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• INSTRUCTIONS TO AUTHORS

COMPARATIVE ANALYSIS OF ANTIQUE FURNITURE WITH REGARD TO THE SCANDINAVIAN DESIGN

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Abstract: The style and design, as an artistic expression of its creators, existed in the ancient period, as evidenced by the numerous representative, authentic and unique works. Confirmation of the connection of styles, and the non existence of a clear border between them, is exactly the connection of the antique furniture to the Scandinavian one. The Scandinavian design, driven by the correlation with nature and the need for durable, simple, functional, yet perfect furniture pieces, finds its connection to the ancient design and its unique historical values.

Today's modern Scandinavian style, as a design of the 20th century, carries numerous antique elements and peculiarities. Based on a detailed analysis of the characteristics of both styles separately and their individual elements, as well as their comparison, we can see the correlation between them and the direction in which they move.

Keywords: armchair, stool, chair, shape, design, color

Introduction:

The editing and the design, which is present today through different styles and forms, is a result of its centuries-old influence, development and change. It is difficult to distinguish innovations and modifications from the factors that shape them. Even within those trends, which claim to be without previous influence, there is some basis on the experience and technology of the previous generations. Some of the most important and influential architectural designs come from classical Greece, ancient Rome, the Middle Ages

and the Italian Renaissance (Nelson and Taylor, 2012)

The historical styles are identified by exploring their architectural details.

The antiquity, as a historical period and also an artistic direction and style that went through history and civilization, has left visible historical and authentic pieces of furniture, which today represent the inspiration of numerous designers. The most distinctive application of this style, through certain aspects, can be recognized in the Scandinavian furniture design. The presence of durable, unique and functional pieces of furniture as part of the home interior of the Scandinavian design signifies the connection of the form with antiquity. By analyzing the characteristics of both designs and distinctive pieces of furniture and their comparison, the connection between the ancient and Scandinavian designs will be defined.

1. Antique furniture

The ancient period, as the beginning of civilization and culture, is an exceptional period of stylistic expression and creation. During this period, complex and highly decorative structures were intended solely to the rulers or to glorify the gods, while the paintings, sculptures and other objects were created for the purpose of fulfilling various functions (Wilkins, Schultz, Linda, 2009).

Although preserved only in fragments, there are many artifacts and unique archaeological specimens, which are an evidence of the existence and stylistic definition of the antique furniture. The furniture and other pieces of art were made from a wide range of durable materials, ranging from plain lime, to the most precious metals and valuables (Ajzenberg, 2009). During this period, most pieces were made at the request of the patrons. The role of rulers in ordering works of art was an expression of the strengthening of his regime and the presentation of his wealth, as well as the benevolence. For example, through Greek furniture, the individuality and the personal style of the artist is emphasized.

1.1. Egypt

Ancient Egypt is the first distinctive style in the world architecture and furniture, which is a forerunner to the entire world civilization, and as such exists and evolves, in the next millennium. Here, the architectural works served to worship the Pharaohs. The Egyptian furniture, retained at the pharaohs' funerals, was made mostly of wood. For example, the Tutankhamen tomb from the 14th century BC was filled with many representative samples.

Egyptian furniture is characterized by geometric shapes with strict symmetry. The simple chairs with curly elements that had legs in the shape of the mammals' hooks or ended with a duck head, while the seat was made of wood with an imitation of leopard skin. The chairs laid on supports that showed the lion's paws with ivory nails. The surface of the seat was made of knitted cane, leather belts and several boards. The backrest was inclined backward to make it more comfortable sitting. In addition, decorative winged discs of gold were mounted, which were made for corner reinforcement of the furniture, as well as the heads of connecting nails. The construction of the chairs was exceptionally refined and unique. The low chairs were made of gilded wood with dark blue faience, intended for the throne, for the feet of the ruler. Also, there were stools with skeleton of whole elephant teeth (Pisareva, 2002).

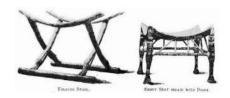


Fig.1. Characteristic Egyptian stool

The armrests and the thrones had decorated backrests with a relief thread, and precious metal and enameled color were applied as decoration. For example, on the throne of Tutankhamen metal is found for the application of the golden sun - the sign of the god Amon Ra.

The masses of this period had a form of a mast (towers) with a typical Egyptian expression.

The beds were made of ebony, son malachite and ivory.

There was an Egyptian custom for the presence of boards at the feet of man. Usually it was coated with a gold coating, or silhouettes of domestic gods were cut out on it. The lying surface - knitted mattresses or a rope network - fastened to the frame of the bed, which was twisted in the middle. There was also a bed with sides, which hung with hooks to the frame of the bed (Knežević, 2012).

Among the most distinctive pieces of furniture, from this period is the Tutankhamen throne, made of gold, silver, glass in color and glazed ceramic, coated with calcite. It was 1.14 m high. The very top of the throne represented the defeated enemies (Nelson and Taylor, 2012).



Fig.2. Tutankhamun's armchair, Egyptian Museum, Cairo

To summarize, the Egyptian furniture was most often made of wood, by applying ornaments and decorations of gold, silver, malachite and other valuables. The shape of the furniture most often followed and imitated the shape of some animals, retaining all the features and accessories in the form of an overcrowded decoration.

1.2. Ancient Greece

The Egyptian style, as the first significant style in the world architecture of the XXXII century BC was an inspiration to the later Greek design, which appears sometime around the 12th century BC. The ancient Greeks saw their teachers in the face of the Egyptians, which was also described in the Greek books themselves, and was also noticed in the detailed description the ancient Egyptian masterpieces (Grozev and Tiholov, 1993).

The main characteristic of the ancient Greek artistic style is the connection of simplicity, clear composition and proportionality between the form and construction, which leads to the attainment of excellence. The interior in this period is characterized by rigor and moderation.

Greek furniture is mainly characterized by simplicity of construction and mastermade details. Its shape, with unusual grace on the line, reflects recognizable plasticity, practicality and excellence. This will influence later on the samples of ancient Rome and the classicism in France in the eighteenth century (Ajzinberg, 2009).

The seating furniture has a rugged construction with an abundance of straight angles.

It includes wide and comfortable seats, a semicircular backrest slope, made with mildly curved attachments. The shaping of the chair is influenced by the logic and tectonic clarity of the constructive basis. After 25 centuries, the pioneer of modern architecture, Ludwig van der Rohe, will be inspired by the pure proportions of ancient Greek works when creating its famous chair - the Barcelona capital.



Fig.3. Klismos – Characteristic Greek group of furniture

The tables in that period, are encountered in several varieties. In one variant, the circular surface stands on three carriers, in the form of muscular legs of coarse animals. The upper leg is decorated with acanthus petals. There is also a trapezoidal or rectangular dinner table, which was used by people who are eating around it. After the dinner was over, the table was put under the bed (Pisareva, 2002).

The beds were multifunctional pieces, so they were used for sleeping, sitting or eating.

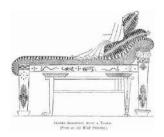


Fig.4. High bed with table

The Greek furniture, can be defined as simplified furniture, compared to the Egyptian, with the rules of simplicity, clear construction and proportionality prevailing. The Klismos furniture. tableware, and the appearance of multifunctional pieces of furniture are characteristic.

1.3. Ancient Rome

The ancient Roman art represents the final phase of the historical period of antiquity. As an heir to the culture and tradition of the earlier ancient civilizations, especially from Greece (especially in the part of plasticity, convenience and perfection of form), it includes exceptional diversity of both objects and furniture (Keller, 1975).

The furniture of this period, the Romans made from wood, bronze, marble, even from willow rods. In general, Roman furniture is characterized gracefulness and elegance of the forms that are combined with small ornaments. They adapted the Greek designs to their needs, but contributed to the style with their own materials and unique engineering techniques. The overwhelming decoration was masked on the constructive parts of the furniture with sculptural rosettes, applications and similar details.

The chair had a flat seat of metal or ivory, and the legs were twisted in the shape of "X". The armchair, known as sella curulis (Grozev and Tiholov, 1993), was designed exclusively for senior officials. Typical

Roman furniture with a transfiguration from ancient Egypt is the chair with a backing, known as the master's desk and curly chairs. The backrests had anthropometric, twisted, comfortable shape. The legs are shaped like a lion's paw, while the armrests depict sphinxes, lions, griffins, and so on. In addition to the seating furniture, there is also immovable representative seating furniture, of white marble or bronze. There were also used Greek-type armchairs (without armrests) and Roman type - with armrests and shields instead of legs (Knežević, 2012).

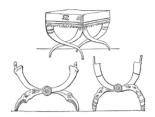


Fig.5. "Sella curulis" armchair

The tables had a rectangular and circular surface. The rectangular had dense vertical sides, covered with a strong relief decoration, while the surface was decorated with mosaics and stone plates. The circular, bronze tables were three legged and had legs on thin animal paws of a goat, a cat, and so on. A richly decorated frieze appears through the perimeter of the dense.

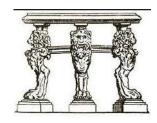


Fig.6. Table with mosaic surface

Beds resembled ancient Greek types. They were composed of a wooden frame in combination with ivory.

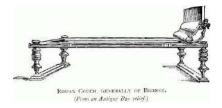


Fig.7. Bed of bronze

Roman furniture can be defined as a kind of imitation or inspiration of ancient Greek furniture, with a larger and richer choice of materials and engineering techniques. It is characterized by reduced application of details and occurrence of various types of furniture in several variants.

2. Scandinavian design and furniture

The Scandinavian design emerges and develops in the early years of the 20th century, ranging from the Scandinavian countries, and rapidly expanding across beyond. Europe and Although Scandinavian design is always associated with minimalism, it is not realized to the extreme (Arnason, 2009). Regarding the interior, some of the basic rules of arrangement in the Scandinavian homes are: minimalism, combined with of multifunctional pieces furniture, daylight, spaciousness, elements of nature and a mix of textures.

Scandinavian contemporary furniture is vintage wood furniture, which definitely has its roots in the past centuries. Furniture reflects a new perception, with a great style, modeling the best of the past, in many more modern furniture designs (Fiell. 2014). Nordic designers traditional craftsmanship, thanks to their valuation of traditional crafts, for the purpose of developing modern pieces of furniture, which are characterized by exceptional beauty, functionality and practicality. One of the basic characteristics of Scandinavian furniture is the use of natural materials, such as teak wood and rich skin.

The furniture is characterized by clean and smooth edges - complete shutdown and reduction of glamour design, asymmetry - in shortening, form or assembly and a unique combination of materials - wood with glass, leather, stone, chrome. The basic technique of making furniture is the technique of folding the wood. Mainly, the furniture consists of a structure made of twisted wood or chipboard, mostly wooden frames, the use of as few materials as possible and the reduced use of upholstered elements (Raiceva, 1999).



Fig.8. Model no.881 cabinet-on-stand – Josef Frank, 1938

Recognizable Scandinavian pieces of furniture are wooden chairs with a seat made of molded plywood and rear parts with a lightweight construction that eminently corresponds to high volume production and innovative armchairs with fully upholstered seats, a seat which can be removed from its construction.

Dining tables can be found in various forms. The shape between the rectangle and the ellipse is characteristic, which was based on the mathematical concept of the so-called "superelipse" of Piet Hein. An example of a dining table with chairs is the famous Kristian Vedel's Modus furniture system, with its low chairs (Fiell, 2014), but with a high back rest support. Comfortable, triple chairs without armrests and adequate table covered with glass. The Modus series was characterized by its leather-coated seats and backrest, which form the hand and rear parts that are embedded in the frame of a richly colored wood.



Fig.9. AX table – Peter Hvidt, 1950

The sofas are the modern most representation of traditional seating furniture. They are characterized by frequent use of light beech wood, male proportions, superior craft skills, use of natural materials, high quality construction and excellent interpretation of visible historical forms.

As a result of the influence of the previous styles, a type of seats appear - a folded shape of mahogany and leather - e.g. Egyptian Stool (1960), based on an ancient collection of antique pieces in the Berlin Museum (Fiell, 2014). The production consists of high quality construction and finish, showing the skill of the craft tradition in Scandinavia.



Fig. 9. Egyptian Stool – Ole Wanscher, 1960

The Scandinavian furniture is minimalist, simple, functional and nice furniture, which draws its inspiration from the ancient uniqueness and beauty of shape and design. It is characterized by simple natural woodwork, with slightly rounded elements. The main feature is multifunctionality, lightweight construction with a noticeable reduction in the decoration.

3. Comparative analysis of the ancient design of the Scandinavian furniture

As one of the basic features of the Scandinavian design of furniture and interior, it is the inspiration and application of vintage pieces of furniture. The use of antique and classical elements within the entire home interior is a hallmark of the very style and at the same time a characteristic of the design of the Nordic designers themselves. There are easily matched and mixed new with old pieces of furniture, they are discrete elements that emphasize the style and comfort itself, but not the colors, details or glamour.

By analyzing the individual characteristic elements of the furniture of both styles, we can generalize and make a correlation between the two designs.

3.1. Antique furniture design

	Furniture:	Materials:	Form:	Color:
	- Stool;	- wood; metal;	-simple and curly chairs with	-stellar gold;
	- Table;	- faience;	backrest;	-dark blue;
	- Armchair;	-Ivory;	-tables-like masts;	-strong red;
Egypt	- Bed;	- reeds; ebony;	-bed with pages;	- light-yellow;
	- Table;	- skin; gold;	-decorations - animal forms;	-melahit; Ivory;
	- Folding bed;	- malachite;		- sunflower yellow
	- Chair - Klismos;	- wood;	-simple construction;	-stellar;
	- Armchair;	- ceramics;	-plasticity;	- red;
Greece	- Dining table;	- marble;	- wide seats;	-dark blue;
	- Floding chair;	- bronze;	- rounded backrest;	 copper brown;
	-Bed of bronze;	-beads and pulley;	- backrest;	-merme rosé;
		- Ivory;	-multi-functionality;	-olive green;
	- Armchair;	-wood;	-chairs with backrest and	- imperial violet;
	-Table;	- metal;	armrests;	-richly gold;
	-Benches;	-bronze;	-curly legs;	-Pompeii red;
Rom	- Chair -cathedra;	-marble;	-Table with a rectangular and	-Rimic green;
	-Lashing stool;	-willow rods;	circular surface;	-black;
	- Bed;	-Enamel;	-Bed -Ancient Greek	
		-Ivory;	prototype;	

Table.1. Characteristics of antique furniture according to form, furniture, materials and color

3.2. Scandinavian furniture design

Furniture:	Materials:	Form:	Color:
- Chairs;	-teak wood, oak, pine,	-organic form;	- white;
- Armchair;	beech, birch;	- rounded edges;	- beige;
-Sofa;	-metal and plastic;	stools with curved backrests and	- pastel blue;
- Bed;	-flax, cotton, wave,	legs;	-light yellow;
- Table;	leather, hemp, jute;	- mostly armrests;	-carnation;
- Corpus furniture;		- reduction of decarcation;	-colorful red;
- Stool;			-pale-turquoise;

Table.2. Characteristics of Scandinavian furniture according to form, furniture, materials and color

Based on a detailed analysis of the characteristics of both styles separately and their individual elements, we can conclude that in today's modern Scandinavian style, as a design of the 20th century, numerous antique elements and peculiarities can be found in relation to characteristic pieces of furniture, use of natural materials, shape, design and color.

4. Similarities and Differences

The Scandinavian style, driven by the connection with nature and the need for durable, simple, functional, yet perfect

pieces of furniture, finds its connection with ancient design and its unique historical values.

We can define the similarities through the following elements:

- Recognizable large corpus furniture for storage-cabinets;
- Roman and Greek types of beds for lying by the bed;
- Antique coffins of massive wood;

- Chairs with folded backrests and legs;
- Large and comfortable armchairs;

The main difference consists in the desire to simplify and avoid scenery in the Scandinavian style, with the aim of greater functionality and practicality.

To better understand the correlation of the two designs, we will show the similarities and differences of the same:

Ancient furniture:	Similarities:	Scandinavian furniture:
Materials:	Materials:	Materials:
-gold, bronze, marble, ivory, enamel, ebony, faience;	- Wood, leather, metal;	- plastic, flax, hemp,wave, jute
enamer, ebony, raience,		nemp, wave, jute
• Form:	• Form:	• Form:
-rich decoration, beds with pages,	-technique of wood bending,	-simplified form, reduced
armrests (Roman type)	without armrests, folding mechanism, backrest, wide seats;	decoration, use of less materials;
Color:	• Color:	• Color:
-strong colors-red, blue, green,	-white, beige, sunny yellow, rose;	-neutral and pastel colors;
gold		

Table.3. Similarities and differences between ancient design and Scandinavian

Conclusion:

The antique furniture is one of the key elements of the interior design and contributes to creating a certain style in the home. As a confirmation of the fact that there are no clear boundaries between the styles and they themselves are interwoven with each other, it is precisely this correlation of the Scandinavian design with the ancient. The Scandinavian design is characterized by extreme laconism of forms, complete lack of decor and ornaments, clarity of composition and monochromism, emphasizing the naturalness of textures (Nelson and Taylor, 2012). The application of solid furniture in

the style of the past eras gives it a unique, historic identity of the interior.

Through a comparative analysis of the individual characteristics of both styles, the correlation between the styles and the direction in which they move can be seen. Dividing the individual elements, through which antiquity notices its presence in today's Scandinavian style, we can see the scope of influence of the antique furniture on the Scandinavian:

• Characteristic pieces of furniture, which are distinctions of the ancient period (stool, big comfort armchairs, seats, solid furniture, coffins, etc.);

- Use of natural materials, without extensive artificial processing, in order to preserve the natural texture and contours. Increased selection of materials in antique furniture, in contrast to the Scandinavian;
- Similarities in shape and furniture design curved form of stools and multifunctionality.
- The color and the use of strong colors in antiquity is richer, while in the Scandinavian design, the application of neutral shades prevails.
- The use of decoration, in antiquity is quite present, while in the Scandinavian design it is reduced to a minimum.

The positive contemporary aspect of interpreting the applied antique elements in the modern furniture design is evident of through the works numerous contemporary designers, which prominent interpretations of ancient masterpieces and at the same time the application of the features of antiquity first of all in terms of functionality, durability - the use of natural materials,

simple and clear construction and perfect proportion.

Based on the overall research, we can safely summarize that the ancient design offers classical forms that are simply defined, purified and durable, which at the same time represent a non-exhaustive inspiration, which is proof of their centuries-old revelation and exploitation in different periods of the development of the design of furniture.

References:

- 1. Ajzinberg, A.(2009). *Stilovi arhitektura, enterijer, namešta*, Beograd, Prosveta.
- 2. Arnason, X.X.(2009). *Istorija na modernata umetnost*, Skopje, Napres.
- 3. Wilkins, D., Schulz, B., i Lindaf, K. (2009). *Umetnost minata, umetnost segashna*, Skopje, Nampres.
- 4. Fiell, Ch. & Fiell, P. (2014). *Scandinavian Design*, Cologne, Taschen.
- 5. Grozev, O. I Tiholov, K.(1993). *Interior*, Sofija, Tehnika.
- 6. Keller, G.(1975). Dizajn, Zagreb, Vjesnik.
- 7. Knežević, O.(2012). *Stilovi namestaja*, Beograd, Krug Commerce.
- 8. Nelson, K. i Taylor, D. (2012). *Enterieri Voved*, Skopje, Ars Lamina.
- 9. Pisareva, E.(2002). *Istorija na interior I mebelite*, Sofia, Lesnotehniceski Univerzitet.
- 10. Raiceva, R. (1999). *Istorija na interiora i mebelite*, Sofia, Lesnotehniceski Univerzitet.