

# We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

4,800

Open access books available

122,000

International authors and editors

135M

Downloads

Our authors are among the

154

Countries delivered to

TOP 1%

most cited scientists

12.2%

Contributors from top 500 universities



WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index  
in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?  
Contact [book.department@intechopen.com](mailto:book.department@intechopen.com)

Numbers displayed above are based on latest data collected.  
For more information visit [www.intechopen.com](http://www.intechopen.com)



---

## Places that Reflect Beauty

---

Naglaa Sami AbdelAziz Mahmoud

Additional information is available at the end of the chapter

<http://dx.doi.org/10.5772/intechopen.69772>

---

### Abstract

Places are where we live! We call them “interiors.” Thus, “interior design” is the science that describes creating the places; so should interior design reflect beauty? Interior design is the specialization that creates places where people can find beauty, safety and a healthy environment to live in comfortable and sustainable ways. Beauty is one of the essential elements that a designer should consider while creating an environment, but do all users perceive this beauty? Moreover, what do designers have to do, to affect the users’ perception, so they can feel the beauty within their surroundings? Many questions need clarification, from the scientific theory point of views. To do so, the use of case studies will enable proving that these rules are applicable to real projects. This chapter explores the methods of perceiving different types of interiors. Any user living in the selected place or interior will perceive these stimuli reflected in the design. The users do not have the same personality or the same culture, which affects the full scope of the places and their reflection, as well as the messages of the interiors. Therefore, after analysis of these topics, within the places, a clear layout of guidelines could lead to generating an interior design that truly reflects the beauty to the end users.

**Keywords:** perception of interior, interior design, interior design psychology, beauty of interior design, Reiss’s motivations

---

### 1. Interiors and beauty, an introduction

Academics, researchers and writers discuss and argue regarding the vast scope of the interior design, as a profession, that deals with the physical aspects of spaces. Others deliberate the environmental effects that encompass these spaces. An important aspect is to ensure clarification of any new points raised, as they will often need more studies and research.

“Interiors” and “Beauty” are what we call, as professionals, aesthetical interiors. Nevertheless, “Beauty” here will reflect the perception of these “Interiors.” The following short definitions will enable us to start our journey in these “Places That Reflect Beauty.”

### 1.1. What is interior?

“An interior is where we live, work and are entertained.” “An interior is all and any place that embraces people to live.” “An interior is a place that encloses and surrounds our life.”

From these previous statements, we could possibly conclude that interiors are all spaces, whether inside or outside. These spaces have physical aspects and visual properties. Materials, furniture, furnishings and equipment that have colors, textures, shapes and forms define the physical conditions. On the other hand, the same spaces have psychological impacts due to their specific layouts, styles, colors and textures, which become places due to their belonging to someone. Therefore, through the particular selection of an interior’s components, we, as designers, can affect the users unconsciously, even as they consciously experience these interiors. Whatever the design reflects, it will affect its users positively or negatively, depending on the designers’ knowledge, skills and competencies. The wider the designer’s experience, the closer the achievement of interior perfection and the better satisfaction of the users’ needs.

Interiors—either design, decoration or architecture—represent the space that becomes a place because of its users. It is a creative challenge, which requires innovative solutions to enable people to react positively within it. The potential of interiors is realized in their connections with the design. It is the use of philosophy and concepts to create a unique design proposal. Interiors are sometimes the reflection of the exterior to some extent in many cases. There are no separations, isolation or detachment from the surroundings. A recognized practice is to bring life and activity to the interior spaces and convert them into interior places [1].

### 1.2. The meanings of beauty

“Beauty is the satisfaction and pleasure that rises due to the perception of any object or creature.” “Beauty is attracting and giving its receiver a charming feeling.” “The happiness that occurs within anyone while dealing physically with his/her surrounds.”

The perception and extent of beauty differs from one person to another. Beauty in its purest form is not often widely acknowledged by a mainstream audience due to the diversity of culture and society. However, all creatures found in nature are beautiful to some extent. In analyzing them, we discover that they follow all of the rules associated with beauty. This pleasing relationship starts with the golden ratio in shapes and forms, the impeccable color schemes and the perfect compositions. Any personality or culture admires and evaluates the “Natural Beauty” or the “Ideal Beauty” as an entity.

It is about each human’s cognition and emotion. The feelings of calmness and stabilities occur unconsciously, psychologically, as a reflection of human perceptions, physiology, through the human vision, consciously or unconsciously, physically. The perception of beauty is in the eyes of the beholder as it is a personal experience. It is affected by the lifetime and the influence of trends, evolutionary through time. The composition of these interiors affects perception.

## 2. Perceptions, theories and interiors

Perception is not what we see, smell, touch or hear. Perception occurs when we are aware of what we see, smell, touch or hear. The process of perception starts with the human's physical senses. It then passes through the receptors, based on the person's focus, which enable him to understand what he is facing: a specific picture or environment, definitive odor, precise texture or particular rhythm. It does not require previous experience unless a judgment of the matter is necessary, as to whether it is suitable or unacceptable. Perception occurs when humans consciously receive a particular sensory element. Many theories control the attitude, but most of these theories focus on the visual sense. Concerning interiors, the visual sense is dominant, but the smell, the touch and the hearing senses are also important, as all the senses have an emotional impact [2].

The results received from our perception vary. They could last consciously for a particular time and then become unconscious with continuing effects. The relation between the human experience, cognitional and emotionally, and the level of perception, is relative. The persistence of feelings (consciously) is virtual and relates to some unconscious variations. Happiness, confidence, pleasure, attraction, satisfaction and optimism are positive feelings that result from these perceptions, whereas sadness, uncertainty, insecurity, doubt and even pessimism are some of the negative feelings caused by the perception of the surrounding environment. The interior or the place affects the inhabitants, as they perceive its components. This perception depends on the way these interiors arrange elements to provide positivity. If the users' productivities raise, it means their performance accelerates along with their feelings of aesthetics, that is the reflection of their well-designed environment [3].

### 2.1. Perception theories

Theories of knowledge rely on psychological philosophy. As humans are surrounded by elements and patterns, they interact physically with them, but once these factors affect human behavior, this means people have started to perceive them. As the perception is variable, theories have the purpose of clarifying and shaping the phenomena. Perception could be direct naïve realism or the active process of representative realism. They could be based on human cognition idealism or even as a matter of abstract existence phenomenism. Theories as philosophic concepts exist and are clear in their entire setting. Based on the perception theories, designing interiors have a set of standards as individual personality, cognition, values, education, and group cultures, professional ethics, faiths and beliefs. Therefore, by clarifying these theories, we will reach the basics of perceiving the beauty of an interior [4–6].

#### 2.1.1. Naïve realism

Naïve realism is the direct common sense theory. It depends upon the perception of the facts related to each person's information and standards. The probabilities of this theory are enormous as it deviates among the variabilities of the receivers. So, keeping every element that each of us recognizes from our backgrounds will create a monotone and boring atmosphere, although stable and secure. A single change within it will produce uneasy feelings that could

vary in the perception and behavior of the person. Therefore, original information and elements play a significant role in creating those individual's interiors.

### *2.1.2. Representative realism*

Representative realism is the indirect perception of any matter. It is the deeper impression that depends on a thoughtful approach to the surroundings. Unconsciously, we perceive components linked to the person's culture and education. Each element of the surroundings has a direct message, but through the perception of it, it translates to the deeper philosophic sensitivity of it. The interiors that include samples of each users' cultures will be well perceived and the users will react positively to it.

### *2.1.3. Idealism*

Idealism depends on everything, from the spirit and the mind to the reality and the human experience. The end user has values and beliefs. By linking them to the environment, it will reflect ethics, standards and faiths. Perception only relies on those criteria; therefore, if any of these are absent, a lack of perception reality will occur. Spirit and cognitivism are the two basic forms of idealism perception. Cultures, education, ethics and beliefs are the keys for the productivities of such a way of perception. Interiors should include some aspects from each personality, cognition and value set to become a beautiful interior.

### *2.1.4. Phenomenalism*

Perception of things does not change whether people perceive them or not. Unlike idealism, everything exists in our surrounds as phenomena created by a human or by nature. It depends on each behavior to perceive it, so it becomes a reaction. In such way of perception, people will react only if the surroundings attract them.

## **2.2. Perception of the interiors**

People perceive their environment based on their background culture, education, emotions and cognitional and emotional phenomena. When the person in a space "processes" the available information, he/she perceives consciously, and so they use their relative cognition. Cognitive responses reflect what life has taught us (relevant, interesting, useful and desirable). All data added throughout time in the form of direct education or indirect culture backgrounds is cognition. While the person in the space "processes" the available information, he/she perceives unconsciously (automatically, involuntary). They use their comparative emotions. Emotional responses reflect our dominant sense (based on culture and personality). Emotions are the natural feelings based on data perception [7].

The link between people and their places is clarified through the explanation of environmental psychology. When a person enters an interior, he starts perceiving its surroundings. Two main responses occur: cognitive and emotional. This is the so-called behavioral response. The person starts to link his surrounding elements to all his background data (cognitive responses), then he links them to his feelings (emotional responses) and reacts based on all

of these steps. The reason for these reactions at the beginning is clear for him (conscious), and then he keeps behaving while forgetting the original reasons (unconsciously). These responses serve to prove the success of the interior (**Figure 1**).

People select and positively react to surroundings that enforce and strengthen their productivity. Productivity happens when humans feel safe and secure and when their surroundings reflect beauty. The interior designer has a prescribed responsibility to create an environment that helps individual personalities, genders and cultural and ethnical groups in their daily life.

As a user, how might one react to an interior? Environmental psychologists and designers suggest three possible answers that are abundant: through visual perception, the scent and the sound of the place. In fact, the senses that affect interior perception are vision, touch, smell and sound [8].

### *2.2.1. Visual perception*

Humans see through the eyes but perceive through the brain. Many psychologists study this topic, but we will take into consideration the most relevant studies that deal with the perception of interiors, with all contents. To perceive means shaping information as a sophisticated mechanism. "Gestalt and Marr" designed a mental model to describe this. We will discuss the four main theories affecting the perception of interiors: perceptual organization, perceptual segregation, perceptual construction and perceiving intelligence [9].

#### **a. Perceptual organization**

The structure of the space is a composition of the physical elements and the hidden relation between them (**Figure 2**). The elements of the interior occur in a way that makes space appear to focus on specific points, without a straight design to lead to this stage, the creation of the whole from directed parts.

#### **b. Perceptual segregation**

The perception of the interior needs two visual steps, first to differentiate the separation and second to recognize the shapes of the components (**Figure 3**). The appearance of the interior appears completely after some seconds based on the receptor's ability of perception. The complete interior looks divided by two, but after a while, the full picture shows the unity of this interior.

#### **c. Perceptual construction**

Interiors appear as result of grouping the pieces all together in one scene (**Figure 4**). The whole picture gives the idea, but in perceiving it over time, the main seating and flooring details and patterns come out in the full perception.

#### **d. Perceiving intelligence**

The interior is dynamic. The composition and the details of its components lead the perceiver to a fourth dimension. The details and the main parts drive the vision to a continuity of scenes (**Figure 5**).

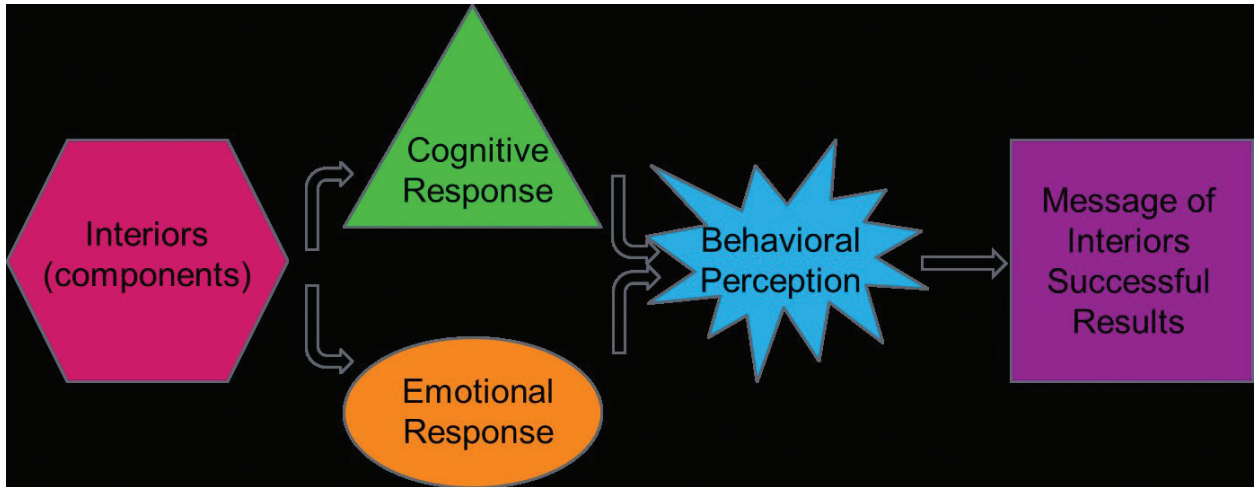


Figure 1. Perception process of the interiors.

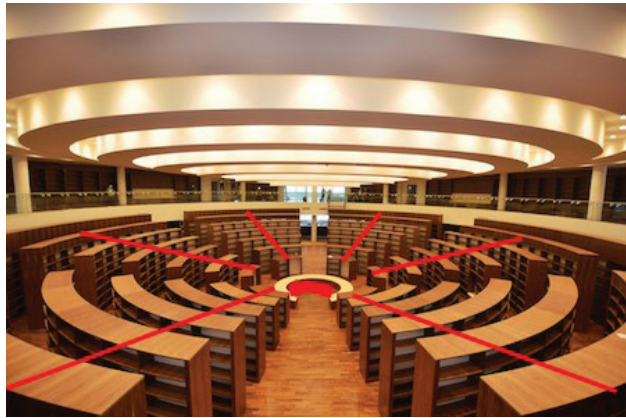


Figure 2. Perceptual organization example.

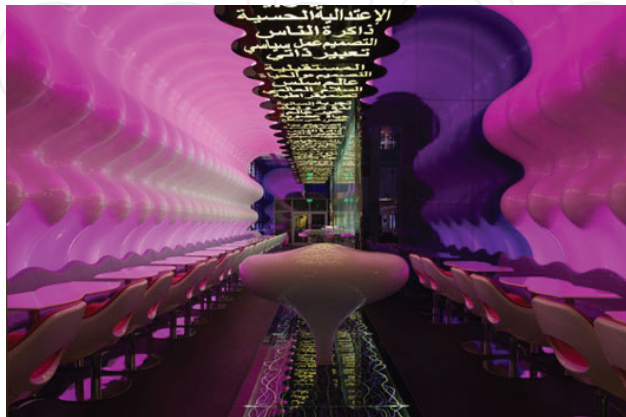


Figure 3. Perceptual segregation example.



**Figure 4.** Perceptual construction example.



**Figure 5.** Perceiving intelligence—example.



### 2.2.2. Scentscape perception

The scent is an additional element to create a psychological effect. So, using this tool to enhance the functionality and the productivity of a place is vital. It affects the human with full consciousness at the beginning, and then, it moves to the back of the mind, while still affecting the person's performance. Pleasant scents make people remain longer in the space. The scent can stimulate happiness, appetite, their motivation to complete a particular function and even their feeling of belonging in a place. To design the scent scheme in any interior, designers refer to the Scentscape. Scented space will feel larger, cleaner, fresh and bright; it adds part of the beauty to it.

### 2.2.3. Soundscape perception

Similar to the Scentscape, the soundscape is the schematic background sound of an interior. Surveys discover that people work 30% more effectively while listening to their favorite music without a tired feeling, whereas disturbing noises can make spaces appear dull and ugly. Many tools help designers in their duty of creating a soundscape: quiet rhythms lead to a relaxing mood. It is preferable to keep music at a low level, without the song lyrics (words); this helps in concentration. Live music creates a better mood than prerecorded songs. The designers should investigate to reach the best soundscape that makes the interior beautiful.

## 3. Interiors' messages

The message the person receives when using a space is the effect that the interior is having on a human. Any area presents an idea to whoever experiences the function of the place. An interaction occurs between the physical shape of a space and the user, resulting in psychological or emotional effects. If the designer has paid full attention to each detail, the full interior will give the correspondent effects needed to accomplish the functionality of this space in a pleasant and productive manner. Perfection is hard to achieve, yet the psychological effects of each interior component as in line, shape, form, color, pattern composition, lighting, scent, sound and even texture can bring an excellence to the place.

The design of an interior continuously affects people's behavior. Different sensory experiences through time create a mutual mood, with diverse details consistent with each culture and personality. Asking some questions will help to identify the targets of designing places of beauty, such as what does the interior designer want to express to the users? What should the interior look like? What is the reason for selecting this model? What is the purpose of this interior? When people use this interior, what will they feel? What is the message of this design? What was the primary motivation for such an interior design approach?

Psychologists, and specifically Steven Reiss, propel the identification of 16 different reactions or emotions as the reflection to any interior layout, calling them "*Reiss's 16 Motivations.*" [10].

### 3.1. Reiss's motivations

Steven Reiss, Psychologist, Professor Emeritus at the Ohio State University in Ohio, USA, studied the human reactions and found 16 different responses as a reflection of the average human being experiencing interior spaces. These reflections are the result of being in a place. He called them 16 motivations, leading as feelings of the users. These motivations (interior design messages) are the basics that designers should achieve by explaining and linking interior element selections to their psychological effects. These messages have meanings and enhance internal functionality based on their psychological effects. These 16 motivations (interior messages) are as follows: Power, Curiosity, Social Status, Honor, Idealism, Social Contact, Physical Activity, Independence, Romance, and Acceptance, Eating, Saving, Family, Tranquility, Vengeance and Order.

#### 3.1.1. Power

*The need for control of the will.* The being under "Power" feeling occurs in distinct interiors and functions. To reach this emotion, a designer has to produce some details, but the architectural layout should interface to the full scope. People will feel under control if they see high ceilings, levels in the place, and extreme size in the majority of the interior elements. In addition, high quality will reflect some dominance but not for all type of personalities nor cultures (**Figure 6**). Power is an important emotional message in the governing spaces and the law areas such as courts.

#### 3.1.2. Curiosity

*The need to gain knowledge.* Developing people in all type of activities and for all age levels needs special attention from the designer. To stimulate feelings of interest, designers need to activate an emotional response by creating diverse shapes and lines, colorfully, and with unexpected patterns (**Figure 7**). Classrooms for different study levels, libraries and shopping spaces are where "Curiosity" responses need enhancement.



**Figure 6.** Power message sample of Court Hall.



**Figure 7.** Curiosity message sample.

### 3.1.3. Social status

*The need for social significance.* The social level occurs in residential spaces, in branded shopping areas, in hospitality interiors and even in commercial spaces. This level reflects the inhabitant's social status through the grade of the interior components. The size of the interior, selection of luxury materials and the excess use of white colors (**Figure 8**) all represent and reflect a high level of social status.

### 3.1.4. Honor

*The need to be faithful to the common values of an individual's ethnic group, family or clan.* Traditions are the values of any society. To keep, preserve and show this culture reflects a feeling of



**Figure 8.** Social status message sample.

honor. It is the identity of any human group. Practically, all interiors will show a percentage of tradition, as the designer unconsciously adds it to the design (**Figure 9**). The spaces representing the message of Honor are mainly residential and governmental, but it could be hospitality, or for relative level commercial. The interior will involve a touch of the central tradition of the place or the users.

### 3.1.5. Idealism

*The need for respecting human principles.* Beliefs and principles are only philosophies, and people might share the same traditions, the same society, but could have very different ideas. The respect of each principle is vital between humans. This message will manifest clearly in a residential interior, (**Figure 10**) by adding a pattern as a symbol showing this idea.

### 3.1.6. Social contact

*The need for a relationship with others.* People need to interact together, even the most introvert ones. Gatherings often happen in residential and public commercial spaces. The interior must promote the number of people grouping all together in one place and at one time (**Figure 11**). The focus of such a place should be on verbal interaction and social discussions.

### 3.1.7. Physical activity

*The need for work out of the body.* This message could be, directly or indirectly applied in the interior. Every human needs to exercise. In residential interiors, if possible, adding exercise equipment can have a direct result and endorses the purpose of it. Whereas in other interiors, like in administrative spaces (**Figure 12**), where people spend a considerable amount of time without physical activities, the need for an unconscious feeling of movement is crucial to prevent lethargy.



**Figure 9.** Honor message sample.



Figure 10. Symbols patterns showing idealism' message.



Figure 11. Social contact message sample.

### 3.1.8. Independence

*The need to be distinct and self-reliant.* This message is used best to describe and show people who believe they are different and they do not copy anyone. Distinguished, self-confidence is their main personality trait. It is evident through their selection (Figure 13) of elements representing their interests. It could be in their own residence or in their projects—commercial or administrative.

### 3.1.9. Romance

*The need for mating.* The feminine touch that is inviting is one of the interior features that appear in the “boudoir” or other mutually physical spaces (Figure 14). The interior is full of fabrics, soft exciting colors, especially warm schemes. Lighting is indirect; lines and shapes are smooth. It is an intimate place, where any cultures or personalities can react within it.



**Figure 12.** Physical activity message sample.

### 3.1.10. Acceptance

*The need for approval.* Any human communication should respect others. While interacting, people need to feel their acceptance in front of others. Places for brainstorming and rehabilitation therapies, where all attendees are equal in distance regardless of hierarchy (**Figure 15**), improve and support the feelings of acceptance.



**Figure 13.** Independence message sample.

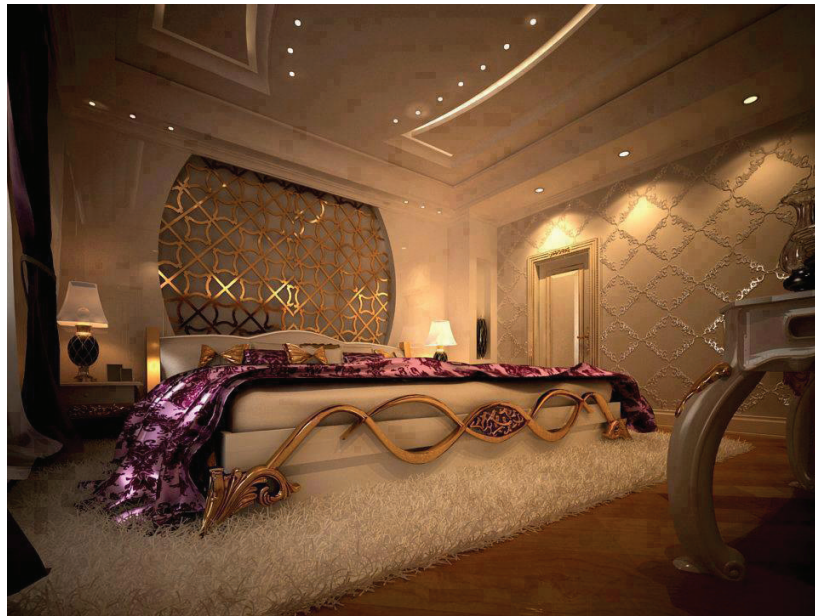


Figure 14. Romance message sample.



Figure 15. Acceptance message sample.

### 3.1.11. Eating

*The need for food.* Places full of cooking and food items will invite those who do not prepare to eat. Either private (residential) or public, like an open kitchen restaurant (**Figure 16**), if the food and the cooking process are clear to the user's eyes, the "Eating" message will have success, and the emotional response will call for a physical one.



Figure 16. Eating message sample.

### 3.1.12. Saving

*The need to accumulate something.* Real estate is the investment of choice for many human beings. While investing in some expensive items, which have value in some field, it will produce the same emotion as “Saving.” These elements could be artworks, precious references books and any particular collection (**Figure 17**). This is active in residential or even in publicly owned spaces and is ruled by the individual.



Figure 17. Saving message sample.



### 3.1.13. Family

*The need to take care of one's offspring.* The home should give a feeling of security and safety. Residential places are those where the family will raise their children. They should reflect all the family needs, allowing for exchange of experiences and promoting advice. Either these spaces are luxury or average, but essential needs for each family member are present without any possible distractions (**Figure 18**). It is kind of a "Social Contact" space, but with a homey setting.

### 3.1.14. Tranquility

*The need to be secure and protected.* Places to reduce stress are the best locations to escape today's complexities. Relaxation and restoration are crucial to facing life's difficulties. To realize "Tranquility," the designer needs to add elements of nature (**Figure 19**). This involves real plants, sources of water and stones. Greenery is necessary, but it is crucial to provide it naturally. This message is vital in residential, in commercial, in restoration and healthcare facilities.

### 3.1.15. Vengeance

*The need to strike back against another person.* Challenges are the spice of life and offer encouragement to reach higher levels. By exploring personal gains and trophies, the surround gets the inspiration to boost a level up (**Figure 20**). In addition, the display of certificates and acknowledgments promotes the viewpoint that the person who owns them is one that can be trusted.

### 3.1.16. Order

*The need for prepared, established and conventional environments.* The system people use to organize their life appears in their emotional responses. "Order" is very clear when shaping happens between different areas and activities in the same space (**Figure 21**).



**Figure 18.** Family message sample.



Figure 19. Tranquility message sample.



Figure 20. Vengeance message sample.



Figure 21. Order message sample.

## 4. Perception of beauty in interiors—Conclusion

The aesthetical interior or the beautiful place is where humans live, act and pursue their lives in a productive manner. An interior should reflect beauty as it is a self-reaction feeling or a behavioral response to space. However, the question is: Do places reflect beauty?

Perception theories in philosophy, as previously explained, define perception as general thoughts happening in the human mind. It is a complicated process, related to our cognition, which guides our views and insights. It is absolute thinking, which needs more studies to relate it to human behavior in spaces. However, philosophers and psychologists do have their points of view, which are a start to any development. Some of them, such as Gestalt and Marr, did produce some graphics to explain their theories. This was the starting point to linking these theories to the applications.

Designers studying these ideas in their preparation stages do apply them, either unconsciously or consciously, and the results are not only impressive, they also add another dimension to the perception of the interior, as the samples included previously show. It was the starting step, from my point of view, to link between the theoretical statements and the practical side of life. In another observation, the natural creations as shapes, forms, textures and colors are beauty interpreted in physical elements. I believe that designers and artists derive all their creations from Mother Nature where every particle is a clear expression of beauty. So philosophers, psychologists and designers are two sides of the same coin, where one reflects beauty as an idea and the second reflects beauty in physical elements seen by all.

The interpretation of statements from Reiss, as interior perceptions, is that results' tools help me to transmit these theories to future designers—my students. The real application for today's generation is necessary in this technological and software-driven world. Moreover, we start to realize that in our daily practical living, people need to use their physical senses in addition to their mental ones. While thinking, we get some perception of outright thoughts, but while living we need to feel these ideas.

I believe the applications of ideas will result in different and diverse interpretations, but this is what makes life so rich and full of options. If philosophies and concepts are proved theoretically and applied, beauty will occur by default. It was the detailing of Reiss's motivations in this chapter, where beauty happens as a direct result of actual application.

### 4.1. Basics Guidelines - Results

- a. The interior is where people live and act daily, in and out of spaces. The pattern of designs that include all the interior components, such as furniture, equipment, materials for all surfaces and lighting (natural or/and artificial), affects the appearance of this interior physically. It does affect people mentally and emotionally.

- b. Beauty exists in nature before the fabricated products, and it is the base of all aesthetics around us if designers follow its principles of shapes, forms, textures and color schemes.
- c. Perception theories are the heritage of all philosophers and psychologists, and the base of any science and field of study. The greater the physical pattern appears; this is due to the following of these theories. Theories are the base of every material matter.
- d. Perception of the interior, as theories, results in applications that enable and guide designers to create interiors that protect people. Places where they can find beauty, safety and a healthy environment to live in comfortable and sustainable ways. This perception follows steps and specific processes. It starts by viewing the link to human cognition, and then it produces emotional responses, that is what we call the behavioral responses (the personality, the culture and the education). At every step, we can judge the interior's success by the reaction the user has within the space. Either it will remain a space or it becomes a place!
- e. Visual perception is the guide for forming, aligning, shaping and selecting the different components of interiors. By following them, designers produce great interiors, as exemplified by the samples we discovered previously. They are interacting with the users, and this is what makes them beautiful. To be able to perform in a positive and productive manner means, the space becomes a place with a great impact—it becomes beautiful.
- f. Scentscape is a new kind of perception that affects enormously on the users' performance. It helps the interior statistic elements to shape people's activities.
- g. Soundscape is usually forgotten, but raises personal performance by around 30%. It deals with noise and the type of sound, where and when needed.
- h. Messages / Motivations; from theory to application, it is obvious that by following philosophy, the designer can create what is suitable and feasible to the end users. Clarity in the message is needed in a place for better results that suit the performance of the users and the beauty of the place. Following the message of the concept of design appears clear to the designer, and the philosophy of the design shapes the interior. It is the platform of creating the interior to guide the user to a beautiful place!
- i. Applications of theories will shape the appearance of these interiors and beauty will be the result: The Places that Reflect Beauty!

## Author details

Naglaa Sami AbdelAziz Mahmoud

Address all correspondence to: [n.abdelaziz@ajman.ac.ae](mailto:n.abdelaziz@ajman.ac.ae)

Interior Design Department, Ajman University, Ajman, UAE

## References

- [1] Ankerson KS, Pable J. Interior Design Practical Strategies for Teaching and Learning. 2008, Fairchild Books, Inc., New York
- [2] Angell JR. Chapter 6: Perception. In Psychology: An Introductory Study of the Structure and Function of Human Conscious. 3rd ed., revised. New York: Henry Holt and Company; 1906. pp. 122-140
- [3] Briscoe R, Grush R. Action-based theories of perception. In: Zalta N, editor. The Stanford Encyclopedia of Philosophy; 2015. Info. Available from: <https://plato.stanford.edu/entries/action-perception/>
- [4] Theories of Perception. Theory of Knowledge. Info. Available from: <http://www.theoryofknowledge.info/theories-of-perception/>
- [5] Theories of Perception. Definitions. Info. Available from: <https://en.wikipedia.org/wiki/Phenomenalism>
- [6] Theories of Perception. Action-Based. Info. Available from: <https://plato.stanford.edu/entries/action-perception/>
- [7] Augustin S. Place Advantage, Applied Psychology for Interior Architecture. NJ: John Wiley & Sons; 2009. pp. 37-68
- [8] Gosling SD, Gifford R, McCunn L. The selection, creation, and perception of interior spaces: An environmental psychology approach. In: Brooker G, Weinthal L, editors. The Handbook of Interior Architecture and Design. London: Bloomsbury; 2013. pp. 278-290. ISBN: 9781847887450
- [9] Ding S. Sketching Interiors from Traditional to Digital. New York: Fairchild Books; 2011
- [10] Steven Reiss's 16 Motivations. Info. Available from: <https://explorable.com/16-basic-desires-theory>. 1995