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Relating Systems Thinking and Design
2022 Symposium
University of Brighton, Brighton, UK,
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THE AGE OF PLANETARY SYSTEMS COMPLEXITY: Applications for Systemic Design

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In this workshop, we will discuss the key intellectual, social, and political trends that have been unfolding over the past sixty years, which are reflective of a regenerative paradigm. Generally speaking, these shifts represent an interest in cultivating wellbeing for people and planet, combined with an awareness of the cross-scale complexities that can arise across globalized systems. They might be summarized as follows: **(a)** the designation of a unique set of eras; **(b)** rising concern over environmental degradation, natural resource consumption, extreme poverty, and social inequality; **(c)** counterplay between utopic and dystopic, optimistic and pessimistic narratives; **(d)** critique and amendment of conventional methodologies in research, innovation, and governance, amidst uncertainty and high-stake problem scenarios; **(e)** extension of power, agency, and governance as lenses of critical analyses; **(f)** hyper restructuring of modern modes of thought, organization, production, and development; **(g)** vacillation between micro- and macro-level frameworks in problem analyses and management; **(h)** extrapolation of ecological into complex systems and relational worldviews; and, **(i)** reinvention of the sacred. Workshop participants will map these intersecting areas of thought and action, identifying the conceptual and methodological advancements implied, therein. The workshop will close with groups pitching ideas for related applications in social, service, institutional, product, industrial, architectural, landscape, and urban-based systemic design.

KEYWORDS: complex systems thinking; regenerative paradigm; global transition

RSD TOPIC(S): Methods & Methodology, Society & Culture, Socioecological Design

At present, we reside in a time of significant transformation, which has been characterized across a number of fields by new designations, such as the Anthropocene (Crutzen, 2006), Urbanocene (West, 2017), Ecozoic (Berry, 1991), and Age of Complexity (Young, 2017). In this workshop, we will discuss how social and environmental pressures, unfolding at a global scale, over the past sixty plus years (see Steffen, Broadgate et al., 2015), have been prompting a paradigmatic shift, with the potential to influence every aspect of scholarship, enterprise, governance, and community action.

Framed initially by work such as limits to growth (Meadows et al., 1972) and sustainable development (United Nations, 2015a; WCED, 1987), along with the more recent climate action (United Nations, 2015b), the past sixty years has represented a process of social, intellectual, and political transition towards sustainability, at a global level. Meanwhile, the inherent complexity of related challenges has necessitated new conceptual and methodological approaches, for example, as introduced through post-normal science (Funtowicz & Ravetz, 1993), resilience (Holling, 2001), and complex adaptive systems (CAS) thinking (Holland, 2014).

Furthermore, sustainability thinking has been accompanied by a dissolution of modern commitments to certainty, control, and expectation that we can solve the world's problems primarily through economic growth and technological development. In this respect, work in the field has been coupled with deep critique of the modern world, with a view to its reinvention; however, not without acknowledging the social benefits that have been gained through its purview (Gibson et al., 2005, p.41; Quilley, 2017).

Systemic design is well positioned to engage with this tension, and map out a middle ground: an alternative to the modern, the premodern, and even the postmodern. Through a regenerative lens, this could be rooted in balancing among various socio-ecological systems complexities, in order to generate wellbeing for all planetary life—a mandate that began to appear in the work of select designers, as part of the described paradigm shift (Alexander, 2002-2005; Mau, 2010; McDonough & Braungart, 2013; van der Ryn & Cowan, 1996).

In this workshop, we will discuss the key social, intellectual, and political trends, which have engendered not only a sustainable, but also a regenerative mindset, as follows: **(a)** the designation of a unique set of eras; **(b)** rising concern over environmental degradation, natural resource consumption, extreme poverty, and social inequality; **(c)** counterplay between utopic and dystopic, optimistic and pessimistic narratives; **(d)** critique and amendment of conventional methodologies in research, innovation, and governance, amidst uncertainty and high-stake problem scenarios; **(e)** extension of power, agency, and governance as lenses of critical analyses; **(f)** hyper restructuring of modern modes of thought, organization, production, and development; **(g)** vacillation between micro- and macro-level frameworks in problem analyses and management; **(h)** extrapolation of ecological into complex systems and relational worldviews; and, **(i)** reinvention of the sacred.

Workshop participants will map these intersecting areas of thought and action, identifying the conceptual and methodological advancements implied, therein. The workshop will close with groups pitching ideas for related applications in social, service, institutional, product, industrial, architectural, landscape, and urban-based systemic design (derived from Ruttonsha, forthcoming).

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Workshop format

120 minutes | online | maximum number of participants 15-21 |

Workshop agenda

30 minutes: Introduction

20 minutes: Mapping of Trends, Concepts, and Methodologies in an Emerging Regenerative Paradigm (3 breakout groups: i-topics a/b/c; ii-topics d/e/f; iii-topics g/h/i)

20 minutes: Group Presentations

20 minutes: Applications for Systemic Design (3 breakout groups: i-social/service/institutional; ii-product/industrial; iii-architectural/landscape/urban)

30 minutes: Group Presentations and Conclusion