Design in Context: Continuity and Change in the Urban Fabric

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Abstract: A human settlement is a symbol of culture evolved over a period of time and shaped by deep rooted understanding of environment, spatial and social preferences, aboriginal forms of wisdom and skills. Every culture develops "assertiveness" towards land, climate, symbols, spatial organization, form, proportions, and dimensional order that remain "constants" irrespective of contingent "changes". Thus, memorable architecture of the settlements is a unique response to geographical milieus, socio-political conditions, belief systems and the "assertiveness" that developed in relation to these factors resulting in an urban environment which is genius loci of the place.

Urban spaces and built forms tend to outlive the very society which assembled and perceived them. With the onset of globalization, there has been a radical swing in the urban form and it evidently resembles an analytical diagram meant largely for urban mobility resulting in an insensitive urban fabric. In shaping our built environment, we have a greater responsibility of connecting past to the present and project into the future by understanding a place and responding to it judicially.

Urban spaces and their form have been dynamic as the people and activities carried out in it constantly evolve and change. These dynamics bring in contradiction between the relatively constant built form and ever-changing socio-economic life often leading to unregulated and unresponsive transformations. Fortunately, meanwhile several examples have reinforced the possibility of preserving the significance of a place over a considerable period of time without interfering with the needs of sequential situations by being adaptable to the constant changes brought in by the cultural and socio-economic realms.

Against this backdrop, this paper intends to critically compare and contrast two distinctive urban environments, Rome and Bhutan set in unique contexts. They have been noticeably responding to the diverse realms towards the corresponding changes in society.

Keywords: Context, Continuity, Design, Urban environment

I.INTRODUCTION

A human settlement is a symbol of culture evolved over a period of time and shaped by deep rooted understanding of environment, spatial and social preferences, aboriginal forms of wisdom and skills. Urban fabric is continuously weaved in layers through the contributions of each successive

generation enriching the urban environment. However, places and built forms tend to outlive the very society which assembled and perceived them. With the onset of globalization, there has been a radical swing in the urban form and it evidently resembles an analytical diagram meant largely for urban mobility resulting in an insensitive urban fabric.

II. CULTURAL EXPRESSION: CONTINUITY AND CHANGE

Built forms, like poems and rituals, realize culture. Different cultures and their practices shape landscapes. The appearance and functionality of built form are greatly influenced by socio-cultural requirements. Better design approach stems from a response that is informed by the sensitive understanding of the context more frequently referred as the 'setting'. Correlations between built forms and its context (historical, political, socio-cultural, economical and physical fabric) contribute to that place's exceptional identity.

Contextual references can be categorised as:
1. Visual context-Visual appropriateness
2. Formal Context- Scientific environmental data
3. Human Context- Cultural values and identity

Built forms that respond positively to the cultural and physical setting remain timeless.

A. Architecture - An Expression of Culture

Architecture, as an expression of culture is not only the design of exclusive buildings but is an integral element in the eternal renaissance of cities. The lifestyle of inhabitants has a huge impact on the forms of buildings while influencing their appropriate spatial usage, layout and unit sizes. Every culture develops "assertiveness" towards land, climate, symbols, spatial organization, form, proportions, and dimensional order that remain "constants" irrespective of contingent "changes". Thus memorable architecture of a settlement is a unique response to diverse milieus that developed in relation to these factors resulting in an urban environment which is genius loci of the place.

III. DESIGN IN CONTEXT: TWO UNIQUE CASES

A settlement pattern is composed of streets, promenades, public and private spaces, green areas, built forms – all of which render a unique character to its form and structure. Any new addition of edifice to the urban fabric can have a beneficial or detrimental effect on its setting. In this regard, the prominent claim of modernism that every act of building must be completely original and personal invention is debatable because the concept of complete originality denies context. Building designs conceived without due consideration for the prevailing traditional architecture are most likely not well received by its users completely as it does not reflect the perceived notion of belongingness. Built forms can be built with certainty by reconnecting with the historic architecture of a place by dwelling upon the success and failure of different experiments carried out by successive generations.

IV. ROME – AN IMPERIAL CITY

Looking at cities can give a special pleasure; however commonplace the sight may be. Like a piece of architecture, the city is a construction in space, bur one of vast scale, a thing perceived only in the course of long spans of time (Lynch, 1960). One such example is the imperial city of Rome. The contribution of Rome to world architecture and city planning is tremendous. Its history goes beyond twenty-eight centuries. It's a city of multiple architectural layer, and each layer is the response to the socio- economic, cultural and political circumstances prevailing at that particular time in society.

A.   Understanding the context

Rome is placed centrally in Italian peninsula, along river Tiber, founded in 753 BC. As per the legends, Rome had been built by twin brothers, who were the sons of a princess deflowered by Mars, and who had been delivered by divine protection from a watery death, and fostered and suckled by she wolf, the animal sacred to their sire (Niebuhr, 1851). It was the centre of culture and politics. The Romans were evolved engineers and builders, had great skills to channelize water systems and the road networks. Much like the Greek Agora, the Roman forums (Civic open spaces) were the hub of the city. After Julius Caesar combined many states together Rome became a republic and as throne became heredity. This lead to emperor receiving divine powers and glorification of empire than that of religion as a result architecture in the Roman Empire was monumental. The invention of lime concrete helped improving the construction techniques. The building build then (amphitheatres, aqueducts, theatres, basilica, state temples etc.) still stand the testimony of the time. The roman culture has had influence from (1) Italian

Fig.1 Map showing the geographical setting of Rome (source: Ziolkowski, A. 2013)

origins resulting in functionalism and imperialism in the built form, (2) Etrurian (believed to be natives of Asia) & (3) the Greeks had the influence on the philosophy, literature, Art and Architecture. The Italy during Greek period had an influence of Greek culture.

B.   Analysing the key characteristics

Fig. 2 The Ruins of the ancient Roman Civilization

The building built by Romans had a monumental characteristic. The Materials used were limestone, concrete and mortar. The canvas roof of Coliseum, Velarium, Trajan's column, temple of Saturn are some examples of the monumental characteristic of Roman architecture. The key building system of the roman architecture are the lintelled (influenced by Greeks), Vaulted (influenced by Etrurian) beautiful arcading, barrels vaults, domes, strong thick walls, huge decorated columns, fountains, sculptures, piazzas, squares and dressing the building with stone. The Pictures below show the images of the some of the key characteristics of the roman architecture.

Fig. 3 St. Peter's Square, Vatican City

Fig. 4 Colosseum, Rome*)*   Fig. 5 Pantheon, Rome

C.   Defining the Realms: Context and Architecture

The classical architecture of the Rome has laid the foundation of the architecture design language that we know today. It has been well established that the city has a very strong historic context that has evolved over centuries. The city looks like a picture in which parts sum up to for the whole and vice versa.

Frank Lloyd Wright's Guggenheim Museum is an impressive building. Unfortunately, it doesn't bear any actually relationship to its surroundings; it could have been placed anywhere. Wright's Fallingwater house, on the other hand, was designed to cohere with its location. Aesthetic coherence is very important; a sense of place depends on every element in that place working together. The streets of the Beacon Hill neighborhood in Boston are beautiful because there are many different elements, but they are all aesthetically unified. The Tour Montparnasse in Paris is horrifying, because it doesn't flow with the surrounding buildings and draws attention to itself. Capitalism eats culture, and it makes ugly places (Robinson, 2017).

In the changing Millenia, many iconic architects have designed buildings in Rome. These contemporary buildings are devoid of the very design language of the Rome and in few cases do not respond to the context at all. These building speak more about themselves than about the place and could have been placed in any of the Metropolitan cities and would have worked just same. Few examples of such contemporary buildings are Ara Pacis Museum by Richard Meier, The MAXXI by Zaha Hadid, The auditorium Parco della Musica by Renzo Piano, Rome's Convention Center by Massimiliano Fuksas etc.
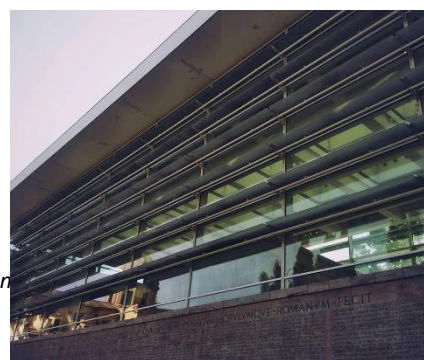

Fig. 8 Entrance to Ara Pacis M

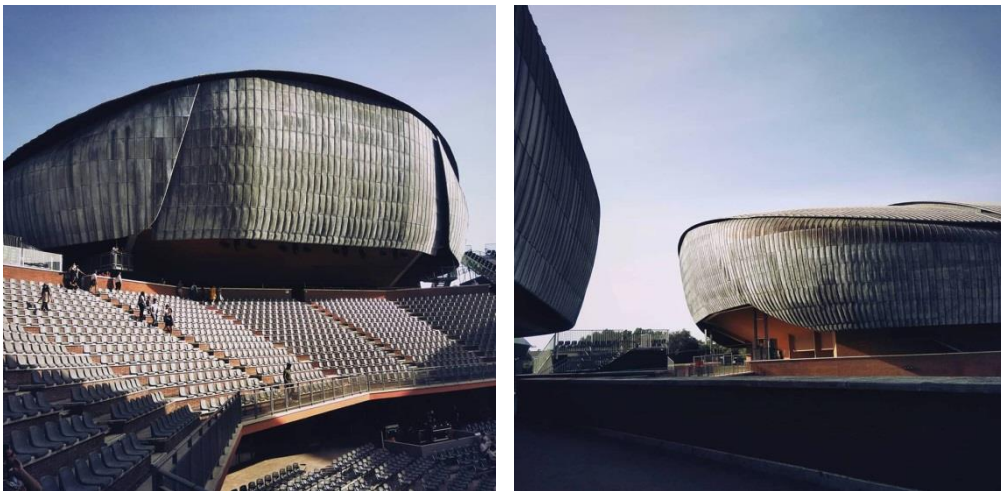Fig. 9 Entrance to Ara Pacis M

Fig. 12 & 13 Auditorium Parco Della Musica, Rome

Fig. 14 Rome's conventional centre, Rome

Argues that Architecture and the place are inseparable; they are vitally attached to each other. Despite the factors shaping a building, the relationship to be formed with the intimate environment and thus the fitting is very important.

V. BHUTAN - A BUDDHIST KINGDOM

Bhutan, a Buddhist kingdom on the Himalayas' eastern edge is a country extending over a small geographical area is one of the few countries where traditional living is way of current life and not a nostalgic past. Majority of Bhutanese are self-sufficient with primarily agriculture being the main economic activity along with cottage industries specializing in weaving, handicrafts along with the growing intensely scrutinized eco-tourism heralding 'High Value Low Impact' policy are yielding the multi-fold growth. The 'High Value Low Impact' policy being an expression of Bhutan's Gross National Happiness (GNH) accentuates that economic growth should not be trailed at the expense of environment and unique culture.

Fig. 15 Settlement Map of Bhutan (source: Author)

A. Understanding the Context: Past and Present

Buddhism has been the principal contributor for Bhutan's spiritual and cultural legacy. Bhutanese architecture is not merely an assembly of structural elements on a site but it precisely echoes the socio-cultural aspects. Several sacred monuments, monasteries, stupas, religious institutions, prayer wheels and prayer flags dominate the cultural landscape. Ranging from hot and humid tropical conditions in the south to alpine type in the snows and the ice on the mighty Himalaya in the north, the climate of Bhutan defies any descriptions of altitude, sunlight, rainfall, wind velocity, etc. presenting unique set of physical and environmental settings.

As Bhutan advocates into a new era of development, it faces the challenges of keeping its traditional architecture culturally relevant and sustainable through exclusive measures. Bhutan government is attempting to address the adverse impacts of urbanization on its ecology, culture and traditional architecture of built forms through rigorous enforcement of several polices such as Structure Plans, Local Area Plans and Development Control Regulations.

Fig. 16 & 17. Bhutanese settlement – Respecting the physical context & Contemporary built forms in tune with traditional architecture

B. Analysing the Characteristics

True to Bhutanese culture, its architecture upholds unique identities. Traditional Bhutanese architecture has attained a distinguished character through informed interpretations and varied responses of different dimensions expressing strong cultural sensitivity and symbolic metaphors. Most of the architectural masterpieces do not bare any visible records of the architect, workmen and artists who helped to build them as the Bhutanese believe that the craftsmanship is not a form of personal expression but the reflection of shared values and traditions. The architecture of the built forms is impressive and splendid with its visible symbolism; the spiritual and material, the organic and geometrical. Most of the living monuments of the Bhutan stand out exclusively not only because of its aesthetic qualities but also for the timeless sustainability quotient prevalent as on date.
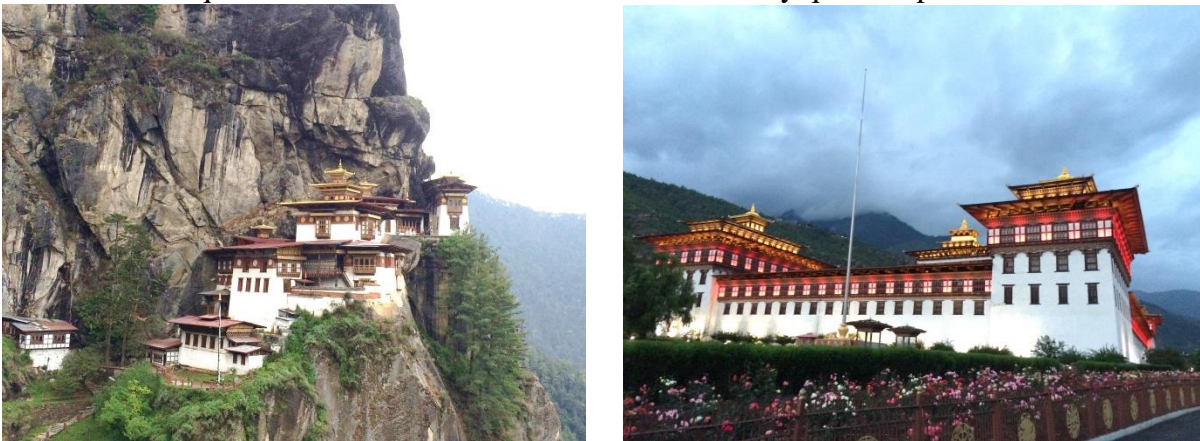

Figure 18 & 19.Takshong Monastery- Built form in harmony with nature & Taschichho Dzong-Depicting traditional elements

The remarkable built forms have stemmed from natural needs and purposes without giving undue importance to non-utilitarian aesthetics. Although there is a clear commonality, each region has its own architectural vocabulary and character differences adhering to the availability of workmanship, techniques and construction materials that conveys strongly visual richness, quality and human scale. Bhutanese architecture and the sustainable features of built forms are the strong cultural manifestation of unique tradition demonstrating the merits of living in harmony with nature.

C.   *Defining the Realms: Context and Architecture*

Bhutan's traditional architecture represents long established and practiced in contemporary age. In the absence of military might and economic power, Bhutan's resilience lies in its unique identity. Today when societies are vulnerable and are losing their ethnicity, whereas Bhutan has been much admired for preserving its cultural identity and contextual relevance.

Fig. 20 Adaptive use of traditional building   Fig. 21 Spaces surrounding an internal courtyard

Although there have been sweeping changes in all the spheres of Bhutan, it still continues to uphold and preserve its identity owing to revered attitudes towards its architectural expressions of built forms. It aptly echoes the supremacy of culture and climate in determining the form of a structure. Bhutan through its initiatives recognizes the native architecture as a way to build economically and aesthetically.

VI. DISCUSSION AND WAY FORWARD

Two most prevailing design approaches, either direct interpretation of the architecture of the existing architectural features (superficial reflection) or a design that has no references to the time-honoured setting can prove elusive to the quality of a place's character. Contemporary developments in a valued setting must understand and respond appropriately the context that has remained significant over a period of time throughout the evolution of the city. It is desirable to analyse the built forms along with systems of settings within which activities take place. Diverse historic and traditional elements that contribute to significant visual context can act as catalyst for a successful contemporary design. As a consequence, the resulting design creates new relationships between the built forms and its context.

A.   *Context - A Constraint or a Tool*

Diverse notions that evaluate context as a 'constraint', it is important to consider it as tool the generation of apt solutions to facilitate the process of establishing a dialogue with the setting. The fact that the contextual data has a pivotal role in the design, significantly contributes to the built form having a sense of place. Differing quality of environments in contemporary times require a re-conceptualisation of the context. The design of built forms in the contexts that are very limiting, it is possible to interpret these limitations as a tool. Contextual design is possible by moving beyond being an absolute form and style and through conformation to the contextual requirements within the

setting. Each context can be referred as a strong design concept and should be considered holistically with its own set of specific values to arrive at unique solutions. As long as the context is identified as a tool, design will be more open to descriptions. The relationship between context and architecture needs to be dealt in co-relation including elements such as grain, existing patterns of development, vistas, scale, building methods and material palette. Neither can be fully analysed or understood in isolation; they contrast and reinforce each other.

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