PRESENCE OF CULTURE IN ARCHITECTURAL EDUCATION: A CASE STUDY OF METU SCHOOL OF ARCHITECTURE (1)

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INTRODUCTION

Architectural education and its relation to culture is the core idea of this research. Both terms, architectural education and culture are treated as entities for discussion here because of their specific attributes that make them significant in a society. Architectural education is described as an entity with respect to having its peculiar existence as a discipline. It is distinguished as an exclusive discipline having its multidimensional contents and methodologies as an educational discourse. Culture is described as an entity with respect to its holistically inclusive nature, which is composed of several attributes that differ for different societies. Hofstede (1994) defines culture as a collective programming of the mind, which is distinct for members of one category of people from another, thus distinguishes the categories. The dynamics of relationship in these two entities encompass several aspects that vary according to the context prevailing in a society for a specific time. Society plays a pivotal role in translating cultural aspects that are communicated through architectural education. The similarities and differences in several societies about cultural attributes and their understanding are gauged through cultural sensitivity. This signifies cultural sensitivity as a mean to communicate several societal attributes; architectural education being one of them. Moreover, the dissemination of architectural knowledge and culture also adopt the mean of cultural sensitivity. In contemporary times, architectural education is communicated through curriculum-based model; same being adopted for case study selected for this research. This model for architectural education has evolved with evolution of human society, according to the contextual requirements like industrialization, mass induct of students in architectural studies after industrialization, societal urge for designed buildings with basic comfort and shelter other than state edifices are several others factors. The construct of architectural education henceforth has also evolved to cater these changes in societies. Harvey (1971) has described that it involved mainly two modes of

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teaching to prepare architects; as apprenticeship and curriculum-based models, in addition to several other methods of teaching as drawing, painting, sculpture, training as war prisoners, etc. In its present form, it includes theoretical and practical parts to disseminate knowledge through curriculum-based model in almost all parts of world.

THE CONNECTION OF ARCHITECTURAL EDUCATION AND CULTURE

Architecture is a response to the primary human needs for shelter and comfort. (Architecture D.O, 2015). French (1998) described the evolution of architecture, from mastery to discipline and then a profession, stating the core as a skill to design. Architectural education encompassing a wide and diversified range of knowledge areas in itself is composed of both art and science dealing with history and social cultural values. Vitruvius (1914), described architecture as a science mastering many other disciplines including arts. The architect alone, he wrote, combines firmness and utility with beauty. This discipline of education has been observed as an integral part of society in tangible and intangible form since historical times. Since the societies have also gone through the process of evolution, it is very likely for all educational disciplines to get effected by this process which is not a short-term process. Ahuja (2015) described six types of societies that are categorized by sociologists and anthropologists according to the chronological sequence and the evolution process. These include foraging societies (primitive stone age), horticultural societies (10,000 to 12,000 years ago), pastoral societies (10,000 years ago), agrarian societies (8,500 to 7,000 years ago), industrial societies (between 18th and 19th century), and postindustrial societies (beginning of twentieth century). The evolution of architectural education during these stages of human society evolution took place in very natural manner, as societal needs were the basic reasons of evolving new methods of training according to the available resources and context. This evolution is underpinned by contextual requirements for discipline of architecture, some of these are industrialization, mass induct of students in architectural studies after industrialization, leading a shift from apprenticeship to curriculum based model, and societal urge for designed shelters (Smith, 1871).

The dissemination of architectural education is a two-way process, which involves basically a student teacher connection as a mode of teaching process. This teaching process involves both practical and theoretical methods to disseminate knowledge. The mode of teaching architecture ever since its evolution has been changed from master-pupil method to apprenticeship leading it to currently adopted curriculum-based model. Both methods are dealt with diversified pedagogical patterns in different parts of the world owning particular history, beliefs, customs and thus cultures. This belongs to the holistic approach of defining architectural education.

"The architect should be equipped with knowledge of many branches of study and varied kinds of learning, for it is by his judgment that all works by the other arts is put to test" (Vitruvius, 1914). Training of architects is therefore, a complex exercise which takes into account multiple factors like contents, methods, and outcomes with a focus on responding to the core necessities of society both in tangible and intangible forms; togetherness of which both is reflected in culture.

Culture, generally has been defined in its anthropological and sociological sense as a complex whole, way of life and commonality in the behavior of society. Tylor (1970), Hofstede (1994), and Matsumoto (1996), has described it as knowledge, belief, art, morals, laws, customs, education and other capabilities and habits acquired by man as a member of society for a specific period of time. Culture therefore, is a variable of society, which has a tendency to change with time, and hence describes the characteristics of a society in a particular context. The attributes of culture include laws, customs, beliefs, food, language, dress and many others in different societies and vary according to the context of different societies. The recognition of these differences and similarities is the origination of idea of cultural sensitivity. Stafford, Bowman, Eking, Hanna and Lopoes-De-Fede (1997) have emphasized that the ability to sense these attributes of culture varies in different societies, which is referred as "cultural sensitivity". Hence the term "cultural sensitivity" has been discussed as the awareness of the existence of cultural differences and similarities and their effect on values, learning and behavior.

The variables associated with culture, present themselves as the gauge to assess cultural sensitivity in a society. Amongst these variables some are interrelated to each other while others are not. These similarities and differences are ultimately reflected in societal behavior and are communicated through several means. This interrelationship also varies in different societies according to the context, which reveals complex dynamics of cultural sensitivity. For instance; there exist preferences in wearing a specific dress for having food at a particular time like breakfast or dinner, while in some other societies it is not a norm. On the other hand, many societies have commonalities in wearing office dress, 'Eid' festival dress, and funeral dress. Likewise, many societies have adopted common understandable language as their national language while the same society also uses different languages in different geographical areas. Since the attributes of the term culture vary according to the context, the same applies for cultural sensitivity as a mean to assess the varying attributes of culture. It is experienced through cultural variables like language, food, dressing, beliefs, customs, rituals, and festivals, and many more through changing time. Culture is therefore, described as an expressed form of all variables, which ultimately constructs its tangible and intangible parts.

While customs, beliefs and values appear to be intangible parts of culture, built environment is one of the tangible parts, which reflects the architectural education. The process involved in educating the architects, including the contextual cultural concerns, underpins it. The available literature in this context encompasses architectural education in relation to the profession as well as to the built environment, that are well connected to architectural education. At the same time, different societies around the world have experienced a variety of built environments depending upon individual cultural values. The integral parts of culture are tangible culture and intangible culture. UNESCO (2003), refers tangible part of culture to artefacts that are produced maintained and transmitted through generations in a society. This also includes artistic creations, built heritage such as buildings and monuments that are invested with cultural significance in a society. Intangible culture refers to practices, representations, expressions, knowledge, skills. It includes instruments, objects, artefacts and cultural spaces associated herewith that are recognized as cultural heritage of communities, groups, or individuals in a society, for instance oral traditions, arts, local knowledge, traditional skills.

While both tangible and intangible parts of culture are interrelated to each other, both need to be taken care of and are worth exploring. It is also considerable that the intangible part of culture exists somewhere in the training process of architects and is thus reflected in tangible part like built environment. Culture is integrated so delicately in the whole process that its effective status is negligibly known.

TRANSLATION OF CULTURE INTO FORMAL ARCHITECTURAL EDUCATION: THEORETICAL CONSTRUCT

The need for culturally sensitive built environment, respondent to society emerged as a deriving factor towards the development of formal architectural education in the fifteenth century. The translation of this emerging understanding in formal education of architecture was initiated at Academia Des Beaux Arts in 1648 (France), where the massive increase in the number of pupils was accommodated. It offered education in arts, music and sculptures. Sennot (2014) mentioned the spread of architectural education in Europe, Russia, America and Central Asia in schools like Cooper Union, New York (1859), Ecole Des Beaux Arts, France (1863), Hendese-i-Mulkiye Mektebi in Turkey (1884), J.J School of Arts in India (1857), Mayo School of Arts in Pakistan (1857) and Staatiliches Bahaus, Germany (1919).

Architecture was considered to be something that all gentry were expected to know about at a basic level, before Oxford and Cambridge offered formal architectural education. (Walker, 2017). School of Architecture, University of Cambridge, accommodated some very relevant concerns about the dissemination of architectural education according to the cultural context by emphasizing the general subjects. It offered a range of subjects, which were considered as major and not minors or allied subjects. These subjects connected between cultural norms of society and previous patterns of architectural education in history. (University of Cambridge, School of Architecture, 1927).

EXAMINATIONS	SUBJECTS		
The First Examination	 General History of Architecture. Elementary Mechanics. Properties and uses of Materials. Elementary Design and Drawing-I. Elementary Design and Drawing-II. 		
The Second Examination	 General History of Art and Architecture Building Materials and Construction. Architectural Drawing. Mechanics and elementary structures. Design. (Intermediate). Quantifying subject: surveying. 		
The Third Examination	 General History of Art and Architecture. A special period of Architecture. Essay on Theory and Practice of Art Advanced Design. Town Planning. Theory of Structures. Advanced study of a subject in the History of Art. 		

Table 1. Subjects in undergraduate architecture curriculum at School of Architecture, Cambridge University, 1927.

The cultural connections addressed through arts and general subjects included in architectural curriculum for Cambridge University (1927) as shown in **Table 1**, included three major subjects; General History of Art and Architecture, (at all three levels; first and second and third), a special period of Architecture (providing in-depth sight of relevant history and its application in contemporary design process), and essay on theory and practice of Art. It depicts the architectural education as a social science discipline, which is culturally sensitive wherein; arts and technique both merges together as a science to be applied to society.

Moreover, during the times, when the discipline flourished, skills were identified to be taught because of the prevailing societal and cultural norms, where generally the occupational need to construct the royal structures in abundance was translated in learning modules of architecture. During these translations it was assumed that hidden aspects of the societal and cultural requirements has always been present. These hidden aspects are worth exploring in terms of extents, factors, influences, derivations, and translations specific to a region, in order to signify their status and to understand their relevance to culture, the term, which is widely understood in its generic meaning.

While developing this theoretical construct, it is well understood that architects, as professionals ought to receive the core of cultural notions of society through educational and personal learning. In contemporary times, this education is communicated through the curriculum-based model, hence it is also understandable that the cultural capital of the society requires to be integrated within the architectural academics at basic undergraduate level. Therefore, a systematic approach to signify the question about effective presence of culture in architectural curriculum is required. This question is underpinned with existing attributes of architectural education that constitute the educational process and ultimately affect the society. However, due to the vast elaboration of architectural education, the understood concept of culture in the existing form of curricula has apparently diminished to an extent where it is likely to be overlooked. Therefore, there is a need to explore this effective status of culture, in order to explore the attributes, which integrate culture and built environment keeping the architectural education as an interfacing ground.

CONTEMPORARY DELIBERATIONS ABOUT INTEGRATION OF CULTURE INTO ARCHITECTURAL EDUCATION

The contemporary debate and considerations for architectural education take into account some seminal cultural deliberations. Amongst some relevant discussions surfaced in past few decades, one considerable approach is by standardizing the learning outcomes through regulatory fora (EQF, 2016). Moreover, three important ones as; Royal Institute of British Architects RIBA (2011), UIA / UNESCO Charter (2005) and Canberra Accord, CAA (2009). These three fora identify and address the role of culture, though the approach may differ. Firstly, the general criteria for Royal Institute of British Architects (RIBA) Part 1 and 2 emphasize for students to have an 'understanding of the profession of architecture and role of the architect in society, and Part 2 focuses on showing the 'ability to generate complex design proposals showing an understanding of current architectural issues.' Secondly, the revised version of UIA/ UNESCO Charter in 2005 considers culture as one of the major concerns

in architectural education. It signifies architectural education, as an application, which respects social, cultural and aesthetic, needs. Thirdly, Charter of Architectural Education by UNESCO-UIA as implemented for Canberra Accord describes some key points to be considered in the development of a curriculum, stating the importance of cultural aspects as, "awareness of responsibilities toward human, social, cultural, urban, architectural, and environmental values, as well as architectural heritage" (CAA, 2014).

Another such deliberation is the materialization of the idea in ALFA III cooperation programme between European Union and Latin America, which develops higher education system in relevance to the needs of society. ALFA-III ensures "the EU-Latin American's Common Higher Education Area objective, recognized as a strategic element for strengthening bilateral and multilateral relations between the two regions" (ALFA III, 2018). It also provides a platform for revisiting different aspects of higher education including curriculum. This model of addressing the curriculum driven higher education directly coincides with those considered in UIA and RIBA.

As an integral part of ALFA III Program framework and its contribution towards architectural discipline, a comprehensive structural project, aims as follows; "discuss and design structural mechanisms to promote the modernization, reformation and harmonization of the higher education systems, aiming specifically to the expanded field of architecture, design and urbanism" (ADU, 2020).

This project includes 18 partner countries with thirteen from Latin America and 5 from Europe with objective to focus on the development and restructuring the higher education of architecture and urban design in order to improve the quality of education in a sustainable manner while considering the employability of the graduates in the partner countries. The major concerns to the architectural education are addressed in two main aspects related to curricula of architectural education:

- 1. It aims to map the existing curricula adopted for architectural studies in the partner countries in relation to the Latin America Tuning Project (ALFA III) and the professional field.
- 2. It focuses to make concrete propositions to update, modernize and synchronize university curricula in architecture, design and urban planning.

Another seminal approach in this realm is architectural research in order to question the validity of all the relevant debate. In this domain, European Association for Architectural Education is providing of a platform for architectural research. A recent advancement in this connection is the approval EAAE Charter on Architectural Research by EAAE General Assembly China. This Charter intends as a reference document to be used in universities, architectural Schools, research institutes, funding agencies, professional bodies and architectural practices that are undertaking architectural research. One of the main parts of the charter is describing the societal and cultural concern to be taken into consideration while architectural research is being conducted, stating; "Architectural research takes place in a broad societal and cultural context, position is necessary, stimulating stronger links between theoretical and practice-based research and between academic and professional arenas" (EAAE, 2013).

Considering the pattern of architectural education in Asia, Sun-Young Rieh et al. (2017) emphasize that many Asian countries have followed a Westernized paradigm in architecture especially since 20th century. This indicates similarity existing between Asian and Western countries with reference to paradigm of architectural education affecting the futuristic approach and tends to regard cultural sensitivity holistically to endorse the architectural research and practice for a culturally sensitive society.

ARCHITECTURAL EDUCATION IN TURKEY

Architectural education in Turkey has been deeply rooted in past. The early history of Ottoman Empire in 15th century onwards experienced architectural education in its informal spirit. Sey and Tapan (1983) describe that until 18th century an institution Royal Architect's School named as *Hassa Mimarlari Ocagi*, established in 1453 was taking care of training of architects who were to serve at state buildings sites. This institution offered apprenticeship model through both theoretical and practical means and allied knowledge areas. Sinan, the legendary royal architect in 16th century, further developed the same institution.

A significant and notable part of the pre-institutionalization stage of architectural education in Turkey is the time of Sinan, who was the chief royal architect in the Ottoman Empire in sixteenth century. Necipoglu (2009) has referred the autobiography of Sinan, Tezkiretul Ebniye, holding the office Bas Mimar Hassa or Chief Imperial Architect over a span of five decades, termed as classical style in Ottoman architecture. Ottoman Empire is acclaimed to be very rich on its architectural grounds as the training of architects in the region was very much cultivated in the society. With a larger vision of Sultans for the development of state buildings throughout the region, the whole territory was fortunate enough to develop many architectural landmarks. This was done through a wide spread training of the famous architect Mimar Sinan to his pupils on the practical grounds during the construction of state buildings, like mosques and palaces (Sey and Tapan,1983).

Goodwin (1921), an Ottoman historian describes Sinan's career based on inherited Ottoman building methods, while after his appointment as a royal architect in 1538, his work was transformed into mature, self-translating and contextual. Architects in Ottoman Empire, were trained as carpenters and engineers where adequate flow of apprentices was a norm in Ottoman Empire. Many of the laborers were janissaries. Nomades and gypsies were considered for hard and tough work and were paid less. (Goodwin, 1977; Pasha, 2019). Most of architects before getting their training were related to any art or engineering skill. Some of the salient examples of these trainings are mentioned in **Table 2**.

After Sinan era, in 18th century, formalization of westernized architectural education took place at military technical school Askeri Humbarahane ve Hendesane in 1734 followed by Muhen Dishane-i-Bahri-e-Humayun in 1773. After some other engineering schools formed in 1795 and 1883, it was in 1908 for the first time when Architecture was formalized as a discipline in a fine arts school named as Sanayi-i-Nefise Mektebi Alisi. (Khan, 1983). Architectural education flourished in Turkey according to the architectural movements; Ottoman, Seljuk, and western and then in late 19th century Young Turkish Movement. This resulted in the pattern developed as national architectural education, which emphasized new westernized as

Sr. No	Name of Architect	. Skill	
1.	Davut Agha .	Architect. Pupil of Sinan	
2.	Ahmet Dalgic	The driver or hydraulic engineer. Completed his training by making a Quran Box and before succeeding Davut Agha as his architect, had driven the piers into the mud that sultan Yemi Valide mosque.	
3.	.Mehmat Agha	. A musician and a worker in mother of pearl. Trained as successor of Ahmet Dalgic as architect. Built Ahmet – I complex.	

Table 2. Examples of training of notable architects in Turkey.

well as Seljuk and Ottoman attributes for the training of architects and thus reflected it in built environment of the country. The institutionalized and curriculum-based model for architectural education is currently prevalent across the country in almost all schools of architecture.

THE CASE STUDY PREMISE AND SELECTION

This research focuses on two interconnected exploration areas of cultural sensitivity; firstly, the composition of architectural education in terms of content, methodology and outcomes which responds to society and secondly, the role of architectural education as socio cultural variable which deals with the built environment as a tangible attribute of culture. The research thus aims to assess the effective presence of culture in architectural education. Moreover, since the architectural education is translated to the society through the curriculum taught in architectural schools, therefore it is assumed that the applied level of cultural aspects in the curricula affect the understanding of societal norms.

The premise of this research exploring culture in architectural education is underpinned through the concept of cultural sensitivity. Therefore, it is assumed that the entity of cultural sensitivity in currently applied curricula of architectural education exists in an over simplified form.

Naz (2005) explains that East and West have shared diplomatic relations and resemblances between different countries providing common grounds for collaborations in different sectors, architectural education being one of these. The selection of case study is based on the historical set up of architectural education in Turkey as one of the early setups developed at the geographical connection point of East and West where the country is located. It is one of the main reasons of transmission of architectural educational patterns between East and West. Therefore, the setting of this study will essentially focus on the evidences from selected case study of Department of Architecture at Middle East Technical University (METU) located in Ankara, Turkey.

The undergraduate program in case study is based on a four-year study leading to the Bachelor's degree with emphasis on architectural design studios. Two undergraduate minor programs are offered; Minor Program in Conservation for undergraduate students of city-planning, and Minor Program in Architectural Culture for students from all departments of METU. **Figure 1** shows the glimpses of some activities in the department.

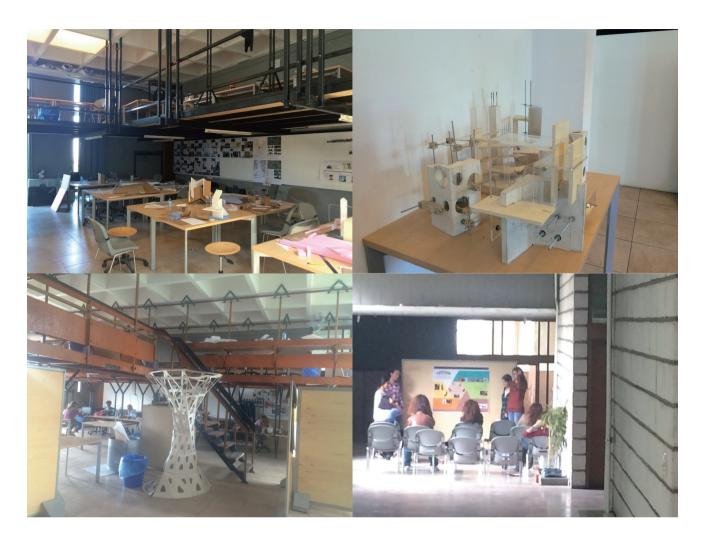


Figure 1. Glimpses of work at Architecture Department, METU, Ankara.

The curriculum for this research at Department of Architecture at METU is a four-year course with sixty-three (63) subjects spread over ten semesters with 151 credit hours (METU ARCH, 2015).

METHODOLOGY AND SAMPLE

Groat and Wang (2002) have outlined seven approaches used for architectural research according to the context. These are termed as, historical, qualitative, correlational, experimental, simulation, logical argumentation and case study and combined approach. Out of these, case study approach is selected for this research according to the context of the study.

One of the five characteristics of case study approach specified and adopted is "a focus on either single or multiple cases studies in real life contexts". Another important factor in the selection of the case study is the typology described by Seawright and Gerring (2008) as "Influential cases". This is to explore those cases which might be influential, but they do not propose new theoretical formulations and applies to one or a few cases with small to moderate samples. The theoretical construct through literature review suggests suitability of purposive sampling for this research, which is described by Lavarakas (2008) as a subjective method of sampling carried out by applying expert knowledge in a non-random manner, that can best

represent the whole population. The sample selected for the case study is of two categories; faculty and students.

Framework for Quantitative Data

The quantitative data follows a framework for exploration, suggested by literature review and theoretical construct of research as follows:

- A: Standing prospects of culture in architectural education at undergraduate level.
- B: Cultural variables included in the curriculum for cultural understanding.
- C: Futuristic perspective of school in terms of cultural aspects.

This quantitative data is collected through two basic tools for investigating the research questions; questionnaires and curriculum.

Ouestionnaires

The questionnaires designed for two categories; faculty and students focus on the exploration about ten different aspects listed in **Table 3**. These separately designed questionnaires for both categories are used to collect data from faculty members of school regardless of which year they are teaching at undergraduate level, while the questionnaire for students caters only fourth year level considering well-established understanding of students about architecture. The questionnaires extended to both categories of respondents have commonalities and differences in order to extract the relevant information to its maximum extent.

Sr. No	Research Probes	Respondents Faculty / Students			
A: Stand	A: Standing prospects of culture in architectural education at undergraduate level.				
1.	Understanding of idea of cultural sensitivity	Both			
2.	Objectives of inclusion in courses	Both			
3.	Extent of Inclusion in courses	Both			
4.	Level of inclusion in courses.	Both			
5.	Current emphasis of the curriculum.	Faculty			
6.	Suggested Method	Faculty			
7.	Suggested Emphasis on cultural sensitivity.	Faculty			
B: Cultural variables included in the curriculum for cultural understanding.					
8.	Significant Factors (Variables) to develop cultural understanding	Faculty			
C: Futur	stic perspective of school in terms of cultural aspects.				
9.	Observation about cultural sensitivity in built environment	Students			
10.	Choice of practice after graduation	Students			
11.	Emphasized choice for mode of practice	Students			
12.	Reason for emphasized choice	Students			
13.	Expectation from academia in training about cultural sensitivity	Students			
14.	Difficult aspects of cultural sensitivity in practice	Students			
15.	Role of practicing architects in promotion of cultural sensitivity	Students			

Curriculum

The second tool used for collection of quantitative data is the curriculum used officially by school for teaching Architecture at undergraduate level during the time of research. The target data to be extracted from curriculum is both implicit and explicit in nature. Some of the clearly mentioned details in the official document of curriculum for school are strengthened by implicit notions, further translated in a curriculum matrix of descriptive nature (METU ARCH, 2017).

FINDINGS, ANALYSIS AND DISCUSSION

Understanding of the Idea of Cultural Sensitivity

Figure 2 indicates that 12% of the respondents find it as a poor idea, 12% mark it as a fair idea, 25% mark it as a good idea, 13% mark it as a very good idea while 38% of the respondents mark it as an excellent idea and 0% responded as Nil. The figure also indicates that 50% of the respondents find it as a poor idea, 50% mark it as a fair idea, 0% mark it as a good idea, 0% mark it as a very good idea while 9% of the respondents mark it as an excellent idea and 0% responded as Nil.

This indicates the fact that the extremes are very less while a reasonable number of faculty members find it as an excellent idea to be applied at the undergraduate level in architectural education. The findings also signify that a large number of students have understood the idea as fair, however not a significant coherence exists between both stake holders; faculty and students. The findings reveal that there is a general level of understanding about the idea present in the respondents of both categories. The idea of cultural sensitivity is endorsed mostly as a fair or poor factor. There may be multiple reasons for this consideration, Firstly, it is likely to have influence of the contemporary content of courses included in the curriculum. Considering it as a poor idea that may be underpinned by the understanding of cultural sensitivity, sometimes mixed up with the idea of traditional architecture, which is not the case. Since the culture is an adaptable entity, having tendency to change with time, there is a need to understand cultural sensitivity as distinct idea from that of tradition. Moreover, as most of respondents have equally opined for a fair and poor factor for the idea, therefore, it is revealed that general understanding about cultural sensitivity in architectural education exists.

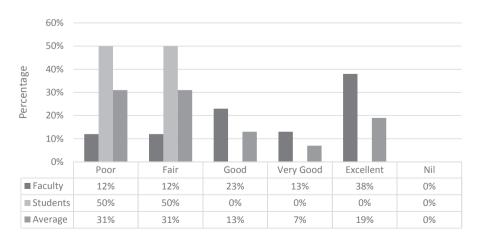


Figure 2. Understanding of the idea of cultural sensitivity.

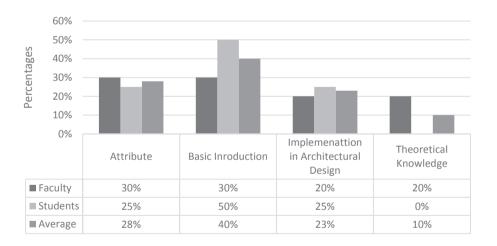
Objectives of Inclusion in Courses

Figure 3 indicates that 30% of the faculty members have the opinion that the objective of inclusion in studio courses should be the basic introduction, 30% say that it should be included for implementation in architectural design, 20% say that it should be present for theoretical knowledge, and 20% for any other opinion. Figure-2 also indicates that 25% of the students opined the objective of inclusion in studio courses as basic introduction, 50% say that it should be included for implementation in architectural design, 25% consider it to be present for theoretical knowledge, and 0% for any other.

The findings indicate that a very visible coherence exists in both stake holders on factor of implementation in architectural design relating to the actual presence of cultural content in the curriculum adopted. It also indicates that the understanding of faculty for the translation of courses in the curriculum is well understood by students and the content is well delivered as desired.

Extent of Inclusion in Courses

Figure 4 indicates that 12% of the respondents opined that cultural sensitivity is poorly present in the studio courses, while 0% present in lecture courses. 0% opined for it as a fair inclusion in studio courses while 2% of the respondents says that culturally sensitive content is fairly present in the lecture courses. Moreover, 12% feels that it is included



 $\label{eq:Figure 3. Objectives of inclusion in courses .}$

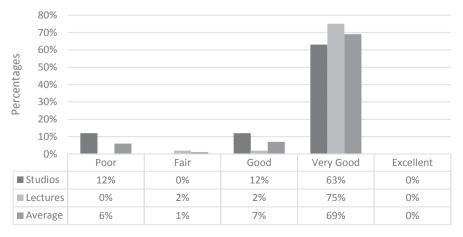


Figure 4. Average extent of inclusion in courses.

as a good factor in studio courses while 2% of the respondents have the opinion that a very good amount of culturally sensitive content is present and communicated through lectures. A significant number (63%) of respondents opined cultural sensitivity present at a very good extent in studio courses while 75% opined at a very good extent in lecture courses. 0% of the respondents consider it is present as an excellent factor.

The findings indicate that the faculty and students have identified the placement of culturally sensitive content in the curriculum. This also relates to the fact that even if, wherever, the culturally sensitive content is not indicated in the curriculum, yet the faculty has successfully devised the ways and means to apply the idea in the process. The findings also imply that a significant coherence in faculty and students about their understanding of adopted curriculum exists.

Level at which Included in Courses

Figure 5 indicates that 13% of the respondents have an understanding that culturally sensitive content is present in the curriculum at first year level, 25% at second year level, 33% at third year level, 29% at fourth year level in the undergraduate curriculum in studio courses. While at the same time 17% of the faculty members have an understanding that culturally sensitive content is present in the curriculum at first year level, 28% at second year level, 24% at third year level, 17% at fourth year level in the undergraduate curriculum in lecture courses.

The findings indicate that on average which includes both studio and theory courses, 15% of the respondents have an understanding that culturally sensitive content is present in the curriculum at first year level, 27% at second year level, 29% at third year level, 23% at fourth year level in the undergraduate curriculum course. This finding reveals that presence of culturally sensitive content exists at third year and fourth year level while fourth year also caters the same presence.

Current Emphasis of the Curriculum

Figure 6 indicates that the faculty endorses current emphasis of the curriculum as 25% global, 25% local and 50% glocal and 0% as Nil. The findings indicate that currently adopted curriculum in the school is more considerate about glocal aspects of culture; but the students are inclined towards global understanding through their studies, and

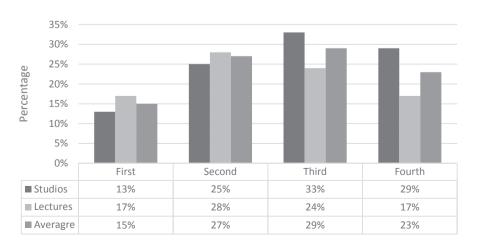


Figure 5. Level of inclusion in courses.

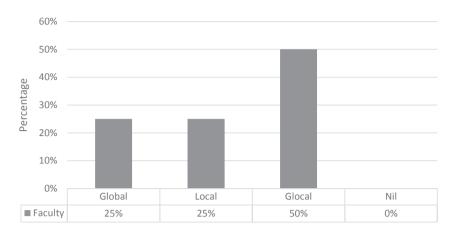


Figure 6. Current emphasis of the curriculum (faculty respondents).

are considering all three areas more or less equal. This implies for both theoretical and studio courses.

This also signifies that the faculty tends to apply the cultural sensitivity through the adopted curriculum and students have developed the same aspect in their understanding through taught content. Moreover, it strengthens the idea of integrating cultural sensitivity with architectural education through the architectural design process. The curriculum adopted in case study is also evident of the fact that cultural sensitivity is hidden and not brought to the surface efficiently.

Suggested Method

Figure 7 indicates that the 88% of the faculty members suggest a combination of both theoretical and practical method to teach cultural sensitivity in undergraduate curriculum, while 12% suggest only theoretical method and 0% suggests practical method.

The findings in **Figure 7** also indicate the understanding of faculty about both methods of teaching; theoretical and practical are emphasized in the taught content. This acknowledges the understanding of respondents that there are certain subjects, which are important to be taught on theoretical basis while some subjects on practical basis. Therefore, it is necessary to consider the multiple methodologies of teaching architecture in order to create cultural sensitivity.

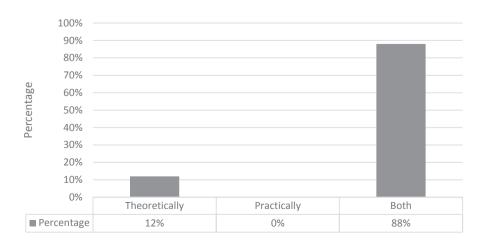


Figure 7. Suggested method.

Suggested Emphasized Content

Figure 8 indicates that the suggested emphasized content is 32% for glocal cultural analysis, 32% for social and political analysis, 23% for comparisons of cultures, and 13% for some other aspects.

The finding reveals that a significant coherence exists in favour of two aspects; glocal cultural analysis and social and political factor while disseminating the knowledge about cultural sensitivity through the curriculum. This indicates the fact that the translations of the curriculum into the design assignments may reflect such selections. This ultimately helps students to understand the idea and its application through the prescribed factors of social, political and glocal culture. Although the findings signify, the fact that currently adopted curriculum in the school is more considerate about glocal aspects of culture; but the students are also inclined towards social and political understanding. Moreover, this is also related to the fact that the school considers to include several global paradigms and methodologies in addition to maintaining its own specific contextual needs. Ever since the emergence of formal architectural education in Turkey, architectural schools generally have realization about both the aspects of local and global needs; former for their own development of built environment in the country and later for the futuristic visions in order to meet the global standards of architectural education.

Significant Variables

Figure 9 indicates faculty suggestions for significant variables to be included in undergraduate curriculum as 29% contextual, 12% religious, 21% historical, 12% ethnical, 13% national, and 13% as some other.

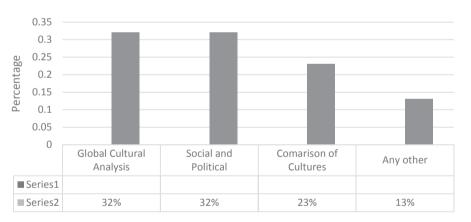


Figure 8. Suggested emphasized content (student respondents).

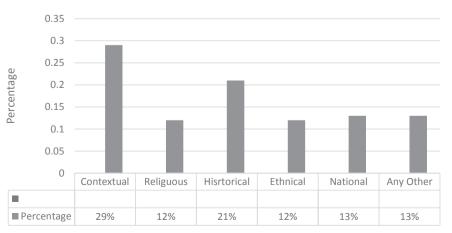


Figure 9. Significant cultural variables.

In **Figure 9**, the case study presents some significant variables of culture as perceived by the respondents. It is resulted that the contextual factor (variable) of culture is dominant at maximum rating. The factor of contextual variable is related to the societal needs of the society, as ultimate objective of architecture. It is also observed here that more than any other variable like religious, historical, ethnical, and national given as options, contextual variable is the one mostly included in the curriculum. This inclusion is in both theoretical and practical forms.

Observation About Cultural Sensitivity in Built Environment

Figure 10 indicates that 50% of the respondents observe that the built environment is culturally sensitive while 50% observe it as fairly sensitive about culture. At the same time 0% feels that it is included as a good factor, while 0% of the respondents have the opinion that a very good factor of culturally sensitive built environment is present and 0% observe it as an excellent factor.

The findings also reveal that the observation of architectural students about the cultural sensitivity is underpinned by the understanding of the course contents enabling them to opine. Disseminating knowledge through both practical and theoretical means as mentioned in Figure-6 strengthens this understanding.

Choice of Architectural Practice After Graduation

Figure 11 indicates that 67% of the students opined about their choice of practice after graduation as architectural design, 33% for interior design, 0% for landscape design while 0% opined for urban design.

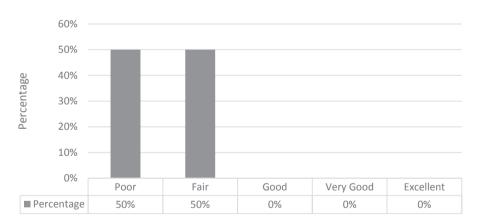


Figure 10. Observation about cultural sensitivity in built environment.

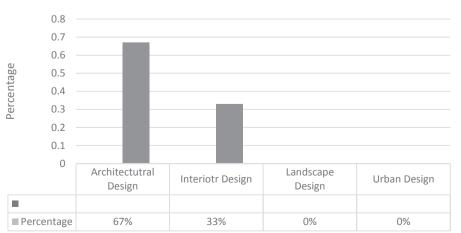


Figure 11. Choice of architectural practice after graduation.

The findings reveal that maximum numbers of students feel themselves competent enough to work for architectural design after their graduation. Though a significant number also show inclination towards interior design, yet the other two options for landscape design and urban design remain as nil. This also indicates the interest of students in architectural design and the capacity building from faculty side for architectural design through curriculum and design assignments conducted through the course of work.

Emphasized Choice of Practice

Figure 12 indicates that 100% of the students plan to opt for a practice, which is glocally sensitive, means catering for both local and global aspects at the same time. While none of the students opted for global or local practice separately.

The finding reveals that the students have an integrated interest generated for glocal cultural sensitivity. This deliberation is underpinned by the combination of knowledge areas disseminated during the course of four years. Moreover, students collaborate with the practicing architects and take their feedback, hence develop their choice of practice after graduation.

Reason for Emphasized Choice of Practice

Figure 13 indicates that a significant number of students (50%) have the stance for client preferences during their practice. While 25% have the opinion that it is the need of the current time and another 25% opined that it is about the cultural concerns that should be practiced / not missed out

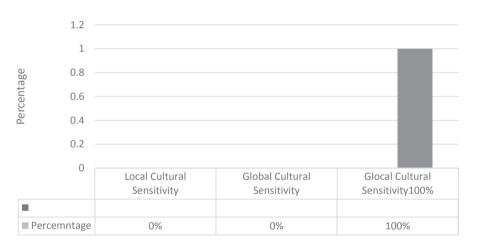


Figure 12. Reason for emphasized choice of practice.

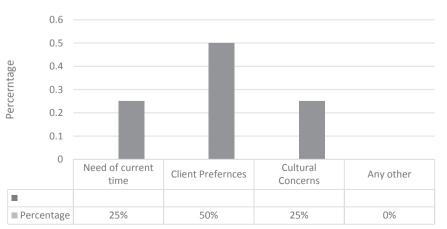


Figure 13. Reason for emphasized choice of practice.

in practice. The findings reveal that the understanding of students for their architectural practice after graduation depends upon the choice of their clients

Expectation from Academia in Training About Cultural Sensitivity

Figure 14 indicates that 50% of the students expect from academia to provide the basic awareness while 50% of students endorse that academia should take the full responsibility to generate awareness, and 0% opined for consulting practicing professionals about cultural issues.

This finding also indicates that faith in faculty for the training of students is a well-understood idea. At the same time students have opined that if the basic awareness about cultural sensitivity is disseminated to students, it can always be flourished in the same direction while considering allied aspects of architectural practice also.

Difficult Aspects of Cultural Sensitivity in Practice

Figure 15 indicates that faculty has different opinion regarding difficult aspect of cultural sensitivity in practice. 40% of respondents feel that there is a demand of modernity in buildings, 40% feel that there is less awareness about cultural sensitivity in clients and 20% feel that there is less understanding in fresh graduates when they start practicing.

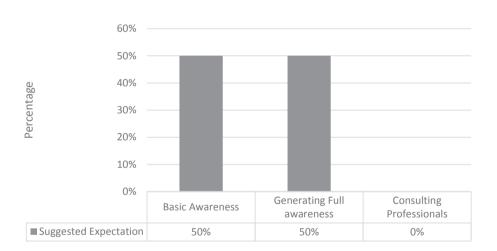


Figure 14. Expectation from academia in training about cultural sensitivity.

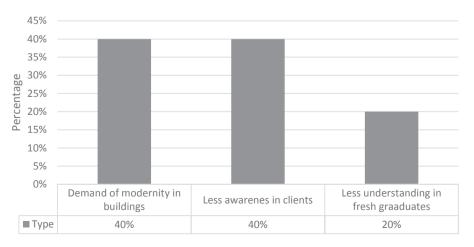


Figure 15. Difficult aspects of cultural sensitivity in practice.

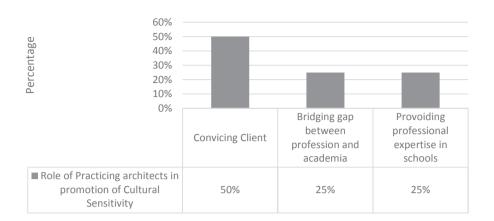


Figure 16. Role of practicing architects in promotion of cultural sensitivity.

The difficult aspects of cultural sensitivity in terms of practice are sensed in faculty in terms of modernity demand and less awareness of clients, because of the fact that both of these factors are already prevalent in the society generally.

Role of Practicing Architects in Promotion of Cultural Sensitivity

Figure 16 indicates that the faculty expects the role of practicing architects in different ways. 50% of the respondents feel to convince the client about responsibility as a part of built environment. 25% opined to bridge the gap between academia and profession by mutual consultations, while 25% responded as to provide professional expertise in school in terms of teaching. The finding also reveals that the role of practicing architects should be towards convincing the clients in order to contribute in the built environment.

CONCLUSIONS

It is concluded that the status of culture in architectural education in selected case study is oversimplified and diminished. Moreover, the presence of culturally sensitive content in the curricula is a factor, which is neither negated completely, nor articulated during the process of architectural education and in its connection to practice. Culturally sensitive content is present in the curriculums/ course contents of the school generally spread over all the years of study and specifically during mid-levels of the course. Three significant variables of culture found as social, spatial context and historical which are considered and included in the course. The research also concludes and highlights the potential of architectural education to relocate the significance of cultural values with reference to both historical and futuristic visions. Henceforth, the task of architectural education is to achieve provision of effectively modern designs that are worth presenting as cultural agency in architectural production. Moreover, definition of culture adopts a new form in contemporary times, which can be narrated as, culture is a holistic term communicated to and by society, composed of the tangible and intangible attributes, having tendency to adapt change with time. Culture, therefore is a potential attribute of the society that can be further explored through architectural education as its imperative part.

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MİMARLIK EĞİTİMİNDE KÜLTÜRÜN YERİ: ODTÜ MİMARLIK BÖLÜMÜ ÖRNEĞİ

Bu makale, Mimarlık eğitimi ve kültür arasındaki ilişki üzerine odaklanmaktadır. Bu iki alan, farklı geri planlarını korumakla birlikte birbirine bağlı durumdadır. Bu çalışma, bu ilişkinin bazı yönlerini başlıca iki araç vasıtasıyla araştırmayı amaçlamaktadır; günümüzde bilgi yaymanın yapılandırılmış bir yolu olan müfredat ve birincil veri toplama kaynağı olarak kullanılan, öğretim üyeleri ve öğrenciler için ayrı oluşturulmuş yapılandırılmış anketler. Kavramsal çerçeve, kültürün mimarlık eğitimindeki yerini müfredat aracılığıyla değerlendirmek için

kültürel duyarlılığı potansiyel bir araç olarak tanımlamaktadır. Bu çalışma, vaka çalışması yaklaşımını ve nesnel olarak seçilmiş öğretim üyeleri ile öğrenci örneklemini kullanan nicel metodolojiye dayanmaktadır. Sonuçlar, kültüre duyarlı bir içeriğin mimarlık lisans dersleri boyunca müfredata yayılmış olduğunu göstermektedir. Ancak bu içerik, mimarlık bilgisinin öğretilmesi sürecinde son derece sadeleştirilmiştir. Kültür müfredata ivi entegre edilmis olsa da müfredatta önemli bir içerik olarak sunulma ve öğretilme potansiyeline sahiptir. Dahası, fakülte ve öğrencilerdeki kültür anlayışı, kültürel hususların mimarlık eğitimi sürecinde bütünlük ve uygulama bakımından öneme sahip olduğu gerçeğini de güçlendirir. Bu çalışma mimarlık akademisi için önemlidir, çünkü burada kültür, mimarlık okullarında öğretilen müfredata dayalı model aracılığıyla topluma aktarılmakta ve daha sonra yapılı çevreyi oluşturmak için uygulanmaktadır. Bu nedenle, muhtemeldir ki, mimarlık okullarının müfredatında bulunan mevcut kültürel hususlara odaklanılırsa, bu mimarlığın anlaşılmasını etkileyebilir ve toplumda bağlamsal ve kültüre duyarlı bir yaklaşıma, devamında kültüre duyarlı yapılı bir çevreye yol acabilir.

PRESENCE OF CULTURE IN ARCHITECTURAL EDUCATION: A CASE STUDY OF METU SCHOOL OF ARCHITECTURE

The paper focuses on the relationship of architectural education and culture. While holding their distinctive backgrounds, these both entities are interconnected to each other. This study intends to explore some aspects of this connection through two main tools; firstly, the curriculum which is a structured way to disseminate knowledge in contemporary times, and secondly, structured questionnaires for faculty and students separately that are used as a source of primary data collection. The conceptual framework identifies cultural sensitivity as a potential mean to assess the status of culture in architectural education through curriculum. The study involves quantitative methodology using a case study approach and an objectively selected sample of faculty and students. The conclusions depict that culturally sensitive content is present in the curriculum which is spread over the duration of course for B.Arch. However, the inclusion is oversimplified in the process of dissemination of architectural knowledge. While culture is well integrated in the curriculum, it has a potential to be presented and taught as a significant content in the curriculum. Moreover, the understanding of culture in faculty and students strengthens the fact that cultural aspects are potential for integration and application in architectural education process. This study is significant for architectural academia as culture is translated to the society through the curriculumbased model taught in architectural schools and then applied to the society to create built environment. Therefore, it is likely that if the status of cultural aspects present in the curricula of architectural schools is explored, that may affect the understanding of architecture itself and lead to a context relevant and culturally sensitive approach in society and ultimately culturally sensitive built environment.

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