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AN INTEGRATED APPROACH TO THE CONSERVATION OF TRADITIONAL BUILDING CRAFTS AND THEIR SUSTAINABILITY IN CONTEMPORARY DESIGN

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Tangible and intangible cultural heritage, architecture View project

Living Human Treasures of Traditional Architecture: Traditional Building Masters View project

CRAFTARCH'18

INTERNATIONAL ART CRAFT SPACE CONGRESS PROCEEDINGS BOOK

Editors Assoc. Prof. Dr. Özlem KARAKUL Assoc. Prof. Dr. Ahmet DALKIRAN



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AN INTEGRATED APPROACH TO THE CONSERVATION OF TRADITIONAL BUILDING CRAFTS AND THEIR SUSTAINABILITY IN CONTEMPORARY DESIGN

Geleneksel Yapı Zanaatlarının Korunması ve Çağdaş Tasarımlarda Sürdürülebilirliğine İlişkin Bütünleşik Bir Yaklaşım

Özlem KARAKUL*

ABSTRACT

The conservation of cultural heritage necessitates searching for the ways of the synchronization between the transmission process of the elements of intangible cultural heritage and the transformation process of traditional buildings. This study tries to investigate the incompatibility between different processes, mainly focusing on building crafts as an element of intangible cultural heritage throughout the transformation process of building technology from "traditional" to "new" to discuss certain sustainable principles for contemporary designs to achieve cultural continuity.

The conservation of traditional craftsmanship as a part of intangible cultural heritage necessitates providing their transmission from generation to generation and the continuity of the productions made by practitioner craftsmen. The end of traditional building production restricts the living areas of crafts and their livability into the restoration processes. The decrease in demand causing the decrease in the number of practitioner craftsmen brings forward the necessity of regenerating the organic relationships of crafts with architecture for their conservation. Throughout the transformation process from traditional to new building period, the developments in new building technologies had brought up the organic relationship of architecture with its local context, local culture, craft and art, and caused a standardization and uniformization in architecture. In this respect, the search for the ways for the sustainability of integrity between building crafts and traditional architecture in new buildings and contemporary

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designs is vital. This study presents an integrated approach to traditional building crafts and their sustainability in contemporary designs.

Keywords: Building crafts, traditional architecture, conservation, integrated approach, contemporary design

ÖZ

Kültürel mirasın korunması, geleneksel yapıların ve somut mirasın dönüşüm süreci ile somut olmayan kültürel miras elemanlarının aktarım süreçleri arasındaki uyumun sağlanmasının yollarının araştırılmasını gerektirmektedir. Bu çalışma, farklı süreçler arasındaki uyumsuzluğu, yapı teknolojisinin gelenekselden moderne dönüşüm süreci içinde, somut olmayan kültürel miras elemanı olarak yapı zanaatlarına odaklanarak, kültürel sürekliliği sağlamak üzere çağdaş tasarımlarda sürdürülebilir ilkeleri tartışmayı amaçlamaktadır.

Somut olmayan kültürel mirasın bir parçası olan geleneksel zanaatların korunması, uygulayıcı ustaların yaptığı üretimlerin sürekliliği ve nesilden nesile aktarımın sağlanmasıyla mümkün olmaktadır. Geleneksel yapı üretiminin neredeyse tamamıyla son bulması, zanaatların yaşayabilirliğini ve yaşama alanlarını restorasyon süreçleriyle sınırlamıştır. Talebin azalması, uygulayıcı ustaların sayıca azalmasına yol açarak, zanaatın korunmasında, mimariyle kurduğu organik ilişkilerin yeniden kurulmasının zorunluluğunu da ortaya koymuştur. Gelenekselden yeni yapı dönemine geçiş süresinde, Yeni yapı teknolojisindeki gelişmeler, mimarinin yerel bağlamla, kültürle, zanaat ve sanatla olan organik ilişkileri koparmış, mimaride tek tipleşmeye ve standartlaşmaya neden olmuştur. Bu bağlamda, gelenekte var olan zanaat-mimari bütünlüğünün, yeni yapılar ve çağdaş tasarımlar içinde sürdürülebilirliğine yönelik çalışmaların yapılması önemlidir. Bu çalışma, geleneksel yapı zanaatlarının korunması ve çağdaş tasarımlarda sürdürülebilirliğine yönelik bütünleşik bir yaklaşım sunmaktadır.

Anahtar Kelimeler: Yapı zanaatları, geleneksel mimari, bütünleşik yaklaşım, koruma, çağdaş tasarım

INTRODUCTION

"Craft" is defined as "a certain type of making in which objects are created by hand through the skilled use of tools" within ICCROM Report (2004: 5) on craft and conservation. Actually, craft was a term meaning every products based on hand worksmanship before Industrial Age (Sözen, Tanyeli, 2010: 329) . The differentiation between "art" and "craft" in artistic activities emerged through the Renaissance period, after that period until 20 th century, the skills except from fine arts were called as craft and had been evaluated as secondary (Sözen, Tanyeli, 2010: 329). Craft is generally distinguished from fine art by the function of the end product ; craft objects are created for use, not for contemplation as in fine arts (ICCROM, 2004:5). The creation process of craft objects is carried out with hand and the skilled use of tools by craftsmen and necessitates a particular skill, knowledge and know-how, involving an act of creation (ICCROM, 2004: 7). The creativity in the formation process of craft forms the originality of the craft product.

Building crafts are the crafts related to the building activities created by hand through the skilled use of tools by building craftsmen expressing their specific knowledge, techniques and knowhow about local building culture into architecture. After the introduction of modern building technologies, the decrease and interruption of traditional building process caused to restrict the area for the implementation of building crafts into the restoration practices only. Because of the decrease in demand, the number of practitioner building crafts started to be disappeared causing the degradation of intergenerational transmission between master and apprentice. In rapidly changing conditions, the decrease of the demand for building crafts with the interruption of traditional building period necessitated to define the appropriate practice domains for building crafts to sustain their life.

This paper aims to discuss the sustainable aspects of the integrity of craft and architecture in tradition for contemporary designs introducing an integrated approach to the conservation of traditional building crafts. The study particularly focuses on two conservation problems in traditional environments related to conserve and transmit building crafts; and to design national, local and contextual architecture. The study presents an integrated approach to the formation and transformation process of traditional architecture to understand the genuine interrelations

between building crafts and traditional architecture to determine their sustainable ones in contemporary designs.

CRAFT AND ARCHITECTURE RELATION THROUGHOUT HISTORY

Throughout the history, art and craft products had been an organic and integrated part of architecture; these holistic relations started to be interrupted together with the Renaissance Period; and the differentiation between art and craft; and the number of art works independent from architecture increased (Karakul, Bakırer, 2018:3). Together with this interruption, throughout the Industrial Period and afterwards, the development of new building technologies and the abandonment of ornamentation in modern architectural understanding, the possibility of implementation of traditional crafts in architecture has nearly disappeared.

Before the Renaissance period, art and craft expressed a meaning of a whole composed of both of them (Sözen, Tanyeli, 2010: 329). The differentiation between "art" and "craft" in artistic activities emerged in Renaissance period, after that period until 20 th century, the skills except from fine arts were called as craft and had been evaluated as secondary (Sözen, Tanyeli, 2010: 329). Throughout the Middle Ages in which artist and craftsman had same status, there were no differentiation between art and craft, art works were produced in ateliers without putting signs of artists with the patronage of church (Güner, 2014: 66). Together with Renaissance, the differentiation between art and craft became more evident and the status of artists increased; and it started to be thought artists as creator; craftsman as implementer(Güner, 2014: 66). Artists started to sign over their paintings; and the discrimination between art and crafts started to become more evident.

First reaction to this discrimination was Arts and Crafts Movement which started under the leadership of William Morris. Arts and Crafts Movement adopted the idea of the active participation of craftsmen into the design process of industrial products causing artists and craftsmen to become close to each other. After Arts and Crafts Movement and Art-Nouveau were three theoretical movements emerged after first world war, De Stijl (1918) in Holland, Bauhaus (1919) in Germany and Vkhutemas (1920) in the Soviet Union which brought the terms of architect, artist and craftsman together and were based on the idea that architecture was a profession composed of all art branches (Güner, 2014: 71). Bauhaus, De Stijl and Vkhutemas Movements emerged after First World War brought the concepts of architect, artist and craftsman and advocates the idea that architecture was a discipline comprising all art

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branches and that for architects and artists, having the skill on crafts was the main source of their creativity. The foundation declaration of Bauhaus emphasized that architects and artists required to return to crafts; and skill in crafts constituted the main source of creativity of artists. The cooperation between artist and craftsmen and art and hand works had a significant place in the Bauhaus education understanding (Bayer, Gropious and Gropious, 1959: 28; Erzen, 2009).

In Anatolia, Ehl-i Hiref, the most important organization determinant over art and architecture relationship and art and design styles, brought all design and craft activities together under one organization in Nakkaşhane (Güner, 2014: 67). That organization also formed the basis of Hassa Architects Organization which created Classical Ottoman Architecture in 16 th century in cooperation with Ehl-i Hiref. In that period, while architectural projects were prepared in the Hassa Architects Organization, the projects of interior design of the buildings, decorative arts, the design of furniture and details were prepared within Ehl-i Hiref. Throughout this period, monumental architecture was enriched with the various works of the different craftsmen and artists.

INTERNATIONAL DOCUMENTS ON CONSERVATION OF BUILDING CRAFTS AND TRADITIONAL CRAFTSMANSHIP

"Building crafts" or "traditional craftsmanship" concretized in traditional architecture is determined as one of the domains in which intangible cultural heritage is manifested in the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage adopted by UNESCO¹. The knowledge, skills and creativities of building masters concretized in traditional architecture can also be accepted as the intangible aspects of building crafts as a as a branch of traditional craftsmanship. Craft differentiates from other forms of intangible cultural heritage because the product of its formation process is a tangible one, like architectural ornaments.

The UNESCO 2003 Convention described the intangible cultural heritage with all its dimensions related with the different disciplines and explained safeguarding measures, such as,

¹The UNESCO 2003 Convention defines "intangible cultural heritage" as "the practices, representations, expressions, knowledge, skills-as well as the instruments, objects, artifacts and cultural spaces associated therewith- that communities, groups and, in some cases, individuals recognize as part of their cultural heritage"; and, emphasizes the domains of intangible cultural heritage as (a) oral traditions and expressions, including language as а vehicle of the intangible cultural heritage;(b) performing arts: (c) social practices, rituals and festive events;(d) knowledge and practices concerning nature and the universe;(e) traditional craftsmanship". See the Convention for the Safeguarding of the Intangible Cultural Heritage. 32nd General Conference. September 29-October of the 17. Paris. from Session http://unesdoc.unesco.org/images/0013/001325/132540e.pdf)

"the identification, documentation, research, preservation, protection, promotion, enhancement, transmission, particularly through formal and non-formal education, as well as the revitalization of the various aspects of such heritage." As in other elements of intangible cultural heritage, the conservation of traditional craftsmanship necessitates an accurate documentation, the continuity of practice and its transmission between generations.

With regard to the documentation and inventory of intangible cultural heritage, the UNESCO prepares specific lists of intangible cultural heritage in need of urgent safeguarding and the Representative List of the Intangible Cultural Heritage of Humanity². The dominancy of social practices and performing arts can clearly be seen in the UNESCO lists over the examples of traditional craftsmanship expressed on 122 countries, which are only 37 among 508 heritage items listed all around the world³. Among the heritage elements of traditional craftsmanship, only 15 items are related to building crafts. From Turkey, there are only two heritage items related to traditional craftsmanship; *Ebru, Turkish art of marbling (2014)* and *Traditional craftsmanship of Çini-making (2016)*. In spite of the diversity and variety of traditional building craftsmanship in traditional architecture in Anatolia, there is only one heritage element registered in UNESCO Lists.

Within the 2003 Convention, UNESCO also established Living Human Treasures System⁴ for the safeguarding traditional craftsmanship, organizing craftsmen and transmitting their knowledge to new generations and encourages state countries to establish their national system. UNESCO determined that the 2003 Convention is mainly concerned with the skills and knowledge involved in craftsmanship rather than the craft products themselves; and safeguarding was discussed only on the activities of craftsmen related to producing craft and passing their skills and knowledge onto others, not to preserve craft objects⁵. Although the transmission process of crafts has been deeply analyzed by UNESCO Living Human Treasures System, the usability and adaptability of crafts to contemporary life and architecture have not been discussed so much. Thereby, the works of building masters as the practitioners of building crafts have limited into the restoration practices. Therefore, the number of studies to define new

 $^{^{2}}$ The Representative List of the Intangible Cultural Heritage of Humanity (see <u>criteria</u>) is made up of those intangible heritage practices and expressions help demonstrate the diversity of this heritage and raise awareness about its importance.

³ See http://www.unesco.org/culture/ich/index.php?pg=00011

⁴ See http://www.unesco.org/culture/ich/index.php?pg=00061&lg=EN

⁵ See https://ich.unesco.org/en/traditional-craftsmanship-00057

practice areas for craftsmen to implement building crafts except from restorations need to be increased.

BUILDING CRAFTS IN TRADITIONAL ARCHITECTURE IN ANATOLIA

Anatolia has a long building tradition, which has constituted by various contributions of different cultures and continued for centuries, and embodied on the variety of the traditional buildings in historic environments. Traditional buildings have been produced by the handling style of building craftsmen of the local specifics, which are created by the mutual interrelations between environmental factors and cultural practices and expressions (Karakul, 2015, 2018). The diversity of local building cultures has been generated by the traditional knowledge and the skills of builders transmitted by the master-apprentice relationship from generation to generation. Actually, local building culture is constituted by the production process of the traditional buildings as a communication system between craftsmen and apprentice and inhabitants (Marchand, 2007). Traditional buildings in Anatolia representing local building culture are the products of a complex process through which builders handle environmental characteristics and the needs, expectations and values of local people by their skills and knowhow and express their creativity. Beside building craftsmen, different craftsmen experienced on a great variety of craftsmanship, like, stone, wood, metal craftsmanship, have worked through the construction process of traditional buildings.

Besides traditional dwellings, Anatolia also has a huge number of still standing historic monumental buildings like, mosques, madrasas, khans and caravansaries, which were mostly built in Seljukid and Ottoman Period, by master craftsmen experienced on various craftsmanship. Monumental buildings from Seljukid Period had been constructed as a part of building tradition formed as a synthesis of different cultures, under the effects of Greek, Roman, Persian and Mesopotamian art (Arseven, 1952: 2069). Embodying various traditional crafts, the buildings include a great variety of architectural ornamentation made in different techniques, like carving-out or relief, and different materials, like stone, timber, by the collaboration of building masters and artisans. The variety of the monumental buildings as the considered as the source of inspiration for architects, designers to cope with the standardization of the present-day architecture.

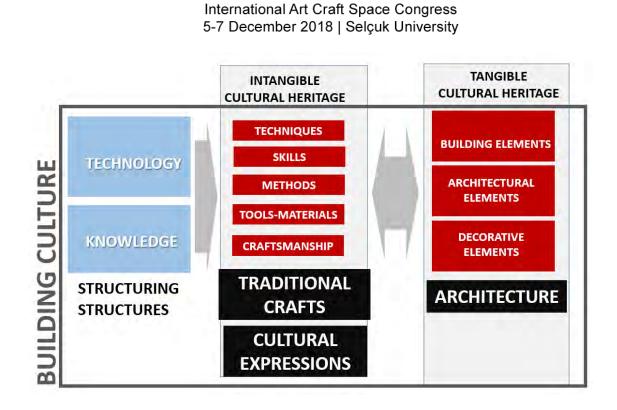
INTEGRATED APPROACH TO CONSERVATION OF BUILDING CRAFTS

To discuss the conservation and sustainability of building crafts, it needs to understand local building culture in an integrated approach with its constitutive elements with all tangible and intangible aspects and their relations throughout the formation and change process of traditional architecture; and seek the ways of sustainability of this integrity into future. The integrated approach of this study is mainly based on understanding the genuine qualities created by the mutual interrelations between tangible and intangible values of building craft products (architectural qualities and traditional craftsmanship) to discover the sustainable characteristics of this integrity throughout contemporary designs in the future.

Building Crafts through Architectural Process

Building culture⁶ as a part of culture, which is a complicated and changing whole, can be dismantled in to its more concrete components, both tangible and intangible ones, to be understood systematically (Karakul, 2013). The intangible aspects of building culture, as an expression type of culture on built environment, includes certain "structuring structures" and the cultural expressions within it (Karakul, 2011). The structuring structures in building culture, composed of the technology and knowledge of the local builders, have the formative power on the intangible values concretized mainly on the building culture is constituted by the interrelations between the elements of intangible cultural heritage, like traditional crafts composed of techniques and know-how, technics (Pultar, 1997: 27-32) and methods, skills (Ito, 2003; Akagawa, 2005), craftmanship (Akagawa, 2005); and, the elements of tangible heritage, like, the use of building materials, construction details, building elements, architectural elements of the structure of the structure elements (Figure 1).

⁶ Culture can be investigated in three groups according to their expression types over the built environment as 'living culture', 'building culture', and 'value systems', each of which has also two constitutive parts as the 'structuring structures' and intangible values (Karakul, 2011).



AFTARC

Figure 1. The intangible and tangible elements of building culture

The term 'traditional craftsmanship' physically reflects the skills and know-how of craftsman or artist, culturally, it possesses expressive aspects conveying various hidden meanings attributed by craftsman and local people (Karakul, 2015). In this respect, it can be stated that traditional craftsmanship meets both 'functional' and 'expressive' needs. Functional needs are related to the physical and mechanical aspects of the building production process. Bringing building materials to construction sites, and after processing, putting into their place in the building, techniques and tools particular to this process are some of the physical works carried out by craftsmen related to his technical skills (Bingöl, 2004; 22; Blagg, 1976; 154; Marchand, 2007; 182). On the other side, expressive needs are related to "mental representations" (Marchand, 2007; 191) of craftsmen conveyed to the physical characteristics through design process. The expressive aspects of craftsmanship are the reflection of the cultural values, values judgment and worldview of builder and society and at the same time, it also includes the individual diversities and creativities (Aran, 2000; 122).

To understand the mutual relations between building crafts and architecture and to discuss their sustainability, it needs to investigate their integrity through both architectural process in tradition, specifically, the formation and transformation process of traditional architecture and new architectural process.

Architectural Process in Tradition | Formation Process of Traditional Architecture

The traditional architectural process can be defined as a complex and changing process through which different tangible and intangible elements of traditional craftsmanship had continuously been interrelated to produce local and contextual architecture for centuries (Figure 2). The mutual interrelations had created a unique and authentic architecture formed from local environmental specifics and needs within the hands of local masters and craftsmen. The formation process of traditional buildings can be investigated under two parts as design and construction process to understand the variety of crafts interrelated with architecture.

The design process actually expresses a theoretical phase of the formation process of buildings which is mainly shaped by the mental schemata and knowledge of builders and technology as the "structuring structures" affecting over the relations between building crafts and architecture through construction process (Karakul, Bakırer, 2018) (Figure 2). With regard to the design process, Hubka (1979) states that folk design method is carried exclusively in the mind of builders and continued by tradition- the handing down of information by word of mouth, observation, replication and apprenticeship. Rules and traditions in folk design method are in the minds of its builders as a kind of highly abstracted architectural grammar, or schemata. Certainly, the transmission of the knowledge of masters to their apprentices assures the continuation of the local building tradition. Hubka (1975, p.28) also stresses that the native builders share a strategy for generating design out of schemata as a continuous process of architecture from spatial organization to spatial characteristics, architectural elements and decorative elements, the mental schemata of craftsmen develop the appropriate solutions by evaluating the needs, expectations of people, cultural practices and expressions and environmental characteristics.

Throughout the formation process of traditional buildings, the design process carried out by building craftsmen directly affects over the architectural properties and building crafts interrelating through construction process. In historic environments in Anatolia, the construction process of traditional buildings is mainly constituted by two processes: the construction of structural system and building elements, composed of foundation, walls, floors and roof; and non-structural system, composed of infill walls, architectural elements, decorative elements and finishing materials (Figure 2). The structural system of traditional buildings is generally determined by building masters having the knowledge of traditional building craftsmanship within the limitations of environmental conditions and local building materials. In Anatolia, traditional buildings are generally constructed by the use of three structural systems, specifically, stone masonry, timber frame system, mud-brick masonry.

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ARCHITECTURAL PROCESS IN TRADITION

		DESIGN PROCESS	CONSTRUCTION PROCESS			CHANGE PROCESS
	B		STRUCTURAL SYSTEM	NON-STRUCTURAL SYSTEM		
BUILDING CULTURE	TANGIBLE CULTURAL HERITAGE	FOUNDATION WALLS FLOORS ROOF	INFILL WALLS ARCHITECTURAL ELEMENTS DECORATIVE ELEMENTS FINISHING MATERIALS	ARCHITECTURE		
	INTANGIBLE CULTURAL HERITAGE	KNOWLEDGE TECHNOLOGY MENTAL SCHEMATA	TRADITIONAL BUILDING CRAFTSMANSHIP STONE MASONRY TIMBER FRAME SYSTEM MUD-BRICK MASONRY	CARPENTRY STONE CRAFTSMANSHIP WOOD CRAFTSMANSHIP METAL CRAFTSMANSHIP GLASS TILE CRAFTSMANSHIP WALL PAINTING CRAFTSMANSHIP GLASS CRAFTSMANSHIP	BUILDING CRAFTS	

Figure 2. Architectural Process in Tradition

After the construction of structural system, secondly, the non-structural system of the buildings is constructed by craftsmen having the knowledge of different craftsmanship. While the construction of infill walls is carried out by building craftsmen constructing the structural systems, architectural elements and decorative elements are constructed by different craftsmen experienced on different craftsmanship, particularly, stone, wood, metal, glazed tile, glass, wall painting craftsmanship. Throughout the construction process, after the construction of structural system and infill walls, secondly, architectural elements, like doors, windows, cabinets, lattice, railings are made from carpenters and metal craftsmen (Figure 3). Lastly, decorative elements, like, architectural ornaments, geometrical and floral ornaments on the edges of architectural elements and building elements, muqarnas, rosettes are made by the use of a great variety of different craftsmanship, like, stone craftsmanship as low or high relief; wood craftsmanship as low or high relief and *kündekari;* metal, glazed tile, glass, wall painting craftsmanship.

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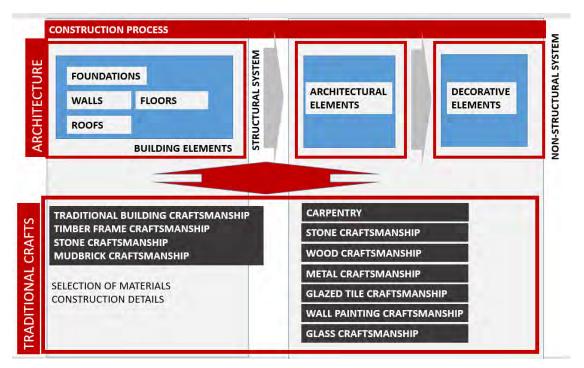


Figure 3. Interrelations between building crafts and architecture through construction process

Change Process in Building Technology and Conservation Problems

Historic environments have been radically changed because of the interruptions in building tradition and the new developments in building technology throughout 20th century. With the introduction of Modernism, in the late 1800's and the early period of 20th century, the drastic changes in building technologies and lifestyle of the societies had started to be emerged. Accordingly, the role of local builders on conveying the cultural expressions of societies into architecture by using traditional craftsmanship was considerably changed. The variety of the traditional buildings produced by craftsmen considering local cultural and environmental features have replaced with the monotony of buildings produced in same architectural language.

The rapid change process in building technology and the value systems of craftsmen affected over the implementation of building crafts in architecture and the attributed cultural expressions. The change in building technology, the knowledge and value systems of craftsmen caused by technological, economic and cultural change of historic environments has deeply affected the relations between crafts and architecture (Karakul, 2014).Throughout the transformation process, with the introduction of new building technologies, while certain building crafts, like traditional building craftsmanship, have been completely disappeared; some crafts, like metal craftsmanship, carpentry, wood craftsmanship have been changed with

regard to their implementation ways, tools and the materials used. Besides, new and contemporary interpretations of crafts have started to be implemented by craftsmen and artists.

Nowadays, the interruption of traditional building process caused to restrict the area for the implementation of building crafts into the restoration practices only (Karakul, Bakırer, 2018). In rapidly changing conditions, the decrease of demand for building crafts with the interruption of traditional building period emerged the need for defining the appropriate practice areas for building crafts to live. Building masters and craftsmen experienced on building crafts have still been worked within the restoration practices and carried out crafts by the use of traditional techniques, methods, tools and materials. However, the craftsmen have obliged to compete with the products and practices of modern industrialization (UNESCO, 2005). Nowadays, most craftsmen have still used traditional skills with traditional technology; they have to struggle with machines and time (UNESCO, 2005). So, for the conservation of building crafts, it needs to define new domains in which craftsmen and craftsmanship can be benefited in contemporary life besides restoration practices.

CONSERVATION AND SUSTAINABILITY OF BUILDING CRAFTS THROUGH CONTEMPORARY DESIGNS

To carry out specific researches on the sustainable aspects of the craft and architecture relationship in Anatolian building tradition in contemporary architecture is a significant issue with regard to the conservation of traditional crafts. The conservation of traditional crafts necessitates the continuation of the practice and transmission of the knowledge and skills of craftsmen to new generations. From this respect, the documentation of traditional crafts embodied in architecture is significant for the documentation and conservation of the skills and knowledge about craftsmanship. The documentation of building crafts is significant for both the supplement of technical knowledge for restoration practices and the continuity of tradition within contemporary architecture and designs (Karakul, Bakırer, 2018).

To develop specific approach on the sustainability of building crafts and to make them livable and applicable within the conditions of contemporary life, it needs to adapt them into contemporary life (UNESCO, 2005: 133). The documentation and understanding of craft and architecture also enable to design national, local, contextual and modern architecture. As explained above, the integrity of craft and architecture had formed as a result of a process shaped by the knowledge and skills of craftsmen using local materials and technology considering local cultural structure. The accurate understanding of craft and architecture

relationship in tradition can be used as a context to be considered as a source of inspiration for contemporary design by designers. Therefore, new interaction contexts need to be created to meet traditional building crafts and craftsmen and contemporary designers, architects and interior designers.

Education of Building Crafts as a Safeguarding Measure

The conservation of traditional craftsmanship, specifically, building crafts necessitates a holistic documentation with its tangible and intangible aspects and the intergenerational transmission of techniques, methods, skills, know-how of craftsmen. The holistic documentation of the relations between craft and architecture is especially significant to form a database including technical knowledge for the building masters working in restoration implementations. But, the continuity and transmission of the holistic relations through restoration works is not enough for their conservation; building crafts need to be integrated with contemporary life and design practices. So, it needs to create new interaction domains between craftsmen and designers to continue the transmission of traditional knowledge about building crafts in new designs.

Craft education need to be incorporated within the curriculum of the departments in faculty of fine arts, like the department of sculpture and traditional art, to teach traditional knowledge, methods, skills, tools used in traditional craftsmanship. Craftsmen experienced on various craftsmanship can also contribute as teaching staff. Such educational studies on the documentation and reproduction of traditional craftsmanship provide increasing the awareness of students about their conservation and facilitate their participation into the restoration process.

Crafts can also be considered as a context for design for the students of architecture, interior architecture and industrial designers. Design education could be based on inspiration from various crafts and reinterpretation of traditional craftsmanship to develop original, national, local, contextual and contemporary designs. Besides, gaining craft skills is also significant for architects and artists to develop their creativity. From this respect, traditional hand arts need to be used as specific contexts to be inspired and reinterpreted to be used in new building design, interior design and furniture design. To develop the idea that architecture is a whole comprising from interior design to environmental design formed by interrelations between cultural expressions and architectural and spatial characteristics as in traditional architecture is significant to make original and holistic designs.

The Sustainability of Craft and Architecture Relations in New Designs

Nowadays, a growing tendency towards crafts all around the world has revealed within the area of architecture in parallel to the tendency towards the buildings constructed from local building materials which have been accepted as more healthy and economic. This growing tendency is especially significant for providing a new domain of work for building craftsmen to continue their practice of the craftsmanship except from the restoration practices. The educational studies on awareness-raising local people to encourage the use of local building materials and traditional techniques in rural environments is significant for the continuity of traditional building craftsmanship.

The consideration of traditional crafts for contemporary designs is also significant in the area of architecture to be interpreted for original, national and contemporary furniture design, wall, floor and ceiling cladding materials to provide the continuity of tradition. The increasing trend on the use of local building materials and crafts in modern architectural products within new techniques and digital technology has deeply affected over our country. Today, carpentry which has still been used in making furniture is a craft provided convenience by the new developments in technology with regard to time and labor force. On the other hand, in mosques, wood craftsmanship and *kündekari* are crafts still continued especially in making architectural elements, like *minber* and doors. Metal craftsmanship has also continued to be used to make railings. Besides, the interest on ceramic and glazed-tile wall panels has increased in contemporary architecture recently all around the world.

Arising from the mathematical principles of geometrical ornaments, carved-out from stone or made from brick, to develop new designs in architecture by using digital production techniques is also significant for the continuity of tradition. Conforming to the modern architectural understanding, crafts need to be used as an organic part of structure and function in contrast to decorative or formalistic understanding. From this respect, the researches on the use of crafts in new designs within new technology need to be increased.



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