

DESIGN AND POSSIBILITY

MADS NYGAARD FOLKMANN

UNIVERSITY OF SOUTHERN DENMARK

MNF@LITCUL.SDU.DK

ABSTRACT

A central element in design is the search for the new and not-yet-existing. Thus, design is a matter of the possible, of which kind of products and meanings can be made possible through design. The paper attempts to propose a way of theorizing the field of the possible in design. The ability to deal with, mediate and evoke new possibilities and thereby creatively explore new territories of use, meaning and impact is seen as a defining factor of design. Using a phenomenological framework and stating the imagination and the imaginary as central concepts, the paper aims at pointing in new directions for conceptualizing the possible in design. The paper differentiates between two different models of possibility in design, 1) the dimension of possibility in the design process, that is, before the finalized design, and 2) the generation of possibilities through the design object. The contribution of the paper to design research lies in asking fundamental questions of how design, epistemologically and ontologically, operates through the possible.

INTRODUCTION

What makes a chair possible? This sentence can be interpreted in more than one way. It can mean: (i) What are the factors that make the chair possible? That is, which conditions enable the possibility of the chair? Or, if we rephrase the sentence and see the chair as the subject of the sentence – what *does* the chair make possible? – it can mean (ii): A chair makes *what*

possible? That is, which are the possibilities that are created or achieved by the chair? To illustrate, the famous *Panton* chair (1960, Figure 1), made in one single form in injection-molded plastic by Verner Panton, is both the result of a struggle to make the chair possible and, when completed and marketed as a piece of design, an enabler of new possible ways of using, conceiving, and experiencing design. So, on the one hand, the chair is the result of a design process, which took about ten years from the initial idea of a one-structure chair in modern materials to final realization. And on the other hand, in its final iconic presence, which balances modernist ambitions and swooping organic curves, the chair irreversibly changed the space of cultural possibilities for chairs. As a design object without precedent, the Panton chair set new standards for what design is, and what it can look like.



Figure 1: Panton chair (1960), by Verner Panton, manufactured by Vitra

The possible in design can be very elusive. It is, by and large, defined by the individual design case; thus, there are as many *possibles* in design as there are design objects. Each design object has its own story of

becoming in the design process and in its specific impact. As a type of design, for example, a tangible, manifest piece of design such as a chair undergoes different process of being designed and entering the cultural stage than a technological product, where most of the design in the form of pervasive computing is hidden from the eye of the spectator/consumer. Still, as a central aspect of the formative dynamics of design, whether in its phase of becoming or being a design object, it is relevant to move from the level of concrete stories to a general, generative level of the possible in design: analyzing the role of the possible as a leading factor in initiating, structuring, and enabling design processes and processes of attributing meaning to design objects. A design process may take its point of departure in an idea, while it is the cultural context that ultimately determines the meaning of the design object, but it is the object that gives the idea its tangible expression, and it is through the object that the context is affected and perhaps transformed. Thus, we should examine, first, the role of the possible in the becoming of design objects, and, secondly, how design objects, though their constitution, give rise to new spaces of possibilities.

DESIGN MEDIATING POSSIBILITY

Design is a passage to the new. Design is a not only a term for describing certain categories of objects or solutions, it is also a medium for envisioning something new. This is a process that takes place in the intersection of function, aesthetics, actuality, and possibility. Thus, design deals with the *possible*. To further sharpen the thesis: The ability to *address, mediate, and evoke* new possibilities and thereby creatively exploring new territories of use, meaning, and impact is a defining feature of design. It is what constitutes design and makes it special: Design is capable of transforming the possible into actual, tangible and useful objects that, in turn, can have a huge impact on human life and behavior (with widely distributed products) or on widespread notions of what objects are or mean (in experimental design).

In the phase of becoming, that is, in the design process, design converts and transforms the possible into forms and appearances. Accordingly, in the phase of finalized objects, some aspects of the possible remain as a structure of meaning contained in the objects. Thus, another central thesis is that *the possible is not only to be found before and after the realization of the design object but is also contained within it*. This concept of design – design as a medium that enables the possible – touches upon our understanding of design, how it is conceived as a discipline, and what is understood by design.

Design is both an old and a new discipline. It is a new discipline in the sense that it is only within the last 250 years that design has established itself as a professional

discipline operating in relation to industry and modern mass-production as a deliberate approach to affect our physical surroundings. As a scientific discipline, design is even younger, as research has been contributing to our knowledge about design for about 50 years, and efforts to create a research discipline are still ongoing, as demonstrated in the anthology *Design Research Now* (Michel 2007). Conversely, a comprehensive “design turn” is taking place within the humanities, engineering, and the natural sciences, where design as a discipline connecting theory and practice in objects of synthesis places itself at the center of the production of knowledge (Schäffner 2010). During the same period, the concept of design has expanded from being associated with products and graphics to being associated with areas such as communication, environments, identities, systems, contexts and futures (Heskett 2002). Further, modern technology is a more integral part of design than ever before, shaping the concrete objects of design from within. Design has been associated with a culture of the artificial (Simon 1969) and seen as an art of technology (Buchanan 1995), but on the concrete level of design objects too, technology plays a growing role in both the material and immaterial culture of today’s design objects through the use of miniaturized microchips and pervasive computing. Design as a medium for envisioning the new is ever changing, both in terms of the culture of objects and in terms of professional disciplines. In the latter domain, lately the term *design thinking* has been devised to describe the ability to use design tools and design methods in relation to business strategies (cf. Borja de Mozota 2003) with processes oscillating between problem formulation and solution generation, and with the formulation and generation of abstract concepts in the materiality of actual design solutions (e.g. Stolterman 2007; Brown 2008, 2009; Rylander 2010). Design thinking is a way of thinking and acting through and with the concreteness of design.

Design is, in turn, also one of the oldest genuinely human capacities. The very concept of design thinking, which in its strategic approach to designing might use new and refined tools, defines a basic competence in design: the connection of conceptual (what do we want from the design?) and concrete materiality (how does this come into being?). Many books on design open by stating that design is both a noun (*the design, meaning outcome*) as well as a verb (*to design, meaning a process*). On a fundamental level, design can be seen as the general ability to conceive and carry out plans as well as designating and thus giving meaning to these plans (implied in the Latin root *designare*): Design is a way for people to interact with their surroundings with a conscious intention and through material objects full of immaterial meaning; in this sense, we can speak of a world created, constructed, and structured by design. Thus, design can be understood as the term for the

culture of both material and immaterial objects that are created by human beings based on a certain intention.

Any human creation is, however, always situated within a historical context, and what specifically defines design in contrast to, e.g., craft is its close connection with industry, where it has the potential to get widely distributed as a means of giving form, structure, and meaning to products. The attachment to industrial mass-production is often the criterion of demarcation for design histories that typically set the starting point of the history of modern design at the beginning of the industrial revolution in England (e.g. Forty 1986; Raizman 2010, Sparke 2009).

Design is, then, a central part of our interface with the modern world; we see, perceive, and understand contemporary culture through its design and its various material (visual, haptic, auditive, olfactory, and even gustatory impressions and impulses) and immaterial (conceptual, critical, systems-oriented) representations. Design can be said to be a 'Leitmedium' of modernity, in the sense that it creates meaning in an intersubjectively binding way (Hörisch 2009), which means that design is the unavoidable access point for our perception and understanding of the world in its cultural formations. Then, design is a way of imaginatively envisioning the new, conceiving and grasping possibilities of living and being engaged in the world. Thus, I will define *design as a means available to human being for envisioning and realizing new possibilities of creating meaning and experience, and for giving shape and structure to the world through material forms and immaterial effects with a potentially massive impact.*

The philosophical framework for my approach is phenomenological in the sense that phenomenology deals with conditions of experience, and my focus is on the relationship between design and experience. The point is to explore how design is a result of experiential structures, and how design objects themselves are capable of creating new structures of experience. In essence, design in its many forms designates the specific appearance(s) of the world of objects. As we sense and perceive the modern world through its tactile and visual surfaces, it becomes clear that these affect and structure our experience in particular ways. For example, there are huge differences between experiencing the world through the formal structures of functionalistic design and architecture or through Verner Panton's experimental, psychedelic roomscape. My approach takes the cultural surroundings and socio-economic contexts into account, but my focus is primarily on the enabling of experience and dimensions of meaning on behalf of the objects rather than on the actual use and cultural contexts of design object. This kind of phenomenological approach is relatively new in design research, although there are exceptions, e.g.

Schön's studies of the phenomenology of the design situation (e.g. Schön 1983). This approach is also what sets this study apart from approaches to design creativity in psychology or cognitive science (see e.g. Yukari & Taura 2011) or in neuro-science (cf. Skov & Vartanian 2009).

THE POSSIBLE IN DESIGN

Possibility evolves at the threshold to actuality. In one of the most powerful cultural expressions of the possible, the seminal novel *Der Mann ohne Eigenschaften* (1930/33; English: *The Man Without Qualities*, 1995) the Austrian author Robert Musil states how the sense of the actual, "Wirklichkeitssinn", must be complemented by a sense of the possible, "Möglichkeitssinn" (Musil 1978, I, 16). The important point in Musil's reflection is the simultaneously utopian and reality-bound nature of the possible. A person capable of conceiving the possible always thinks, "things might be different":

"So the sense of the possible could be defined as the ability to think of everything that also could be and, conversely, not to regard the given as more important as the non-given" (ibid., my translation).

In the context of Musil's novel, the sense of the possible leads the protagonist on a search for new possibilities of living: The utopian horizon is wide open, as the sense of the possible also leads in the radical direction of the "as yet un-awakened intentions of God" (ibid.). At the same time, though, the possible is connected to the actual, to the *possible actual*, as it is always the actual that provides the foundation for the possible. The possible is marked by immanence as well as transcendence. The sense of the possible is not just given but must be awakened. This, then, requires a specific mental setting in a paradoxical attachment to/detachment from reality.

This mental setting towards the possible actual (and the actual possible) is the setting that characterizes design and the designer. Musil speaks of having a "will to build and a conscious ambition to the utopian that does not abandon reality but treats it as task and invention" (ibid.). To conceive of the possible and utopian in a reinvention of reality is at the heart of design. At the same time, this is also an experimental task: Musil speaks poetically of dragging a line through the water without knowing whether it is baited (17). In most design, searching is hardly quite this open, but the key point here is that the means of searching for the possible can be hard to define. Working actively with design and design processes is, however, an attempt to specify the bait.

In a design context, the possible is the open space of the new and non-existing or rather the not-yet-existing. Addressing the possible in design means opening the discussion about what design is for, and asking how it

can be used as a form of meaning that shows us new directions. This is central to Herbert Simon's famous 1969 dictum that "[e]veryone designs who devises courses of action aimed at changing existing situations into preferred ones" (Simon 1996, 111). Simon's statement is loaded with Modernity's optimistic ideology of using design to create a better world, but even seen apart from its historical context, which relates, for example, to the discussion about the role of artificial intelligence, the statement still has something important to say: that design is a flexible tool that can take on a wide variety of shapes and expressions (encouraging "action"), and that it can be an active means of engaging with the surroundings (accomplishing "change"). Furthermore, possibility in design does not have much in common with the philosophical notion of "possible worlds" as counter-projections of reality (i.e. asking what would be possible if we had another world). Instead, possibility in design has to do with making possibilities of *this* world relevant and tangible. Design is a means of proposing *possible models* for being in, perceiving, and engaging with the world. The possible should not only be seen as something that comes into being before the actualization of the finalized design but rather as an *inherent structure of design*: As a tool for actively organizing the mode and appearance of reality in the modern world, design indicates what is possible, and what is not. Design provides models of how to perceive and filter reality; it enables what is not currently enabled (cf. Sloterdijk 2010).

Within the field of design and in design theory, the possible has been conceived in a variety of ways depending on design approach. Basically speaking, there are two different models of possibility in design, 1) the dimension of possibility in the design process, that is, *before* the finalized design, and the generation of possibilities *through* the design object.

The possible plays a prominent role within design epistemology, as the starting point of a design process is often a search for a solution that has to come into being. Here, the possible is a part of the early formation of the design object, before it is finalized as a solution with a physical aspect. In design epistemology, the debate revolved around such issues as generating ideas, enhancing creativity in the process of seeking new proposals, and promoting the creative leap in design when design is used as a device for creative processes of anticipating and grasping for something new and not-yet-existing. Further, it is exactly due to its ability to devise concrete proposals and solutions for something yet unknown – and this bridging the gap between unknown and known, possibility and actuality – that design often is seen as having a prerogative in comparison with disciplines that only describe characteristics of the world (e.g. sociology and humanities) and not necessarily projecting anything

new. From this perspective, then, design is a more *synthetic* than analytic discipline; it has a progressive, future-oriented and openly interpretive orientation: When we initiate a design process, we never know what the ultimate outcome will be.

With regard to the methodology and process of creating concrete design objects, the possible can, then, play a central role. Daniel Fällman has discussed the dimension of *design exploration* in the design process, as design is used critically to question what design is for. In this context, "design becomes a statement of what is possible, what would be desirable or ideal, or just to show alternatives and examples" (Fällman 2008, 7). Thus, design exploration can be used "to show what is possible", that is, to explore "a possible future by transcending (i.e., breaking down and going beyond) the boundaries of an existing design paradigm" (15). In an extension of this kind of reflection, Per Galle raises a series of fundamental, philosophically informed questions that must be faced regarding the act of reaching into the future with design: He asks what design predictions refer to, since design on this stage has not yet manifested itself in the form of objects. Therefore, the questions facing designers may be *ontological*, asking what the "subject area of design" can be, "given that it cannot be the actual artifacts themselves". This leads to the central *epistemological* question: "How can the designer *know* the truth of his predictions (or at least justify his faith in them)?" (Galle 2008, 279-80). Galle examines various theoretical or philosophical models or "world-views" that might help us understand the design process and its relationship with an object that does not yet exist, and he makes the general statement that designers need to be aware that all approaches to the design process (as described in design theory) have a conceptual foundation: "What threatens to disintegrate our body of design theory is not the worldviews *per se*, but our lack of awareness about them" (298). This is true, and as a consequence, we also need to be aware of the preconceptions implied in the current notion of possibility on the level of the design process: Central to my argument is that this kind of design thinking implies that we might *think* and *act* within a field of possibilities, but also that these possibilities often are thought to exist in the form of a large reservoir of latent design choices that disappear as the design process is condensed into a final product. In the design object, the sphere of possibilities is often conceived to be transient and eventually transformed into the actual. Seen from the perspective of the design process, then, the possible is virtually active as a force behind the process, but seen from the perspective of the design object, it eventually loses its relevance. The result of this process is the fundamental annihilation of the possible that disappears virtually without a trace. My point is, therefore, that this notion is challenged by the use of the concept of the imaginary.

Within design ontology and design phenomenology, the notion of the possible is engaged on another level, as the possibilities are created by and around the design object. Typically, the design object is conceived as static, which also is a notion to be challenged. Thus, the design object can generate new possibilities as design is regarded as a catalyst for generating cultural possibilities. Design can be a way of opening up a space of cultural meaning. In this vein, John Heskett states that “[c]ultural identity is not fixed, like a fly in amber, but is constantly evolving and mutating, and design is a primary element in stimulating the awareness of possibilities” (Heskett 2002, 133). The key question here is what implications this has for design and our understanding of design. On the one hand, Heskett’s statement contains an element of a one-way model, where the design object has a stable and secure ontology and points to an ever changing and unstable culture; on the other hand, however, it indicates an understanding of the relationship between design and culture with the design objects as the starting point. Thus, Heskett views design as integrated in a general anthropology; that is, in his perspective, design is a natural extension of man, dynamically responding to human nature and culture. In a statement on the same level of abstraction and ambition as Herbert Simon’s dictum, Heskett says that “design, stripped to its essence, can be defined as the human capacity to shape and make our environment in ways without precedent in nature, to serve our needs and give meaning to our lives” (7). Further, the notion of the generation of new possibilities through the design object is close to the notion of Critical Design, which implies that design critically could, and should, project productive counter images of a given reality, thus functioning as a critique of everyday habits and practices of creating and using design (cf. Dunne 1999, Dunne & Raby 2001). Since, on a fundamental level, design operates as “orientation” and communication between individuals and collectives (Schneider 2009, 197) design has the potential to indicate new directions. This approach may also be future-oriented in nature; we may “use design as a methodology to create examples of how the future *should* be” (Hjelm 2007, 120).

In a philosophical context, Peter Sloterdijk tightens the argument of opening up possibilities through design. He speaks of design in the paradoxical phrase of “the capacity of incapacity”, “Können des Nichtkönnens” (Sloterdijk 2010, 12). On the level of a phenomenology of use, design, according to Sloterdijk, has a ritual quality in simulating the kind of sovereignty that emerges when we are able to grasp of otherwise incomprehensible objects. When this occurs, users are fundamentally enabled and empowered. For example, in interface design, the hermetic “black box” of an otherwise incomprehensible product can become “useful” and develop an “unlocked exterior” through design devices; design can be seen to serve the “need

of competence for structurally incompetent users” (15-6). On the level of design ontology, however, Sloterdijk is more radical. He speaks of design as a reshaping of things, “Neuzeichnung von Dingen” (17), which by transcending the existing places design in an open space where it designates the new on the basis of the unstable condition of the exception:

“A designer can never understand himself as simply a curator of the existing. All design arises from anti-reverence; it begins with the decision to put the questions of form and function of things in a new way. Sovereign is the one who can decide over the permanent state of exception in questions of form. And design is the permanent state of exception in issues concerning the forms of things.” (19)

Furthermore, Sloterdijk speaks of design as strategy of renewing things whereby design objects become *comparative* objects; they are always dependent on previous objects and are “results of a forward-looking story of optimization” (20). As a consequence, in Sloterdijk’s perspective design objects can emerge at the intersection of actuality and possibility in two different ways. In a synchronic perspective, design objects can be mediums of new possibilities that are based on the capacity of incapacity and on the openness characterizing the permanent state of exception. In a diachronic perspective, this structure unfolds in the temporal process where new products realize possibilities that older products did not have and in the enabling of new possibilities in the design process.

THE IMAGINATION AND THE IMAGINARY

Thus, on the level of the design object the possible can be present as the stimulation of cultural possibilities (so Heskett) or as the not-yet-given-but-still-possible capacity of incapacity but-still-possible (to rephrase Sloterdijk). My point is that the possible can also be seen as an inherent structure in virtually all design objects. This stems from the role of the imaginary in design objects. The imaginary in design may be applied in theories describing the *inner dynamics of expanding the space of possibility in design*.

Thus, the concept of *imagination* is tightly related to the potentiality of the possible. Thus, a central entry to the discussion is the role and workings of the imagination. To be able to imagine is a central human capacity, not only for designers and in design, but for all human beings. Indeed, the idea that imagination is a part of designing is so obvious that it is perhaps redundant to speak of imagination in design: It lies at the heart of design. But as a concept, imagination is not obvious. In a historical perspective, imagination has been regarded ontologically as a *faculty*, almost a physical entity with a certain location in the human mind, or functionally as an *ability* to perform the task of imagining and create

imaginary meaning. Regardless of definition, the point about imagination in design is that imagination performs an operation of abstraction, negation, transformation, and envisioning of something new, and that this is an important condition for conceiving the open spaces of possibilities in design. In addition, in the design process imagination leaves its mark on the coding of the resulting design objects and solutions.

THE IMAGINARY AS ENABLING POSSIBILITY

This means that imagination may be viewed as structure that acts as a formative power in the process of designing, and which subsequently follows the design object as it is permeated by *imaginary* meaning. In this sense, the imaginary can inform the established knowledge of what happens in the cultural production of meaning in design products and solutions; it can reveal how design, with its structures of realized and imaginary meanings, engages with culture. Thus, the concept of the imaginary is the most crucial concept as it deals with dimensions of meaning in design, whereas an overly strong emphasis on the role of imagination may lead to an outdated celebration of creative genius of the (individual) designer. Thus, my ambition is to not fall back the assumption of an almost metaphysical belief in the designer's artistic creativity that was characteristic of the classic art historian approach to design history, cf. Pevnsner's focus on the designer's genius in his seminal 1936 work on the pioneers of modern design (Pevsner 1991).

Then, the exploration of the role of imagination, particularly the imaginary, offers an entry point that lets us discuss the possible in design. While design is capable of opening a space of possibility and, by giving form and structure to the possible, can itself be a medium of the possible (or, rather, a possibility that derives from the verge of actuality), exploring the concepts of imagination and the imaginary can reveal *how* the possible operates in design. This conceptualization in relation to design requires us to investigate the principle underlying the possible.

The imaginary also refers back to the designer's use of design as a medium for imagining something new and thus transforming creativity into innovation, that is, creativity put into a practical and concrete context of use. This connection should not, however, be seen as an attempt at finding the 'true' intention in the designer's mind (which would be a fallacy). Rather, by using the concept of the imaginary to conceptualize the complex relationship between a mental process of immaterial imagining on the one hand and the realization in a physical, concrete and material medium on the other, we are able to discuss how meaning, through the vehicle of the imaginary, can be transferred in a way that detaches it from the designer. This means looking closer at the nature of the imaginary.

The imaginary is invisible and non-present. As presence, it is structured by a negation that makes it

come into being: When we imagine, the object is not actually there (cf. Sartre 1940). The imagination is the catalyst in this *logic of negativity* whose product is the imaginary, and it is this negativity that opens up the space of what is possible.

The imaginary puts at stake what visibility is (as we cannot really see the imaginary), how the object imagined is in focus, and how – if at all – we can control it. The imaginary can be seen as a practice of representation: The imaginary stands always in a relation to an entity, it may be an object or a structure of meaning, that it is imagined from. This is, however, a special kind of representation. In short, the imaginary forms a kind of *blurred, distorted, or simulated* representation. Seen as a signifier, the imaginary points to a signified in the real; this relation is not only problematic (how does the imaginary represent the real?) but the signified in the real is not left unmarked, but ultimately altered or influenced by the signifier in the imaginary (as when we also understand the real through the ways we imagine it, i.e. the mirroring of the real in the imaginary). The ability – or non-ability – of the imaginary to represent the real is central in relation to the change of extension and content of meaning from the real to the imaginary, and thus to the degree of liberty of the imaginary. It is both tied to the real and attributed with the ability to transcend the real. The imaginary's relation to the real can be enlightened by looking at the imaginary as simulation and through the relation of known and unknown that often is at stake in design. This pinpoints how the imaginary in relation to the real not only contains known elements, but also reaches out for the realm of the unknown.

As a form of representation, the imaginary operates as a simulation of the real: It points to the real but at the same time instantiates a structure of meaning that erases the relation to the real. In this turn, the real loses its prevalence as the origin of meaning, and, roughly speaking, the imaginary takes over. In this reversal of meaning and erasure of the importance of origin in the real, the imaginary gets close to the role of simulation described within the context of a semiotic-cultural analysis by the French sociologist Jean Baudrillard. He develops a theory of perceptual organization of meaning in the late modern societies where the image, in his opinion, dominates the distribution of meaning. The images no longer just reflect reality; they take over and create what reality is, and in this movement produce simulated simulacra. Thus, Baudrillard states, "Simulation is no longer that of a territory, a referential being or a substance. It is the generation by models of a real without origin or reality: a hyperreal" (Baudrillard 1983: 166). Strictly speaking, the simulation cannot live without a link to the real (hence, for instance, the references of the Luxor hotel and casino in Las Vegas to the Egyptian pyramids), but what is interesting in Baudrillard's conception of simulation is that it, in its act of performing its own hyper-reality, evokes a break with the ontology of the real. Simulation has a starting

point in reality but also, at the same time, in its own act of simulating the power to create its own kind of ontology with new and open possibilities (in this way, the Luxor can engage in not only improving, but also superseding the pyramids in terms of function, structure and aesthetics: It can contain hotel rooms in the wall, employ a multitude of materials in the creation of a variety of tactilely and visually engaging surfaces promoting ambience, and it can be a temple of mundane pleasure for the masses (it is intended so) instead of just a monument for a single dead. When the imaginary simulates representation, it performs the same act: It creates its own space of representation.

Thus, in its power of being simulation, the imaginary can point to and even create new spaces of meaning. It may be instantiated in its relation to reality (as representation), but as a virtually new being and as a presence in its own right, it is saturated with the ability to transcend reality. I will relate this to the polarity of the known vs. the unknown. Establishing a relation to the unknown is much in line with obtaining a defocus in the design process: It has to do with not only focusing too sharply on what is given and known, and what knowledge can be acquired in order to inform the design process (this is, of course, also important), but has to do with a mental setting that can acknowledge and integrate emergent and becoming layers of meaning that we do not know yet. A mental setting that embraces an interface between known and unknown (cf. Folkmann 2010) may make it possible to let the inner space of imaginings develop into something new in the design process. Thus, when the formative phase of imagination itself is structured in the polarity of known and unknown, and the process of imagination to a certain degree is being liberated of being fixed to given knowledge, the product of the act of imagination, the imaginary, also gains in openness: The process of imagining in the intersection of known and unknown reaches out for a constitution of the imagined object or meaning where the transformative power of the imaginary is central: As marked by the unknown, the imagined object gains in being open-ended and operating as a catalyst for emergent meaning that was not known in advance. When lesser tied to being a representation of something given, the imaginary can change in new directions.

The possible directions of the imaginary do not mean that the movements of its changes are random or arbitrary. At the intersection of known and unknown, the imaginary is at one and the same time blurring the borders to the known in entering the realm of the unknown and tied, fixated, to the known. The imaginary can be closed structure of fixed meaning or containing an open principle of self-generating meaning. This is formulated by Jean-Jacques Wunenburger in his analysis of the products of the imaginary (Wunenburger 2003: 12-3). On the one hand, he sees the imaginary as a restrained, static content produced by the imagination. The imaginary can never step beyond the content that is

put into it by imagination as it is restrained by the limitation of perception. On the other hand, though, Wunenburger points to a kind of dynamic-expanding imagination, that “in integrating all sorts of activities of imagination, designate systematic groups of images while at the same time carrying on some kind of auto-organizing, auto-generating principle that without halt permits the opening of the imaginary towards the innovation, transformation, the new creation”. Thus, the imaginary can entail an openness in meaning and itself be a generative principle of meaning; it can give way to an auto-organization of ideas (Wunenburger 2003: 90) beyond its any originating imagination. Seen in this perspective, the imagination loses in importance as the origin of meaning.

My point in this context is that the product also itself generates a meaning that is not in an intentional control of the designer. Paradoxically, however, this ability to generate meaning has a link back to the mental setting initiating the imaginary meaning. With a degree of defocusing and a structural openness towards the new, unexpected and unknown, the potential of an “opening of the imaginary towards the innovation, transformation, the new creation” (to repeat Wunenburger’s quote) is encouraged, even if not secured. To follow this line of thought, designed products with an open-ended conception of incorporating the unknown, of entailing both “knowledge and not-knowledge in projecting” (cf. the title of Stephan 2010), may be more creative in the sense of evoking and enabling new meaning.

IN CONCLUSION

My aim is, beyond this paper, to describe a *phenomenology of imagination* and to look at the implications that this process of imagining has for the constitution and ontology of the object and for the object’s way of “affording” possibilities, i.e. as a constraint on the possibility for specific actions that may be inherent in an object (cf. Gibson 1977, Norman 2002). This reflection can be productive on a cultural level by examining the potential of design objects to enable and create culturally circumscribed meaning. The concepts of possibility and the imaginary reveal that objects are always more than their mere materiality, that they are permeated by structures of meaning that are given in an interplay of negation and positioning, of absence and presence, and that this further opens up a space of possibility that lies hidden in the object but is latent in its structure.

REFERENCES

- Baudrillard, J. 1988. “Simulacra and Simulations”. Mark Poster (ed.). Selected Writings, 166-184.
- Borja de Mozota, B. 2003. Design Management. Allworth Press.
- Brown, T. 2009. Change by Design: How Design

- Thinking Creates New Alternatives for Business and Society: How Design Thinking Can Transform Organizations and Inspire. Collins Business.
- Brown, T. 2008. Design Thinking. Harvard Business Review (June).
- Buchanan, R. 1995. "Wicked Problems in Design Thinking". In: Buchanan, R. & Margolin, W. (Eds.), *The Idea of Design*. London: MIT Press, 3-21.
- Dunne, A. 1999. *Hertzian Tales. Electronic Products, Aesthetic Experience, and Critical Design*. Cambridge, MA: MIT Press.
- Dunne, A. & Raby, F. 2001. *Design Noir. The Secret Life of Electronic Objects*. London/Basel: Birkhäuser.
- Fällman, D. 2008. "The Interaction Design Research Triangle of Design Practice, Design Studies, and Design Exploration". *Design Issues* 24:3, 4-18.
- Folkman M. N. 2010. *Creative Imaginings: A Model of Imagination in Design*. Proceedings of the 1st DESIRE Network Conference on Creativity and Innovation in Design. Lancaster: Desire Network, 72-82.
- Forty, A. 1986/2005. *Objects of Desire. Design and Society Since 1750*. London: Thames and Hudson.
- Galle, P. 2008. Candidate worldviews for design theory. *Design Studies* Vol. 29, No. 3. Elsevier, 267-303.
- Gibson, J. J. 1977. "The Theory of Affordances". Shaw, Robert & Bransford, John (eds.), *Perceiving, Acting, and Knowing*. New Jersey: Hillsdale.
- Heskett, J. 2002. *Toothpicks and Logos*. Oxford: Oxford UP.
- Hjelm, S. I. 2007. "Energi som syns". *Under ytan: En antologi om designforskning*. Stockholm: Raster Förlag and SVID, 118-131.
- Hörisch, J. 2009. *Bedeutsamkeit*. München: Hanser.
- Michel, R. 2007. *Design research now*. Basel: Birkhäuser.
- Musil, R. 1978. *Der Mann ohne Eigenschaften*. Hamburg: Rowohlt.
- Norman, D. A. 2002. *The Design of Everyday Things*. New York: Basic Books.
- Pevsner, N. 1991. *Pioneers of Modern Design: From William Morris to Walter Gropius*. London: Penguin.
- Raizman, D. S. 2010. *History of Modern Design*. Laurence King.
- Rylander, A. 2009. Bortom hajpen – designtänkande som epistemologiskt perspektiv. *Research Design Journal* 1, 20-27.
- Sartre, J.-P. 1940. *L'imaginaire*, Paris: Gallimard.
- Schäffner, W. 2010. *The Design Turn. Eine wissenschaftliche Revolution im Geiste der Gestaltung*. Claudia Mareis, Gesche Joost, Kora Kimpel (ed.). *Entwerfen, Wissen, Produzieren. Designforschung im Anwendungskontext*. Bielefeld: Transcript, 33-46.
- Simon, H. 1996. *The Sciences of the Artificial*. Cambridge, Mass. & London: MIT Press.
- Schneider, B. 2009. *Design – eine Einführung. Entwurf im sozialen, kulturellen und wirtschaftlichen Kontext*. Basel: Birkhäuser.
- Schön, D. A. 1983. *The Reflective Practitioner – How Professionals Think in Action*. Basic Books.
- Skov, M. & Oshin V. (eds.) 2009. *Neuroaesthetics. Foundations and Frontiers of Aesthetics*. Amityville: Baywood Publishing Company.
- Sloterdijk P. 2010. *Der Welt über die Straße helfen: Designstudien im Anschluss an eine philosophische Überlegung*. München: Fink.
- Sparke, P. 2009. *The Genius of Design*. Quadrille Publishing.
- Stephan, P. F. 2010. *Wissen und Nicht-Wissen im Entwurf*. Claudia Mareis, Gesche Joost, Kora Kimpel (ed.). *Entwerfen, Wissen, Produzieren. Designforschung im Anwendungskontext*. Bielefeld: Transcript, 81-99.
- Stolterman, E. 2007. *Designtänkande*. S. I. Hjelm et al. (eds.). *Under Ytan: En Antologi om Designforskning*. Stockholm: Raster Förlag/SVID, Stiftelsen Svensk Industridesign.
- Yukari, N. & Taura T. 2011. *Design Creativity 2010*. London: Springer.
- Wunenburger, J.-J. 2003. *L'imaginaire*. Paris: Presses Universitaires des France.