"Moving sands of power?" – power dynamics in co-design practices with older adults

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Abstract

Participatory approaches, such as co-design, aim to include diverse groups of older people in decision-making. Yet, such approaches can be limited by established power dynamics. To explore how those power dynamics can unfold and be enacted in co-design with older adults, we draw on 11 thematically analysed, semi-structured expert interviews with Australian co-design facilitators. Australia's specific policies on co-design and disability, along with its settler-colonial history, make it a valuable case study for investigating power relations and intersectionality. Findings show how power in co-design moves within three identified main themes: (1) (lack of) control over recruitment; (2) Constraining power dynamics; and (3) structural obstruction of inclusion. Implications for design and policy are discussed herein.

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Introduction

> I guess my initial sense is that co-design, done right, is about trying to address power imbalances or even explicitly trying to -include the voices of people who don't usually get included. And so, as compared to traditional research, there aren't as many power issues, but of course they still exist. (Thomas, co-design facilitator)

Similar to many European funding schemes (e.g. Horizon 2020), co-design is becoming a prerequisite for many Australian research funding programmes in the health sector (e.g. National Health and Medical Research Council–NHMRC). Simultaneously, "ageing is generally considered to be the most dramatic" (Australian Bureau of Statistics 2022a, Population by Age section) trend in Australia's population, and it is projected that the percentage of people aged 65 and over will increase from 17% to 27% between 2022 and 2071 (Australian Bureau of Statistics 2023). Australia's government thus introduced specific policies to mitigate these effects; inter alia, accepting the Royal Commission into Aged Care Quality and Safety's recommendation that "priority [should be] given to research and innovation that involves co-design with older people, their families and the aged care workforce" (Australian Government 2021; Royal Commission into Aged Care Quality and Safety 2021: 147).

Thus, scholars from various fields are situating older adults as "lived-experience experts" within co-design processes (often used interchangeably with co-creation[1]) (Vargas et al. 2022). As with most participatory design frameworks, the underlying notion of empowerment in co-design appears to take place by actively involving and including diverse stakeholders, such as older adults in public policy planning or gerontechnology development (Vargas et al. 2022). Therefore, the process of co-design transcends traditional notions of user research or product testing and is instead often promised to possess a democratic and empowering ethos (Willatt et al. 2024).

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[1]See Javanparast et al. (2022) and McGill et al. (2022) on the multiplicity of terms or (non-) differentiation between terms among Australian co-design facilitators.

In the Australian context, co-design is repeatedly discussed as an approach that fundamentally reconfigures long-standing power dynamics by reversing inherent Western designs that favour "top-down" research and governance (Gerrard et al. 2025; Trischler et al. 2019). Emerging from a recognition that social innovations cannot be abstracted from the complex lived experiences of individuals, we situate co-design as a social practice of power. In doing so, we focus on the perspectives of co-design facilitators, such as Thomas (pseudonym), to explore how exactly such reconfiguration of power dynamics is enacted in co-design practice in Australia and which implications for design and policy can subsequently be derived. Due to its specific policies on co-design and disability, as well as its settler-colonial history, centring our study on the Australian context provided a valuable case study for applying an intersectional lens to investigating power relations. Based on co-design facilitators' insights, we therefore aim to explore how these power dynamics affect co-design with older adults and where the ideal of empowerment through participation may be prone to interference.

Co-Design with Older Adults

Through the lens of critical gerontology, we recognise that ageing is not a linear process of decline but a dynamic and complex experience of continuous becoming, in the context of structural pressures and constraints associated with, for example, gender, class, and ethnicity (Gilleard & Higgs 2005). Nonetheless, images of old age in society often fluctuate between deficit-oriented views and idealised notions of "best agers," "silver surfers," or "healthy ageing," with the latter often promoted as the preferred narrative. An accurate representation of lived experiences in the highly heterogeneous group of older adults thus becomes increasingly challenging (e.g. Pena et al. 2021).

Contemporary approaches to participant involvement and design practices, for example, in terms of policies or technologies, therefore need to move beyond traditional, linear methodologies towards more collaborative and participatory frameworks that fundamentally reimagine the relationship between various stakeholders, including citizens, politicians, scientists, and technology creators, among others (Borthwick et al. 2022).

With co-design being considered as a form of participant involvement in design practices, facilitators of co-design, for example, researchers in policy or gerontechnology development, hence seek to promote a deeper level of participation and inclusion of older adults (Pena et al. 2021) by engaging them as (equal) partners in design processes (Sanders & Stappers 2008). To achieve this, Australian researchers Dietrich et al. (2017) and Hurley et al. (2018), for example, applied a six-stage model, dividing co-design practice into the following stages: resourcing, planning, recruiting, sensitising, facilitation, and evaluation; in all of which, participants of co-design are supposed to be involved. Rather than positioning older adults as passive recipients of technologies or policies, co-design methodologies recognise them as expert contributors with unique insights into their own needs and experiences (Trischler et al. 2019). The ethical implications of this approach are profound. Co-design becomes a practice that simultaneously develops social and/or technological "solutions" but also affirms human value. It recognises that policies and technologies are not just about solving functional challenges, but also about supporting dignity, autonomy, and quality of life for older adults (van Hees et al. 2023). We therefore understand co-design practice as a space of (re-) negotiation where not only pre-defined outcomes (e.g. technological artefacts or new policies) can emerge as a result, but also social actions (Knoblauch 2020) such as power (re-) negotiation, can take place and either reaffirm or challenge them.

Nonetheless, researchers and institutions have been criticised for instrumentalising co-design to advance their own objectives instead of genuinely wanting to include, for example, older adults (Akama et al. 2020; Cozza et al. 2020; Jaz et al. 2019). This undermines the, in certain contexts often framed as, innate democratic notion of co-design – at the expense of those participating in such processes and to the detriment of the most vulnerable (Willatt et al. 2024). Furthermore, most observational and interventional studies on ageing rarely investigate diverse characteristics within the older population (Ferrucci & Kuchel 2021), leading to skewed results, at best, and systemic exclusion and discrimination, at worst.

Older adults in general, and minoritised older adults especially, are confronted with far-reaching structural inequalities (Willatt et al. 2024). Considering that many of the vulnerabilities faced by older

adults are bestowed upon them as a result of their structural contexts (Gu & Dupre 2021; Haider 2022; Langmann & Weßel 2023), vulnerability is not a binary concept of either being vulnerable or not (Haider 2022). Old age in and of itself can therefore not be considered as inherently marginalising or leading someone into vulnerability. Instead, an older person may acquire additional layers of (potential) vulnerability through factors such as low literacy, a lack of social network and support, low socioeconomic status, gender, race/ethnicity, and disability, among other social characteristics (Rießenberger et al. 2025).Culturally and socially constructed categories of difference, such as gender, race/ethnicity, or disability, are known to impact a person's daily life through the association with different resources, levels of power, and influence (Holman & Walker 2021). The complex interplay and reinforcement between these was first introduced in 1991 and referred to as intersectionality (Crenshaw 1991; Tobin et al. 2023; Westwood 2023). For example, with an increase in heterogeneity throughout the lifespan (Ferrucci & Kuchel 2021), phenomena like "ageing into disability" (Monahan & Wolf 2014) emerge. Applying an intersectional lens enables us to look beyond the singularities of old age or disability, revealing the complexity of the individual's lived experience by exploring the structural underpinnings of marginalisation and vulnerability (Ferraro et al. 2017). This can, in turn, be extrapolated by adding the traits of additional categories of difference, such as race or ethnicity, leading to, for example, older black Americans experiencing an elevated prevalence of chronic physical health conditions or early-onset physical disabilities due to greater life course exposure to health risks, marginalisation, socioeconomic disadvantages, and increased exposure to social stressors throughout the course of their lives (Sternthal et al. 2011). The partnership-based approaches of co-design may lead to a better understanding and consideration of intersectionality (Rießenberger & Fischer 2023) and, thereby, potentially reduce age-related stereotypes (Mannheim et al. 2023).

While co-design approaches in Australia are increasingly adopting intersectional frameworks that consider the combined impacts of race, gender, age, socioeconomic status, and geography on individual and community needs, a critical scholarship has drawn attention to the use and misuse of "intersectionality" (Carbado 2013; Davis & Lutz 2023). For example,

questioning the applicability of a seemingly American concept in other contexts, arguing that it may impose a hegemonic, Global North perspective (Bastia et al. 2023). Critics also contend that this framework can inadvertently "reproduce the notion that people of color are 'intersectional' and possess culture, whereas Whiteness is positioned as normative, implying that White people do not have culture" (Chandra 2021: 770).

Nonetheless, Australia is uniquely shaped by its multicultural population, significant First Nations presence, and an array of geographically dispersed urban and rural communities. This diversity brings rich perspectives, but also presents complex challenges, particularly in how community needs and voices are recognised and integrated. Australia is home to Aboriginal and Torres Strait Islander peoples, the First Nations peoples of the country, with distinct histories, cultures, and identities that have existed for tens of thousands of years (Langton 2023). Cultural heritage and connection to the land are central for Australian First Nations (Heiss 2018). While they represent the longest-living culture in the world (David et al. 2024), their knowledge, values, and practices have been undermined through power imbalances and historical injustices that persist to this day (Heiss 2018; Watson 2014). In addition, Australia is one of the most culturally diverse countries globally, with nearly half the Australian population born overseas or having at least one parent born abroad (Australian Bureau of Statistics 2022b). This diversity involves varied languages, traditions, and experiences, making inclusion essential in any co-designed work. Engaging First Nations' peoples and CALD (culturally and linguistically diverse) communities requires culturally sensitive approaches and accessible communication methods. Finally, Australia's vast geography encompasses densely populated urban areas and remote and rural regions (Australian Bureau of Statistics 2022–23). Rural and remote communities often face challenges, such as limited access to healthcare, education, and technology, which impacts their ability to participate in co-design initiatives (Burmeister & Marks 2016; Gardiner et al. 2019; Fuqua & Roberts 2021). Addressing these geographic divides demands flexible approaches that account for logistical and infrastructural constraints, in order to ensure that rural voices are not sidelined. In sum, Australia's diverse landscape – both culturally and geographically – makes it a distinctive environment for co-design, requiring sensitivity to the intersecting identities and experiences that shape

each community. Neglecting to integrate an intersectional framework in this context may, therefore, obscure social processes that underlie disparities and power imbalances throughout the lifespan (Tobin et al. 2023). Thus, an intersectional lens when co-designing with older adults appears to be necessary if we are to uphold the inclusive nature of such methods.

Although co-design can be considered as a form of (community) empowerment through a redistribution of power (Javanparast et al. 2022), co-design is still able to constitute an exercise of power (Rießenberger et al. 2025) or face considerable barriers because of hierarchical power imbalances (Javanparast et al. 2022). To understand how co-design can sometimes undermine its core principle of genuine inclusion through participation, it is essential to critically investigate the power dynamics at play – specifically, who is allowed to participate, under what conditions, and how intersectionality shapes these factors (Rießenberger et al. 2025).

Conceptual Approaches of Power

In practice, co-design processes often appear to be shaped by overt, observable conflicts – such as those arising from immediate clashes of interest – and less by power dynamics, whose influence tends to be more subtle and concealed. Nevertheless, these dynamics can become all the more effective indirectly, by setting or reproducing the institutional, political, cultural, or discursive contexts within which co-design processes often take place.

As a social practice, co-design is not a neutral, benevolent practice, but rather a complex site of power negotiation. However, by actively involving older individuals in the design process, one needs to reflect on whether, for example, co-designed technologies offer "solutions" (see discourse about "technological fix"; Oelschlaeger 1979), or whether these co-design processes simultaneously challenge traditional power dynamics and create more equitable relationships in technological development (Bratteteig & Wagner 2014). These considerations are usually not linked to conceptual approaches on how to enable power-centred reflections and analyses (Volkmann et al. 2023), and the extent to which power dynamics are redistributed within co-design processes needs further analysis (Farr 2018).

Regarding the distribution, use, and potential effects of power dynamics, there is a practical necessity to moderate these power

relations in a way that the processes of co-design and negotiation can proceed productively (Kier et al. 2023). Accordingly, as a social practice, co-design requires extensive communication and collaboration between heterogeneous stakeholders (Farr 2018) – which in practice are represented in the form of individual persons who talk, reason, argue, debate, and collaborate with one another, for example in workshops or other formats (Deisenhofer et al. 2025). In such social interactions, the individuals involved are oriented and guided by both individual and collective stocks of social knowledge. By framing their interpretations of the situation, its context, and the others' actions, these orders of social knowledge and patterns of interpretation may be reproduced by their own social action or communication, respectively (Knoblauch 2020). Appropriate concepts on power, thus, ought to reflect settings of social knowledge (i.e. socio-cultural contexts), structural contexts (such as institutional, legal, or other frameworks), and contexts and interactive dynamics at an individual level (i.e. social actions, interpersonal relationships, and discursive practices of and among involved social actors).

Based on fundamental approaches of power in social sciences (Bachrach & Baratz 1962, 1963; Dahl 1957, 1961; Lukes 1974; Weber 1972), the concept of power proposed by Hay (1997) integrates both overt and covert, as well as direct and indirect dimensions of power. It incorporates, on the one hand, power in the form of immediate influence on the execution of actions (conduct-shaping), and, on the other hand, indirect forms of power in the sense of context-shaping. Even the constitution of interests and social structures involves effects of power that are likely to influence claims, opportunities, content, and processes of participation and involvement, thus potentially restricting others' autonomy (Hay 1997). "Power then is about context-shaping, about the capacity of actors to redefine the parameters of what is socially, politically and economically possible for others" (Hay 1997: 50). In that way, "power refers to the capacity to redefine structured contexts and is indirect, latent, and often an unintended consequence" (Hay 1997: 51).

Hay's (1997) approach combines fundamental perspectives on power, which were already considered most relevant for power analyses in intersectionality research (Howard & Vajda 2017: 15). For its multi-dimensional integrating view, Hay's (1997) approach appears as being

highly appropriate for exploring power dynamics in co-design practice with older adults to this day. It is not normative and can be applied independently of time-specific societal categories of difference and conceptions of norms and order. It provides a heuristic framework that allows a reflection of context-driven forms and dynamics of power that are not obvious in social practice. It views co-design as a social practice that can be influenced by both overt and covert, as well as direct and indirect dimensions of power. The resulting power balances are volatile. They can be more or less dynamic, depending on the situation and contextual conditions, for example, in relation to socio-historically conditioned constructions of identity and societal structures, such as existing implications of Australia's settler-colonial history, or embedded inequalities based on gender or other categories of difference. These theoretical considerations and perspectives have guided the following empirical analyses. Based on co-design facilitators' insights, we aim to explore how these power dynamics affect co-design with older adults and the points at which the ideal of empowerment through participation may be prone to interference.

Material and Methods

By means of expert interviews, we explored how Australian facilitators of co-design for/with older adults experience, report, and enact power dynamics. Following a qualitative design, we conducted 11 semi-structured expert interviews with facilitators of co-design. The interview guide was developed through an in-depth examination of existing literature on co-creation/design with older adults and their respective interactions with other categories of difference (such as age, gender, and CALD) to provide theoretical sensitivity (Corbin & Strauss 1990: 41). Based on this, the interview guide included narrative questions on (1) understandings of co-creation/design with older adults, (2) their practices and experiences in terms of age, gender, and CALD in co-creation/design, and (3) practices and experiences of power dynamics in co-creation/design processes. Two pre-tests of the interview guide with facilitators from different fields and geographical locations resulted in an adjustment of certain questions, phrases, and applied terms to the Australian context.

Study Context

For this qualitative study, we collected data from Australian co-design experts who were either currently or had been based in the Melbourne metropolitan area in the past 5 years at the time of the interview. Six interviews were conducted in person, and five online via the video-conference tool Zoom. Given this setting, the diverse and multicultural landscape of Australia plays a crucial role in shaping the dynamics of co-design.

Participants and Procedures

Selection criteria included being able to participate in an interview for at least 1–2 h and speaking either German or English. Furthermore, all participants had to have practical experience in co-design for and with older adults. These took on different shapes, such as involvement in research projects, projects within non-profit organisations, and policy development for governmental institutions. Their facilitation of co-design encompassed all six co-design phases: resourcing, planning, recruiting, sensitising, facilitation, and evaluation (Dietrich et al. 2017; Hurley et al. 2018).

Purposeful sampling (Patton 2014) was used to recruit a heterogeneous sample regarding gender, cultural and linguistic diversity, and academic background. Recruitment was performed via pre-existing connections and networks. Snowball recruitment further enriched the original sample. Potential interview participants were contacted and informed about the study by the first author via email. To those indicating interest in participating, an informed consent document and a short survey on their socio-demographic data were sent. With those participants not available in person, online interviews were conducted. Six interviews took place in Melbourne, Australia, at locations selected by the respective participants; five took place online.

The participants were aged between 38 and 59 years old. Six identified as women, four as men, and one as non-binary. Most interviewees identified as white (n = 4) or white with roots in the United Kingdom (UK) (n = 4). Three interviewees shared diverse heritage: one with parents from the UK/Netherlands, and India; another with German and Australian roots; and the third with Colombian and Australian ancestry. Their academic backgrounds included anthropology, social work, social

sciences, human-computer interaction, psychology, occupational therapy, neuroscience and bioethics, as well as computer science, and gerontology. The interviews (*n* = 11) all took place from March to May 2023 and were digitally recorded, fully transcribed, and anonymised. Pseudonyms were chosen by the interviewees themselves, following an inclusive research practice (Allen & Wiles 2016).

While we acknowledge that co-design facilitators may appear to hold more powerful positions within co-design endeavours, they are still part of larger societal and regulatory structures. As representatives of more powerful organisations, such as universities or the government, they often find themselves faced with a predicament between navigating those larger societal and regulatory structures and appeasing the participatory ethos often guiding their co-design work. This makes their experiences a valuable starting point for analysing power dynamics in co-design.

Analysis

To uncover themes, patterns, and contexts of power dynamics in co-design with/for older adults, the interview data were thematically analysed (Braun & Clarke 2006). Firstly, all interviews were coded inductively. Memos were created throughout the initial coding process to analyse data and codes early in the research process, which was aided by MAXQDA 2022 software. Based on this, preliminary themes were identified that not only encompassed those mentioned further above, but also themes relating to, for example, the "intersection of old age and disability" or the "tokenism of co-design in grant funding." All emergent themes were discussed with the other team members through several iterations and compared to Hay's (1997) concept of power. These discussions were enriched by the developed codes, memos, and direct interview quotes to remain as close to the empirical material in our analysis as possible. Subsequently, a second round of coding was performed deductively, based on Hay's (1997) concept of power, out of which the final themes, as presented in this paper, were developed. We further acknowledge our own biases and blind spots as researchers, which may have shaped our analysis in certain ways, inadvertently.

Results

Applying Hay's (1997) framework on overt, covert, direct, and indirect dimensions of power allowed us to delve deeper into the way different layers of power enacted during co-design processes attempt to move and shift. Focusing on power dynamics pertinent to all stages of co-design, we were able to capture three overarching themes within the interviews: (1) (lack of) control over Recruitment; (2) constraining power dynamics; and (3) structural obstruction of inclusion. These are further elaborated in the following paragraphs.

(Lack of) Control over Recruitment

Co-design aims to enhance inclusion by engaging end-users, such as older adults, from the earliest stages of a project. However, given the considerable diversity within the older population, ensuring meaningful representation is both envisioned and challenging. On an overt level, it was generally noted that co-design facilitators perceive themselves as the ones carrying the main responsibility in terms of recruitment strategy and, therefore, for enabling diversity in the recruitment of participants. With regard to old age, recruitment was described as a particularly challenging task due to potential complex needs, low response, high drop-out rates, and access issues, directly and indirectly influencing participation. Despite applying extensive recruitment strategies to reach older adults through various channels, the process and turnout were described as, "then it's always way less people and way harder. And we're usually just more or less left with just with whatever our clients can scrape together" (Johann). This indicates that despite their best efforts to reach older adults, co-design continues to be reciprocal in nature. While it remains the responsibility of co-design facilitators to apply diverse recruitment strategies and create easily accessible spaces, the intended participants still need to agree to take part, thus displaying an indirect exercise of power. Furthermore, when adding additional categories of difference, the majority of interviewees admitted to having none or insufficient recruitment strategies regarding old age and, for example, CALD or disability (excluding man/woman ratio in their sample), unless they were supposed to target said groups specifically. Some participants appeared surprised

by this line of questioning and then admitted to both a lack of awareness and understanding of the need to change their recruitment strategies. Others appeared to have been aware of this shortcoming and admitted to their challenges in their attempts to recruit more inclusively, implying for categories of difference to both overtly and covertly influence power dynamics in recruitment. Thomas' reasoning, for example, was: "that it's so difficult to recruit older adults for research. […] To have a diverse population, […] is an aspiration. But the realities of recruitment have meant that, at least to date in projects I've been involved in, gender balance is easier." This seemed to be a common denominator among those participants who appeared to have been aware of this lack of inclusive recruitment strategies. They also emphasised having limited control over the level of inclusion and related practices. For instance, Kristy exemplified their perceived level of powerlessness by stating: "[…] when you're conducting funded research, all of us […], we're at the mercy of what we've signed up. And sometimes you end up doing things you aren't necessarily that happy about." It was repeatedly noted that grant providers and universities had direct decision-making power on what is getting implemented, with whom, and even how inclusion and participation are to be practiced. This led, at times, to greater segregation among participants, thus eroding the participatory framework intended in co-design. Examples of such restrictions being imposed by universities or funders encompassed funding guidelines or feedback from potential funders stating that the co-design facilitators should focus on one or two specific categories of difference (instead of multiple ones within the same project). But even on a much smaller scale, simply acquiring funding for translations to further the involvement of culturally and linguistically diverse populations in co-design appeared to have been challenging.

Nonetheless, when speaking about attempts to recruit First Nations people for co-design, the historically rooted mistrust of potential participants towards representatives of universities or government bodies (further discussed below) often appears to get in the way of well-intended recruitment attempts in co-design. In this context, we feel it is noteworthy that not a single participant reported on a project that focused on old age and First Nations people, despite some of them having worked with First Nations people in the past. The reasons for this are unknown to us and we can only remain on a speculative level.

Those examples of successful recruitment of diverse populations that were shared within the interviews had taken place in the context of PhD projects, where co-design facilitators spent time outside of paid labour, and hence, typical research funding, to enhance inclusivity for their projects. One such example is aiming for greater involvement of older adults living in remote and rural regions. This resulted in one such co-design facilitator journeying from one small town to another to put up recruitment posters for co-design activities on each town's information board. That it takes this additional effort to recruit older adults living in remote locations suggests to us that even their place of residence can exude an indirect dimension of power in co-design.

Being held back by existing government, funding structures, university structures in co-design research and technology development, and societal dimensions of categories of difference appeared to be a common denominator across facilitators of co-design. Yet, facilitators seemed to acquiesce to these more covert structures, claiming they would rather have some funding for certain subgroups or smaller projects than not have any at all. This led to a negotiation process between securing funding for projects while also upholding the democratic values of inclusivity in co-design. For example, Jayden mentioned:

> I've got a much smaller pot of money than I hoped for and it's killing me […] that I can't be as inclusive as I would love to be. Sometimes it's just a compromise that you have to make, but it's not sitting great with me.

While they acknowledge that conducting co-design and fostering inclusion involves balancing their goals with the expectations of funders and their universities, there is a sense that this balance may require adjustments to their ideals on co-design and inclusivity.

Constraining Power Dynamics

Most facilitators described the gold standard of co-designing with older adults – oftentimes also referring to "true collaboration" or "genuine co-design" – as involving participants in decision-making processes throughout all stages of co-design work. This ranged from prior to any project proposal, development or project work, through to disseminating the project's results. Johann mentioned that according to

their understanding, "co-design represents, in my opinion, a new level of democracy, an extension or expansion of it, and so it naturally finds opposition, constantly." This reflects the belief of an inherent democratic notion in co-design, which, according to co-design facilitators, goes against established top-down hierarchies, found in both research and technology or policy development. As co-design is increasingly viewed as a pathway to democratising policy and technology development processes in certain contexts, the shift from established top-down hierarchies to a bottom-up approach to decision-making is seen by many facilitators as essential when engaging in co-design with older adults. However, their attempts at redistributing these established power dynamics in co-design, by recognising participants' experiences as expertise and allocating decision-making power to them, were met with challenges, some going so far as to share that they "feel like, unfortunately, we might have hit the peak of that democratic swing" (Johann).

As noted by Hay (1997), the capacity of actors (here, the facilitators of co-design) to redefine what is feasible in terms of redistributing power appears to be restricted due to social, political, and economic parameters. These restrictions were noted on multiple occasions by the interviewees, with Kristy, for example, stating that she believes there are "a lot of systemic organizational barriers to co-design […]. So the university funding system, the way research is funded, how we pay people, that it's still got to be mostly research-led." More specifically, this included constraints such as the less openly known requirement of third-party funding in research, leading to predetermined technologies being created despite participants' opposing feedback. In addition, facilitators also reported on not being allowed to provide sufficient remuneration to co-design participants due to university and funding regulations. This was often interpreted as an exploitative practice towards co-design participants, and, in turn, adequate remuneration was seen as a potential solution to this issue, if achievable.

Another facilitator stated that a journal refused to accept an older co-design participant as co-author, despite being a retiree with a professional background in academia, because they had no current university affiliation and mail address. This decision displayed a direct exercise of power with regard to the exclusion of older co-design

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participants, silencing their contributions, and denying (non-)monetary recognition for their labour, which at times encompassed the entire duration of a project. With these hierarchical power dynamics at play, co-design facilitators reported considerable constraints when co-designing with older adults.

Structural Obstruction of Inclusion

Further reflecting upon impeding factors for inclusion revealed again how multi-layered power is enacted in co-design, not just with older adults. Co-design facilitators reported on how certain systems, and their rigidity, impeded the inclusion of older adults, especially when intersecting with other categories, such as CALD, disability, or gender diversity. Some interviewees explained that, for instance, informed consent forms, necessary to conduct ethically responsible research in Australia, tend to be standardised in ways that can covertly discriminate. For example, older adults with cognitive impairment and/or physical disabilities may be challenged in accessing and comprehending these fully, due to readability, formatting, or complex language usage issues. Navigating this requires constant micro-ethics – or adjustments from researchers – to further refine procedural ethics. Miranda recounted how "the plain language statement and consent form […] had to be done in multiple different forms." When facilitators of co-design then attempted to adjust these to the needs of their participants, they often faced difficulties in gaining approval from the ethics committees. In Miranda's case, she then:

> went back to ethics again and again and again because of this. The ethics committee did not understand the form. The best example was when we took these consent and plain language statements to the group of co-designers, and they said, "What do you mean they'll be anonymous?," "What do you mean people can't name them themselves and own their stories? That's really treating people like children and we don't accept this." – It was very unexpected. And so we went back to human ethics and we got agreement that people, if they chose, could use their full name.

Despite agreeing to this change, according to Miranda, the ethics committee still argued that they (the participants) would not be protected

since people will be able to figure out who they are. This exemplifies that, once participants understood the full scope of the consent forms, they refused to accept them. This suggests that, even with the best intentions, conventional procedures in co-design with older adults may be paternalistic, potentially resulting in undesirable research and ethics practices by stripping individuals of their autonomy under the guise of well-intentions for their protection.

Another facilitator remarked on a project proposal that aimed to conduct co-design with a group encompassing two distinct categories of difference, namely people living with disability and migrants (new arrivals and international students). This proposal was initially rejected by grant funders unless they were to change their research design, segregating the diverse group into two, based on the respective categories of difference. At the time of writing this paper, we found that the funders had not understood the project. They only agreed after the facilitator advocated for the potential participants and the applied intersectionality approach.

It was further indicated by co-design facilitators that particularly marginalised and underserved communities appear to be hesitant and jaded regarding a potential participation in co-design. An interviewee even quoted a previous co-design participant who stated: "Why would we think you're going to listen to us?" (Johann). Interviewees suggested that these hesitations stem from deep-seated mistrust and scepticism due to present-day experiences of discrimination, negative encounters in prior projects, Australia's settler-colonial history, and transgressions by healthcare and research institutions against marginalised communities. Opaque motivations of large institutions and universities, as well as concerns about how their perspectives might or might not be used, were also reported:

> With Indigenous people, we've worked there. I think that the mistrust, given the horrible colonial heritage and racism in Australia and the discrimination and stealing of children […] understandably people are mistrusting of big institutions. It's universities that took Indigenous bodies for study and put them in museums. There's a whole reason why Indigenous people would be mistrustful of what I represent or how I present." (Aiden)

Nonetheless, interviewees such as Aiden appeared aware of how marginalised populations have historically been exploited by Australian research

institutions. Moreover, this reflection appeared to extend beyond large institutions to researchers themselves: "I have to be aware of the fact that I'm pale, male, and stale […] and be mindful that my presentation, to those who don't know me, may raise suspicions or concerns." (Aiden). The same interviewee also reported on their institute's efforts to hire and train diverse staff for the purpose of mitigating discriminatory practices and to help build trust between facilitators of co-design and participants. This encompassed, for example, training First Nations students to become researchers themselves, or hiring researchers who identify with the LQBTQ+ community to lead projects within said community. This highlighted the need for additional relationship-building to establish trust, which demands more time and, consequently, funding – resources often lacking or not provided by grant funders. Since co-design is frequently conducted within academic settings, the inclusion of society's most vulnerable members is further hindered by these challenges deeply rooted in existing power dynamics.

While in all three instances, organisations either adhered to the changes and practices advocated for by the respective co-design facilitators, or attempted to work against exclusionary structural conditions, it can be assumed that without constant reflection and advocacy, these exclusionary practices would have resumed and potentially reproduced in future co-design processes. This supports the sentiment that individual representatives of these organisations may not have been actively working against genuine inclusion, but rather that the prevailing hierarchical and paternalistic structures perpetuate such exclusivity and therefore undermine the essence of co-design, namely genuinely including those with less power in society in decision-making processes and implementing their feedback. This leads to an increase in effort, resources (time and funding), and need for constant reflection and awareness in order to work against these obstructing structures even in co-design processes.

Discussion

Focusing on the perspectives of co-design facilitators, the three main themes highlight the forces at play when looking at power in co-design with older adults. While co-design facilitators recognise the potential of co-design to change the way power is distributed in such processes

(Zamenopoulos & Alexiou 2018), the implementation into real-life practice appears more challenging.

Instead, the attempts at redistributing power through co-design are a complex set of actions and non-actions, both affecting the way co-design is enacted presently and the way power and control are negotiated for future co-design practices as well. This is reflected in the way co-design facilitators frame their (1) (lack of) control over recruitment, (2) constraining power dynamics, and (3) structural obstructions of inclusion in their co-design practice.

While at first glance, the decision-making power in choosing who gets to participate seems to lie with the facilitators (Slattery et al. 2020), a closer look reveals the complex nature of recruitment and how both potential participants, as well as government, funding, and university structures, influence recruitment perhaps less directly than facilitators, but to no lesser degree. This leads to negotiation processes between, for example, securing funding for a project and upholding their ideals of co-design and inclusivity, or wanting to involve a large set of older adults in co-design and not generating enough interest among this population to participate.

Furthermore, despite funding schemes and policies having been implemented to support co-design (with older adults) in Australia, their social, political, and economic structures still exercise power, thus constraining the democratic notion of co-design processes. Based on the facilitators' reports, it can be derived that a different funding logic in research needs to be applied. This could, in turn, lead to a greater impact and decision-making power of co-design participants, provided that co-design facilitators utilise this opportunity to uphold the empowering notion often ascribed to co-design.

Similar changes would need to be envisioned to counteract existing power distributions with regard to remuneration and non-monetary recognition of participants' labour. The way these are currently embedded in co-design practice reflects a traditional top-down hierarchy in academia (Lafferty & Fleming 2000) regarding who is "deserving" of, for example, recognition and who less so. Thus, this potentially facilitates an exploitation of older adults participating in co-design practices. This poses constraining power dynamics for co-design facilitators who attempt to promote the democratisation of design processes and hence,

according to them, for achieving genuine inclusion and recognition of participants' contributions.

It also became clear that larger institutions continue to practice procedures that support a structural obstruction of inclusion. While some may appear as protective agents on the surface, such as standardised consent forms that require anonymisation of participants, co-design facilitators are not able to easily individualise them to match new contexts and participant feedback. This serves as an example of paternalistic notions, where such institutions are in the position to determine who needs protection and thus has to receive it, and not who actually wishes for it. A similar obstructive structure was reported in terms of who decides where additional relationship-building is necessary to mitigate justified mistrust of academic institutions, and thus receives additional funding, and who does not. Since co-design is oftentimes enacted in academic settings (McGill et al. 2022), these are impactful power structures regarding the inclusion of society's most vulnerable, and navigating these as co-design facilitators is challenging. While it became evident that facilitators of co-design are aware of matters of intersectionality in co-design with older adults, solutions to mitigate intersectionality effects were scarce. It takes constant reflection and advocacy to first raise awareness on these very practical issues, and then, in the best case, also change existing structures. This displays how much energy needs to be put into moving those pre-existing distributions of power.

It can be noted, furthermore, that power in co-design is enacted on many different levels and is a constant push-and-pull between actors. Yet, power is distributed in a way that may at times feel to facilitators of co-design as if they have reached the glass ceiling of public involvement, genuine inclusion, and democratisation of decision-making processes. While facilitators need to show a large level of flexibility and persistence to successfully navigate through traditional power structures in funding, publishing, and research in order to further their goal of genuine inclusion, this appears to be a majorly one-sided effort. The results are asymmetric, dysfunctional power (im-)balances at the level of large-scale decision-making; these in turn, potentially reproduce established exclusionary practices (overt and covert, direct and indirect). Decisions that are answers to, for example: Who publishes what? What projects receive funding and how much? How are inclusion and diversity managed? Whose feedback is getting implemented, and to what degree? Who

receives appropriate remuneration and who decides what is appropriate? This showcases the additional effort it takes for co-design facilitators to attempt to counteract these. No matter if they are "pale, male, and stale," or embodying one or more categories of difference, co-design facilitators face and are affected by systemic barriers, with limited ability to influence them. In a way, this reveals the feeling of powerlessness of those who are actively trying to empower others, and points towards not just their work-related labour but also the emotional labour they invest when attempting to change previously established power dynamics.

To summarise, given its multi-layered, both rigid and moving power dynamics and intersectionality issues, co-design maintains its dynamic nature. This is to be solved continuously, not just by facilitators of co-design, but especially those creating and (re-) shaping the structures in which they take place.

Limitations

Although this study puts forth valuable insights into the way power dynamics are enacted in co-design with older adults, certain limitations need to be reflected upon when interpreting the presented results. Due to geographical limitations, not all interviews could be performed in person, but rather had to be switched to an online format. Despite video-conferencing, non-verbal cues might have been imperceptible, thus potentially resulting in a different interview flow than in the in-person interviews.

In addition, despite the wide array of academic backgrounds, this study – entailing only 11 expert interviews within the Melbourne metropolitan area – limits the transferability of the findings to other countries or regions in which co-design with older adults is practiced. Further research in other regional settings and cultural contexts would add useful comparative data. Furthermore, this study only reports on the narrative and experiences of facilitators and does not represent the voices of lived-experience experts as participants in co-design processes, thus limiting the insights this study provides. Future studies are needed that focus on the perspectives and experiences of lived-experience experts in co-design research to further our understanding and delve deeper into the nuances and intricacies of power dynamics in co-design with older adults.

Conclusion

As our society continues to age, the importance of co-design practices will only become more pronounced. The future of policies and technologies lies not in creating universal, one-size-fits-all solutions, but in developing flexible and adaptable approaches that can be personalised and co-designed with those they aim to support. Our study showed that, despite efforts to create spaces that allow for this to happen, established hierarchies, power dynamics, regulations, and other kinds of formative structures appear to diminish the democratising capacity of these endeavours.

If policymakers, universities, and other stakeholders, such as journals and ethics committees, are genuinely committed to democratising research and design, we need approaches that ensure reflection on potential blind spots that obstruct genuine inclusion. The responsibility of facilitators of co-design therein lies not only to remain mindful of the conflict and power dynamics at play in co-design but also to raise awareness and advocate on behalf of (potential) participants in co-design.

Acknowledgements

Data Availability

Data will be made available upon request.

Ethical Approval

Ethical approval was not required. All data were recorded, stored, and analysed on storage devices at the University of Applied

Sciences Kempten. As a University of Applied Sciences in Bavaria, Germany, we adhere to local rules and regulations of GehBA. These state that no ethical approval is needed for studies on and with human participants when there are no risks or harm for the participants to be expected and no violation of ethical principles occurs. Expert interviews are specifically exempt from needing ethical approval since these are perceived as posing no risk or burden on the participants compared to their everyday lives. Written informed consent was obtained from each participant ahead of time, and all data were stored on password-protected devices and anonymised/pseudonymised. For each quotation, written consent was given by the respective participant for use within the context of this paper.

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