

Psychological implications in ambiental design

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Abstract: *Psychological implications in ambiental design are the totality of physical and psychological factors involved in the realisation of the design concept. Systemic, intuitive, anticipatory and logical thinking in the phasing of the ambiental design process must be possessed by the designer. Psychological implications also arise from the interaction with the beneficiaries, where the designer sorts out ideas and steers discussions in the direction where he can obtain important key information from clients in order to shape the interior design concept. The needs and wishes of the beneficiaries are weighed up in order to select the optimal implementation options, and the functional-aesthetic criterion is also an important design consideration.*

Keywords: *design; designer ambiental; psychological; thinking; ideas; interior;*

Introduction

In the ambiental design, the psychological implications are of great importance due to the need of the beneficiaries to identify with the space, thus entering into a state that describes them, thus referring to single-family dwellings, and in the case of commercial or hospitality spaces, the issue lies in attracting a niche of customers, starting from the specificity of the premises, to elements in the space that "awaken" in individuals various states when they are in contact with the materials, textures and nuances of furniture objects and not only.

Design "has a voice", through design interior designers communicate, through design they create topics of discussion and moods, and through ambient designers "invite" their clients to take part in a sensory experience. The designer communicates directly and repeatedly with the beneficiaries throughout the project and thus we can see in chapter 2 how psychological implications make their presence felt in this subject area. Chapter 3 develops the notions from the previous chapter, thus focusing on the designer this time, on how to absorb the feedback from the beneficiaries.

1. Psychological implications in design

Design has 'something' to say. Communicating the message through design is about finding the idea that wants to support a specific concept or purpose. The idea or way of thinking twice about a problem is actually the starting point of the design by looking for ways to solve it. Under the idea of cause and effect², the designer emphasises the functioning of things in terms of the objects in the space, or the ergonomics of the space itself. This also includes the documentation of the materials used to make the objects and interior finishes. It is the designer who has to think logically, sorting out information in a systematic, step-by-step, infographic way, in order to make the beneficiaries understand the role of materials in the interior space.

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² Jamer Hunt. 2021. *Scaling models [Modele de scalare]*. Bucharest: Publica Publishing House, p. 17.

Beneficiaries' choices that weigh in the balance include: convenient or sustainable³, recycling or reuse, direct purchase of pre-designed objects from shops or custom design of objects. Customers make decisions based on a fusion of what their mind⁴ and body perceive.

On a psychological level, we can perceive an environment in distinct ways, through the prism of our emotional states. The way we think, the way we react, and the way our mind refers back to memories⁵ is a function of mood and can influence the way we analyse an interior design. The ambience of the interior space thus becomes evaluated in a subjective way. Objectivity in describing an environmental design occurs when the individual is not subject to strong emotions or states of tension. Selective⁶ memory is the accumulation of information that is considered interesting to the individual and the elimination of information that has no association with situations, people or things with which the individual has ever come into contact. Thus, in the case of the assessment of the ambiental design by the beneficiary of the design, both his current emotional state and his selective memory are called into question.

Psychologist Ader Robert talks about the 'mind of the body'⁷ or how 'emotions influence health', noting that emotions, mind and body are closely linked. Drawing an analogy between the ambiental state of a space and what psychologist Ader has said above, it becomes increasingly important to choose and organise objects and materials in the interior space in order to create an ambience that supports the smooth running of activities and at the same time exudes a state of comfort and well-being.

Ambiental design refers not only to the space itself that requires furnishing and finishing, but also to the mood that individuals experience when they enter the room, through the observation of shapes, materials, textures, colours, the way of lighting or even the olfactory and auditory sensors that complement the ambience. Sensory⁸ design brings together various elements, but interior designers place most emphasis on the combination of textures and shades in order to convey their idea in a concrete way. The material contrasts of the selection of colours and textures in sensory design must necessarily be chosen correctly for a qualitative design. Multisensory experience in design is the interaction between the recipient and the interior space or object itself. Based on the idea that "form follows function"⁹, in an interior space we find various pieces of furniture that are primarily intended to be functional, and by the way they are arranged in the horizontal plane, we can create the correct ergonomics of the space, and then the designer can focus on the purely aesthetic side.

The loading of the interior space with different objects of furniture or decoration, or by complex prints can sometimes lead to the idea of an untidy space, which affects the ambience because of the discomfort created, physically¹⁰ and mentally.

³ Jamer Hunt, *op. cit.*, p. 17.

⁴ *Ibidem*, p. 17.

⁵ Daniel Goleman. 2018. *Emotional Intelligence [Inteligența emoțională]*, 4th edition, revised. Bucharest: Curtea Veche Publishing, p. 458.

⁶ *Ibidem*, p. 458.

⁷ *Ibidem*, p. 271.

⁸ Silviu Teodor Stanciu. 2021. *Semiotic bridges between architecture and design [Punți semiotice între arhitectură și design]*. Iasi: Sedcom Libris Publishing House, pp. 77-87.

⁹ Alexandra S. Ghioc & Radu B. Carnariu. 2018. „Shifting the Romanian cultural Perspective through Design and Design Education to Address a Transformative Society”. *Beyond EYCH2018. What is the cultural horizon? Opening up perspectives to face ongoing transformations*. Congress Proceedings, p. 131. Brussels: ENCATC. Retrieved August, 2019, from https://www.sutermeister.ch/site/wp-content/uploads/2019/08/Sutermeister_Business-models_ENCATC_2018.pdf#page=127.

¹⁰ Monica Pop. 2013. *Semiotics of environmental space [Semiotica spațiului ambiental]*, Visual arts collection, no. 36. Iași: Performantica Publishing House, p. 8.

In the subject of ornamentation, we can also include the symbols that can be seen in the structure of fabrics, in flat or embossed patterns, in wallpaper or often in objects that are traditional. Symbols¹¹ have always influenced the interior space, as they are stylisations of things that provided protection or related parts of everyday life in the countryside. On the other hand, there are also symbols that go in a different, more shadowy direction, such as those rooted in Freemasonry. The inscription of the syllabuses and their placement in a certain way in the ambiental space give out subtle signals that lead to decipherment, seeking the depth of meaning.

The precise meaning of the ambiental space is given by the whole set of furniture objects and by the finishes on the walls and floor, selected according to the activities performed in that room, resulting in the ergonomics of the space taking into account the placement of objects and creating a flowing traffic route. Signposting of activities can also be achieved using signposting in the space, by marking out routes to be followed to indicate the stage of certain activities, with boards containing icons or names indicating the specific nature of the rooms. These are usually found in institutions or companies, where the space requires a demarcation between the activities of employees and customers.

The designer, depending on the formal or informal¹² spaces to be designed, subtracts information about social distance. Failure to observe the rules of social distance leads to psychological discomfort and affects the activity of individuals in the environmental space. It is important to know the activities and ranks of individuals working under the same roof, in the same room or in separate adjoining rooms. Traffic flow can only be planned when the designer knows and understands the phasing of the duties of employees in an institution, for example. They can also create a scheme whereby the handling or storage of files can be done in a logical and convenient way, to greatly reduce the amount of time spent on managing paperwork. Once again, the need for step-by-step, logical and systematic thinking is noted, to create a state of mental relaxation due to the fact that employees can be spared from the grinding thoughts of losing or forgetting where they put a file, for example. In other words, organising things in a room produces a sense of security and mental relaxation.

Also in the field of psychology, we find the anthropologist Edward Hall's subject, which provides a different vision of space, seen from two perspectives. Hall argues that space can be real or physical (the 'actual'¹³ one), or the 'affective'¹⁴ one which represents the inner or metaphysical one. In the latter case, the affective space, we can say that it also includes the subconscious notions of the individual that relate to the culture to which he belongs, and in this case the designer must inform himself on his culture and traditions, to extract information that will help him in shaping the concept of ambiental design, while creating sketches of ideas that will identify the activities carried out in that space. The design of the environment is also based on materials, textures and shades, which have psychological implications for the activities carried out in that space; certain shades can have a positive influence on the mood of individuals. Their subconscious should be able to identify specific items taken from their culture without being very visible. Subtlety, in design, implies an increased ability of the designer to simplify or stylise complex aesthetic information.

¹¹ To see: Loredana Gașpar. 2022. *Romanian symbols: decodings and interpretations [Simboluri românești: decodificări și interpretări]*. Iasi: Performantica Publishing House.

¹² Monica Pop, *op. cit.*, p. 10.

¹³ *Ibidem*, p. 7.

¹⁴ *Ibidem*.

In terms of public, urban design, or "ambiental¹⁵ art", it is built according to "integrated systems philosophies", which implies an interaction of subjects drawn from landscape, architecture and art.

The ways of thinking about a design are shaped when the designer observes the objective¹⁶ reality. Among the typologies¹⁷ of designers' thinking, we mention: Convergent thinking (when the most efficient solution to the problem in question is identified), Divergent thinking (involves a more detailed search for different ways to solve a problem), Intuitive thinking (based on pure instinct), Systemic thinking (is a step-by-step thinking to better understand the context and to create a mental security, which provides for a happy outcome of the project), and Critical thinking (represents objective thinking and involves a detailed analysis of the problems).

2. The resulting common denominator between the ideas of the beneficiaries and those of the designer

The scaffolding¹⁸, in psychology, is the totality of information and arguments that shape the conception, based on concrete examples. The idea of scaffolding, in the area of design, can come from several perspectives: the way of searching for information through "fine-tuning"¹⁹ (which means a collection of ideas from several people in order to reach a common denominator); ideation or observation of possibilities (occurs when "innovative ideas... become tangible and visible, we start a process of establishing a consensus on project directions"²⁰, on the principle that "the best way to get an idea is to get lots of ideas"²¹, as the American chemist Linus Paulig put it); prototyping and joint forecasting; observation of possibilities by creating conditions; recursion (contains permanent feedback²² to identify good ideas); and regeneration (also consists of the idea of feedback, taking into account the divergent needs of beneficiaries).

The designer must have an important social quality - empathy²³. By getting under the skin of the client, the designer can understand the perspective from which the client presents the subject and notice the client's wants and needs. The designer has to merge between a concrete thinking of the client's needs and a creative thinking²⁴. By putting himself in his client's shoes, he can better see where he can score when negotiations begin on the choice of the optimal furnishing solution, which of course also involves the financial side.

The cooperation or connection between designer and client is built on respect and seriousness on both sides. It is up to the designer to be conscientious, professional and persistent in completing the project by the project deadline set by both parties.

The timing²⁵ of the 'giving justice to each other' moments occurs as a result of a connection at a psychic level, which means that both recipients have similar thoughts or put

¹⁵ Monica Pop, *op. cit.*, pp. 23-24.

¹⁶ Tiberiu Pop. 2023. *Design withMind [Design cuMinte]*. Iasi: Palace of Culture Publishing House, p. 30.

¹⁷ *Ibidem*, p. 31.

¹⁸ I. Coteanu et al. 1975. *Explanatory dictionary of the Romanian language [Dicționarul explicativ al limbii române]*. Bucharest: Publishing House of the Academy of the Socialist Republic of Romania, p. 307.

¹⁹ Jamer Hunt, *op. cit.*, p. 173.

²⁰ *Ibidem*, p. 173.

²¹ *Ibidem*, p. 173.

²² *Ibidem*, pp. 174-176.

²³ Daniel Goleman, *op. cit.*, pp. 419-420.

²⁴ Tiberiu Pop, *op. cit.*, pp. 89, 74.

²⁵ Daniel Goleman, *op. cit.*, p. 430.

themselves in each other's shoes and give justice to each other, basically reaching a moment of empathy. Psychologists refer to synchronisation as a 'traffic light'²⁶ because the moment of synchronisation passes through three stages: the stage when it is red (the moment of calm, the stage before acting), the stage when the traffic light is yellow (this is the stage when the problem is observed, the aim of solving it is set for a happy ending, the best options are sought, taking into account the consequences), and when the traffic light turns green, the idea that seems most appropriate is expressed.

Prejudice versus acceptance and self-knowledge (of the beneficiary) can make the ideas that the beneficiary reverberates not the right ones about themselves, and this leads to a distorted understanding of their wants and needs, with the designer going after a distorted reality of things. The client's fear of showing himself, as a way of life, as pleasures or taboos, due to possible prejudices²⁷, means that the designer's study of the space's ambience is not, in the end, what the client actually wants. It is now clear that the designer needs to know a little of the mysteries of psychology, to be able to read between the lines.

The designer must be organised and have the ability to coordinate the teams with which he works. The IQ of the group²⁸ is given by the totality of the talents and capabilities of those involved in the project. Basically, each individual involved must be an expert in his or her niche, so that the project is ultimately qualitative and impactful. A designer, in the work team and in the interaction with the beneficiary must speak to the point, on concrete data, offer solutions even after negative feedback, be active when exchanging opinions, be empathetic but at the same time think of optimal solutions. These ideas are put forward by psychoanalyst Harry Lavinson²⁹ and point to the need to balance criticism and praise in communication between employee (the designer, in this case) and beneficiary.

Integrating the sense of melancholy into the ambiental design is the stage where the designer must find defining details that will convey as authentically as possible the historical period to which they wish to "teleport" us. Melancholy³⁰ in ambiental design does not necessarily have to characterise the whole space, but can represent a placement of a piece of furniture or a decorative object in a certain way or angle of the room, to emphasise the synergy or connection between past and present. Melancholy does not necessarily mean living in the past or rendering an outdated ambiental design, but can also emphasise more personal things, such as the memory of happy times, even in the recent past, in the life of the recipient.

Melancholy means emotion. Emotion, according to Freud, is part of the dynamics of the soul³¹ and is often activated in a state of unconsciousness. For example, the idea of associating things or objects with something we already knew beforehand can be called melancholy. For example, if a wall is decorated with clocks of various shapes and sizes, this decoration can create anxiety in a person who associates the clock with the time limit, but another person may experience a pleasant, familiar feeling, remembering hours spent with loved ones. The perspective of observing a situation or an interior design is often subjective, passing through the filter of the mind and soul of the person concerned.

²⁶ *Ibidem*, p. 431.

²⁷ *Ibidem*, pp. 256-257.

²⁸ *Ibidem*, pp. 261-263.

²⁹ *Ibidem*, pp. 252-254.

³⁰ *Ibidem*, pp. 130-131.

³¹ Daniel Goleman, *op. cit.*, pp. 107-108.

The criteria for interaction³² between designer and beneficiary are diverse and can be viewed from different perspectives. Whichever way we look at this interaction, it must be based on the ability to understand the client's needs and wishes. Interpersonal communication needs to be carried out in a way that is satisfying for both receivers, so that the designer can extract the necessary information to start the concept by designing aesthetic variants. Pieces of furniture and decorative objects must be appropriate³³ to the ambient space, selected or made according to specific cultural cues, according to technical details that are in line with the ergonomics of the person or persons, or of the space itself. At the same time, the economic side and a margin of guidance should be taken into account for the cost estimate.

Anticipating the dangers³⁴ or concerns that plague designers starts with satisfying ideas on a functional as well as aesthetic level. Concerns may include the inability of collaborators to make the custom design perfect, the inability of craftsmen to solve technical problems, which prolongs the duration of the project, or worries about accessing stock material requirements at the supplier. A material that is not fully available from the same factory or supplier can change the concept of the interior design in small or large ways.

The proposal for the setting of a space contains intentions³⁵ and goals, among which, the goal of arousing the interest of the beneficiary. The ways to incite to the detailed knowledge of the concept of the space's ambience are found in the ways we present the project, namely, with the help of the implemented technologies, through the most realistic renderings, through the presentation of samples for the different types of materials. All of this connects in creating the overall visual image, which helps the client to make the right decisions for them.

No two customers are alike. Each person is unique in their own way and may focus more on certain issues than others. Thus, the choice or design of furniture pieces must first and foremost meet the customer's needs. A designer has to deal with the diversity of people's typologies, leaving aside prejudices, and it is even necessary to make an effort to tolerate certain behaviours within the normal range.

The power of being able to put ourselves in the shoes of the character, the client, is an asset to be able to better enter into their mind and to highlight the main ideas to guide our design. This can be associated with empathy, but not so much, because this is cold, systematic thinking based on cause-and-effect analysis.

3. The feedback and constructive criticism for designers

Relevant customer design opinions arise from interaction with the object or space itself. The sensory experience³⁶, involving the sense of touch in particular, makes the recipients better understand the materiality of objects previously seen only in renderings, photographs or sketches, and the impact can be satisfying. After the visual impact, the client begins to discover the functionality of the space or object, and if this aspect has also been done correctly, we can say that the mission has been successfully accomplished.

Client feedback on the designer's proposed design is important in validating the designer's professionalism. If the feedback is negative, or contains less than satisfactory parts, it means that the right connection of ideas between the client and the designer has not been made.

³² Tiberiu Pop, *op. cit.*, p. 80.

³³ *Ibidem*, p. 81.

³⁴ Daniel Goleman, *op. cit.*, p. 123.

³⁵ Monica Pop, *op. cit.*, pp. 16-17.

³⁶ Tiberiu Pop, *op. cit.*, p. 77.

Criticism³⁷ of a project involves highlighting essential information established in the brief phase and inconsistency with the tangible end of the project. The feedback stage can even include reproach. This may contain arguments stemming from the designer's promises. For example, a designer may promise that the design of the rooms seen in the renderings will be accurate in reality, but in the course of the project he has come up with other ideas and shows of finishes, which the client has approved without asking for a further rendering. In this case, the client's expectations change and they may dislike the final design because it weighs down the renderings, which are often made to catch the eye, with the designers introducing more ambient lighting than what can be achieved in reality.

For both designers and future designers, the way of interacting with potential clients in the first discussions should be done following the brief and the questionnaire. The brief contains information on objectives, services provided, strategy or milestones on deliverables with deadlines and budget setting. It is imperative that the designer has a knowledge of the concepts involved in communicating and negotiating the details of the project.

In the event of positive feedback from the client, the designer may enter a trance or a state of realization of the exceptional results obtained from the design project. This trance is referred to as "a moment of peak emotional intelligence"³⁸ following professional performance. Experiencing this trance³⁹ makes the individual want to go beyond their peak more and more, meaning that the designer becomes more motivated to develop professionally, to feel the sense of appreciation once again.

With positive feedback comes optimism or the hope of completing the next project with at least the same success as the previous one. In the case of negative feedback received from clients, the designer should channel their energy with a state of positivity and optimism to distance themselves from the frustrations⁴⁰ they have built up and to be able to think clearly about the next steps to take in solving problems.

The overall views are the views of the collective. The collective may be made up of several people who have certain similarities and differences in tastes due to the environment in which they live or spend time at work, but taken from the collective in which they feel familiar, and put together with other people, in a certain context, they can articulate different ideas about the same subject, following a common goal. For example, students at a university have different jobs and belong to different social groups, but during their specialist classes in the design department they become a unitary mass or 'psychological crowd'⁴¹ (as Le Bon calls it) pursuing a common goal. Le Bon explains that an individual gives up the ideal of his or her Ego⁴² in favour of the collective soul in order to connect towards the solution of a concept (even design, for example).

4. Conclusions

A designer who can conceive a project that is functionally and aesthetically correct, but who also captures the information needed to shape the design concept, is the designer who has

³⁷ Daniel Goleman, *op. cit.*, pp. 247-248.

³⁸ *Ibidem*, p. 162.

³⁹ *Ibidem*.

⁴⁰ *Ibidem*, p. 158.

⁴¹ Sigmund Freud. 2024. *Collective psychology and the analysis of the self [Psihologia colectivă și analiza eului]*. Bucharest: Cartex Publishing House, p. 21.

⁴² *Ibidem*, pp. 92-93.

the ability to harmonize his rational intelligence⁴³ with his emotional intelligence.

The quality of a design project is based on the designer's ability to create a concept that satisfies the wishes and needs of the beneficiaries. In today's competitive design economy, the emphasis is on innovation and creativity, both in terms of the technologies involved and in the finishing materials or carefully chosen objects that complete the environmental space.

Human-centred⁴⁴ and object-centred design are the two ways of looking at an idea that design is heading towards. If we associate these concepts of Tim Brown with the way we think about the ambience of a room, we can see that a room can be organised around a single decorative object or starting from a piece of furniture. At the same time, the same space can be reconfigured according to the needs of the client. At the same time, these two notions can coexist in the way the ambiental design concept is created.

The development of an interior design project, in continuous connection with the final aim - to create a space that simulates the mentality, character and way of being of the client (if we are talking about an individual home) or to simulate the creed of a company (motto and concept), must have as its direct aim the reflection of all the information established in the brief, for a correct understanding of the message conveyed by the design.

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• Electronic source – article based on a print source

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⁴³ Daniel Goleman, *op. cit.*, p. 71.

⁴⁴ Tiberiu Pop, *op. cit.*, p. 125.