



Design and New Ontology

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ABSTRACT

The design literature shows that explanations on ontology were made mostly in terms of subjective idealism, and in order to do this, references were constantly provided to Heidegger, who came from the Neo-Kantian tradition. Unlike from subjective idealism, in this paper, we aimed to discuss design knowledge in terms of Nicolai Hartmann's objective idealist New Ontology approach by focusing on inevitable and limited ontological assumptions in the design process and incompleteness in representation in design knowledge. In the light of the main assumption of New Ontology; "*Being as Being is independent of our knowledge of Being*", the purpose of this study is to introduce a debate on a new way of looking to process of designing in the mind.

Keywords: industrial design; new ontology; incompleteness in representation; ontological assumptions; Hartmann.

INTRODUCTION

Some phenomena have the quality to resist all kinds of attempts of discovery in understanding, and to sometimes make understanding inadequate. The concept of ontology itself is also in this state. Being or existence is inside everything, but although the concept is so significant, it does not get the attention it deserves in terms of related disciplines.

While there are different movements in interpretation of the issue of Being, it is seen that philosophy is camped between a Plato-style subjective idealism and an Aristotle-style objective idealism. Subjective idealism provides the object with a secondary role by stating loyal to the idea also supported by Plato and Kant that "all we know is the product of our consciousness." According to this approach, in order to reach everything that exists, the starting point is the person. On the other hand, in objective idealism, it is



believed that the object should have a significant share in the emergence of knowledge. Knowledge is understood as comprehension of an object, and it is considered as an obligation that the search for knowledge is always based on existence. The actual real Being in objective idealism is the individual object. While knowledge is hidden behind these objects, in subjective idealism, the person is the only real Being, and to go even further, "*the human Being is not the lord of Beings, but the shepherd of Being*" (Heidegger, 1996). In the subjective approach, the world has no reality in a place without the person; nevertheless, in objective idealism, according to Hartmann for example, Being is hidden only in real objects (1965).

The design literature shows that explanations on ontology were made mostly in terms of subjective idealism, and in order to do this, references were constantly provided to Heidegger, who came from the Neo-Kantian tradition. The German philosopher who was a prominent name in existentialist philosophy is often referred to because of his criticism of the person as a Dasein put on the earth (Dorst & Dijkhuis, 1995; Nimkulrat, 2012), his preferences and choices (Willis, 2006) and the world generally shaped over the development of technology (Wylant, 2010). Heidegger's attractiveness in terms of design theory depends primarily on his phenomenological approach to knowledge and the concept of knowing (Jonas, 1993; Krippendorff, 1995; Friedman, 2000) and secondarily on his conceptualisation of the divisions among approaches to the world as Being present-at-hand (*Vorhandenheit*) and ready-to-hand (*Zuhandenheit*) (Bonsiepe & Cullars, 1991; Verbeek & Kockelkoren, 1998).

On the other hand, the design literature does not cover the ideas of another German philosopher Nicolai Hartmann (1882-1950), who were previously educated in the lines of Neo-Kantianism but later had conflicts with Heidegger by adoption the ideas of objective idealism. As it will be explained in detail below, according to Hartmann, knowledge is hidden inside the object. Thus, to reach knowledge, one should tend towards the object. This is metaphysics. As the issue if metaphysics and as the human mind has limits in knowing, there is not much to do when we reach the part of the object that is no longer comprehensible. The existence our limits of knowing creates an incompleteness in the representation of existence. In this study, we will discuss design knowledge which is subject to underrepresentation using the expression Being as Being is independent of our knowledge of Being, which is the main approach of NO (as NO here and after) founded by Hartmann. Indeed, the broad area currently taken by the existent outside knowledge, that is, the fact that the things we know are always and only a part of the existent, lead to the progress of the act of design over limited ontological assumption and this situation creates an incompleteness in representation of Being. Incomplete representation that



arises inevitably, creates a basis for the reason for the act of design to be and exist in the past and in the future.

The concept of Being is one of the first and maybe the most important questions on which the history of philosophy has been constructed. As Aristotle stated, the debate on what Being is and how it can be known is eternal and everlasting. In his philosophical enquiry, Aristotle asked two important questions: *Ti esti?* (What are?) and *Ti esti to?* (What is this that is?). What makes Aristotle special in ontology is the question *Ti esti* in which he asked for Being directly. With this question, he did not reduce Being to the level of that which arises from itself / exists by itself, and chose to construct his philosophy with an ontological basis. In European philosophy that started with Descartes, we see that this first ontological question was not asked, but an epistemology-based philosophy tradition that is far from life emerged by directly questioning the existent and ignoring the latent Being. In later periods, various ontology-based approaches emerged to seek Being with the purpose of re-establishing philosophy's connection to life. Perhaps, the most special of these approaches is Hartmann's NO. As we will be discussing design knowledge in terms of ontology, we will firstly try to shortly introduce the principles of NO which allows practical inferences. we will then focus on the representation crisis and its outcomes inevitably created by design knowledge by its nature.

HARTMANN AND NO, AND ONTOLOGICAL ASSUMPTIONS

Hartmann's NO discusses Being as a whole and investigates the basic qualities of the existent. As his contemporary Heidegger, Hartmann thinks Being comes before knowledge, but he does not prioritize Dasein like Heidegger, and does not place the person in the centre of Being. Nevertheless, Heidegger's philosophy is a human-centred approach and existence of the world is secondary to the existence of humanity (Heidegger, 1996). However, the basis of Hartmann's approach finds itself in Being. Accordingly, taking Being back to a single thing, object, leads to missing the Being that cannot be sensed or perceived (Hartmann, 1965). Limiting Being to the world of objects this way, brings about the outcome of defining Being in a limited and incomplete way. In fact, according to NO, all Being is not limited to tangible Being. Then, what does this mean?

In NO, Being and perceived existence is separate. While Being exists independently, the existent is a partial consciousness correlation that is made an object, so objectivised by a knowing subject, a representation, or what the subject perceives. That is, the subject partially perceives the Being with his senses, and objectivises it in a partial way. The subject of objectivization is a knowledge object uncovered by the subject in which the



subject draws their own limitations, or in other words, it is a *gnoseological* object. However, an existing knowledge object *is* even without *existing* and the area of Being is wider than the area of the object. This is because the things we know are always a part of Being. Broadening knowledge means the circle of the objects we know is constantly broadening within all Being. The subject knows only a part of Being, because Being is neither explicable nor limitable, because Being is the last thing and it is meaningless to look for anything beyond it (Hartmann, 1965). Therefore, the subject, with limited capacity of knowledge, makes only a part of Being into an object by objectivisation, can make it knowledge. All approaches that are built on this knowledge and that will try to define Being, will perceive only a part of Being. This partial comprehension will also make the ontological assumptions that will be built on his knowledge partial. Ontological assumptions built on partial knowledge will create incompleteness in representation of Being. As it is known, theories and approaches are built over ontological assumptions and they are shaped in the boundaries of that assumption. For example, in the neo-classical economics individual decisions with an ontological assumption, the individual is *homo economicus*, which is an abstract concept that claims the individual will constantly pursue financial operations using rational, logical decisions and try to maximise their own utility. Similarly, in Castells' (2010) Network Society conceptualisation based on network morphology, the assumption of an individual is a collective subject who builds their individual identity over network channels. Do these assumptions represent all individuals? Of course not, but these assumptions are the part that is tried to be homogenised for practical purposes by formation into a data form, within the entire heterogeneous whole. Data is only the surface, it is external. The actual Being is the inside of this external thing. It is the hidden, not the data (Hartmann, 1965). Ontological assumptions are our tools of resistance against heterogeneity that we cannot completely objectivise, turn into data. While ontological assumptions are used to create practical results, they create incompleteness in the representation of the entirety of Being. Therefore, there are several approaches about various reasons for Being and different assumptions over the same Being, and as we cannot deem all Being existent due to our objectivisation limits, many approaches will fall short.

LAYERS OF BEING

Being shows variety, plurality and stratification. The effort of description in NO is based on the purpose of describing types of Being, categories of Being and layers of Being in their *intentio recta* state, with all aspects. The layers of Being in NO from the bottom to the top are (Figure 1) the inorganic layer, organic Being layer, psychic layer and spiritual (*or Geist*) layer (Hartmann, 1965). Geist is the free side of humans that tends towards values and meanings which is genuine to humans and cannot be found in any other

Being (Scheler, 2009). There is a unity among these four layers, but there are categories that separate these layers from each other. While there are common fundamental categories of Being in all layers, each category of Being includes something called *novum*, which does not exist in the previous layer but does in the new one. *Novums* allow distinction of categories from each other, makes the upper layer independent, indeed, these are significant categories of Being (Hartmann, 1949). As our subject in this study is design product, we will focus on the spiritual layer; however, it will try to shortly explain the other layers and the relationships among the layers to understand the spiritual layer.

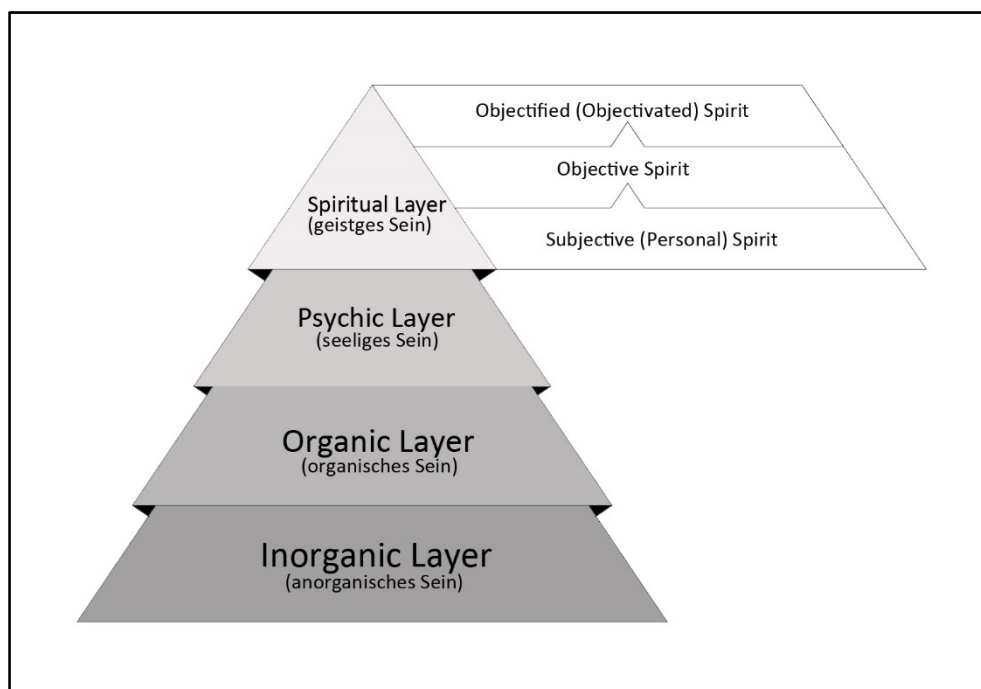


Figure 1. Hartmann's layer system of Being (1949).

The first layer, the inorganic layer (*anorganisches Sein*) is the one that is unrated and intertwined across the universe. It is the base of the layer pyramid and has the largest extension (e.g., space, substantiality, causality). There is the organic layer (*organisches Sein*) above the inorganic one. It spans a large pool from the most basic single-cell organisms to humans. The organic layer is the state of the inorganic layer that took a capable form, and the physical rules in the inorganic layer are also applicable here (e.g., finality, organic system, metabolism, homeostasis). The psychic layer (*seeliges Sein*) is above the organic layer. There is consciousness in this layer. The mental layer is separated from the first two layers in that it does not take any room in space; there is a substantive distinction (e.g., act and content, consciousness and unconsciousness, pleasure and distress). The last layer in NO is the spiritual layer (*geistiges Sein*). This



layer constitutes the world of culture and history (e.g., thought, cognition, desire, freedom, valuation and personality). Spiritual Being is not Being by itself, and the spiritual layer cannot be realized without the psychic layer. The spiritual layer is formed by the mental experiences of individuals; therefore, it is collective. In NO, spiritual Being consists of three pieces. Subjective spirit (personal) is the consciousness of ourselves. Objective spirit shows a unity, and forms historical and cultural Being. Objectified spirit covers the entire thought and creation (Hartmann, 1949). Art, which is formed by the unification of substance and spiritual Being and surrounds humanity completely, forms various objectified spirits such as design. In objectivisation, a spiritual content is revealed in an object. The thing in the thought of the individual becomes an object in their behaviours via objectivisation. The spiritual Being coming out of objectivisation is unreal and it needs a living Being that will comprehend it and establish a connection with it. In order to be able to explain the issue better, it will be useful to analyse a discussion in *Das Literarische Kunstwerk* (1960) by Polish aesthete Roman Ingarden. In his work, Ingarden questions whether Goethe's literary work Faust is a real or an unreal object. Accordingly, a thing that forms through time becomes a temporary Being; in this sense, a temporary Being will be a real thing. However, this is a faulty inference, because Faust's unreal spiritual Being does not coincide with Goethe's real Being. Although Goethe's real life and the time of writing this work ended, Faust continues to live as an unreal spiritual Being and it will go on this way as long as there are subjects that perceive it. Indeed, Goethe formed his work at once by using both his subjective spirit and objective spirit as the common spirit of his period, and the work became an unreal spiritual Being independent from time by objectivisation. As every work needs subjective spirit that will comprehend it, establish a connection with it, and in short, make it exist, it will continue to exist repetitively over every subject that will perceive it. Although Faust became liberated from the self (this self is Goethe) that created it, that is, it is liberated from the self's fate, it cannot be independent of the subject that perceives it. To exist, it needs the subject that perceives it. As in Faust, this is also similar for design works where there is a creative spirit. In terms of the approaches of NO, design products are unreal spiritual Beings. As a result of design, subjective spirit and objective spirit forms knowledge object, an objectivised spiritual Being that did not previously exist which leads to an influence on another consciousness. We call this a design product. This spiritual Being consists of two heterogeneous areas of Being. One of these is the real layer (*vordergrund*) that is based on objectivity. The second one is the unreal spiritual area of Being (*hintergrund*) that is carried by the real Being and positioned on it (Hartmann, 1949). The real Being in design product is a knowledge object, and it is called a gnoseological object. With the spirit that the designer adds onto this gnoseological object, the unreal Being of spiritual Being forms. We mentioned that there is a need for a



subject for the spiritual Being to make sense of it. Hence, the thing put into the matter and placed into it must be revealed again but a subject, save it from the state of substance, and reanimate it. This subject is the product user who is a living spirit and whose consciousness is influenced. The transformation is completed and the irreal spiritual Being is revealed with the resonance that takes place between the spirit placed into the gnoseological object by the designer and a subject that comprehends it.

A similar discussion between the created object and the subject was also carried out by Barthes (1981). Barthes presents *studium* and *punctum* concepts in photography. According to him, *studium* is a meaningful or meaningless partner in all the photograph work. This meaning, which can be read in the photograph work, may vary depending on many factors such as culture, life style, knowledge, and etc. Punctum, on the other hand, is a thing that jumps out at the viewer within a photograph- "*that accident which pricks, bruises me. (but also bruises me, is poignant to me)*" (Barthes, 1981). Even though Punctum is hidden, it is still unexplained how it strikes the viewer. Punctum does not exist as the photographer puts it into, but exists as the viewer sees. Punctum will be a studium, if it has consciousness behind. The coexistence of studium and punctum is both inevitable and questionable. When we try to explain the punctum, the punctum leads us back to the studium at the end of the journey because it leads us to a conscious study and analyze. From the perspective of the design, the punctum is not at the possession of the designer; it is out of his control. If a designer could compile the punctums of subjects and present them in a studium form for the next, then he would have the chance to produce a new design knowledge that would be the base for the next product.

DESIGN AND DESIGN KNOWLEDGE

In the discussion that we carried out over NO up to this stage, we saw that the design knowledge that is objectivised by a knowing subject is actually a partial correlation, correspondence of the entire Being. However, Being, and design knowledge which is a consciousness correlation are two different things. Limiting Being only to the world of knowledge-based objects leads to a limited and incomplete definition of Being. Incomplete representation that arises inevitably, creates a basis for the reason for the act of design to be and exist in the past and in the future. Every design process is carried out via this incomplete representation as an ontological assumption, and the end goal of the act of design is to overcome this incomplete representation.

There are several debates on what design knowledge is. Debates are generally focused on understanding what the nature of design knowledge is and classifying it, while some are focused on production and management of design knowledge. Design knowledge in



terms of ontology exists in four forms. The first one of these is the knowledge towards the subject that is expected to make sense of the design to be made. The second one is the knowledge the designer has towards designing. The third one is the knowledge carried by the design object. The fourth is the design knowledge of the subject that is expected to make sense of the design object.

The knowledge based on the subject towards whom designing will be done in the design process, is based on assumptions and phenomena homogenised for practicality as a result of assumptions. According to the phenomenological approach, phenomena are existences that show themselves. All existence has something that shows itself (*phainesthai*). The problem that rises here is consideration of Being, phenomenon, showing itself or apparent thing as the same things. However, that which exists everywhere is not a phenomenon as an existence (Hartmann, 1965). Therefore, all consumer assumptions that are the basis of the design process are things that show themselves only in the scope of our knowledge. According to Berkeley (2008), *esse est percipi*, which means, existing is perceiving. In NO, this is *objectum est percipi*, which means, only those that we perceive are the objectivised. Therefore, in order to broaden the knowledge about potential consumers, businesses are carrying out research and analyses intensively, and to go even further, the subjects themselves are included in the processes under a theme of participatory design as objects of design.

All knowledge about the consumer is a knowledge object, that is, a gnoseological one. However, this leads to incomplete representation as it cannot reflect the entirety of Being. The ontological consumer assumptions that are built on this gnoseological object are doomed to incomplete representation. Consumer assumptions subject to the design are actually works of homogenisation towards practical purposes. For example, the basic approach of consumer representation, fictional *persona*, is a technique that helps representation of consumers and their goals (Cooper, 2004). In this technique, it is aimed satisfy the needs of all consumers over the persona with the help of the product. The persona is a hypothetical consciousness correlation of the existent and does not represent all consumers, and ontologically, it cannot. Therefore, the Being itself that is inevitably heterogeneous will be subject to innumerable personas. We know the consumer only to the extent that we can perceive, and we objectivise only the part that we can perceive and make it into design knowledge. This situation rises not from the inadequacy of the designer, but from the impossibility of the designer to understand the entirety of Being. Discussion of Being in ideals forms such as persona never provides the entire knowledge about the real Being. This would just be logic. However, unfortunately, while there is incomplete representation, our knowledge is limited by our objectivation.



This limitation creates the basis for the reason for the act of design to be and exist in the past and in the future.

Another type of knowledge is the knowledge the designer has regarding design. This knowledge of the designer, the nature of this knowledge and its changes with experience, and whether the knowledge is open or tacit, are issues frequently discussed in the literature. Ontologically speaking, the knowledge the designer had, as in the case of Goethe, is the combination of both subjective and objective spirit it contributes to. In design, there is an act of creation by using these two spirits. The designer participates in the objectified spirit via the act of creation. However, the design that has become a spiritual Being continues to live in the consciousness of other subjects as a Being independent of its designer. Every product of design, even if it comes from previous knowledge and experience in the creation process, is the previously-non-existent and does not exist before the present. The designer can turn an existence only into knowledge; on the contrary, puts organic spirit onto knowledge and presents something that does not exist. Objectivation and objectivisation should not be confused (Hartmann, 1949). In objectivisation, that is, turning the existent into an object, the designer is the receiver as an organic spirit; however, in objectivation, the designer is the creator as they present something that did not exist before. In objectivisation, Being is indifferent to the existence of an object or a mind for it. Therefore, the designer is passive. On the other hand, in objectivation, the designer is active as a previously non-existent thing is revealed. At this stage, we should ask for the purpose of objectivation. This undeniably has a reason. The designer wants their organic spirit that objectivated in a certain substance to influence a subject; another mind. The reason for the failure of many design products is that there is no mind that will interact with the content, receive the spiritual content from the tangible structure of the product, and perceive it. On the other hand, it is the designer's responsibility to create the spiritual entity needed for the interaction. If such a spiritual being is presented successfully in the way the subject is perceived, there is not much that the subject can do. In objectivation, compliance will not take place if there is no resonance between the organic spirit put into the real structure by the designer and the subjective spirit of the observing subject who comprehends the product. We mentioned that design creation is the combination of both the subjective spirit of the designer and the objective spirit. Subjective spirit is the spirit that forms the conscious side of the designer about own Being, is characterised by temporality and individuality, separates the designer from others, and leads the designer to be a knowing and behaving Being. The frame of subjective spirit is formed by perception. Thus, perception is a capability that makes sense of objects (these objects include previous knowledge), and comprehends these as a meaningful whole. As a result of this, perception appears to



be the most basic act of knowledge that establishes subject-object relationship among the existent, and gives us objects. However, formation of this connection, that is, perception becoming an act, is based on long experience and training. Therefore, a designer's perception of the existent (here, the existent means all created knowledge that becomes the input of the design process), their interpretation of it and usage in favour of own goals, are based on experience and skills of perception. The problems to be experienced in perceiving the existent and making it into an object as a result of objectivisation, are dependent on the capacity of the designer to perceive and if possible to develop the basic body of knowledge that they need in the design process. It is not expected from a designer to completely perceive the specific basic body of knowledge in their field and use it in the objectivisation process. In order to overcome this problem, with the acceptance that our perception is limited, focusing on a field to limit the specific basic body of knowledge, specialisation or broadening the area of comprehension, all kinds of interdisciplinary, cross-functional team work, are methods that are frequently resorted to in the professional practice. Difference in perception and understanding of the issue are based on different perception limits and different end result of objectivisation. Thus, it has been possible to reach very different designs on the same subject. The situation resembles the Hindu tale of "Blind men and an elephant" where six blind men who are open to learning are asked to define an elephant yet each of whom has his own opinion, start a serious and violent fight. Each designer touches only one part of the real Being, each provides a description based on their own experience, each one is right in their claim but none of them can objectivise the whole entirely.

Well, is the entity in here (the elephant) constant and constant? If the touched entity changes over time, the actual entity becomes a time-varying copy. Variability in the touched entity will lead to variability in the descriptions. In this regard, we find it useful to remind Platon's *Cave Allegory* (2016). In this allegory, in a cave, people are chained in such a way that they cannot move their heads to the left or to the right or back, and they see no other than the cave walls in front of them. Behind them burns a fire. Between the fire and the prisoners there is a wall where puppeteers can walk. The puppeteers, who are behind the prisoners, carry puppets of human beings and animals that cast shadows on the seen wall. Since the chained people only see those reflected on the wall, the whole reality is thought to consist of shadows reflected on the wall. However, they will see first the fire behind them, and then the glittering sun outside the cave, and at last the reality will come into contact with them once their chains are dissolved. According to Plato, the actual beings are the ones that remain unchanged and always the same. He's naming them as the *idea*. Ideals are the earliest examples of all Beings. They are eternal, timeless, alone and with authority. These are the real assets. The objects we see in



everyday life are copies of ideals; their assets are limited, they change over time and disappear. Just as in the cave example, if the thing that the designers touch changes over time, it is nothing more than a variable and mortal copy of the truth, a shadow. The fact that the world of objects is constantly changing and at the same time, changing indicates that the designer's claim of understanding is valid for that moment.

Another spirit the designer used for objectivation is objective spirit. Objective spirit surpasses individuals, but at the same time, creates spiritual living spaces that connect individuals such as art, science, morality, law, history and culture. Objective spirit is a real Being as it has a temporal context. The boundaries of objective spirit extend from life styles to interpersonal relationships, societal goals, morals, law, religion, art, science and philosophy (Dilthey, 1927). This means, every design is a product of objective spirit as much as a product of subjective spirit, and is compliant with the conjuncture of objective spirit. The change in this conjuncture leads to different objectivations and designs. For example, Eames' Lounge Chair (1956) was created for that period, and although its unreal spiritual Being continues today, its inspirational objective spirit belongs to that period. Eames's Lounge Chair is even available on this day. He lives in today's objective spirit. Despite the changes in the objective spirit of the object, there is something unchanged in Eames's product. The unchanging thing is the ideal thing. If something had changed, it had to be something that was time-dependent. So something that is changing must be in time again; the thing we call change is that it must pass in time again. Moreover, time is a category that determines objective existence. However, it is not a category that determines the spiritual existence of the chair. For example, Faust remains the same Faust. To interpret Faust today does not lead to a change in Faust's unreality. Faust, then, is both in change and immutable. The reason for your immutability comes from the fact that the objective spirit that contributes to the creation of chair is timely exhausted by time while joining the unreal sphere and completing its task. Consequently, the knowledge the designer has is dependent on their perception and skills of objectivisation based on their perception limit, and the designers ever-changing objective spirit that guides them during the process of design. Perceptual limit restricts the design knowledge. This, again, creates incompleteness in representation. In practice, in order to overcome this incompleteness and close our gaps to an extent, we usually resort to specialisations and sometime design teams that consist of specialisations. Sometime, we include designers that are from different cultures in design teams to overcome conjunctural changes in objective spirit.

The third design knowledge is the knowledge held by the design object. Products are indeed categories of knowledge provided to us by a creative spirit and they are not *ideae*



innatae (ideas coming from the human nature), but they develop with consciousness. For NO, the design product itself is a knowledge object and when it is ontically disassembled, it consists of real and unreal layers of Being. As much as each product has a physical real structure, it has an unreality that reaches appearance in reality. This unreality lives in the mind of the subject that perceives it. It is the idea of design in the product that joins the physical reality. Design idea receives a share from reality but it is outside physical reality by itself, and we see its traces in physical reality. Coming back to the example of Lounge Chair, we see that he defined the product with the metaphor "*the warm receptive look of a well-used first baseman's mitt*" (Grudin, 2010). This means, every designer has a contemplation in their head before going into the creation process. According to Max Bense, this contemplation is related to giving form to the one that is real, and it is the thing that appears with the design (1965). According to Hartmann, this contemplation is named as *hintergrund*, and a product consists of a foreground (*vordergrund*) that is provided as real, and a background that is apparent in the foreground. We comprehend the contemplation of the designer within the appearance in the real Being (1949). Thus, this polyphonic structure in the product leads to its stratification. There is a reduction from the spiritual background to the real foreground in the creation of design. On the other hand, the perception of the one who contacts the design product is in the opposite direction, from the foreground to the background. Completely comprehension of the design value of a product is based primarily on how much the designer was able to transfer their contemplation into the real one and secondarily on how much the observer is able to reach the spiritual background of the design. The observing subject who is able to comprehend the spiritual background has actually started to comprehend creativity. A comment in a 1961 Playboy issue regarding Eames' product was interesting. An experience about this product was described as "*sank the sitter into a voluptuous luxury that few mortals since Nero have known*" (Ricardson, 2016). Apparently, Eames' contemplation in the first place as a designer was comprehended by an observing subject. Even today, there are several comments about Eames' production. Unfortunately, Eames is not with us anymore, but his contemplations are still alive on the level of spiritual Being conceived by subjects. This is the proof that Eames' contemplation is living as an unreal Being among us. How is this happening? There is a practical purpose in every product. It is impossible to think of a product without a practical purpose. The product, at least in principle, has a composition that is shaped by functional hegemony. A practical job may be done in very different ways and each opinion represents different opinions and design approaches. This point of view is provided with the form of life, especially by living together (Hartmann, 2014). In understanding the practical goal, life form makes its meaning and form, in summary, itself, accepted to the solution. Therefore, the contemplation by the subjective spirit and life form that includes



subjective spirit, that is, objective spirit, are all combined. We know have a work of design that consists of both real and unreal layers. The real part is the material state that we feel with our senses. The unreal part is the design thinking that is placed into the material and positioned in it. This spiritual content must be revealed with the agency of an observer's mind. This mind is the users themselves. Thus, the mind of the user as an observing subject constitutes the fourth design knowledge. With the design knowledge it has, this mind must uncover the contemplated unreal that is embedded in the real thing. It is a reality that, as a result of our perceptual limitations, the many subject cannot completely comprehend the contemplated thing that is aimed to be transferred, and can understand it only after reaching a certain level of maturity. The thing here is the quality of the resonance between the living spirit put by the designer into the product and the spirit of the user that perceives it. This need for quality brings us to another ontologically problematic area: the design knowledge of the subject who is expected to make sense of the design object. In principle, the essence of the concept we call user-product interaction is this. How is the user physically and emotionally perceiving, analysing and interpreting the physical and the design thinking embedded in the physical in both real and unreal spheres? Incomplete compliance in resonance constitutes the activity basis of the concept of user-product interaction. In the user-product interaction, the designer faces the skills of the user in the same subject, meaning, the ability to sense their intentions (Hartmann, 1982). Thus, incomplete compliance may take place due to two reasons. One is the incomplete knowledge about the user. The other is that the user cannot completely understand the living spirit that is embedded into the product and shows itself in the real Being. Building the living spirit over an ontological assumption based on incomplete representation disrupts the resonance of the product with the user as a chain reaction. This inadequacy, paradoxically, creates the motivation and reasoning for future design efforts.

Up to this stage, we tried to discuss the concept of product design in terms of NO. The main assumptions of NO brought us to the inference that the thing we concluded to know are actually a process of creation in the mind, and the only thing left to us regarding Being is the collection of our conceptions and images on them. In fact, the only data we have about Being is a formation of consciousness and knowledge cannot *be* without a consciousness area as in Descartes' *cogitatio*. The knowledge that is revealed becomes a subject to incomplete representation, because it is stuck in our limits of perception. If knowledge is formed in the way that is allowed by our perceptions, this process should never be undermined. However great the size of the things that are left unknown about the world surrounding us and about our structure, while our existing knowledge



constitutes the main reference point, all fields of knowledge actually allow us to find our way in the world (Hartmann, 1982).

Several creative minds across the world have the intention to present what is perfect in terms of design. All efforts in this direction lead to a contextual increase in knowledge creation. This increase takes place in the form of creating new designs and improving the existing ones with the help of new knowledge. The new thing created by each designer appears as a new category of knowledge. Every contemplation we presented while creating designs is shaped based on our ontological assumptions. The things we ontologically assume are the forms of Being that became data; however, they do not present the entirety of Being to us. The entirety of the existent is not homogeneous, but heterogeneous. The thing that constitutes the basis of design knowledge is merely a data form, any external surface that appears to us. Therefore, there are innumerable designs as a result of different ontological assumptions. Above all, this is a richness, and an indicator of the well-meaning efforts by numerous creative minds.

While it is impossible, in terms of the act of design, what would happen if we could conceive Being completely? As a design, we would have a metaphorised single product that will perfectly predict the needs and wants of subject now and in the future without any errors, and will have perfect resonance with them as if created by Aladdin's Magic Lamp. Existence of a Magic-Lamp-like product for every subject would most probably be the source of anarchy. Nevertheless, we do not have such a magic lamp in hand; however, we are happy that the knowledge in design is increasingly expanding in order to reach the ideal, see the depth and comprehend the big picture. Our curiosity towards finding the existing things is supported by our ambition to produce new knowledge. Considering ontologically, all objectivised knowledge leads to closing the cliff-like gap between the subject and the object areas, and correctly positioning knowledge in the general connections of life and Being. The thing that lies behind all historical advancement in design knowledge and transformations of concepts of design and constitutes their essence, is the transformation experienced by knowledge. Every contribution we make, is actually a part of the tendency to adapt to the world we live in, and connect to it.

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