must safeguard the cultural heritage in Ukraine, as a testimony of the past, but also as a catalyst for peace and

cohesion for the future, which the international community has a duty to protect and preserve."[14] Among the measures adopted initially included marking cultural sites with a "Blue Shield" emblem, in addition to UNESCO-UNITAR (United Nations Educational, Scientific and Cultural Organization) – (United Nations Institute for Training and Research) analysis of satellite imagery and direct contact with civil society and Ukrainian heritage professionals and institutions, such as The International Council of Museums (ICOM). Moreover, UNESCO indicates that, "The term 'cultural property' refers to immovable cultural property as defined under Article 1 of the 1954 Hague Convention, irrespective of origin, ownership or status of registration in the national inventory, and facilities and monuments dedicated to culture, including memorials."[15] There are 7 UNESCO World Heritage sites in the Ukraine, which include St. Sophia Cathedral and the Pechersk Lavra Monastery in Kyiv and the ancient city in Lviv (1254) as well as the Carpathian Forest. In its application to UNESCO for Historic Register consideration (2009), the Port City of Odessa's justification of outstanding historic value focuses on urban infrastructure. The second criterion states: "Historic center of Odessa shows a unique co-existence of two principles of urban environment organization represented by macro-urbanism of streets and squares oriented towards European architectural styles and micro-urbanism of inner courtyards demonstrating "Odessan traditionalism".[16] In tracing the cycle of disruption and continuity, the urban development of the city of Odessa spans from the end of the Russo-Turkish War to the Crimean War to World War One and the Bolshevik Revolution to World War Two to the dissolution of the Soviet regime to Ukrainian independence and to the current Russian-Ukrainian conflict in 2022. At the juncture of each conflict arises the iterative cycle of disruption and continuity. As a catalyst for change , a cycle of disruption triggers a rupture which in turn transforms and effectively neutralizes traditions of living or belonging in either the physicality of the real world or the virtuality of the metaverse. The notion of urban typology is reductive in the sense that the urban grid, as an organizing principle, signifies rational human movement from one place to another in a city, which imparts a sense of structure, scale and order. To explain urban structure, Derrida states:

> "Now, *stricto sensu*, the notion of structure refers only to space, geometric or morphological space, the order of forms and sites. Structure is first the structure of an organic or artificial work, the internal unity of an assemblage, a construction; a work is governed by a unifying principle, the architecture that is built and made visible in a location." (Jacques Derrida[17])

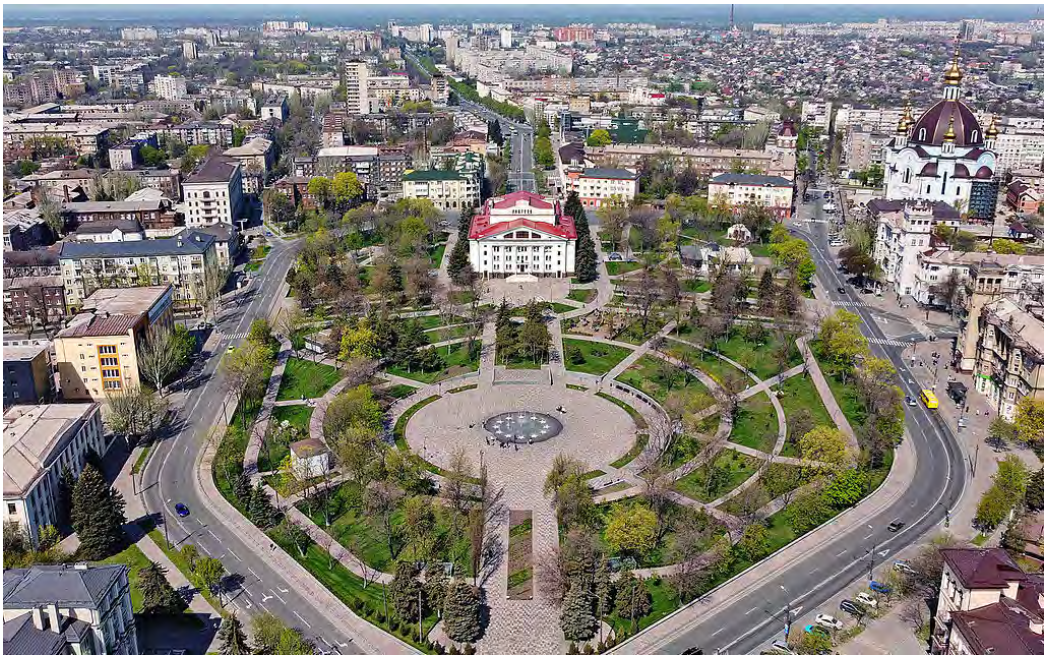

Fig. 1: Academic Regional Drama Theater, Mariupol, 2022. (Source: https://before-war-after.com/en/news/tragedy-of-the-drama-theater).

Fig. 2: View of the bombed theater building, Mariupol, Ukraine, April 10, 2022. (Source: https://before-war-after.com/en/news/tragedy-of-the-drama-theater).

The urban grid, as an organizing principle, signifies order. The military origin of the Roman gridiron is extant in the archaeological remains of the city of Timgad (Emperor Trajan, AD 100, UNESCO World Heritage City, 1992), that is located 480 km south-east of Algiers near Batna, Algeria. The street grid is instrumental in the classicist urban structure of Odessa. As a brief historical narrative of Odessa's origins as an imperial city, after the Russian troops defeated the Ottoman forces (Russo-Ottoman War 1768-1774), Russian Empress Catherine the Great founded the city of Odessa in 1789 and then allocated funds for the port-city in 1794. Although Catherine the Great reputedly never visited Odessa, José de Riblas and Franz de Volan set about building urban infrastructure, houses and civic buildings based on a Vitruvian-inspired master plan, defined by a street grid with respect to the geography of the limestone steppes, ravines and a natural harbor, (Fig. 3). In describing the Odessa master plan origins, Patricia Herlihy (1986), cites:

> "De Voland's plan for Odessa was in keeping with other western ideas of the time.' Because of the ravines, de Voland laid out two gridirons intersecting at a forty-seven-degree angle. To preserve uniform rectangularity in the city blocks, the principal gridiron had to be set at an angle to the shore. This grid pattern was a popular contemporary form, chiefly because it rendered the tasks of surveying and subdividing relatively straightforward." (Patricia Herlihy[18])

Herlihy also describes favorable terms including tax incentives for foreign colonists (Greeks, Albanians, Jews, and Moldavians, et al.) to settle in the free port of Odessa. After Catherine the Great's death in 1796, her son and heir Tsar Paul 1 decommissioned both master planners de Ribas and de Voland in their respective roles for political reasons. Subsequently, Tsar Alexander 1 appointed the grand-nephew of Cardinal Richelieu, Armand-Emannuel Sophie Septemanie de Vignerot du Plessis, Duc de Richelieu, as the Governor of Odessa. Richelieu served from 1803-1814 and in his honor the statue by Ivan Petrovich. Martos, Sculptor, (1828) was placed in the plaza at the top of the Potemkin Steps, leading from the harbor. Richelieu was charged with enforcing the 'Black Death" quarantine in Odessa from 1812-1813, as noted, "On November 22, 1812, all 32,000 residents of Odessa were forcibly imprisoned in their homes."[19]

The Internet Encyclopedia of the Ukraine describes the morphology of the city grid layout and the architectural significance of the Richelieu Statue as the gateway to the port city of Odessa, "Prymorsky Boulevard with a semi-circular square at its center and the monumental staircase known as the Potemkin Stairs (built by F. Boffo, 1837-1841) serves as a grand entrance to the city."[20] American author Mark Twain, (Samuel Longhorne Clemens) visited Odessa in 1867 and remarked on the Richelieu Statue and the monumental stairs, as well as the ubiquity of the urban grid to provide continuity in urban space for an "American Town in Russia," (Fig. 4).

> "I have not felt so much at home for a long time as I did when I "raised the hill" and stood in Odessa for the first time. It looked just like an American city; fine, broad streets, and straight as well; low houses, (two or three stories,) wide, neat, and free from any quaintness of architectural ornamentation; locust trees bordering the sidewalks (they call them acacias); a stirring, business-look about the streets and the stores; fast walkers; a familiar new look about the houses and everything; yea, and a driving and smothering cloud of dust that was so like a message from our own dear native land that we could hardly refrain from shedding a few grateful tears and execrations in the old time-honored American way. Look up the street or down the street, this way or that way, we saw only America!" (Mark Twain[21])

In unravelling the historical threads that tie together a map and narratives of cultural space for a spatial history of the Russian Empire, in particular the Port City of Odessa, the Imperiia Project (2018 – present), supported by a Digital Humanities Advancement Grant from the National Endowment for the Humanities and the Davis Center for Russian and Eurasian Studies at Harvard University, provides visual iconography, maps and historical narratives. Project Director Kelly O'Neill poses two crucial questions, first: "Can we map cultural space?" and second: " Can we find new ways of navigating between the micro and macro scales of such a vast political space?[22] Emblematic of urban cultural space and a cycle of rupture and reconstruction, the Odessa National Academic Opera and Ballet Theater (Italian architect Francesco Frapelli, design and French Architect Jean-Francois de Thomon, renovation) first opened in 1810 and was destroyed by fire in 1873. After an inconclusive design competition, Austrian Architects: Ferdinand Fellner & Hermann Helmer were appointed in 1883 to design the new opera house in the Neo-Baroque, French Rococo style, (Fig. 5).[23] The candle chandeliers were replaced with the first Edison electrical lights in Odessa. The Odessa National Academic Opera and Ballet Theater (1887) continued to be a cultural symbol in the cycle of rupture and continuity, when in 1925 another fire destroyed its orchestra pit and stage. Both were re-built. Faced with the prospect of destruction during World War II (1941) and again in the Russian-Ukrainian conflict (2022), the Opera House was protected with anti-tank barricades.

Fig. 3: Plan of Odessa, Publisher: Carl Hohfelder, circa 1850. (Source: https://commons.wikimedia.org/wiki/File:1850_map_Odessa.jpg).

Fig. 4: Odessa Urban Grid by Flemish Engineer Franz de Voland. Photo Valentina Mushynska, 2014. (Source: http://www.mushynska.ch/docs/Architektur_en.pdf).

Furthermore, the cultural narrative in Odessa, according to Olivia Durand, (2022) provides an in-depth analysis of the twin commemorative statues of Richelieu and Catherine II, located along the urban axis of Katerynynski Street and Primorsky Boulevard. In a gesture of symbolic urban connectivity, the left hand of the Catherine II Stature is raised towards the sea, in line with the Richelieu Statue. This subliminal connectivity energizes the route and the plaza between the two statues. Conceived as a "Monument to the Founders" of Odessa, the Catherine II statue was designed by Architect Yuri Meletyevitch Dmitrenko, who won the 1892 design competition, (Fig. 6). Her imperial authority is acknowledged in the Catherine II Statue to commemorate the 100th anniversary of Odessa, (Olivia Durand, 2022). Joining the statue at the base are the four founding fathers of Odessa, namely Prince Grigory Potemkin, who was governor-general of "*Novorossiya*," José (Joseph) de Ribas, admiral in the Russian army and administrator of Odessa's development, Prince Platon Zubov, second governor general, and Franz de Volan (Wollant), a Flemish engineer responsible for the street gridiron and the master plan of Odessa. Prince Grigory Potemkin was associated with the "Potemkin Villages." The term is used in a derogatory sense to imply that the mythological villages constructed to impress Catherine the Great during her tour of the "*Novorossiya*" territories were merely facades with local troops dressed up as happy, productive peasants in model villages, in one sense, a kind of 18th-century simulation of virtual reality.

In terms of physical orientation and navigating political space, the Catherine II Statue in Odessa is symbolic of Russian imperialism and emblematic of the cycle of rupture, discontinuity and reconstruction from its founding in 1789 to the present day. The destructive cycle of rupture also connotes erasure and the elimination of memory. Therefore, the disruptive set of historical events surrounding both the Catherine II and the Richelieu Statues illustrate how political disruption reconfigures political traditions that migrate back and forth between neo-classicism in the colonial period to valorization of the Russian Revolution in the Soviet period with Karl Marx Plaza towards Ukrainian nationalism in 1991, after the dissolution of the Soviet state. Another cycle of rupture is unfolding during the Russian-Ukrainian conflict in 2022. State-mandated 'amnesia' seeks to replace the memory of deposed regimes or former governments. Parallel forces seek to eradicate the colonial past and attempt to cultivate Ukrainian national cultural identity. Durand states, "The context of the reinstallation of the statue of Catherine II – or rather the Monument to the Founders as a whole – is thus entrenched in previous processes of historical erasure."[24] Additionally, Durand observes that the square itself has changed its name at least seven times in its history, as part of a cycle of erasure and creation of cultural identity. during the Russian Revolution, perceived as a symbol of Tsarist Russia's imperial expansion, the Catherine II Statue was at risk and put in storage for its own protection during the Odesa Bolshevik uprising in 1917. The statue was recast and reinstated in 2007 to restore the perception of historical continuity of classical urban traditions in Odesa. However, its survival as a civic monument is uncertain due to its contested history, especially in the context of the Russian-Ukrainian War in 2022. Currently, a cultural war in Odesa targets the destruction of Russian and

Soviet monuments in favor of a Ukrainian national cultural identity. On March 9, 2022, local citizens arranged for and installed over 1200 sandbags to protect the Duke de Richelieu Statute, which is listed in the State Register of Immovable Monuments of the Ukraine, (Fig. 7, Fig. 8). As a further indication of the geostrategic importance of the U.S.-Ukrainian cultural relationship in 2022, a statute of Mark Twain is planned for Odessa. Prior to the Russian-Ukrainian conflict, international relations journalist, Peter Tase (2021) noted, "The Statue of Mark Twain in Odessa will eternally be considered as the symbol of brotherly ties between the United States and Ukraine; it will serve as an exceptional platform that will promote rural tourism in the Black Sea Region."[25] In contrast with "hard power" of war and destruction of urban monuments, this cultural exchange is an indication of "soft power," thus strengthening cultural identity, either as part of a tangible past or an imagined future.

After an initial damage assessment of cultural and historic buildings in Ukraine, reports indicate that to date none of the UNESCO World Heritage sites appear to have been damaged. As of August 16, 2022, there are 177 damaged cultural sites elsewhere in the Ukraine of which 44 sites are in the Donetsk Region with 27 damaged sites specifically located in Mariupol, where there are 10 cultural and educational buildings, a museum, a library and two monuments as well as religious and historic sites included in the UNESCO inventory. During the siege of Mariupol from February 25 to May 17, 2022, up to ninety percent of the city's buildings were damaged or destroyed. Cognizant of potential damage to physical artifacts, intangible cultural and virtual collections, Quinn Dombrowski, an academic technology specialist from the Stanford University Library, instigated a grassroots global initiative for the digitization of Ukrainian cultural heritage, known as SUCHO (Saving Ukrainian Cultural Heritage Online). Calling for volunteers, Dombrowski posted on the Twitter social media platform on August 24, 2022. Within a week over 1,000 volunteers were collaborating online to create a virtual cultural exhibition space composed of 50 TB (Terabytes) of data on 5,000 websites. The SUCHO website announced, "We have created a virtual exhibition space to raise awareness for Ukrainian culture."[26] The rising awareness is that not only are physical artifacts at risk, but also are virtual sites. With the goal to capture online cultural websites, Sebastian Majstorovic, Co-Coordinator of SUCHO, sensed the electronic version of the Kharkiv State Archive was at risk and it was saved hours before SUCHO situation monitors confirmed that the servers were damaged. Poignantly, a photograph in the digital archive is dated 1887 of Vasyl' Leontiĭovych Shapovalo's Winter Theater which was replaced in 1960 by the Donetsk Academic Regional Theater, and subsequently bombed in 2022, underscoring the perpetual unwrapping of urban rupture.

Fig. 5. Odessa Opera House, Architects: Ferdinand Fellner & Hermann Helmer, 1887. Photo Credit: Valentina Mushynska, 2014. (Source: http://www.mushynska.ch/docs/Architektur_en.pdf).

Fig. 6: Catherine the Great – Founder's Statue, Yuri Meletyevitch Dmitrenko 1892, Photo, 2022. (Source:https://www.telegraph.co.uk/world-news/2022/08/28/odesas-new-culture-war-sees-ukrainians-targeting-russian-monuments/).

Fig. 7: Duc de Richelieu Arman-Emmanuel du Plessis Statue, Odessa, Ukraine, (1828), Photo 2020 (Source: https://before-war-after.com/en/news/monument-to-duke-saved-from-bombing-in-odesa).

Fig. 8: Monument to the Duc de Richelieu Duke de Richelieu with sandbags, 9 March 2022. (Source: https://before-war-after.com/en/news/monument-to-duke-saved-from-bombing-in-odesa).

3. URBAN CULTURAL CATALYSTS

The UN Habitat World Cities Report 2022: "*Envisioning the Future of Cities,*" raises the question: "How can cities be better prepared to address a wide range of shocks and transitions to sustainable urban futures?"[27] Policy points within the report involving the future of cities conclude that innovation will drive knowledge-based cities, evolving around the widespread use of technologies as well as digitization in all facets of city life. In the context of challenges and opportunities as well as disruptive conditions in cities, António Guterres, Secretary-General of the United Nations states: "Local is the space where we connect the dots. Cities and towns can spearhead innovations to bridge the inequalities gaps, deliver climate action and ensure a green and inclusive recovery from the pandemic – especially as the proportion of people living in urban areas is projected to grow to 68 per cent by 2050."[28] The identification of urban cultural catalysts connotes the ability of cultural places to invigorate and revitalize public spaces. In chemistry a catalyst is "a substance that increases the rate of a chemical reaction without itself undergoing any permanent chemical change."[29] Metaphorically,

an urban catalyst connotes redevelopment and change. Wayne Attoe and Donn Logan (1989) argue: "A catalyst is an urban element that is shaped by the city (its 'laboratory' setting) and this in turn shapes its context. Its purpose is the incremental, continuous regeneration of the urban fabric."[30] Besides being a force for change within an existing city, an urban catalyst may provide the impetus for new cities. In the context of American cities, Attoe and Logan (1989) discuss urban catalysts underscoring the importance of architecture:

> "The subtleties of the catalytic concept and its power to help us understand the interaction of urban design and other factors are usually overlooked. Architecture, too, is catalytic. Not only infusions of capital that incidentally produce new buildings and reconstructed streets but buildings themselves can be catalysts, ensuring the high quality of urban redevelopment. Urban design *quality* is determined at the scale of buildings, not balance sheets." (Wayne Attoe and Donn Logan[31])

Conceived in 2021, Telosa (Telos: Highest Purpose, Greek) is a utopian city in the U.S. based on sustainable development, equity and inclusion (Fig. 9). Former Walmart president, billionaire tech investor and entrepreneur Marc Lore envisions a socio-ecological endowment model based on "Equitism," a theory that economist Henry George popularized in the nineteenth-century (Progress and Poverty, 1898). However, Marc Lore denies building an urban or political utopia. On the contrary, he expresses the need to put people first in the city in saying: "We've started a mission and a set of values – open, fair, and inclusive – and will be taking demonstrable steps to live these values better than any other city in the world." [32] Telosa plans to target 5 million people on a 150,000-acre (62,000-hectare) site to be built between 2015 through to 2050, possibly in Utah or Nevada, subject to water capacity. According to the BIG website, Bjarke Ingels, Founder and Creative Director, announced "Telosa embodies the social and environmental care of Scandinavian culture and the freedom and opportunity of a more American culture."[33] Tom Ravenscourt (2021) reports that, "Broadly based on the principle of urbanist Ebenezer Howard's Garden Cities in the UK, the city would have a density of around 33 people per acre – broadly equivalent to that of San Francisco."[34] The kinds of innovation expected to become catalysts for sustainable urban growth in Telosa include: a 15-minute walkable city, eco-friendly, sustainable architecture, emphasis on walkability with scooters, bicycles and autonomous electrical vehicles, green infrastructure for maximum penetrability and a fund to restore critical habitats and preserve regional natural resources. The separation of vehicular traffic and pedestrianized space fits within an ecological model of a low-carbon city and reduces predictable effects of global warming and heat islands. As an organizing principle, courtyard housing is arranged within a grid of streets, reminiscent of *La Rambla (Las Ramblas,)* an arterial street in Barcelona. The *Rambla* is an artery that connects the *Plaça de Catalunya* with the port and numerous cultural establishments, including the Opera House, theaters, plazas and a museum.[35] As the locus of civic pride and eco-urbanity, "Equitism Tower," is

replete with photovoltaic roofs and aeroponic farms. Besides being a landmark viewing tower and skyscraper, Equitism Tower is an urban catalyst that symbolically aims to be a beacon for inclusion and equality for its citizens, (Fig. 10). Therefore. the master plan combines cultural, socio-economic and environmental elements in its objective to become a sustainable city, as well as the embodiment of urban catalysts for the environment and architecture.

Sociologist Saskia Sassen, who coined the term "Global City," posits that a Third Space exists that is neither fully human nor fully of the biosphere, but an assemblage, (2016). This thought is in direct opposition to the rupture between cities and the biosphere that causes environmental destruction. Sassen argues that: "This rupture has been described as the *unbiological* consumption by cities of the biosphere. That is, cities today, unlike in past periods, take more from the biosphere than she can generate."[36] In the rupture between cities and the biosphere, Saskia Sassen contends that "The urban today is increasingly constituted through processes that produce diverse instantiations of space, time, place, and 'new natures.'"[37] Sassen points out that since buildings and architecture, as well as city districts, function as instruments for environmental sustainability, these conurbations need to go beyond recycling and gathering rainwater. One example Sassen puts forward is a design by Arup, the Strategic Science Consult (SSC) of Germany and Colt International for the Solarleaf façade that filters out carbon dioxide from the air, that in turn grows algae which is then used to fuel bioreactors. Therefore, systemic advances as urban catalysts in the realm of architecture, material science and scientific knowledge could well transform future cities to link with the biosphere in a more sustainable and holistic way.

Fig. 9: "Telosa's mission is to create more equitable and sustainable future," Marc Lore, 2021.
(Source: https://worldarchitecture.org/article-links/evmgn/big-envisions-new-city-in-america-that-can-house-five-million-people.html).

Fig. 10: Equitism Tower, Telosa, BIG Architects, 2021. (Source: https://worldarchitecture.org/article-links/evmgn/big-envisions-new-city-in-america-that-can-house-five-million-people.html).

4. URBAN INNOVATION IN THE METAVERSE

Shifting the narrative on rupture in urban architecture from tangible geographies to intangible virtual space, urban innovation creates different models and immersive experience in the digital world. Derived from disruptive technologies of blockchains, gaming, and bitcoins, the metaverse triggers innovation from a real economy to a digital economy. In exploring the metaverse, Jeremy Huggett, University of Glasgow, (2020), investigates the emergence of virtual heritage that sits at the intersection between VR and culture heritage. Huggett asserts that measures of accuracy, authenticity, authority and accessibility are necessary to assess the immersive experience in the digital world. Currently, a collage approach to virtual heritage results in the use of multi-media including videos, sketches and 3-D animation to create a virtual experience. Huggett concludes, "Alternatively, in a virtual world in which the viewer is encouraged to develop their own narrative, the boundaries between different techniques might usefully clarify where the real versus the surveyed versus the interpreted begin and end."[38] Recognized tools in the metaverse include devices for Virtual Reality and Augmented Reality, such as Meta Quest Pro (formerly Oculus VR). The hardware is still in its infancy despite considerable investment of US$10 billion (2021) from Mark Zuckerberg's leap into the newly formed company Meta Platforms, Inc. (formerly Facebook). The promotional video message of Zuckerberg's Meta (verse) is "first and foremost about connecting people." Relative to architecture and urban planning in the metaverse, Michael Ball observes, "Multi-billion dollar, multi-decade city projects are using these technologies to determine how a given building might affect traffic flows and emergency response times, or how its design will affect the temperature and sunlight of a local park on a specific day."[39] Ball envisions these digital twins and simulations will shift collaborative exercises onto a digital platform.

Fig. 11: The micronation of the Republic of Liberland on the Danube River in the Metaverse, 2022. (Source: https://www.dezeen.com/2022/03/11/liberland-metaverse-city-zaha-hadid-architects/).

Fig. 12: DeFi City Hall in Libraland Metaverse, Patrik Schumacher, Zaha Hadid Architects, 2022. (Source: https://www.dezeen.com/2022/03/11/liberland-metaverse-city-zaha-hadid-architects/).

Architecture in the metaverse is no longer subject to conventional structural or ergonometric constraints. Building designs defy gravity since they are suspended in cyberspace. Patrik Schumacher of Zaha Hadid Architects, London, notes that even though there are no physical constraints in virtual space, the articulation of space may use familiar building elements such as columns, floors, walls and roofs to modulate space suitable for human perception. Design constraints in the metaverse concern how many people can be in a scene relative to server data capacity. Patrik Schumacher envisions architecture in the metaverse mirroring

the multi-disciplinary nature of the Bauhaus architects, textile designers, web designers and urban designers operating together to develop a singular virtual geography.[40] Ultimately, the metaverse will concern social interactions in cyber-urban utopias. Without urban planning restrictions in virtual space, architects may design communities and cities. Liberland, described as a cyber-urban crypto incubator in a blockchain metaverse, is physically located within an aspiring micronation in-between Serbia and Croatia on the Danube River, (Patrik Schumacher, Zaha Hadid Architects, 2022). Renderings for the Liberland master plan are based on naturalistic and organic motifs resulting in a baroque leaf stylization, (Fig. 11). It will be possible to buy plots of virtual land in the virtual city with a potential financial stake in the real world. Liberland has its own flag, coat of arms and a cryptocurrency. As the locus of Liberland's emergent cultural identity, a City Hall around DeFi (Decentralized Finance) Plaza, a NFT (Non-Fungible Token) Gallery and a DeFi Incubator, define meeting spaces in a virtual world, thus mirroring commercial and civic places in the real world, (Fig. 12). Disruptive technology, such as NFTs replaces paintings in the art market. In either the public sphere or the metaverse, civic landmarks are cultural catalysts for socio-ecological innovation.

5. CONCLUSION

Perhaps sensing lability or change, Derrida continues the discourse on structurality to allow for transformation. In an analogous way related to the fluidity of the baroque, Derrida proposes, "It is during the epochs of historical dislocation, when we are expelled from the site, that this structuralist passion, which is simultaneously a frenzy of experimentation and a proliferation of schematization, develops for itself."[41] In the virtual colonization of the metaverse, the real human world is reflected in virtual reality with avatars to expand human experience into the commercialization of both worlds. In conclusion, the cyclical nature of the rupture and continuity between the real and the virtual worlds affords myriad instances to create urban catalysts for socio-ecological innovation in the metaverse.

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AESTHETIC POLITICS, BLENDING OR CONFUSING THE RUPTURE AND CONTINUITY OF THE TRADITION OF DOMESTIC ARCHITECTURE OF BARPAK, NEPAL?

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AESTHETIC POLITICS, BLENDING OR CONFUSING THE RUPTURE AND CONTINUITY OF THE TRADITION OF DOMESTIC ARCHITECTURE OF BARPAK, NEPAL?

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Barpak, the crown of Gorkha, a picturesque Nepali Himalayan village with its iconic black stone tile roofs, stone block walls, and mud-painted floors and interior, settled harmonically in cobble streets, was dramatically razed by the earthquake of 2015. Barpak experienced a slower, long-term disruption in its tradition through globalization and transculturalism, but it was the catastrophic event of the earthquake that resulted in a rupture that extensively changed the dynamics of the village, especially its aesthetics. It is now a disorder of concrete, cement, traditional stone blocks, timber, black stone tiles and corrugated galvanized iron sheets, with an enforced architectural design model that is taken on from the nondescript cubic construction and built on ambiguous memories and aspirations. This study aims to build on the representation of this ambiguity of memories and aspiration, and tradition and modernity on the new dwellings of Barpak through the vantage point of aesthetic politics to understand the rupture and continuity of traditional architectural and spatial practices of Barpak. So, this aestheticization under duress incorporating disruption with aspiration and grounding its feet in tradition is a determinant of global and cultural forces, political aesthetic(s) of the nation, the intrinsic volatility of social actors and their relationship, the aspiration for innovation, progress, modern material world and status quo, and the emotional attachment with traditions. Hence, this study starts from a critical architectural enquiry investigating dwelling aesthetics (exterior and interior), followed by an interpretive methodological approach emphasizing social and cultural rupture and continuity through aesthetics. In the end, it attempts to analyze the epistemic value and the visualization of the residents of their dwelling as a blended or confused aestheticization of rupture and continuity of tradition. The outcome of this study will contribute to two larger questions of this discourse, first, how and in what capacity can architecture embrace and present disruption and continuity? Secondly, how the contemporary ambiguity in the meaning and practice of "traditional" and "modern" post rupture brings new narratives, architecture and positionalities to a traditional settlement.

1. INTRODUCTION:

Barpak, once a picturesque historic hamlet is located at 6000 ft above sea level in the northern territory of province 4 of Nepal at the laps of Buddha Himal (a subrange of Mt. Manasalu). This Himalayan village is 176 km from the capital city of Kathmandu and it roughly takes 8-9 hours to reach Barpak on a good day. The once scenic ridgetop hamlet of 1450 identical homogenous stone buildings is now a disorder of scattered heterogenous nondescript cubic construction. Barpak being the epicenter of this 7.9 magnitude earthquake is now beyond recognition due to a rupture in its physical and spatial form which was once dominated by beautiful traditional domestic architecture. This village was an important location for the Mount Manasalu trekking route as it offered beautiful homestays and brought tourism which highly contributed to the local economy; however, this isn't the same in the present as an outcome of the earthquake and its implications leading to rupture of the village. This rupture challenged the natural change and continuity which was an outcome of modernization, globalization, transculturalism and traditionality.

Figure 1: Aerial view of Barpak before earthquake. (Source: Pin Ghale, Barpak, Nepal).

Figure 2: Reconstruction of Barpak after earthquake. (Source: Author).

The history of Nepali villages constantly speaks of the clash of change and continuity and change and continuity do not just happen, it has to do with human agency.[1] However, the human agency itself is confronted by natural, social and political intervening events and processes and times that lead to rupture rather than just change. The rupture in meaning and practice of domestic architecture, its spatial arrangements and its materialization post-earthquake of 2015 compels to reimagine the social and cultural system and the processes of this village and confront the idea of 'local, traditional, modern, development, and

production. Also, the village is further contested by the political aesthetic(s) of the nation and the aesthetic politics of the residents of the village in its rebuilding which result as a major determinant in the rupture and continuity of the traditional domestic architecture of Barpak, Nepal post-disaster directing the course of new text and architecture of the village of Barpak and many other Himalayan villages of Nepal.

The concept of disaster has multiple social constructs and has set out multiple important conceptual differences in its theoretical and practical approach.[2] From conceiving disaster as primarily a physical and natural agent to one where it is realized in relationality to the vulnerability of social systems and processes[3, 4, 5, 6] or where it is a collective outcome of natural, technological, social, physical and political[7, 8] presents a broad global conceptualization and narrative to disaster. These conceptualizations and narratives inform a very much-needed theoretical understanding for an epistemological attempt to conceptualize disaster and rupture for this study and identify the positionality and a clearer approach to the field of study and subject matter in order to avoid obvious confusion, distraction and anomalies in the advancement of research findings and set a robust pathway for the research.[9, 10] Thus, this study conceptualizes disaster through the three paradigms – 'the result of the impact of external forces', 'the result of social vulnerability' and 'the result of uncertainty'.[11] However, it focuses primarily on social vulnerability and the result of uncertainty and not the external agent as it is these two that inform the rupture and continuity of the traditional domestic architecture. As much as these conceptualizations are critical for this study, disasters have local narration and are very contextual, hence it needs to be situated in the context of the Himalayan villages.

The 2015 earthquake of Nepal is primarily the commencement of this rupture, even though it doesn't take disaster as the primary point of study it informs the basis of this study. This is because disaster for this study is conceived as an outcome of socio-cultural processes and consequences, and political implications that increase the vulnerability and uncertainty of the impact of external forces acting. This vulnerability and uncertainty are the production of the society rather than a result, and it is particular that production informed by aesthetic politics that this study intends to engage through the lens of architecture in order to realize how aesthetic politics blends and in the meantime confuses the rupture and continuity of domestic architecture of Barpak.

The subject and object of this study, both are contested by the transition and 'Nepal seems to be lost in transition'[12] and in this transition period, its politics is defined by instability and short-termism.[13] In addition, this instability and short-termism politics is further contested by the vulnerability and uncertainty of the village challenging the gradual transition to a rupture. In this situation, the political engagement in re-writing and re-building the villages is crucial as post-disaster reconstruction presents 'a rich political and economic resource that local political elites are competing to capture and politicize the whole process' and yet

aesthetically present the order of disorder with a 'blanket approach' in the name of neutrality, social harmony, inclusivity, progress and development.[13] The aesthetic embodiments of political positions are material transformations and interventions, with concrete effects', and this in a literal sense implies to Barpak's architectural material transformation and interventions with concrete as a result of particular political ideology to present the aesthetic of 'modern', 'progressive' and 'development'.[14] However, this political aesthetics doesn't stand independent of aesthetic politics which is informed by the aspiration, realization and circumstantial situation of the residents of the village.

The aesthetic of modernity informed by the political aesthetics at the time of crisis created the basis of an alternative view to reshape the ideology through a physical form as a sign and symbol of progress. This reshaping either circumstantial or aspired within led to an alternate aesthetic for Barpak. In addition, this study seeks to investigate how the aspiration of modernity formed by 'a view of the world as changing, as offering opportunities for individual progress, as being a place, in which one looked beyond the neighborhood in space and away from the past in time for models of success' took an alternative aesthetic for reference.[15] This reference as the claim to modernity was the claim for comfort, progress, respect, safety and development and in the meantime the same claim challenged the society's pride of a single aesthetic of its traditional domestic architecture to a non-descriptive cubic aesthetic taking away the essence of their traditional living system and its social-cultural importance which carried a consignment of personal associations, meanings and evocations. In contrast, the aesthetic politics of a few residents of Barpak wasn't informed by political aesthetics inspired by modernity, it rather sought to rebuild as a claim to pride, continuity and citizenship which has more personal reflection of socio-cultural practices and its associated meaning. However, even these residents were aware of the reality of their situation and the needs of the present generation hence leading to a form of anonymous and multi-referenced architecture, rooted in traditional practices and situating it in contemporary times.

2. RECONSTRUCTION AS A TOOL TO REDEFINE THE AESTHETICS?

Barpak, proud of its traditional domestic architectural heritage and once known as a living museum of Gurung culture met a collapsing fate when the earthquake of 7.9 Richter scale centered on the village. This was followed by more than 500 aftershocks crushing nearly every single house in the village to rubble. The immediate response to the aftermath of the earthquake soon transitioned its focus from health and food to the temporary or transitional shelter as the monsoon was about to hit and it hits hard in such hilltop villages given its geography and geology. Barpak being the epicenter of the earthquake received immense national and international attention and support for short-term immediate emergency relief. However, the same wasn't witnessed in the following reconstruction process. After more than 18 months from the earthquake, most of

the residents of the village still living in corrugated galvanized iron (CGI) sheets transitional shelters, tarpaulin tents and the self-constructed temporary shelter had a clear realization of the government's struggle and inefficiency in providing support for the reconstruction of houses. As for the past more than 18 months, the guidelines for the reconstruction of earthquake-resilient houses and the grant scheme have been discussed but not been realized on the grounds.

Figure 3: Traditional domestic architectural heritage of Barpak (pre-earthquake). (Source: Bir Bahadur Ghale).

Figure 4: Example of non-descript cubic construction post-earthquake. (Source: Author).

This government's grant scheme in the form of financial support could be capitalized to rebuild the houses if the rebuilding was done in accordance with the government-approved earthquake-resistant designs. What is

surprisingly shocking about this grant scheme and the approved generalized earthquake-resistant designs for all the villages is that neither of those realized the reality on the ground in regards to the peculiar social context, financial difficulties, vulnerabilities and uncertainties each village presents. These approved designs for reconstruction primarily ensure structural integrity to make the houses earthquake resistant but not even one design considers the traditional architectural methods, materials and its social and cultural implications of respective villages. In addition, the grants offered in three parts after signing the participation agreement were realized in three tranches – NPR 50,000 (to begin the project), NPR 150,000 and NPR 100,000 (offered against satisfactory compliance with technical construction guidelines). This total amount of NPR 300,000 approximately meets only 30-50% of the total money needed to build the house, however, regardless of the shortfall, even the promised money (in accordance with meeting the technical criteria) was subject to the ability of the residents to access these services and resources offered by the government given their limitations in regard to age, power, connections, affiliations and capability of handling the bureaucratic system.

Figure 5: Reconstruction of earthquake-resistant design with new defined aesthetics. (Source: Author).

What these two combined reconstruction schemes as a top-down approach did in the name of 'building back better' is create confusion and complication for the residents in rebuilding their houses. The language and ideas of this reconstruction scheme was built on international reconstruction policy discourse which did not resonate with the reality of the villages.[16] In addition, its implementation witnessed the ongoing struggle of the government to realize the schemes on the ground with its anticipated effectiveness to support the residents. The outcome of this resulted in the reconstruction of Barpak which has no association with its rich heritage, relevance to their social system in practice before the earthquake, confusion in adapting to the new aesthetics and question of the community's ability to be self-reliant which it has been for centuries.

In addition to the implications of the reconstruction schemes, in the time of uncertainty and vulnerability, the ideology of 'progress and development' of certain local political and active actors of the village informed the aesthetics of many initial reconstructed houses given their beliefs and exposure to the modern world, access to finance (strong political ties and remittance money) and an opportunity to advance on their status in the village. This in accordance with the approved earthquake-resistant design by the government and promising progressive living encouraged the vulnerable and confused residents to follow the same path which was further fortified by the impact of transculturalism and globalization. And lastly, the chant, 'the earthquake didn't kill people – poorly built houses did' repetitively used by many government officials, politicians and members of national and international organizations convinced many of the residents of Barpak to accept the non-descriptive cubic construction for which most of them had to take additional loans. This led to a ripple effect and eventually resulted in most of the residents opting for this type of construction as it became the practiced norm of reconstruction during the crisis. However, linking with the discoveries of Gladfelter, many residents now lament the outcome of this reconstruction, witnessing the loss of their traditional solidarity of the community in self-sufficiency and rupturing the dynamics of their traditional village in its form, function, visualization, experience and practice.[17]

The non-descriptive cubic construction was undoubtedly safer than the traditional architecture in terms of structural integrity, but it brought rupture in the social, cultural and aesthetical practices of domesticity and domestic architecture of the village of Barpak. Since the reconstruction some residents still struggle, some accepted the modern way while others negotiated between traditional and modern living with the transition of social and cultural norms and practices in the community filled with new forms of domestic architecture. However, the acceptance of the new redefined aesthetic of the individual homes and the entire village is something which most of the residents are struggling till date as it presents a constant reminder of what they had, what they lost and what they might have to live with for the rest of the lives as they have lost their pride heritage to this reconstruction. And, it isn't just the 'top-down' nature of the government, national and international actors who are responsible for this disjuncture between need and outcome but it also came from the locals struggling to navigate through the uncertainty, vulnerability and rupture. In the same understanding, the outcome of this reconstruction process questions its capacity as a tool to redefine the aesthetics, whether it was a conscious application or a natural outcome of the situational crisis and the decisions made in the time of uncertainty and rupture.

3. POLITICAL AESTHETICS OF ARCHITECTURE

The outcome of the redevelopment of the Barpak reveals the anthropological vision of the politics of the government, local political actors and the residents, which is not purely a manufactured product, but rather a presentation of the development of ontological position constructed of shifting ideologies of different actors and their dialogues, agreements, disagreements and decisions. The aestheticization of this vision through the domestic architecture of Barpak results in a powerful mode of politics as it determined the reformation of speech and production in the revisualization of the village. This mode of politics in determining the reproduction of domestic architecture post rupture evoked deep debates over politics, aesthetics, citizenship and traditional way of life by a few residents who questioned the capitalization of crisis for politicizing the architectural activity which has been a product of tradition practiced over centuries. In addition, this challenged their practice of citizenship as the current animated power of architecture purposely celebrated or unintendedly revealed the dominance of visualized aesthetic of 'progress and development'. This visualization was diffused in the community of Barpak during the crisis by drawing attention to the aesthetics of modernity as a claim for progress, status and comfort. This political aestheticization through the 'aesthetics of architecture would represent an important value judgement, a decision as to how we shall live our lives and what our priorities should be'.[18] This was realized through building regulations, publicity, safety concerns and financial and material support offered by the government and the aesthetics of the social aspirations of the residents. However, the construction of this new mode of politics in the village didn't completely disassemble the system of the traditional practices and citizenship for a few residents of the village, as they continued to practice their traditional way of citizenship, aestheticization, production and living through the means of their domestic architecture. This validates the question of how political aesthetics and aesthetic politics represented through architecture ruptures or continues the tradition.

The political nature of architectural reproduction in the Barpak governed how its aestheticization and materialization physically determine the action in the domestic sphere whereas the social and cultural nature of architectural production has been determining how the social action and cultural practices materialize and aestheticize the physical form. This dualism (political nature and socio-cultural nature of architectural production) of aesthetics and materialization to impose external power dynamics to capitalize on the presented rupture or potentially disrupt it to encourage continuity informs the fundamentals of aesthetics and presents the current confused and blended state of the village of Barpak. Hence, here in the Barpak, the home and its architecture is not simply a unit of dwelling in the physical form, but a contestation of aesthetics which has been essentially political since the rupture.

Photo. 6: Visual of how architecture, people and politics led to rupture and continuity of tradition. (Source: Author).

The political nature of architectural reproduction in combination with the social aspirations of the residents for the modern material world, comfort, aesthetics and class politics has been confusing the residents through its divided spatial arrangement, modern industrial material and the unfamiliar domestic environment when put against their practiced way of life. This, in addition, has challenged their occupational system (which is a part of their domestic sphere), social relations, and cultural and religious practices to accommodate the political aesthetics of 'modern development' and 'safety and security' borrowed from the western world. This raises the question of the applicability of aesthetics of a particular perceived ideology of development and a social body with a new system of hierarchy embodying change. In contrast, the socio-cultural nature of architectural reproduction (which is evidently witnessed in Laprak, the sister village of Barpak) argues that drawing on traditional socio-cultural practices brings associated histories, memories, meanings, emotions, and cosmic relations, embodied in artefacts, materials, spatial layout and structure. This was possible when the power of citizenship was realized in the aestheticization of the domestic architecture and in turn aesthetics are thus essential to reconstruct the elementary duty, power and practice of their citizenship.[19]

The political aesthetics of architecture offers a critical system to make declarations of belonging and enables (either the government or the residents) to claim visibility, power, citizenship and prominence. In the case of Barpak, this political aesthetics sometimes certain and at times ambiguous transformed the physical appearance of the village, the social order in practice, the historical relevance and to an extent the daily life itself. However, this change prominent or obscure is still confronted by aesthetic of traditions appearing

democratically by creating a traditional dwelling environment in the interior of the house, performing rites and rituals, organizing cultural and religious activities and continuing their social relations making its own political claim.

4. SOCIAL AND CULTURAL RUPTURE AND CONTINUITY THROUGH FORM, AESTHETICS AND MATERIAL:

The event of construction was a complex arrangement and relationship of actors, the actions they partake in, the particular space and time of the process and production, and materiality and arrangement are a construct of practiced social, cultural and religious norms. These constituents of this event imbued the character, aesthetic, spatial layout, functional spaces, ornamentations, form and orientation of the domestic architecture of the village in the past. The harmonious relation between the constituents of construction in juncture with the cosmos led to the production of an auspicious house and life in it for its residents.[20] The rituals of this construction were social, cultural and religious in essence and practice; however, the event of reconstruction post-earthquake saw a reverse trajectory where the aesthetic, form, material and technical construction aspects determined the construction process and the product. This transformation isn't the outcome of just change, but the rupture that was created by the earthquake, vulnerability of social order and uncertainty of the systems in place. Despite of this deep rupture the process of building a house wasn't completely devoid of the social, cultural and religious practices as the residents tried to accommodate these in alliance with the determinants of aesthetic, form and material when possible. However, the outcome of this unnatural accommodation is perceived, conceived and lived as an impure and inauspicious place for dwelling and having no way to purge it completely except for performing rituals in the attempt to bring auspiciousness to the place for dwelling and for the coming generations.

Gurungs and Ghales of Barpak built their traditional houses on rectangular sites and directly opened it to the streets. The site was never surrounded by low walls which separated the house from the streets as the domestic life in this village was never limited to the boundaries of home. The house was oriented with the entrance opening to the cobbled stone streets linking the house directly with the community in the essence of space and people. However, there was a hierarchy in the organization of access to space and the function of space based on its actors and actions. The access to the main entrance was always through 2-3 steps and a covered raised veranda spanned the entire façade of the traditional dwelling. This transitional space was constructed for multiple social and cultural reasons – creating an invisible division between the exterior and interior of the house, to offer a space for daily social gatherings for non-family or related members as the interior of the house was generally limited to family and relatives unless there is an occasion in the house. Even the interior of the house had a social and cultural configuration as the access to the deity room, sleeping

space and store room was mostly limited to immediate family members only to maintain the purity of the house and avoid the potential danger of any malicious activity. Hence, these spaces were either on the first floor or separated from the communal space (an open kitchen) which had the earthen stove and a deity idol protecting the family.

Apart from spatial configuration and form, the aesthetics and material were also informed by social and cultural norms. The external walls were built of dry stone lined with mud and covered by black stone tiles on the roof. The windows and doors allowing the air to flow in the house were built of wood and the interior of the house was painted with a mixture of red clay soil and water. The house was daily warmed by the earthen stove in order to bring the house as a union of four elements of life – earth, air, water and fire, protecting the beings living in it. The materialization of the house and the realization of the aesthetic was also a collective social process where members of the family and relatives young and old, male and female, all contributed in their own capacity to build the house. One extraordinary attribute of the traditional domestic architecture of the Barpak village was the homogenous materialization and aestheticization of the village. All the houses in the Barpak before the earthquake were almost of the same size, style and material which strongly contributed to defining the social dynamics of the village. The traditional architecture of this village didn't determine the status, caste, religion, power, occupation and more of the residents of Barpak in contrast to how architecture and its materialization and aesthetics are prone to reflect those aspects of society.

This union of cultural, social and religious practices to build the house was ruptured by the earthquake, vulnerability, politics and aspirations at the time of crisis. This rupture resulted in a completely unrecognizable landscape of the village with barely any resonance to its traditional architecture. The non-descriptive cubic construction of the houses determined by form, material, aesthetic and structural integrity challenged the social, cultural and religious constituent which was the basis of building a house in the traditional village. The heterogeneous contemporary houses of Barpak in different forms and sizes, haphazardly situated in the village explicitly speaks of status, power, occupation and caste. Building a boundary wall or fence has been a norm either from concrete, dry stones or branches depending on the financial status of the family. These to an extent have created distance between the residents of the village as it has limited the feeling of access to each other's houses. In addition, the hierarchy in the organization of access to space and the function of space has drastically changed in modern dwellings. The absence of an elevated covered raised veranda, a communal space around protected kitchen and segregation of storage area, sleeping space and deity room is now a direct entry into the house crossing the boundary wall and the internal spaces are practically divided into rooms in accordance to function, which has brought privacy to the individuals which were missing in the traditional dwelling but at the same time brought distance between the family members and changed the way they collectively performed domestic activities.

The basis of most dwellings has changed from the concept of sacredness to safety and the absence of a union of four elements of life raises the question of auspiciousness and purity in the mind of residents. To address this outcome of rupture, some residents have attempted to integrate certain traditional practices (though not in the same manner) as the aesthetic, form and material of the modern house doesn't enable the same continuation. This is done by adding an earthen stove in the kitchen (but using it every day in the concrete house has raised concerns for the aesthetics of the kitchen as it blackens the interior of the kitchen), applying a mixture of red clay soil and water at the entrance of the house and around the earthen stove, collectively building shared communal space to supplement the absence of veranda, performing rituals frequently to purify the house and bring auspiciousness.

Photo. 7: Integration of traditional elements in the modern construction, for instance Earthen stove and deity to protect the kitchen from the impurity of people (other than the family members) entering this space, as kitchen offers the essential source of life & in all times should be protected against impurities. (Source: Author).

5. EPISTEMIC VALUE AND VISUALISATION OF RESIDENTS:

According to Bourdieu's concept of 'bodily hexis', the knowledge, character and actions by which we perform and live everyday lives are not purely guided by just reflexive form in words, thoughts, expressions and actions that we communicate verbally and physically but also through an implicit form of gestures, postures and movements and other abstract psychological habits.[21] The duality of the above two mentioned in cognition with the epistemic value of the residents characterized how they experienced and visualized life in the village. In addition, the embodiment of these reflexive and tacit forms is not simply habits as Bourdieu

suggests, it grants individual ideas and concepts to find new methods and actions to new realities without calculated consideration, constructed from their instinctive and intuitive feelings. However, when the embodiment of reflexive and tacit form and instinctive and intuitive feelings were challenged by the rupture, the permanent disposition of the epistemic value of the residents of Barpak brought an abrupt change in how they visualized the reconstruction of their village.

The village once a socially and culturally homogeneous large neighborhood in its spatial and lived experiences was a construct of homocentric spaces of inclusion and exclusion, justified beliefs, indigenous knowledge system, values and attachments on which an ensemble of individual and collective actions and emotions were performed. However, the temporary abrupt change led to a permanent reconstruction of a heterogenous, scattered and detached village not only in terms of the built environment but in the revelation of new everyday life, activities, system and order. The residents unable to visualize the new aesthetics of the village and its consequences on everyday life during the crisis and reconstruction, now laments – *'paila bhukampa le, pheri rajneeti le, pheri hamro awastha le ani pheri hami aafai le hamro gaun harayao'* which translate as *'first it was the earthquake, then politics, then our situation in crisis and eventually we ourselves lost our village'*. Living the sad reality of the architectural loss and its multifarious implications, many residents kept travelling on memory lane emphasizing the fullness of the functionality and the aesthetics of their traditional architecture. However, some residents who lost their family/relatives/friends validated the need for modern construction for safety as it was the material and structure of the traditional domestic architecture that was responsible for the deaths. Despite the acceptance of modern architecture, the aesthetic of it is still questioned by them as they never visualized their village completely devoid of the essence of their traditionality.

'The everyday world of practices, that is motivated actions, takes place in the context of space, social and cultural time that includes past, present and future which results as a way of life. This everyday world of practice is everyday life and it is the domestic life for the villagers'.[22] The complexity of the 'seemed' simple domestic life and the epistemic value and visualization of the residents is deeply rooted in '*grihastha dharma'* as it defines the way of life of the residents. Grihastha is the domestic life of the householder and dharma is a religious or ethical duty. The traditional domestic architecture and grihastha dharma were in unity as it informed the worldly action and embodied being. In association, it defined the code of conduct for sacred, moral and ordinary activities based on the epistemic value of individuals of different gender, age and caste. However, the process of construction of modern architecture, its form, organization, material, aesthetics, time, and space detached the householders from their grihastha dharma. As beginning from the conceptual organization, construction and followed by inhabitation, the code of conduct of auspiciousness, purity, sacredness, morality and ordinary activity of the aforementioned was detached from the practiced enigmatic lifeworld of the householder. This detachment and renunciation as an outcome of the rupture led to the

balanced attachment of functional, social and cosmological home to a unit of dwelling where all three are being attempted to fit with house and householders.

Most of the residents identify their dwellings as a confusing unit of rupture and continuity, where the rupture is visible in the aesthetics and the continuity is lived in fragments in everyday life. The visualization of the residents of the future of their village is unknown as they are uncertain if the fragments of traditional life lived every day will find its way through grihastha dharma and blend with the house or if the house will reconceptualize the meaning and practice of grihastha dharma. What they are certain about is that home is an embodied unit of experience, knowledge and action in different dimensions and planes of life, and it is multifaceted and one of which is the *'yantra'*. Yantra which literally means an instrument, the machine that stimulates the inner being for action and cosmically it is the mystic pictorial geometric plan representing nature and order of the universe to inform the spatial arrangements and system of correlations between space, activity and cosmos. What most of the residents affirm on the future visualization of their village is, though the form and aesthetic of the village will never go back to the past and the cosmic connection with the home might not be established but home as a yantra will continue to stimulate inner being for action.

6. AESTHETIC POLITICS – BLENDING OR CONFUSING:

The aesthetic of the traditional domestic architecture of Barpak could be perceived as imploded, but how its politics in the recent time reconstructed a new image is the distinction between the constant gradual change, and innovation and insertion of the modern world. This outcome of the rupture, restructured their home, grihastha dharma, social life and occupational structure. However, as Hobsbawm (1992) discusses the inventions of traditions, he exclaims certain unchanging and invariant '…objects or practices are liberated for full symbolic and ritual use when no longer fettered by practical use'.[23] This symbolic and ritual representation in the aesthetics leading to living architectural traditions still informs certain practices of grihastha dharma. To give a few examples these symbolic and ritual traditions in visual form are the earthen stove in the kitchen, the application of a mixture of red clay soil and water to paint floors and walls and the stone structure washing unit in the exterior still has practical use along with its symbolic relevance. However, these and other similar examples aren't an established practice in the modern house which is definite and perfectly codified in every household but a representation of the significance of certain aesthetics and practices where the intention is to continue its importance and relevance leading to a blend of aesthetics of tradition and modernity.

The complexities of the relations of architecture, form and politics together, situated in the paradigm of modernity are primarily comprehensible through close attention to the aesthetics and materials of the current architecture of Barpak. Aesthetics and materials became fundamental in reconfiguring the house, safety and

quality of life in it for the residents of Barpak who decided to build modern homes, by bringing aesthetics and materials with the showcased conception of a perceived better life, appositeness to modernity, and commensurability with other residents. This was realized through clean vertical lines, defined geometry, framed cubic construction, ordered block/brick layering, shutters and grills, larger window spans, smooth walls and flooring, partitioned rooms and multiple stories by the use of concrete, cement, glass, steel, bricks, gravel, iron sheets, plastic carpets, wall paints and more. The materialization of this into a new modern house was expressed by many as a proud moment (which was momentary) and a relief (to have a safe structure to dwell in). It certainly offered safety, a modern facility, convenience, and excitement (especially for kids), however, the enjoyment of it demanded a detachment from its history, tradition, culture and more importantly grihastha dharma which eventually downplayed the pleasure of modern material and aesthetics.

The new political ideology, with the manifestation of 'building back better' formulated in a wholly new language of architecture intended to bring everyone back to harmony did very little to do its indented propaganda and rather backlashed as confusion and dissonance. The new visual of architectural aesthetics and aural of architectural vocabularies in the context inexperienced of these, the residents could not hold the visual and meaning of their own new homes as it confused their being and living. Their living informed by technical rather than ideological justification whereas their being still situated in the convention of grihastha dharma confronted them with the dilemma of choosing one, as blending both for most of the residents is conceptually impossible, especially after the reconstruction of the new house. However, very few residents visualized this dilemma prior to reconstruction and attempted to blend both. In making that choice, they did not use the design models offered by the government, offered along with financial and material support. They chose to build their own house in their own style. This brought financial, technical, material and design challenges, but it allowed them to be the artisan-maker of their own house, incorporating memories, stories, identities, cultural significance, traditional values and architectural practices ensuring structural integrity in confluence with the rituals of auspiciousness, purity and grihastha dharma.

The artisan-makers of the house set without prior knowledge of planning concepts and technical details of modern architecture but in identification with their nature, tradition, culture, ritual and safety acted creatively in materialization, aestheticization and inhabitation of their new home. The internal spatial arrangement embodying the family and clan relationships reflects the living tradition of the social structure of the inhabitants with its open plan on the ground floor and new adaptation to the concept of privacy on the first floor. The raised access to the house through the covered veranda leading to communal space around the kitchen painted with red soil on the floor and wall, protected by the earthen stove and deity, lives more life than the first floor which has limited access restricted mostly to the family. The sense of place and home is felt more on the ground floor which is cosmically closer to earth whereas the sleeping room(s), store room

and deity room are on the first floor being cosmically closer to the super beings. The material and aesthetic of these houses incorporate a blend of vernacular and modern materials and styles using concrete, timber, stone, mud, water and fire to maintain the structural integrity and yet bring the union of elements of life – earth, water, air and fire. This configuration and production in juncture with cosmic yantra, auspiciousness (of time, place and people) and purity have led to blended form and aesthetic and in the meantime enabled these residents to continue their grihastha dharma.

Photo. 8: Kitchen and communal space of the house of one of the artisan makers blending the traditional form and aesthetics of the interior (in sync with cosmic yantra, auspiciousness, purity and grihastha dharma) with structural safety in its construction through mix use of modern and traditional materials. (Source: Author).

7. CONCLUSION

Barpak's aesthetic practices and its politics instigated the exploration of the outcome of a heterogenous modern village from the ruptured homogenous traditional village. This allowed discussion on the capacity of architecture and its constituents to embrace, reject and present disruption and continuity presented by nature, politics, social order and cultural phenomenon. However, what was significant in this particular case is that during the situation of crisis more than the capacity of architecture it was the capacity (which is dependent on the severity of the situation) of the individuals who direct their limitations and competence through architecture. The residents were potent power to govern the materialization of their home, its auspiciousness and purity, function, organization and grihastha dharma. However, the severity of the rupture and implication

of external forces – fear, politics, modernity, transculturalism led to the architecture which presented such disruption that Barpak is known to be 'lost in reconstruction' as it is now an unrecognizable scattered village when compared to its rich historical architectural landscape. Despite this, there are few exemplars – residents and architecture that out of the odds accepted the rupture and used it to embrace the disruption and with the aspiration of continuity blended the traditional and modern architecture not necessarily through form but rituals, symbolism, material, spatial organization and grihastha dharma.

Of course, the aesthetic and form, the architecture and the politics typically are changed in their representation and existence in the village of Barpak post-earthquake. Even if it did not change it could not be read, written or experienced the same now as it did before. But even more, when it has imploded how we perceive, understand, analyze and textualize it with all its complexities is a challenge. This study merely presents a point of initiation in the inquiry of aesthetic politics of the domestic architecture of the Himalayan village to instigate dialogues in the discourse of architecture and traditional settlement but more towards its rupture and continuity. This experience and notion of rupture and continuity together led to ambiguity in the meaning and practice of traditional and modern. This ambiguity was realized as confusion by most of the residents if not all, as for the residents the home was a lived-in declaration of ownership that expressed and reproduced the legitimacy of their ideologies and practices whereas now it is the attempt to embrace the new house presented by contested modes of being in the modern system and trying to live in fragments of traditionality. Taking on new positionalities out of circumstantial situations plagued the aestheticization of architecture which has brought new narratives of life uncertain of its course.

The new architecture reflecting and refracting the notions of safety, security and good domestic life materialized with collective politicization of improved aesthetics are voluntarily questioned by the residents. The questions rooted in ambiguity compelled to the realization that the reconstruction of the village was stimulated through political and social ideological transformation rather than through materiality of domesticity and grihastha dharma. This often reminds the residents that the home isn't just a home now as it used to be, it is a unit of social and political transformation, but especially an outcome of aesthetic politics. Aesthetic politics emerged as decisive means as it informed the perceived possibilities of experiences of an improved life, symbol of development, the desire of projected belonging, and ideology of progress but unfortunately resulted in a pastiche of disagreements. These disagreements are lived in the everyday lives of most of the residents of Barpak while the remaining few have either come in agreement with it or didn't take the same course of reconstruction. Hence, given all the discussion in this paper, the raised question of aesthetic politics, blending or confusing the rupture and continuity of the tradition of domestic architecture of Barpak, Nepal, by no means has been comprehensively answered but certainly offered a force that moves towards a detailed investigation.

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RUPTURES AND DISRUPTIONS AS INNOVATIVE TURNS: INTERPRETING CHANGES AND ANTICIPATING POSSIBILITIES IN BUILT ENVIRONMENT IN AND AROUND THE WALLED SETTLEMENT OF LOMANTHANG, NEPAL

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RUPTURES AND DISRUPTIONS AS INNOVATIVE TURNS: INTERPRETING CHANGES AND ANTICIPATING POSSIBILITIES IN BUILT ENVIRONMENT IN AND AROUND THE WALLED SETTLEMENT OF LOMANTHANG, NEPAL

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Traditions and traditional settlements are not static but always changing and evolving in response to diverse contextual factors including ruptures and disruptions of different types, scales and intensities. Using the case of a 15th century earthen walled settlement of Lomanthang in Nepal, the paper explores how the evolution of Lomanthang can be understood through changes and innovations that emerged out of a series of geological, historical and political, climatic and socio-cultural ruptures and disruptions. It is argued that ruptures and disruptions are not necessarily setbacks, rather they can be seen as an opportunities for innovation. The paper concludes takes reference to some concepts already used in business, evolutionary biology and human psychology.

1. INTRODUCTION

The Cambridge online dictionary defines rupture as noun to be 'an occasion when something explodes, breaks, or tears' and as a verb 'to burst or break, or to cause something to burst or break'[1]. Similarly, disruption is defined as 'an interruption in the usual way that a system, process, or event works'[2]. They both deal with changes of the status-quo either by way of breaking away from the existing form or by interrupting the usual system. These are recurring phenomenon in traditional environments, and are accountable for evolution of traditional environments. However, interpretations of these phenomenon have been done in multiple ways, for example – in general many publics may not pay attention to it, so there is no conscious attempt in understanding and responding to them. For them, it is a way of life – some consider as dictated by individual and collective destiny, some just ascribe it to the invisible forces of the universe. Historians may document such instances as the building blocks of history – as causal factors of what happened in the past. A researcher of built environment, however, needs to interpret these historical accounts as contexts which trigger certain actions and reactions. This requires an attention to past traditions, the ruptured moment and the disruptions that are brought in, and analyze where innovations can take place to resolve the gaps revealed by the ruptures and disruptions. It is a conscious but critical reaction to the moments of ruptures and disruptions.

The conscious reaction to such phenomenon have generally triggered either a conservationist approach which would aim to resist the change or minimize the impacts of ruptures and disruptions, or an evolutionary approach to consider them as the something that was bound to happen and accept all changes as inevitable. The former is grounded on a perspective that sees values in the things from the past, whereas the latter seeks to grab the opportunity to do new experiments on new buildings, spaces and techniques. While these approaches would have their own relevance and validity in their respective situations, this paper argues that

there could be a mixed approach borrowing from both the conservationist and experimental perspectives. However, such a mixed approach acknowledging both viewpoints requires a framework to interpret ruptures and disruptions in traditional environments as something that exposes the vulnerability in the traditional practices but also offering aspects through which the traditions can continue in new realities post-ruptures. This paper aims to discuss the possible directions towards a framework by examining an empirical case of the walled settlement of Lomanthang in Nepal, particularly in the past five decades or so.

Lomanthang is a small walled settlement in the North-western part of Nepal, in the district of Mustang. The district of Mustang is perceived generally in two geographic parts: Northern and Southern. Northern Mustang is entirely to the north of the mighty Himalayan range – namely the Annapurna and Dhaulagiri range, but the Southern Mustang contains partly the trans-Himalayan part and partly the parts to the South of the Himalayan range. In this paper, we are concerned about the Upper Mustang, which more or less was an independent kingdom by the name of Lo from 15th to early 19th century. Lomanthang's walled settlement was founded as the capital of the kingdom of Lo. Out of many small kingdoms that were unified under the banner of greater kingdom of Lo in the 18th century, the kings of Lo were able to maintain their tutelary kingship until 2008 when the entire Nepal was converted into a Federal Republic. Culturally and geographically, the area is close to Tibetan. This paper focuses on Lomanthang as a case of settlement along with its historic and landscape context of being part of Upper Mustang – the kingdom of Lo.

The paper draws from historical narratives, overlapping them with the visible or documented spatial changes in both forms and patterns, and supplements the interpretation through some ethnographic accounts. It refers to recent policies and projects of 'development' and 'conservation' as triggers of human-induced ruptures, and historical accounts of geological and climatic changes, political changes, and economic dynamics as forces of ruptures and disruptions in different scale. The representative accounts suggest the possibility of a conceptual framework to consider the ruptures and disruptions as possible innovative turns, so that the evolution and changes in the traditional environments may be understood as situated in such moments. This may be helpful for the designers and researchers to respond to such moments in logical manner. I suggest that inspirations or parallels can be drawn from a diverse range of theories like that of theory of disruptive innovation[3], Darwin's theory of evolution[4], as well as Maslow's hierarchy of needs[5]. I will come back to a conceptual framework after discussing the empirical case of Lomanthang and surrounding landscape of Upper Mustang.

2. LOMANTHANG OVER TIME: A BRIEF ACCOUNT OF SOME HISTORICAL RUPTURES AND DISRUPTIONS

Lomanthang is a small walled settlement built as the capital of a newly independent kingdom in the 15th century AD[6]. The emergence of Lo was a result of a political rupture in the larger Tibetan kingdom which was weakening internally in the 14th/15th century. This political rupture was preceded by a religious disruption of increasing movements of Buddhist scholars and saints from the South (India and the Kathmandu Valley) onto this landscape otherwise dominated by an indigenous Bonpo faith and traditions. This gradual rupture onto the Bonpo religious landscape can be interpreted as an innovative turn which led to the making of several religious sites in the region we are concerned with in this paper. I call it innovative turn because the dominance of Buddhism over the Bonpo traditions – around 7th to 10th Century AD, did not uproot the Bonpo traditions entirely but integrated various sites and traditions of the Bonpo practices into the emerging Tibetan Buddhism. The independence of the kingdom of Lo happened within such a political and religious history.

World map: Google Earth
Map of Nepal:
***Karte:** NordNordWest, **Lizenz:** Creative Commons by-sa-3.0 de*

Figure 1: Location of Upper Mustang region and Lomanthang.

Though initial establishment of the kingdom of Lo took place from small forts atop the hills to the north of present day Lomanthang, the founding king Ame Pal felt the need of a capital city. Thus, a royal palace and the entire new settlement with fortifications was built around 1440 AD. This new settlement was built with locally present mud or earth, stones and timber. It was possible to build it as a coherent and a planned settlement to start with, because the community had the knowledge and skills about the construction techniques. Then, it is important to position how they have acquired such building skills built into their

traditions. To understand this, we need to relate to a geological rupture in a distant past that gave a specific climatic and geographic context to the entire Tibetan plateau.

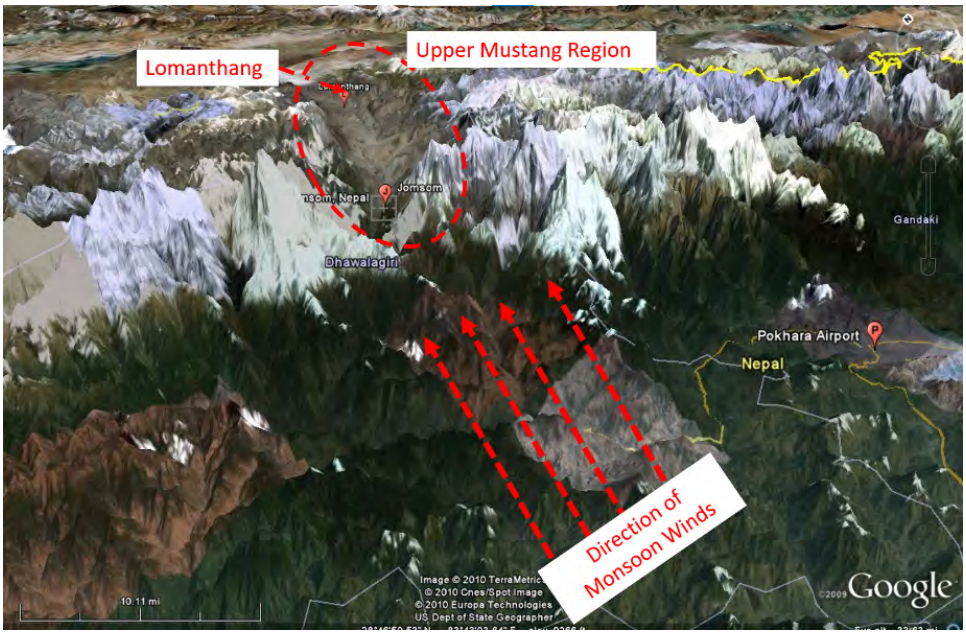


Figure 2: The rise of the Himalayas as an ancient geological rupture, causing the rain-shadow in the region of Upper Mustang. (Source: Google Earth).

The gradual formation of the Himalayas as an ancient geological event of collision between the Tibetan and the Gondwana landmasses leading to the rise of the Tethys sea bed could be considered as a rupture of entirely different scale (both in space and time). This rupture induced the formation of this subcontinent along with the Himalayan Mountains. Had it not been for this rupture resulting in the formation of the mighty Himalayas, the character of this region as dry and arid would not have been possible, as the Himalayan range primarily disrupts the rain-bringing monsoon winds from the South. Hence, very interesting mud architecture with flat roof evolved in this entire region where the flat roof becomes very useful in snowy winters for drying of grains etc.[7] Today, however, due to climate change or other climatological ruptures, the rainfall has reportedly increased causing a disruption to the 'way of life' as compared to the past. It is where one can anticipate the gradual change of materials for roof making or an entire change of the design of roof in the future. This is an indication for architects and engineers to think and innovate on roof design and construction. There are other details of the roof making process and its components that need similar attention where understanding the ruptures and disruptions would be helpful, for example – the tradition of capping the wall parapets with a cake of highland grass and twigs are getting lost due to the labor and cost involved. Instead, people are just maintaining the tradition in visual way which does not serve the utility of wall cap. Hence, while the visual derivation of the building character from a roof making tradition has been

maintained, the tradition itself has been changed by the residents on the technical part. This disruption of tradition needs to be examined to find ways of addressing the technical purpose as well. So far, architects have appreciated the black or red bands on the parapet (as visual characteristics and decorative element) but there is a need for innovation here.

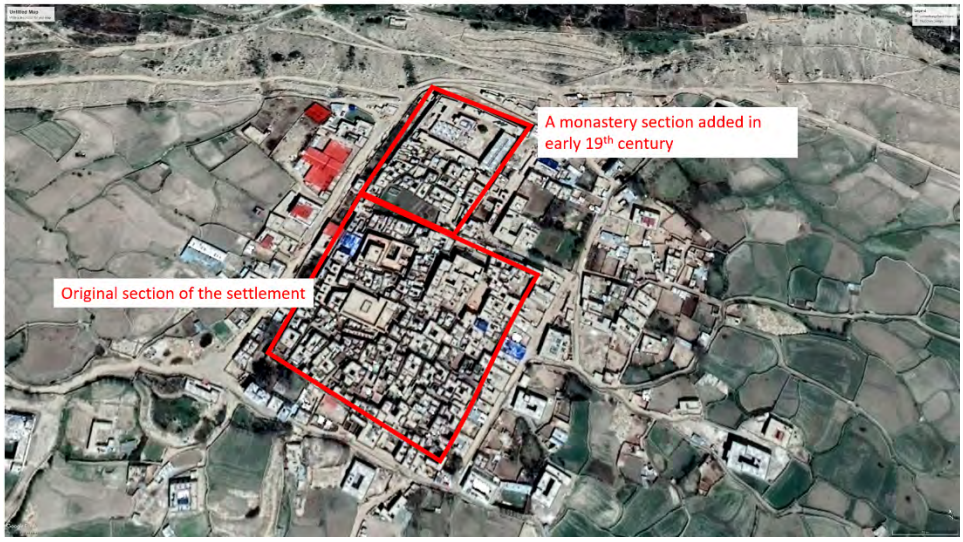


Figure 3: First set of settlement plan, based out of google…with northern quarter added in 17th century. (Marking by author on a Google Earth Image).

Going back to the historical timeline, Lomanthang originally was settled as a roughly square shaped plan. Historical accounts have it that its northern quadrangle was added in the early 19th century (see figure 3) to incorporate a fallen monastery nearby, that fell apart in an earthquake. In fact, such disruptions have occurred repeatedly in past at different places as various ruins in this landscape suggest. It is recorded in historical accounts that settlements had to be shifted around due to water issues or security issues or sometimes due to floods as well. In the recent past, the water issues – both lack and excess, have been a cause of displacement. In one case, about 30 families were relocated to Southern part of the Himalayas since the government offered them lands there, which disconnected the people from their traditional landscape and society. In other case, some external agencies helped them to find an alternate location nearby to settle new houses and farmland when an old settlement struggled with water supply. Both these cases deserve an ethnographic inquiry into apparently a climate change issue but such disruptions also need to be accounted by architects, planners, development agencies and heritage practitioners.

In 1786, the kingdom of Lo opted to merge itself within another emerging kingdom (empire perhaps) of the then Gorkha Kingdom[8], which later became the Kingdom of Nepal. This political event can be considered as an important rupture in the land of Lo because this shifted the socio-political orientation from North (Tibet)

to South (rest of Nepal). This have had implications on language (as Nepali language would become a mandate later on) as people's last names were modified, place names got phonetically adapted, and influence of other socio-political nature begun to appear as a broader framework. Yet, this particular disruption was not contested much because the geographic context of the sheer mountains between this region and rest of Nepal distanced the society here from the rest of Nepal – physically difficult to access and no other efficient modes of communication. One can sense the benefit of such a geographic disruption to everyday connectivity to maintain a degree of autonomy of the kingdom of Lo even when they were merged into the greater kingdom of Nepal. This geographic 'disconnectedness' favored this region to maintain their cultural identity within a political kingdom of whose the majority had an entirely different cultural identity. Fast forwarding to the last century, this favorable rupture began to become disruptive rupture due to the growing dynamics in the subcontinent – by the arrival of the British East India company to the South, the ongoing wars between the British and the Gorkha forces, then the independence of India, followed by the Chinese cultural revolution leading the fleeing of the Dalai Lama and other Buddhist monks from Tibet.

The Khampa movement in the 1960s probably was the most remembered disruption in this landscape, visible through scars in the landscape but also in the memories of people. Though the Khampas shared similar cultural and religious background, their political aggressiveness required them to make use of many of the caves and parts of landscape as their defensive mechanisms for the war they were waging, thus disrupting an otherwise peaceful region. Yet, this disruption reinforced the region's autonomy as it emerged as a 'forbidden kingdom' where external visitors and influences were purposefully controlled. Though the advocates of cultural preservation could consider such exclusion as contributing to the upkeep of cultural identity and traditions, the humanistic perspectives would decry the exclusion as the region lagged behind in various aspects of 'development' that other regions and communities in Nepal were exposed to. Yet, these mainstream projects of conservation and development were introduced in the last quarter of the twentieth century. For this paper, the analysis of these recent projects are important ruptures and disruptions worth theorizing for our understanding of the dynamics of the traditions and environment. Hence, I discuss them in the next section.

3. CONSERVATION AND DEVELOPMENT DISCOURSES: RUPTURES AND DISRUPTIONS IN THE PAST FEW DECADES

This section continues the preceding discussion of historical accounts of ruptures and disruptions, but with specific attention to the policies and projects related to conservation and development in the past four decades. Though the first set of human-induced ruptures would have been the arrival of colonial explorers venturing out onto this landscape – at least those whose accounts are available as historical references, they

were not organized missions in themselves. So, we will consider the events and outcomes of organized efforts since the 1980s when a protected area concept is introduced in the region. This concept of area conservation approach involving people of the land quickly connects to the opening of the area for controlled tourism, then specific projects of both cultural heritage conservation and infrastructure development, then a major political change in Nepal, and the current socio-economic transformations.

It must be noted that the walled settlement of Lomanthang pretty much contended itself within the fortification walls in terms of settlement growth until 1950s except for a major change that took place in the early 19th century during the reign of the king am-dpal dgra-'dul (reigned c. 1816-1837)[9]. A monastery – ruins of which can still be seen at a site nearby, was severely damaged in an earthquake, and it was accommodated within the settlement by expanding the settlement to the north-western part (see figure 3 above). This has led to an important change in the walled settlement's visual identity. As can still be seen today, the fortification walls have most of it painted as white whereas the northern quarter has red paints on it. This refers to the symbolism that the red refers to the religious institution, and the white refers to secular or the king's domain. However, it is interesting that the narrative of white referring to the king's domain and the red referring to the monks' domain within the settlement has never been contested for the fact that the red-symbolism must have been incorporated on the settlement wall after the early 19th century northward expansion of the walled settlement. The fact that the oldest religious buildings still are within the white painted area, but that has not called for a red paint on the settlement wall just nearby the two old *gompas*[10], remind us that the visual tradition of settlement perceived as having two colors is a 19th century innovation. Yet, the tradition of painting religious structures in red is an age-old tradition and still carried out. So, the current tradition of two distinct colors on the settlement wall itself is an evidence of an interesting innovation in tradition after a natural disruption to the functioning of an important religious institution in its original location.

Figure 4: Walled settlement of Lomanthang, picture taken from North-west by author in 2002.

Continuing onto this discussion of addition to the settlement, there are notable numbers of buildings constructed outside the walled boundary and a few entrances are created, instead of just one original entry gate that is on the north. The location of the main gate to the North probably inspired any additional buildings to be placed towards the north side. Some of the early additions outside of the walled settlement included some facilities established by the Nepal Government like school, health post and a police post among others. In the early decades when this region was open for visitors and researchers, there was a prevalent inclination among researchers and professionals to see any building activity outside of the walled settlement as a disruption of the traditional fabric. This has been a major contestation between the local residents and the external intellectuals (with some exception). Traditions can at times be very structural but they can also respond to any other emerging philosophies across time and space. What is interesting to note here is that I see these intellectual and professional inputs as ruptures in themselves to a society and environment which actually is open and keen to engage with any scholarship and player as long as they see a relevance for themselves (to the place and the people). I elaborate this argument with reference to both the projects of conservation and development.

Figure 5: An aerial view of the walled settlement of Lomanthang. (Source: Google Earth).

Annapurna Conservation Area Project (ACAP) was set up in 1986 with an intent to promote environmental conservation in collaboration with local population and supporting local development. It initially considered areas south of the Annapurna mountain range, and later on expanded to include the trans-Himalayan area including Upper Mustang. It was a new discourse on environmental protection in which people were seen as partners, and the aim of conservation was considered to facilitate local development. The mandated time of this project was ten years, after which it was supposed to be handed over to a community-based management mechanism (though it has not happened yet). This was a major policy rupture in this area that we need to consider, and I would like to explore some of the innovations that were seen in the general cultural context there.

ACAP was seen with much skepticism as there was no such initiatives in this isolated region before. The project brought people from other parts of Nepal as field officers and their mandate was to work with the local communities. The language spoken by the local people is called *loba* – a dialect of Tibetan language, which is very different than Nepali language. So many issues of cross-cultural learning and adaption would have taken place. In all these, ACAP formulated local conservation management committees, mothers group, and youth group among others. There would be community meetings, reforestation campaigns, and many other collaborative activities. The ACAP staff lived within the communities, mostly renting local houses, and they very much adapted into the local culture and communities. It built a culture of collaboration, common responsibility and brought in opportunities of cross-cultural learning. While a detailed ethnographic exploration would be required to document all the innovations (or lack of it) that would have yielded from this policy level rupture in an otherwise isolated environment, I can see only a few visible innovations in the environment and culture. The idea of trash management, sanitation, basic health, education, and collaboration

along with a few locals getting trained in managerial capacities to work in the ACAP field offices itself are some of the contributions of this project, but the fact that the project management itself has not yet been handed over to the local community indicates that something has been a miss here. The snow leopard conservation has been a success story of ACAP, yet one sees occasionally community members going against the accord of not killing a snow leopard. There have been innovations in terms of designing new types of corrals for domestic animals – both structurally and technologically, and introducing community pacts on not killing the snow leopards, among others. Yet, it can be agreed that the innovations in traditions require a much deeper engagement and understanding of all kinds of ruptures – both as challenge and opportunity.

A few years after the region was opened for foreign visitors, a cultural heritage conservation project began in Lomanthang. This well-funded project (of which I was also a consultant for few years in the beginning of my professional journey) failed to innovate much in terms of traditions of maintenance. Not understanding the economics of the locals in general, these projects could not contribute much in innovating local traditions in terms of heritage conservation because of the lapse in strategic thinking on how a temporal conservation project can adapt into local economy and perpetually trigger an economic sustainability for heritage conservation. Yet, when the project focused on capacity building and skills based innovation, it did contribute in creating limited number of new professional opportunities in the community, for example – in my recent visit, I met two of the trainees in wall paintings restoration program turning themselves into artists who have now set up their own art galleries in Lomanthang. Yet, I think these two projects missed important opportunities which could have brought about sustainable innovations in local traditions, much more than what they achieved so far. This is what makes me argue that every external action should be seen as a rupture to the existing tradition, and one needs to think how the rupture can be innovative for the given context. Not perceiving an external intervention as a rupture leads to a process which misses out on being innovative for sustainable changes.

Apart from the above-mentioned two organized interventions as ruptures in the traditions, there has also been a major rupture in the form of a road building project which triggered much debates since last more than two decades. My observations in the early 2000s was that building of a motor road was informally considered as a forbidden agenda in this region for a number of experts' opinion. The opening of tourism for Upper Mustang was directly related to the mandate of ACAP as it was conceived as a limited and high fee paying trekking tourism which should carefully avoid making any impact or strain on the local culture, economy and fragile environment while supporting the local development. While the tourism permit fees (USD500-700 for up to ten days of trekking) would be collected by the government, it was promised that 70% of the revenue would be used for local development. However, this did not happen in reality. On the other hand, the local communities had been demanding air and road connectivity to ease the life in this high

altitude region. While air connectivity was a far-fetched option as Jomsom airport was not very far from air connectivity perspective, the road could not be ruled out. Yet, it was a project mostly argued as an unwanted rupture to the local culture and environment by many agencies and professionals.

It is in this context that when the local self-governance act was enacted in Nepal in 1999, the local governance units like that of Lomanthang took the good opportunity to decide on their own development priorities. Additionally, when the local governments were allotted certain budgets annually to spend on their development projects (without having to wait for inclusion in national priority and budget), the five local government units of Upper Mustang joined hands together to launch a common project – that of building a road through Upper Mustang. It was this rupture in governance modalities – particularly in relation to the local governance that was seized by the local leaders of the region to concentrate their efforts on building of road as the topmost priority. In my opinion, this infrastructure project is the major rupture since the past two decades, and it needs to be understood as a turn for innovation by all stakeholders. I will elaborate this further in the next section.

In 2006, Nepal entered into yet another major political shift when the constituent assembly – formed to write a new constitution for Nepal, in its first meeting unanimously passed a resolution to declare the country as a Federal Republic of Nepal, thus ending a 250 years old monarchy with the Kings as the head of the state, and ushering into a new political system where a president would be the head of the state, a prime minister as the head of the government, and the country to be organized in a few provinces and empowered local municipal governments. This had a direct impact on the socio-cultural scenarios of Upper Mustang because it still had the hereditary kings of the early kingdom of Lo as its symbolic cultural leader with the title of the king (raja in Nepali). Though the king of Lo had been only symbolic since 1951 when the country ushered into its first democratic era, the cultural power the Lo king was quite noticeable. As a matter of fact, the king's role in local cultural festivals are still recognized symbolically, and one can consider this transition also as an innovation as this symbolic recognition of having its own local king unifies the communities in this region. This is in fact a very unique social tradition unparalleled to any other community or region in Nepal today. It is to be seen in the coming years how this interesting innovation continues further because the last formally recognized king of Lo died in 2016, and there has not been a formal coronation of a new king (and in 2008 the Kingdom of Nepal was officially changed to Federal Republic of Nepal after abolishing monarchy. At the moment, the nephew of the late last king and his son are treated symbolically as 'the king' when needed in rituals and celebrations, but their presence both symbolically and physically has been significantly less than that of the late last king.

With country into federalism, and the local governments becoming powerful, and the communities of Lomanthang and Upper Mustang remaining the same demographically, they are bound to take the maximum advantage of the local empowerment that federalism has provided. In fact, during the height of the debates in parliament about the federal structure, I had noticed some slogans appearing in Upper Mustang demanding for a separate province too. The rise of ethnic identity issues, local empowerment, cultural identity, promise of tourism promotion, as well as common issues like out-migration of youth, impacts of climate change and disasters, the regional geo-politics involving both the giant neighbors of Nepal – China and India, are some of the few contexts within which next set of ruptures may emerge for Lomanthang and Upper Mustang. The next section of the paper highlights a few examples of how innovations are observed in and around Lomanthang amidst different kinds of ruptures that I sketched so far.

4. RUPTURES AND DISRUPTIONS AS INNOVATIVE TURNS

Reflecting on the preceding discussion of ruptures and disruptions, this section will discuss how ruptures and disruptions can be taken as innovative turns although some time the innovation may result in the loss of certain forms or traditions. The argument will be made based on historic observations, and then it will be proposed that contemporary ruptures and disruptions are opportunities which professionals and institutions may use to frame an informed and logical approach of dealing with traditional environments in order to maximize the desirable innovations. In absence of such attention, traditional environments may continue to be caught in between the preservationist extremism leading to 'museumification' of traditions and traditional environment, and the developmental universalization thereby missing out on the local or regional identities. In the following paragraphs, I will attempt to point out some observations in which – in case of Lomanthang as explored above, the ruptures and disruptions bring about innovative turns.

4.1. Settlements level

I have discussed above that landscape is dotted with several ruins of small settlements across the region, and the oral accounts suggest the shifting of settlements and houses due to various factors, scarcity of potable water being the primary reason, threats of security by invading army or rebels being a temporary reason in certain parts of history, and the search for better agricultural land being a secondary but consistent reason throughout history. One can still see many ruins of buildings in the landscape across the region. Many of these have oral stories attached to them, some of them have symbolic meanings attached giving some cultural and religious significance to them, whereas many of them have no memory or significance attached to them. The current patterns of settlement locations are the resultant of these various attempts to find a better location, and as most of the inhabited settlements today seem to have been stable for at least a century now, except the three relocations that had been sponsored by either state or other externa support.

At an individual settlement level, I would like to take the case of the walled settlement of Lomanthang which I have been observing as it expands overtime creating layer(s) around the historic settlement, in response to a desired disruption of the limits posed by the boundary walls. Added with the road access, this expansion gets further directions, thus resulting in the contemporary yet evolving settlement pattern outside of the walled settlement. I argue that the emerging expansion pattern deserves a careful study as constant building and experimentation is going to finally result in a planning that over the time will be established as a justified expansion of the walled settlement. Of course, there may be a need of some cosmetic changes to highlight some of the features of the old and new settlements, but there has to be an internal realization for such a highlight than an external push. In the past two decades of my observations for seeking these patterns, I can say at this point that an expansion pattern is emerging which still keeps the core walled settlement at its core. However, the visual character of the old walled settlement is already compromised on various sides, and the only part where it exists in parallel to the new line of houses is on the west side (see figure 6).

Figure 6: Western side of Lomanthang with new buildings on one side and the red colored settlement wall on the other: seemingly a new layer of buildings around the historic core. (Source: Author in May 2022).

Towards the end of the twentieth century, the road became the most desired yet most controversial project in Lomanthang and around. While a conservationist thinkers have been resisting the idea of road to maintain the status quo of cultural heritage, others have been taking it as opportunity. The local people seemed to ready to go to the extremes of ignoring the walled settlement if it would become a reason for not building a road, as it was being proposed to be listed in the UNESCO's tentative list of World Heritage sites (and it is in that list since 2008). Yet, my fieldworks have noted how the local people actually had come up with their own strategies to minimize the negative impacts of road on historic settlement. Reflecting back, I see the road as a

big rupture but being interpreted differently by different stakeholders. Today, it is apparent that the road may be appreciated as an innovative rupture in the landscape.

4.2. Evolution of Vernacular Buildings Typology

At individual buildings level, the innovations in response to ruptures are prominent. A typographical study of vernacular earthen houses in Upper Mustang illustrates how the building typology has evolved from a 'no window' type to a courtyard building with multiple windows with glass panels (see figure 7).[11] Though no exact chronological stamp may be put on the transitions from one typology to other, it is nonetheless a powerful catalogue of how the building typology evolves in response to ruptures that communities face in terms of weather conditions but also how techniques evolve to manage such weather conditions. Exposure to imported materials and space needs also yield to change in building typology, and over the course of time, people master new incorporations.

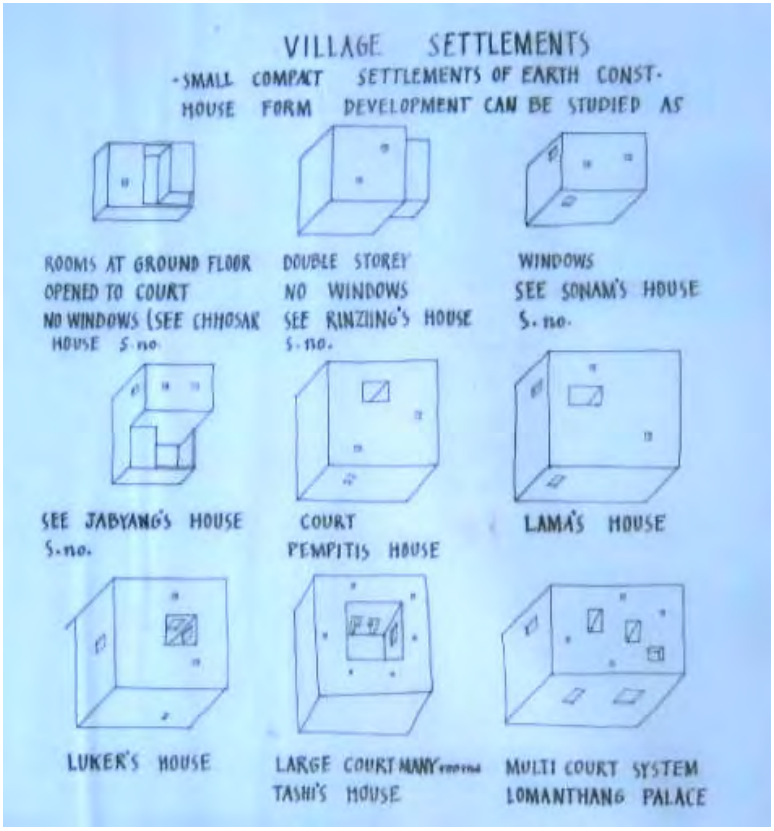


Figure 7: A sketch catalogue of different typology of vernacular earthen houses in and around Lomanthang, author's undergraduate thesis in architecture, 2000.

4.3. Continuity and creativity in cultural symbols

One very interesting observation I have is about the evolution of a small building that I witnessed since the beginning (figure 8). In early 2000s when I was working in Lomanthang as conservation architect, one of our local carpenter desired to build a small tea house to tap into the growing tourism and visitor pattern. This small tea house building comes up in a very prominent corner, and in the process of building, the owner has no choice (in real estate sense) but to get rid of a set of three chortens which have been there as place marker for long. I too note of this development and had a question about the integrity of this place after such a strong symbol of religious and cultural marker is erased from the ground. After the building was completed, I was pleasantly surprised that the three stupas re-emerged but this time on top of the building but almost at the same location ten feet above the ground (see figure 8).

Figure 8: Observations of how a traditional element of a set of three chhortens disappear during a building construction, and later re-appear on top of the new building but on the same location, a floor above, and how it still continues to exist today.

In terms of new buildings, there have also been a trend of departure from the traditional – both in terms of material and design. Many people who would have migrated seasonally to the cities in South for their winter cash economy activities, they had brought in the desire to build a city like house, and if they could afford they would built with cement instead of the traditional mud construction. This had begun to change the environment to resemble any other part of Nepal. However, this scenario seems to have been drastically affected by the rise of tourism and perhaps people recognizing the charm of the traditional features. In my recent visit, casual conversations and observations on the hotel room occupancy revealed that those with very exquisite traditional features and decorations (see figure 9) seem to have had good occupancy and advance booking whereas the rest of the facilities would receive the surplus flow of guests including myself for my

own accommodation. On the other hand, it was also found that the authentic vernacular with lack of improved amenities also did not attract the guests unless absolutely necessary to sleep a night. This is where I think the idea of hierarchy of needs by Maslow helps us to understand divergent behavior about built environment and traditions by the same people, and the explanation lies in what is their pressing need at any given time. In every ruptures and disruptions, individuals would be looking for their own interest rather than thinking of traditions or environment. Traditions do get shaped gradually when these individual actions forge into a collective pursuit.

Figure 9: A new hotel building with rich traditional decorations seemed to hit full occupancy as compared to many other services during the Tiji Festival in May 2022: Many of these new buildings boast the architectural details which are not generally seen in Lomanthang but seen elsewhere in Tibetan cities. (Picture:Author, May 2022).

4.4. Redefining traditions

Some of the *gompas* (Buddhist temples/monasteries) have also seen a significant departure from the traditional practice of lighting butter lamps inside the hall. The black soots from the butter lamps had historically covered the wall painting beyond imagination, and following the wall painting cleaning activities in since the 1990s, there have been a consensus on changing the practice in a way that the tradition continues without creating the black soot deposit problem again. This has been done either by lighting the lamps within a glass chamber inside the main hall or shifting the majority of lamp lighting practice to the outside in the open courtyard. This has been a new practice introduced in such religious places in many other places too, thanks to the ruptures induced by heritage conservation projects, and the disruptions of the old tradition as accepted by all stakeholders in the process of conservation activities.

However, such induced changes – often by inputs from outsiders, do not always get materialized. I was instrumental in creating a small museum space to display the recovered but unused artifacts and wall painting

fragments in a corner outside the Thubchen Gompa in Lomanthang. However, this idea of museum has still not taken shape within the user groups, hence the museum space serves just as a storage till today. Other intervention has been to introduce a rain water gutter to safely dispose the rainwater from the flat roofs of the buildings. Though this has been a common practice now, with the easy availability of plastic pipes, the workmanship on this is far from functional as the seepage around the gutter itself seems to be more damaging than not having a projecting gutter in the first place. All these observations indicate that managing change either ways is not as easy as it seems even in the most logically justified situations and practices. Yet, some do work and some take time to get embedded in evolving traditions. It is thus evident that we need some kind of mental framework to observe, analyze and interpret the changes triggered by any type of ruptures of disruptions, so that one may also proactively imagine what kind of changes and innovations may be relevant in such environments.

5. TOWARDS 'INNOVATIVE RUPTURE/DISRUPTION' OR 'POST-RUPTURE/DISRUPTION INNOVATIONS' AS A CONCEPTUAL FRAMEWORK

Nezar Alsayyad in his 1995 paper[12] suggests a model to interpret the changes in traditional environments by interpreting the historical contexts into four phases, to account for the four visible characters in traditional built forms. Such models are useful and my proposed framework is in line with such approaches but here I try to focus on how one may interpret the ruptures and disruptions that are encountered. In doing so, I refer to the theory of disruptive innovation by Clayton Christenson but I propose to use the phrase but the other way around, i.e. Innovative disruption or Innovative Rupture. The intent behind coining such phrase is to capture the innovative ways out from any kind of disruption or rupture that influences the built environment or traditions. Such ruptures or disruptions could be in the form of climate change or disaster or socio-political circumstances, or just a desire to change the status quo. The key concept in my proposition of innovative disruption is that such disruptions at times offer opportunities of innovation, or people have dared to innovate as a way to resolve the impacts of such disruptions. These innovations may not be time-tested when they appear first but like any other traditions, they will go through the test of time and use, and evolve. Therefore, they make sense in the broader temporal life as traditions even though what appears may be new (non-traditional) to start with.

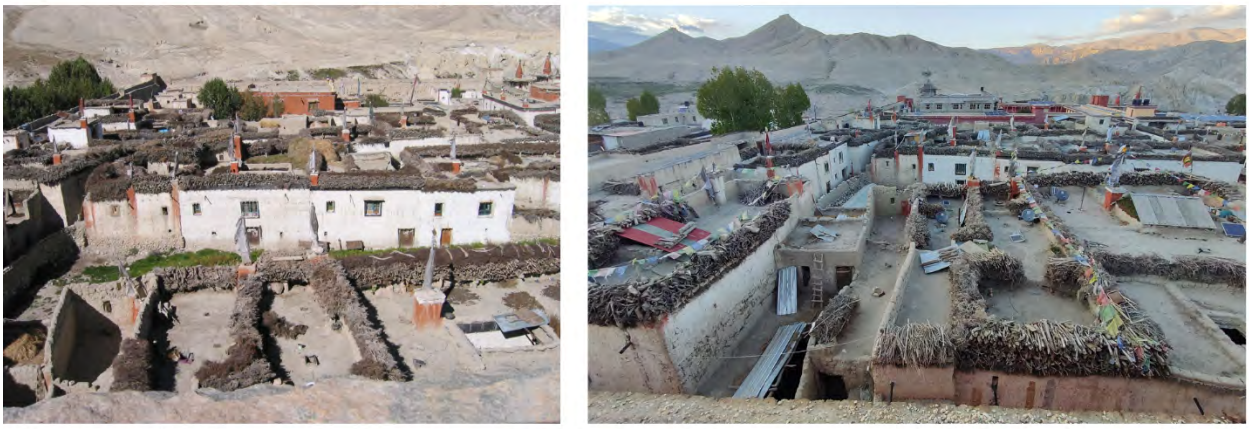
Similarly, the business world has also used the idea of innovative disruption by tweaking it to 'post-disruption innovation'[13] in the supply chain framework, so we can adapt similar phrase for our purpose too. Either way, my proposal is to theorize innovative disruption or post-disruption innovation (also innovative rupture or post-rupture innovation) as a way to understand innovations that appear in traditional environments after any form of disruption or rupture to which the society may respond in creative manner. This suggests a departure

from seeing traditions and environment through romantic lens and decrying any drastic changes to them in any circumstances including the ruptures and disruptions. In the same light, the proposal is also meant to search for opportunities of innovation in the times of disruption or rupture, and invoke it proactively as a designer and not just observe it retrospectively as a theorist. This shall allow us to refrain from mere romanticizing the traditions, and rather see traditions as having its own limitations which are challenges in such disruptive moments, thus leading to a new form or revision or even abandonment of the traditions if it does not fit the new context. From this perspective, I will now anticipate how the current traditions in the traditional environment of Lomanthang and Upper Mustang be imagined or innovated in future.

As I indicated earlier, one of the key disruptors today for Lomanthang is the changes brought about by the road. The challenges posed are the traffic, the new services required like repair workshops and fuel stations, the pollution it may create, the issues of parking, human resources etc. A community with long traditions of horse culture as a mode of transport has now shifted to a motor vehicle culture. Many of my colleagues in Lomanthang who used to keep horses are looking for alternative economic opportunities. The corrals for horses are getting empty while the dung as alternative fuel is also diminishing. So, this rupture brings in obvious challenges. At the same time, this rupture now opens up new possibilities of settlement planning, enhanced services and nobilities, among others. Can not one imagine bringing in sufficient tourists easily but designing experiences which would re-enact the past cultural traditions in the comfort of new amenities? So, one may keep horses to cater to specific tourism sector needs to provide certain kind of exploratory experiences. Such sector could explore more of the landscapes around Lomanthang, and by doing that connect to the remote high lands from where some of the traditional building materials used to be brought. With the value-chain connecting to the forgotten building materials like *pengya* and *pangya* (the materials that are used to cap the wall top so as to prevent erosion from rain/snow), some of the useful traditional building techniques could be revived. As I discussed earlier, the tourists market tends to pay well if the accommodations offer the experience of a traditional building but with contemporary amenities. Here in lies a great opportunity to revive the traditional techniques but at the same time improve their quality and experience. However, these opportunities make sense only when the peoples have their basic necessities met. This is where the hierarchy of needs theory comes into play. Traditions are overtime accumulated wisdom and ways of doing things, derived from everyday practices which are underpinned around meeting the daily needs. From the hierarchy of needs, we can argue that when there is surplus resources and times, then the traditions move to a mode of 'high art'. This understanding is important to recognize the scope and limitations of traditions as well as tradition-practitioners.

The unreliable rainfall pattern has also challenged the efficacy of traditional mud flat roofs, and that is certainly an area that needs innovation. A comparison of roofscapes seen two decades apart illustrates the changes already brought in by the residents to address the impacts of changing rain patterns (see figure 10).

With the access of materials and testing processes, and learning from similar innovations across the world, the roof building tradition needs an innovation both in terms of material as well as design and construction. While the size and scale of buildings have changed as per the requirements, it is interesting to note that these new functional needs have also supported the visual architectural features of Tibetan buildings. These revitalization of traditional architectural features in themselves are innovations, because even the oldest buildings there did not seem to have so elaborate of carvings or façade decorations. It is obvious these new buildings are inspired by popular imagination of how a Tibetan building should look like, but it is a logical imitation of architectural details from places of similar cultural history. So, altogether what it means for me is a combination of three theories that I refer in the beginning: Darwin's almost outdated theory of evolution, but it seems to hold true here; Maslow's hierarchy of needs, and the theory of innovative disruption by Clayton Christenson (which inspires me to adapt it in different ways). Altogether, these seemingly disjointed concepts enable us to analyze the contexts and process of disruptions and rupture in relation to traditional environments, and if we take in the spirit of managing change, I believe the change is perceived as an opportunity of innovation, rather than something to control (like how conservationists would think) or something to overemphasize (like a typical notion of development would aspire for). Herein is the opportunity for both scholars and practitioners of traditional environments to treat traditional environments as living environments that are relevant to the times that it lives in.



Roofscape looking North from the Champa Gompa in 2002 Roofscape looking North from the Champa Gompa in 2022

Figure 10: Roofscapes on Northern part within the walled settlement, seen twenty years apart: 2022 picture has some CGI sheets visible in the foreground and drastic changes in monastic buildings at a distance. (Source: Author in 2002 and 2022 respectively).

6. CONCLUSION

The case of Lomanthang and the landscape of Upper Mustang discussed above highlights the existence and emergence of ruptures and disruptions as recurring phenomenon. These ruptures and disruptions do

interrupt the regular function of a society, but they also provide a much needed pause from the routine. It is in this pause that sometimes traditions are forgotten, and many other times, traditions are invented or innovated or reinvented. Scholars and practitioners of traditional environments shall look into the ruptures and disruptions as reflective moments – moments of pause and reflection, but also icebreaking moments to introduce new agenda into traditions and environments. In the past, conservationist orientations have tended to react to such ruptures in a revivalist way – driven by a romantic and preservationist reference to the pre-rupture traditions, whereas the developmental zealots have used such a break as a way to break away from the traditions. In reality, there can be a middle way and that is what we explored in this paper. Referring to useful concepts like innovative disruption, post-disruption innovation, theory of evolution, and Maslow's hierarchy of needs, this paper attempted to usher in towards a possible conceptualization of a framework that would consider ruptures and disruptions as having the potential of bringing in innovative turns to traditions and environment. The proposed framework is mentioned here to trigger discussions on the proposition, based on which I aim to work it further.

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