PREFACE

Design Anthropology in Participatory Design

This focus section explores the opportunities of design anthropology in participatory design as an approach to research and design in an increasingly global and digital world. Traditionally, ethnography has been used in Participatory design to research real-life contexts and challenges, and as ways to involve people in defining user-needs and design opportunities. As the boundaries between diverse – material, digital and networked – spaces and experiences become increasingly blurred, so do the conventional distinctions between research and design. The papers presented in this focus section explore opportunities of using design anthropology as a holistic and critical approach to addressing societal challenges and change, and a way for anthropologists and designers to engage in participatory research and design that extend beyond the empirical.

From Ethnography to Design Anthropology

Much has changed since the introduction of Scandinavian participatory approaches to design in the 1970s and the initial employment of ethnographic methods and perspectives within such practices in the late 1980s [1, 2, 3]. Changes in technical, social, political and economic landscapes are altering the way we think about and practice design, participation and ethnography within an increasingly global and digital world. Recently Blomberg and Karasti [4] have argued for a renewed perspective on ethnography in participatory design, one that relates to the shifting contexts of the contemporary world and extends the scope of the field. "As we look back on the last two decades, during which ethnography has become somewhat commonplace in participatory design, it may be time to reimagine the relation of ethnography to design, not as having a singular relation to participatory design, but as a varied contribution including connecting to the everyday 'realities' of the sites of design and intervention, informing the possibilities for participation given local contingencies, being iteratively allied to reflection and intervention, and constituting the source and outcome of design" [4 p.108]. With the spread of participatory design beyond local, Western and commercial settings the authors point to new opportunities and challenges of ethnography and participatory design relating to sustainable and long-term involvement with issues, sites and participants of design. It is in this context, we argue, emerging perspectives on design anthropology may play a role in extending discussions of the role of ethnography and anthropology in participatory design [2, 5, 6, 7, 8]. By shifting the focus from design ethnography or ethnography *in* or *for* design, towards an emphasis on design *anthropology*, we want to call attention to the potentials of a more theoretical, critical, speculative, materially engaged and future oriented approach stretching beyond the local, the descriptive, and the empirical.

Ethnography in Participatory Design

Ethnographers and anthropologist have been involved in design, innovation and product development for more than 30 years, adopting and developing various roles and interdisciplinary approaches. Some have worked from more traditional ethnographic positions, using fieldwork and ethnographic descriptions to render real-life settings and practices accessible for design [3, 9, 10, 11, 12]. Their work has primarily focused on understanding and describing, 'what is' while leaving speculations about alternatives and the question of 'what might be' to designers. Other ethnographers have emerged themselves in participatory design processes taking on roles as mediators and facilitators of collaborations and co-creation activities, as part of an interdisciplinary collaborative pursuit [8, 13, 14]. Here we have seen an increased preoccupation with how we might understand and work with emergent relations between designed objects and use-practices, and a growing interest in experimenting with various ways of combining understandings of and interventions in 'use-contexts' [15, 16, 17]. However different the various approaches to ethnography in design might be, they often seem to share an interest in minimizing *distance* between contexts of use and design, creating familiarity and empathy with 'the (ethnographic) Other' - whether in the form of *user*, *informant* or *design partner*. Hence, drawing things closer in order to create understandings of empirical matters in 'real world' contexts.

The critique of much literature on ethnography in design indicates that even if collaborative approaches have become more sophisticated and understandings of the value of cultural insights more complex, ethnography in and for design is often based on a narrow and predefined conception of anthropology [2, 18, 19, 20, 21]. The consequences of the limited scope on user experience and real-world context may entail, a somewhat mechanic understanding of people's needs and life-worlds, and predefined ideas of what ethnography can deliver to the design team. As a result we have seen a disproportionate focus on developing methods and techniques for research and collaboration around 'implications for design' and 'ethnography as design material' [22, 23, 24], while disregarding the potential of anthropological analysis and theory within larger contextual and socio-cultural frameworks [6, 7].

Like design ethnographers, participatory design researchers are faced with the challenge of re-imagining their practice in an increasingly global and digital world. In "Design Matters in Participatory Design" Bannon and Ehn [25] outline some of the challenges contemporary participatory design faces as technology development moves from a focus on system-design towards the design of generic platforms and infrastructures that are less confined in time and space. In light of these challenges Bannon and Ehn emphasise the need for expanding the notion of participatory design beyond engagements during project time, to include participation in 'design after design' for example through exploring potentials for end-users to actively appropriate, and (re-)shape generic and infrastructural technologies locally, in use and over time. With reference to Latour and Binder et al. [26] they propose a future participatory design focused on 'drawing (controversial) things together', and consequently suggest shifting our frame of reference from 'design projects' to 'design things' understood as both 'objects' and assemblies for 'matters of concern' [25].

Where design ethnography, as participatory design, focus on 'getting closer' or 'drawing things together' [25, 26], we see design anthropology as being as much about contextualising these 'things', framing and re-framing the objects and practices of design, using different theoretical *positionings* and critical approaches to explore possible and alternative futures. This approach to design anthropology tends to differ from traditional participatory design and ethnographically informed design by emphasising the theoretical or cultural *frameworks* and the socio-political *contexts* within which both field studies and design collaborations are conducted and understood within the design process, and by focusing on and challenging how these affect the intertwined processes of knowledge production and design [7].

Design Anthropology as Cultural Critique

As design anthropology emerges as an academic field of research and knowledge production [2, 5, 27] discussions between anthropology and design research are becoming increasingly entangled. Otto and Smith [2] argue for design anthropology as a *distinct way of knowing* that incorporates both analysing and doing in the process of constructing knowledge. This approach involves defining and inventing the ethnographic field or design space, as well as acting situationally to produce various cultural agendas through the research and design process. In a Scandinavian context, at least, design anthropology has emerged out of the field of participatory design, with shared concerns for e.g. the social and political aspects of design and use of technology in diverse contexts. Researchers engaging in the field grapple with constellations of socio-material and technological matter, and entanglements with political and public concerns in domains afar from workplace or conventional industrial agendas of ethnography in design [4, 28].

In a world of increasingly heterogeneous and interconnected contexts, and domains of design, production and use, we argue, design anthropology offers an opportunity to rethink and extend anthropology's engagement within participatory design. Here the aim is not merely 'getting closer' to users and real-life contexts, through familiarization, mediation and facilitation, but also to create a critical and theoretically informed *distance* from which to perceive and reflect upon complex and situated relations between people, technology and design. The aim of design anthropology goes beyond description, empathy or advocacy, even if this might be part of the methodological approach [21, 29]. It is rather about establishing other *points of discourse*, by challenging and reframing dominant conversations [7, 30]. It is about using anthropology as a critical approach to create *sites of transformation* in design research and practices [6, 31]. The strong orientation of design anthropology towards alternative futures and potential change, its focus on design interventions and material engagements with differently positioned people in situated contexts, are corner stones in the field. This particular positioning of the field creates opportunities and constructive tensions within design anthropological practice and research. Some central tensions, we argue, which are reflected in the following chapters, can be characterised through the following continua:

- *Proximity versus Distance*
- *Understanding versus Emergence*
- *Empathy versus Critique*
- *Description versus Intervention*
- *Professional Boundaries versus Transdisciplinarity*

Although a design anthropological approach pulls towards the concepts on the right side, the concepts are not mutually excluding positions. Rather, they are constructive dialectics through which we may reflect upon our engagements with *the Other*, whether 'internal' or 'external' to specific sites and collaborations, when creating objects and contexts of design. Due to the orientation towards transformation and change, attention in design anthropology is on scaffolding contexts for *emergence* and *assemblage* of co-created reflections of present and future realities [6, 32]. It is about reimagining the possible through socio-material interventions that both create and transform knowledge and perspectives of the people involved (including the design anthropologists themselves), hence reframing a more critical role and position of anthropology in participatory design.

Our own work in the field of design anthropology has emerged out of diverse engagements as anthropologists in the field of participatory design. Our research projects have included exploring potentials for interactive and emerging technologies in the contexts of digital cultural heritage in museums [6, 33, 34, 35], transformative learning processes in schools [36], digital innovation of playgrounds [7, 20], and online community based innovation [37, 38]. The starting point for the research and design projects in which we engage is often the role and potential of technology, which is collaboratively explored through a variety of qualitative research, experiments and design interventions. Through these processes however, our work has impacted the focus by extending the attention into wider more complex concerns for the socio-political contexts and digital cultural practices within which the envisaged transformations are situated.

The contributions of our design anthropological approach in these settings, is to create other points of discourse through emphasising and reworking the underlying assumptions and cultural frames of understanding prevalent in particular contexts. This explorative and critical approach is much akin to participatory Design [25] and constructive or speculative design research [39, 40]. But the role and function of anthropology *within* these contexts differs by drawing closer attention to the messy and complex socio-cultural and political contexts, the relationships and 'correspondence' [29] to diverse agendas and communities, and an accountability to the knowledge created from these contexts. The engagement with participatory design has extended the anthropological approach into embracing diverse material, collaborative and explorative engagements, directed explicitly towards the design process (and issues) and developing design opportunities and future potentials. Ultimately, we find that this design anthropological approach and knowledge production dissolves the boundaries between practices of anthropology and design research to create critical reflections for technological and cultural change.

Design Anthropology in Participatory Design: Looking Ahead

The authors in this focus section represent diverse perspectives and positionings within and between the fields of design anthropology and participatory design. Some are firmly situated in participatory design but working with social and political aspects of co-designing with communities (Light; Tonolli, Teli and D'Andrea). Other papers represent collaborations between design researchers and anthropologists working within diverse fields (Akama, Stuedahl and Van Zyl) or on transdisciplinary research projects involving e.g. new forms of technology for elders (Tonolli et al.) or new ways of engaging people with dementia (Branco, Quental and Ribeiro). Common for the authors is that they use the future oriented connections between design anthropology and participatory design to reflect upon their own research practice, as well as to carve out opportunities and developments in and between the research field(s) they cross (Stuedahl; Light).

In "Troubling Futures: Can Participatory Design Research provide a Constitutive Anthropology for the 21st Century?" Ann Light explores the possibility for seeing participatory design as a form of generative anthropology that brings together design research and perspectives from anthropology to address societal challenges in a fair and sustainable manner. Speaking from a position within participatory design she asks how anthropology and design research may unite to create a space for *multiple* futures to be aired, shared and critiqued. Inspired by Ingold, Light sees design anthropology as a study *with* (rather than *of*) people, aiming to open our eyes and minds to other possibilities of being. In this pragmatic, democratic and critical endeavour design research and design anthropology is described as sharing the same mission if not the same epistemology.

In "A Design Anthropology Critique of Active Aging as Ageism" Tonolli, Teli and D'Andrea take ageism (a paraphrase of Said's 'Orientalism') as their starting point for a design anthropological critique of how elders are often stereotypically framed within ICT research and design projects, as being both inept at and in need of technology. Through ethnographic descriptions, participatory design engagements and anthropological theoretical perspectives the authors challenge this 'Othering' of the aged, and call for a more critical and reflexive design for aging. Their critique extends beyond ICT research for active aging to include a participatory design practice (that intentionally or not finds itself) in service of systems and institutions geared towards the development of artefacts for economic growth. As part of this critique the authors invite us to re-imagine participatory design as a deconstructive practice geared toward engaging participants in the long-term consequences of development processes, rather than towards making appealing products. In this pursuit design anthropology serves as a critical perspective both *within* and *of* participatory design.

Branco, Quental and Ribeiro explore the possibilities for co-designing a game to support communication between dementia patients and their relatives and careers in "Getting Closer, Empathising and Understanding: Setting the Stage for a Co-design Project with People with Dementia". The main design researcher, who is also a relative to people with dementia, uses design interventions and field studies as tools for simultaneously minimizing and creating distance to dementia and the issues it raises for her personally as well as professionally. Through design engagements in

the field she realizes that co-designing the game extends beyond providing a tool to support communication, to include the empathy and creative understanding that can emerge for the relatives within the design process itself. The authors' design anthropological approach not only provides interesting insights and ideas, but also leads to a re-framing of design objects and relations within the project.

The concept of disruption is closely scrutinised by Akama, Stuedahl and Van Zyl in "Design Disruption in Contested, Contingent and Contradictory Future-Making". From an intertwined approach to design anthropology and participatory design, the authors propose disruptions as a way of rethinking knowledge construction and research practises in and across the fields. As part of an ongoing trajectory in both fields, disruption is used as a reflective approach to analysing the plurality, heterogeneity and incompatibility that design practice meet in cultural and political encounters. Based on diverse cases and contexts in Australia, South Africa and Scandinavia, the authors demonstrate how disruption is fundamental to social change, but can be constructively used in the meeting between design anthropology and participatory design to address and transform the conflicts of situated knowledge entrenched in incompatible practices, value systems and politics.

Stuedahl's paper "Future Orientation in Design, Participation and Learning" investigates the future orientation of design anthropology, participatory design and educational anthropology. Based on Dewey's thinking, the author illustrates how design, making and doing are cultural practices implicated, or aligned, with design anthropology and approaches to 21st century education. As a transdisciplinary endeavour, the paper tracks future oriented approaches across the three fields. Using a case on youth's engagement in a collaborative design project in a science museum, the author illustrates how a design anthropological approach functioned as *acts* of collaboratively defining and addressing the future oriented concerns. This anticipatory and reflexive approach gave direction to an emerging, rather than predefined, outcome. The author makes a strong case for how intersections of participatory design, design anthropology and educational anthropology might fruitfully be used to address contemporary (and future) societal challenges.

Together the papers in the focus section represent new perspectives and trajectories in the relationship between design anthropology and participatory design. They address how the shift from ethnography in and for design opens up for critical and transformative reflections on emerging futures and how to enable social change by intervening into existing realities. Design anthropology and participatory design are clearly intertwined and more research is needed to explore and consolidate the potentials of design anthropology in this field. The authors in the following chapters contribute with nuanced reflections and research cases that open the opportunities for exploring political, social, material and technological concerns in design research and practice in a heterogeneous world, and to rethink and extend anthropology's engagement within participatory design.

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