
Inclusion and the ‘new normals’ of design practice

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Abstract

This research is an exploratory engagement with Inclusive Design to better understand its effectiveness and uptake in practice. For this, Inclusive Design is broadly defined as the engagement and advocacy of often overlooked or marginalised people who live with the outcomes of designs. Grounded theory is used to create an iterative discussion between theory and practice. As not only inclusion and access are becoming growing concerns in mainstream society, current events like the global pandemic and social equity movements present a novel opportunity for design research. This inquiry first looks into the complex and expansive landscape of Inclusive Design and other approaches that advocate for marginalised groups to form a guiding framework for engagement in design groups through their new ‘normal’ ways of practicing. This short paper presents the general methodology, the factors / characteristics formed by a first exploratory review of literature, and an example from the test study on the first stage of engaging with designers and practitioners.

Author Keywords

Inclusive Design; Inclusion; Accessibility; Uptake; Design Practice; Research-through-Design; Grounded Theory.

5 stages to the research:

1. Situating Knowledge

Learn about the knowledge and experiences participants have with Inclusive Design through interviews and informal discussions on their process(es). Refer to common design practice, and new ones in light of global social shifts.

2. Shared Frames

From stage 1 data, present an overview and assessment of Inclusive Design in practice to create a shared common frame of reference about opportunities, challenges, and approaches. Discuss findings with participants.

3. Design Process Inquiries

Multiple participant observations and interviews during the design process; Using instances in the study, existing and new factors, and artefacts as cues.

4. Reflecting on Outcomes

Discussing the outcomes of the process at the end of field study.

5. Uptake and Future

Validate the data from analysis and reflect -months later- on the uptake of Inclusive Design post-study.

Introduction

While concepts like inclusion, fairness, and accessibility seem well known in our everyday, design research identifies notable barriers to their use in 'normal' practice (common project development). These issues however are rarely evident and appear complex, paradoxical, and controversial. They are situated within group dynamics which denote plural interpretations, expectations, and ways of communicating, they deal with ethical issues on justice and decision-making, and they are impacted by longstanding design practices [2, 11,16]. This research must also recognise the radical ongoing changes to our lifestyles and society at large caused by the pandemic, and advocacy for social equity. It has become clear that these social re-articulations and changing the way we conduct our lives and seem to be dethroning governing practices and ideologies about project development. It is also becoming obvious that these situations will have permanent effects on our ways of engaging with, advocating for, and approaching Inclusive Design. This situation has presented a critically novel opportunity for current research which deserves attention.

This research proposes that combining existing theories on Inclusive Design with practice-based understandings of inclusion, set within current systemic societal changes, will bring to light the difficult decisions designers and planners confront, overcome, or displace in the design process. This is explored by shadowing and working alongside multiple groups and individuals involved in the development of diverse projects. The findings will be interpreted to try and form an accurate depiction of Inclusive Design today as part of helping secure its uptake in a future bound by complex questions on fairness, inclusion, access, and (new) 'normal' ways to design.

Research Approach – Methodology

This research uses grounded theory. According to [5, p. 63] this approach to theory-development is "grounded in data from participants who have experienced the process". Using Research-through-Design (RtD), data is collected on groups and individuals practicing design and engaging with Inclusive Design. This includes participant observations and supporting those involved through the process as an 'acknowledged participant' [3]. Data collection also includes interviews and reflections on designed artefacts. Continued involvement and inquiry will last about one year (until 06/2021) and will respect Pedgley's recommendations on RtD research rigour (see 7,13). Participant observations are part of the five proposed stages to this research methodology design (see sidebar). Participants are likely involved differently across the field study. Some may take part throughout the whole study, while others may only participate in some stages. This is to (i) manage data (avoid overflow) while still (ii) gaining multiple perspectives and different levels of depth in the study, and to (ii) respect the availabilities of participants. Projects (and their participants) are considered according to selection criteria. Groups or individuals considered should be involved in the planning or design of projects (outcomes) that involve or affect society and serve diverse groups of people. This means the projects can be for the use of diverse public spheres, cultural backgrounds, physical and cognitive abilities, age groups, and incomes. The projects should be accessible to the public and have blended user appeal. Note that the selection criteria serve as a guide and may be altered according to the participants and projects involved. They mainly outline that private projects are

Projects considered under this research include:

Products: physical objects and services, or applications (apps).

Policies: includes the design of institutional legislations, regulations, and acts.

Buildings: public buildings such as museums, shops, galleries, and schools.

Spaces: physical indoor and outdoor planned spaces like parks and atriums, or virtual spaces

Events: temporary gatherings in physical and virtual spaces

Programmes: coordinated actions, leading to programmes like the design of academic and leisure activities or hiring processes.

The following approaches were reviewed:

Participatory Design, Universal Design, Super Normal Design, Feminist Design, Queer theory (Crip) Design, Alternative Design, Accessibility Design, and the evolving forms of Inclusive Design (from a physical model, to a social model, to an interpretivist model).

not suitable, such as the design of unique residential dwellings (see sidebar for details).

Each moment in grounded theory is a continued dialogue between proposed research interpretations, the theoretical landscape, and practice-based inquiry. It is a back and forth between data from each stage and a critical inquiry into the theoretical landscape. This helps refine and amend the working hypotheses, or in this research, a series of factors to effective Inclusive Design (and their relative impact). According to [5, p. 64], this is considered "a constant comparative method of data analysis". A preliminary inquiry into the topic is done to find research opportunities by identifying gaps in the theory through open coding. They serve the research as a first grounding into Inclusive Design and in forming characteristics to guide the (field) study.

Problem Setting – First Grounding

Before formalising an understanding of Inclusive Design, it is important to recognise that its interpretations and uses in practice are plural [10], and that these multiple interpretations are beset within an evolving and arguably entangled theoretical landscape. For instance, while some consider Inclusive Design, Universal Design, and Design for All interchangeable [8] they are also distinct in both their origins, and uses. Thus, it becomes important to treat them both respectively, and as a constellation set within an overarching goal (see sidebar). Through open coding, a series of shared characteristics which serve the research as a first grounding in the theoretical landscape emerged:

1 Governing Mentalities: These practices advocate for the inclusion of often unheard voices by reflecting on whether to work alongside, transform, or dismantle governing mentalities / status quo. Governing

mentalities are formed by the widely shared values, norms, expectations, and assumptions that hegemonise society [1]. In [12, p. 19] it's explained that "governing mentalities shape how people interpret macro socio-cultural phenomena and how they think about their own lives and identities".

2. Scale of Change: Different approaches work to improve the lives of users from either individual and localised changes to systemic ones; From deliberative democracy within a community [14] to the feeling like a project was designed 'just for me' [15]. The scale of a proposed change – from individual to collective - can characterise the approach and become a point of discussion that influences the goals, design process, limitations, and outcomes.

3. Accessibility: This stems from design approaches that work to advocate for users with physical and psychological disabilities as well as the complexities of their participation in the process. As the theoretical landscape grew, a social model of ability highlighted how social impairments are diverse and can come from gender, sexual orientation, social status, or cultural views, amongst others [4,6]. It also said that Inclusive Design is stifled by limitations in the design process itself [17]. This factor looks at how an approach is concerned with the contextual issues of access in the design process (like financial ability, knowledge about disability regulations, time dedicated to inclusive design research), or peoples' (dis)abilities.

4. Marginalisation: This is also described as oppression, the unheard voices, or sub-altern(ate) groups in society [12, 17]. It is a tough characteristic that draws lines between the inclusion and exclusion of specific groups [16]. It is broken down into concerns for marginalised majorities (the design for all, or the

The main questions included are:

Q1: What do you understand from Inclusive Design; (1.1) what does that entail, (1.2) how do you see that playing out in practice?

Q2: Do you know about other forms, like Universal Design or Participatory Design?

Q3: What does inclusion mean to you; (3.1) how does that work in practice; *the previous question prompted the participant to talk about lockdown measures and compare against their previous standards to inclusion*; (3.2) How has this changed or challenged the way you practice 'inclusion'; (3.3) Do you think your changes will be used in the future? ; (3.4) Do you expect resistance to implementing these ideas? ; (3.5) Is there a balance to make moving forward now that you've reached minority groups that couldn't participate before; (3.6) Do you think that's fair?

resonance between different users), and marginalised minorities (specifically targeted marginalised people).

5. Design Stages: Different approaches advocate for social inclusion at various points in the development process; Some work to improve the design context from the outset by redefining design objectives, others throughout the process, and others are mostly concerned with the design outcomes. This characteristic therefore highlights which stage of the design is concerned in the use of specific inclusive practices.

6. Fairness: The arguments around fairness and equality are diverse and difficult to settle. It concerns the ideas of 'what is fair, and how to strike a balance?'.

7. Involvement: Defining user involvement was noted as an often-significant challenge to carrying out a design development process and including diverse user groups. This characteristic brings out the enablers and barriers formed by decisions on who is included and excluded from (different parts of) the design process.

Field Study

This section briefly outlines how the categorisations are used in the first stage of this inquiry using preliminary data from a small test study. The first stage is to situate participants' knowledge about Inclusive Design and its use in practice. It was a guided conversation in the form of a semi-structured interview over the phone lasting about 40 minutes. The categorisations/factors served as cues to guide the interview (see sidebar for the questions included). After working through the questions, there was a discussion with the participant to reflect on their understanding; comparing it against the theoretical framework and categorisations, negotiating different possible solutions, and managing the barriers they outlined. Three notable findings are

worth explaining here. **First**, the participant claimed to have no prior experience in Inclusive, Universal, or Participatory Design. However, when prompted on Inclusion, they touched on both the physical and social models of inclusion as "including people with disabilities and can be about cultural background. For events, we need to consider interpreters so people can not only understand one another but react immediately and contribute to the conversation. We make sure the space is accessible, like ramps and bathrooms and we get sensitivity training to manage any possible conflicts". **Second**, the pandemic seems to have served as a catalyst to improving their standards of inclusion: "normally we have like a calculator for inclusion, where we put in the requirements and it gives us solutions (which space to use, which interpreters to contact, how the space or signage should be managed,...). We've never questioned them until now since we have to plan virtual events. We make mistakes and try to improve on them in the next event. This kind of reflecting wouldn't happen before". **Third**, the most significant barrier (aside from budget) was a lack of middle ground in fairness, access, and inclusion. The participant explains that they have little room to test new ideas and risk unnecessary expenses if any single part of a new plan does not meet existing inclusion standards. For instance, in considering an online panel in their physical events, if one single interpreter cancelled on the day, the entire online service would have to be removed. "The risk of pain from excluding one group outweighs the benefits of including all others". The participant explains that these kinds of endeavours are not worth the risk since there is little guarantee that this diversity will have any impact on the otherwise general consensus. It's laid out as "a difficult but needed compromise on fairness".

The four markers for categorising are:

Enablers: a positive influence on effective Inclusive Design or its uptake.

Barriers: a negative influence on effective Inclusive Design or its uptake.

Overcome Barriers: a challenge / barrier that was resolved or overcome which then positively influenced effective Inclusive Design or its uptake.

Unknowns: indication that a factor played a role in an action or interactions, but it's positive or negative effect is not known (yet).

To make further use of the data in broader theory development, the responses are highlighted in a table which uses the factors/categorisations. It highlights how their responses either act as enablers, barriers, overcome barriers, or unknowns (see sidebar) [9] in the uptake and engagement with Inclusive Design and serves the reflective process later in the RtD phase.

Conclusion

This short paper briefly outlined one interview from the first stage of the field study. It highlighted existing perceptions of Inclusive Design (or Inclusion) in practice and demonstrated how the first grounding serves the research. It also highlighted how the pandemic has significantly influenced the planning process and proposes opportunities and challenges that may be faced in the future. Although nascent, it is also likely that global attention to minority social inequities will also play a part in the uptake of Inclusive Design. A constructive discussion with the participant appeared to have enriching and engaging consequences on the data. Co-constructed debate into problems and solutions uncovered further complex challenges like a 'compromise on fairness', and the issue of 'middle ground' in existing inclusion standards. As more interviews, discussions, and participation populate the collected data, the table of factors/categorisations will serve in weighting, reformulating, and highlighting the different influences on the uptake of Inclusive Design. In this way, inquiring about Inclusive Design in today's contexts is bringing out issues and opportunities to its uptake and effectiveness that have been otherwise out of view. They also seem to be reforming the planning and development process. In this way, this research will hopefully provide a current depiction of how Inclusive Design is engaged within these likely new 'normal' ways to design.

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