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INTERNATIONAL CONFERENCE ON SUSTAINABILITY IN ARCHITECTURE, PLANNING, AND DESIGN 11-12, 13 May_2022

edited by Claudio Gambardella



Dipartimento di Architettura e Disegno Industriale

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BEYOND ALL LIMITS

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edited by Claudio Gambardella

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Dipartimento di Architettura e Disegno Industriale

RR Research activity report

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Proceedings of International Conference on Sustainability in Architecture, Planning, and Design 11-12, 13 May_2022

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Design for social innovation: a proposal for an holistic design approach

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Abstract

Digital technologies have played an important role in redefining social relations; physical and virtual spaces, increasingly agglomerated, give rise to "hybrid communities of place", collaborative social networks that open new possibilities for sustainable design and rethinking the dynamics of design oriented towards social innovation. Transition Design proposes a method focused on the development of projects for desirable futures, related to the transition of the current socio-technical system starting from the activation of a movement of local innovation technological niches. The design approach is oriented towards a holistic view to restoring local autonomy and resilience; Transition Product design can have an impact on these kinds of transitions in the short term. The role of the designer is therefore to negotiate solutions that are inclusive and create community relationships that build the shared common good.

Keywords

New Relationships, Sustainable communities, Social innovation, Transition product design, Holistic approach

1. Introduction

When faced with new problems, humans tend to use their innate creativity and design skills to adapt and make something new: they innovate (Manzini, 2015). The exponential growth of digital technologies has had a strong impact on social dynamics: first of all, we see the emergence of new modes of social interaction, not always yet evident but with characters that are being defined and in line with the macroevolutions of society. Two practices related to the new modes of interaction, which can take place in physical or virtual spaces, are "hybrid sociality" and "connected solitude" which in turn define new connections within social groups that Manzini (2020) calls "hybrid communities of place". Here, "community" refers to a network of people interacting collaboratively, "hybrid" emphasize the physical and virtual nature of interactions and "place" highlight an active and dynamic connection to the physical environment in which they are located. The ways of living and the ideas of well-being are radically redefined, opening up different possibilities for designing spaces and relationships linked to the new opportunities for sharing. The paper aims to investigate, in this context, what is the role of Design in meeting the needs of emerging communities in a perspective of social innovation, understood as the set of new ideas (products, services, models) that simultaneously meet new social needs and create new collaborations (Murray, 2010). Moreover, through the critical analysis of case studies - reported in the full paper - crossed with the research, future scenarios are proposed in which new practices and new models of operation will be tested. The thought of "hybrid communities of place" leads to a creative rethinking of existing assets (from social capital to historical heritage, from traditional craftsmanship to accessible advanced technology), which aim to achieve socially recognized goals in a new way; what kind of spaces would society need if its main goals change from productivity and accelerated economic growth, to new forms of aggregation, sharing and employment? How would relationships in and between communities be nurtured? What is the role of design and how does design thinking change to activate local communities?

2. Article text drafting

The "smart city" is not enough to adequately withstand the changes that occur, its spaces are defined and the inability to imagine new ones, to meet new demands, makes it just an efficient echo version of existing urban models (Maak, 2019). In other words, this model limits the emergence of what Manzini calls "spontaneous infrastructure": communities, associations, and gathering places. In this sense, the countryside and rural villages seem to be able to represent a space of freedom, experimentation, and self-sufficiency, in which innovative technologies and connections to digital networks will allow the development of new services that recombine places, connections, and social co-presence (Thackara, 2019). A historical scenario that repeats itself: in the 18th century, the philosopher and political scientist Charles Fourier theorized the Falansterio, a self-sufficient housing structure in which the life of the members of a social unit took place within a building with dormitories, refectories, workshops, theater, library, etc.; that is, what was required by the needs of a large social aggregate. Everyone inside would share in the profits, being at the same time producers and consumers, in a perspective of design and holistic approach to life. Cosmopolitan Localism, proposed by W.Sachs (1999), can be considered the evolution of Fournier's thought. The theory of Cosmopolitan Localism concerns interregional and planetary networking practices among local communities that share knowledge, technologies, and resources. Cosmopolitanism refers to the awareness of our common humanity and co-habitation with the planet, while Localism is about satisfying as many needs as possible at the local level to optimize quality of life rather than maximize consumption. A theory at the basis of Cosmopolitan Localism is proposed by the theorist and economist M. Max-Neef of "Needs & Satisfiers" (1991), in which the ten Needs necessary for every human being are clustered. The ways of satisfying these are infinite and determine the daily lifestyles of a human being and the community in general. The modern economic model, aimed at the exasperated maximization of profit, offers centrally designed satisfiers that satisfy only one Need at a time in an efficient but generic way. Another aspect to consider is that the pursuit of consumption, rather than satisfaction, has led to extreme exploitation of available resources so that today we have reached the era in which our consumption has direct consequences on the livelihood of others. In this context, how can design generate a transition from an unsustainable lifestyle to a more sustainable one? The traditional design world being subjected to the dominant consumerist drive, the exclusion of complexity from design, the lack of value creation, and long-term solutions designed for society, are some of the issues that highlight the need for a redirection of design practices. In this sense, the design approach proposed by the discipline of Transition design provides a new methodology intending to influence new lifestyles in society based on the vision of Cosmopolitan Localism. Transition design turns its attention to two fundamental concepts: the idea that entire societies will face a transition to sustainable futures, and the realization that this will involve changes at a systemic level, triggered by understanding the dynamics of complexity (Irwin, 2019). Designing with complexity, i.e. "systemic" problems (climate change, biodiversity loss, etc.), requires a shift in approach that considers global issues and the impacts they have at regional and local levels. A significant change could occur thanks to solutions that come from below, which F. Geels (2006) defines as technological niches of innovation, capable of reacting in the short term to local problems derived from complex global issues. The temporal aspect of these interventions assumes significant importance: if on the one hand, it is necessary, in a Transition design process, to establish a medium-long term vision, on the other hand, it is necessary to understand how to act in the short term and begin to activate new technological niches for a sustainable

transition. According to Gaziously, new products are framed as potential enablers of transitions that lead to the development of additional products, which reflect the characteristics of the new or emerging sociotechnical system (2019); from this perspective, we can speak of Transition Product design. Considering a local system from a holistic perspective, one can speak of a cluster in which materials and resources are managed by techniques and technologies and are relatable to the multidisciplinary knowledge of the community. A Transition Product designer works to create decentralized, distributed, and interconnected satisfiers to restore local autonomy; they design to facilitate system resilience by creating a temporal link between the project and the local community, with the view that the project will survive multiple generations of users. This approach parallels the theme of inclusivity and, in the design discipline, ties in with the principles of Universal Design, which advocates the importance of complexity and the need to give equal opportunity to the so-called "weaker component" of society. Design and its projects help to show how things could be different by suggesting new life goals and objectives; therefore, Universal Design presents itself as an approach that values and celebrates human diversity, where celebrating the individual does not preclude caring for the well-being of all (Szenasy, 2011). Underlying this inclusive approach is the thought that each individual has the capabilities, unique to each, to make an impact within their community. People decide to work together to achieve the results that have value for each and all; in this sense, Common Good is defined as belonging to a community where people can achieve well-being through relationships with others (Nicolas-Le Strat, 2016). Applying this thinking to design, the designer is at the service of the system, and the skills of design are used to negotiate new solutions, which can be sustainable for the community itself by setting as a goal the construction of shared common good; we can therefore speak of Design for the Common Good.

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Beyond the XX century's object: 12 keywords from the international design scenery

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Abstract

Design has proved to be a culture not only able to overcome the crisis of Modernity, but to emerge as a protagonist in the post-industrial age, through a reconfiguration of its thinking and practices. Designers explore new ways beyond a production homologated in its aesthetic and symbolic values, in favour of new pluralistic visions, the recovery of the affective relation with objects, a freer and more imaginative use of technologies.

The digital and telematics technologies revolution, the ecological matter and a new scientific imaginary contribute towards the modification of the traditional vision of the objects, and influence propensity of design for interdisciplinary collaboration. Through an in-depth overview of recent international production in the field of product design, the research has identified a variety of emerging phenomena: condensed into 12 keywords, each representing the overcoming of a limit of the Modernity, but above all an opening to the near future.

Keywords

Sustainability, post-industrial age, design trends, product design, aesthetic paradigms.

1. On the wings of technical innovation

With the advent of the post-industrial age, the most rigid principles of international functionalism found a theoretical and concrete reaction from design culture. The object of design re-emerges from the crisis of rationalism with new traits, new energy and a more fluid nature. In avant-garde attempts, in visions of art, in utopian aspirations or in practical experiments of designers, a tension is constantly present in the 1900s, towards an object that is no longer inert, but rather inspired to biological systems, evolutionary and sensible; during the second half of this century, specifically, the evolution of the design object is influenced by three main concepts: *sustainability*, *innovation* and *dematerialisation*. *Innovation* is understood primarily in the sense of scientific and technological achievements; but with an important clarification: *on the wings* of technical innovation, comes back in through the window that science itself had theatrically thrown out through the door: this "something" is the profoundly anthropological value of man's relationship with objects (La Rocca, 2017).

The research aimed to identify influential phenomena that characterise design in the post-industrial age; each of them is useful for interpreting the contemporary project as *elastic deviation* from its modern matrix. It is indeed crucial to remember that Modernism has always been characterised, as many critics have pointed out, by a *profound ambiguity* with regard to its monological version; so, the emergence of its unresolved units of thought represents a high potential energy, which still has to develop new directions of expression in the future.



Fig 1. a) *The living*. Algaerium Bioprinter Marin Sawa, 2013 b) *The enigmatic*. Ying Gao, Film noir, 2021. d) *The thinkered*: Kyouei design, Pendulum sound machine, 2011. d) *The formless*. Detail of the Nacho Carbonell exhibition at Carpenters Workshop gallery, 2018.

2. Giving the floor to objects

The research started in 2014 and has continued uninterruptedly, also updating the projects over time. The survey involved direct contacts with more than 100 emerging designers and design studios, through which the investigation was linked to particularly innovative exhibitions and events. Special attention was given to contests aimed at young designers. The specific analysis of the international product design scene, developed in collaboration with Chiara Scarpitti, was based on 12 main *keywords*. In the economy of the present article, each keyword can be emblematically represented by a single project image [Fig. 1-3]. *The living*. It is an object going beyond the idea of mechanical and inert, not evolutionary. In recent years, design research is moving along the increasingly flexible boundary between the object and the living system. The attraction for the biological, from utopian aspiration of the avant-garde of the 20th century, increasingly fits with new acquisitions of scientific research and biotechnologies. New figures of designers with specific skills and interdisciplinary teams conjugate in new forms project with chemical research and bioengineering, creating interesting short-circuits between science, technology and art (Myers, 2012).

The enigmatic. Absence of ambiguity and mystery, these are the characters of the rationalist project that design today wants to overcome. Many protagonists of today's creative scene are dealing with an aesthetics of the indefinite, the ambiguous, the blurred, also approaching other cultural vision of the universe of objects, in particular oriental philosophy. The dematerialisation of the technologies, the miniaturisation of electronics, in some cases contribute to a product difficult to understand in its traditional form/function relations.



Fig 2. a) *The connected.* Katia Prins, Shifting perspectives, Wall objects1 (detail), 2016. b) *Bare nature*. Michal Fargo Cutting tool, 2015. c) *Neo-material.* Kyouei design, Form of light force transmission, 2013. d) *Mini-ego.* Giulio Iacchetti e Matteo Ragni, Tombini, 2012.

The thinkered. Beyond the myth of the new, this word blends "thinking" and "tinkering": re-use, as an opening to consider what pre-exists and is available to reworking, is a key theme of sustainable design, against a project method starting out from an ideal tabula rasa. Design also appears able to produce innovation starting from disorderly, random pieces of what exists, be it nature or history, imagining them in an all-new scheme. To reconstruct a relationship between thought and concrete doing: the re-assessment of the tactile, relational and incomplete is today one of the turning points in imagining a new creative approach. (Sennet, 2008).

The formless. Designers refuse the dogma of an idealised form, rigid geometries, aseptic beauty. "Could we not say that every form invented is seen as a fold - until crumpling, until becoming formless and tearing – of a previous form?" (Didi-Huberman, 2006). The idea of the formless has been taken – in the wake of the famous definition by Georges Bataille – as an interpretative instrument for contemporary art, against the modernist conception of the form (Krauss & Bois, 2003). The deliberate alteration of a form or type; crushing and falling of materials; deconstruction of the scene or liquefaction of the object. When questioned by Le Corbusier as to the future of architecture, Salvador Dalì answered provocatively: "it will be flaccid and hairy".

The connected. Contradicting the concept of the thing as an isolated entity, many contemporary artefacts only gain a sense insofar as they are connected, nodes of a network and of a wider system of communication (Scarpitti, 2020). Systems that interact not only with us, but now even amongst themselves: in the era of the *internet of things*, they interfere with the collective knowledge. Design is deeply involved in the development of devices whose essence lies in their role as exchangers: discreet presences of the everyday, they are a resource in fostering creative collaboration, the sense of a social and sustainable environment.

Bare nature. Design goes beyond a deterministic vision of the nature aesthetic, as sort of side effect of

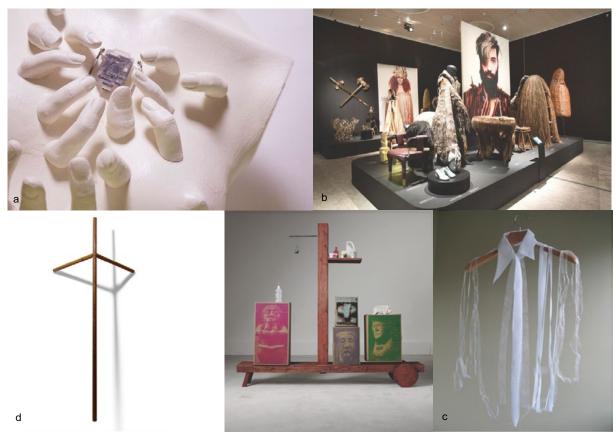


Fig 3. a) The sensory. Lesley-Ann Daly, Commodification of metamorphosis, 2017. b) The fetish. Shamanism. Exhibition "Fetishism in Fashion &Design", 2015-2016. c) The absent. Ying Gao, Indice de l'indifférence, 2006. d) The dramatic. Exhibition "Independent Design Secession" 2011: Giulio Iacchetti, Untitled 2010; Andrea Branzi, Grandi Legni GL19, 2010.

form-function compliance. "The artist-alchemist organises living and plant things into magical facts, working to discover the real heart of things, to find them and exalt them" (Celant, 1969). These words about the movement of Arte Povera, in the late 1960s, adapt well to the defining, many years later, new critical visions of nature in design. Designers today show a great interest for the natural element as a fragment that can be drawn from without mediation; varied interpretations of a relationship with nature, packed with symbolisms, made up references to the mystery that is intrinsic to it.

Mini-ego object. No longer a producer of status symbols to be flaunted, design establishes itself as microsociology of the everyday life; in this sense it is a powerful instrument to express, with analytical precision, only apparently minor values. "My only intention is to take things from everyday life and use them scientifically", Sigmund Freud wrote. A new generation of designers make their small gestures and discrete intervention into a form of poetry and aesthetics (Finessi, 2005). Bruno Latour identifies an escape route from a *muscular artificiality* in the care and attention to detail, for a world of objects that instead contemplates material, morality and sustainability (Latour, 2008).

The neo material. Designer want to overcome the scission of thought, machine and hand. The tendency to become once again producers in the first person, the possibilities offered by numerical control machines to be personalised, the contact with materials – with a search for the rare and unexpected – stimulate designers to a new laboratory dimension. Neo-craft design scene is at the opposite end of a model in which industry is delivered the project as an established matrix, to be executed and automatically replicated. In the staff laboratory, in the individual process something always happens: as Le Corbusier wrote, "passion makes inert stones a drama".

The sensory. Against the devaluation of the empirical knowledge and the exclusion of the sensory range we have new generation of products. "Les sens ne trompent pas. Le palais d'un fin goûteur juge plus precisement que mille machines (…)" (Serres, 1985). A *sensory revolution*, as Branzi has defined it, has found fertile ground in recent years (Branzi, 1992). Chromatic values, environmental music, microclimate, olfactive experience, haptic perception of materials: all aspects neglected by rationalism, which see the body immersed in a global experience, become today material for the project.

The fetish. As a reaction to the exclusion of the symbolic, the anthropomorphic and the zoomorphic, the fetish refuses the closure of the product in the mere function. Fetishism is not a fogging of the "wild thought", but rather it condenses an excess of meaning. (Lévi-Strauss, 2010). Beyond the "soul-less" object of rationalism, Designers of the nowadays scene charge their product with new symbolic energies, exploring fetishism in its different declinations (Edelkoort & Fimmano, 2013); occasionally, in the fusion with advanced technologies, the sense of the archaic blends with concrete animated devices.

The dramatic. Not only in the field of art, recently also the design project show interest to go beyond the censure of the real, the exclusion of existential themes and the dimension of the sacred (Branzi, 2008); above all because this removal is perceived as the result of a world flattened out for industrial and marketing needs. In the exhibition *Independent Design* edited by Branzi e De Lucchi in 2011, emerges an original vision of design as a culture that can face up to the matters of religion, history, irrational and tragedy.

The absent. Sustainable design refuse the uncontrolled multiplication of objects and the *hard and soft contamination* of the consumerist society (Serres, 2009). The matter is double: the *hard* contamination by products, but also the *soft* contamination by information: a space crowded with messages and intangible connections. So, a poetry of absence is today interpreted in many ways by design. That "life without objects", provocatively considered in the early 1970s Radical Avant-Gard, corresponds to a challenge in the current condition (Sottsass, 1978). Fig 3.

3. A vision and a movement

Taken together the keywords, reflect a *vision* and a *movement:* on the one hand, the point of view of critical thinking that tries to untangle technical, aesthetic and ecological aspects in the object; on the other hand, the vital movement that design shows in a nomadic, unconventional and fertile collaboration with the most disparate disciplines of science and art.

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