A new role for designers through meta (open) design

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Abstract

The growing speed with which consumers discard artifacts is a significant but regrettable part of the capitalist economy. High consumption rates are accelerated by contemporary society, which is based on a model of values that link the notion of well-being to profit generation and consumption of material goods. This exacerbated consumption cycle perpetuates environmental damage. In this context, proposing sustainable solutions involves new ways of thinking and doing that are distant from the practices of the current model of consumer society. This paper reflects on the necessity to implement changes into the design process, production, and consumption modalities. These changes propose a "new" role for designers as professionals, and as individuals in society at large. This research connects the concepts of metadesign and opens design- enabling system awareness. Metadesign can be considered critical and reflexive thinking about the boundaries and scope of design, but also, as the prefix "meta" implies, it can be understood as the design of the design process, in a critical and reflective way. Open design implies the openness of the design project for multiple actors (including consumers), information sharing, and building knowledge between them. As a result, design can lead to consumption modalities situated in slow culture, transforming the relationship between users and artifacts.

Keywords: open design, metadesign, ecosystems, users, consumption.

Consumption is part of human behavior. However, it is clear that society and culture influence consumption, in relation to values, beliefs, and meanings. Therefore, design and other fields, like media, are related to the creation of meaning, and in this context, humans are most often seen only as consumers. As consequence, society is organized in relation to consumption, which can be either tangible or intangible.

Conspicuous consumption, a term coined by Vebler in 1899, remains a relevant way to understand the current forms of consumption, which are related to the consumption of symbolic values of objects in an attempt to furnish social identity. However, postmodern identities are not only based on class identity as described by Veblen (and others like Simmel and Bourdieu), but also on personal identity (Svenden, 2006). To create and develop their own personal identity, consumers adopt and appropriate products to define themselves (*i.e.* clothes, cars, cellphone).

This appropriation allows people to communicate their opinions, but also to experiment with different selves. The desire to show and make explicit their identity is influenced by fashion. In this sense, fashion is more a process than an object and entails "[…] the conjunction of two logical systems: the system of ephemera and the system of aesthetic fantasy" (Lipovetsky, 1994, p.25). Ephemeral is one of many adjectives associated with the current mode of consumption that is influenced by fashion. The fast turnover is a combination of just-in-time production, and the high volume of consumption that is associated with the capitalist economy. Therefore, a model of values that link the notion of well-being to profit generation and consumption of material goods, accelerates the speed with which consumers discard artifacts. The exacerbated consumption cycle perpetuates environmental damage.

The connection between the rise of consumption and design has been a topic for discussing among different researchers and critics. Papanek (1971) provided an in-depth critique of the design profession, pointing out its role in encouraging consumption and therefore contributing to ecological and social degradation. Although design can play an important role in changing this situation by proposing sustainable solutions, it is necessary to implement new ways of thinking about the ecosystem in which design is part – which is beyond the idea of the design process focused on achieving an expected solution to satisfy user's needs.

New ways of thinking

Design projects are intrinsically connected to the ecosystem in which they are involved. Therefore, every decision in the design process has a consequence which affects not only the design process, but also all entities that are part of this ecosystem, and the proper ecosystem itself. In this perspective, objects can be considered all human and nonhuman elements (*i.e.* technology) that have any kind of interaction (c.f. Latour, 1996).

The design effects in the ecosystem and its entities make responsibility a complex action which is more than just good design choices, since it is also related to transparency, commitment and attention to the consequences of any design action. Therefore, design should reconsider waste and the speed of the consumption lifecycle. New product life cycle and new forms of consumption can be related to the openness of the design process, in which it is understood that the designers are not the only creators, but that they work in collaboration in open projects, together with users, other consumers, and a multidisciplinary ecosystem. The input of the design is the facilitation, and the collaboration is the creation of a reasonable space expressed in the form of patterns, prototypes, tools, space for conversation. This model represents a new paradigm for design.

In order to achieve this paradigm change, it is necessary to accomplish a mindset transformation, in which design practice and methods should enable people to have a different relationship to the artifacts, reducing the waste life-cycle. Our position is that open design practices can be a way to engage users in a participatory process, prompting a reflective critique about consumption.

Open (Meta) Design

From the moment that design starts to take into consideration all entities, and the complexity of different interactions and their connectivity in the ecosystem with which it is involved, new forms of design practices arise – like open design. Although open design is not a new practice, it changes some of the current paradigms of design practice, like authorship, the use of human centered design and the idea that every design project should end with a material outcome, such as a product or a service. However, one of the most important changes is the role of the designer.

The development of open design is connected to the rise of computers and the internet, just like other fields influenced by the open movement, such as open source software, open science, and open technology (De Mul, 2011). The introduction of digital technologies has enabled new forms of organization and distribution of resources, or it has modified obsolete forms (Goetz, 2003). Therefore, new spaces and conditions for practice are developed regarding the openness of projects, participatory practices, the sharing of knowledge and information, and collaborative interactions.

Open design is more than just a new way to create products. As a process, and as a culture, open design also changes relationships among the people who make, use and look after things (Van Abel, 2011). Since open design breaks the boundaries between different entities, it is possible for non-designers to become "designers", allowing end users to share projects and access to digital fabrication technologies to manufacture the products they want locally (Menichinelli, 2016; Stappers, Visser, Kistemaker, 2011). Therefore, open design favors the development of new forms of value, expanding existing relationships, power and responsibilities between suppliers, consumers, and competitors in a given ecosystem.

From this perspective, the designer has to become a metadesigner, shaping environments in which unskilled users can design their own objects. The metadesigner resembles the scientist who no longer creates a linear argument, but instead develops a model or simulation that enables the user to explore and analyze a particular domain of reality, or a successful game designer who designs a game space that facilitates meaningful and enjoyable play (De Mul, 2011).

According to the Merriam- Webster online dictionary, the prefix Meta is "usually used with the name of a discipline to designate a new but related discipline designed to deal critically with the original one (*i.e.* metamathematics)." Regarding the idea of thinking and/or reflecting critically about the discipline, metadesign can be considered critical and reflexive thinking about the boundaries and scope of design, aimed at coping with the complexity of natural human interaction made tangible by technology, with the goal of transforming this complexity into an opportunity for new forms of creativity and sociability (Giaccardi, 2005).
Similar to open design projects, metadesign does not require a final and tangible product or service as an outcome. Thus, metadesign is able to develop a free space for creativity and reflection. Moreover, in those meta spaces, designers can move away from the simple goal of developing a product or a service and be more critical about their activity and their creations.

Final Considerations

To consider all the entities that are part of the ecosystem in which design acts is to transcend the idea of a simple artifact as an outcome of the design process. Thus, it is to think about all the

possible interactions and the effects that every design action can have in the ecosystem, which can be exponentiated as a consequence of its complex networked organization. As Giaccardi (2005) claims, metadesign can be an emanating culture, in which the challenges of complexity are addressed through new forms of interaction, creativity, and sociability.

The new forms of interaction associated with open design will allow consumers to become participative and engaged users, changing their relationship with the artifacts that they consume. The challenge of "new designers," as metadesigners, is how to create sustainable long term relationship with users, supporting their active role (Fischer & Scharff, 2000).

This short paper is a theoretical reflection about the possible benefits of moving toward a meta dimension in design practice. Future studies should consider the effectiveness of this approach in order to reduce product waste, user engagement in open projects, and changing the value proposition of innovation. In order for these changes in the design process to be effective, it is important to study all the possible interactions between humans and nonhumans that can arise in the ecosystem.

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Stan is the Anthony J. Petullo Professor in Graphic Design. He came from the Institute of Design in Chicago, where he managed the design PhD and Visiting Scholars program. He was originally tenured in Canada, at the University of Alberta, where he was in the Humanities Computing MA program and the Department of English and Film Studies.

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Stan has worked for the past 20 years on the future of reading. He is now looking at the role of prototypes in research, not only in addressing research questions, but also in developing them. Watch for a new book on prototyping across the disciplines in 2018.

Stan is part of an international group developing new predictive models of key concepts for use by designers. Their current topic is how design can help encourage people to expand from holding opinions to making interpretations.

Finally, his team is exploring physical interfaces for complex conceptual work, such as text analysis, modeling time, and designing experience.

He has co-authored with over 230 different people across 21 disciplines and 16 countries.