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Architectural Education as the Interface between Culture and Built Environment

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Abstract

The main focus of this paper is the non-coherent appearance of the built environment in Pakistan that does not reflect the culture of the society, rather it represents external influences more than native ones. By virtue of being a part of a larger territory in the past, the country has been influenced heavily by external factors and deliberated efforts for “modernization” since independence in 1947. Many parts of the subcontinent including India and Pakistan are influenced by Modernist trends in architecture evident in the built environment. The probability of inclusion of many diversified attributes of culture over a considerable period of time has been increased. It is therefore important to discuss the most relevant possibilities through which these attributes are adopted and translated into the built environment. These influences are assumed to be translated through the taught content of the architectural education provided in the country. The paper also discusses the relationship of three entities namely culture, built environment and architectural education. It takes into account some examples of residences in Pakistan to analyze the interfacing capacity of culture and the built environment. It adopts a qualitative methodology based on literature review and considers evidence from some cities of Pakistan to seek the validity of the argument. It also narrates the role of curriculum driven architectural education in the process of creating the built environment. The findings reveal that the existing form of culture has incorporated external influences in a subtle manner while adopting a new form which appears as non-coherent. The role of architectural education in this regard holds a pivotal position in relation to the built environment. The findings also connote architectural education as the interfacing factor between culture and the built environment.

Keywords: architectural education, built environment, culture, curriculum, interfacing relationship

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Introduction: The Relationship between Architecture, Culture and the Built Environment

Architecture encompasses a wide and diversified range of disciplines in itself. It is believed to cater both art and applied sciences in order to address its own peculiar nature as a subject and as a direct means to create the built environment. This phenomenon of diversity in subjects and modes of architecture emerged over a long period of time. It involves psychological understanding and cultural behavior at the user’s end, while it involves pedagogy and application at the architect’s end. This also implies as the foremost responsibility of an architect in order to create a responsive built environment for the society. It becomes a part of societal behavior in a subtle manner for the basic reason that the psychological understanding of a particular space is culturally embedded in a user’s mind which is deeply rooted in the past. The composition of culture itself may include the nature of festivities, types of houses and public buildings, access to buildings, modes of transportation, types of food, communication styles, spirituality, educational status and much more; architectural education is also a part of it. Therefore, it is inevitable to abide by those cultural norms to design the best usable space.

The term culture was first used in its current anthropological sense in 1871 as “that complex whole which includes knowledge, belief, art, morals, laws, customs and any other capabilities and habits acquired by man as a member of society” (Tylor, 1970). Even before the coining of the term itself, culture existed in an undefined form with all its embedded properties for any particular society. These properties, attributes and norms of a society may exist in both physical and non-physical forms which implies that culture exists in two major forms, that is, tangible and intangible forms. Tangible culture refers to the attributes which are observed materially in a society, for instance, festivals, habits and the built environment. On the contrary, intangible culture refers to the attributes which are not observed materially. They are hidden and embedded in a society, for instance, beliefs, religion, authority, communication style, sense of spirituality and many more. It is also understandable that intangible culture never disappears (D. Gloster, personal communication, February 15).

Built environment refers to the manmade environment that provides physical settings for human activities. It ranges in scale from buildings and parks to the spaces available in the neighborhood. Collectively, built environment includes places and spaces modified by people such as buildings, transport systems and parks (De Munck & Winter, 2012). It also emphasizes the role of architectural education in drawing the base of the built environment for the society. The salient
attributes of any society, including its culture and its built environment, play a pivotal role in establishing the image of that society. This holistic image of a society helps to distinguish it from other societies. Moreover, it also creates a way forward for the development of societal norms. These developments are essential to incorporate the challenges of time as well as to help societies sustain themselves and their members.

1.1. Built Environment in Pakistan and its Relation to Culture

Built environment in Pakistan as in any other part of the world belongs to two major categories in terms of its creation, that is, with architect and without architect. The existence of these two categories in different societies has surfaced in scholarly debates in broader terms and specifically in relation to the built environment. Bernard Rudofsky (1987) discussed the existence of the built environment without architects while relating it to historical times. He said, “It is possible to have a built environment that embodies man’s intelligence and humanity, and without involving architects.” The newly emerging built environment in Pakistan has also been dealt with in a similar manner. Discussing the new built environment in Pakistan, Arif Hasan (1995) said, “One of the major causes is the absence of a sufficient number of properly trained architects as major actors in the built environment drama in Pakistan.”

On very obvious grounds, the major portion of the built environment existing in Pakistan was constructed without architects. There are various reasons behind this fact. However, at the same time the left over part has been accepted as the responsibility of the architects. Historically, the built environment constructed without architects was organized as communities and worked out by skilled artisans in the territory where Pakistan is situated today.

Residences in the walled city of Lahore is a complex example of the same situation where Mughal emperor encouraged the users to build their own comfortable living spaces themselves with the help of artisanal skills. Though at the same time, a considerable number of mosques, gardens and other state buildings such as Shalimar Gardens, Badshahi Mosque, and royal palaces were designed and built by skilled architects / designers under the patronage of the state. Moreover, there has been a considerable change in the built environment of the city over the centuries. This change is self-evident and has been stated in historical writings. An extract from an interesting account titled “Lahore Past and Present” written in the period of Emperor Shahjahan by a Spanish monk Fray Sebastian Manrique, who visited Lahore in 1641 AD, is given below. It describes the built environment and the cultural style of the society in the following words,
“On the 21st day from our departure from Agra, at sunrise we came in sight of the city of Lahore, which is large and capacious; but large as it appeared, there were not houses enough for the accommodation of the people who were encamped or half a league outside the city. It is a handsome and well-ordered city, with large gateways and pavilions of various colours......... As to the abundance of provisions, it would be unnecessary here to describe it. The riches of the principal street (known as the bazaar delchoco), if shown to advantage would equal the richest European mart” (Iqbal, 1984).

In the years to follow notable changes appeared. These changes in the tangible component of the built environment are discussed by Alexander Burnes who visited Lahore in June 1831 AD. He writes of his travels,

“On the morning of 18th June, we made our public entrance to the imperial city of Lahore, which once rivaled Dehli. We moved among its ruins.............The mosques and tombs which have been more stably built than the houses, remain in the midst of fields and cultivation as caravan serais for the travelers. The houses are very lofty and streets are narrow” (Iqbal, 1984).

Another British traveler, W.S. Caine described Lahore in 1898 AD in the following words, “Modern Lahore bears the stamps everywhere of the great Maharaja Ranjit Singh. His buildings are tawdry and in bad taste, and have very little artistic or architectural interest” (Iqbal, 1984).

These changes are likely to have occurred due to changes in both tangible and intangible behaviors that surfaced during the course of time. Since culture has the tendency to adopt such societal and behavioral changes by virtue of its nature, it is therefore an obvious reason to cause a subtle change in the built environment. In the following times, such examples of the built environment can be seen also across many large cities of Pakistan such as Karachi, Lahore, Peshawar, Multan, Faisalabad and Islamabad. These structures are much more disconnected from cultural as well as climatic considerations as compared to the historically made ones. Likewise, “katchiabadis” in Karachi exhibit housing which is usually erected by users themselves with varying skills.

An example of the built environment in the area included in Pakistan is the famous Model Town situated in the city of Lahore, where some cultural variables were considered as the core of designing a new built environment. This new idea stood in contrast to the previously existing built environment pattern of the city of Lahore in general. This idea was conceived by Diwan Khem Chand, originator of Model Town Lahore in 1921, which was which was designed as the residence of
choice for the elite class. He conceived the idea based on his experience with the narrow winding streets of the old walled city, while dreaming for a wider space to live. The architect of the scheme M.C. Khanna designed a total of 100 houses.

The significant factor of this vision was the intention to develop a new area was mentioned in a paper by Diwan Khem Chand titled as “Ideal town”, wherein he defined the new space to be designed as “A place where people of every religion and faith lived in perfect harmony.” These two attributes, religion and faith, as significant variables of culture dominated the built environment in that particular setting.

![Figure 1. An eight bedroom house in Gujjar Khan (2015) (not designed by architect)](image1)

![Figure 2. A residence in Faisalabad (2015) (not designed by architect)](image2)

Apparently, it was a shift from the locally designed space with a central courtyard and narrow streets to another new design wider in scale, which people could afford in terms of land and service cost in addition to design cost by the architect. Such seminal explorations of cultural concerns and their acceptance in the society in the form of an altered built environment provide the manifestation of culture as an entity which has a tendency to alter and function in the society. Senior academician and architect Pervaiz Vandal highlighted the ideology of Diwan Khem Chand as the wish of local elites in the following words, “Each house would be detached from the others and would be built Banglow-like (colonial prototype) with some garden around it”. This model was accepted widely throughout the country in times to follow and appeared as a symbol of a “designed built environment by architect” for residential areas. A well-designed built environment thus appears to be directly related to culture.
Figure 3. ‘A’ class house in ‘G’ block, Model town, Lahore

Note. Source: Jessica Holland, (2013), Archive of Translational Architectural Group, Presented in a conference paper “The Co-operative Model Town Society: History, Planning, Architecture and Social Character of a Middle-Class Utopian Suburban Residential Development in Colonial Lahore”. Accessed on August 13, 2017. https://transnationalarchitecturegroup.wordpress.com/tag/model-town/

2. Discussion

Examples of the built environment with their origin and design based on cultural variables are negligible in the country, whereas the user end comfort of the built environment is embedded in cultural variables regardless of its development via architect or without architect. The apparent marginalization of the built environment depicts a non-coherent and less coordinated built environment which needs to be taken care of at all possible stages of the building process. One of the reasons appears to be the fact that the interface between culture and the built environment currently existing in Pakistan has been dealt with at a superficial level. The stakeholders of this interface have not been identified at grass root level, where the core of the problem resides. Many a times scholars, professionals and academicians have discussed architectural profession and culture as two separate entities. By all means, built environment is the ultimate product of societal norms and culture with all its dimensions as described earlier, education being one of them. It is the ease and comfort of the inhabitants which should be translated into the built environment, whether it is designed by architect or not.
This ease and comfort is either developed by the user through habits, norms, beliefs, traditions and learning adopted during the course of time; or by specific training provided so as to translate it in the best possible way in a contextual manner. The former refers to the built environment without architects and later as to the built environment with architects.

**Figure 4.** Categorization of the built environment and its attributes

Since the user of the built environment is equipped with a specific culture being a member of a specific society, therefore it is pertinent to establish a common ground between these two entities of culture and built environment. Figure 4 shows the commonality between these two entities which posits that if the built environment is developed with architects, it is likely to achieve all the aspects necessary for a well-designed built environment and it may appear contextually sound and culturally sensitive at the same time. In this regard, architectural education becomes the direct source of input for a built environment that is culturally sensitive and contextually sound.

Here, the question arises that what factors need to be inculcated in the built environment as a whole which can create a better interface between culture and the built environment. Generally, as applicable to all societies, culture is an entity which responds to temporal changes but these changes only constitute an addition to the old bank of culture; they do not delete the basic body of culture itself, though they have a tendency to alter it. The stagnant part of the behavior becomes tradition, while the vibrant part becomes culture which is coherently practiced by the society. Culture can be defined in another way as the living and adaptable style of any society which has the ability to grasp the alterations, additions and subtractions to
its content according to convenience, thoughts, and available resources. Therefore, built environment is the entity which needs to be addressed and it can be directed towards generating a common ground with culture in order to respond to the society for all strata and times, equally. The ways and means that devise the built environment in order to address what and how to build constitute the key considerations while discussing the interface between the built environment and culture.

Figure 5. Residences in the Walled City of Lahore (not designed by architects)

2.1. Role of Architectural Education as the Interface between Culture and Built Environment

Keeping in view the ways and means that constitute, formulate and dictate any built environment, one can point out two major factors. Firstly, the ideology as what is to be built and secondly, the source of knowledge as to how to build it. The former relates to culture which defines what fits best with the actual requirement of the built environment and the later relates to the actual process of architectural education used as a tool. Therefore, the training of architects holds a pivotal role in creating the built environment. Architectural education stands as a major factor and it has the tendency to be used as a tool of communication between the users’ culture and built environment in order to bridge the gap between them. More than the design of buildings to be taught to the architects, the design of architectural education itself is a foremost step towards a built environment coherent with culture. Arif Hasan, an architectural educator and senior professional, suggested
that architectural education should bring the architecture student nearer to the building site and closer to the people and their culture (Hasan, 1984).

Architectural education, like all other types of education, is essentially a two-way process. The general educational process in architecture applies to in all societies. It is normally based on three main elements including teacher, student, and curriculum. Among the two models of architectural education, that is, apprenticeship based model and curriculum based model, the later has been more widely adopted throughout the world. This model has been discussed, criticized and developed in many respects including its methodology, development process and application in the society. This model is also connected to the built environment of any given society where it is adopted with its contextual specifications, which may differ for different societies. It relates to the content and methodology of architectural education in addition to the ideological and pedagogical processes involved. The last few decades have shown a wider potential for the discussion of the problem formulated here in the following words, “…it would require 22 years to study all the subjects essential for a sound and complete architectural education” (Naz, 2010). “Education, its underlying rituals and processes, has not really changed over the past 20 years and this is one of its biggest weaknesses” (Till, 2012). Researchers have also emphasized the importance of change in the prevailing educational patterns in architecture. A widely noticed aspect of architectural education described by Salama and O’Reilly (2014) is that architectural practice has changed dramatically and several corresponding changes in architectural education are needed. They marked these changes as continuous attempts to massage architectural curricula, to reconfigure the structure of the educational process, to test accepted ideas and to probe future visions. However, they also described some fundamental disagreements that emerged while analyzing the changes in architecture education. These included the goals and objectives, structures and contents, and tools and techniques required for architectural education in recent years. Royal Institute of British Architects identified the emerging requirements of architectural academia in the following words, “Schools of architecture are struggling to keep up with the current issues that are transforming architecture practice, and students are not educated to meet the industry and wider market needs” (RIBA, 2005). The efforts made by educationists and scholars of architecture in their discussion appears to be originating with deliberated and undeliberated but conscious concerns about the tangible product of architectural education, that is, the built environment.

The concern formulated above needs to be discussed broadly, although some very considerable discussions have surfaced about it in the last few decades. In this
connection, an approach has been adopted by some relevant forums, that is, standardization of the learning outcomes through the regulatory fora. Notable among them are the Royal Institute of British Architects (RIBA, 2005), UIA / UNESCO Charter (UIA/UNESCO, 2005) and Canberra Accord (Canberra, 2014). The similarity of the problem is identified by all three fora, although the commonality of the approach may differ. The addressed concern signifies the role of architectural education as the interfacing factor between culture and built environment. Some relevant excerpts may explain the concerns which revolve around not only the content but also the methodology used. It is also important to mention here that while these forums are supposed to provide the guidelines, they are also required to monitor the learning outcomes and performance of educational institutions established for architectural training.

The general criteria of the Royal Institute of British Architects (RIBA), Part 1 asks the students to develop an ‘understanding of the profession of architecture and role of the architect in society’, while Part 2 emphasizes that students must demonstrate the ‘ability to generate complex design proposals showing an understanding of current architectural issues’ (RIBA, 2005, p.52).

The revised version of UIA / UNESCO Charter (2005) considers culture as a major concern in architectural education. The charter not only describes the vision of a future world but it also focuses on the built environment as a product of this education system. It states that the vision of the future world cultivated in architectural schools should include the following goals:

- A decent quality of life for all the inhabitants of human settlements.
- A technological application which respects the people’s social, cultural and aesthetic needs.
- An ecologically balanced and sustainable development of the built environment.
- An architecture which is valued as the property and responsibility of everyone.

*Box 1. Excerpt from UIA / UNESCO charter (2005)*

The Canberra Accord (revised 2015) signifies the key responsibilities, learning outcomes, and special considerations for the development of curriculum in the schools of architectural education. It states: Graduates with qualifications from accredited programs in architecture recognized by the Canberra Accord are expected to have commonly held attributes including the ability to

1. apply the acquired knowledge for the design, operation, and improvement of systems, processes, and environments;
2. formulate and solve complex architectural problems;
3. understand and resolve the environmental, economic, and societal implications of architectural work;
4. communicate effectively with clients, peers, and community;
5. engage in lifelong learning and professional development following graduation;
6. act in accordance with the ethical principles of the profession of architecture;
7. make the case publicly for a better human environment in contemporary society.

*Box 2. Excerpt from Canberra accord (revised 2015)*
Since curriculum driven architectural education has been adopted widely across the board in the country, hence the significance of curriculum is imperative in the process. A very simplified mechanism of the process is described in figure 6.

**Figure 6.** Mechanism of the built environment

The simple equation in the above figure reveals the following major points:

- Curriculum acts as an infusing baseline for inculcating all the necessary ingredients of social, political, behavioral, environmental, contextual and thus cultural aspects and is processed using a specific methodology in the institution.
- Institution acts as a source platform to produce an adaptable built environment for the society.
- The built environment appears to be a reflection of the curriculum adapted through a particular methodology suitable for the educational process.

The above narrated simple equation describes an interfacing relationship between three entities. It is noticeable here that all three entities are tangible and so are vulnerable to change, while still being fed by both tangible and intangible aspects of culture. Therefore, built environment acts as an ambassador of all social, political, behavioral, geographical and environmental factors prevailing in a society and defined as culture.

The development of curriculum can be analyzed on the basis of how a particular curriculum is derived and what were its ingredients at the time of its development. Keeping in view architectural education, several gaps may emerge when the curriculum is analyzed from this perspective. For instance, differences in value systems and the practice of architecture have always been very obvious, generally across the globe and specifically in Pakistan. Value systems are based on many variables, while the practice of architecture addresses a very limited section of the society where the state has always played a pivotal role rather than the people. Here, the social and cultural disconnect plays a vital role in locally developing architecture. This causes the disorientation of the educational discourse while expressing the local and cultural environment. The curriculum is also dismissive of the local context and negates the native culture in a broader context, which originally was the undeniable purpose of architecture itself. Therefore, architectural
education may be treated in terms of its altering characteristics with reference to the built environment.

Higher Education Commission (HEC) of Pakistan with the mandate to design and monitor the application of curriculum for a vast range of disciplines in Pakistan devises the curriculum for architecture at both graduate and undergraduate levels. The institution provides basic guidelines to the schools of architecture in order to correlate their particular objectives with its specific requirements. This exercise also provides the room for coinciding the new challenges of time while maintaining alignment with the specific societal needs. The recent guidelines provided by to schools for architectural education at undergraduate level in Pakistan (Higher Education Commission of Pakistan, 2014) suggest.

> “Architectural education needs are different for different regions within Pakistan. This curriculum provides a broad outline and framework of knowledge areas with a built in flexibility for it to be adapted by different schools of architecture according to their specific needs.”

Box 3. Excerpt from curriculum of architecture (B. Arch), revised 2013. Higher education commission of Pakistan

The altering characteristics of architectural education provided in the guidelines are directly linked with the societal practices which also have a tendency to alter and thus become culture. These societal practices or cultural variables are defined generally as differences in the behavior, outlook, eating habits, socialization, recreation, and values. Body language, styles of humor and attitudes toward family, authority, religion, gender roles and time can all be very different in different cultures. While discussing the relationship between culture, built environment and design, Rappoport (2014) suggested that design must be based on the knowledge of how people and environment interact with each other. Therefore, design needs to respond to culture. He concluded that there needs to be a change from designing for one’s own culture to designing for users’ culture. Moreover, design should be based on research in anthropology and other relevant fields. Such changes should transform architecture and design, so it may do what it claims to do which is to create a better and supportive environment.

Some important discussions related to cultural concerns included in the curriculum have emerged during the past decade. They have been directly or indirectly related to the various modes of teaching architecture. Different paradigms in architectural education were reviewed by Bonsdorff (n.d.) and she highlighted that the training of architects in institutionalization or curriculum based model rather than the apprenticeship model, somehow ignores and overlooks the problem of cultural connectivity of the building with the environment.
This is related to the fact that expertise in architectural education has been kept apart from expertise in profession in the institutionalization model. While apprenticeship based model provides a training pattern which involves political, social, technical, economic, aesthetic, ethical and ecological questions, institutionalization seems to be a part of it.

In this regard, the application of such concerns in architectural education plays an important role. Some focused exercises conducted during the teaching of architectural design in schools of architecture revealed a result which was close to the culture of the society. The results of a study conducted in Lines Area, Karachi were instructive in this regard. Architectural design solutions taught as academic exercises suggested that the inhabitants of the area integrated the original living style with the upcoming needs of social setup in such a manner that avoided cultural disconnect.

Such examples surfaced as a consequence of deliberated efforts for designing the curriculum with reference to cultural concerns. Architectural education plays an interfacing role needed to bridge the gap between culture and the built environment.

An architectural curriculum that responds to cultural parameters such as socioeconomic, political and religious parameters needs to be employed while training architects in order to make them capable of designing an appropriate built environment which is culturally sensitive. Training and educating architects has emerged as a complex exercise that has been influenced by several disciplines including culture. Works of such architects who possess a significant understanding of the cultural context is acclaimed and appreciated globally. The task of inculcating cultural comprehension and sensibility in a specific context is an undeniable purpose of architecture in order to create the built environment which is best able to respond contextually. Moreover, the process of dispensing architectural education involves psychological understanding, pedagogy, and application which is the foremost responsibility of an architect in order to create responsive built environments. The psychological understanding of a particular space is culturally embedded in its users’ minds which are deeply rooted in the past. Therefore, it is inevitable to abide by those cultural comfort zones to design the best usable space. Likewise, architectural education needs to be improvised in a way wherein cultural understanding holds a pivotal role. The discussion also reveals that cultural aspects essential for academic patterns emerge from the norms of a society. It is, therefore, a pertinent fact that societies around the globe differ in their academic patterns.
Figure 7. Study and design of a squatter area in Karachi. An exercise conducted in architectural school

Note. Source: Archives, Department of Architecture and Planning, Dawood University of Engineering and Technology, Karachi
3. Conclusion

Architectural education, like all other types of education, has evolved in a different manner for different societies. Pakistan itself is rooted in a deep historical setting in terms of its geographical, political, environmental and educational values. The research endorses the importance of the built environment and highlights the fact that the stated values have been well translated into the residential built environment in the country. The infusion of global trends as well as cultural patterns as displayed being part of the built environment is not characteristically superficial. Rather, it depicts the culture of a particular society infused into the built environment without a process of amalgamation. It is not infused in the built environment by a process which involves culture with its generalized definition; rather it holds a specific definition of culture best fit for a particular society.

The research highlights the new form of the term “culture” which appears to be non-coherent as compared to the generally perceived one. For that matter, the term culture is defined here as the behavior of a society having a set of complex attributes embedded, cultivated and practiced widely in that society through generations and which has a tendency to alter. Therefore, cultural sensitivity appears to be a conscious and sensitive behavior which has the ability to respond to cultural norms of a society.

The interfacing relationship of culture and built environment as described here develops an equation which is adaptable for societies in different forms according to their particular culture. It is concluded from the discussion that the factors which shape the built environment originate from many dimensions such as societal norms, social and political preferences, and methodologies of education system. Since a larger part of the built environment is constructed without architectural intervention, therefore a common approach can be established that it belongs to people’s behavior, norms, comforts, and psychological understanding, which reflect their culture. While a very small part of the built environment is designed by the architect which is environmentally respondent, technologically sound and yet culturally absorbent in the society. The research also concludes that the built environment tends to exhibit a contrasting situation wherein the structures not designed by architects are the main contributors of an ill designed space, while those designed by architects are marginalized. The discussion also signifies the role of architectural education in the process as an interfacing factor which bridges the gap between culture and the built environment. Architectural curriculum that responds to cultural parameters, such as socioeconomic, political and religious parameters, needs to be addressed while training the architects in order to make
them capable of designing an appropriate built environment which remains culturally sensitive.

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