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HCI and Older Adults: The Critical Turn and What Comes Next

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HCI and Older Adults: The Critical Turn and What Comes Next

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ABSTRACT

Human-Computer Interaction (HCI) has long studied the design of technology for older adults. A critical turn problematizing how older adults were being framed gained momentum in the 2010s. The literature comprising this critical turn offered insights for what researchers should avoid in their work as well as high level future directions. Past work was critiqued for positioning older adults as incapable technology users, the same as one another, and chronically ill and in need of care. In this monograph, we summarize some of the research that followed and responded to the critiques that began this critical turn. We focus our review on three spaces: technology use, intersectionality, and care. We describe how researchers have fruitfully drawn upon other disciplines including feminist and critical studies, gerontology, social computing, and disability studies to further break down myths, generate knowledge, and open new research spaces. We include our view of the gaps that remain and what should come next.

1

Introduction

Recently, a colleague said that the fourth wave of our field seemed to be “Critical HCI”. This is from an individual housed in a prestigious computer science department, whose highly technical work has been shaped by critique in what he says to be positive ways. Critiques related to social justice concerns seem to have touched nearly every subcommunity in our field. For example, concerns around the body of research with underserved communities around the world (HCI4D or ICT4D) (Irani *et al.*, 2010; Yvonne and Marsden, 2013) included how the notion of designing for “undeveloped countries” can position these nations as “essentially powerless and unable to “develop” without intervention” (Irani *et al.*, 2010, [1]). Similar themes on the imbalance between designers and the targets of technology interventions came up in a big way in 2019 at the ASSETS conference. A critical convergence included a critique of technology solutions in a keynote by anthropologist Karen Nakamura (Nakamura, 2019), an article touching on power structures and subordination of disabled people in HCI research (Williams and Boyd, 2019), and social media posts by disabled people critiquing conference discourse.

The community of HCI researchers working with older adults was no exception to facing a convergence of critique. While there had been critiques made prior, a number of arguments emerged around the same time (2012–2015) arguing the broad ways in which existing research had problematic foundations. This included writing and talking about older adults as if they were a homogenous group, a strong emphasis on deficit and decline, and stereotyping views when it came to technology use (Knowles *et al.*, 2024).

The research that constituted this critical turn impacted the work of each of the authors of this monograph. Like many others in our field, these arguments shaped the ways that we reviewed, read, and conducted research. In this monograph, we present the arguments made during the critical turn on research with older adults in HCI and how the research that followed responded to those arguments. In terms of the articles that we selected for this monograph, we included articles that have been influential to us and conducted keyword and reference searches for others aligned with the focus areas of this monograph. Our review was not systematic – the exclusion of a paper should not be taken as a signal that the work is not relevant, but rather as a limitation of our approach. We kept our review largely to papers from the last decade, so that we could understand trends of and following the critical turn. Literature on older adults in HCI which might otherwise fit the themes we found, but fall outside this date range, were mostly excluded. Finally, our own background inevitably shapes the ways that we describe and frame research – we are researchers based in the US and UK and as such, we are likely missing important nuances of cultures and countries outside our own. The monograph is structured as follows:

In Section 2, “Older Adults and the Critical Turn in HCI,” we provide the necessary background for the remainder of the monograph. We discuss how researchers are framing and conducting research with older adults in different disciplines, including in the field of HCI. We describe the body of work that emerged in the 2010s calling out problematic trends in research with older adults. Trends that were critiqued included positioning in terms of technological capability, homogenizing, positioning in terms of “burdens” in regards to healthcare needs, and “othering” in the design process. The following sections delve into each

in depth (with the exception of “othering” in design, which is outside of the scope of this monograph).

In Sections 3–5, we focus on where HCI research has gone, and still needs to go, since this critical turn. These sections take stock of research that has emerged with and since this critical pushback, largely in the last decade. We answer questions including, How do projects address the critiques from the critical turn? How have researchers moved our understanding of this domain forward? How does research, and ways forward for the field, look different in the different domains identified as problematic by past research?

Section 3, “Older Adults and Technology Use,” describes research responding to the oversimplified framing of older adults as incapable or incompetent technology users. We review research that shows how older adults’ can be active technology users, but also that technology non-use should at times be recognized as intentional rather than as due to barriers that need to be overcome.

Section 4, “Older Adults and Intersectionality,” encompasses research responding to the tendency to frame older adults as a homogenous group. We describe the arguments made by researchers that older adults can not be considered as a monolith, and that aging cannot be studied without considering intersecting identities with historically marginalized groups. And, these other characteristics can rarely be studied without including aging.

Section 5, “Older Adults and Care,” includes research in response to the myth that older adults are a care burden on society, and that technology alone can alleviate this “burden”. We describe research that shows how care is bidirectional between older and younger people, is collaborative, and that receiving care technologies takes work.

In Section 6, the conclusion, we reflect and synthesize what we learned from the prior sections, focusing on three main directions for future research.

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