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Poiesis of objects: Theory of making

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Abstract
The aim of this study is to discuss the basic state of object production. Essentially, objects exist as a result of the act of making. Making occurs through the processes of cognition, conceptualization, and representation. Cognition and conceptualization are dealt with the notion of noesis, which occurs on the foundation of four concepts: the self, matter, form, and aim. A design is formed by the cohesion of these four components. Some practical acts are required to represent this design. However, these practical acts continue the conceptual state of making because they require the knowledge of making. All stages that create objects are developed depending on mental productions; this features the process of poiesis. Poiesis is an act of creating objects simply as a product of our integrative comprehensions. This study involves the redefinition of the concept of making in the context of the intuitional, undefined, and unlimited states of poiesis.

Keywords
Artefact, Noesis, Production of objects, Techne, Conceptualization.

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1. Introduction

Human beings perceive the world and existence based on their natural and created environments. Existence is perceived within the unlimited world of human thought with their matter quality and occurrence form. While humans attempt to express existence verbally or through the act of making, their theories and ideas fall short if they do not contain the potential of their conceptualization. Nowadays, it can be said that, even if the abundance of these expressions does not appear any deficiency on the possibility or variety of the occurrence of objects, the production of an object is based on the literal knowledge that is gained or produced by people. As if all object meanings and all methods of object creation are discovered, object production is repeated with this literal knowledge. Therefore, it can be said that there is a complex perception of object production that is affected by literal knowledge. This situation necessitates the reconstruction of content of making to evaluate all factors that constitute or affect the design thinking of today.

The question of how human beings produce objects without the widespread transmission of knowledge and artificial images can be explained by the conceptual origins of mental and practical actions, as well as the relationship between meaning and content of these concepts. Therefore, this study can be considered as a research for the concepts underlying the production of the objects. With this research, it can be reasoned about the starting point of the idea of the conscious person to produce the object and turning this idea into action. Accordingly, inferences can be drawn about the problem that the object is the product of original ideas and that the object is reproduced in a creative way. This method can allow the architect and designer to use the concepts that define their professional actions consciously.

Essentially, objects are created by humans as a result of the process of making. It can be said that everything, except for natural objects, is created as a result of the human act of making. Since the impetus of every object's creation is to reveal something that does not exist, the act of making requires a reflection on a creature. Plato explains this situation as follows: 'Poiesis (to make, to create), as you know, is complex and manifold. And all creation or passage of non-being into being is poiesis' (Symposium and Phaedrus, 1993, p. 28). Thus, human is in a position of creator for each object one makes. The position of creator for humans can be related to the creation of a non-pre-existing thing or abstract notions and comprehensions.

The creation of comprehension can be considered as the whole of intellectual and practical acts. This can be understood with the examination of the concept of making. Making is a process of comprehending the self, matter, form, and aim first, and later, representing these comprehensions into products. This process defines an existential gap between the human mind and the physical world. Objects materialize in this gap as a result of the interaction between existence and environment. Therefore, the expressive potential of objects is the sum of comprehensions between the mind and environment. Taking the mind and the interpretive methods of primal humans, which have not yet been captured by artificial imagery, as an example may enable us to make more productive inquiries and to understand how objects are made. It can be said that primitive humans could use the first quality of matter and the utility function of matter, within the first thought system, in which they comprehend natural creations by examining their semantic value. Using this framework, this study develops a fundamental query of the theory and practice of creative acquisitions and expressions, which displays the basic methods of object creation. Thus, sub-concepts and meanings that form the content of the theory of making can be defined. It is recommended that these concepts and meanings also refer to the current content of the concept of making; because the subject, object and the act of making remain fixed even if the requirements, conditions and methods change through time.

To discuss the basic state of object production in this study, a concept of making was adopted by trying to un-

derstand how the state of consciousness of human evolved to create something in the historical process. In this concept, a conceptual typesetting was created, as concepts are the means of seeing human capacity for object production, and typesetting explains the stages of making. Thus, enabling this study to develop its method to clarify these concepts by using the deep and valuable content of philosophy for expressions and approaches to making. With this conceptual inventory, the simple relationship between the object and human being is presented to the vision of making of today's world. This method is a micro theory experiment, a scientific-inferential scenario that handles a new typesetting to address the design and production of humankind. It can be claimed that understanding the reality of making requires a review of the layers of this scenario.

2. The process of making

Making is considered possible as a result of consciousness. Questions of how human cognition and consciousness evolved, including bases, or how and when object creation arose, have long been complex issues. However, it is safe to assume that humans first created objects as a result of comprehending their own existence—thinking, watching, examining, influencing, and even taking inspiration from human existence.

It can be thought that human beings are unique creatures in perceiving matter and interacting with the environment. The first step in perceiving existence must be the sensation; as it is inevitable that humans recognize the environment with sight, hearing, or other sensual abilities. However, this knowledge must be explained to oneself. At this point of awareness, it could be said that the senses pass through a perceptual filter and allow one to re-establish the world in one's minds. This may actually be the first interaction with the environment. The reflection of environmental impacts on consciousness as knowledge, highlights the ability to think conceptually. This ability helps to re-explain and reshape everything humans sense in the environment. It must be a justification to call primitive humans who perform conscious acts Homo habilis, because conscious acts reveal the ability to conceptualize and interpret. Thanks to these new abilities, Homo habilis was the first species to exhibit the capacity for tool making and object production (Haviland, Walrath, Prins, & McBride, 2011).

It would not be wrong to think that a human who is aware of the self, environment, and matter through consciousness makes sense of these components, interacts with them and designs them for requirements. Humans require objects; this is the first incentive for reactions to the environment and the development of capabilities and products as a result of these reactions. Humans begin activities of production by developing new meanings for the matter that they have begun to understand. Humans who understand these requirements are likely to turn environmental impacts and qualification to their favour, or reform the matter to meet these objectives.

Products of cognitive behaviour types and abilities were created approximately two and half million years ago by the invention of stone tools by a group of diligent explorers. The first stone tools known from regions in Eastern Africa are simple sharp aggregates (Tattersall, 2007). When *Homo heidelbergensis* developed Acheulean axes or Clactonien flagstones, they met the needs of the mind which was intricately achieved through cognition with a type of stone. The hardness of stone was sensed, and the sharp side was honed to meet their needs, creating a type of product. Making the stone device is the best indirect reflection and expression of cognitive capacity (Tattersall, 2007). Hence, examining these first products illuminates one method of understanding the possibilities of the human mind and its capacity for creation.

Humans' advanced mental strength and abilities can be considered to be the basis for more complex social and technologic developments that encourage creative behavioural improvements. Therefore, new types of life, perception, and production are developed. Humankind began devel-

oping more detailed tools by learning from the natural environment, as well as sharing knowledge and experiences with each other. Humans' tools evolved to include specially designed prongs, knives, and scrapers (Faulkner, 2014). Tool technology was developed as production techniques were created, transferred, and repeated; so this way the technology by which cultural objects used by communities were created.

The occurrence of every new object can be considered as the construction of a cognition state. In this study, it is assumed that these states are developed on the basis of four components as a result of inferences made by primitive humans: the self, matter, aim, and form. It is asserted that all design processes are made by understanding of these four elements and establishing their cohesion. These assumptions make it possible to talk about the occurrence processes by which constructions and designs are created. In other words, some practical acts are carried out in the materialization of designs. These practical acts require knowledge of making. Therefore, the process of making continues with its intellectual content by situations related to conceptualization. According to Aristotle, the occurrence of an object is referred to as "of the comings-to-be and movements, one is called 'thinking' (noesis) and the other 'making' (poiesis); thinking is the one that proceeds from the starting point and the form, and making is the one proceeding from the completing stage of the thinking" (Metaphysics, 1985, p.15). Since the practical acts of object production deal with the results of thinking and designing, the making processes expressing the occurrence of objects are concluded with the matter formation of humankind's understanding. It can be said that this process that occurs between thinking and matter formation is also a creation to Aristotle. In this context, making defines the relationship between the object founded by the mind and the object's matter of existence. While *Homo heidelbergensis* created Acheulean axes with the ability of cognition and conceptualization, the object that occurred is an artefact as a way of representing this conceptualization.

2.1. Noesis: Cognition and conceptualization

Objects are the products of acts directed by the mind and cognition. The mind has an ability to simultaneously know and think of existing objects *(pathetikos nous)* and is the place of cognition and conceptualization *(poietikos nous)* (Aristotle, 1999). Cognition and conceptualization of known objects form the real aspect of the mind and its effective-creative side. To discuss the mind's perception and process of understanding as a single term, 'noesis' may be used, the Greek word for intelligence or understanding. It is derived from noein, meaning to perceive or think, which in turn is derived from *nous*—mind or intellect (Smith & McIntyre, 1982). In this study, noesis refers to both cognition and conceptualization, including four aspects: the self, matter, aim, and form. Noesis can establish a relation among these four states and provide integrity through their unification.

Noesis of the Self: Making primarily requires one's cognition. In recognizing the structure of the body, its function and rules enables humans to know themselves, because, after humans understand the physical presence of their bodies, they come to discover the circumstances beyond their physical presence are not included in the mechanical position of the body and are internally changing. Physically, existence is not completely mechanic, since the body can be separated into two entities. One being 'the external body', perceiving matters as a means of senses and nerves, and the other 'our body', discussed on the level of spirit and cognition (Sartre, 2017). In this analysis, humans can understand their inner freedom, independence from their environment and conditions, and will. Thus, humans can direct their inner experiences.

It could be thought that there is a comprehension of 'me' within the cognition that humans reveal for themselves. This comprehension reveals knowledge that is directly led by the

mind. The entity referred to as mind consists of knowledge within a human. What Descartes calls the 'real self' is a non-spatial but thinkable substance as well as a mental unit (Churchland, 2012). The mind causally interacts with the body. For example, sensory activities of the body cause visual, audial, or tactual perceptions in the mind. The comprehensions and decisions of the mind cause the conscious behaviours of the body. Therefore, the 'body which is an object for mobilising objects is an acting centre; [without conceptualizations of mind] a design cannot reproduce' (Bergson, 1988). In other words, the existence of an object is not a result of physical activity, but a mental production.

Human beings, who comprehend or design, collect all connections of the universe in their minds. So, humans must know themselves to understand everything around them. All creatures have a spirit which is 'the natural shape of [an] object having a substance and life.' However, the spirit is also the carrier of mind *(logos)* that separates human beings from other creatures (Aristotle, 1999). Therefore, spirit may be considered to provide all actions for humans including thinking, judgement, and perception. This makes humans creative creatures. When humans explore their creativity, they find the power to change and determine the rules of universe. All the searching, finding, and creation attempts carried out by humans are results of this. Thus, humans create their own existence with conscious acts, differentiating themselves from others in their environment. This differentiation makes humans a kind of creator by means of a consciousness that broadens matter, form, and requirements.

Noesis of Matter: The first knowledge about creatures that was acquired by humans is the one gained directly with the senses. It is the simplest method by which humans can recognize matter and the environment. This is enough to create some impressions of matter in the mind. However, according to Plato, such acquires of knowledge seemed to be a sub-type for human beings. Plato divided experiences of existence into two categories: sensible and intelligible. While sensible experiences include understanding facts and objects in world, intelligible experiences are mathematical concepts and ideas (Cevizci, 2015). The knowledge of ideas is the highest form. Therefore, knowledge is natural to the existence of humans alongside ideas. Humans remember these through understanding matter and developing experiences.

In this context, humans exhibit a more advanced ability to know than the experiences gained from their senses. According to Aristotle, creatures have sensual abilities; however, while some creatures interiorize these senses by intercepting them 'spiritually', others do not (Posterior Analytics, 1999). Experiences are created when perception is interiorised and repeated, allowing humans to develop a knowledge of existence. The mind must be created here; because creatures that turn experiences into knowledge, not by supposing these as instinct and unconsciously repeating them, but by shaping their actions with this knowledge are clever.

Perhaps Aristotle's view of 'knowing' is not beyond time and space unlike Plato's view. The ideas that exhibit the highest type of knowledge are found together with the matter and form. However, senses yield the lowest type of knowledge according to both Aristoteles and Plato and for this reason, knowing is discussed on the level of consciousness. Knowing cannot be observed without any intervention of the mind. As a result, humans find the reality they perceive in the matter and reality they sense. When matter images created in the mind are combined with consciousness and the relations between consciousness and matter are established, the actions of the spirit are encouraged. 'The brain movements caused by the external objects trigger thinking in the spirit even if they do not give place to the similarities' (Sartre, 2017, p. 11).

In this context, there are two types of knowledge that arouse humans' creative stimuli. The first is the knowledge of matter that belongs to instinctive notions and is an automatic and code-designated memory system. The second is the knowledge of form that belongs to mental notions and is an ef-

fective-creative memory system (Bergson, 1988). The knowledge of matter is a part of natural order, is in connection with the environment, and is gained by understanding the world. The knowledge of form examines the data of nature and rearranges matter to create fact from new species (Malo, 1992). Therefore, the understanding of creation resulting from the relation and cooperation between mind and matter can be achieved. Matter that could not be found by the mind itself is discovered by the instincts. Since the instincts do not have the ability to search and know, they are nourished by the ability of the mind. This cooperation can be found in the *Homo faber* who creates tools as a kind of semi-person that overcomes nature incompletely (Gasset, 1941). The mental data required for establishing life independently from matter is created by establishing knowledge about matter.

Noesis of Form: Humans begin to understand, conceptualize, and interiorize when they establish a relationship between existence and new circumstances for creation. The perception and experiences of the environment are described with images and notions that are created in the mind. In the pre-mind stage, we attempt to explain the objects which are understood as knowledge in the mind and created by our perception devices in the recognition and interpretation processes. It is related to the conceptualization and the ability to think abstractly. The ability to think abstractly forms a phenomenon that occurs in the mind before physical actions are borne from the body. As stated by Ditfurth:

Before delivering the purpose of performing actions directly related to the concrete, external object to a process that is again realized by concreate movements, …, an "interior space" would have been created within the consciousness of the subject, or rather a "space of design". Within such a designing space, a certain action can be "designed" in terms of all its possible consequences, the subject then acts according to it. (Bilinç Gökten Düşmedi; Bilincimizin Evrimi, 2007, p. 501).

This internal designing space is the place in which the senses are conceptualized. Matters are discussed over the notions where qualifications are uncertain, and qualities are unlimited.

A discussion of physical existence exceeds the scope of this paper, but different forms of existence are discussed because humans are creatures that design the environment and themselves within the environment. The condition of being human substantiates our perception. These substances are indirect and pure advantages of understanding. Therefore, they are the original form of existence. For example, Sartre discusses these substances as images (Sartre, 2017). Images are in the mind and are different from the objects we sense. When images become objects, they are not just in our mind anymore. There is a process of creation that ensures the transformation of matter into images and images into objects with its three steps, perception, imagination, and objection. The 'external body describes the matters, it knows, in a part of brain by means of senses and nerves and makes an action in our body' (Sartre, 2017). Through this action, images come to existence. So, the images are created at the stage in which physiology and consciousness integrate. This kind of interaction between matter and mind indicate that form is designed in the mind and is determined from the matter. Therefore, the object is the occurrence of form into matter. Our consciousness which transfers the external to internal and conceptualizes matter for the internal, also regulates matter from images to objects. In this arrangement, making, the creation of objects, always forms the actions of humans and enables them to exist by arising from the backstage (Plato, 1993). Making takes the form of designs that are envisioned by the mind. This situation can be understood from qualification of making by its forename, this way, the making of a 'thing' can be mentioned. As making gives pre-knowledge about the object to be created, it also indicates that the object has already been designed in the mind.

Noesis of Aim: It can be considered that the intellectual designs, new meanings, and qualifications to be attributed to matter are formed by requirements. Matter is organized and formed to

present creation in the simplest and purest way to meet the requirements in the best way. For example, the mind conceptualizes the requirements of an object, and creates a form to hold water to meet the need for drinking, which is instinctively known, by linking sensed thought and impermeable matters with this form. Thus, form and matter are decided according to certain requirements.

The requirements can be understood with the object's purpose, as well. Each object is created 'due to a thing or for a thing' (Aristotle, 1961). Humans provide the form to matter for certain purposes. This matter-form-aim relation could be examined by the four causality principles of Aristotle:

1. *Causa materialis:* matter with which an object will be created
2. *Causa formalis:* form which includes matter, the shape of an object
3. *Causa finalis:* aim of the object, the reason for which an object is created
4. *Causa efficiens:* the provision of the object or, in this case, person who makes the object (Heidegger, 2015).

In this sense, human thoughts regarding creation can be considered to be developed by forming matter with respect to certain requirements.

In this study, the notion of making is analysed as noesis and representation. It is assumed that humans develop cognition and conceptualization that are considered with the term of noesis through processes that include the self, matter, form, and aim. In the context of these four states; human interaction with their body, environment, and matter leads to constructive and transformative speculations on matter in the context of certain requirements. The accumulation of sense and the process of filtering it forms a 'thing' in the mind with a substance-free integrity, as all layers of interaction. The concrete responses of the 'thing' created in the mind are a kind of representation. Kim Tanzer calls this representation 'thingifying' (Tanzer, 1992). Thingifying is the theoretic meaning of idealization and objectivation. In this sense, objects are created in acknowledging findings and forms that the mind develops with a purpose. Therefore, in this study, cognition and conceptualization refer to the theory of making which is approached with the construction of the object in mind. The notion of representation is suggested as a fundamental notion in the materialization of an object, design, and conception that exists in the mind. Representation refers to the meaning and content of an object's existence and knowledge for its materialization.

3. Representation

It can be said that even if object production emphasizes the unlimited concrete experiences within the process of making, all designs are formed through the cohesion of matter's conceptualization, form, and aim. In order to express this design and make it used and recognized, some practical actions are required. However, it refers to a production in mental content; knowledge of making is necessary for these practical actions to represent this design. In other words, the practical side of making is in the mental actions.

The mental content of the actions in practice could be referred to as 'techne'. Techne is a type of cognition, as in, objects are created from this form of cognition (Heidegger, 2007). It provides knowledge on how a notion is revealed. In this sense, techne is a common origin point in the mental content of technical and technological terms that deal with the answer to the same question. It is thought that the origins of technique and technological terms contemporarily used are based on the notion of techne used in Ancient Greece (Ural, 2015). Technique can be considered to be the knowledge of making and is based on ability and experience. Instead of knowledge based on experience and inferences, the use of scientific knowledge has begun, which means that the practical acts of making are carried out in the technological field. It can be said that, in technology, the practical aim is applying the knowledge of making rather than exploring it.

3.1. Technique

Knowledge of Making: Knowledge of making can be referred to by technique. Technique reveals the four noe-

sis components (the self, matter, form, and aim) (Heidegger, 2015). Technique is the integrity of designs and the procedures that help to have a specific result. It is the tool for producing objects in accordance with their fundamental structure and conceptualized form. In fact, for this reason, all possibilities of the concrete experiences of making are mentioned here. However, this form's representation indicates an action that requires knowledge regarding the object. Plato uses the term technique as the same meaning of knowledge (episteme), because representation already has a certain knowledge. According to him, objects have already been observed as designs in the ideal world before they are created. Therefore, the realization of current potentiality is technique. The knowledge kept secret in the universe is developed by the effects of humans, consciousness, and aim; this is called realization (Plato, 2015). Similarly, Aristotle thinks that the occurrence of an object is the process of occurrence of form. This is the indication of objects being created by a certain knowledge. The practical action of the entire making process is created from knowledge or it creates knowledge, which indicates that this section can be referred to as the 'knowledge of making'. In other words, the knowledge of making and technique are the bases of all actions which turns designs into objects. Therefore, all human actions for making are related to mind, as well as action.

3.2. Technology

Knowledge of Making for Practice: 'Making' does not refer to labour as suggested by Marxian analyses of Homo laborans, the worker. The circumstances in which production refers to labour are not related to the intellectual conditions of object creation and uniqueness. Therefore, the processes and products of technology require different discussions regarding object creation. Due to technology being interested in object creation process like other practical sciences whose purposes are actions, it requires a type of information. Since technology uses cumulative and developing knowledge and scientific information, the act of making involves concrete and physical actions. Therefore, unlike technique, technology does not resort to finding new object-specific knowledge. However, in the case of knowledge not dominating the act of making, it becomes a mediating component that does not destroy the creative process of making.

The field of technology that causes the means of production to change suggests a model of production independent from conceptualizations between objects and their production or new knowledge and humans. This field detracts object production from conceptualization, experiment, and variety, while also destroying the relationship between matter and form. Objects are created only to meet certain requirements. Franklin tackles this concept, and refers to it as prescriptive technology (The Real World of Technology, 1990). Prescriptive technology causes the collapse of creativity in the making process and standardizes objects. The best example of this is the factory production, which includes the maker in only a small part of the making process. On the other hand, holistic technology, which is suggested by Franklin, is associated with the kind of making in which the maker is a creator. Although the maker is in cooperation with other disciplines, they are entirely involved in the making process and apply their own experiences to the process. This reveals new content at every turn in the object production.

As a result, it can be understood that all processes that create objects are performed intellectually. The object first exists in the conceptualizations of humans toward the self, matter, aim, and form. The design of the object is achieved with the cohesion of these conceptions. Then, since the realization of these concepts requires the knowledge of making, the mental aspect of making is sustained. The knowledge of making is engaged to design. For this reason, in this content, it can be said that each object is a creation. The will that occurs in all processes of making turns into concrete things, a process called poiesis.

4. Making as poiesis

The creative acts involved in the cre-

ation of objects occur in the processes of conceptualizing the holistic nature of an object. The comprehension of this integrity reveals the design of object. Producing a design that did not previously exist is a form of creation. Therefore, the creation of objects is related to poiesis. Poiesis is based on the creation of non-pre-existing objects and the transformation from privacy to full-enlightenment (Heidegger, 2015). Poiesis is the process by which humans reveal the conceptualizations of the mind by affecting matter. It is a representation of an abstract design by processing and transforming matter. Aristotle presents arts and crafts as examples for poiesis, because they transform matter into a different thing, from its original state to specialized objects for each of their purposes. The literal meaning of arts and crafts is techne for Aristotle (Kart, 2015). Techne can be considered as a form of creation since it involves the activities that consist of the knowledge of objects and their making.

It can be claimed that objects are created in the continuity of noesis, which refers to ideal and abstract thought and practice, which is the activity of its concrete production. The mental and ideal processes in each stage of this continuity indicate that the production of objects is creation. Therefore, object production should be examined in conjunction with creative action or poiesis, which offers a unique approach that eliminates the analytic dilemma of considering only mental or practical components.

Due to form of the object being designed in the mind, the process of making differs from other actions. Aristotle explains the distinction between act and making with the terms praxis and poiesis. Generally, praxis is differentiated by its use with an action word, while poiesis is a term of activity used with a *poiein* verb in the context of 'making, producing, and creating' (Kart, 2015). Therefore, making and creating are different from all other actions because they reveal object designs by producing concrete results. They involve a process that is based on noninstinctive actions, personal conceptualizations and concrete expressions.

5. Discussion of theory of the making in design and architecture

Making is both a deliberate action and a state of knowing. Since making directly intervene and interfere with the world, it contains more than design.

Design describes the activity of architecture [or other disciplines associated with design] with an implicit bias: cognitive modelling is favoured and physical qualities [are] minimized. In contrast, making refers to the realms of mental and physical construction, acknowledging the dialectic quality of the process. (Knesl, 1992, p.6).

For this reason, objects can be considered as the physical results of mental work. As the matured ideas are transferred into material realities, they are not forced to change. Ideas are observed in the model and aim of the act, as well as the projection of the processes involved in the realization of act. The understanding of poiesis yields the design of an object that represents the original idea and is pure and unique. Because within this understanding:

- Humans reveal their consciousness and have the energy to alter existing states with this consciousness. This energy reveals humans' capacity for creation.
- The object is the product of understanding and creative performances. For this reason, it is created from the individual perception of humans who make objects.
- Humans create an intellectual space of their own by questioning existing situations. Thus, everything that they have created is the response of a field of inquiry and thought.
- The mind has a wide comprehension capacity. As a result, many possibilities of object creation are discoverable, and the identification of matter is always possible.
- Certain decisions are taken, and knowledge is built. Therefore, the discrimination between theory and practice, mind and body, and subject and object becomes blurred and intertwine. As envisaged, objects reveal their meaning and aim.
- There are some comprehensions of matter. It is ordinary to reach findings about the statement value of matter

that is produced through interrogation. Therefore, it is possible to discover possibilities beyond the material realities of objects. Furthermore, comprehending matter can reveal contrast sensual experience of objects.

• Matters are considered with barriers and obstacles in the design process. Therefore, it is more likely that matters deviate from the original intention.

• Images appear as a result of integrative understanding. They appear as pure findings of the mind and exist as a result of experience. This opens the process on a representational level and leads to a new formal vocabulary.

• Each component should express something about the integrity of the object when revealing the image. No factor divides the perception of integrity.

• A method is discovered for each object. Instead of using the common methods of making, the knowledge of making itself is produced in order to reveal comprehensions and designs. The practical circumstances of making are included in design.

• Since object production is practice of design, it has its own strong and appropriate intellectual culture. This is because the design establishes a field of inquiry and discussion on its own without importing from different cultures such as art or science (Cross, 2007).

• Although the method shows ontological and epistemological differences in technical and technological situations, it includes the knowledge of making on the basis. However, the knowledge of making gains more meaning in the expansion of the technique towards the consciousness-matter-method, because technology shapes consciousness, and develops more on production rather than creation. The technique emerges as a result of consciousness making discoveries on results. Therefore, it reveals the poetics in the relationship and interaction between idea and method.

• Objects are exactly the result of design which is "neither completely predetermined nor universal (as in the notions of ideal form or essence), but specific to individual acts of making" (Childers, 1992, p. 5).

In the context of these expansions that make up the content of poiesis, this study states that poiesis constitutes the intellectual boundaries of the theory of making as a theoretical equivalent of making. The design is observed in the mental content of making and the design object is a product of the knowledge of cognition and conceptualization that occurs uniquely in each human. Therefore, the theory of making and poiesis should be considered as the hypothetic basis of all original productions in the field of design and architecture.

6. Conclusion

The act of making indicates a form of human existence, in other words, the mind. The mind is the place of cognition and conceptualization or noesis. It can be said that noesis initiates the creation of objects. In this study, noesis' development based on four conditions, the self, matter, form, and aim, is asserted. When humans understand their own mental abilities for cognition and conceptualization, they can reveal their creative identity. Noesis of matter explains that matter can bear different qualities apart from the ones sensed by humans and be differentiated from its own (for example, the stone is hard but could be sharp, as well). Noesis of form makes it possible for humans discover new meanings to be attributed to matter and find a way to express an intention. Therefore, it can be said that form is determined by the noesis of aim. For this reason, these four components can be understood holistically and simultaneously. These four fundamental and conceptual components explained in the context of noesis considering the design integrity of noesis as the intellectual backbone of making in our minds. The revelation of this design also refers to noesis and the mental process, since it requires the knowledge of making in its practical process. All the conditions related to making are developed mentally. This emphasizes poiesis, because poiesis is the creation of previously non-existed objects, and the occurrence of noesis in matter as claimed in this study. Since poiesis deals with each act through a mental process, it creates different

qualities, because conceptualizations of the mind in the mental process are expected to be unique. Therefore, this study proposes to examine original objects as potential results of poiesis. Hence, the act of making that produces objects remains within the limits of the theoretical and practical aspects of poiesis.

This study questioned how humans have created objects in order to find creativity of the mind towards the production attitude. This explanation is made by the conceptual typesetting laid out by the theory of making [Figure 1]. This conceptual content of the theory of making will lead to the renewal of the established order in the fields of design and architecture. Instead of the concept of design currently discussed in an epistemological field, it underlines the necessity of reinterpreting the concept of design in an ontological field. The ontological content of the concept of making can manifest itself in technical and tectonic searches. In this content, the actions creating the objects of all design fields arise from conceptions of designers. Thus, this study invites the rediscovery of the concept of making's ontological origins as a theoretical premise that enables the identification of experimental research areas of how matter and form can be grasped afresh. With the theoretical tools proposed in this study, it can be provided the expansion and deepening of design thought in contemporary design environments. From education to practice, this study can be a basis for the reform and advancement of all fields of design.

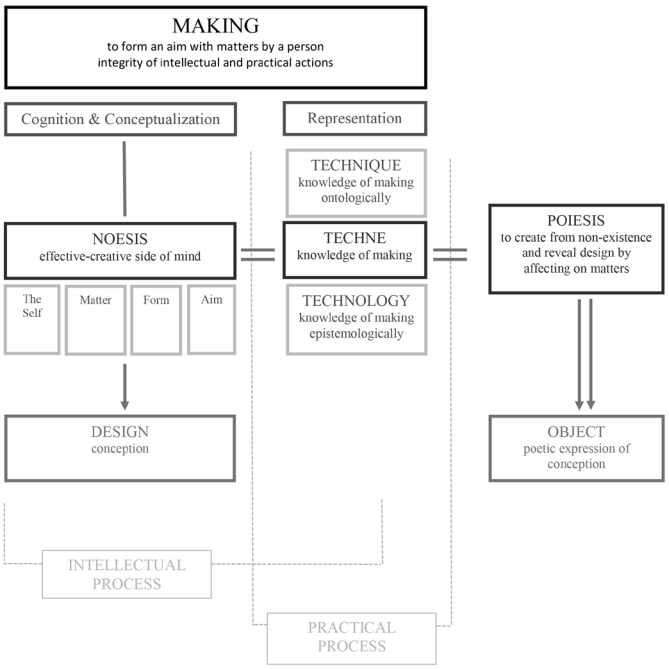

Figure 1. *Conceptual schema of making.*

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