

Nature positive/Design for transformation



Bob Geldermans¹, Alexis Jacoby², Els Du Bois², Ivo Dewit², Dirk Van Rooy², Mario Rinke³, Bert Belmans⁴

¹Interior Architecture, Faculty of design sciences, University of Antwerp

²Product development, Faculty of design sciences, University of Antwerp

³Architecture, Henry Van de Velde, Faculty of design sciences, University of Antwerp

⁴Energy and Materials in Infrastructure and Buildings (EMIB), Faculty of Applied Engineering, University of Antwerp

Introduction

The Track Nature Positive/Design for Transformation started off with a few big questions: Even if we are technologically able to do so, are we still allowed to create our designed environment as we see fit? How can we navigate through sustainable transitions and within planetary boundaries? Can a systemic lens help us creating an overview to better overcome the present and imminent future conflicts? And can we regenerate ecological and social damage done? Indeed, the futures we want tomorrow are enabled by the actions we take today. Shaping societies, industries, buildings, products, and behaviours is a task to tackle by those able to cut across different disciplines and become agents for change. A call out to designers around the globe to put nature positive transformation at the heart of their actions. Many of them have responded within the framework of this Cumulus Conference.

We received 150 abstracts that, after a double-blind review process, resulted in 37 high-quality academic papers. Furthermore, out of 17 workshop proposals, 5 were selected for the conference. In addition, the program for our track includes several visual papers and posters. 8 themes were identified that determined the final division in paper sessions.

The attention for **Design Methodology**, a theme to which 2 sessions were allocated, is not surprising, since existing methods and tools are to be critically assessed with respect to the challenges we face. The envisioned transformation concerns a large-scale systems integration of deep ecology strategies, which is a complex endeavor. Departing from the notion that current design approaches are incapable of dealing with *uncertain* conditions of critical complexity, as argued by an increasing number of scholars (Ceschin & Gaziulusoy, 2016), we need to break away from attraction to *existing* systems and values. At the same time, high levels of complexity pose new questions concerning **Design Education** (Meyer & Norman, D2020), which comprises another theme within our program. Philosophical and pedagogical concepts concerning design education are discussed, as well as the role of the physical learning space. Trans-disciplinarity is put forward as a mode of collaboration that looks beyond bridging divides in academia, engaging directly with external sources of knowledge. Internalizing environmental and social awareness has inherent material implications. A third theme has thus been dedicated to Design Materialization. Within this theme, the future of material selection for products and interior design

is discussed, amongst other topics. Enhanced guidelines for Life Cycle thinking are addressed in one of the papers, making the connection with circular material use: a hot topic in practices and policies alike. The act of repairing and caring for living systems in truly *restorationist ways* is closely connected to this, but often neglected in simplified circular concepts towards material use. The theme of **Biophilic Approaches in Design** elaborates further on such notions of restoration. Bio-receptive Design, as an example, embeds living organisms in design processes through the creation of materials and artefacts, whilst connecting design and biology. In another article, boundaries between living and non-living are pushed through the parametrical control of plants in the creation of furniture. As such, the biophilic approach centers on both local and global human/nature relationships (Kellert, Heerwagen & Madort, 2008). Other perspectives on those human/nature relationships are brought to the fore in the theme **Eco-Social Transitions**. Here, the concepts of systems thinking, and co-creation have been connected to leadership and business, for example. One paper takes the role of Design as central to sustainable change processes, underscoring the transformative power of the designer to unlock solutions by sequencing seemingly distant dots and generating new meanings. One theme has been allocated completely to **Fashion Innovations**. The diversity of angles varies from negotiations with fabrics, form, and future for re-balancing design thinking, to issues of greenwashing and brand communication, and from the importance of indigenous textiles and know-how to difficulties in changing unsustainable lifestyles. Although we have grouped these articles into one topical session, it can be observed that challenges and opportunities are in many ways overlapping with those in other fields of design. From that perspective, also the urban scale shows parallels, based on the rationale that human-centric approaches transcend scales through conscientious contextualization, as can be found in the session on **Urban Design and Citizen Inclusion**. Time-limited planning of urban living circles, for instance, reconnects the physical proximity of urban residents with basic daily needs, such as food, health, and education. This gives way to slower means of traffic, such as walking and cycling, whilst reducing negative effects to human well-being, climate, and the environment. A similar scope can be found in yet another research, in which an innovative form of development is proposed to radically change the urban landscape in favor of a human-centric approach, by means of a quantitative measuring method. End-user in-

clusion is also central to a paper on Do-it-Yourself studies to establish new 'partnerships' between products and users. This can be filed under the act or process of *democratizing design*. And that aspect seems to join the various tracks within this Cumulus '23 Conference: no matter from which way one approaches it – nature positive, inclusion and care, hybrid realities, or otherwise – the *human scale* is paramount for understanding contemporary challenges and finding solutions. Talking of new methods to facilitate this, the digital world is never far away. The theme **Design & Digitization** showcases assets of computation regarding the shift from a degenerative societal paradigm, to a regenerative one. For example, through serious gaming to create awareness, understanding,

and – ultimately – behavioral change. To increase imaginative capabilities, less conventional methods have been proposed for approaching unsustainable behavior. One study does not shy away from using dystopian futures, fantasy-scape, and even zombies, exploring new ways of inquiry and how (sub) conscious perceptions of time and space affect people's beliefs and the choices they make.

Choices made through design should always be 'nature-positive'. The opposite is no longer viable. If there is anything this selection of papers shares, it is that: in the transition we are all agents of change.

References

Ceschin, F., & Gaziulusoy, I. (2016). Evolution of design for sustainability: From product design to design for system innovations and transitions. *Design Studies*, 47, 118–163. <https://doi.org/10.1016/j.destud.2016.09.002>

Kellert, S.R., Heerwagen, J.H., & Mador, M.L. (2008). *Dimensions, Elements, and Attributes of Biophilic Design*. John Wiley & Sons.

Meyer, M. W., & Norman, D. (2020). Changing Design Education for the 21st Century. *She Ji*, 6(1), 13–49. <https://doi.org/10.1016/J.SHEJI.2019.12.002>