For Nature/With Nature: new sustainable design scenarios

Editor: prof. Claudio Gambardella Call for papers addressed to Springer Book Series in *Design and Innovation* (SSDI) Editor-in-Chief: prof. Francesca Tosi <u>https://www.springer.com/series/16270</u>

Introduction

July 16th, 1945 - the date of Trinity Test in Alamogordo, New Mexico, just three weeks before the launch of "Little Boy" on Hiroshima city - is considered the symbolic date of the end of Holocene and the beginning of Anthropocene, the name created in 2000 by Paul Crutzen in order to indicate the present glacial era. The latter has this name because to condition the terrestrial environment is the «telluric force» of man - as Stefano Mancuso defines it - so much so that in 2020 "[...] the weight of materials produced by man - cement and plastic - has exceeded the weight of life on the planet" [Tonphones 2021]. However, it is relevant to declare that the increasing of CO2 and CH4 concentrations in the atmosphere is the most significant signal that the human actions influence negatively the life conditions on the planet; that means they cause desertification, pluvial wood destructions, increasing of ground karst phenomena, loss of usable surface for agricultural crops due to erosion or over-fertilization, ozone hole and climate alterations. In order to oppose these events, the 193 UNO member countries signed 2030 Agenda for Sustainable Development in 2015 [Nazioni Unite, n.d.]. 2030 Agenda indicates 17 Sustainable Development Goals and 5 key concepts such as: to grant prosperous and full lives in harmony with nature; to protect the natural sources and the planet climate for the future generations. On the base of 2050 long term strategy [Unione Europea, n.d.], the EU has the ambitious objective to reduce 55 % net emissions by 2030 in respect of 1990 levels and to become the first climate-neutral continent by 2050. It needs to consider how much the recent energy crisis due to Ukraine war will slacken decarbonization plans and the process of abandoning fossil fuels by modifying the European Green Deal program and the date term.

Nevertheless, "[...] to say that the nature is in a dangerous situation is senseless", Salvatore Natoli says in his lectio magistralis in 2011. "Man hasn't the [...] force to destroy something more powerful than him and in which he was generated [...] eventually man by abusing of nature or not using it in the right way destroys the conditions of his life and so he puts himself in danger [...]" [Natoli 2011]. This behaviour is due to the consideration that man doesn't feel, as in the ancient world, "[...] a being created in the $\phi i \sigma i \varsigma$ [...] its own product", but he is separated from it [Natoli 2011]. The science has increased the alienation sense towards nature lived in tragic way by our present society by arriving at paradox "[the science] identifies itself with nature in order to allow men to detach from it as possible [becoming the manipulative dimension], in these two centuries in particular; that means the science has become our natural way to live [...] [Natoli 2011] through the use of technique which has become the essence of science [Galimberti 2019]. "Such industrial society had upset the relationship between man and nature by subjecting the nature to man so the technological society that was born through the quantitative increase of industrial society produces qualitative transformation which is the subordination of nature and man to technology" [Galimberti 2016, p. 356]. "The unfolding of the Baconian formula [scientia est potentia] has changed the scenario: no more the power of man over nature, but the power of technology over man and nature. In this type of condition, the anthropocentric horizon is already dissolved because the power belongs to technique now and no more to man. The technique imposes to the supposed holder of power (man) its correct use, so man becomes a passive executor of the technical possibilities that are exercised over nature, which suffers them passively" [Galimberti 2016, p. 524]. The self-governing of technique which "moves over the human-nature relationship" [*idem*], emphasises the skill to diagnose -one by one- in a "technique" way the pathologies affecting the planet and to answer with right "technique" remedies to the same pathologies. Plants are considered machines - that set humidity, produce oxygen, absorb CO2 and microparticles – in green architecture and urban furniture in order to give the present towns a way to live better.

What means "Nature" nowadays? What effort of repositioning is required of us with respect to it? How can we reconsider our history, our being in the world also future with respect to a new idea of Nature? Finally, what is our correct position to establish the most effective actions in order to improve life conditions of men on the Earth? These "human" questions are necessary to find our nature vision, to found it again and put it in new research items of disciplinaries which seem from philosophy so far.

First of all, the culture of the project such as scientific research and training are involved in the necessary change of course to establish a new balance between man and nature because "Many problematic situations of our world are the result of planning decisions" [Thackara 2005, p. 1]. They are often wrong decisions not due to mistakes of calculi but to approach they are derived from. Nature is considered as consumer goods in exhaustion because of a pervasive and reductive economic vision of the world. Therefore, we prefer simpler names instead of Nature to avoid philosophical or religious problems and to keep it under the easy control of a fragmenting thought, so we use words as 'planet', 'earth', 'biosphere', etc.

The German philosopher Gernot Böhme (2012), overcoming the representation of a world shaped by circulating conceptions of Nature and the Man-Nature relationship, shows new scenarios in which "[...] nature presents itself today [...] as a task that is in front of us" [p. 5]. Therefore, we are invited to "[...] recognize as our great collective task not the defence, but the construction of nature as a foundation for human life, and to work in a serious way in respect of it" (p. 24). Böhme's suggestion (2012) can wisely be taken up by the person that work within the project culture in order to feel fully involved in this 'task'.

By means of the call, For Nature/With Nature: new sustainable design scenarios, researchers are invited to give their own contribute to the construction of a multi-voice mosaic on the theme of Nature and the relationship between Man (understood as designer) and Nature by emphasizing the innovative and sustainable proposals coming from the discipline of design, in its many facets and interdisciplinary contributions. Since it isn't discussed the creative and economic effort that designers, institutions and companies have been leading for years to improve human living conditions, preference will be given to scientific contributions (unpublished or not yet fully known case studies, projects of strategies, products, systems and services, theoretical contributions, communication) that are an expression of a new approach to Nature, seen as our ally and object of an ethics of care.

The focus will be the design both in its role as innovation driver and interpreter of social evolution, that must be considered within the human-nature relationship. The following topics identify some of the most relevant fields of development in which "Design Driven Innovation" can be developed in the respect of perspective of a new relationship with nature.

Topics / subtopics

The call is divided into three main topics and nine subtopics:

A) Nature and artifacts

- biomimicry and biocompatible materials in industrial, fashion and textile design;
- memory and innovation of processes and products in handmade design;
- project, production, design management for sustainability (packaging, communication, etc.).

B) Nature and digital technologies

- towards sustainable, humancentric and resilient industry 5.0;
- smart mobility and green vehicles;
- pervasiveness and sustainability of apps.

C) Nature and "fourth environment"

- Orbiting stations: design for living;
- dress design and new materials for space tourism;
- the design of new low orbit habitats.

Important dates

- November 28th, 2022 abstract submission (2.000 characters including spaces and 5 keywords)
- December 30th, 2022 abstract notification
- February 17th, 2023 full paper submission (from X to XX pages)
- April 28th, 2023 full paper notification
- May 26th, 2023 final paper submission
- June 23th, 2023 final paper notification

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