Time, Temporality, and Slowness: Future Directions for Design Research

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Abstract

A diverse set of research and design initiatives related to time, temporality, and slowness has emerged in the DIS and HCI communities. The goals of this workshop are to: 1. bring together researchers to reflect on conceptual, methodological, and practice-based outcomes and issues and 2. to develop an agenda for future research in this growing area.

Author Keywords

Time; Temporality; Slowness; Slow Technology.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Workshop Motivation and Goal

This workshop seeks to build off prior successful workshops at DIS 2012 [16] and CHI 2013 [13] that represent early efforts to explore how notions of time, temporality, and slowness are conceptualized, enacted, and investigated through design research. Since these workshops, a diverse set of research and design initiatives related to time, temporality, and slowness has emerged in the HCI community. Five years later, the goals of this proposed one-day workshop at DIS 2018 are to (i) bring together researchers and practitioners to critically reflect on conceptual,

theoretical, methodological, and practice-based outcomes and issues and (ii) to develop a design-oriented agenda for future research. Importantly, the initial workshops were both conducted at sites in Europe. A broader goal of this workshop is to expand to an Asian context to further develop an international network of researchers and practitioners investigating topics of time, temporality, and slowness.

Background and Related Work

Temporality—the state of existing within time—shapes virtually all aspects of how we experience and construct the world around us. There is extensive literature exploring the concept of time from many perspectives in the humanities and social sciences [c.f., 2,15]. Time touches on many core aspects of research and practice in the HCI community. Interaction and graphical user interfaces are fundamentally temporal; time is the medium through which an interactive dialogue between a human and computer begins, unfolds, and resolves.

As focus in DIS and HCI expanded outside of the workplace, the need to take more seriously the temporal dimensions of technologies in everyday life steadily emerged. This is summed up well by Mazé and Redström's assertion that creating digital artifacts requires designers to: "*investigate what it means to design a relationship with a computational thing that will last and develop over time – in effect, an object who's form is fundamentally constituted by its temporal manifestation*" [14, p. 11]. There has recently been a resurgence of interest investigating connections among slowness, time, and technology in HCI. A key strand of research has focused on how different experiences of time can operate as an outcome of using technology. Works in this area have focused on creating

technologies that support experiences that include moments of mental rest [e.g., 3,11] and solitude [7].

Another area of work has investigated temporality and slowness as different ways of framing the design of interactive systems themselves. Drawing on principles of Slow Design [6], Grosse-Hering et al. [8] designed a series of juicers that aimed to support meaningful interactions by slowing down key, well-timed parts of the juicing process. Pschetz & Banks directly apply a longer-term framing to the design of The Long Living Chair [20], which captures and displays the amount of times people have sat over its lifetime. Slowness has also been applied in design efforts to support experiences of anticipation [e.g., 17], social connection [e.g., 18,23], and longer-term relations with everyday computational objects [19].

HCI researchers have started to turn their attention to examining different perspectives of time. Lindley [12], and Pschetz et al. [20] and envision time as socially entangled and relational, highlighting the need for alternative expressions of temporality in design. Taylor et al. [22] offer a rare account of a cross-cultural design project that emphasizes time from an Australian Aboriginal community's perspective. Across several works [e.g., 4,5], Friedman, Nathan, and Yoo have sought to expand initiatives in HCI to consider multiple lifespans. They highlight the need for new design methods to embrace the complexity in designing in timeframes that may well expand beyond the lifetime of the design team itself. In parallel, researchers have proposed different themes, such as narrative time [1] and ephemerality [24] as resources for design.

Researchers and designers have also expressed struggles in creating technologies that invite and

sustain longer-term experiences [10,16]. Such tensions highlight the complexity of designing technologies that deviate from enacting normative conceptions of time. This resonates with the work of Vallgårda et al. [15], who argue for designing the *temporal form* of computational objects, in addition to their physical form and interaction gestalt. They describe the need for design research to develop concrete examples of temporal form through "*comprehensive and intricate designs in which the material and physical forms expand beyond two-dimensional glass and plastic surfaces, and the interaction gestalt comprises more than look and point action*" [p.14].

Collectively, these areas of work trace a trajectory of perspectives on time, temporality, and slowness in the design and HCI communities. They highlight a growing diversity of perspectives on and approaches to attending to time, temporality, and slowness in design research and practice. The core goal of this one-day workshop will be to bring together a diverse set of researchers and practitioners to critically reflect on conceptual, theoretical, methodological, and practice-based insights and issues that have emerged through our respective works; and, to develop an agenda for future design that reflects the diversity and needs of research and practitioners working in this space.

Workshop Themes

Process and insights into practice– What kinds of concepts, methods, and/or approaches have productively supported designers and researchers in making new artifacts, technologies, or systems that deviate from enacting normative conceptions of time? How is the 'long-term' conceptualized and attended to in the design process? What are the practical, ethical, and/or moral issues of creating systems intended to

outlive (and be maintained) beyond the lives of those that design them?

Social or cultural constructions of time – What are appropriate and viable ways of studying how time is socially or culturally constructed? How can such insights be incorporated into the design of new technologies? What tensions are potentially entangled with pursing these research initiatives?

Expressions, representations, and materiality of time – How are alternative representations of time and temporal expressions manifested through the design of new artifact, technologies, or systems? What are the relations (and possible tensions) among time, speed, and pacing in these examples? How do the material aspects of a design artifact shape the experience of interacting and living with it over time?

Methodological matters – What kinds of methods, tactics, and approaches are needed to study and/or design technologies that embody alternative temporal forms? Where have methodological or practical struggles emerged and how have they been addressed? What is the biggest challenge to researching and designing for time and temporality?

Acknowledgements

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