ISSN: 2687-6043 e-ISSN: 2687-6035 https://dergipark.org.tr/en/pub/wie

> Volume 3, Issue 1 2021 pp. 30-39





Artwork Craft and mass production Furniture Design

# **Paper Type**

Review Article

## **Article History**

Received: 08/12/2020 Accepted: 15/12/2020

# **Corresponding Author**

Seçil Şatır ssatir@fsm.edu.tr



# Wood Industry and Engineering

International Scientific Journal

# FURNITURE DESIGN AND INTERVAL PRODUCTION IN ART-CRAFT-INDUSTRY

Seçil Şatır<sup>1</sup>

## Citation

Şatır S. Furniture Design and Interval Production in Art-Craft-Industry. **Wood Industry and Engineering**. 2021; 3(1): 30-39.

#### **Abstract**

The concept of mobility contains the meanings associated with the movement from one place to another. Although furniture, whose history is as old as human cultures, has shown some differences according to the countries. It has achieved an almost equal development in the contemporary sense and covered a distance between art and industrial production by exceeding itself and even its function. With the revival of craft production in terms of production before the industrial revolution, it gains a different dimension. Within these stages, the identity of modern furniture, even being made in small quantities, is differentiated by material and method of production and also based on its functionality in a broader meaning. In the future, the development of their production will be revealed by the semi-mechanization in the skill full production of large or small manufacturers. The report includes the semantic concept of furniture in modern design, primarily a chair, an object of art, craft production based on a functional object and production that responds to the requirements of mass production.

<sup>&</sup>lt;sup>1</sup> Fatih Sultan Mehmet Vakıf University, Department of Interieur Architecture, Istanbul, Turkey

## FURNITURE DESIGN AND INTERVAL PRODUCTION IN ART-CRAFT-INDUSTRY

## Seçil Şatır

ssatir@fsm.edu.tr



### 1. Introduction

In this report, the concept of furniture is considered in a universal way and defined from a universal point of view. This definition refers to the scope of the general definition of design and attempts to reveal the industry's orientation in the field of art, which, on the one hand, is related to the mass production, and on the other, to the esthetics. With these perspectives, design can be defined as: "The human ability to serve our needs and to make our life meaningful, to be able to create and shape our environment, without previously existing in nature" (Heskett, 2002).

"Design is a creative activity the aim of which is to establish the multifaceted qualities of the objects, processes, services and their systems throughout all life cycles. Design the main goal of which is humanizing technology through innovation, is considered as a very important factor in cultural and economic change"

(ICSID=WDO). Things that did not previously exist in the nature are created by human hands. Using his mind, a person produces whatever he considers necessary. Even in the primitive times, man got out of the cave and created shelters from bad weather conditions and wildlife in accordance to the material of that time. He often made and used pieces of furniture to make the bone and muscle structures of his body more comfortable in these shelters. Since the prehistoric times, furniture has been used according to the periods:

"In the First Age (4000 BC - 476 AD) wood, leather, processed wood fibers, ebony in luxury furniture, copper hinges. In the Middle Ages, oak, beech and thin boards; in Renaissance fruit trees and wood veneer; nuts and oaks during the Baroque period; Walnut, oak, rose trees, rosewood in the Rococo Period; cherry, mahogany, ash and birch trees in the New Age; In the Industrial Period chestnut wood, laminated wood, wrought iron, steel, glass; walnut tree in the Art and Craft Period; wood, cast iron, steel, aluminum in the Art Nouveau Period; In the period of Futurism wood, leather, metal, polyurethane foam and plastic; steel pipes, plywood, leather, plastic in the period of Bauhaus Art; lacquered wood in the De Stijl Period (Neoplasticism); in the Art Deco Period, ebony, jacaranda, zebra, calamender, palm, amoranth, amboyna, mahogany, violet, sycamore, ash, rose, maple, eel skin, pony skin, shark skin, processed iron, of pearl; polyurethane foam, plastic, flexible fabric, leather "(Erdem, 2007) materials were used in the Post Modernism Period.

As for the furniture material, the use of wood did not completely disappear with the advent of the concept about ecological esthetics as an environment protector, but rather the use of fast-growing trees was supported. "Materials such as sustainable oak, balsa and pine attract attention. Bamboo is a wood which is easy to recycle is also suitable for furniture" (Yüksel, 2016). In this context, the report examines dozens, hundreds of furniture options, some of them are the most typical for mobile furniture and mainly used in chair and seat concepts.

#### 1.1. Methods

Although the report considers furniture design in many dimensions, it also attempts to highlight the differences in production perspectives, from the most functional to the artistic ones, from the advanced mass-produced to the traditional and semi-industrial ones with very different design features. The article analyzes and interprets the furniture, which was identified as an example through a literature review. Matrix analysis and methods of interpretation are based on the thought of Dilthey(Dilthey, 1999): "The limits of our understanding are always where we reproduce and reconstruct, it's almost like living again ."

#### 2. The Concept of Modern Furniture

Furniture originated from the French "mobile", is associated with the concept of mobility, it is defined as both a direct functional value for a person and the value of spatial equipping. Also, in all living spaces: positive or negative, beautiful or ugly, effective in heat or cold, cute and funny or dull and colorless, etc.it creates a mental image with its perceptual dimension and ensures that space remains in the mind with these objects. The definition that will be essential in the concept of furniture, as in all design concepts, will also be important for mass-production furniture: "Industrial design concept" is defined as follows in

Decree-Law No. 554 on the protection of industrial designs: "Design is the whole or the part of a product, or the external part of the ornament on it, determined by its characteristics, such as line, shape, form, color, material or surface texture" (TPMK Klavuzu). Furniture, which is an important part of the design concept, is a group of objects considered in the context of their relationship with the space. Furniture used to meet the needs of a person in sitting, lying, eating, created from the following materials: stone, wood, metal, plastic, glass, fabric and leather, is a movable object.

To understand the concept of modern furniture, it is important to know approximately the historical background in which it was produced and used. In this context:

- "□ Renaissance XIV and XVIII centuries, baroque, rococo and romanticism,
- ☐ XIX century Realism and Symbolism,
- □ 20th century Modernism, Cubism, Expressionism, Dada, Fauvism, Art Nouveau, Bauhaus, De Stijl, Art Deco, Pop Art, Futurism, Minimalism, Postmodernism, Installation Art, Performance Art and Video Art,
- "We also should evaluate 21st century with its relational art, video game art movements" (Sever and Dişkaya, 2019).

In the first half of the 19th century, the start of the Industrial Revolution was the result of the development of a fully functional steam engine invented by James Watt in 1783, which became an environment independent source of energy.

"Furniture manufacturer Michael Thonet provided the opportunity of industrial furniture production in the early period. Since about 1836, he continuously rationalized the process of furniture production, and in 1856 he founded his first furniture manufacturing factory. Finally,instead of carving three-dimensional shapes of the massive wood blocks Thonet curved them with perfective wood techniques. In the growing furniture industry, most of the furniture was made by unskilled factory workers, not trained foremen" (Vegesack, 1997).

The rapid development of the metallurgical industry, which began with the industrial revolution and was an important engine of this revolution, influenced the production of furniture. Cast-iron, bent iron furniture was widely used outside. İn conditions of rapid industrialization, the Arts and Crafts movement, pioneered by William Morris, produced high-quality craft products as an alternative to the mass-produced goods. 19th and 20th. Over the centuries the development of material depended on furniture also accelerated its industrial production as opposed to craft. However, the concept of sustainability that was emerged in the 1970s, global warming due to over industrialization, ozone depletion, turning oceans into plastic landfills, and many other reasons, has led to support of craft production. Although furniture, whose history is as old as human cultures, shows some differences according to the countries. It has achieved an almost equal development in the contemporary sense and has become a distance between art and industrial production by exceeding itself and even its function.

Within these stages, the identity of furniture, even a small number of contemporary art works, based on its functionality also depends on the material and production method and finally, the development of their production by semi-mechanization, either completely or by small-scale producers' opens the door to the future.

## 3. Furniture With Significant and Production Differences

The items that determine the characteristics of the use of the rooms are furniture. The choice of furniture in accordance with the characteristics of the room and its arrangement within the area define the unique quality of the space and determine its use. Items that are additional elements of furniture are defined as decorative object. "While the pieces of furniture define the use of space, the objects improve the esthetics of the space. The interior decoration is based on the correct choice of object and furniture, taking into consideration individual needs and tastes. Mass production objects are necessary despite their uniformity" (Miró, Coll, Viloria, 2006: 9). In this report, initially the chair is considered both as an artwork of and a functional object, an object of craft production, an object of production corresponding to the style of mass production goes throught the semantic analysis in modern design. In this context:

"Can Furniture Be Art? What is art and when does furniture become art? Furniture at its best combines form and function effortlessly, but just because you sit on a chair, and eat at a table, does that not make it art? Art is an expression of creative skill and imagination; it can tell a story and build an emotional connection. Furniture has the ability to do all these things" (www.artvancouver.net).

The fact that furniture can establish a connection with its user or facts, photographs, stories related to the past in such cases, the ability to establish an emotional connection with the furniture in order to interpret the history of the past, are the qualities that brings furniture closer to art.

#### 3.1. Art Based Furniture

Art, considered as a form of experiment, is contained in the Phenomenology of Perception by Maurice Merleau-Ponty:

"We learn everything that we know from the world around us. Art explores the world in all its manifestations and reflects not only how we see it but also how we react to what we see and what we learn as a result of this vision. The world is the source of all our esthetic, social and political relationships. Art belongs to the world, it is inseparable from it ... Art is a process of discovery through creation, and our ability to explore is often higher than our ability to invent" (White, 2012).

In his research, White defines art as more than just self-expression, information taken from the environment and different other sources helps the artist self-form. He also determines that even imaginary works have sources other than the artist, and that the artist must know their sources. In the preface of Oscar Wilde's book "Portrait of Dorian Gray" White quoted: "Art does not seek profit, if it does it will no longer be art. Sometimes Art plays an impractical role in our lives, but it doesn't mean that it is not very important or necessary.



Figure 1: 1a: Davide Conti, The Bloom Chair; 1b: designed by Pool, The Cut Chair; 1c: Ralph Nauta ve Lonneke Gordijn, İnception Chair; 1d: Staight Line Design, Pink Chair (www.boredpanda.com).

The art chairs represented above are the examples that have been designed recently. In the thought of Oscar Wilde, as in White's one (2012: 11), although art seems to be useless according to Wilde's thought, art is not unnecessary. Because art forms the basis of creative, flexible thinking, and this flexible thinking has enabled the design of chairs that give the impression that they are not used primarily, as in Picture Group 1.

#### 3.2. Furniture Based on Craft Production

In the current guide of the Turkish Language Association, craft is defined as "work requiring experience, skills and craftsmanship together with education, to respond the material needs of people". Craft is a type of manufacturing that requires labor-intensive skill. The area of crafts requiring high skills is based on manual labor; includes apprenticeship - journeyman - mastery; It is an area that deals with the production, repair, maintenance of various objects of use. The concept of craft in the modern sense and in the context of sustainability, as well as in the situation of global warming caused by excessive industrialization, pollution, is becoming increasingly important and began to renew due to the events that harm nature and the environment. This required a revision of production systems and handicraft production. The concept of craft, different from the on of art, has materialistic and useful qualities.

In his work "Thinking Through Craft", Adamson (2007) says that fully complementary craft conflicts with contemporary autonomous art. In this context, contemporary art fundamentally confronts to a very strong material specificity; He believes that this was done just for a visual effect. The main part of Adamson's thoughts (Adamson, 2007) is given below:

"Craft in itself is equal to materiality (the extension of matter in space). Basically, craft always involves the usage of the properties of a particular material. It may be wood, it would be metal, clay, paper, plastic, paint, stone - anything - or it would be a combination of multiple materials.

According to Press (Press, 2005), "Craft is regarded as a permanent knowledge demonstrating its power and value ... Crafts should be made from natural materials, preferably colour is beige (beige: is considered a colour of natural materials such as unbleached and natural wool). Craft needs to be made by hand. It needs to be functional.", on the other hand, Sennett believes that as the skill develops, the ability to sustain increases: "A skill is comes with practice; When modern technology deprives users of repetitive, specific and manual workouts, it is misused. When the head and hand are separated from each other, a a

result we have mental damage" (Sennett, 2009). Below there are some examples of the designers who have experimented with furniture in the craft definition:



Figure 2: 2a: "Trevor Cottelli, 2002; production: Rex Heathcote Furniture, 2006; 2b: Chris Robins, 2006; Cadiz Chair is molded on stainless steel legs with pine laminate from Western Australia and wood veneer material; 2c: Soft sofa, 2003, material: Straw production framed with reed; Manufactured in Cebu Island, Philippines for Idee Co Ltd. Tokyo, Japan; 2d: Design: Marc Newson with Eckerhard Reissig produced Lockheed Living Room furniture with riveted aluminum plates in 1988-89, according to the hand-made version in 1986; Powerhouse Museum collection "( Cochrane, 2007).

Craft production, regardless of the material, brings the product to its origine, and is seen as impersonation of the master's soul and more importantly, it is the product that represents his heart and his skills. Craftsmanship is a highly specialized manufacturing area that requires not only manual labor, but also a lot of patience, as seen from the Soft Sofa or from Lockheed Living Room Furniture, in addition to work of patient and attentive craftsmen- experts such as Eckerhard Reissig. Taking in consideration the origins of the wicker sofa made in the Philippines, it gets clear that artisans tend to be poor workers; Although their skills are highly developed, they work to satisfy the need for food, which means the people who created it may be different.

In a study by Doğan (2012), characteristics of the craftsmanship were defined as follows:

- "□ Manual labor prevails in production. Instead of machines, tools are regarded as an auxiliary element in production.
- ☐ Manufacturing takes place in small workshops. The master and the apprentice together produce the objects in the workshop.
  - $\hfill\square$  Traditional education is used in the process of mastering and improving the skills of the student.
- □ Products can be made either to order or as a creative work of a master. It also allows him to produce the objects he designs.
- $\Box$  Even if the general style prevails in the product, it can't be standardized because it is made by hand.
  - □ Ownership of production belongs to the craft master.
  - $\hfill\Box$  The craft master has the right to control the production process.
- $\Box$  Manufacturing requires high quality. The number of employees is limited. The technology of production is simple.
  - $\hfill \square$  Production and sale are carried out in one place, the relationship with the market is direct.

A sense of rhythm, which reinforces skills, and helps to understand and express spiritual feelings such as looking, seeing, represents the value of a workart. In the craft production, when the hand skill is used to satisfy material needs, this is the right way how to achieve the ideal balance between hand, eye and thought.

Another concept is the concept of handcrafts; this sphere of decoration and its smaller, possibly flexible, direct or indirect use, is a concept developed between art and craft. While handcrafted objects or works are sometimes used for personal or spatial decoration, in other cases they are considered as objects of direct use.

#### 3.3. Furniture Based on Industrial Production

When furniture is considered from industrial production point of view, there can be found a range of completely different production styles that support craft production. In this context, the following examples are important in terms of production differences and call into question some material differences:



Figure 3: 3a: Jasper Marrison, Air-Chair for the Magis Company, 2000; injection molding with gas; 3b: Eye Chair, Interfoam Limited Company, Foam molding method; 3c: Konstantin Grcic, Chair-One for Magis Company, 2001; high pressure metal casting- except iron; 3d: Ulrich Böhme, 1971, Thonet S826 Model, for Thonet Company, Ring rolling method; 3e: Studio Dillon, 1998, Lloyd Loom Nemo chair, kraft paper, metal wire based plastic and wood on computer controlled machines (Thompson, 2011). 3c: Konstantin Grcic, Chair-One source: (www.aram.co.uk).

If we look at industrial furniture in the order of the pictures, the "Air chair" in "3a" is produced by injection molding using gas. Polypropylene (pp) plastic material is injected into a two-pieced mold. But the mold shouldn't be filled; Polypropylene plastic (pp) is injected into a two-piece mold. But the form is not fully filled; The necessary amount is entered. Because, especially in the bulky parts, it is necessary to direct the molten pp mold to the bottom cavity and walls.

This provides the gas injection pressure. The gas pushes the pp and squeezes it against the mold walls. The thickness can be 3 mm or more. The process takes about three minutes. The mold is cooled along on the conveyor belt. Then the chair is taken out of the mold. The chair weighs 4.5 kg. As the gas pushes the material under internal pressure, the PP material provides a very nice and flat surface on the mold walls. It can be intensively used for a long time.

Secondly, the "Eye Chair" in "3b" is produced by foam molding method. This material is called Liquid Polyurethane Resin (PUR). The softness of a PUR Material or its lack will be determined accordingly on whether the foam cell structure is open or closed. Open cell PUR gives a softer result. In case of foaming and swelling, the PUR property is calculated again, what ensures the compression of the material towards the walls of the mold and a smooth surface. In the good mold, this method can be performed (used) 50 times a day. There is a moderate level of speed and cost. Depending on the form and material, the cost of laying can be high. The "eye chair" is molded from cold rigid foam with a density of 55 kg /  $m^3$  (3.4 lb / ft3) (torque (rotational motion) for the gravity system in english engineering). There is an internal metal support with legs.

In the third row, Chair-One in 3c was made by high pressure die casting. It is a method of composite casting for metal with other non-ferrous metals. The high pressure pushes the molten metal to all directions and into the mold. Hot liquid metal under high pressure is pushed into the mold cavity by the injection piston. Water cooling channels are important to keep the mold temperature lower than the temperature of the liquid metal in it. The process takes up to several minutes and the mold isn't opened until the liquid reaching the smallest cavity cools down. The smoothness of the inner walls of the mold leaves no scratches on the chair. However, the paths to the dump are cleared. It took three years to manufacture this chair; İt was anufactured with a fully automatic system.

The "Thonet S826 Model" in "3d" rocking chair's pipe bending process is an industrial production. On the rotating head, the mandrel (rotary bending) the pipes are bent in the way that large circular curves are formed between the rollers. A clamping clip is used to ensure a wrinkle-free bend. The CNC machine flattens the pipe and starts bending. The seat and backrest are made of molded laminated wood; riveted to the bent pipe. In this production, materials and waste are minimal.

Fifth place is the "Lloyd Loom Nemo Chair" in "3e". Here, the braided wicker material is an leading industrial product because it is woven like a fabric on a loom. Fiber is resistant. As a hard textile, lifting and lowering of the comb bars, feeding the weft mats and forging are important. Each warp thread passes through a hole in the comb. The production is carried out under computer control. It can also be moved by pressing the foot pedal. The blind blade, called the beater, is used to firmly attach each weft mat to the overlapping warp. Here, the warp is made by twisting strips of kraft paper into dense textured fibers. Rattan, willow and bamboo are used as natural materials. In addition, metal, paper, plastic and wood fibers can be used in serial production. The frame to which the woven mat is attached consists of steam-bent wooden rings.

### 4. Analysis of Art, Craft and Industrial Furniture Production

Furniture intended for seating, with its meaning and production differences, also requires an analysis of the subject. The matrix analysis allows you to take 2 or 3 examples of each of the three furniture groups. The analysis of furniture was carried out according to the following criteria, factory and labor costs, production style and material effect, equipment and mold costs, manufacturer's competence and skills, surface quality, design suitability for production, idea , art production competence , craft production competence, industrial production competence. The interpretations of the analysis of art, craft and industrial furniture in the matrix are given in the section below. The comments are handled in multiple and really comparative between 'A' - 'J'.

Table 1: Analysis of art, craft and industrial furniture and thoughts as interpretation infrastructure

Objects Criteria		M	0				
A- Production and labor costs	Special workshop production. No worker or factory cost .	Depending on the material, it can be a workshop and a factory.	No factory costs. The craftsman produces according to an inner mold or skeleton	No factory costs. The master can work. The designer is different; craftsman is necessary.	Factory, labor cost is high. The first is a long process production, carried out only in the factory	There are factory and labour costs. It can also be produced in a large workshop.	Wicker knitting workshop production. But here there are factory production, workers
B-Production style and material influence	Workshop production, the artist works alone. The material is massive wood.	The artist is alone; If the leg are steel reinforced, they are wrapped with CTP.	The craftsman produces by hand. An internal skeleton is reinforced. The material is wicker.	Produced by craftsmen. The material is anodized aluminum. Solid foam wood frame.	Pressure metal casting. Non ferrous composite metals. Factory production.	Large diameter pipe bending; rolling ring with mandrel.	Wicker weaving on the machine; warp twisted kraft paper, weft rattan, willow,
C-Machinery, equipment and mold costs	Big machinery equipment, no mold costs. There are hand tools and some small machines.	In fact, a two- piece mold is needed. But it can be produced and painted like a sculpture.	The skeleton is like an inner mold. It is knitted on wicker. No machinery, no equipment.	There is no machine, equipment or mold cost. If desired, the upper and lower bulges of the skeleton can be molded.	In the factory, there is a high pressure mold, equipment machine;	There is a machine and equipment to bend the mandrel or long, large ring between cylinders.	Wicker weaving machine and equipment.No mold is required.
D-The competence and skills of a producer	The artist looked for magic and in the art, by making this chair with one leg	There is no doubt about the competence of the artist, it has an elegant symbol.	The craftsman is very competent. He has exceptional handeye skills. The steel skeleton facilitates production.	The designer offered an original design; the craftsman with great skill.produced quite different furniture	The designer's point of view is very different. Production was possible due to factory facilities.	The attention and skills of factory workers are also important.	Skill is unnecessary for wicker weaving machine. Technical knowledge is important. Straw handling requires skills.
E-Surface treatment qualities	The surface has to be processed and cleaned	In workshop production, the upper surface has to be processed	It is necessary to polish the upper surface in wicker weaving.	Dozens of aluminum anodized parts are cut and riveted according to the surface lines and numbers.	In the product coming out of the high pressure mold, only liquid spouting nozzles are processed.	chrome-plated pipe and laminated wood is treated as paint or veneer	The machine does not require matting, maybe just spray polish
F-Design suitability for production	Design is surprising and suitable for production.	Desire to create artistic elegance. Production in the workshop was compulsory.	Crafting becomes easier with the craft skills.	The design requires a lot of craft skill.	The design forced the factory production. The first production took 3 years.	The design is very suitable for production.	To dress the furniture with wicker weaving requires skills
G-The emergence of the idea; user expectations	accordig to the contemporary furniture idea the artist looks for magic	The artist wanted to reflect some female elegance in the furniture.	it can use a user's idea with craftsman's one. It may change over time.	Original designer idea; He applied to craft production for a different design	Designer idea; It is possible to produce only by mass production. The user finds it very original.	Thonet idea; The user knows it well. New version with contemporary material.	The user likes the warmth of the wicker material. The idea is general
H- Art production competence	Art production is sufficient from the point of view of art idea; User request is insufficient	The artist designs and produces only what he wants. Doesn't think of the user	Craft production does not seek the idea of art. The idea of usage is more important.	The absence of any art idea in craft production, designer think and design his artwork.	The idea of art is not sought in industrial production. But the designer can look for beauty	Standard furniture like Thonet is already very elegant	The user always likes the wicker, it's very useful.
I- Craft production competence	Artistic expectation is ahead; No craft skills	Artwork is close to hand-making art work. But it doesn't intend to use.	The craft skill is very high. High usage expectation; The good idea is neat- collective, and holistic.	The usage expectation is equivalent to the craft expectation. But the design idea is ahead	The idea of mass production is at the forefront. No need in craft qualification	A well-known furniture; mass production with different contemporary materials. No craft idea	Mass production of wicker is at the forefront. Craft competence exists in upholstery.
J-Industrial production competence	No industry competence is required for art product	Such a work of art can be made by industrial production. But it's optional.	Wicker sofa as a craft product does not require industry competence	No industry skills are required for craft production. Material althought is close to industrial production	A very high level of industry competence is required.it is very difficult to produce another one	in industry competence; It can also be mixed craft production with semi- machine production.	Industry competence is very important. However, it can also be produced with craft proficiency.

# 4.1. Art, Craft, Industrial Furniture Analysis

After being covered from different aspects the analysis of furniture requires comments:

- A- Commentary: Artist and craftsman have no factory and labor costs. The cost of the workshop is low. Sometimes a worker assistant can work. Industrial production has factory and labor costs.
- B Commentary: Production styles and material properties are sometimes appropriate for both factory production and workshop. However, production requiring high pressure or gas pressure is possible only in the factory.

- C Commentary: Although the cost of machines and equipment is not necessary for arts and crafts, in some cases small machines and equipment are important for this kind of work. Art and usage products can always be adapted to the factory mass production. As it was with the molded production of ,Pink Chair.
- D Commentary: Furniture made by an artist or craftsman requires skill and competence. The worker in the factory also learns how to use the machine in furniture production. No skills required. Maybe woven mat veneer requires skill, it depends on the situation.
- E Commentary: Spray polish is applied to wicker furniture. Top surface treatment is not required for high pressure molded furniture. Other art or craft products also require top surface treatment.
- F Commentary: An art and a design product may present difficulties in production. However, all other designs or crafts are well suited to production.
- G Commentary: User expectations are not important for the artist. He is looking for magic, , or wants to reflect an idea. The master ponders customer orders and examine them taking in considertion the wishes of his clients. In industrial production, the designer evaluates the general user expectations and works on the average value and cost of use.
- H Commentary: Art production in the field of furniture has recently developed in order to make it different. Artist want to put forward their original ideas without considering user expectations. There is no insufficiency in the art production. It is bought by a small number of users.
- I Commentary: Craft production is sufficient according to the user expectations. There is no expectation of magic. However, in some cases it works as if there was some cooperation with industrial production. Like in the example with the wicker weaving machine.
- J Commentary: Industrial production is very efficient in terms of materials and production methods. It responds to a general user when more general forms are produced by mass production. Or it will be expensive, as with the high pressure cast chair. This is not a work of art.

#### 5. Conclusion

Since 4000 BC. people, due to the structure of their bodies, have felt the need to sit. The location and shape, as well as the structure of the seating, varied in different periods of time, and the decorations reflected their features. It has become meaningful in the modern development by adapting its qualities to the concept of design.

Although the differences in meaning and production of seating furniture have become apparent in recent years, they began to mix and accumulate in each other. For example, while the artistic features seemed uninhabitable, magic was sought in the chair. The fact that the usebility and habitability of the object is ensured was realized. For example, the image of an elegant woman sitting with crossed legs was transferred to a chair; It is made of plastic, but if it was produced by injection molding it would seem to be the art attributed to industrial production.

For example, For example, a seating furniture was designed by a designer, but manufactured by a craftsman with individual pieces combined. In this case, design and craft get intertwined. And again, an example, wicker knitting, which is originally a craft production, was produced by machine production, as well as by industrial production using a material such as kraft paper. The idea of the craft here was just in upholstery function.

Another chair, entirely designed for industrial production, was created using the high pressure non-ferrous metal production style and took three years. Made a name in the industrial revolution as Thonet, made with rods of chestnut wood and sticks, is completely a craft product,. The hazm-1 taam (for digesting food) seat, in a modern way, was produced entirely with industrial production, the mandrel was produced by the ring rolling method, this is how the craft was transferred to the industry.

All of these art, craft and industrial features of production are now intertwined and grouped into a single whole. We may have the impression that it will continue to be so.

# 6. Acknowledgments

This study was presented in IFC 2020 - 6st International Furniture Congress held by Karadeniz Technical University, Trabzon, Turkey

### **Conflict of Interest Statement**

The corresponding author states that there is no conflict of interest.

#### References

Adamson G. (2007). Thinking Through Craft, Berg is the imprint of Oxford International Publishers Ltd., London, ss: 39

Cochrane G. (2007). Smart Works: Design and the Handmade, Powerhouse Publishing, Sydney, pp. 19, 163, 169, 171.

Dilthey W. (1999). Hermeneutik ve Tin Bilimleri, çev. Doğan Özlem, Paradigma Yayınları, Felsefe dizisi: 7, İstanbul, s. 35-36

Doğan E.T. (2012). Zanaatkârlığın Günümüzde Yeniden Yorumlanması, : Yeni Zanaatkârlık mı?, Çalışma İlişkileri Dergisi, Cilt 3, Sayı 1, sahife: 67-85, pp. 71.

Erdem T. (2007). Mobilya Tarihine Genel Bakış ve Art Deco, Y. Lisans Tezi, İstanbul Kültür Üniversitesi-Fen Bilimleri Enstitüsü, pp. 117-123

Heskett J. (2002). Toothpicks and logos, Oxford University Press.pp. 11 https://www.turkpatent.gov.tr/TURKPATENT/

ICSID = WDO, Uluslar arası End. Tas. Konseyi (International Council of Societies of Industrial Design – ICSID), güncel (World Design Organization-WDO)

Miró, E., P., Coll, M., P., Viloria, A., R., C. (2006). Mobilya Restorasyonu ve Yenilemesi, Dekoratif Teknikler, Çev. Feza Altuniç, İnkılap Kitapevi, Ankara, s. 9.

Press M. (2005). Handmade Futures: The Emerging Role of Craft Knowledge in Our Digital Culture, edited: Alfoldy, S.,The Press of the Nova Scotia-College of Art and Design, Canada, ss: 250, 251.

Sennett R. (2009). Zanaatkâr, Çev. Melih Pekdemir, Ayrıntı Yayınları, İstanbul, pp. 73-75.

Sever A.İ. ve Dişkaya F.N. (2019). Mobilya Tasarımlarının Mekân Üzerindeki Etkileri, 6. Uluslararası Multidisipliner Çalışmalar Kongresi, Tam Metin Bildiri, pp. 241.

Thompson R. (2011). The Manufacturing Guides Product and Furniture Design, Thames & Hudson Publishing, pp. 42-43, 54, 64-65, 88, 119-121.

TPMK-Klavuzu - Türk Patent ve Marka Kurumu – Tasarım Bölümü, Tasarım Bilgilendirme,

Vegesack A. [Edited], (1997). Designmaßstäbe - 100 klassische Sitzmöbel, Ausstellungskatalog des Vitra Design Museums, Zusammenarbeit mit dem Goethe Institut München, pp.1-5.

White K. (2012). Sanat Okulunda Öğrenilecek 101 Şey, Yem Yayın, pp. 3, 11, 29.

Yüksel E. (2016). Çevre Dostu Mobilya Tasarım Yaklaşımında Kullanılan Ahşap Malzemeler, Ahşabın Tasarım Serüveni" Başlıklı Uluslararası Katılımlı Sempozyum bildirisi, pp. 05

#### Web sites

Web-1: https://www.artvancouver.net/post/can-furniture-be-art?gclid=EAIaIQobChMIlrbFiPm07AIVgrWyCh1rDQvbEAAYASAAEgLLk\_D\_BwE, consulted 18 October 2020

Web-2: https://www.boredpanda.com/creative-chair-

design/?utm\_source=google&utm\_medium=organic&utm\_campaign=organic, consulted 18 October 2020

Web-3: https://www.aram.co.uk/designers/konstantin-grcic, consulted 18 October 2020