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11TH HARDWOOD CONFERENCE PROCEEDINGS

Róbert Németh, Christian Hansmann, Holger Militz, Miklós Bak, Mátyás Báder



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Sopron, Hungary, 30-31 May 2024

**Editors: Róbert Németh, Christian Hansmann, Holger Militz,
Miklós Bak, Mátyás Báder**



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Research on the value retention of hardwood products in the spirit of sustainability

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ABSTRACT

The concept of value retention is linked to a specific social stratum, which, in addition to age and various existential values, is determined by the product's styling, formal appearance, and the complexity of the product's use-related or quality-related and other added values and properties. The value and durability include everything that, due to the quality of the furniture and form, are the signs by which it becomes fashion-proof. The aim of this study is to take a new approach to these levels, in the spirit of sustainability, in the mechanism of the value of wood products, but also their definition.

INTRODUCTION

Among hardwood products, furniture is suitable for testing in several ways. Hardwood products have been chosen because the basis of the experiment is concentrated on these materials, and it is planned to extend the experiment to include non-hardwood species in the future. Furniture has become a part of our lives, according to Anthropogenesis, our closest relative is homo sapiens, which appeared approximately 200,000 years ago as a result of a long evolutionary development, simultaneously with this process, the appearance of the first primitive tools, the term or items such as "furniture", can also be dated to this time. (Kaes, 1978) With the appearance of man came the advent of culture, which is the information that one individual of a given species passes on to another by teaching or example. Culture has changed and shaped the whole course of our development. (Attenborough, 2022) Civilizations have emerged or come into existence. (Acuna-Soto et al, 2005) Over time, the tool and material culture that surrounds people developed in parallel with mental and other endowments (Howard). In addition to these tools, there have also been developments in the various mobilities. Among these objects are the chest furniture made for storing crops, food, and later clothes, which over time expanded in function, structure, and design, and became more and more sophisticated. A simple example of the evolution of the form of objects is how, over time, mankind came from an archetype of a chair with an average sitting function, the tree trunk, to the Lounge Chair designed by Eames or the high-tech office chair of cutting-edge design. (Gy. Kaes 1978)

RESEARCH AND METHODS

The primary objective of the research is to examine the development of value retention factors in relation to wooden furniture, which is based on the relationship between the sustainability of wooden products and the synergy of their long life cycle. Products can be assigned different subjective values, derived from emotions and experiences. According to the interpretation of literary value retention (Bárczi G. and Ország L. 1959), a material, object, or tool can be described as having a character or property that satisfies a need and is appreciated by the individual or society. In relation to quality and quality issues, relevant findings made by Szintay (Szintay et al., 2011), which, in addition to the definitions of quality, also examine ethical aspects and make statements on these issues, as Turcsányi also writes about in his thesis (Turcsányi, 2014). According to Veress (Veress, 2015), the essence of quality is to satisfy the needs of those involved in consumption and production. Products that meet quality criteria through design are recognized through various design awards. The criteria for these awards are based on compliance with the following criteria: humanity, sincerity, innovation, aesthetics, and design ethics. These are complemented by additional criteria such as attractive appearance, excellent function, and performance, high quality, user-friendly product. (G-Mark Org. 2024)

The quality thus formulated was one of the most optimal starting points for the research, and the findings related to the study of wooden toys were as follows: With regard to wooden products and toys, a company founded by a master carpenter Ole Kirk Christiansen, the company known today as LEGO, should be mentioned (Andersen, 2022). The company has a history of several decades, in whose values the production, manufacturing, and sale of wooden products of the highest quality that serve the users and that are passed down from generation to generation, have been given maximum importance. Ole has recognized learning through play as an important means of developing children's creativity. Building sets are crucial for children's development, and play has an essential role at this age, a topic that Sebestyén has described in depth in his thesis "Development opportunities with LEGO® sets in early childhood education" (Sebestyén et al. 2020). The LEGO ecosystem as we know it today can be compared to the Mercedes-Benz AG philosophy of "Best or Nothing". The popularity of wooden toys is still unbroken and they are considered eco-friendly products.

The various construction toys and models of trains, cars, and doll houses that can be found on the shelves of toy stores to this day are still a significant number of products made of wood, alongside other plastic products. The findings were based on visits to various toy stores and an examination of their product ranges.

METHODS

To support our theories, we used in-depth interviews involving 27 people. In this way, the data necessary for the research was collected and analyzed through users. In this way, we collected and analyzed data through users. The people included in the study represented different social levels, both financial and marital status, single or in a partnership. The age range chosen for the study was 25-45 years of age, with different social and value levels. This age group is the most likely to have established a home and existential values. The guided questions were freely answered by the participants in the experiment. This data was recorded and used for the research, analysis, and evaluation, and the findings were used to look for correlations. The interview questions focused on sustainability and the purchase and use of wood products, which aimed to understand users' motivations. From the subjective opinions and information of the participants in the study, which emerged from the interview responses, it was concluded that the need for sustainability is becoming increasingly important for wood products. Simultaneously with sustainability, the study also focused on the conceptual definition of value constancy in the field of individual subjectivity. For wooden furniture, the origin of the products is an increasingly important factor, with subjects considering whether the product is FSC certified as an important aspect. The average of the formulations in the interviews did not differ from the definition in the literature. It can be concluded that sustainability, recyclability, expandability, product durability, and repairability were also factors highlighted by the interviewees as important for modern society. From these responses, it can be concluded that the fate of our planet is an increasingly important factor for users. Closely related to the results of our research, and supporting our findings, is a definition already made at the 1987 UN General Assembly (Brundlandt, 1987), which states that "The Earth is one, but the world is not. The life of all of us depends on the same biosphere to sustain life." These factors are the guiding principles for the 21st century, as exemplified by the "Ecodesign for Sustainable Products Regulation", ESPR for short, and the ESG goals.

RESULTS AND DISCUSSION

In the case of products, quality can be considered a defining indicator. Which means that for a given product, a product with a higher quality attribute is better than a product with a lower quality attribute. Moreover, quality should also be guaranteed. This feature distinguishes a higher quality product from a commercial product. In the interviews, it can be said that quality can also be associated with an indicator and attribute such as reliability. For a product, reliability can be associated with low maintenance and longevity. The findings on the issue of reliability, for a given product, which can be found in the literature, are based on the thesis of Szabó (Szabó és Nagy, 2009) the study of new levels of quality management provides answers. A product is considered to have a long life if it is not completely worn out by use and wear and tear during its life cycle, which is defined by the company that manufactures and markets it. In the case of wooden products, an object with such a long life can be, for example, a cabinet or a chair. During the interviews, one of the interviewed persons mentioned a wooden chest in his possession, which dates back more than 100 years. In addition, emotions are also attached to the

chest. An important object on which the family's life events were recorded, such as the birth of a child (engraved inscription on the chest): "Mariska child", which usually includes years, serves as an imprint. According to a metaphorical interpretation, an object that looks almost worthless, a wooden chest, represents value for someone or some people. It still performs its original function to this day. From this data, it can be concluded that the concept of value has an individual, subjective level. In the case of the furniture pieces, the quality in the use of materials, the accuracy of the joints, and the precise processing are the factors that were determined as a result of the interviews. The upper limit of the age range surveyed, which included an older age group in the guided interviews, is that for earlier generations, furniture was inherited, having served in a household for up to 50-60 years. In this way, it can be concluded that such pieces of furniture have a long service life. From the interviews and the study, it can be said that the furniture is replaced every 7 years on average. The following data were used to answer the question of how new furniture is chosen: replacement is influenced by many factors, most of which are fashion, changing needs, and the level of depreciation. However, it is also stated in the survey and experience that there are cases when a piece of furniture is replaced, and the worn-out, outdated piece of furniture or wooden toy is disposed of by selling or giving it away. In the past, this trend was typical for families to pass on their assets, furniture, and household items over generations. With the advent of globalization and the consumer society, which began to disappear in the 1950s, this model, fortunately, is experiencing a renaissance again today. This allows the wooden product to start a new life in another place, creating a cycle. An example of this is the presence of type furniture. They play an important role, these items are still in use in some older households. They are highly valued. The late sixties was the era of the type of furniture, with mass-produced, high-precision, and made-to-measure furniture and elements appearing on the market, giving birth to the hit furniture of the seventies and eighties (Sári, 2021). These later evolved into the various flat-pack products, which incorporate the stylistic elements and material variations of the modern era, which can be observed in the product range of multinational companies in the present day (Tóth, 2001). As time has passed, it can be said that the mobility of structural solutions and flat-pack furniture is still present on the market.

CONCLUSIONS

With regard to the different hardwood products, which focus on their durability and sustainability studies, by analyzing the subjective opinions of the people interviewed through guided interviews, it can be stated that the archetype of the literary definition of durability does not differ from personal motivations and opinions. Wooden products are present in our environment almost from the beginning of our lives, whether it is a children's bed, a children's toy, and in the course of development in relation to various wood-based products, such as a cabinet, chair, or any other utility device. With the passage of time and the use of products, an attachment to the object develops, which becomes subjective values and experiences in the person of the individual. In addition, the definition of value depends not only on emotions but also on existential values developed over the years. In the course of the study, it can be established by the basic knowledge and the interview that sustainability plays an increasingly important role. The collection and incorporation of knowledge from the area and the user value system into a sustainable study of the lifespan of wooden products and furniture requires further research work, during which deeper connections and new levels of knowledge are defined.

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