Mapping Futures and Futuring in HCI/Design

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This one-day workshop seeks to bring together design researchers that have different orientations and practices for futures and futuring to unpack the role of futuring across design, design artefacts, and designers. Our goal in this workshop is to use examples of established futures to engage with and reflect on questions around the role of futures in HCI/design. We believe that there is a common thread between work from many different researchers, but that the people doing that work are spread across different disciplines and geographical locations. To that end, this workshop will assemble researchers working with different methods and approaches to futures in design and will aim to identify core challenges and opportunities for futures in HCI.

1 INTRODUCTION

Design is an inherently futures-oriented discipline, involving imagining contexts, actors, and interactions surrounding technological artifacts in the future via sketching, scenarios, or prototyping. Fundamentally, human-centered design approaches orient towards the future, attempting to move from existing to preferred situations [30], yet often doesn't make its own future orientation explicit. Sketching and prototyping allow shape and form to be rehearsed in materials, to both imagine and create a shared understanding of future possibilities. Design scenarios tell stories of future interactions between personas and not-yet-realized technology designs [6]. Prototypes are *proto*, indicating their status as first, early, or provisional [24], reflecting desire for what might come to be more fully realized in a future [20].

Represented as scenarios, futures become a part of planning by for example imagining generic futures to help classify as well as generate and nuance in ideas about the future [5, 7]. These most often frame the future as containing actors with problems that can be solved by technology. Futures are targets, articulating how a problem might be addressed, and persuade those involved of the relevance of the problem and the viability of proposed solutions. Here, futures have been taken up by a wide variety of design consultancies and advocacy organizations, such as the Danish Design Center, as well as corporate sources like the Shell Scenarios [28] or Philips, and even at the office of the United States Director of National Intelligence [25].

We see a discussion of futures in HCI and design as offering a place to expand and refine design methods and processes already native to Research through Design to imagine new forms of criticism and new kinds of conversations. Futuring as a topic has a natural affinity for the themes of DIS 2024: they are used to reflect on the present by projecting into the future. In this workshop, we hope to develop new ideas for ways of engaging with contemporary troubles and concerns to imagine new forms of relations with the world. If design is innately about creating futures, then asking "Why Design?" leads us to correspondingly ask "Which Futures?" "Futures for Whom?" "Futures by Whom?" and perhaps most fundamentally "Why Future?" at all.
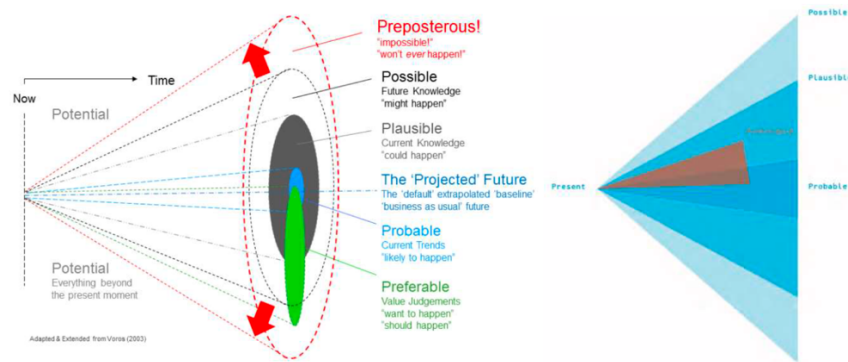

Figure 1: The futures cone, from Voros, left [37], and Dunne and Raby, right [10]. A dominant metaphor for futuring.

1.1 Broadening Design Futures

Diverging from more traditional design methods, design futuring approaches do not offer solutions or targets but rather aim to critique, discuss, debate, and question alternative futures, shifting from corporatized understandings of futures towards a more critical orientation [38]. Kozubaev et al. use the term *design futuring* to refer to a loose ensemble of approaches that "leverage design to explore futures as a means to comment on—and potentially change—the present" [21]. For example, the role of speculative design is "not to show how things will be, but to open up a space for discussion" [10] and the fictional storytelling nature of design fiction allows it to be "temporally disinhibited when compared to traditional design" [22]. Other design futuring approaches include critical design [3, 8, 9], participatory speculation [12, 29, 36], speculative design [1, 10], fabulation [15, 27, 32, 35], and others in this loose ensemble of HCI and design practices. In contrast to human-centered design, these approaches break away from solutionism and invite questioning or critiquing the status quo. Often in this mode, the idea of sociotechnical imaginaries can work as a generative 'backdrop' to which design futuring approaches respond [18]. Futures are reflections of cultural and social understandings of technologies—for better or for worse. In a sense, sociotechnical imaginaries synthesize the cultural, societal, political, or

institutional norms that design futuring often aims to question, amplify, resist, or subvert. By aiming to address an often societally held notion of the 'status quo', however, design futuring approaches risk embedding the viewpoints of dominant groups that have defined or benefit from that status quo, even while attempting to critique and shift it.
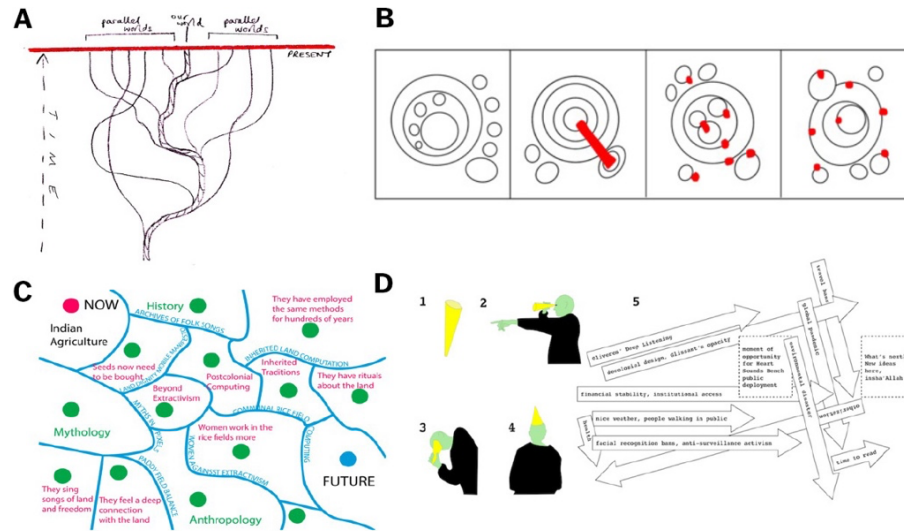

Figure 2: Alternative metaphors for futuring [16]: A. Parallel Presents; B. Time as cyclic; C. Epithelial time; D. The Uncertainty Cone.

1.2 Futures for Whom?

There are those who are left outside of futures, leading to growing calls for diversifying design futuring and challenging the privileged position of speculative design [23]. For example, with decades of rich precedent works outside HCI, Harrington et al have established Afrofuturism, Afrofuturist feminism, and Black feminism as a prominent and canonical approach(es) to design futuring in HCI [14]. Tran O'Leary et al. question who gets to future, pointing toward possibilities for more participatory futuring with racially diverse and socioeconomically marginalized communities in Seattle's Africatown [34]. Bardzell calls for moving beyond the typical modernist telos of rationality toward imagining feminist utopias [2]. Søndergaard contributes 'collective imagining' as part of the approach for troubling design focused on women's health [31], drawing from STS scholar Donna Haraway's advice to 'stay with the trouble' [13]. Howell et al. critique ways that the Futures Cone often foreground a dominant perspective and call for a greater plurality of perspectives on design futuring [16]. Other concerns with futuring involve assumptions about ongoingness and continuation of the status quo in light of the ecological crisis and climate change. Transition design, for example, means to take a futuring approach to backcast from situations where the world has changed for the better to imagine a path for transitioning to those futures [17, 33]. Finally, the idea of futuring at all has been productively criticized. Jönsson et al have taken Haraway's idea of 'thicker presents' to use design to materially encounter current biodiversity loss [19]. Pschetz likewise builds on Haraway to consider design with no future to engage with the present more purposefully [26]. These approaches show a need to continue to diversify and explore approaches to imagining alternative futures.

The uptake of futures as a critical mode of engagement with the present points to a sense of enthusiasm and possibility in HCI/design. At the same time, there are also many unresolved agendas, multiple perspectives, and open

questions. The intention in this workshop is not to flatten this complexity or seek to simplify what futures are or could be, but rather to map out the influences and genres operating in this field to help understand the forces that are at play.

2   THEME AND GOALS

This one-day workshop seeks to bring together design researchers that have different orientations and practices for futures and futuring to unpack the role of futuring across design, design artefacts, and designers. Our goal in this workshop is to use examples of established futures to engage with and reflect on questions around the role of futures in HCI/design:

- Why future? What agendas and ideas can futuring represent best?
- How are futures manifested and made material? What modes of making futures work in HCI?
- Who futures? Why do or can they? Who else can be involved or empowered? What theoretical perspectives, persons, or topics are left outside of the "futures" frame?
- What strategies, tactics, methods, or orientations to futuring are present in HCI? What commitments and values do they espouse? Are there others that could or should be present?
- How do we build knowledge through futuring both individually and as a research community?
- How does design futuring connect or extend notions of past and present?

We do not want to endlessly talk about how work is categorized or sorted, preferring instead to take the time to establish relations, intentions, and goals of futures work in HCI. To this end, we will create an emergent annotated portfolio [4, 11] that offers a summative outcome that coheres various approaches to HCI and design futures.

3   ANTICIPATED OUTCOMES

Our aim in this workshop is to develop orientations or goals for futuring to help unpack and better understand the idea and role of futures in design. How do futures in design take influences from other fields and other disciplines to become generative for design practice? What kind of knowledge does design futuring create or support? Are there particular values or practices that are "native" to futures-based design? Are there or should there be design practices that operate outside of the "futures" frame?

We believe that there is a common thread between work from many different researchers, but that the people doing that work are spread across different disciplines and geographical locations. One outcome from this workshop would be to bring them all together and establish a common interest. To that end, this workshop will assemble researchers working with different methods and approaches to futures in design and will aim to identify core challenges and opportunities for futures in HCI. In doing so, we hope to produce broader intermediate knowledge that can become a shared resource for designers in this space. We intend to cohere the projects of participants from the workshop—a set of artifacts, images, theory, and annotation that articulates how futures have worked in design—and possibly find gaps for future practice. In this way, the outcomes of the workshop will be twofold: One, we will produce a group of researchers and practitioners that are working in the domain, aiming to unpack, discuss and respond to critical issues around futures in design both during and after the workshop. Two, we will create an annotated portfolio that can travel on its own as documentation and vision for future design practice.

Acknowledgements

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