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To cite this article: Fernando Galdon (01 Feb 2025): RCA/Futuring; A decade of future(s) research at the Royal College of Art, The Design Journal, DOI: [10.1080/14606925.2025.2454838](https://doi.org/10.1080/14606925.2025.2454838)

To link to this article: <https://doi.org/10.1080/14606925.2025.2454838>



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Published online: 01 Feb 2025.



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RCA/Futuring; A decade of future(s) research at the Royal College of Art

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ABSTRACT

Building from a preliminary study, we state that Design has become indistinguishable from the future. In this paper we present ten years of research at the Royal College of Art at the intersection of this paradigm via a comparative study between five different design future approaches emerging from the College; Speculative Design (SD), Co-Speculative Design (CoS), Cybernetics Design (CyD), Prospective Design (PrD), and Xenodesign (XnD). In this study, we outlined diagrammatically their propositions, as well as the fundamental areas of enquiry; projection understanding, participation, and change.

KEYWORDS

Future, design research, speculative design, co-design, prospective design, Xenodesign, cybernetic design

Introduction

In reviewing the foundational work of Archer (1992), Cross (1982), and Frayling (1993) we found that all of them missed one fundamental variable; time. This is surprising, as this variable was introduced by Buckminster Fuller in his *eight strategies of anticipation* (1957), Herbert Simon in *the science of the artificial* (1969), or John Chris Jones in *Design methods* (1992). This missing aspect in their work forced them to operate in the present, and fundamentally, prevented them to understand design as a future-led activity operating around notions of prospectivity, abductivity, contextuality, and probabilism (Galdon and Hall 2022).

The model presented by Galdon and Hall (2022) consolidates Archer, Cross, and Frayling fundamental distinctive position of design as a third way of knowing, which implies it is different from the sciences, and humanities (Figure 1). It positions the ontological nature of design knowledge as probabilistic. This reposition emancipates design research from the present, thus overcoming the scientific/tacit paradigms, and liberates design research to

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	1928 8 strategies of anticipation <i>Anticipation</i> Buckminster Fuller
	1969 The sciences of the artificial <i>Anticipation</i> Herbert Simon
	1970 Design method <i>Constructive futures</i> John Christ Jones

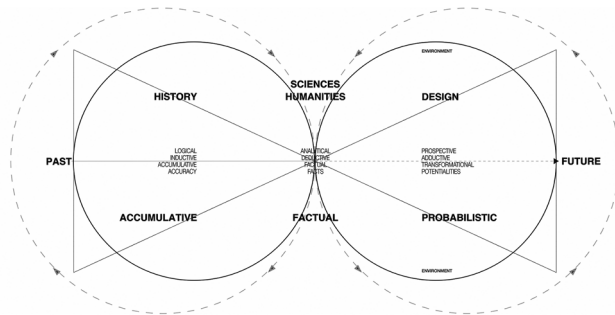


Figure 1. The ontological nature of design. This model presents a comparative study between different modes of enquiry, positioning design within its own ontological model.

operate independently in its future-led prospective and transformational nature focused on world-making. But this independence, which is capital to constitute distinctiveness, does not mean insulation, quite the contrary. It facilitates interdependences and collaborations by clarifying what we in relation to others. Now we can sit in front of a scientist, sociologist or anthropologist and explain what is what we do, exactly as when a sociologist and a scientist sit in front of each other and explain to each other the scientific method, or field work. We are prospective thinkers using abductive reasoning to generate potentialities to transform society and the build environment by prototyping objects/services/actions (World-making).

In the past we were enclosed in workshops and studios, and now we integrate others in the process, but our expertise, distinctiveness, and culture is to lead transformational processes. Design research and practise is directional and transformational at its core, and we are consummated experts in this process.

Futuring

In conceptualising the future as a unique space for design research (Galdon and Hall 2019; Galdon 2021), the design of the future has become indistinguishable from any design activity. Within this context, the School of Design at Royal College of Art has focused its research in expanding a plethora of modes of enquiry offering a more comprehensive space that reconciles differing perspectives. This paper presents a comparative analysis of design futures approaches within the RCA as well as key insights. This study builds from a preliminary analysis by Galdon, Hall, and Ferrarello (2021). The goal is to improve the core function of design in an increasingly unpredictable and rapidly evolving social and technological landscape.

In the field of design futures at the RCA, five primary approaches emerged over the last decade: Speculative Design (SD) (Figure 3), Co-Speculative Design (CoS) (Figure 4), Cybernetics Design (CyD) (Figure 5), Prospective Design (PrD) (Figure 6), and Xenodesign (XnD) (Figure 7). These approaches

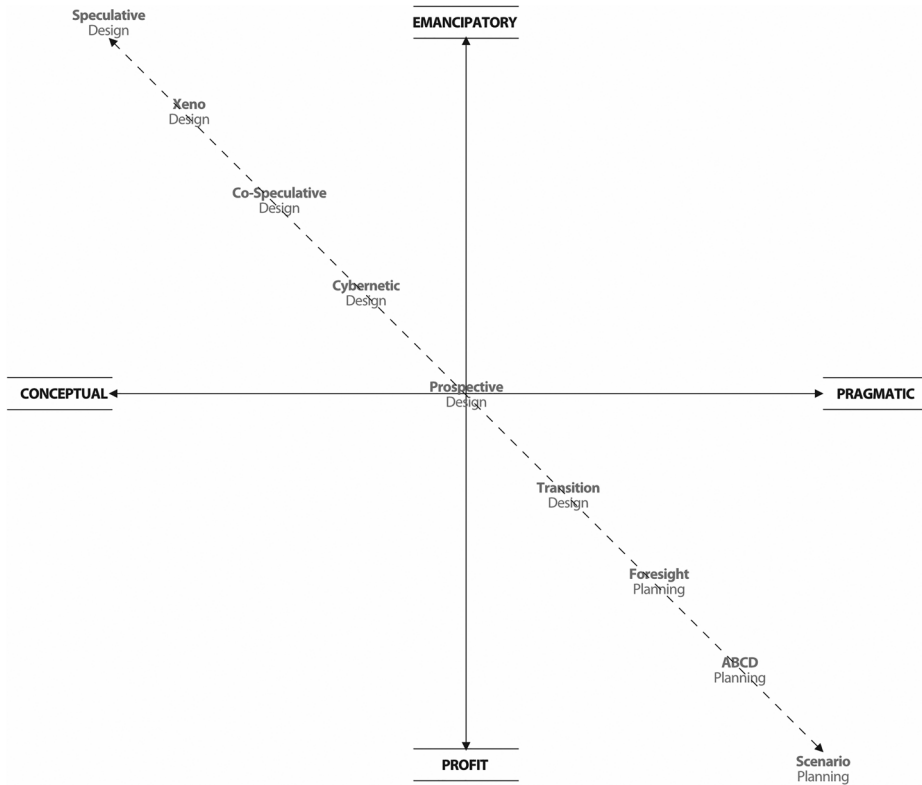


Figure 2. Comparative study.

SPECULATIVE DESIGN, 2012

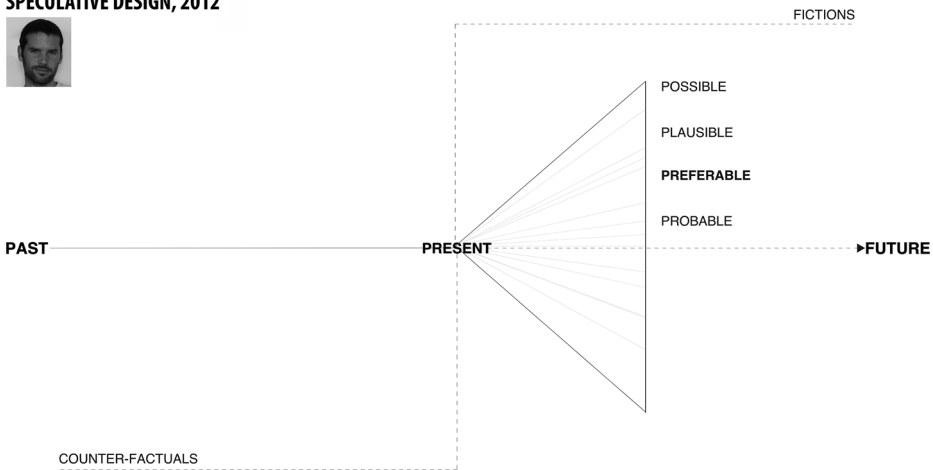


Figure 3. Speculative Design. J. Auger 2012.

encompass a wide spectrum of possibilities, ranging from more conceptual frameworks to more pragmatic applications (see Figure 2). These models have gained widespread recognition and are regarded as essential tools within design practice.

CYBERNETICS FUTURES, 2016

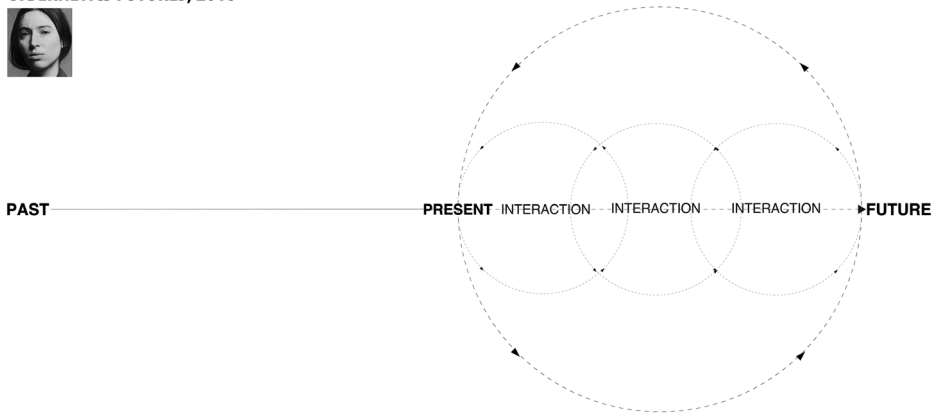


Figure 4. Cybernetics Design. D. Fantini van Ditmar 2016.

CO-SPECULATIVE DESIGN, 2018

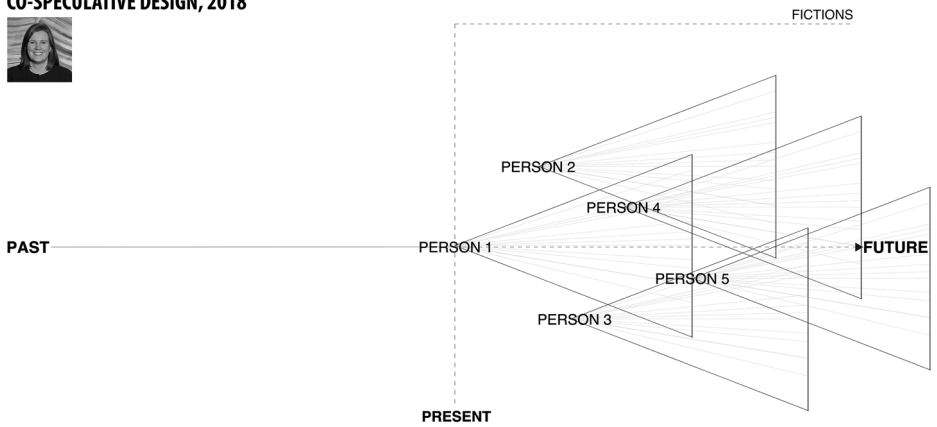


Figure 5. Co-Speculative Design. Julia Lohmann, 2017.

PROSPECTIVE DESIGN, 2021

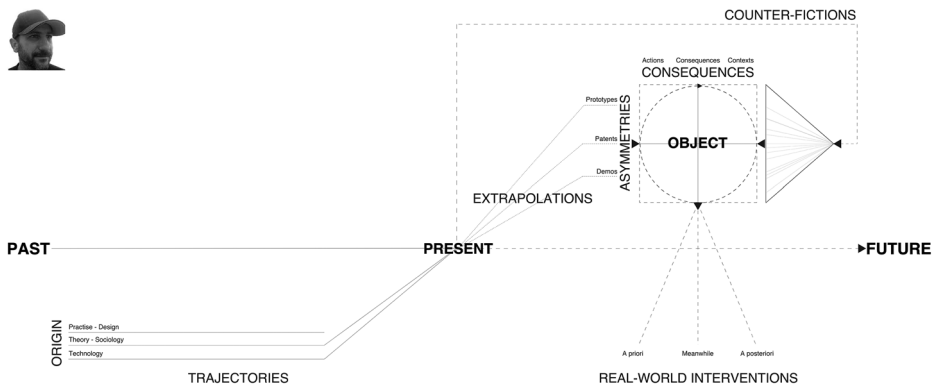


Figure 6. Prospective Design. F. Galdon 2021.

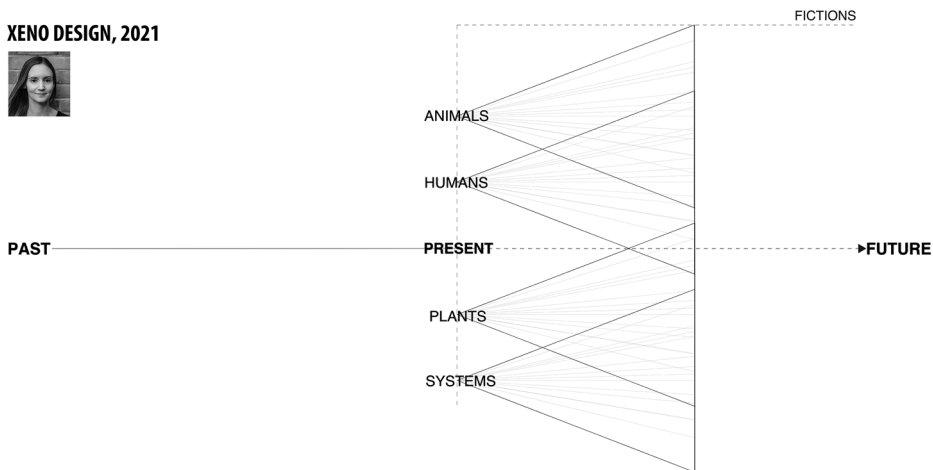
XENO DESIGN, 2021

Figure 7. Xeno-Design. J. Schmeer 2021.

Discussion

Speculative design focuses on authorship, is enabled by what if? questions, aim for the preferable, and the main element to design is engagement. This element of engagement is also the main target for Co-speculative Design, Cybernetic Design, and Xenodesign, yet for Prospective Design is trust. In terms of participation all the aforementioned practises integrate some levels, except Speculative Design, which is more authorship-led. However, they differ in their function; for Prospective Design participation aims for the co-design of prospective evidences, whereas for Co-Speculative, or Xenodesign aims for collective co-creation. An interesting aspect of participation is also the integration of more-than-human elements in Xenodesign. This presented a novel modus operandi for our practises. Finally, while SD and PrD use trajectories to identify its target, CyD uses loops, and CoS and XnD use multiples voices.

Within the RCA, practises operate with methods mainly employing the cone as its fundamental framework, leading in the process to more constructivist's models. However, in some cases such as PrD or XnD they are combined with analytical matrixes. They tend to lean into emancipatory approaches, which are primarily applied in sociologically-driven design practices, often yielding cultural contributions. However, they are increasingly employed in technology-focused design practices, typically leading to more pragmatic contributions. All these practises ultimately aim to achieve the same overarching goal: facilitating positive change.

Within this decade of research two fundamental questions have been asked;

- *To which extend do we need to understand the projection/speculation/fiction? (Figure 8)*

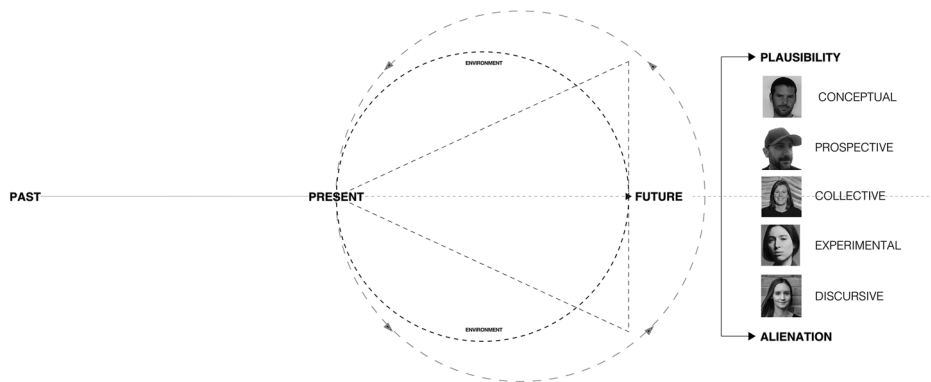


Figure 8. Projective understanding; Spectrum of possibilities.

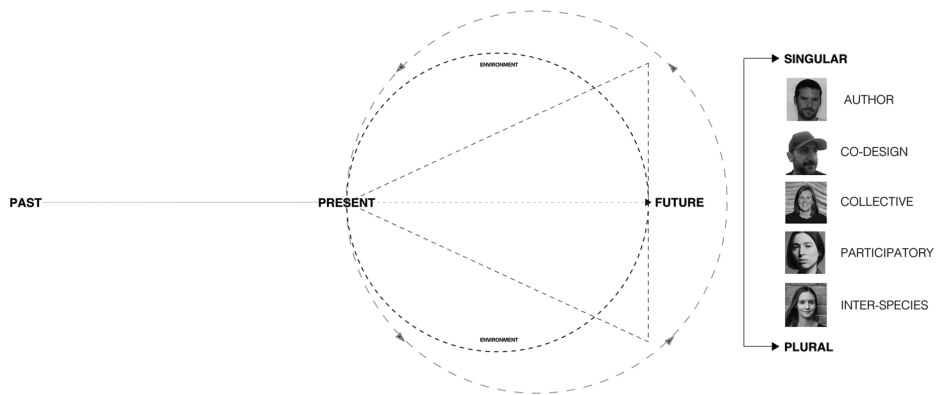


Figure 9. Participation; Spectrum of possibilities.

In this area we can see a spectrum of possibilities between plausibility (Auger 2012) and alienation (Schmeer 2021). In the case of Xenodesign, building from a preliminary experimentation on XenoArchitecture by Avanesian et al. (2017), where the authors pushed the boundaries to a total alien output, which the audience could not make sense of it, and therefore, limited their engagement, Schmeer introduced some degree of understanding. Therefore, we can state that the future needs to have some level of understanding to be operational in the context of design. This projection can be archived through conceptual, prospective, collective, experimental, or discursive means.

The second question asked was;

- *Who could/should be part in constructing the future?* (Figure 9)

In this area we can see a spectrum of possibilities between singular authorship (Auger 2012) and inter-species participation (Schmeer 2021). In the case of Xenodesign, Schmeer proposed a more-than-human perspective in which non-human have a seat in the table.

Therefore, we can state that the entitlement for constructing the future have been expanding towards collective forms in the context of design. This articulation can be archived through co-design, collective, participatory, or multi-species means.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Notes on contributor

Dr. Fernando Galdon is a design practitioner, researcher and educator. He holds a BA Product Design, an MSc Cognitive Computing and a MRes Design, as well as, a PhD in Design from the RCA, where he currently works as an Assistant Professor. His research has been published and presented internationally at conferences at MIT, the University of Cambridge, the University of Manchester, UNISINOS Brazil, CHUV Lausanne, EASD Valencia, Harvard, Politecnico di Milano or the Design Museum in London.

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