ANTHROPOLOGY IN ARCHITECTURAL RESEARCH: PAST, PRESENT AND PROSPECT

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Abstract: Nowadays, our world is being confronted with human-induced global problems such as climate change, space management, and energy crisis. In this situation, a multi-disciplinary research approach is the best way to resolve the global crisis. For example, Anthropology and architecture both the disciplines are interrelated through working with/for people. For a long time, anthropologists, particularly social anthropologists, have paid attention to studying societies, culture, tribals, their culture, and their social upliftment. As well as they have engaged themselves in studying different behaviours and patterns of culture. For doing this, they have paid less attention to the 'house' where we live. In recent decades, few anthropologists have begun to connect architectural works with social-cultural anthropology. They proposed the term 'architectural anthropology' to describe the interrelation between humans and their built environment. Based on existing literature, this paper explored how our dwellings can be a research object for anthropologists and the prospects of architectural research from an anthropological viewpoint. Further, architectural research by practising anthropologists can help resolve various human-induced global problems such as climate change, slum Proliferation, and global housing problems through their expertise and knowledge of space management, cultural needs, and expectations.

Introduction

A very small number of scholars of anthropology have paid attention to the 'houses' in which we live. On account of this, Humphrey (1988) complains that there is 'no place like

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home in anthropology', which is quite valid to some extent. Vellinga (2011) further argued that anthropologists have paid very little attention to houses as much as they have given importance to the study of kinship, religion, economy, political organisation and social structure. Carsten Hugh-Jones (1995) was right in saying that 'houses'- as like our body- are '…...taken for granted' by anthropologists. The anthropological interests in the house and its architecture have not been conducted long before the 18th century. In the mid-18th century, Marc-Antoine Laugier proposed the concept of 'primitive hut' in his book *An Essay on Architecture*. According to him, human beings (huts) built primitive huts in the forest just to fulfil the need for shelter- such constructions were natural and were driven by instinct. The concept took into consideration the nature-man-environment relation. Thereafter, the concept of 'primitive hut' was ideologically accepted by anthropologists and other social scientists (Stender 2017). Thus, anthropologists accepted this concept in search of the origin and development of human society. Later on, anthropologists became interested in architectural research to get intellectual support to build theories in anthropology during the long nineteenth century (Buchli 2013). In this effort, the works of Gottfried Semper and Eugene Emmanual Viollet-le-due, both architects, brought to focus on anthropological aspects, particularly cultural anthropology of architectural research. Indeed, the scholarship in architecture was confined to the study of monumentality and practically sightless to anything outside of Greece, Egypt, and Europe (see Rapoport 1969, Rudofsky 1965, Kamatsu et al. 2003, Vellinga 2011). At the same time, another prominent work was the worldwide ethnoarchaeological collections of Lieutenant-General Pitt Rivers; the belongingness of those materials ranged from the Lower Palaeolithic to the Roman Empire and even the mediaeval age. These ethnoarchaeological collections virtually support the development of human invention and the cultural evolution of mankind, along with the origin and evolution of the house and its architecture (Chisholm 1911). In the late 19th century, the foremost anthropological contribution to the building environment was found through the work of Morgan's *House and House-Life of the American Aborigines* (1881). The book gives an account of the built environment to reconstruct their social-cultural realities like their kinship structure and social organisation (see Waterson 1990).

Anthropological Study on Architecture

After Morgan's work, anthropologists for a long time disregarded 'house' as a study object except for a few anthropological monographs that appeared in the 19th and 20th centuries, for example, Horowitz 1967, Heider 1979, and Chagnon 1983 (see Vellinga 2011). Those monographs took into consideration the architecture of traditional houses to better understand the native society. Since the mid-20th century, the symbolic analysis of Southeast Asian societies emerged through the scholarship of some eminent anthropologists. In the

book *Order in the Antoni House* (1964), Clarke Cunningham presented that spatial symbolism and gender opposition have intertwined connections among the Indonesian ethnic group named Antoni. Bourdieu (1973) proposed architecture as a symbolic capital in which the ideas, beliefs and aesthetic sense of inhabitants are embedded. Waterson (1990) presented that the house has a significant role in the social structure of the societies of South-Asian countries. Further, she described that the house has symbolic relations with the kinship system, the rules regarding the use of space, and the interconnection between spatial divergence and social category. Since the 1960s, the study of architecture twisted towards the 'vernacular', 'indigenous', and 'polite' form of architecture alongside the symbolic analysis of architecture, which has emerged with new conceptual and methodological formulation through some architects without knowledge of professional anthropology.

In 1965, Bernard Rudofsky published his book *Architecture without Architects*, in which he drew attention to vernacular tradition around the world. The book also provides the demonstration of artistic, cultural richness, and functional aspects of vernacular architecture. Amos Rapoport (1969) wrote the book *House Form and Culture*. The book proposes a conceptual framework for looking at the great variety of house types and factors that affect them to make such a variety. He interpreted that house forms as individual units and every traditional house is an accumulation of different evolutionary lines by which every element developed in itself. For example, the roof has a primary evolutionary line, as well as an entrance, hearth, and windows also have an evolutionary line. The most recently published two books that deal with these issues are Paul Oliver's *Dwellings: The House Across the World (2003)* and *Build by Hands: Vernacular Buildings Around the World (2003)* by Steen et al. Both books present diverse kinds of global vernacular traditions with photographic collections and detailed sketches documenting the making process of distinct traditional houses. Further, the concept of 'vernacular' is becoming a national and international interest for doing research. A worldwide movement has emerged with numerous architects and international organisations focussing on the study of traditional or vernacular houses.

In the above discussion, the author introduced the overlooked anthropological interests in architecture from the past to the recent past. Yet, it is true that these researchers have a vast amount of primary data on the topic of architecture; those are collected by anthropologists whose principal interest does not lie in the house *per se*. It is observed that anthropological studies of the houses explain the comparative theories, and cultural evolution, to enrich the ethnographic accounts of the traditions of specific cultural groups and to explore the symbolic view of primitive groups. Consequently, these studies also encourage us to separate architecture into 'traditional' and 'modern', 'their' and 'our', 'western' and 'non-western' in the 19th and 20th centuries. Moreover, what anthropologists did in the past

is not important to us; what anthropologists should do in future is a foremost fact for academic and professional anthropologists.

This paper tries to illuminate several scopes for anthropologists to engage in architectural research. Further, I discussed how anthropological contributions could help architects, builders, and experts to make a sustainable building environment. Likewise, such anthropological contributions will help to overcome human-induced global problems such as climate change, population growth, high levels of energy consumption, depletion of resources, and migration. Those problems are closely related to architecture- without saying, it also includes vernacular architecture. Today, the study of houses from the perspective of theorisation, documentation and analysis of distinct housing traditions is less important, in which the house is an essential basic need for us. Because of its importance to man, it has become a scarce commodity in the whole world confronts with it.

Research Methodology

This paper has been written based on existing literature on architecture and related anthropological contributions. So, I reviewed the classical works of anthropologists, field notes, paintings, sketches, and their ethnographies to identify the research trends of the 19th and late 18th centuries that are related to architecture. Also, I collected sketches and designs from the mediaeval period to categorise the house types.

The ancestors of humans started their journey from cave and forest dwellings later they constructed royal buildings, monuments, and palaces and recently they built high-rise buildings, skyscrapers, and towers. In every stage of human evolution, these constructions fulfilled the third basic need of human beings i.e. shelter. With the fulfilment of basic needs such constructions also fulfil other needs such as storing, gathering, domestication animals, keeping armament and so on. So, I reviewed ethnographies of primitive societies which were done by anthropologists. Through these ethnographies and monographs anthropologists have tried to understand the evolution of human societies, social structure, family, kinship, and marriage patterns instead of architecture. During this time, anthropologists have shown little interest in the materiality of human society. With these explorations, anthropologists have developed various fieldwork methods and formulated various theories that help them to explore the insight of human need.

Further, this paper tries to explore how such investigations will help to resolve human-induced global problems in the current scenario. In this context, few experts in allied disciplines have developed theories and methods that are related to anthropological theories and methods to some extent. The earlier studies of architecture will provide the structure of a building and anthropologists will provide an aesthetic sense of human beings. The methods of both disciplines can complement each other.

Prospects of Architectural Research for Anthropologists

The anthropological views on architecture can be alternative approaches to studying the built environment. Architecture plays a communicative role in society to express the meaning of its built environment. Architecture expresses a variety of cultural and symbolic values of a society through its physical appearance. So, we can consider that architecture is a mirror of culture. Further, anthropologists can use their knowledge to build sustainable building environments as well as they can use to resolve human-induced global problems such as climate change, slum proliferation, shortage of urban spaces, and the problem of housing programs.

(a) **House as a Mirror of Culture:** Culture and architecture are not organically related to each other, but architecture is an expression of culture. Every built form or built-up environment is the appearance of culture masked behind its layers of abstraction. The appearance may be royal or may be simple; it always expresses the creator's identity and nobility. This is because any design, when conceptualized to perform the desired function, is directly or indirectly derived from or synchronized with the cultural identity of the user (Senan 1993, Upton 1993, Kisku and Santra 2017). If we go back to the Egyptian civilization, the people of Egypt believed in life after death. This belief directly converted into their architecture in the form of the great pyramids. In Rome, cultural belief in polytheism was expressed in its true form in the Pantheon. The Greek concept of the Agora, which is nothing but a gathering space, also evolved out of their cultural practice of congregation. Thus, culture and architecture are two sides of the same coin. Architecture never separates from culture; it adapts and merges with the layers of abstraction and sometimes exists in transition when there are dramatic paradigm shifts in the way people live. Over the years, cultural influences have moulded the way spaces have been designed in India and other third-world countries. Not only in areas of ritualistic and religious importance, such as temples and mosques but also the design of residences has been a direct result of the cultural practices common at the time. One such example is the blue city of Jodhpur in Rajasthan. The town was occupied by the Brahmins, who belonged to the elite class and performed ritualistic chores. The basic cultural principle that the belief in unity and keeping away from others (non-elite) so all the dwellings share a common colour and common structure. Another classic example is the houses of Santals. Santal houses are distinguished through their traditional wall paintings and multicoloured designs, which convey the identity and 'we-feeling' sentiments of the Santals (Kisku and Santra 2017). So, before programming any housing scheme, we need to properly study the beneficiary's

culture, which could help to implement the programmes. In this regard, anthropological knowledge and research will better help to know the beneficiaries' culture. For instance, the ethnographic knowledge of anthropologists will help the study of culture from a different perspective. That does not mean that architects could not do 'ethnography'; nowadays, they also use the ethnographic method to collect laws, regulations and some social aspects of inhabitants. But this process generates only data and does not provide reciprocal influences like empathy between the researcher and inhabitants. Anthropologists could point out the cultural needs, wishes, and expectations should keep in mind of architects, builders, and planners during policy-making and programming. The knowledge of anthropology at home could be used as a tool for innovation.

(b) The Vernacular Architecture and Climate Change: Today, climate change is one of the major global challenges; a common interest emerged through scholars, academics, architects, and engineers towards making environment-responsive and green buildings. Very recently, some publications suggested that vernacular buildings are more environment-friendly than modern buildings and need to be conserved (Philokyprou and Michael 2015, Kumar 2013, Curtis 2014). Yes, it is true! Such architectural design has a low environmental impact and is made with locally available materials and low-energy technology. For hundreds of years, vernacular architecture has provided comfortable shelter to people. Now this kind of architecture is predominantly seen only in the countryside region of the world. Here, one question may be aroused in the reader's mind How long vernacular buildings be preserved in future? In my opinion, the conservation approach is only appropriate for academics and theorists. Practically, it is not possible to conserve it for longer. As Oliver (1999) noted, the vernacular becomes synonymous with thatched cottages and mud houses, 'good for holidays and fun for tourists', but possibly not for much else in the age of globalisation. In this perplexity situation, we should conserve the vernacular technologies and knowledge alongside conserving vernacular buildings that should help to make us a sustainable built environment in future. However, the process of vernacularization will come in front of many other processes, such as modernisation, globalisation, and urbanisation. Yet, we cannot isolate ourselves from the process of modernisation, globalisation and urbanisation because the high standard of living style will never let us stay isolated. Inevitably, we should stay with modernisation, globalisation and urbanisation in the vernacular building. How could it be possible? It is only possible if we will use vernacular technologies to make modern buildings. That should directly or indirectly help to reduce high energy consumption for household purposes. We could continue the

high standard living style but don't need to maintain comfortable thermal conditions. So, we need to conserve such vernacular technologies. In this situation, anthropologists can contribute different ways to conserve such vernacular technologies and how could apply these technologies. Through cross-cultural ethnographic studies on vernacular architecture, anthropologists could document such knowledge of vernacular technologies. Further, such knowledge could give suggestions and recommendations to make sustainable houses in different geographical locations.

(c) **Understanding the Problem of Slum Proliferation:** In the 21st century, most countries from Africa and Asia are experiencing rapid urbanization with the support of new innovative technologies. New towns are being designed and planned, and existing urban centres are being renovated for development. Before the 1950s, urbanisation mostly occurred in More Economically Developed Countries (MEDCs) such as the United Kingdom, the United States, Germany, France, and other European countries. Later, urbanisation occurred in Less Economically Developed Countries (LEDCs) such as India, Pakistan, China, and other third-world countries since the 1950s. The urbanisation process in LEDCs is expanding more rapidly compared to the more economically developed countries. Due to the urbanisation process, a mass number of people are moving from rural to urban centres; the whole process has led to a population influx in urban areas. As a result, people have started to live on the outskirts and surrounding lands of cities. The dispersal of the population in city outskirt areas has caused the growth of extra-municipal areas, slums, and informal settings. Today, according to a UN report, 54% of the global population lives in urban areas, that expected to increase by 66% in 2050. Most of the urban population lives in slum areas. The growth of slums in the last fifteen years has been unprecedented in most of the developing countries. In 1990, the world was inhabited by almost 715 million slum dwellers. The slum population has increased by approximately 998 million by today. United Nations Habitat estimated that if the trend continues, it will reach 1.4 billion by 2020.

In considering the urbanisation issues, some questions are aroused in the reader's mind. Why do people choose to live in cities rather than stay in rural areas? What are the factors pushing them to live in the urban centre? A city is a place with all the required services and things available to live in the modern world. It has the well economic and business opportunities, an advanced transportation system, and better educational, health, and recreational amenities, which are enough to

attract anyone who wants to improve their living standard. Besides this, the poor economic conditions and limited types of employment opportunities, political instability, ethnic tension based on casteism, and lack of infrastructure to provide basic public services (e.g., education, water, electricity, road, and hospital) in rural areas are main push factors for rural to urban migration. Adversely, rapid urbanisation puts pressure on physical, social and ecological resources (such as space and water) in the urban centre. For the name of the well-being of the poor by gave the gift of informal settlements, squatters, and slums. In this situation, governments and NGOs did not come across a sustainable solution. For this reason, policymakers, urban planners, developers, stakeholders, architects, and designers are making efforts to slum upgradation. However, nobody gives attention to the fact that, at the same time, new groups of people are coming to cities and making informal settlements. Rural-to-urban migration is a continuous historical process. As a result, the challenges of sustainable development remain unsolved in urban areas.

Under this circumstance, we need to a holistic approach to urban planning and management is needed to improve the living standard of urban dwellers. Anthropologists could apply their knowledge and skills to make a sustainable city life. The anthropological study of space can enable a holistic analysis to achieve an overall and synthesised view of society and culture and to create a more liveable society in future. Anthropologists specialise in the in-depth study of humans in their society and culture. Through this knowledge, they can find out the root causes of an influx of humans to urban areas and the problems humans face in those areas, especially in terms of housing and living conditions. By doing this, they can suggest how physical space can be managed in urban areas.

(d) **Anthropological Perspectives on the Global Housing Problem:** The United Nations declared the year 1987 as the 'International Year of Shelter for the Homeless People'. During the 1990s, the UN recognised that everybody has 'the right to live in an adequate house'. Through this recognition, '…live in adequate house' enlisted with some other rights such as human rights, economic, social, and cultural rights. Since the year 1996, governments of various countries have revised their housing policies concerning various aspects of human rights. Therefore, dozens of housing programmes, policies, agendas, and meetings have been carried out by those countries. However, the major challenges were faced particularly by the third world countries to provide adequate shelter for their homeless citizen. Till now, thousands of millions of people are homeless in these countries. In response to the challenge,

governments, international agencies, and NGOs have been trying to provide subsidized permanent dwellings, which are built with cement, concrete, steel, and other industrial made substantial industrial materials. With this interest, architects, builders, engineers, and planners have been providing low-cost buildings to low and middle-income class families. Unfortunately, all the good intentions could not reach success; sometimes houses are rejected by inhabitants, sometimes inhabitants have not used the provided houses, and sometimes inhabitant does not use them for shelter; alternatively, they use them for storage purposes.

Cole and Lorch (2003) argued that the major cause of failure is cross-cultural technology transfer, the houses being built by architects and builders do not fit with the cultural practices of inhabitants. By supporting the statement, Vellinga (2005) proposed that the inability of the builder to consider cultural needs, wishes, and expectations is staked to implement the housing programmes. Often it is an assumption that the technologies provided by the builder which is not always appreciated by the culture of beneficiaries. There is a wide gap that has emerged between the culturally specific understanding and the implementing technologies of the programmes (Tribhuwan 2005). The use of technologies to build a house has wide variation among different cultural groups where architecture has a portrayal reflection of every culture, which is followed by the people of this culture (Rapoport 1965, Kazinee 2008, Furlen and Faggion 2016, Gulzar 2017).

The prospects of anthropology in architectural research have been highlighted above. Architectural research can help anthropologists to show the culture of natives from another viewpoint where they can understand the cultural needs, wishes, and expectations in different ways. Such knowledge may help anthropologists to document the vernacular technologies for making sustainable houses. In the era of climate change, sustainable house building is very important. So, such vernacular technologies can help to construct it. Later, the problem of slum proliferation and the global housing problem has also been described. Most nations are facing these problems in the 21 st century. Particularly, developing countries such as India, Bangladesh, Pakistan, and China are suffering utterly. Anthropologists can resolve these problems through their specialise in the in-depth study of human society and culture. Through this knowledge, they can find out the root causes of an influx of humans to urban areas and the problems humans face in those areas, especially in terms of housing and living conditions. By doing this, they can suggest how physical space can be managed in urban areas further they can resolve the global housing problem.

Conclusion

The present paper attempted to explore possible anthropological engagement in architectural research to overcome human-induced global problems in the 21 st century. However, all the

possibilities and opportunities could not be reached successfully if both the subjects these are anthropology and architecture, do not collaborate. Both subjects have close relations through research, methods, approaches, and techniques such as ethnographic methods, in-depth interviews, and case study methods. The history of anthropology is provided by some accounts of longhouses, sketches of the layout of villages, and how the spatial organisation of households is signified by cultural and symbolic meaning. Thus, some ethnographic studies of the 20th century advocated that architecture does not only represent material structure but also represent social structure. Later, the new post-structural approaches began to emphasize to study of dwellings, buildings, spaces, and landscapes to inquire about what architecture does rather than what it represents. Although anthropologists and architects both have been exploring human culture, the mode of exploration is different. Anthropologists are studying human beings from outside of the house as opposed to architects studying human beings from inside of the house. Whereas anthropologists at first seek to understand human culture and later come to understand how culture influences their habitat or house, architects study houses first and then seek to know the culture. Experts, academics, and scholars of both subjects are seeing human culture from different foci. Instead, their collaboration will enrich subject knowledge and help the practical application of both subjects. In this situation, anthropologists must rethink roles, methods, techniques, and paradigms to solve contemporary human-induced global problems; those global problems are directly or indirectly linked with human habitation and its practices.

Abbreviations

UN-United Nations

NGOs- Non-Government Organisations

MEDCs- More Economically Developed Countries

LEDCs- Less Economically Developed Countries

References

Askland, H.H., R. Awad, J. Chambers, and M. Chapman. 2014. Anthropological Quests in Architecture: Pursuing the Human Subject. *International Journal of Architectural Research: ArchNet-IJAR*, 8(3):284-295.

Bourdieu, P. 1973. The Berber houses. In Douglas, M. ed., *Rules and Meanings,* 98-110. London: Routledge. Place & Publisher??

Buchli, V. 2013. An Anthropology of Architecture. New York: *A&C Black*.

Carsten, J. and Hugh-Jones, S. eds. (1995). *About the house: Lévi-Strauss and beyond.* London: Cambridge University Press.

Chagnon, N.A., 1983. *Yanomamo: The ûerce people*. New York: Holt, Rinehart and Winston.

Chisholm, H., 1911. British Newspapers. *Encyclopaedia Britannica,* 19:562.

Lorch, R., 2008. *Buildings, culture and environment: informing local and global practices*. Garsington Road: Blackwell Publishing Ltd.

Curtis, R., 2010. Climate change and traditional buildings: the approach taken by Historic Scotland, *Journal of Architectural Conservation*, 16(3):7-27.

Douglas, M., 1972. Deciphering a meal. *Daedalus*, 101(1): 61-81.

Glassie, H., 1976. *Folk housing in middle Virginia: a structural analysis of historic artefacts*. Knoxville: University of Tennessee Press.

Gulzar, S., 2017. Traditional dwellings: an architectural anthropological study from the walled city of Lahore. *Journal of Advances in Agricultural & Environmental Engineering*, 4(1), pp.152-158.

Heider, K.G., 1997. *Grand Valley Dani: peaceful warriors*. New York: Wadsworth Publishing Company.

Horowitz, M.M. 1967. *Morne-Paysan*. New York: Holt.

Humphrey, C. 1988. No place like home in anthropology: the neglect of architecture. *Anthropology Today*, 4(1):16-18.

Kazimee, B.A., 2008. Learning from vernacular architecture: sustainability and cultural conformity. *WIT Transactions on Ecology and the Environment*, *113* :3-13.

Kisku, A. and A. Santra. 2017. Understanding Santal identity through their Architecture. *IOSR-Journal of Humanities and Social Science,* 22(9): 24-29

Kumar, A. 2013. Vernacular practices: as a basis for formulating building regulations for hilly areas. *International Journal of Sustainable Built Environment*, 2(2):183-192.

Laugier, M.A., 1977. An Essay on Architecture, trans. *W. and A. Herrmann*. Los Angeles, Hennessey and Ingalls.

Morgan, L.H., 1881. *Houses and House-life of the American Aborigines* (Vol. 4). US Government Printing Office.

Oliver, P., 2003. *Dwellings: the vernacular house worldwide*. London: Phaidon.

Rapoport, A., 1969. *House form and culture*. America: Pearson Education.

Rudofsky, B. 1964. *Architecture without architects: a short introduction to non-pedigreed architecture*. Albuquerque: University of New Mexico Press.

Semper, G. and Mallgrave, H.F., 1989. *The four elements of architecture and other writings* (pp. 1-67). London: Cambridge University Press.

Steen, A.S., Steen, B. and Komatsu, E., 2003. *Built by hand: vernacular buildings around the world*. Utah: Gibbs Smith.

Stender, M., 2017. Towards an Architectural Anthropology—What Architects can Learn from Anthropology and vice versa. *Architectural Theory Review*, 21(1):27-43.

Tribhuwan, R.D., 2005. *Tribal housing issues*. New Delhi: Discovery Publishing House.

Cohen, B., 2006. Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability. *Technology in society*, 28(1-2):63-80.

Upton, D., 1993. The tradition of change. *Traditional Dwellings and Settlements Review*, 5(1):9-15.

Vellinga, M. 2005. Anthropology and the challenges of sustainable architecture. *Anthropology Today*, 21(3):3-7.

Vellinga, M. 2011. The End of the Vernacular: Anthropology and the Architecture of the Other. *Etnofoor*, *23*(1):171-192.

Waterson, R. 2012. *Living House: An Anthropology of Architecture in South-East Asia*. Rutland: Tuttle Publishing.