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# ROLE OF AESTHETICS IN UNIVERSAL DESIGN

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## Abstract

Most people consider aesthetics to be the visual value of a design. Anything good-looking like a car or a service is perceived to have more value and more character. How do we understand what to design when our user's senses are influenced by aesthetics? A product or a service has to be designed in such a way that it balanced the ratio of form and function. In other terms, Aesthetics and usability should be balanced and are supposed to be in harmony. A design with such a notion and need in the market is a pure success. According to the aesthetic usability effect, people find designs easier to use if they appear to be simple to use. It is also believed that any aesthetically pleasing design is also easy to handle.

**Key Words:** *Aesthetics, Design, User, Product, Experience, Sense, Balance, Functionality*

## 1. Introduction

The Oxford dictionary defines aesthetics as an adjective which is "concerned with beauty or the appreciation of beauty". It also defines aesthetics as a noun where it becomes "a set of principles underlying and guiding the work of a particular artist or artistic movement" (Oxford dictionary, n.d.).

Aesthetics is a branch of philosophy that may be defined hardly as the theory of beauty that deals with natural and artificial sources of aesthetic experience and decision. The beautiful women, the shabby-looking men, the beautiful portrait, and the repulsive dress are some examples of how aesthetics offers insight into things. It is also taken further into the philosophy of art and design. It has evolved so much in time with people that most decisions and judgments today are based on aesthetics.

## 2. Aesthetics

### 2.1 What is Aesthetics?

Aesthetics majorly depend upon various visual factors and fundamental principles of design. While designing an artifact, the designers use the tool of aesthetics to enhance practicality and usability. Aesthetics are about feelings and emotion. For example, The chairs (Fig. 1) serve the same basic purpose but the appearance, feel, and hence how it affects users is different. Each one is a different emotion.

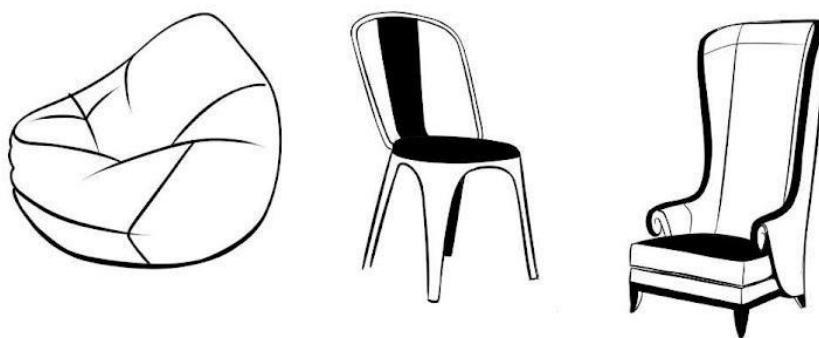


Fig. 1. Chairs of different styles

Humans generally like nice-looking and shiny designs over just functional ones. Aesthetically pleasing designs are satisfying to look at and it's a delight to use. Most of us think that aesthetics is only through what we see. But it is beyond just looks.

### 2.2 What Is Aesthetic Design?

Aesthetics is also more intended toward the field of philosophy. Edward Thorndike coined the term "the halo effect" which means, most humans tend to believe that good looking people are perceived as people with good qualities and not so good-looking people are often perceived as ones with bad character (Edward Thorndike, 1907). Any product or service that is designed today is also seen in such a manner. today good-looking products and services are valued more than their functionality and lifetime. Margaret Wolfe Hungerford said, "Beauty is in the eye of the beholder" which means that beauty is how we perceive things and it differs from person to person. So, aesthetics are in all our senses, not just sight (Starbuck, 2019).



Fig. 2. Five sensory organs

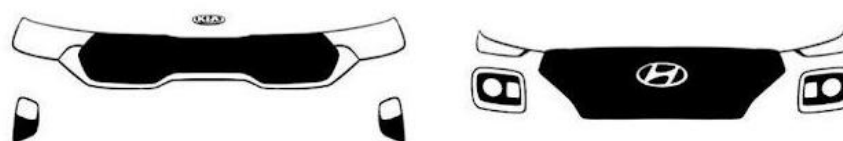
There are 4 major types, through which we make our decision to admire a design.

It is the way something looks, feels, sounds, smells and tastes (Fig 2). It elicits an emotional reaction in a person. They are the prime deciding factor for many purchases.

### **2.2.1 Vision**

The more knowledge and information that we acquire today is in the form of visuals. We subconsciously learn many things from seeing around us and we can't stop ourselves from looking at things that are pleasing to our eyes. We have the natural tendency to keep looking at more attractive and engaging things. For example, watching a series or a movie continuously without break and scrolling through social media for several hours. We dress up with new clothes and find ourselves attractive. Here, visualization plays a major role in deciding any product acquisitions.

So many products deliver similar functionality but different forms. We usually rely on our emotional response to a product purchase. Hence most consumer products are driven by aesthetics.



*Fig. 3. Kia Sonet(left), Hyundai Venue(right)*

The car brands Hyundai and Kia (Fig. 3), are sister brands that share their engines and platform but they differ in form and brand. So, customers decide their choice based on the form which is more appealing based on their emotions.



*Fig. 4. Starbucks coffee*



*Fig. 5. The Marriott VR*

Starbucks provides its customers with a cozy atmosphere and relaxed experience by using green and yellow as their interior colours. Starbucks maintains a welcoming feel through their choice of wall paintings and artworks. The employees give customers a warm welcome and smile which creates a positive feel. The seating arrangement is also made in such a way that provides enough space for customers and lounging. For sole coffee drinkers, the tables are designed in a circular shape so they don't feel unaccompanied. The Marriott chain of hotels started providing Virtual Reality service (Fig. 5) for their customers to experience by seeing and hearing the hotel rooms before booking them for their vacation.

Key elements of vision: Colour, Shape, Pattern, Line, Texture, Visual weight, Balance, Scale, Proximity and Movement. These elements will help us reach good visual aesthetics.

### **2.2.2 Hearing**

Our ears have the potential to take in more data and assess aesthetically pleasing sounds and music. Some have developed the ability to identify a particular brand only with its sound and not by looking at it. The different notification sound helps us differentiate notifications of different applications. This is the ability of a sound that our brain is attracted to. Almost 100 per cent of all companies make use of sound and music as a medium to pass and carry information. Most productions have an audio identity to move hand in hand with their visual identity. To select the appropriate music on the sensory advertising and marketing approach, you may want to analyze thorough studies on the users and catch their likes and preferences. For example, the tone when Windows is logged in and shut down makes us understand that it is windows even without looking. Similar strategy made brands like Intel, Netflix (Fig 6) and PlayStation easily recognizable.



*Fig. 6. Netflix*

Visa, the brand illustrated in Fig. 7, has come up with a sound design solution to enhance its customer experience. They made a tinkling sound pop out, to make the customers realize that the transaction was successful without checking the phone. Visa made a study on how music and sound play a role in making customers purchase more. The Visa complete sound puts an emotion of trust and safety among the potential customers belonging to their brand. Similarly, Ola illustrated in Fig 7, uses the sound of a vehicle unlocking when the driver reaches the pickup point.



*Fig. 7. Ola and Visa logos*

The music and song played in the stores are cleverly picked and played at the right place according to the background of the setting. The songs list is so selective that they get from a head location directly and also, they run their radio station which is played at the stores. Every employee is trained to socialize and intermingle with the customers and they call out their name instead of the order number when the order is prepared. This makes them connect with customers' emotions. This makes the customer feel superior. The noise from the coffee machine is tweaked and the tone of voice from the staff is trained to give a pleasant experience for the customers.

Key elements of Sound: Loudness, Pitch, Beat, Repetition, Melody, Pattern, and Noise.

### **2.2.3 Touch**

Skin is the largest and most sensitive sensory organ of the human body which helps us feel things physically. It also helps us feel the aesthetics through touch. Physical

aesthetics are especially important for products that we touch and experience.

We remember how velvet feels and how a hard rough surface feels physically and we tend to decide on which pleases us more. We, customers, make our decision on buying things based on the material of cloth as shown in Fig 8, or the touch feel while holding an iPhone. Such a leading sense is this material aesthetics. It improves users' interaction and connection with any brand's products.



*Fig. 8. Experiencing the texture*

Research suggests that up to more than half a percent of customers say that they would prefer to feel a product before buying it. Like if they choose to buy products like furniture they would like to sit and feel the texture. An example Apple product stores use this marketing strategy to customers, making them prefer their products.

Key elements of Touch: Texture, Shape, Weight, Comfort, Temperature, Vibration and Sharpness. By learning them we can make our customers esteem our products.

#### **2.2.4 Taste and Smell**

For human beings, 1000s of taste buds work together to help in experiencing the difference between a rich and a dull taste. It is more closely related to us than any other sense.



*Fig. 9. Starbuck store coffee bean pile*

Starbucks ensures the aroma/smell of the coffee as shown in Fig. 9, is strong enough to interest customers and make people think it's the world's best coffee. Starting from grinding the coffee bean till it's made a drink it is performed in front of the customer. They even stopped serving breakfast because the smell of eggs was affected by the fresh smell of ground coffee. There is flexibility in customizing the customer's order. The worker asks for the customer's preference and prepares the order according to the customer's liking. If a customer is dissatisfied with the order, Starbucks remakes it to give the customer an enjoyable experience. Customers are given a trial taste of their order before paying for it (Chowdhury, 2021). This reduces the effect of regretting after purchasing. Starbucks succeeds in giving its customers a memorable experience every time they walk into the shop. Using such techniques Starbucks improved and enhanced its variety of customer experiences around the world.

Key elements of Taste and Smell: Strength, Sweetness, Sourness and Texture (for taste). Use these elements, when possible, to improve the complete picture, so our users can feel the aesthetics even deeper.

## **2.3 Branding Using Aesthetics**

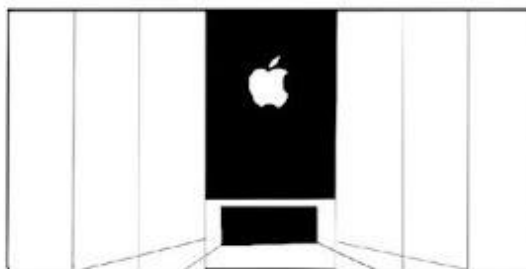
Today most industries and brands use sensory reacted aesthetics to build their values, increase trust and create a positive impression among the customers. This practice is termed Sensory marketing. Those were a few examples of how different sectors use this marketing technique to attract their customers.

### **2.3.1 Sensory Marketing**

The idea and thinking of logic wouldn't work over the sensory emotional effect. Also, it has this magical way to reach the desired customer that a typical conventional marketing strategy cannot. The conventional marketing strategy is based on analyzing the previous choice of customers and showing them their related products or services. Such a marketing strategy is successful as it uses the user data and their emotions towards it. It assumes people will respond more to their emotional urges than objective reasoning. Sensory marketing increases their product success and makes it lasting by properly identifying, and studying the emotional deal of the customers, which ensures the building of the brand and its loyalty within the customer (Chowdhury, 2021).

Other examples of brands using sensory marketing.

### Example 1: Apple



*Fig. 10. Apple store*

Apple was the first brand to establish stores as shown in Fig 10, where their customers can experience the in-store service and activity. The stores are designed minimally with pure colour to get the customers distracted from experiencing their products. It has this easy, simple, and active atmosphere to it. They have gone one step further, where we can open our purchased products and start using them straight away, whereas in other brands it says “charge the phone to 80 per cent before use”.

### Example 2: Singapore Airlines



*Fig. 11. Uniforms for flight attendants*

Singapore Airlines aims at multiple senses – especially smell and vision. They have these unique and refreshing rose, lavender and citrus scents used by all the flight attendants, sprayed onto their clothes and other service equipment like towels and socks. They have a unique uniform for their flight attendants as illustrated in Fig 11, which has different designs that match their designation in cultural and traditional means.

Today many airlines have started following this strategy to provide a home-like experience for their customers.

## 3. Why Does Aesthetic Design Matter?

Till some point in time, we were purchasing or even we had products and services that were only made out of practicality and reliability. For example, people were using a phone that had a



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keypad and thought it was reliable but now the touch screens have become more reliable and look good. Hence today we expect usability by default and are searching for products and services that are more than just functional and usable. People are ready to spend their time and money on experiencing such aesthetics. We want a product that represents us. A person would love to get out and walk from a basic model Mercedes Benz than from a top model Toyota. Users are emotionally connected to such designs.

There is a phenomenon called “Aesthetic Usability”. Beautiful looking things work beautifully. It can be simply put like, judging the content quality of a book by the way its cover page looks. They naturally become more valuable even if they are not. This is much more seen in products that have the same functionality but differ in look. A product of Kia and Hyundai might be the same in engine performance and the decision goes by the value that it holds in exterior and interior design that attracts the customer. Through which we become loyal to that brand and we go to the extent that even if any product from that brand fails to impress, we still like it. For example, imagine the Apple fans.

The aesthetic impression that a brand creates, marks the long-term impression and trust between customers and the brand.

### **3.1 Design for Aesthetic Pleasure**

So now how do we know what should be designed and aesthetically pleasing? The design has to have a need and value within the market. Designing without a need for it will become a failure, however aesthetic ever it might be.

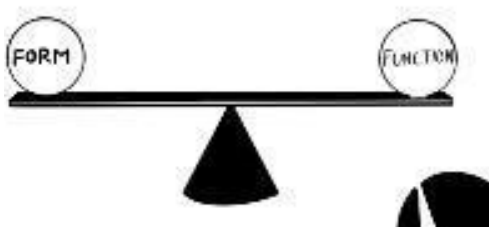
A design has been in such a manner that it does not overreact to the human senses. Products that are designed with the notion of physical pleasure like a chair, which has to be ergonomic, feel simple. Products or services that are designed based on social pleasures such as interactive design (AI voices, home-based assistance devices). Such devices on evolving have a much threat to removing social interaction, and connection between real peoples. Coffee machines as shown in Fig 12, are not meant to work silently and not too loud. It operates with a certain level of noise which is satisfying and enables the interaction with customer and seller without any disturbance. Psychological pleasure is another part that decides whether a product feels right even before being experienced. For example, a Ferrari car which is fast and sporty has to look the same. Another example is the DC Avanti which looks like a sports car but doesn't perform like a sports vehicle.



*Fig. 12. Coffee maker machine*

### **3.2 Balancing Aesthetics (Form) and Usability (Function)**

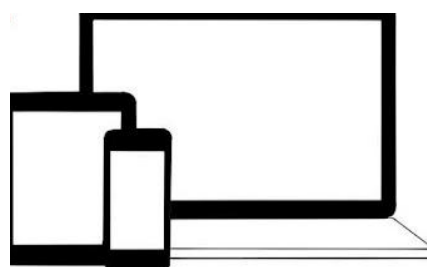
There are certain cases where the aesthetics have to be compensated over bringing in more practicality. It is always said that form follows the function.



*Fig. 13. Form and Function balanced*

#### **3.2.1 Function and Form Balanced**

This is the area that decides the success of a design and its designer. Most designers try to achieve this point in their designs. Balancing these two factors are important and hard to achieve (Nikolov, 2019). Many designers have achieved it. For example, a smartphone and gadgets as shown in Fig 14, trolley bags, ergonomic chairs etc.



*Fig. 14. Smartphone, tablet, laptop*

#### **3.2.2 Form Over Function**

Some products in the market are more valued toward the design of aesthetics than their functionality. For example, fashion costumes made out of paper would not handle water

and fire and heels that are in flame as illustrated in Fig 15, feel more attractive but do not serve their ultimate purpose. People fall crazy for such designs and have them in showcases (Nikolov, 2019).



*Fig. 15. flame fashion heels*

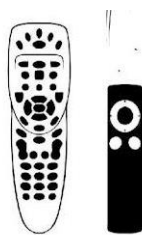
Another example is Philippe Starck's lemon squeezer as illustrated in Fig 16, by Alessi. Don Norman says, "It's just neat, it's fun. It's so much fun. I have it in my house but I have it in my entryway, I don't use it to make juice. I bought the gold-plated special edition and it comes with a little slip of paper that says," don't use the juicer to make juice". The acid will ruin the gold plating" (Don Norman, 2009).



*Fig. 16. lemon squeezer*

### **3.2.3 Function Over Form**

Remember when we enter into a clothing store with many possible choices and end up not buying anything and at the same time entering into a store with less yet attractive choices and end up finishing the shopping. Too many possibilities or options will take a lot of time and confusion in deciding a design and often lead to frustration and depression. To overcome such confusion there is a phenomenon referred to as Hick's law. Which when applied to a design will help make clever and better design choices (William Edmund Hick, 1952). A remote would be a fine example of this. Having too many buttons, as shown in Fig 17 (left), to click on a remote will make the task time consuming and irritating during emergencies. A remote with a minimum button as shown in Fig 17(right) has better experience in such emergency cases (Nikolov, 2019).



*Fig. 17. TV remotes with more buttons(left) and less buttons(right)*

#### **4. Aesthetics as Qualitative Assessment**

The sensory experiences (visceral and others) play a huge role in affecting a person's perception, impression and reaction while interacting with a designed artifact. Therefore, every design should be subjected to both qualitative and quantitative evaluation and validation. Quantitative assessments are based on governable data and standardized specifications. Qualitative assessments are based on emotive responses generated by sensory experiences. Validation of functional achievements and usability are usually done through qualitative assessments. However, the emotive experiences that are gauged through qualitative assessments provide a deeper insight into the minds of the users and stakeholders. Aesthetically pleasing designs that are easier to use and therefore highly usable should ideally perform equally well in both quantitative as well as qualitative assessments.

#### **5. Conclusion**

The seven primary principles of universal design do not include aesthetics. Their focus is on practical requirements rather than sensory experiences. However, this study suggests that a design should also adhere to the guidelines and standards, its situatedness in context and consider the value of aesthetics in it. A design that is done only with the idea of functionality cannot be termed as a designed entity at all if it is devoid of emotive experiences. The key to designing effective built environments for everyone is to draw together aesthetics and universal design. Universal Design tries to increase flexibility and adaptability, to which functionality is very important. But it should not be intended to be based on the factor of usability alone. Emotional and sensory experiences provided by good aesthetics strengthen purely functional provisions to become wholesome universal design experiences.

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