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Toward an Eco-Social perspective: How to design in time of trouble

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Toward an Eco-Social Perspective

How to design in time of trouble

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As Laboratory of Design for Sustainability (LDS), our main objective is to investigate and analyse the contribution of design to complex contemporary challenges, applying the sustainable paradigm through a systemic and critical approach, i.e. in its multiple environmental, social, cultural and economic nature.

The presentation starts with a reflection on global upheavals, such as the proliferation of ecological disasters, lack of care for the Other and the Elsewhere, and growing social inequalities. We propose the need to redirect the attention of design towards an eco-social perspective as the two components are deeply intertwined and cannot be addressed individually (Armiero, 2021).

So how do we design in time of trouble? Through national and international research and development projects, we have investigated and studied how to answer this question, trying to outline and promote an eco-social perspective of a highly systemic and speculative nature. The invitation for design is to engage in critical dialogue with other disciplines; in this sense, we will present case studies that have seen the establishment of interdisciplinary design discourse, including areas relating to the Social and Natural Sciences. The aim is to compose a

scientific framework of interdisciplinary methods and tools (design-driven, co-design, systemic thinking, participatory approach) that arises in the border spaces between knowledge and points of critical dialogue among academic silos. A tentacular operation (Haraway, 2016) is necessary to understand the complex challenges or missions that await the designer to explore new possibilities of applying systemic thinking to design and develop a critical point of view essential for promoting an alternative to the status quo.

The output of our critical enquiries is the development of an eco-social design framework consisting of three design formulas. They provide a possible direction for design research and practice dealing with complex issues and transdisciplinary connections. By visualising a different and critical application of the systemic approach, we intend to present how design research, practice and methodology can be enriched and "re-meant" by adopting an eco-social perspective.

KEYWORDS: eco-social perspective, system thinking, design methodology, system design applications, beyond anthropocentrism

RSD TOPIC(S): Cases & Practice, Methods & Methodology, Socioecological Design

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Presentation summary

Designing in time of trouble

The presentation starts with a reflection on contemporary global upheavals. The propagation of individualistic practices, the proliferation of ecological disasters, the lack of care for the Other and the Elsewhere, and the growing social inequalities put the designer in front of the need for a redirection of the perspective of the future, adding to the design lexicon keywords such as cooperation, mutualism, responsibility, togetherness.

According to the *mutual aid* law proposed by Kropotkin, animal species do not develop competitive and individualistic attitudes in the occurrence of hostile conditions. However, cooperation, mutual aid, in fact, is the driving force that allows the evolution process to develop in the biosphere.

Our thesis is that, by enhancing this cooperative pattern (Manzini, 2015), design must adopt a hybrid, interdisciplinary, systemic and immersive approach in comparison with the complexity of reality, which is increasingly characterised by socio-ecological issues and complex objects – *hyperobjects* as Morton premises – to deal with.

The presentation starts with a preliminary framing of the contemporary scenario, adopting a system thinking approach for the constitution of a set of interdisciplinary references, above all of a bibliographic and filmographic nature. This preliminary step was useful for the constitution of a common *systemic design glossary* of keywords and iconographical references that would help to describe the case studies and practices activated and the methods and tools used in the research and development projects subsequently exposed.

An eco-social perspective

Case studies and practices

The development and definition of the proposed eco-social perspective move both from a strong theoretical-critical scientific basis and an equally consistent targeted application of hybrid interdisciplinary methods and tools (systemic design, co-design, design-driven, ethnography, etc.) put in practice in research and development projects at regional, national and international level.

The state of the art of references made it possible to enhance the design action in the proposed research practices, activating a multilevel and transdisciplinary approach to each project and redefining the systemic framework established a priori. The reflection then led us to reflect on the discipline of design as a culture and design practice, rediscovering and highlighting its social mandate and ecological perspective (Maldonado, 2022; Papanek, 2019). In the contemporary context, the attention of design research and practice has expanded beyond the industrial product as the final design

object. Systems, processes and relations are attracting the attention of the design discipline and *cooperation*, understood as a system of collective practices of doing together, is a pattern and an approach that design must adopt for its more strategic, systemic and sustainable action over time.

Three research projects will be presented in support of our thesis. Therefore, the structure of the presentation provides the story of the three research and development projects in terms of design context, general and specific objectives, expected and obtained outputs, and design methodology adopted (specific focus on approach, methods and tools).

Through the presentation of the three projects, we intend to show and demonstrate the need to adopt an eco-social perspective to deal with the complex challenges of the present and, above all, the future and to share a proposal on how to design in times of trouble. The framework that results is of a systemic and rhizomatic nature and represents a mapping of the design flow that acts in an osmotic way: passing from micro to macro contexts and interacting with heterogeneous disciplines.

The formulas

Augmenting the systemic approach

In the analysis and definition of the eco-social perspective as a possible augmented systemic design approach, it seemed useful to identify categories; renamed *formulas*. They intend to represent the steps in which the eco-social perspective unfolds and have been theorised as norms, practices, and perhaps even rituals that design must keep in mind to develop a critical and systemic approach and to interface with the complexity of the contemporary scenario.

The three formulas, specifically, are *Human* + *Human* (anthropocentric dimension), *Human Augmented* (intermediate dimension that wants to overcome the anthropocentric vision by incorporating systemic flows such as green transition and digital transformation), *Human* + *Non-Human* (effective overcoming of anthropocentrism and definition of a new humanism, more inclusive, systemic and in dialogue with other species).

The first formula—***Human + Human***—was mapped within the research project carried out together with the social enterprise Terra di Tutti, operating in the Tuscan territory (Capannori, province of Lucca) and whose main objective is the socio-professional inclusion of migrants, refugees, asylum seekers and disadvantaged people in general. The collaboration was structured in the context of a six-month workshop seminar in which some design students designed together with the social workers and migrant artisans of Terra di Tutti, developing product prototypes, services and communication strategies aimed at the empowerment of the social enterprise in terms of more strategic approaches, methods, tools and technologies. With reference to the H+H design formula, it was noted that thanks to a collaborative environment - featured by themes such as social cooperation, intercultural craftsmanship, and interdisciplinary dialogue - the anthropocentric dimension begins to expand and the initial individualistic perspective attention towards more collective, participatory and horizontal action, in which the human being is not alone at the centre of the project, but is part of a wider and more varied whole.

The second formula—***Human Augmented***—was defined as part of the research and development project (Augmented reality, evolved storytelling, Blockchain in the circular and technological innovation process of social cooperatives), which involved heterogeneous partners such as universities, social cooperatives and technology companies. The main objective was to communicate the social and circular innovation self-generated by the social realities involved through the design of advanced narrative systems typical of digital innovation. As the main output, a service platform was designed and activated within which the territorial circular supply network of waste materials and skills was reported, structured together with the social cooperatives and the technological partner. The preliminary investigation of the delineation of the territorial network was very important for the identification in a participatory way (targeted interviews and focus groups) of what were the "relationships with the digital" by the social cooperatives. In this case, the dimension is still anthropocentric but tends towards the Other, and Elsewhere, it widens thanks to the interconnectivity of the flows of green transition and digital transformation that mutually reinforce each other together with that of social innovation already present. Thus the eco-social perspective begins to take shape.

The definition of the third formula—***Human + Non-Human***—is supported by the research project SMAG (SMArt Garden), whose result is given by the sum of human and non-human agents. In particular, the project had as output an urban furniture system in which different systems dialogue: the 'vegetable', the 'social', the technological and the cultural. The presented project, therefore, tries to keep together the social, cultural, technological and biological aspects to make them act as a single hybrid system (human –technological–botanical) that aims to self-regulate for the common purpose of life (Marseglia et al., 2021). The project involved an in-depth study of Man-Nature interactions, enabled thanks to particular digital technologies, which represented a real bridge between human and non-human. the project also draws on the traditional knowledge of ancient cultures, which have always been respectful of the Non-Human sphere.

Conclusion

The three design formulas are patterns detected and identified in the reported case studies. Subsequently, a theoretical-critical framework was defined to support the Design Formulas model and the Eco-Social perspective highlighted. This process constitutes a hybrid, speculative and holistic methodological approach. The proposed model and reflection, still under implementation and testing, are intended to rediscover and highlight the social mandate and the ecological perspective of the design discipline (Maldonado, 2022; Papanek, 2019).

Systems, processes and relationships attract the attention of research and design practice today. Cooperation - as a system of collective practices of designing and operating together - is an approach that we believe that designers must adopt for a more strategic, systemic and sustainable action over time.

Our thesis argues that it is necessary for the designer to take on an eco-social responsibility (Papanek, 2019) and to adopt a transcalar approach to the project, intended as an activist (Fuad-Luke, 2009) rhizomatic and cooperative practice. In fact, design will increasingly have to devise ways to support the planet's ability to sustain biodiversity, providing reasonable survival strategies for humans and beyond. This involves making difficult decisions under conditions of uncertainty, complexity and

substantial biophysical constraints. We envisage a generation of designers capable of making their way towards the outlined eco-social perspective, a generation willing to rediscover their kinship with other living beings (Haraway, 2016; Han, 2017).

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