

# EDITORIAL

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## MIX SUSTENTÁVEL VOL. 10 N. 2 — EDIÇÃO ESPECIAL

### SUSTAINABLE DESIGN SYMPOSIUM 2023

In this edition Mix Sustentável presents a set of papers that received the highest scores by ad hoc reviewers during the submission process at the Sustainable Design Symposium 2023 (SDS2023), which occurred at Santa Catarina Federal University between 1st and 3rd December 2023. It provides the reader a glimpse of the broad spectrum of themes that is tackled by the Design Research community, which is in tune with the high complexity associated with the search for a more sustainable society.

Whilst many topics present a growing maturity and consolidation, both from a theoretical as well as methodological perspective, the efforts of the authors show clearly an attempt to spread and test out their applications across different sectors of the economy as well as different social contexts. Sustainable design research on those papers is clearly concerned with the actual implementation issues, providing viable and effective responses to contemporary social, environmental and economic challenges. This is the case of papers that investigate issues around materials and manufacturing/building processes, such as the work of Sasaoka, Pereira and Souza (2024) on the use of bamboo to produce lamps within a local community; the work of Calei e Librelotto (2024) assessing the culture and history of natural materials in the context of the vernacular architecture in Angola; the work of Sampaio et al. (2024) demonstrating practical applications of 3D printing in the health sector; the proposal of Zeni et al. (2024) on strategies to reduce the environmental impact of packaging through system design. These studies bring new light into the role of Design to value local wisdom and culture on materials and associated processes and, at the same time, the potential role of Design to push forward the frontiers of existing knowledge.

The current generation of Designers is already facing gigantic challenges, particularly regarding the urge for climate change mitigation, higher social equity and cohesion and the crying need for implementing a greener economy. Creativity is more important than never to develop innovative sustainable solutions, including those beyond the anthropocentric paradigm. The work of Melo et al. (2024), for instance, looks into the issue of a creativity by reporting a ceramic design workshop with the intent of valuing the knowledge and competencies within a territory; the work of Silva, Arruda & Silva (2024) investigates the issue of creativity by discussing the role of bioinspiration as a basis for innovation in surface design. Emerging research themes such as the role of A.I. when creating solutions towards sustainability; the challenge of co-creating solutions with/for other forms of life; the integration of existing creativity competencies within traditional communities, etc, illustrate the vast challenges presented to the research community in order to potentialize this central and crucial competence of Designers and of the Design field.

Despite the generalized increase in awareness about the emergency of implementing actions towards more sustainable patterns of production and consumption, pushed by the growing number of extreme weather events around the world, there is also a recognized urgency to speeding up the development of competencies on sustainability among Design students and professionals. The selected papers do show such concern, with results of various research projects around the issue of Design Education. Ferroli et al. (2024) provides a critical analysis of the educational training content within Design courses from the perspective of the Environmental Dimension of sustainability; Garcia e Franzato (2024) adds further discussion on the issue by analysing the future of Design from a social-environmental perspective. Some of the papers provide propositions on tools and approaches to enable more effective education of current/future designers regarding sustainability, such as the work of Ferroli & Librelotto (2024) which debates the use of material library as a means for achieving the environmental education of Designers, or the work of Santos, Pfeiffer & Gonçalves (2024) that demonstrates the use of a urban garden project as a project-based approach for sustainability education.

Besides of looking for innovative solutions for the present, the papers on this edition also provide some light into contributions of the design field to devise solutions for the long term. The research reported by Franzato et al. (2024) provides a good example of such contribution, with the use of Design competencies to develop scenarios and ecotopias within a socio-environmental design laboratory. Notice that even those papers that look into the situation of the present, such as the work of Araújo, Clementindo & Torres (2024), which provides a panorama and guidelines for the use of digital manufacturing in the Brazilian context, also provide foundations for those interested in developing wider policies, programs and projects. Important to notice that the past is prologue and can provide wisdom on our future directions, helping to inspire designers and other professionals when conceiving products, services and systems. For that matter, this issue

presents the work of Fiorin, Rodrigues & Lopez (2024) that investigates the landscape of marine-industrial production in the city of Florianópolis, presenting lessons learnt from the Arataka shipyard.

Human behaviour towards sustainability remains a relevant research topic in the Design field, and the drastic changes in the patterns of consumption and production required to mitigate climate change is likely to maintain it high in the research agenda. This edition presents the paper of Dantas et al. (2024) that investigates behaviour towards sustainable consumption within the fashion sector in Brazil. It also presents the work of Medeiros et al. (2024) that looks into the behaviour issue from the perspective of the social dimension of sustainability: graphic design contribution to prevent violence within a public school.

Finally, consistent with the previous editions, the environmental dimension receives more attention from the Design community, followed by the social dimension. Yet, the papers presented in this edition show more multidimensional approaches towards sustainability, even when it is the social dimension that underpins the initiative. The paper of Custódio, Santos & Barata (2024), for instance, investigates the Housing First concept for homeless people, which clearly entails economic, environmental concerns, despite its focus on the social dimension; the work of Costa, Arruda & Oliveira (2024) provided an “humanized analysis” of popular housing through 14 biophilic patterns.

The breadth of themes on this edition might contribute for those searching for inspiration on the role of Design and Designers on the search for a more sustainable planet. It is also a testimony of the relevant impact that the field can provoke in a variety of contexts and challenges. It clearly illustrates how essential is the field of Design to articulate a multi/interdisciplinary perspective in order to tackle the great challenges presented by sustainability.

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