Importance of Cultural Impact in Furniture Design; Examples of the Istanbul/Yeniköy-Oklahoma State/Stillwater

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ABSTRACT

Furniture, the necessity of human life, could be investigated in terms of historical social life, geographical regions, and technological developments. Furniture, named according to its purpose and place of use, has also been an indicator of the status and taste of consumers. Furniture has shown influences on developments in every field of society throughout history, merging with the concepts of production and consumption and carrying numerous innovations until today. In addition to social developments, furniture has been influenced by cultural impacts. Furniture is used in various places such as homes, restaurants, cafes, and gardens. In this study, wooden tables were selected within the scope of research and were limited to cafes and restaurants as the place of use. The preference for the sizes and shapes of tables changes according to users, design, and capacity of the spaces in Turkey, similar to the world in general. A total of 30 cafes and restaurants from the Turkey/Istanbul/Yeniköy region and the USA/Oklahoma State/Stillwater region were investigated in this study. The shapes, dimensions, table-top materials, foot material, and construction types of the tables in these places were the subject of investigation. It was observed that products with similar functions at a similar type of place have significant differences in terms of design and use of material depending on cultural factors in the case of selected tables. The results obtained in this study support the view that culture has a significant impact on furniture design. In a table sample with highly characteristic similar features and usage function, it was estimated that 33.4% of the samples differed significantly due to cultural impact.

Keywords: Construction, cultural structure, interior decoration, wooden furniture, wooden table

Introduction

Cultures have often been separate and independent areas of existence in the past. However, in recent years, cultures and nations, although having their characteristics, have become increasingly connected and compounded in the globalizing world. Intercultural communication refers to the communication and interaction between individuals with different cultural and subcultural backgrounds, knowledge, and experience. The conceptual framework and area of interest of intercultural communication as a discipline has expanded over time to include internal subcultural groups, especially ethnic and racially differentiated groups (Kim, 2005).

In the 1900s, factory mechanizations were developed and, as a consequence, mass productions emerged to meet the demands of the consumers. In 1930, transfer lines and stationary automation systems were created to improve mass production. Programmable automation systems have emerged as a result of these developments. In 1950, NC was developed as an innovative approach to programmable automation. In 1955, the introduction of CAD systems and the developments in NC systems were the reasons for the emergence of systems such as CNC and DNC. In 1970, CAD applications and developments in CAM-based systems generated the concept of CIM, and it was named as advanced manufacturing technologies. In the 1980s, in response to the problems encountered by industrial automation processes in traditional production, the need for the integration of advanced CAM systems, computer-aided process planning, computer-aided quality management system, flexible manufacturing system, and CIM had become mandatory. To integrate automation islands, the United States Air Force launched its integrated computer-aided manufacturing program in 1983 (Kumar et al., 2005).

The essence of all design processes is the harmonious integrity of its part and achieving certain goals. In interior design, selected items are transformed into three-dimensional models with func-
tional, aesthetic, and behavioral guidance. As a result of the relationships that these elements establish among themselves through models, they determine the visual quality and functional suitability of the interior and affect our perception and use of space (Ching, 2004).

Because furniture is used by all world cultures, in the face of the increasing competition in recent years, facilities that produce economically and at world standards have been established. Moreover, with the dealership organizations, the product sells products in the country and the world has been reached (T. C. Ministry of Science, Industry, and Technology, Furniture Industry Report, 2012).

Three areas must be considered when designing furniture. The first is functional design that determines what the furniture will do and what the basic benefits expected from the furniture are. The second is aesthetic design that, under the influence of the relevant culture or fashion, also takes into account user demands, shape, form, texture, color, and line in the furniture. It is an artistic work that deals with the design of matters. The final area is engineering design that refers to the process of determining ergonomic criteria, materials, construction techniques, and production technologies in furniture in an optimum manner (Imirzili, 2008).

The load resistance and stability of the joint, the appearance and order of the joint, the type of production (manually or by machine), the status of the existing machinery and tools, the characteristics and type of the raw materials used, the material requirement, the knowledge, experience, and the capability of the workforce. It is beneficial to add the construction type and product range to these factors. Moreover, it has been stated that the annual ring structure is suitable for color and pattern harmony due to high strength properties and that it is least affected by the work of wood material; it can be designed in a short time and easily using machines, and it can be glued and combined in a short time (Ilhan, 1977).

In their study on exploring the spatial factors that influence perceived crowding, Sinha & Prakashvati, 1995 found that people perceive less crowding with an open plan organization and side furniture arrangement.

As suggested by Sanoff (1974), an aesthetic product must accomplish the following two aspects: (1) gain (and maintain) the attention of the audience and (2) keep arousal within limits. Arousal may be sharp, with high levels of complexity, or gradual, when more order or simplicity is used. Using the environment/behavioral approach, Scott (1992) examined the preferences for interior design scenes and found a positive correlation between preference and complexity, where complexity included the number and variety of architectural features, the arrangement of furniture elements, and their volumetric shape.

Yıldırım et al. (2015) found that a significant number of participants would either shorten the duration of their visit or immediately leave a furniture store upon finding poor lighting, poor climatic conditions, bad ambient scent, or a dirty environment. Those with a secondary education tended to report that such circumstances would cause them to leave immediately, whereas the higher educational group reported that such environments would cause them to shorten the duration of their visit. This situation can be explained by the differences in the knowledge, experience, status-related lifestyle, and expectations of customers.

Individuals give meaning and configure some elements belonging to their societies. All self-induced customs and traditions belonging to the society for generations or new values that consisted to merge construction with different elements are known culture. Bonnell et al., 1999 indicated that culture develops to include all fields of human sciences.

Similarly, furniture is a reflection of the physical and social status of culture. Furniture configuration is affected by the developing need of sociocultural structures of the users, and hence the requests and needs of users with different sociocultural structures are different from each other (Ayanoğlu, 2010).

Furniture design is involved in several design fields such as interior design, industrial design, and architecture. Involving the design concept in general terms is associated with several fields. It brings along the cultural nourishment as a significant design element. Space culture is separated as a space concept and usage of space and varies according to the culture with this aspect (Kartan, 2006).

The design has been developed to increase the functions of spaces, enrich their aesthetic appeal, and make them more livable. Advances in technology the requirements of the modern era and changes in living standards some engineering analysis methods that have come to the fore in furniture and other sectors stand out.

Kurtoğlu & Dilik, 2016 the factors affecting furniture design and types are titled as in Figure 1.

**Design concept**

Design is the creation of a plan or object, architectural, and engineering models in the construction process. “Design,” which is used as a verb and noun, defines the process of creating and developing a plan for a new product or object.

One of the most comprehensive definitions of design was given by Hasol (1995), who defined it as the most important activities that bring style and order to life.

Kaye (2002) approached design from a different perspective, in a manner that can be called fun. According to the author, a designer compares graphic design to cooking, i.e., whenever a creative process begins with a list of ingredients such as color and paper, you start following a basic structure.
Alexander (1977), who started with the definition of design using Kahn's words that “idea is the spine of the development process and design in design,” stated that design creates the order of expressions and rules that make the idea understandable. According to him, design has two sources, mathematics and the structure of nature.

**Place and interior design**

Place is the environment arranged according to human movement and behavior. It is a three-dimensional space where people can regulate their behaviors and move in line with all types of objects and messages in their environment. It is formed by the combination of depth, width, height, distance, and range; it is a formation. Spatial design elements are handled under the headings of horizontal and vertical borders, openings and transitions, color, lighting, sound, furniture and reinforcement elements, materials, and environmental systems, based on Abercrombie's classification.

**Types of furniture construction**

The method of producing and combining building groups and elements with certain functions is known as construction. Design is understood as choosing the construction of the product and determining its appearance according to the intended use.

Joining forms are examined using features such as strength, material usage rate and type, usage place, and production by machine or hand. The classification of combining forms as described by Kurtoğlu et al. (1991) is depicted in Figure 2.

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**Figure 1.**
Factors Affecting Furniture Design and Types

**Figure 2.**
Classification of Construction
Digital design tools

As in several sectors, in interior design, with the support of computer programs, products can be planned and made closer to reality in three-dimensional design stages. Hence, it can be understood that what will emerge before the product is still in the development phase. In furniture and interior designs, realistic drawings and pictures can also be prepared using these programs. Moreover, these programs offer realistic solutions in a short time about making decisions before starting the production phase and how the produced product will be. Therefore, they can be made ready for production with less error margin. The computer-based space editing program aims to provide solutions by arranging the interior space and designing the original forms of furniture specific to space, according to the needs of the human being and the characteristics of the selected material.

Today, the most used space editing programs in furniture and interior design include Adeko X, Arcon, AutoCAD, Infowood, Kitchen Draw, Optima Dekor, and Smart Draw. The most used computer programs are AutoCAD, SolidWorks, Siemens NX, Autodesk Alias Family, and Matlab (Anonim, 2018a).

Methods

This study was conducted to determine the importance of cultural impact in furniture design in three basic steps. Based on previous studies conducted in the first stage, table designs, table shapes, dimensions, the foot material used (wooden-based, steel-based, etc), and foot shapes were examined, and the table construction designs with common characteristics were determined. The tables commonly used in restaurants and cafes in the world and our country can be selected in different sizes and shapes according to the request, space capacity, and space design. For this purpose, the Oklahoma/Stillwater region of the United States and the Istanbul/Yeniköy region in Turkey were selected as the application area for this study. Investigations were made in 30 different locations in the selected regions. The research area was chosen in a selective manner. The tables were randomly selected according to their rules. The general table shapes, dimensions, table materials, leg material shapes, and construction types used in these places were examined.

Oklahoma is a small state in USA with a population of 649,021. Stillwater is also in this state. Figure 3 shows the Oklahoma-Stillwater region. A large university is located in this region. When the university is active, the population becomes the most crowded. People living here generally deal with agriculture, animal husbandry, and forestry. Stillwater cafes and restaurants can accommodate a maximum of 15–20 people. In this place, which is very active at certain times of the year, 30 cafes and restaurants were visited and added to the study.

Istanbul is a large state in Turkey with a population of 15,520,000. Yeniköy is also in this state. Figure 4 shows the Istanbul-Yeniköy region. Yeniköy is a district whose old structure is intact. Therefore, cafes and restaurants are smaller and more numerous. Yeniköy cafes and restaurants can accommodate a maximum of 15–25 people. It is more crowded at certain times of the day because of the banks and offices around it. A total of 30 cafes and restaurants were selected for study in this district.

Visually obtained table images were incorporated into the CAD environment and digitized to determine the common characteristic features technically. As CAD software, AutoCAD 2018 was used to realize basic table designs, and the common features were determined and modeled using the SolidWorks 18 program. The aim was to determine the new designs in the CAD environment by selecting the most used features among all the different types of tables available in the market and by creating new tables, combining them with the most used construction types in the computer environment.

The parameters used for determining the common characteristics are the general appearance of the table, the table structure, table dimensions, the material used in the production of the table, the...
foot structure of the table, the material used in the production of the legs, and the general construction structure of the table.

Results

The findings obtained in this study are presented under four major headings.

Evaluation of Common Table Features Together

In general, the same type of tables was used in 30 different places examined in both countries. Therefore, a total of 60 table types were included in the evaluation. It was estimated that 40 tables of 60 have distinct common features.

A total of 30 cafes and restaurants were randomly selected from Stillwater, Oklahoma. The properties of the selected tables are presented in Table 1. Table properties were viewed as table shape, table dimensions, table leg material, table material, table leg shape, and construction.

A total of 30 cafes and restaurants were randomly selected from Istanbul/Yeniköy. The properties of the selected tables are

Table 1.
Properties of the 30 Selected Tables in Oklahoma-Stillwater

| Table Name | Table Shape | Table Dimensions | Table Material | Table Leg Material | Table Leg Shape | Construction |
|------------|-------------|------------------|----------------|-------------------|----------------|--------------|
| X1         | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Dowel        |
| X2         | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four           | Minifix      |
| X3         | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Mortise      |
| X4         | Circular    | 80R              | Overlaid Wood  | Wood              | Three          | Dowel        |
| X5         | Square      | 80*80 cm         | Overlaid Wood  | Metal             | One            | Minifix      |
| X6         | Square      | 80*80 cm         | Solid Wood Panel | Metal   | Cross          | Screwed      |
| X7         | Square      | 80*80 cm         | Solid Wood Panel | Metal   | Three          | Screwed      |
| X8         | Circular    | 80R              | Solid Wood     | Wood              | Three          | Minifix      |
| X9         | Square      | 80*80 cm         | Solid Wood     | Wood              | Cross          | Dowel        |
| X10        | Square      | 80*80 cm         | Solid Wood     | Metal             | Four           | Minifix      |
| X11        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Cross          | Dowel        |
| X12        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Cross          | Dowel        |
| X13        | Square      | 80*80 cm         | Overlaid Wood  | Wood              | One            | Mortise      |
| X14        | Square      | 80*80 cm         | Solid Wood     | Wood              | Three          | Mortise      |
| X15        | Circular    | 80R              | Solid Wood     | Wood              | Three          | Minifix      |
| X16        | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four           | Minifix      |
| X17        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Mortise      |
| X18        | Square      | 80*80 cm         | Solid Wood Panel | Metal   | One            | Minifix      |
| X19        | Rectangle   | 80*120 cm        | Solid Wood     | Iron              | Cross          | Screwed      |
| X20        | Square      | 80*80 cm         | Solid Wood Panel | Metal   |        | Dowel        |
| X21        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Mortise      |
| X22        | Square      | 80*80 cm         | Solid Wood     | Metal             | Four           | Minifix      |
| X23        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Cross          | Dowel        |
| X24        | Square      | 80*80 cm         | Solid Wood Panel | Metal   |        | Minifix      |
| X25        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Mortise      |
| X26        | Square      | 80*80 cm         | Solid Wood Panel | Iron    | One            | Minifix      |
| X27        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Cross          | Dowel        |
| X28        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Mortise      |
| X29        | Circular    | 80R              | Solid Wood     | Wood              | Three          | Minifix      |
| X30        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four           | Mortise      |
shown in Table 2. Table properties were viewed as table shape, table dimensions, table leg material, table material, table leg shape, and construction.

Six different features of the tables were examined in a total of 60 cafes and restaurants. The most preferred features from the results are depicted in Figure 5.

In the total 60 cafes and restaurants, the most used table-top shapes were square and rectangular 51.6%, i.e., 31 table shapes were square, 36.6%, that is, 22 table shapes are rectangular. From 60 cafes and restaurants, square table-top shapes in 31 spaces, and rectangular table-top shapes at 22 spaces, it has been used. According to the results, 51.6% square and 36.6% rectangular.

Most of the table dimensions were 80 × 80 cm and 80 × 120 cm in the majority of these cafes and restaurants. Although 40% of tables measuring 80 × 80 cm were chosen, 33.33% of those measuring 80 × 120 cm were preferred. Moreover, solid wood table material was preferred in 34 cafes and restaurants, at a proportion of 56.6%.

| Table Name | Table Shape | Table Dimensions | Table Material | Table Leg Material | Table Leg Shape | Construction |
|------------|-------------|------------------|----------------|-------------------|-----------------|--------------|
| X1         | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four            | Dowel        |
| X2         | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four            | Minifix      |
| X3         | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four            | Mortise      |
| X4         | Circular    | 80R              | Overlaid Wood  | Wood              | Three           | Dowel        |
| X5         | Square      | 80*80 cm         | Overlaid Wood  | Metal             | One             | Minifix      |
| X6         | Square      | 80*80 cm         | Solid Wood Panel | Metal            | Cross          | Mortise      |
| X7         | Square      | 80*80 cm         | Solid Wood Panel | Metal            | Three          | Mortise      |
| X8         | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four            | Mortise      |
| X9         | Square      | 80*80 cm         | Solid Wood     | Wood              | Cross           | Dowel        |
| X10        | Square      | 80*80 cm         | Overlaid Wood  | Metal             | Four            | Minifix      |
| X11        | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four            | Minifix      |
| X12        | Square      | 80*80 cm         | Solid Wood Panel | Iron            | One            | Minifix      |
| X13        | Square      | 80*80 cm         | Overlaid Wood  | Wood              | One             | Mortise      |
| X14        | Square      | 80*80 cm         | Solid Wood     | Wood              | Three           | Mortise      |
| X15        | Circular    | 80R              | Solid Wood     | Wood              | Three           | Minifix      |
| X16        | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four            | Minifix      |
| X17        | Rectangle   | 80*120 cm        | Solid Wood     | Iron              | Cross           | Screwed      |
| X18        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four            | Dowel        |
| X19        | Rectangle   | 80*120 cm        | Solid Wood     | Iron              | Cross           | Dowel        |
| X20        | Square      | 80*80 cm         | Solid Wood Panel | Wood            | Four            | Dowel        |
| X21        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four            | Mortise      |
| X22        | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four            | Minifix      |
| X23        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Cross           | Dowel        |
| X24        | Square      | 80*80 cm         | Solid Wood Panel | Metal            | One            | Minifix      |
| X25        | Rectangle   | 80*120 cm        | Solid Wood     | Iron              | Cross           | Screwed      |
| X26        | Square      | 80*80 cm         | Solid Wood Panel | Iron            | One            | Minifix      |
| X27        | Square      | 80*80 cm         | Solid Wood Panel | Iron            | One            | Screwed      |
| X28        | Square      | 120*120 cm       | Overlaid Wood  | Metal             | Four            | Minifix      |
| X29        | Circular    | 80R              | Solid Wood     | Wood              | Three           | Minifix      |
| X30        | Rectangle   | 80*120 cm        | Solid Wood     | Wood              | Four            | Mortise      |
Iron, metal, and wooden legs were generally preferred in cafes and restaurants, with wood being the most used among these (55%). Four table legs were preferred at a rate of 15%. The parts that connect the table top and legs are construction, among which 26.08% were minifix, 25% were mortise, and 21.6% were dowel.

A total of 20 tables with at least one feature difference were investigated to examine the effect of cultural impact on the product. Table 3 shows the table properties at 20 places.

The most preferred table examples shown in Figure 6 were designed using the AutoCAD program. Within the scope of this research, table legs, aluminum single legs and double legs, iron single legs and double legs, wooden single legs and double legs, wooden cross legs, and wooden four legs were found to be the most used.

Table-Top Structure
Table tops are produced using several different materials in the world and our country. The most used among these are metal top tables, solid wood top tables, verzalit tables, plastic tables, and banquet tables. The most preferred table materials in cafes and restaurants in this study conducted in 20 places were massive and wood-based tables. The tables commonly used in restaurants and cafes in the world and our country can be observed in different sizes and shapes according to the request, space capacity, and space design. Square, rectangular, and circular tables are the standard style, and the use of eccentrically shaped tables has become widespread. Based on our study at 20 sites, it was observed that square and rectangular tables measuring 80 x 80 cm and 80 x 120 cm were the most used in both regions.

Table Leg Structure
In general, the legs of the tables selected according to the features and design of the space to be used are selected according to similar features. The most widely used table legs in cafes and restaurants were stainless-metal table legs, aluminum table legs, cast table legs, billet/wood table legs, and metal table legs, as
shown in Figure 7. Within the scope of this study, table legs, alu-
iminum single legs and double legs, iron single legs and double
legs, wooden single legs and double legs, wooden cross legs,
and wooden four legs were determined as the most used. The
most preferred foot type determined in this study was solid/
wooden four feet as depicted in Figure 7.

Table Construction Structure
The pieces that form the furniture were examined for their char-
acteristics such as the joining shapes, strength, material usage
rate and type, usage area, and production by machine or hand.
As reported in the literature, several different fasteners are pre-
ferred according to the conditions of use, material, and durabi-
ity, especially according to the purpose of use. In this study, it
was observed that screw fasteners, minifix, dowel, mortise, and
plug types were generally preferred for tables in sample cafes
and restaurants. The most preferred among these were minifix,
dowel, and mortise types.

In this study, minifix dimensions, viz., diameter 4 mm, depth 34
mm, cam diameter 18 mm for the spindle hole, and hole depth,
were determined to be open 4 mm below the shaft depth axis.
This was created using the AutoCAD design program and the
SolidWorks modeling program as shown in Figure 8.

According to the literature, the dowel dimensions (12 × 80
mm) to be used in the product were determined based on the
proportions of the proposed dowel sizes according to the part
thickness. For the study purpose, the dowel construction type
model was created using the AutoCAD design program and
SolidWorks modeling program with these dimensions as shown
in Figure 9.

Tenon joints are suitable for short woods that are not wide and
have a thickness of at least 12 mm. The tenon thickness should
be one-third or half the piece thickness (a). Based on this, the
mortise dimensions (20 × 70 mm) to be used in the product
were determined. For the study purpose, the mortise joint con-
struction type model was created using the AutoCAD design
program and SolidWorks modeling program with these dimen-
sions as shown in Figure 10.

Discussion, Conclusion and Recommendations
The cultural impact on furniture design significantly affects
the product structure and components. This evaluation was
achieved by examining the living spaces in two different coun-
tries where tables such as those in cafes and restaurants are
widely used. In areas such as cafes and restaurants, products

Table 3.
Table Properties at 20 Places in the Study

| Table Name | Table Shape | Table Dimensions | Table Material | Table Leg Material | Table Leg Shape | Construction |
|------------|-------------|------------------|----------------|--------------------|-----------------|--------------|
| X1         | Rectangle   | 80*120 cm        | Solid Wood     | Wood               | Four            | Dowel        |
| X2         | Rectangle   | 80*120 cm        | Solid Wood     | Wood               | Four            | Mortise      |
| X3         | Circular    | 80R              | Overlaid Wood  | Metal              | One             | Minifix      |
| X4         | Square      | 80*80 cm         | Overlaid Wood  | Metal              | Cross           | Screwed      |
| X5         | Square      | 80*80 cm         | Solid Wood Panel | Metal            | Cross           | Screwed      |
| X6         | Square      | 80*80 cm         | Solid Wood Panel | Metal            | Three           | Screwed      |
| X7         | Square      | 80*80 cm         | Solid Wood     | Wood               | Cross           | Dowel        |
| X8         | Square      | 80*80 cm         | Solid Wood     | Metal              | Four            | Minifix      |
| X9         | Square      | 80*80 cm         | Overlaid Wood  | Wood               | One             | Mortise      |
| X10        | Square      | 80*80 cm         | Solid Wood     | Wood               | Three           | Mortise      |
| X11        | Square      | 120*120 cm       | Overlaid Wood  | Metal              | Four            | Minifix      |
| X12        | Rectangle   | 80*120 cm        | Solid Wood     | Iron               | Cross           | Screwed      |
| X13        | Square      | 80*80 cm         | Solid Wood Panel | Wood            | Four            | Dowel        |
| X14        | Rectangle   | 80*120 cm        | Solid Wood     | Wood               | Four            | Mortise      |
| X15        | Rectangle   | 80*120 cm        | Solid Wood     | Wood               | Cross           | Dowel        |
| X16        | Square      | 80*80 cm         | Solid Wood Panel | Metal            | One             | Minifix      |
| X17        | Square      | 80*80 cm         | Solid Wood Panel | Iron             | One             | Minifix      |
| X18        | Square      | 80*80 cm         | Solid Wood Panel | Iron             | One             | Screwed      |
| X19        | Circular    | 80R              | Solid Wood     | Wood               | Three           | Minifix      |
| X20        | Rectangle   | 80*120 cm        | Solid Wood     | Wood               | Four            | Mortise      |
Figure 6.
Tables That Have a Common Similarity with Each Other
Figure 7.
New Tables Designed Based on Research

Figure 8.
Example of Minifix Drawn Using AutoCAD and SolidWorks for use in Research

Figure 9.
An Example of a Dowel Joint Drawn Using AutoCAD and SolidWorks for use in Research
that are similar to each other and have certain characteristics are generally used. The general appearance of the tables, their structure, the foot structure, and the construction style were the most common characteristics. The following aspects were determined when these properties are evaluated:

- It was observed that 20 of the 60 tables examined had different characteristics, and 40 products had similar features.
- Although the table structure of the tables varies according to the place and purpose of use, they are generally 80 × 80 cm square and 80 × 120 cm rectangular.
- It is known that wood and wood-based materials are widely used in furniture production. Results of this study showed that the most used material in table production is solid wood.
- Construction/assembly style is one of the important components of the table structure. Within the scope of this study, it was observed that the most used construction was “4 legs.” Regarding the combination method, dowel, mortise, and minifix were found to be the most used joining element.
- Ayanoğlu (2010) stated in his study that cultural impact affects furniture design. The results of the present study support the view that culture has a significant impact on furniture design. In a table sample with highly characteristic similar features and usage function, it was estimated that 33.4% of the samples differed significantly due to cultural impact.
- In addition, in one of his studies, Kartari (2006) explained that space is separated as outside, a space as entertainment and use of space, and in this aspect, he demonstrated culture to culture. It was observed that there were no differences, and there were areas with the same characteristics. This completely differentiates the design of cultural spaces.

Culture is one of the most important factors that cannot be ignored when designing the furniture and determining the construction needs. Therefore, cultural structures and changes should be investigated and analyzed in detail for the correct product design.

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