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Interpretive Conflict in Industrial Product Design: Perception Challenges in LG Electronics 2021-2022

Alaa Ismael Gumar[1], Nabil T. Ismael[2*]

[1] Department of Art Education, College of Fine Arts, University of Diyala, Baqubah 32001, Iraq
[2] Department of Architecture, College of Engineering, University of Diyala, Baqubah 32001, Iraq

Corresponding Author Email: nabiltaha2001@uodiyala.edu.iq

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ABSTRACT

The research discussed the issue of interpretive conflict for the industrial product as a concept, and it was referred to in the scope of realizing the design form. The section on interpretive conflict included a review of the literature on the subject and a set of philosophical constants related to the concept of interpretation and its cases, interpretation and communication through which knowledge, values, attitudes and skills are transferred between two parties. or more in order to influence one on the other, and to realize the design form, so that the form bears its expressive symbols in the design and announces its styles and methods through those blocks and spaces that it treats in a way that attracts attention and calls for comfort, admiration and luxury at times, and bridging the relationship between interpretation and perception, especially in the design form. The product, which is a dialogue between the responsible recipient on the one hand, and the design form of the product on the other. As for the aim of the research, it included the disclosure of the intellectual institutions affecting the interpretational conflict, which leads to changes in the perception of the design form of the industrial product, and the understanding of its concept. The limits of this study included the electrical and electronic equipment products of the company (LG) manufactured in the years 2021-2022 AD. The third chapter included the research procedures, describing the sample model and analyzing it. This was done by discussing an industrial product that is characterized by diagnosing the topics mentioned above in a way that extracted the conclusions on which it was based and in a way that achieves the intended goal of the research and according to the available academic methods. The study included the results and conclusions reached by the researcher, and the most important of these results were: 1- The apparent formal variables that were expressed by the mechanism of symbols and signals are achieved in the latent functional system with the suitability of use that was built on several stylistic and technical data, to show the sample model with a relative interpretation in the suitability and formal clarity with the user. 2- The product expresses its apparent function for the clarity of the contexts and functional dimensions in its appearance, taking into account the cognitive and perceptual abilities of the users so that the apparent indications express the levels of performance, as the user's sense of the apparent functional values stems from the ability of the products to match those levels with the basic requirements of the user's needs, and to support them with the performance idea that the user hopes for from them.

1. INTRODUCTION

Conflict: disagreement and quarrels, it is said: the people quarreled, that is: they quarreled and disagreed. It comes in the sense of attraction and jostling. And the dispute in the litigation: Attracting the arguments and defending them between the two opponents. And its origin is from the removal, which is: pulling and pulling, it is said: to remove the thing from its place: if he pulls it out and pulls it. And its opposite: harmony and union, and among the meanings of conflict also: acceleration, racing, quarrels, and dealing [1].

Interpretative conflict: It is the understanding that carries latent meanings, which the interpreter seeks, and which needs to operate the human insides with its spiritual dimension, in a way that contributes to activating his sensory side, which overlaps with the cognitive side, as it is part of the experience, and it transcends the axiom of appearances to an intellectual process that has the same meaning. A dialectical approach in interacting with its topics, and it has no fixed criteria or axioms, other than responding to a specific topic.

Perception: A psychological process based on the awareness of external things, their attributes, and their relationships, and what is directly related to sensory processes [2].

It is defined as: "the process through which the individual interprets the sensory stimuli, as the sensory processes record

the environmental stimuli and formulate them in forms that can be understood [3].

The process of producing and generating shapes in design has introduced mathematics and information technology together to generate new shapes. This trend has created new tool trends for design. These tools have changed the nature of mathematical perception towards shape in design [4].

Industrial Design: It is the outcome and set of operations accomplished by the designer and through which he influences his environment in order to shape, formulate and adapt it, in order for that formulation to come out in forms that meet the basic human needs in life [5].

Industrial Product: Everything materially manufactured by man, such as devices, applications, services, and furniture, that combines audible, video, and moving design stimuli that can be employed, and achieves the utilitarian and aesthetic purpose.

Here, in this study, the researcher attempts to uncover that interpretive conflict by understanding the foundations and systems of interpretation mechanisms by revealing the formal design structure of the industrial product, and revealing the influences in that process, all the way to the essence of the subject, to determine the research problem represented by the following question: What is the role of interpretive conflict in perception? The design form of the industrial product?

2. RESEARCH IMPORTANCE AND LIMITS

2.1 Research importance

- Contribute to educating the intellectual and practical side of workers in the field of industrial design.
- Compensating the lack of specialized studies that deal with the applications of the concepts of interpretive conflict in the perception of design form.

The research objective is to uncover the intellectual institutions that influence the interpretive conflict, which leads to changes in the perception of the design form of the industrial product, and the understanding of its concept.

2.2 Research limits

The research is determined by the following:

- Objective Limit: The research is determined by studying the interpretational conflict in understanding the design form of the industrial product.
- Spatial limitation: The products manufactured by (LG) that are compatible with the research objective.
- The time limit: The industrial products of (LG) manufactured in the year 2021-2022 AD, because the designs of this period represent changes in form and function as well as the tremendous technical development, and in various scientific and intellectual fields.

3. LITERATURE REVIEW

3.1 The concept of interpretation

Interpretation has extended roots with the beginning of the formation of human consciousness, where it was one of its pillars, being based on understanding, with what it achieves of tolerance and assumption, in accordance with the nature of understanding, which seeks to reveal the feature of relationships, and to exclude and delete what it encounters in the process of comprehending its surroundings, leading to the logical. Dealing with his reality, with what is familiar, and what is unfamiliar, so some of the vocabulary of his surroundings is transformed by experiment and proof into facts and Sunnah [6].

The subject of interpretation receives a specific acceptance, for interpretation is the work of thought that consists of deciphering the hidden meaning in the apparent meaning, and is based on spreading the levels of meaning embedded in the literal meaning, i.e., the interpretation of the hidden meanings. A multiple meaning, because the multiplicity of meaning becomes evident in the interpretation, and this double definition of the semantic field on the part of the symbol and on the part of the interpretation results in a certain number of tasks.

As the symbol is generally based on a mutual interaction between showing the meaning and hiding it, the Industrial Design idea of hiding or not showing metaphorically means that the industrial product differs in terms of appearance from what the designer intended in terms of performance, despite the ability of the designer to show the design form of the industrial product in a clear way that indicates directly on the performance function, but it will appear as a traditional product that does not attract the recipient, and thus the interpretation factor is ineffective or weak [7]. Therefore, the design process depends on technical data and the exploitation of available elements in order to implement the idea produced by his imagination and to create and innovate products that are apparent in their design characteristics, in addition to the necessity for the idea to be unique and new and not imitated, carrying within it the qualities and creativity of its designer through interest in “the first nucleus of the idea and studying the form, structure, assembly methods and the extent of its compatibility with its function [8].

The perceived external form, which represents the language of communication with the recipient within the design visual discourse, has in itself a phenomenological system and an objective system. An apparent meaning and another meaningful meaning that can be interpreted in the formal form of the chair’s design (Figure 1).

Figure 1. Two chairs made of wood
Source: https://design-milk.com/series-geometric-furniture-objects.

In order to search for the roots of all the forms of interpretation that have been practiced and are currently being practiced on Industrial Design forms, he stops at two cases in

which the two finest forms known to interpretation in terms of profitability, depth and circulation:

(1) A first case in which interpretation is governed by its references, boundaries, laws, and self-regulations. Interpretation, according to this formulation, is formed from a series that may appear through the apparent logic of references to be endless. Each sign refers to another sign according to the continuum principle that governs the human universe. The infinite is at the same time what stands as a barrier to interpretation and subjects it to compulsions that include it within a finite universe, as long as the universe requires, in order to realize a detailed through which it represents as private entities (there are no absolute entities according to Burris' expression). These barriers and borders reduce the size of the semiosis and impose specific ends on it, and we are not here, according to this perception, in front of suppressing or curbing an unstoppable semantic force, but rather we are facing an action that grows and reveals itself within the specific contexts (it is not related to an end, but to a detail signified by another). The conclusion is that interpretation is not an absolute act, but rather a drawing of a map that is controlled by the assumptions of reading, which are hypotheses that fall out of the data of the design form, interpretive paths that the recipient self-reassures.

(2) A second case in which interpretation enters into labyrinths that are not governed by any goal, as the design form is a fabric of references intertwined with each other without control or oversight, and is not limited by anything. Continuous, not contained by commas and boundaries. Interpretation, from this angle, does not aim to reach a specific goal. Its only goal is the referrals themselves. The whole pleasure is that the design form does not stop at referrals and does not end at a specific indication. The existence of any bank capable of absorbing the remnants of this series of interpretations. The search for an interpretive depth that constitutes a total unit to which all formal indications end will remain a beautiful dream for which the adventure of interpretation will continue, even if reaching this unity is impossible [9].

Within the framework of philosophy, history, and politics, we can include the first explanatory model, and we can also include the second model.

The finite is the one that rests on a specific state, is defined by limits, and ends at an end. The emergence and advancement of civilization was based on this idea of boundaries. The limited in time and space determines the nature and size of possession, just as tranquility is determined by settling on a specific signified. And on this perception was based the idea of finite interpretation, that is, an interpretation governed by a specific goal. Interpretation is an adventure and referrals that are governed by a starting point and heading towards a specific end. Interpretation cannot lead to all possible meanings because this violates the principles of rational thinking. The idea of logical coercion leads to the inclusion of semantic ends in interpretation, and at the same time it excludes others. As for the infinity of the interpretation, it will only lead to the destruction of the principles on which western rationalism was based (the principle of identity) and the principle of non-contradiction (the principle of the raised third). For the interpretation to be infinite means that all ideas are correct even if they conflict with each other, and all referrals are possible even if they lead to the production of absurd meanings, and this is something that contradicts the founding principles of Western rationality and may lead to its destruction [10].

3.2 Interpretation and communication

There is no communication through signs without the presence of intentionality behind the act of communication, and without the presence of creativity, or at least without the presence of a synthesis of signs. This matter is a reality, so why then do we reject the interpretant in semiotics and replace it with the sign of the interpreter, which in the end can only be interpreted by humans? There is no problem here unless we confuse the semiotics of communication with semiotic communication, as semiotics is the science of signs and is not the science of people who communicate through signs [11].

It is everything that is said, read, and done in terms of movements, actions, or gestures, as well as all actions that express non-cooperation, contentment, anger, and aversion. Communication is the process or method through which knowledge, values, attitudes, and skills are transferred between two or more parties in order to influence one another and bring about desired changes in the behavior of the other party. Communication has recently become one of the areas that has become of utmost importance due to its sweeping through all aspects of human life through spoken languages, gestures, movements, rituals, customs, symbols, images, and other renewable forms. Thus, today it constitutes the philosophy of modern sciences, which is the position that philosophy occupied in the past as the mother of sciences.

Communication, in this sense, has become the basic framework for modern sciences, especially with the developments known by these sciences, through the technological revolution and scientific breakthroughs in various sciences, until we truly live in a small village where distances disappear, distances disappear, time shrinks, and man, in turn, is integrated into endless communication and communication circles. Thanks to the Internet and satellites that invaded the wide space.

Hence, the human role is defined as a communicative role par excellence in terms of its association with a pattern of intertwined and complex relationships that were produced by the variables of the living reality with all its new transformations.

As communication is considered a basic procedural technique in understanding human interactions, interpreting texts, experiences, and all methods of communication and transmission, and therefore it can be asserted by saying that communication has become a self-contained science that has its own techniques, components, methods, and specific forms for it. The communicative value resulting from the innovative process provides an opportunity for the designer to belong to the new idea achieved with its human measurements and subject to the same conditions of the human experience. The contemporary form that performs the fun of its time often raises its ability to communicate between societies and peoples. Industrial design is a universal language capable of communicating with everyone, and it is the same one that meets the needs of societies in different parts of the world. The language of the product form in the design carries a high communicative value, especially if it is associated with the innovative idea in the design.

As the design achievement communicates with the old technical links, adding something new to it every day that makes its performance better, more useful, and easier and safer to use. It is certain that the new contemporary images in the design will turn the page on the old image of the design that achieved the pleasure of its era at the time, but rather its

performance was the best within its objective conditions. That is, design in its communication is in its largest part cumulative, adding new values with each new creativity process, and it is no more experimental than the emotional look [12].

Cognitive communication is the one that aims to transmit and receive information, and it is communication that focuses on the cognitive aspects and their advancement, or in other words, it focuses on productivity and profitability. This communication aims to transfer expertise and experiences to the recipient and teach him the methods of installation, application, understanding, analysis and evaluation in general. It aims to provide the recipient with meaningful knowledge and information.

Hence, this communication is based on the exchange of opinions and the transfer of knowledge and experiences of predecessors to successors. Thus, cognitive communication cannot be isolated from emotional communication except as a matter of methodology. There are classes that are represented by Bloom pedagogy in the field of cognitive communication, such as Bloom's class. The following levels:

- Knowledge
- Comprehension
- APP
- Analysis
- Installation
- Evaluation

As for communication tools, Lotman identifies two types of tools that achieve communication according to the pattern of relationships between the signifier and the signified, namely:

(1) Tools that achieve communication thanks to units, the sign between the signifier and the signified in it is internal, and what is meant is units that include at least a small percentage of the resemblance between the signifying form and its meaning, such as the silhouette of a bicycle that indicates a bicycle and the drawing of a crossed spoon and fork that indicates a restaurant etc.

(2) Units that achieve continuity thanks to units whose relationship between the signifier and the signified is apparent, meaning that its constituent units are of the type in which there is no semi-natural connection between their form and meaning, such as the traffic system and the sign of the green cross of pharmacies [13]. The idea is considered the basis of creativity for products that appear with their unique characteristics that affect their aesthetic value and their difference from existing products that belong to the same function. The idea is the imagination of a form consisting of a combination of seemingly different elements in one harmonious whole. The design idea is the basic seed and the idea on which the design achievement is built. It is what makes the achievement a distinctive art on which the idea revolves and makes it different from other designs [14]. Studies related to the concept of the phenomenon in industrial product design are linked to fields that have become diverse and multiple to other aspects to include “aesthetic studies, qualitative values, and values inherent in product design, such as expressive values and symbolic values that are inferred from interaction with it [15]. Industrial products of all kinds have witnessed and are witnessing many visual transformations driven by the methods of development and the effectiveness of designs, as they appeared through the transformation that the designer resorts to, and its basis is the quality of the containment and combination of elements and the difference in their qualities, as it contributes greatly to establishing formal or kinetic processors [16].

The multiplicity of methods and techniques results in a variety of means of communication and their interpretations. The development of new methods in design correlates with the evolution of new means of communication and interpretation for the recipient, provided that the recipient understands the forms of their symbols. If the recipient is unable to find a system that guarantees the transfer of their own experience, they must devise a new system for visual communication. At this point, the viewer engages with the design work, recognizing that there are many ways to perceive the world and various means to convey the essence of the designer’s experience to them [17].

3.3 Interpretation and perception of design form

As the shape often carries its expressive symbols in design and announces its styles and methods through those blocks and spaces that it treats in a way that attracts attention and invites comfort, admiration and luxury at times, it is an aesthetic and functional suit at the same time, and here the industrial designer, as is the case with all designers, does not seek communicating his artistic, aesthetic and creative experiences to others in order to reflect on them, as is the case in the arts, in which these values play their true role in human life and aspirations. Here, design goes beyond its role as a means of communication and expression of emotions to being a means of achieving benefit, benefit and circulation [18]. Modern industrial design continuously evolves, incorporating innovative techniques and distinctive features in product construction. These advancements have led to diverse patterns and forms that cater to sophisticated tastes. For example, Figure 2 illustrates an integrated design for smart multi-touch tables.

Figure 2. The design of a multi-touch smart table
Source: https://arabic.smartboarddisplay.com/sale-28920865-waterproof-multi-touch-screen-smart-coffee-table.

The apparent designs of industrial products represent a concept of an intellectual nature, the importance of which is embodied in reformulating the industrial product according to innovative artistic methods in form and function in line with prevailing ideas that ensure excitement and surprise through "innovative design treatments that make the product formally integrated and the aesthetic and functional system with contemporary dimensions [19].

Shape is an aesthetic and functional function that is linked

to the user's response and perception of what attracts his attention towards a design. The general shape is the determinant of the sensory and expressive value of the industrial product, especially its ability to clarify the functional goal and content of the product. There are elements of shape that work to form the product through their interconnection, intertwining, mixing, and harmony, their opposition, their attraction, which would express the content [20].

Perception is the step that follows sensation, as perception includes something of awareness and discrimination that cannot take place without sensation. With certain factors that control our perception of them and distinguish them from others that exist in the field surrounding us, and that we perceive the things that fall under our goodness as total units, even if we then try to scrutinize their details [21].

The meaning by its nature is related to self-realization, being an event and the result of an external state, which has its reference and its entry into interaction with the act of perception, since the meaning in its first form is related to the tangible existence, within the lived world, which represents the total meaning in its objective form that interacts with the self directly. The interpretation of the meaning is familiar to the self, as a traditional meaning, and the realization that it deals with the sensible becomes here the sensible becomes the basis of the meaning, with what it represents of things, as "the perceived thing is not given or presented to the perceived person, as an explicit and complete presence, but rather the perceptual experience is laden with elements of absence and presence." And that the distinctive contours of what is present and absent in experience change and overlap through perceptual activities [22].

Therefore, establishing the interpretation of meaning in the self depends on perception, which carries out the process of understanding meaning, through experience in its interaction with the tangible, and in several aspects, such as an apparent and clear meaning, and an inner meaning related to essence and essence, and this means that the thing or subject can have more than one meaning according to the formula. It is represented to us and the way it is formed as a perceivable thing in accordance with the reference to the inner meaning.

The interpretation of the shape and the symbols it bears is an important task through which the designer seeks to put his mark on his industrial products, and it is important for the designer to link his imagination and his memory in designing a product that has a perceived form and content, because the subject is a coordinator that combines the image of memory and the image of imagination and does not appear as it was. Indeed, it is formed within a multi-formation and overlay fabric, which gives the design flexibility in the context of which the usual system of design relations changes [23].

Therefore, we find the justifications for interpretation with the multiplicity of meanings and the presence of perception and understanding, and the meaning by its nature performs effectively according to its value. Knowledge is outside the scope of individual experience. In an abstract form, the normal perception strategy does not agree with what surrounds it, what lies in it of signs or revelations, and awareness is what achieves compatibility or compatibility in understanding the inner meaning, and since the meaning is subject to the conflict of interpretation, which is a reason for it, it is subject to intentionality.

Meaning inherently requires a tangible mediator in design to denote and even determine its interpretive power. This mediator is subject to mechanisms that translate meaning into an inherent value, guided by the strategy of the design work or manifest in a form perceptible to the senses. This process influences and is influenced by the form, which encapsulates nature in a profound way, presenting it as a framework for our living world. "Since matter never exists in isolation but always assumes some form, the tangible elements of a design are always organized, even if the form lacks clarity or regularity" [24].

This organization provides a formula through which the design refers to its intended meaning. Form, by its nature, embodies the sublime and tangible, challenging sensory perception with its elements that evoke sensory arousal. This interaction fosters a perception that leads to meaning, thereby creating a coordination formula that interprets and signifies meaning [25].

The formal structure in its entirety that forms the design frameworks remains linked to external pressures, as Professor (Madani Salih) indicates that the forces are the forces of history, the forces of the soul, the forces of thought, the forces of magic, the forces of religion, etc., and they are responsible for bringing about the act of change as things remain hostage Constancy, stability, and iterative representation, but if it is subjected to pressure forces, it is transformed and transformed in its path in a specific direction, in a way that serves its functions, and this applies completely to the design work [26].

Bridging the relationship between interpretation and perception, especially in the design form of the industrial product, is a dialogue between the responsible recipient on the one hand, and the design form of the product on the other hand, as Sartre mentioned (things are phenomena that are perceived by someone who perceives them, but he is keen, at the same time, to alert these phenomena by which we perceive things, or things that are relevant to our perception in phenomena that have in themselves an existence independent of perception, which is the basis of the perception process [27]. Therefore, modern designs have lost, in most cases, some of their identity, as privacy and subjectivity have vanished, and the features and manifestations of the design values specific to each place and time have melted away, which has led to searching in history to find character as a type of solution, relying on the latest theories in the world, which research the science of design phenomena [28]. This is done by investing the energies of the original models and shapes, translating them, and integrating them with the developments of the present and its means, as in Then, a product can be produced that combines the principles of modern products and their technologies, and the historical structure of design forms to achieve communicative industrial products that express human thought, past, present, and future.

Interpretation participates with perception in analyzing the design form, revealing its components, goals, and objectives, and promoting it to the recipient. The interpreter must understand that the design form consists of codes used by the designer within an integrated structure. Consequently, perception is crucial for associating partial relationships with the holistic nature of what the interpreter undertakes in this synthetic process [29].

The value and quality of the visual response to the structure of the design form depends on our ability to perceive, interpret and give judgment on the importance of that design form and its visual components that enrich the recipient and make him feel compatible and attracted to its components, filled with energy of high sense in understanding the design form of the product and responding to it. It should be noted here that the interpretation process is linked to the perception process

through the design elements and the nature of the relationship between them in the formation of the product. Therefore, the function of interpretation lies in dealing with the formal and sensory values of the industrial product and the response and tasting that elicits from the perception process. Here, interpretation is the process of finding the comprehensive meaning of the visual design form that was described and analyzed by the interpreted recipient [30].

The interpreter shows and reveals the power of the process of perception in interpretation. It is the main entrance to defining the act of interpretation, and on this basis the interpreter can be dealt with because it constitutes a first anchoring point for meaning.

Here the high ability of the interpreter, who sometimes works in a dual capacity as a designer and a recipient at the same time in interpretation, is evident, through realizing the relationship between the appearance of the design form and its interior. Here, the quality of the relationship between the recipient and the design form is determined by the self's awareness of itself, and its awareness of the design form that it receives. The perceived self is on the one hand, and the perceived form is on the other side, as the interaction between them takes place according to the general perceptions prevailing in contemporary culture.

Interpretation, within its relationship to realizing the design form, is linked to the mental ability of the responsible recipient, as well as the conceptual and semantic ability of the designer in employing signs and symbols within the design form of the industrial product. As the shape plays the role of the important icon in the processes of interpretation and perception, as the shape indicates a kind of agreement in meaning by focusing on the event, which refers the interpreter to make the meaning of the conflict between two things into one similar meaning in a specific case that the design shape aims for.

The general aesthetic experience in design makes designers stop at the stage of sensory perception, believing that this type of perception is sufficient to reach true knowledge, as long as the recipient receives all the emotions expressed by the designer in his design experience through this activity of perception [29].

But the art of design and designers cannot stop at the perceptual experience, because it is not able to express the real knowledge in it, as it must be reached to the highest levels of abstraction that reveal the real knowledge in the world, and thus be more able to explain the phenomena that lead to values. Functional, utilitarian and performance. That is, the designer here must take note of two basic reasons for knowledge:

The first, knowing the perceptual experience as a sensory-aesthetic design knowledge, based on the language of the design form that is explained by proportionality and correct aesthetic relationships.

The second, knowledge of abstraction as logical, scientific knowledge that relies on demonstrative evidence to prove objective facts. Perceiving the design form in its style and aesthetics is not sufficient as a reality for its function without the user examining it, just as the design of industrial products does not derive its performance value from its aesthetic value, but rather from the practical reality in its operation, functional performance, specific achievement, as well as other designs [31].

There is no doubt that when we discuss and interpret the design work, we will come up with those symbols used to interpretations and indications that extrapolate the contents of those works, because originally selected by the designer, it was as an expression of real emotion embodied by the designer's honest capabilities in selecting expressive symbols, and that this will lead us to that in the design work Real language, even if many of the vocabulary of that language exceed verbal language in expression, and the existence of this language means that these works can be read with minimal expression, but any interpretation is certainly the interpretation of the recipient in the light of his experience, discourse, and artistic and aesthetic taste. Therefore, many design experiments are not popular outside their real environment, and the difference in the environment, values, habits and language makes it difficult to re-read the design work in the same language that was read in its environment. And that we do not read any architecture in the world that is not true, no matter how different its model is, just as we do not read any industrial design such as an airplane or any device that is not true, no matter how different its design, model and model are [32].

3.4 Indicators

We explain the above as follows:

(1) The symbol is based on a mutual interaction between showing the meaning and hiding it. The design idea of hiding or not showing means figuratively that the industrial product differs in terms of appearance from what the designer intended in terms of performance, despite the ability of the designer to show the design form of the industrial product in a clear way that indicates the performative function is direct, but it will appear as a traditional product that does not attract the recipient, and thus the interpretation factor is ineffective or weak.

(2) The perceptions that we perceive are affected by certain factors that control our perception of them and distinguish them from others that exist in the field surrounding us, and that we perceive the things that fall under our goodness as total units, although after that we try to scrutinize their details.

(3) The perceived thing is not given or presented to the perceived person, as an explicit and complete presence, but rather that the perceptual experience is laden with elements of absence and presence, and that the distinctive lines of what is present and absent in the experience, change and overlap through perceptual activities.

(4) The value and quality of the visual response to the structure of the design form depends on our ability to perceive, interpret and give judgment on the importance of that design form and the visual components it possesses that enrich the recipient and make him feel compatible and attracted to its components, filled with energy of high feeling in understanding the design form of the product and responding to it.

(5) The function of interpretation lies in dealing with the formal and sensory values of the industrial product and the response and tasting that elicits from the perception process. Therefore, interpretation is the process of finding the comprehensive meaning of the visual design form described and analyzed by the interpreted recipient.

(6) Levels of acceptance are achieved in the industrial product through its ability to adapt to changing requirements based on the user's acceptance of making modifications to it, by adding elements to it or merging and organizing elements, to reach an acceptable design.

(7) The design forms that play the role of semantic

expression at some point in time may turn into intended functional expressions set by the designer, or into inferences, or they may change, and these changes may be secondary or essential as active forces. Environmental influences and physical and biological factors through which shape perception can be achieved.

4. RESEARCH METHODOLOGY

4.1 Methodology

The current research took the descriptive approach in analyzing the sample, as it is "the objective scientific method that expresses one of the methodological research methods".

Research Society: Society The research community included industrial products with performance and formal characteristics that are compatible with the subject and objective of the study for the period from 2021-2022 AD, and the company (LG) was approved, and that company was chosen for several reasons, including:

(1) The difference in the design of the products of that company.
(2) They are very popular.
(3) Variation in prices.
(4) The products of that company are appropriate to the subject and purpose of the research.

4.2 Research sample

The researcher chose an intentional sample for the purpose of fulfilling the research requirements according to the best image from the original research community and according to what was included in the analysis axes, so the research sample was compatible with those axes.

5. DISCUSSION AND ANALYSIS

For the purpose of seeing the previous research proposals in their realistic design context, the following axes can be applied in analyzing the model chosen (Figure 3), which serve the intended research objective:

- The type of interpretation used in the design system for an industrial product.
- The level of awareness of the design form of the industrial product.

Figure 3. Cord zero A9Kompressor

5.1 The type of interpretation used in the design system for an industrial product

The design system of the smart vacuum cleaner carried its expressive symbols in the design and announced its styles and methods through those masses and spaces that were treated in a way that attracts the eye and calls for comfort, admiration and luxury, by employing a 5-step filter system to capture 99.97% of dust particles with a size of up to 0.3 microns of household surfaces. With four-stage extension, the telescopic tube allows users to adjust the length to their preferred height for comfort of use. The use of compressor technology in the vacuum system also saves time by compressing the dust and lint collected inside the basket. As you will not need to clean the container often, compresses dust and lint (up to 2.4 times the uncompressed capacity). The compressor lever is simply pushed open with the door to clean the contents when it is time to empty. The smart inverter motor also features a brushless design with minimal mechanical friction during operation, improving the durability of the motor. In addition, it is possible to clean and charge at the same time thanks to the two interchangeable batteries. Battery features up to 120 minutes runtime. Accordingly, we see a claim that is not devoid of aesthetic and functional interpretation at the same time, and here the industrial designer, as is the case with all designers, does not seek to communicate his artistic, aesthetic and creative experiences to others in order to contemplate them, as is the case in the arts, where these values play their real role in human life and aspirations. Here, design goes beyond its role as a means of communication and expression of emotions to being a means of achieving interpretation, benefit, and circulation.

The multiplicity of methods and the multiplicity of techniques in the design system of the smart broom is, as a result, a multiplicity of means of communication and their interpretation, as devising new methods in the design is devising new means of communication and interpretation to the recipient, provided that he realizes the forms of their symbols. What he wants to say about his design experience that he wants to communicate, and if he is unable to find the system that guarantees the transmission of his own experience, he must devise a new system for visual delivery, at which point the user accepts the design work knowing that there are many ways to look at this world and that there are different means to communicate summary of the designer's experience.

5.2 The level of awareness of the design form of the industrial product

Meaning inherently requires a tangible mediator in design to signify and even define its explanatory power. This mediator is subjected to mechanisms that translate the design's meaning into an intrinsic value, as dictated by the strategy of the design work or its visual presentation for sensory perception. All of this is influenced by the form, since material never exists independently but always assumes a form. The perceptible elements of the design are always organized in some manner, even if the form lacks clarity or regularity [32].

This organization provides a framework that defines what it refers to, according to the intended meaning's mechanism and strategy. By nature, form represents both the subtle and the tangible, challenging sensory perception with its elements that here incites sensory excitement. This interaction builds a perception that leads to meaning, culminating in a

coordination formula that interprets and signifies meaning. The perceptions that we perceive are affected by certain factors that control our perception of them and distinguish them from others that exist in the field surrounding us, and that we perceive the things that fall under our sense as comprehensive units, even if after that we try to scrutinize their details.

The meaning by its nature is related to self-realization, being an event and the result of an external state, which has its reference and its entry into interaction with the act of perception, since the meaning in its first form is related to the tangible existence, within the lived world, which represents the total meaning in its objective form that interacts with the self directly, and thus becomes Interpretation of the meaning is familiar to the self, as a traditional meaning, and the perception as it deals with the sensible becomes here the sensible becomes the basis of the meaning, with what it represents of things, as the perceived thing is not given or presented to the perceived person, as an explicit and complete presence, but rather the perceptual experience is laden with the elements of absence and presence. The distinct lines of what is present and absent in experience change and overlap across perceptual activities. as in the form of (Figure 4).

Figure 4. Bio-robot refrigerator
Source: https://www.yankodesign.com/2010/06/21/bio-robot-refrigerator/.

Bridging the relationship between interpretation and perception, especially in the design form of the vacuum cleaner (Figure 4), is a dialogue between the responsible receiver on the one hand, and the design form of the broom on the other hand, as Sartre mentioned (things are phenomena that are perceived with respect to a person who perceives them, but he is keen, at the same time, to alert these phenomena by which we perceive things, or the things that come to our perception in phenomena that have in themselves an existence independent of perception, which is the basis of the perception process.

The value and quality of the visual response to the structure of the design form depends on our ability to perceive, interpret and give judgment on the importance of that design form and its visual components that enrich the recipient and make him feel compatible and attracted to its components, filled with energy of high sense in understanding the design form of the product and responding to it. It should be noted here that the interpretation process is linked to the perception process through the design elements and the nature of the relationship between them in the formation of the vacuum cleaner. Therefore, the function of interpretation lies in dealing with the formal and sensory values of the vacuum cleaner and the response and taste that it evokes arising from the perception process. Here, interpretation is the process of finding the comprehensive meaning of the visual design form that was described and analyzed by the interpreted recipient.

Interpretation, within its relationship to realizing the design form of the vacuum cleaner, is related to the mental ability of the responsible recipient, as well as the conceptual and semantic ability of the designer in employing signs and symbols within the design form of the vacuum cleaner as in the form of Figure 5. The shape plays the role of an important icon in the processes of interpretation and perception, as the shape indicates a kind of agreement in meaning by focusing on the event, which leads the interpreter to make the meaning of the conflict between two things into one similar meaning in a specific case that the design of the broom aims for.

Figure 5. Cord zero A9Kompressor cordless hand vacuum cleaner
Source: https://www.lg.com/ae_ar/vacuum-cleaners/lg-a9k-core-uae.

6. CONCLUSIONS

(1) The apparent variables are related to the cognitive processes of the product's identity, which are determined by conveying and communicating clear information about the apparent product in a symbolic and aesthetic way.

(2) The impact and formation of the relationship between the design systems of the models and the recipient are achieved at two levels. The first is inferred from the appearance or what is called the external meaning, while the other is achieved by crossing to a deeper level by means of signals and indications, which is what is called the internal meaning.

(3) The effectiveness of the apparent variables is focused on choosing new design elements and changing the overall product systems and existing processors through creating a new formal system and relationships to form a design that serves the functional and aesthetic purpose.

(4) The apparent formal variables that were expressed by the symbols and signs mechanism in the latent functional system are achieved with the suitability of use that was built on several stylistic and technical data, to show the sample model with a relative interpretation in the suitability and formal clarity with the user

(5) The diversity in the use of modern technologies that take into account the adoption of the multi-functional mechanism leads to changes in the perception of the design form and its concept.

(6) The product expresses its apparent function due to the clarity of the functional contexts and dimensions in its appearance, by taking into account the cognitive and perceptual capabilities of the users so that the apparent indications express the levels of performance, and the user's sense of the apparent functional values stems from the ability of the products to conform to those levels with the basic requirements of the user's needs and attributing it to the performance idea that the user desires from it.

(7) The art of design establishes theoretical and practical dimensions to achieve the maximum effectiveness of an action.

(8) Formal-design perception, by operating its mechanisms on the process of linking the message of presentation to this act mainly and by employing the available scientific technology and communication service, in a way that highlights the common cognitive functional dimension between the two units of science, art and thought in general.

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REFERENCES

[1] Humaidan, Z. (2006). The Comprehensive Dictionary of Fundamentalist Definitions. Dar Al-Resala Publishing. https://kotobshop.com/Details?id=2829.

[2] Aqel, F. (2004). Dictionary of Psychological Sciences. Dar Al-Kutub Al-Alamia for Publishing and Distribution. https://www.neelwafurat.com/itempage.aspx?id=egb44455-5044476&search=books.

[3] Wittig, A. (2016). Summaries of Shum: Theories and Problems in Introduction to Psychology. International House for Cultural Investments, Cairo. https://koha.birzeit.edu/cgi-bin/koha/opac-detail.pl?biblionumber=115002.

[4] Alqaisi, A.K. (2019). Applications of interior space design according to shape generation systems. Al-Academy, 94: 5-22.

[5] Abdullah, I.H. (2008). The Art of Design in Philosophy: Theory and Application. Department of Culture and Information, Sharjah, UAE. https://library.pass.ps/book-12121-ar.html.

[6] Harakoti, S., Shanaf, S. (2024). A criticism of open interpretation of Mustafa Nassif. Text Magazine. https://asjp.cerist.dz/en/downArticle/572/10/2/239766.

[7] Ishikawa, H. (2024). Interpretation. In: Hypothesis Generation and Interpretation: Studies in Big Data. https://doi.org/10.1007/978-3-031-43540-9_8

[8] Alali, A.A.M. (2006). Production And Operations Management - Quantitative Introduction. Wael Printing and Publishing House. https://www.noor-book.com/book/review/590997.

[9] Eco, U. (2004). Interpretation Between Semiotics and Deconstruction. Arab Cultural Centre, Casablanca.

[10] Hamza, S.M. (2022). The cognitive stages of memory in the architectural product: Comparison of mental and spiritual knowledge in the products of architecture students. Journal of Engineering Science and Technology, 17(4): 2936-2957.

[11] Behera, P. (2024). A framework of semiotics theory to understand the signs and their meaning in society. International Journal of Arts Architecture & Design, 2(1): 77-83. https://doi.org/10.62030/2024JanuaryArticle6

[12] Sharjah: Department of Culture and Information. https://altibrah.ae/publisher/72, accessed on Oct. 18, 2024.

[13] Khader, A.A. (1989). Semiotic analysis of modern theatrical performance. MA thesis, College of Fine Arts, University of Baghdad, Iraq. https://www.uobabylon.edu.iq/publications/humanities_edition6/humanities_ed6_4.doc.

[14] Geraghty, L. (2014). Cult Collectors (1st ed.). Routledge. https://doi.org/10.4324/9780203130261

[15] Mahmood, S.N., Aluqaily, M. (2015). Pleasure and emotions and their role in the user's aesthetic experience. Journal of Al-Academy, 71: 165-184. https://doi.org/10.35560/jcofarts71/165-184

[16] Gumar, A.I. (2019). Quality in industrial product design and its impact on achieving competitive advantage. Al-Academy Journal, 94: 41-56. https://doi.org/10.35560/jcofarts94/41-56.

[17] Nobler, N. (1987). Dialogue of Vision. Philadelphia University Library. https://www.philadelphia.edu.jo/Library/700/700/Ar/75_700.pdf.

[18] Al-Shahri, A.H.B.D. (2004). Discourse strategies: A pragmatic linguistic approach. Edishen1. Beirut: United New Book House.

[19] Jaleel, M.Y., Baheel, J. (2022). Exoticism in contemporary industrial product design. Baltic Journal of Law & Politics, 15(3): 624-640. https://doi.org/10.2478/bjlp-2022-002046

[20] Tomljenović, Z., Tatalović Vorkapić, S. (2020). Constructivism in visual arts classes. Center for Educational Policy Studies Journal, 10(4): 13-32. https://doi.org/10.26529/cepsj.913

[21] Kılıç, A.G., Parsıl, Ü. (2023). Perspective of gestalt theory and art education. Journal of Pedagogy and Education Science, 3(1): 1-12. https://doi.org/10.56741/jpes.v3i01.445

[22] Abdullah, T. (2014). The philosophy of discursive communication: A study in the phenomenology of human communication. In Yarmouk Research: Humanities and Social Sciences Series, 10: 227-264. https://koha.birzeit.edu/cgi-bin/koha/opac-detail.pl?biblionumber=256516.

[23] Clara, C. (2022). The role of a shape-centred representations in the perception of complex shapes. Cognitive Neuropsychology, 39(1-2): 103-105. https://doi.org/10.1080/02643294.2022.2083948

[24] Montero, M.L., Ross, C.F. (2023). Physiology of Sensory Perception. In: Clark, S., Drake, M., Kaylegian, K. (eds) The Sensory Evaluation of Dairy Products, pp. 19-52. https://doi.org/10.1007/978-3-031-30019-6_3

[25] Bogaard, P.A. (2023). From a Philosophy of Evolution to a Philosophy of Organism. Process Studies, 52(2): 201-222. https://doi.org/10.5406/21543682.52.2.04

[26] Khader, N.O. (1997). Cognitive Origins of Reception Theory. Dar Al-Shorouk for Publishing and Distribution. https://shorok.com/1997101574

[27] Haddad, Z.S. (1993). Art Criticism: An Edited and Translated Book of Selected Researches in Art Criticism. Lebanon: Dar Al-Manahil.

[28] Supervisor, A.M.S. (2023). Semiotics in the Arab and

Western heritage. Journal of the Faculty of Arabic Language in Itay Al-Baroud, 36(1): 647-678. https://doi.org/10.21608/jlt.2023.289659

[29] Kassem, S. (2002). The Reader, the Text, the Mark and the Significance. The Supreme Council of Culture, Cairo, Egypt. https://library.alkafeel.net/dic/print/page-book/98473/?show.

[30] Wang, C., Kong, F. (2023). Perceptual and rational thinking in painting art. Highlights in Art and Design, 2(2): 11-13. https://doi.org/10.54097/hiaad.v2i2.6149

[31] Gadamer, H.G. (2019). The Manifestation of the Beautiful. Roya Publishing & Distribution. https://www.neelwafurat.com/itempage.aspx?id=egb247164-5262289&search=books.

[32] Hashim, B.H., Hamza, S.M. (2019). Value as a criticism strategy for contemporary architecture products. IOP Conf. Series: Materials Science and Engineering, 518: 022005. https://doi.org/10.1088/1757-899X/518/2/022005