

SYMPOSIUM SESSION 7: OTHERS

Critical engagements with ageing and technology – Why we need Socio-Gerontechnology

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Keywords: Socio-Gerontechnology, theories, critical perspectives

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Resourceful DIY solutions of older people as input for design

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Purpose While creativity and innovativeness are often seen as a positive traits in younger people, the use of everyday objects and technologies in unforeseen or creative ways by older people is equally often seen as a cause for concern. Such behavior is seen as erratic and dangerous by for instance designers, care workers and informal care givers as they fear that such deviant use may lead to harm. Implicitly and explicitly they adopt a paternalistic stance which allows them, and not the older people, to decide what technologies are safe and useful for older people. While it certainly is important to keep vulnerable older people safe, adopting the paternalistic stance and dissuading older people from solving their own problems is not wise. It reduces their autonomy, makes them passive and reliant on external help. We need to counter this way of viewing older people and to improve our understanding of the creative ways in which older people solve problems in everyday life. **Method** We draw on two social scientific projects that focus on the creative everyday life solutions of older people. The first is the Resourceful Ageing project (1, 2). In this project designers, engineers, social scientists and partners from industry worked together to understand the resourcefulness of older people and use it as an inspiration for the design of new gerontechnologies. During this project we used semi-structured interviews, ethnographically inspired observation techniques and an innovative diary approach to get an in depth understanding of the way in which older people use material and digital resources to enrich their lives or deal with everyday life challenges. The second project is the VELTEK project (3). This project studied the innovative work that frontline care professionals do to co-construct gerontechnologies and eldercare services, and how it shapes the experience of ageing. Using semi-structured interviews with care professionals, part of this project focused on their professional encounters with DIY gerontechnology (4) - innovative assemblages that older adults create for themselves in order to resolve issues that available gerontechnologies do not address. **Results and Discussion** We will show that older participants have their own technological literacy which allows them to craft creative inherently non-stigmatizing solutions for everyday life problems, which are understandable and useful to them. Moreover, a focus on creative solutions highlights what is important to older people and resourceful solutions are often a source of pride and satisfaction. Instead of imposing high-tech innovations that don't fit in with the lives of older people, analyzing and linking up with their resourcefulness is a more promising route to designs that do fit in.

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Keywords: resourcefulness, DIY Gerontechnology, ingenuity, tinkering, creativity

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‘What’s the limit?’ Technologies for aging in place as imagined by young adults

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Purpose Current trends in Age Tech innovation designed to enable aging-in-place assume a shared vision of a future where aging can and should be monitored and controlled through data. Many of these technologies include ambient sensors that silently and remotely track the older, “at risk” person’s comings and goings, their eating, sleeping and bathroom habits, whether they are taking their medication, their gate, the length of time they are sitting, standing, or lying down, and the list goes on. Although there have been some efforts to include the experiences and desires of older adults into the design and critique of aging-in-place technologies, young adults, as future users of these devices – both as caregivers and cared for – have thus far been excluded. **Method** To understand whether current trends in Age Tech innovation reflect a future that young adults envision for themselves as they reach what they would define as ‘old age’, in focus groups with individuals between the ages of 18-35, we asked participants to visually map out onto floor plans the kinds of technologies they imagine using in their home in later life. **Results and Discussion** Reflecting on the conversations that were elicited in the presentation and discussion of these maps, we highlight the multiple sources of tension participants voiced as they imagined living with technologies in their later years. These sources of tension arose from a desire to limit technologies in some manner, whether by decreasing their dependence on technologies or by striving for balance in living with technologies. As we argue, their concerns trouble the assumption that technological resistance by older adults is merely a reflection of generational bias and incompetence. These findings highlight the need to be as innovative in finding new ways to *disconnect* from technology and the digital world as we are in finding new ways to digitize our aging futures. We conclude by suggesting that the first step in doing so is to ask people, both young and old, caregivers and cared for, if this is a technology they would want in their own home, now and into the future.

Keywords: future, arts-based methods, young adults, gerontechnology, aging in place, smart home

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Why care of all things? A critical analysis of robotics in care settings

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Purpose In recent years, the design, use and study of robots have increased in the social settings of therapy and care for older adults. In parallel with these developments, voices have been raised advocating for more human-centered and holistic approaches to research on robot technology (1; 2). In particular, the need to critically address underlying technology-driven values (3; 4), and to question the role of machines in the process of communication (5) have been emphasized. More interdisciplinary work is also required to assess the design and use of robots in an increasing range of such settings. The aim of the talk is to critically investigate the use of robots in care, and make visible the challenges and dilemmas of robot use in the surroundings of healthcare and older adults. **Method** The paper draws from a critical analysis of discourses and practices in care robotics. It combines several methods all grounding in an ethnographic approach. It combines the participation in four different sites with indepth interviews, informal talks with researchers and representative users, living lab experiences and observations from scholarly and industry meetings, as well as the re-reading of existing academic studies. **Results & Discussion** In our talk we want to examine and criticize this interconnection of robotics and care on three levels. On the macro level we show how both the scientific goal to create robots and the public healthcare sector are made available for each other by European innovation politics (6). On the meso level we address the configurations of different actors within healthcare settings and how care technology, especially the care robot, is intervening in there (7). On the micro level we show how care is made an object of robotic engineering. In this perspective we reconstruct that and how of all possible applications the areas of healthcare and nursing fit the requirements and conditions of robotics and HRI (8). With this threefold analysis on robots in care, we criticize the whole notion of care robotics and it's development and suggest ways to overcome the current state.

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Keywords: robotics, care, nursing, healthcare robotics, human-robot interaction

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The interrelatedness of digital practices and social connectedness: A study on older people's smartphone use

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Purpose Digitization has become an inherent part of later life, but we are only beginning to understand what this means for the experience of ageing. The subjective experience of being connected is an essential ingredient supporting continued wellbeing in later life. This includes dimensions related, among others, to playfulness, leisure, health and social participation. So, it is important to get insight into the use of digital devices and the role they play in maintaining existing and shaping new forms of social connectedness. Today, smartphones are being increasingly used by people in their everyday life. But we still lack insight into the characteristics and dynamics of their use and its impact on social connectedness. For this reason we will first review empirical studies on older people's smartphone use in everyday life, and we will then present the preliminary results of our empirical study, part of the international research project BConnect@Home (2) that we conducted in Canada, the Netherlands, Spain and Sweden in 2019 (1). **Method** We present data of different and similar trends in how older persons use smartphones in their home and other locations in these four countries, collected by tracking smartphone and mobile app activity patterns of 400 individuals (100 per country) between 55 and 79 years old. We map and trace the use of their smartphones in a comparative perspective, combining quantitative and qualitative data (i.e., tracking activity patterns during one month, a survey, and interviews focussed on how older people experience their smartphone use related to their sense of social connectedness). **Results & Discussion** Using theoretical cues from the emerging body of critical studies in ageing and technology, we aim to illuminate how digital mobile practices shape notions and forms of social connectedness, rather than merely impacting on them. To conclude, we ponder how practitioners of gerontechnology can meaningfully link to existing digital practices of older people.

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Keywords: tracking, survey, interviews, smartphones, older people, social connectedness

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