



How have elements of the furniture industry such as furniture design and interior design evolved and to what extent are they impacted by external factors?

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Abstract

The furniture industry has been around for many years and has seen tremendous growth. It still demonstrates constant development as human needs and preferences change. There are many factors to consider before making a decision to create a product or have an interior designed. It is crucial to keep in mind factors like utility, sustainability, and emerging trends. The element of interior and furniture design itself contains further elements like space, light, colour, form, and others, and that is constant as theoretical knowledge. The industry has, however, been gradually evolving in light of several influencing factors from the external environment. This research paper, therefore, analyses and evaluates how furniture design and interior design have evolved over the years and the manner in which they are continuously evolving and responding to changes in the external environment.

Introduction

How has the furniture industry been impacted by the increasing modernisation of external factors?

Globalization of industries and markets has been a major development in the recent decade. This evolutionary process, which is expected to become more common in the future, necessitates long-term strategies in which enterprises, industries, and nations use the competitive advantage to expand across national borders.

Furniture is an example of a product that lends itself naturally to internationalisation because it serves the same basic function across geographic locations and cultures, such as seating, bedding, dining, storage, and exhibition.

Furthermore, the usage of multinational furniture and woodworking machinery demonstrates how quickly new technologies and ideas spread throughout the worldwide marketplace.

The furniture industry has grown by leaps and bounds over the last century and a half, mostly out of view (Braude, 2016). Moreover, the furniture market is expected to increase rapidly in the coming years as a result of widespread product adoption and demand in the commercial and residential sectors. It's an intriguing story that stretches from the great old civilizations of the world to the time you buy your next favourite piece of furniture. Trends in the furniture industry are constantly developing - globalization, green awareness, overpopulation, and an increase in environmentally conscious consumers have all contributed to the industry's new outlook (Braude, 2016).

The purpose of this paper is to examine the progressive evolution of the furniture industry (furniture design and interior design) in relation to the increasing modernization of several external factors. In doing so, the research question to be answered is **“How have elements of the furniture industry such as furniture and interior design evolved and to what extent are they impacted by external factors?”**

Overview of the furniture industry

The term furniture comes from a combination of European verbs, nouns, and adjectives. The verb *fournir* means "to furnish." The Latin adjective *mobile* means "movable," which is a key feature of furniture (Postell, 2012).

There have been accounts of rudimentary furniture since humanity ceased being nomadic (Souza, 2020). In an archaeological site that dates from 3,100 to 2,500 BCE, stone furniture including beds, shelves, and benches was found. Since these earliest examples, furniture has been used to convey ideas: from the exclusive and luxurious furniture of Ancient Egypt, intended to show the empire's power and wealth, to the functional and straightforward designs of the Bauhaus, intended to reconstruct rationality in the world, understanding the evolution of furniture is crucial to understanding architectural styles.

The history of furniture can be analysed within a timeline derived from varying evidence that has been found. This has been elaborated on below:

Neolithic Period Furniture:



A variety of stone furniture was discovered at an excavated site at Skara Brae, Orkney, dating from 3100-2500 BC. Because of a lack of wood in Orkney, the residents of Skara Brae were obliged to build with stone, a widely available resource that could be transformed into household items (Cahill, 2016).

Ancient Egyptian Furniture:

Egypt's hyper arid climatic conditions have been ideal for the preservation of organic material since the third millennium BC. Ancient Egyptian furniture has been excavated at different sites as a result of these conditions, including 3rd millennium BC beds discovered at Tarkhan, a 2550 BC golden bed and chairs from Queen Hetepheres' tomb, and chests, beds, and chairs from Thebes (Cahill, 2016).

Ancient Greek Furniture:

Excavations at Herculaneum and Pompeii in 1738 and 1748 showed excellently preserved Roman furniture. The ashes from Mount Vesuvius' explosion preserved the furnishings from 79 A.D. until its excavation in the eighteenth century. This early furniture was heavily influenced by ancient Egyptian furniture, which had a hard, rectangular, and unflattering design. Once the Greeks created their own style in the fourth and fifth centuries, furniture became less square and rigid and more curved and flowing (Cahill, 2016).

Medieval Furniture:

The medieval period was a harsh and relatively crude time, which is reflected in the era's furniture styles. The medieval period's furniture has a particular style. Its most distinguishing features include intricate wood carvings on the borders of chairs and canopy beds, garish structural layouts, and primarily grey, beige, or black colours (Cahill, 2016).

Renaissance Furniture:

Starting in the fifteenth century, a similar renaissance of culture occurred in Northern Europe, particularly in the Netherlands, Belgium and Northern France. The aim of these pieces was often to showcase the skills of the craftsmen who made them (Cahill, 2016).

After the Renaissance, there was a gradual change to a less ornamented, quieter style of furniture. Because of the greater availability of a broader range of materials than ever before, as well as an ever-increasing understanding of historical and cross-cultural aesthetics, twentieth-century furniture is possibly more diversified in terms of style than all preceding centuries combined. Art Deco, De Stijl, Bauhaus, Wiener Werkstatte, and Vienna all worked within the Modernist idiom for the first three-quarters of the twentieth century (Cahill, 2016).

Modern Furniture:

The post-WWII Modern style evolved from the Bauhaus and Art Deco streamlining styles, employing materials produced during the war such as laminated plywood, plastics, and fibreglass. Dark gilded, carved wood and richly patterned textiles give way to the dazzling simplicity and geometry of polished metal in modern furniture. Modern furniture forms sought newness, uniqueness, and technical innovation, and ultimately conveyed the present and future, rather than what had gone before, as revival styles had. This fascination with new and inventive materials and procedures resulted in a mixing of the disciplines of technology and art. The utilization of new materials, such as steel in various forms, moulded plywood, and plastics, was crucial in the development of these new designs. They were considered revolutionary, even shocking at the time, especially in comparison to what had come before (Cahill, 2016).



Furniture design

Furniture, as a design element, has always been and continues to be involved in the processes of human life. They are a vital component of the environment and hence play an important part in establishing the conditions for human survival and comfort in the world. It is an applied art that draws upon various disciplines and necessitates knowledge of materials as well as fabrication techniques. So, furniture design is not a singular endeavour. Instead, it is a more comprehensive discipline that draws on many other fields. It combines the arts and sciences, business and marketing strategies, and design and fabrication processes. It explores furniture as physical objects, materials, and built forms that are influenced by research, ideas, and design processes as well as by theory, utility, comfort, and aesthetics (Postell, 2012).

In many ways, furniture design aligns with the discipline of industrial design. Because of the mutual reliance on mass production and mass customisation, digital fabrication techniques, workmanship, assembly processes, and packaging are significant in both industrial design and furniture manufacture. Ergonomic task chairs, foldable tables, and modular shelving units are examples of industrial design goods that are developed, manufactured, and labelled as furniture. These goods are not intended to be site-specific furnishings and are designed to have identical or deliberate quantitative outcomes as a result of industrial production procedures.

Perhaps one of the most important observations regarding furniture design is that it changes in response to the environment. Whatever furniture is involved is determined by analysing how a space will be used and what activities will take place in that space. Function determines which furniture and furnishings, such as appliances, fittings, and other accessories, are required for that specific space. Consider a living room in any home. How would you know where to sit when watching TV or talking to someone? You're going to seek a seating element, right? This is due to the fact that furniture clearly reveals the intended use of the living area. The appropriate furniture mix provides spaces with a balanced look and feel.

Some of the most influential forces on furniture design include the following:

Utility:

Furniture is used to formalize open areas in a room. The appropriate furniture designs create a balanced look and feel in the room - it can aid in the creation of an airy, yet well-put-together room by making even the purposely empty regions more appealing. Interior designers can let their imagination run wild while still putting together operationally adequate rooms if they start with attractive, cutting-edge furniture designs. Because furniture is the foundation of any room, its design is extremely important.

As a society, we find multitasking to be fascinating. Consequently, why should our furniture fall behind? We can benefit from multi-utility furniture in numerous ways. The market for modern furniture has produced a variety of multipurpose pieces. The general populace is unaware of the revolution taking place in the market. Our home's available space is slowly shrinking, so there is a growing need for furniture that is cleverly constructed and serves multiple purposes (Wooden Street, 2019). Some examples of design ideologies incorporated into the furniture design process to attain the aforementioned multi-utility aspect are as below:

User-centred design: It entails designing a product while taking the user's requirements, desires, and preferences into consideration. This approach focuses on creating furniture that is practical, attractive, and comfortable (DeRosa, 2018).

Modular design: Designing furniture in a modular manner entails making it simple to put together and take apart. The technique aids in producing furniture that is adaptable to various settings and spaces. This method is used by designers to produce furniture that is portable, storable, and easy to assemble, making it perfect for small offices, apartments, and other spaces (UNext, 2022).

A sofa-cum-bed (pictured on the left) and study table equipped with a shelf (pictured on the right) are two common examples of multi-utility furniture design.



External trends:

According to Bhasin (2022), the following are some of the main trends that have been witnessed in furniture design over recent years:

Minimalism: A minimalist approach to furniture design has become more popular in recent years. Designers are focusing on clean lines, simple shapes, and functionality.

Mixing Materials: Designers are mixing materials such as metal, wood, glass, and stone to create unique and interesting pieces. This trend allows for the creation of furniture with a variety of textures and finishes.

Bold Colours: Bold colours are becoming more popular in furniture design, especially in upholstery fabrics. Designers are using bright colours and bold patterns to create eye-catching pieces that stand out in a room.

Customization: Customization has become a popular trend in furniture design. Designers are creating pieces that can be personalized to fit the specific needs and preferences of the customer.

The above proves how the changes taking place in society and in the preferences of the populace have a great influence on the design of furniture being produced and sold in the markets.

Culture:

The process of furniture design, in many countries, incorporates cultural nourishment as an important design feature. Space culture is divided into space concepts and usage, and this element varies from culture to culture. Intercultural interaction can modify not only the perception of space but also its usage. For example, open kitchens - the act of living space, which involves sitting and eating, is recognised as a priority in open kitchens (ÖZSAVAŞ, 2016).

Furthermore, furniture reflects the culture's physical and social status. Furniture configuration is influenced by the evolving needs of users' socio-cultural structures; hence, the requests and needs of users with different socio-cultural structures differ. The user profile is the most crucial consideration when designing any room or furniture. The consumption format and behaviours of users reflect societal cultural traits. Furniture design can become popular in any culture through widespread use. The design that is desired to be popular can spread to the entire world in an instant thanks to fast-emerging communication technologies such as mass media and social media (ÖZSAVAŞ, 2016).

Environmental impact:

Comfort comes at a cost. The manufacturing of furniture uses a variety of synthetic materials, which contribute to pollution both during the manufacturing process and after the furniture has served its purpose. Most fossil fuels, like oil, are used in the production of plastics and synthetic materials. However, these precious natural resources are not limitless, and their exploitation has the potential to wipe out entire ecologies. Not to mention that some of these materials—paints, lacquers, varnishes, inks, colours, adhesives, and adhesives—are used in the manufacturing of furniture and produce mostly hazardous greenhouse gases. The furniture industry contributes to environmental pollution by using these raw materials (We Design Green, 2017). Some strategies that have been used to promote sustainability in furniture design are detailed below:

The conscious use of more sustainable materials: Sourcing is critical, and while no material is perfect, some are more environmentally friendly than others. Some companies are starting to utilize organic raw materials that are widely available (and cheaply extracted), do not have to travel far, have a high recycling rate, and are easily repurposed is critical to achieving a low environmental impact (Icons of Denmark, 2008).

Upholstery: On furniture meant to be used for sitting or lying down, upholstery and covers are used. Europeans learned how to use wickerwork from the East, which offered a ventilated and resilient backdrop for loose cushions. The upholstery was replaced by plastic forms that can be moulded and bags filled with plastic balls that can adapt to the body's shifting positions (Wormley, Butler and Lassen, 2019).

Ultimately, no single industry can address the numerous difficulties associated with sustainability and the interdependencies that exist within this enormously complex system. That is why worldwide business collaboration is such an important goal. That being said, we are seeing a shared goal and increased knowledge of creative solutions aimed at reducing waste and toxicity, regenerating energy and natural resources, and raising collective understanding of our individual and company environmental effects. This is undoubtedly a source of confidence for us, and it is assisting in the development of our own sustainability goals - with strong collaborations and learning how to

constructively influence our future.

The furniture industry must therefore continue to concentrate its efforts on three key areas in order to minimize its impact on our planet (We Design Green, 2017):

1. Combating the depletion of natural resources and using environmentally friendly raw materials
2. Creating products that are more robust, long-lasting, or simple to recycle at the end of their useful lives
1. Using less energy and generating less waste during production.

Interior design

The practice of creating an interior environment that protects and satisfies human needs is known as interior design. It is the art, science, and business planning of an expressive, sustainable, and functional solution that complements the space's architecture, incorporates a mandate for safety and health, as well as makes informed decisions about aesthetics. The fixed and mobile ornamental items that are essential components of the interior of any human habitation are all included in the field of interior design. It is crucial to remember that a large portion of what is now considered art and displayed in galleries and museums was initially used to decorate interiors (Friedmann and Savage, 2000).

The history of interior design can be traced back to the naive mud homes of the Ancient Egyptians, who enhanced their plain furnishings with animal skins, straightforward textiles, graphic biographical and spiritual murals, sculptures, and painted urns. The elaborate gold decorations discovered in Egyptian tombs (such as King Tutankhamen's) have drawn attention to the need for more distinctly lavish ornamentation to represent the more affluent and powerful Egyptians. By fostering a sense of civic pride through the development of public structures with domed roofs, Roman and Greek civilizations advanced the Egyptian art of interior decorating and accessorizing. Both Romans and Greeks brought in vases to elevate their homes and made mesmerizing mosaic floors, wall paintings, and frescoes to make their spaces distinctive to them. After the Renaissance, Europe was dominated by intricate and complex Italian Baroque designs. For instance, the French palace of Versailles made outstanding use of Baroque interior design components like stained glass, ornately painted ceilings, spiralling columns, and coloured marble and stone. European interior designers began to popularize the Rococo style in the 18th century, drawing inspiration from Asian stoneware, floral prints, and furniture inlaid with exotic materials like ivory and mother-of-pearl. Then came the Neoclassical look of the late 18th century, a distant take on the celebrated design elements found in ancient Rome with its use of brilliantly coloured silk, satin, and velvet (Décor Aid Team, 2021). From the early 1800s and on, more freedom and eclecticism were often found in interior design in Europe and America (Brathwaite-West, 2020). And over the following two centuries, a plethora of cutting-edge and contemporary interior design movements — including Art Deco, Art Nouveau, Victorian, and industrial Bauhaus styles — would come

and go out of style as the times changed (Brathwaite-West, 2020). The influence that large upscale retail outlets had on the world of interior design was becoming more and more challenged as the 20th century progressed by inexperienced designers and numerous publications. A prominent name in the history of interior design is Elsie de Wolfe. Although the term "interior designer" hadn't yet been coined, Wolfe was the first artist to be paid for decorating a house in the early 1900s, making her the first professional interior designer in theory.



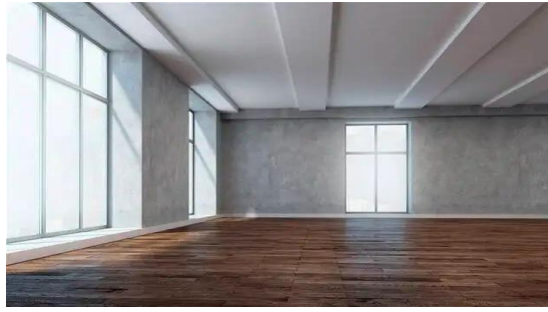
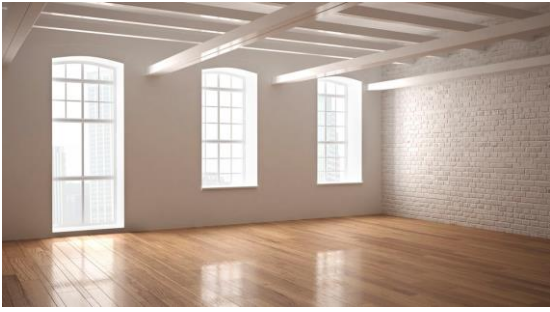
Interior design has been a profession for just over 100 years. What started as the art of decorating

and form in these 100 years has advanced greatly into the modern world of highly specialised interior design fields that demand years of study and experience (IDLNY, 2014). As evidenced above, interior design naturally came into being to coordinate with building architecture before the profession strictly gained popularity. The profession of interior design, however, developed at the same time as the rise of middle-class society and the intricate architecture that became popular during the industrial revolution. The goal of maximising the use of space, along with taking into account user comfort and practical design, continues to advance the development and potential for improving the lives of the interior design profession as it is currently practised (Lang, 2015).

Words like creativity and flair come to mind right away when thinking about interior design, but many would be surprised to learn that there is a degree of science involved. Professional interior designers typically adhere to a set of unwritten "rules" that are based on particular interior design ideas and components. The secret to designing an aesthetically pleasing interior is to balance these interior design elements, which include space, line, forms, light, colour, texture, and pattern (Furnish & Finish, 2019; The Interior Design Academy, 2004).

Space:

Working in three-dimensional space is a luxury in interior design (length, width and height). Depending on the functionality and design goals you want to achieve, this three-dimensional space can be filled or left empty. Space may be positive or negative. Negative space is the open/empty space, whereas positive space is the space that contains objects (including any space between objects) (The Interior Design Academy, 2004). To avoid crowding or, at the other extreme, sparseness, interior designers attempt to strike a balance between a room's negative and positive spaces.



Line:

A room can be shaped, and the eye can be led by horizontal, vertical, and dynamic lines. Using the furniture and structural layout of the space, lines can be formed to create harmony, unity, and contrast. The impact of the different types of lines, as taken from The Interior Design Academy (2004) is analysed below:

Horizontal lines: impart a sense of stability, formality, and efficiency. Interior designers emphasise horizontal lines to make a room appear wider and longer and to draw attention to a focal point. However, putting too much emphasis on horizontal lines may give the space a lifeless, uninspired appearance.

Vertical lines: which are produced by elements like windows and doorways, arouse emotions of strength and freedom. Vertical lines are frequently appropriate for use in dining rooms, foyers, and offices, but they must be incorporated carefully to avoid making occupants feel uneasy.

Dynamic lines: include zigzag, curved, and diagonal ones. Examples of these lines, which exude energy and movement, include stairs. We pay more attention to dynamic lines because they are visually appealing. However, too many dynamic lines in a space can be distracting and obstruct other lines, whether they be horizontal or vertical.

Form:

Typically, forms can be classified as either geometric or natural. Natural refers to more organic forms that appear to have been created by nature, whereas geometric refers to hard lines and square edges that frequently look man-made. Forms can also be closed, self-contained, or open, which refers to things that can be peered into. (Academy, 2004)

Light:

It is crucial to take into account the activities that will take place in the space when thinking about lighting. Here, both quantity and quality need to be evaluated. Beyond serving a practical purpose, light can define colour, line, and

texture as well as the mood and atmosphere of a space. Additionally, a good interior designer is aware that lighting components can add visual interest and strength to any design (Academy, 2004).

Colour:

Colour is a science in itself and a crucial component of interior design. It has the power to define unity, set the tone, and change how big or small space appears. It's important not to undervalue the psychology of colour, which can be fully utilized by any qualified interior designer. Additionally, colour can be used to alter the perceived size or proportions of a space, making small spaces appear larger or spacious spaces appear smaller (TIDS, 2017). It can visually raise oppressively low ceilings or lower ominously high ones. It can make a starkly bright room feel cosier or brighten a dark room. Colour can arouse memories and emotions, causing our bodies to react physically and psychologically.



The mood of an interior is influenced by colours and colour temperature, which also has a psychological effect on onlookers. Colours on the warm side of the colour wheel have a warm, inviting, and stimulating feeling. Colours on the cool side of the colour wheel have a calming, soothing effect. Colours that are cool can have a depressive psychological effect. Between warm and cool, neutral colours are thought of as pleasant and unobtrusive background colours because they have a less pronounced psychological effect and can suggest a professional, utilitarian atmosphere with little emotional content. Extremely neutral hues can come off as lifeless and uninteresting.

Texture:

The tactile surface of an object or finish is referred to as its texture. It's a feature that is frequently disregarded but has the power to give the space a distinctive dimension. The textures in a space are mixed by an interior designer to create a subdued sense of depth, just like colour and pattern are mixed - think smooth, coarse, and glossy. Texture can add interest and detail to anything, from furniture to accessories to fabric, making it more aesthetically pleasing. In essence, it creates a sense of space. (Academy, 2004)

Pattern:

Pattern can be used similarly to texture when paired with colour in that it can enhance the appeal of a space. Wallpaper, soft furnishings, rugs, and fabrics all use repetitive designs to create patterns, which are also found in wallpaper. There are many different types of patterns, including striped, geometric, pictorial, organic, motif, and animal prints. (Academy, 2004)



Once again, the above elements remain

fundamental to the foundational theory of interior design. However, that is not to say that they are not influenced by external factors. In fact, it is quite likely that choices may be made with regard to the colour or pattern used in a room, for instance, based on what is currently trending or desired in the market.

Conclusion

Furniture and interior design have existed for centuries and are still very important in today's society. As a result of modernization and varying trends that occur in the external environment - may they be social, economic or cultural - these aspects of the furniture industry are constantly changing. This paper analysed how new trends in the market, new technologies, materials, or modes of utility, can lead to the constant evolution of furniture design and interior design.

The idea of furniture has not undergone a significant revision since the middle of the 20th century when completely new synthetic materials like plastic and new fabrication techniques like casting first appeared. However, as a result of modernization, the residential and commercial environments have changed over time. As humans, our preferences have changed over time. This has in turn compelled society's designers to gradually modify their design processes to accommodate the clients shifting needs.

It wouldn't be an understatement to say that the future of the industry is brighter than ever before.

Bibliography

Bhasin, K. (2022). *Top 7 furniture design trends of 2022*. [online] SWOOD By Eficad. Available at: <https://swood.eficad.com/top-7-furniture-design-trends-of-2022/>.

Brathwaite-West, J. (2020). *What are the 7 elements of interior design? | Blog*. [online] J. West Design Services. Available at: <https://www.jwestdesignservices.com/blog/2020/11/25/what-are-the-7-elements-of-interior-design>.

Braude, C. (2016). *The Evolution of the Furniture Industry*. [online] Pallucci Furniture. Available at: <https://www.palluccifurniture.ca/blog/the-evolution-of-the-furniture-industry/>.

Cahill, P. (2016). *Furniture Design History*. [online] Onlinedesignteacher.com. Available at: <https://www.onlinedesignteacher.com/2016/02/furniture-design-history.html>.

Décor Aid Team (2021). *Interior Design History And Origins Explained*. [online] Décor Aid. Available at: <https://www.decoraid.com/blog/interior-design-history/>.

DeRosa, S. (2018). *User Centered Designer: IKEA*. [online] Medium. Available at: <https://medium.com/@shaunesseyderosa/user-centered-designer-ikea-ea0c161ff1c> [Accessed 19 Mar. 2023].

Friedmann, A.A. and Savage, G. (2000). *Interior design - Origins of interior design*. [online] Encyclopedia Britannica. Available at: <https://www.britannica.com/art/interior-design/Origins-of-interior-design>.

Furnish & Finish (2019). *Explaining the 7 Elements of Interior Design*. [online] Furnish & Finish. Available at: <https://www.furnishandfinish.com/blog/explaining-the-7-elements-of-interior-design/>.

Icons of Denmark (2008). *Sustainability in the Furniture Industry? | Insight*. [online] Icons of Denmark. Available at: <https://www.iconsofdenmark.dk/what-is-sustainability-and-how-does-it-affect-the-furniture-industry/>.

IDLNY (2014). *A Brief History of Interior Design*. [online] IDLNY. Available at: <https://www.idlny.org/history-of-interior-design>.

Lang, D. (2015). The history of interior design. Available at: <https://www.iconwallstickers.co.uk/blog/history-interior-design#:~:text=The%20first%20note%20of%20architects,in%20ancient%20India%20around%201600AD.&text=A%20very%20elegant%20style%20utilising,porcelain%20in%20their%20home%20decor>.

ÖZSAVAŞ, N. (2016). Intercultural Interaction and Popular Culture in Furniture Design. *Mugla Journal of Science and Technology*, 2(2).

Postell, J.C. (2012). *Furniture design*. Hoboken, New Jersey: John Wiley & Sons, Inc.

Souza, E. (2020). *4 Technologies Impacting Furniture Design and Manufacturing*. [online] ArchDaily. Available at: <https://www.archdaily.com/938308/4-technologies-impacting-furniture-design-and-manufacturing>.

The Interior Design Academy (2004). *7 Elements of Interior Design*. Available at: <https://www.collaborativepractice.com/system/files/2%20-%20Elements%20of%20Interior%20Design.pdf>.

TIDS (2017). *Colour in Interior Design : Part 1. The Interior Design Student*. Available at: <https://interiordesignstudent.com/study-notes/colour-in-interior-design/>.

UNext (2022). *What is a Modular Design? Everything You Want to Know in 8 Easy Answers!* [online] UNext. Available at: <https://u-next.com/blogs/product-management/modular-design/>.

We Design Green (2017). *Impact of the furniture industry on the planet | We Design Green*. [online] WEDESIGNGREEN.COM. Available at: https://wedesigngreen.com/stories/___trashed.

Wooden Street (2019). *Multiply the Usage of Furniture with Multi-Utility Furniture*. [online] <https://www.woodenstreet.com/blog/>. Available at: <https://www.woodenstreet.com/blog/multiply-the-usage-of-furniture-with-multiutility-furniture>.

Wormley, E.J., Butler, J.T. and Lassen, E. (2019). Furniture | Britannica. In: *Encyclopædia Britannica*. [online] Available at: <https://www.britannica.com/technology/furniture>.

