
Designing at the End of the World

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Abstract

We are living in a time of ecological and humanitarian crisis that requires imminent action from the joint fields of HCI and interaction design. In a very palpable way, we seem to be moving towards the “end of the world” (certainly, as we have known it). This workshop addresses three concrete end-of-world challenges – the end of nature, end of culture and end of the human – to contribute to a much-needed design research agenda and to build community in the process. The workshop will explore how the design of technology can support a fairer and more secure set of futures by considering these three end-states and what we, as participants (both contributing to futures and living with the outcomes), can offer to improve the options. Contributions to theory and practice will be welcome.

Author Keywords

End-of-world Challenges; Existential Crisis; Affective Interaction Design; Intelligent Systems; AI.

CSS Concepts

- Human-centered computing~Interaction Design Theory, concepts and paradigms

Workshop Motivation and Goal

This one-day workshop brings together design researchers to co-create, as a unified community, a novel agenda to address what it means to be collectively ‘designing at the end of the world’. The workshop extends a general mobilization within several

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design communities [e.g. 2, 4, 7] directly addressing a growing number of societal and environmental crises. In the following sections, we sketch out the contextual and conceptual framework that grounds the workshop, the three specific “ends” we wish to address, and concrete challenges to be further explored.

Background and Related Work

According to the Belgian philosopher Isabelle Stengers, we are living in ‘catastrophic times’, facing the imminent end of natural resources and a disequilibrium of the ecological and cultural systems with which we are familiar today [18]. In his 2010 book, *Living in the End Times*, Slovenian philosopher Slavoj Žižek identifies four so-called ‘riders of the apocalypse’: ecological crisis, consequences of the biogenetic revolution, system imbalances and the explosive growth of social divisions and exclusions 0.

Living at the end of the world means living in times where “choices in the present become highly charged affectively with fear for the uncertain future” [15, p. 4]. For many, this means coping with a growing urge to change things, accompanied by a feeling that it is impossible to act in the light of the overwhelming complexity of an increasing number of ecological and humanitarian problems [8]. This is partly due to the difficulty of rationally comprehending the globally interconnected effects of a range of societal and environmental challenges that seem to be overlapping and spilling into each other [19].

Light et al. have forcefully put forth a call for action under the heading of design for existential crisis in the Anthropocene age [10]. The authors argue that technology designers and design researchers have a

stake in the production of futures, and are hence implicated in the waves of change and uncertainty in a world characterized by ecological crisis, populism, mass migration, rising refugee numbers, automation and the like. Light et al. frame their project in relation to design as an existential challenge with a range of ethical concerns and the need for new design values to be explored in order to potentially “save humanity” (juxtaposed with saving humankind). Within this frame, the authors point towards concrete suggestions for attuning designers’ towards meaning, purpose and fulfilment in difficult, unstable and rapidly changing times and that designers must strive to be “attentive, different, critical and in it together” [10] p. 6].

In her work focused on documenting people’s attitudes toward intelligent systems, Loi [11, 12] highlights that designers’ have the “moral and ethical responsibility to engage with how intelligent systems futures are being and will be shaped”. While we need futures “enriched and enabled by intelligent yet trustworthy, ethical systems”, guidelines to govern the actions of those deciding “what to design, how, why and what data to feed into a given system” are crucial [12, p. 804]. After identifying ten people-centric recommendations to spark a debate on how these systems are developed and on designers’ related agency [11, pp. 799-802], Loi poses numerous questions still in need for discussion, deepening and practical development [11, p. 803].

Fritsch has put forth Affective Interaction Design (AID) as a potential starting point for a sustained engagement with uncertain and affectively charged design situations at the end of the world [5]. Building on findings from affect theory [3, 14], AID starts from a Spinozan definition of affect as an “ability to affect

The end of nature relates to the challenges we face with the current climate crisis. Data from the UN Intergovernmental Panel on Climate Change (IPCC) from October 2018 outlines the devastating consequences of 1.5°C global warming calling for immediate action.

The end of culture relates to the ongoing Culture Wars (Reestorf 2016), not least in the wake of the current migration and refugee crisis in Europe. The increase in right-wing populism is very much based on the perceived cultural threat posed by the flows of refugees and immigration which to many warrants an end to the culture they are familiar with.

The end of the human relates to recent advances in technological implants and the rise of automation and robots replacing human skilled labor. The latter is closely connected to advances in AI and machine learning challenging notions of intelligence and agency. Important existential questions have re-emerged on the relation between humans and technology.

and be affected" [17]. According to Spinoza, positive affects make us feel alive and act in the world and negative ones reduce our possible activity in the world and make such a reduction felt. Within this frame, end-of-world contexts would be characterized by negative affect. Living at the end of the world thus directly impacts our ability to affect (what can we do?) and to be affected (what matters?). AID argues that it might be possible to design affective interactions on a micro-level for changes in 'affective attachments' [1] towards new possibilities for action on a macro-level.

This workshop is not grounded on the belief that the world is about to end any time soon or that digital technologies can alone save us or provide sustainable solutions to the multifaceted problems we are facing. Rather, the argument is for interaction design to develop a serious commitment and to engage explicitly with what we believe are affectively saturated situations of crisis at the end of the world. We propose that 'ends' might also hold a generative potential, and point to a need for rethinking our existing affective attachments and habits to potentially stimulate positive shifts in attitudes and policies that will help us better cope with situations of crisis and catastrophe.

Workshop Themes

Building on [5] and [6], the workshop addresses three end of world states: the end of nature, end of culture and end of the human (see sidebar). We consider the below challenges to take forward contemplation of the three ends in diverse theory or practice-oriented ways.

Technologies: Given the proposed end states, what interactive technologies may successfully support fairer and more secure futures? What may open up or lead us

toward new options' development and discovery? What design attributes should these technologies have and how should they be identified, designed, implemented and regulated? Which technology should be abandoned or avoided as working against options and strategies that can trigger, facilitate or nurture fairer and more secure futures? What level of autonomy and agency should these technologies have? How should they relate to, converse and engage with their fellow humans?

Values and Ethics: Given the influence that interactive technologies have on those they serve, how should they be designed to educate, activate and empower local and global communities so they can play more active roles in the development of fairer and more secure futures? What design tools and strategies can help us ensure our designs do not become tools for mass manipulation and exploitation? How can human-centric approaches be effective while enabling sustainable business models and technological progress? What roles can participatory practice play in these contexts [9]? What social and behavioral contracts should underpin our interactions with such technologies? How should such contracts be developed, maintained, adjusted, regulated?

Transcending the Boundaries of Design: How could designers stretch and even challenge their roles and repertoire to proactively support fairer and more secure futures? What counts as activism in these end-of-world contexts? Where and how should we, as a design community, draw a line as we approach the design of novel technologies? What should we consistently avoid designing and what should we un-design? What tools could help us challenge and repair what is in the way of fairer and more secure futures?

Reaching Out and Community Building: Given technology development's multidisciplinary nature, what roles should designers play to promote awareness and ensure alignment with fellow travelers? What tools and strategies should they use to activate and sustain shared focus on fairer and more secure futures?

In January 2019, global leaders met in Davos to discuss how to shape global, regional and industry agendas [13]. Among presenters, the most powerful call to action was by 16yo activist Greta Thunberg, who silenced a room full of dignitaries stating what we – the design community – ought to consider carefully: “Until you start focusing on what needs to be done rather than what is politically possible, there is no hope. We cannot solve a crisis without treating it as a crisis.”

In this context of ecological and humanitarian crisis, acting is no longer a negotiable affair; it is a key responsibility of all design communities. We call all HCI and interaction designers to co-explore concrete end-of-world challenges and how the design of technology can support a fairer and more secure set of futures.

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