How Did I Get Here? Navigating Ecologies of Practice as an Interdisciplinary Practitioner in a Practice-Based Design Research Degree in a Design for Health Context

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This paper reflects on the experience of articulating position and practice in a PhD by Design, from an interdisciplinary perspective in a design for health context. The central motivations to use research through design, drawn from experience of person centred approaches in the context of health, social care, housing and inclusive design that inform the research question are outlined. The benefits of design research as a tool to explore lived experience of people living with dementia on a sensory experiential level is explored. The unique value and relevance of the sensory aspects of disruptive, critical and speculative design approaches to explore aesthetic preferences is identified. Methods of documentation of practice in practice based design and the lack of accessible archives is considered. The potential for the research experience contribute to learning and teaching in design that can influence change are considered.

#design research

#inclusive design

#dementia

#lived experience

When embarking on a practice-based design research degree in a design for health context, to articulate my position in my study, I must first define and position my practice and make explicit my core values and motivations. I have deliberately chosen to explore the subject of my research through practice-based design due to the barriers to innovation that I have experienced in health and social care settings. My practice, derived from a combination of training in design and as an occupational therapist working in housing, health and social care, is interdisciplinary. Learning and teaching in disability studies has challenged me to question the societal attitudes that inform these institutions and impact the recipients of the services. The label that most closely encapsulates my skills, knowledge and aspirations is inclusive design. The underlying rationale for my choice to use practice-based design as a means of learning from the lived experience of dementia is the value of using images and objects to provoke dialogues, in which verbal communication may be a challenge. The aspiration is that in an emancipatory approach, where the visual expression of lived experience is the core intention, the findings will have greater relevance and suggest more meaningful solutions.

Framing the Question

The focus of my research is to explore whether the ability to retain aesthetic preferences can support identity in dementia. In a society that values intellect and is largely reliant on verbal communication, if cognition is impaired, assumptions can be made about capability. If there is increasing reliance on sensory information to make sense of the world, do visual stimuli have greater importance? If dementia, often associated with loss of identity, impacts the way people wish to live, can the ability to express aesthetic preferences be a means to support those choices? If our perception of the world is through our senses, then when our cognition is impaired, do we become increasingly reliant on the quality of sensory stimuli to navigate everyday life? The benefits of applying the principles of visual access in the built environment to improving functional independence for people living with dementia are now well evidenced (Bowes and Dawson 2015; Fleming et al. 2009; Marquardt et al. 2014; Waller and Dawson 2019). Can this intuitive response to visual stimuli be used as a means of exploring personal preferences that can enable people to have more control over the curation of their personal space?

A Fish Out of Water

Since my research is situated in learning from participants' everyday lived experience, I am mindful of the potential for subconscious bias – that is, how my personal and professional experience influences what and how I choose to investigate; what I notice, ignore or select for analysis; and how it is interpreted.

> *Just as fish do not see the water, so too are social and behavioural scientists oblivious to the underlying commonsense assumptions that are embedded and reflected in the social scientific construction of their research objects. (Bourdieu, cited in Fries 2009, 334)*

Training in a combination of occupational therapy, 3D design, inclusive design and disability studies has led to a career specialising in inclusive and accessible housing design that involves close collaboration with architects. Taking this analogy further, positioning myself as an interdisciplinary practitioner, I bring an experience of having swum about in different disciplinary ponds that have both challenged my assumptions and offered alternative ways to approach and investigate the same issues. I have now arrived somewhat disorientated, feeling like a fish out of water, seeking to make the best use of practice-based design research as a means of revealing new insights.

A reflexive approach has particular benefits and relevance in this context. To make the role and motivations of the researcher explicit from the outset, Bourdieu identifies three broad sources of bias: personal (class, gender, ethnicity, cultural, politics and locality), disciplinary (professional practice perspectives) and positionality in the scholastic universe. The latter is understood to refer not only to particular fields or knowledge but also to an acknowledgement of the privilege that lies in funded academic research (Fries, 2009). A continual process of reflection that makes conscious our values, assumptions, motivations and their influence on the development of the study design. To learn from lived experience in the context of dementia advocacy, an emancipatory research approach seeks to ensure that the process and intentions have value for the participants, while being mindful of addressing potential power dynamics in these related experiences. Equally, it reminds us that this is a journey through which our thinking is challenged as our views develop and change.

Health, Social Care and Housing: Barriers to Innovation

The Royal College of Occupational Therapy strapline – 'Helping people to live, not exist' – is the most concise summary of the profession's core intention. Occupational therapy is founded on a holistic approach centred on personal priorities, aspirations and interaction with the environment and is a *'whole-person approach to both mental and physical health and wellbeing and enables individuals to achieve their full potential'*.[1] However, Pollard (2017) reminded occupational therapists that an allegiance with the medical profession, and the consequent medical model perspective, has distanced the profession from the agenda of disability rights and the social model of disability. Although the profession's core values may be founded on the right to a meaningful occupation and seek to be guided by individuals' priorities, the reality for healthcare practitioners employed in public sector welfare contexts in an era of austerity means that cash-strapped services are forced to manage demand by prioritising need through a process of risk assessment. Health care practitioners employed by the public sector have limited opportunities to share their knowledge and expertise with *'ever-smaller numbers who must first navigate labyrinthine and costly methods of assessment'* (Cottam 2018, 210). There is little chance to empower people to live well with long-term conditions or attend to psychosocial issues and the real meaning of well-being.

My experience as an occupational therapist working with individuals living with physical, sensory and cognitive impairments in their own homes has led to a conviction that the negative impact of products and environments that are clinical or institutional in appearance cannot be underestimated. A career spent questioning the reason for the limited choice and lack of innovation in this sector was my motivation for pursuing further training and research from a design perspective. My practice has become interdisciplinary due to the obvious synergies between architecture and environmental and product design.

Learning from Lived Experience to Inform Design Briefs

Occupational therapists are privileged to have access to intimate knowledge of individuals' private lives. Taking a person-centred and holistic approach, by its very nature, means enquiring about the impact of the physical, social and psychosocial environment, as well as personal priorities, aspirations and concerns. Rather than being seen as intrusive, this process of deep enquiry is very often welcomed as more relevant and meaningful than a medical model approach that defines the person by their condition and treatment regimes.

Sharing this rich wealth of information from numerous accounts of individual lives and circumstances, though carefully documented and individually analysed, is restricted by the rightful need to observe data protection on patient confidentiality. Although data on the usability of equipment and environments may be documented in personal records, they are rarely used to inform product development.

There are limited opportunities for recipients of services to provide feedback that could inform the commissioning and design of equipment and environments. Even when evidence from formal research is realised, the implementation of recommendations is glacial (Morris 2011). Unlike a commercial environment in which market research and customer reviews provide a continuous iterative feedback loop in the development of products, in a welfare economy, the development of products commissioned by health and social care is rarely evaluated at the point of use, other than in the case of incidents that cause harm or injury (MHRA, 2020).

Disability and Dementia: Rights and Advocacy

The design and delivery of a disability studies module in a master's programme provided me with a deeper understanding of the meaning of the social model of disability, which places emphasis on the impact of culturally produced attitudes and environments as barriers to engagement (Oliver 2013). The challenge in a welfare context, if your values align with human rights, disability rights and dementia advocacy, is to address the power dynamics implicit in this prescriptive context at the outset. One way to address the imbalance of power for someone who havs to demonstrate entitlement to assistance and support is to begin with the assumption that the person is the expert in their situation. If healthcare practitioners have the chance to influence the design of services and environments, we can use what power we have to act as advocates.

Navigating the Ecologies of Practice

Central to my enquiry is understanding the impact of visual stimuli on people living with dementia and how much the response in terms of personal preferences could support a sense of identity. People living with dementia have been questioning the value of research conducted for them – not with them – and are seeking to have a greater influence on the research agenda through user-led organisations. A core underlying principle is that the supervisory team should include an advisor who is a person living with dementia.

The luxury of a funded postgraduate research study is the opportunity to explore a subject from many perspectives and disciplinary lenses. In the context of my enquiry, by searching across disciplines, I can discover alternative methods to interrogate lived experiences. I can begin to articulate where these areas of knowledge interact and overlap.

Still at an early stage, in my review of literature, I am drawn to explore and navigate diverse fields of knowledge: design, arts, medical science, social science and philosophy. At the outset, I must find a way to explain my use of the term 'aesthetic preferences' in the context of everyday aesthetic experience (Saito 2007). I am seeking to establish and defend a methodology that is supported by evidence from the fields of neuroaesthetics (Chaterjee 2014) and neurophenomenology (Jelic 2015) that supports the notion that our perception of space is a multisensory embodied experience as well as the relevance of this to cognitive impairments associated with dementia. In the context of dementia care, I need to explore current practices and innovations. Lessons learned from the efficacy of interventions used by specialist practitioners, such as cognitive stimulation, cognitive rehabilitation (Bahar-Fuchs et al. 2013) and life story work (Guaghan et al. 2016), and growing evidence of the benefits of creative practice and arts-based activities for people with dementia (Young et al. 2016) also have relevance. In a design context, this can be learning from emerging theories and practice in design psychology and anthropology (Israel 2003), sensory ethnography (Pink et al. 2018), architecture design activism and critical and speculative design (Tharp 2019). A combination of these perspectives provides the potential for future ecologies of practice that can *'produce an experimental togetherness among practices, a dynamic of pragmatic learning of what works and how'* (Stengers 2005, 19).

During COVID-19, restricted from the opportunity to immerse myself in the context alongside potential participants and the support and services they receive, my aim was to gain insights from specialist practitioners and recruit an interdisciplinary focus group that could inform and interrogate the study design. The intention was to explore the potential for remote sensory ethnography as a means of working with people with lived experiences of dementia.

Learning from Lived Experience

My encounters with people living with a complex combination of physical, sensory and cognitive impairments have repeatedly demonstrated how the physical and social environment can either support or obstruct independence and impact the quality of life. Presented with inaccessible environments and negative attitudes, people become excluded and defined by their reliance on assistance, deemed incapable or pitied. Central to my approach to my practice is the need to learn from individual lived experiences to avoid assumptions and to use the therapeutic relationship as one of knowledge exchange and collaboration to explore solutions to address the issues identified as priorities by the person. Whatever experience and knowledge we may have of potential solutions, we are constantly learning from the strategies that individuals adopt to manage and overcome barriers that inform our understanding of their experiences.

Alternative propositions that invert the hierarchy of needs to prioritise self-actualisation and self-esteem beyond practical bodily needs to *'address relational and social dynamics'* (Sanders 2014, 25) are welcomed. The aspiration is for a world where *'access is understood no longer as a concession but a 'gorgeous norm' – and spatial inclusiveness looks to generate an equivalence of experience for all'* (Kahita 2013, 38).

Person-Centred, Personhood and Advocacy

Throughout health and social care legislation and policy, the UK advocates a person-centred approach to interactions with service recipients. How this is interpreted and whether it is achieved are not subject to close scrutiny. The *person-environment-occupation* model of occupational therapy practice (Law et al. 1996) is founded on a holistic paradigm that advocates a person-centred approach. This model sees the person, their everyday life and their occupation in a constant and dynamic interaction with their physical, social and psychosocial environment.

In dementia care, a convincing case for the need to preserve personhood is made, which demonstrates the negative impact that the attitudes of others can have on not only everyday life but also the progression of dementia as forms of *'malignant social psychology'* (Kitwood 1997). There continue to be many misconceptions about dementia. People living with dementia advocate research that serves to demonstrate that they are *'more capable than anyone realises'*. Public health policies advocate arts activities for people with dementia (Shoesmith 2019) that can improve mood (Dakin 2008), attention, communication and dyadic care relationships (Eekelaar et al. 2012; Rosenberg 2009; Young et al., 2016), challenging assumptions about capabilities. Dementia advocacy is growing with the emergence of organisations that are informing the agenda for dementia research.

Inclusive design approaches have used the critical user approach (Clarkson 2003, 533), which suggests that by addressing the most complex needs, the design outcomes will be extrapolated to be easier for all. The Helen Hamlyn Centre has used a 'critical user group' that has a range of very specific impairments. The challenge is in accounting for the diverse range of individual and sometimes conflicting needs. The benefits and pitfalls for those with an aspiration to design 'with' rather than 'for' people are well documented in participatory, co-design and co-creation design research (Armstrong and Stojmiroviz 2011; Duque et al. 2019; Taffe et al. 2018). Learning from participation in the initial phase of the RSA project, which delivered workshops on design skills for wheelchair users, provided useful insights (Campbell 2017). Although the participants were introduced to design skills and concepts, there was a missed opportunity for wheelchair users to interrogate and share their experiences of coping strategies that could not have been envisaged by the non-disabled facilitators.

Design for Health

The term *design for health* implies that the aim of design is to maintain and preserve health and avoid ill health. By its very nature, this is an interdisciplinary practice reliant on knowledge exchange and collaboration across disciplines while involving those with lived experience. In this context, design for health is understood to be an approach that '*utilises design and creative practices as methods and tools within research to engage people to understand problems, and visualise new possibilities and future scenarios*'. Research in this context can challenge professional attitudes and interpretations of health, ill-health, well-being, impairment and disability and find solutions that are meaningful to recipients.

Cross-Disciplinary Teaching and Learning

The experience of learning and teaching in a cross-disciplinary context from the Design Research for Disability MA programme at London Metropolitan University provided insights into the influence that disciplinary perspectives have on creative thinking. A mixed student group of graduates from healthcare and design revealed very different attitudes towards addressing issues. Healthcare practitioners (HPCs) with knowledge and experience of multiple factors impacting the person and their medical conditions tended to be overreliant on the need for evidence to support their propositions and, bound by professional responsibilities for duty of care, could be somewhat risk averse. Conversely, designers, given a brief, evidently had less concern for these issues and were keen to jump straight in and try things out, which in turn helped the HPCs to be more experimental.

Design for Health: Value and Limitations

Recognition of the impact of the environment on health and well-being in healthcare settings is not new. Florence Nightingale recommended the introduction of features that provide visual interest and stimulation in clinical settings (Bates 2018). Architects have long advocated the need to account for human physiological responses in the design of the environment:

> *Any design that impairs and imposes excessive strain on the natural human equipment should be eliminated or modified in accordance with the requirements of our nervous and more generally, our total physiological functioning. (Neutra 1936, 86)*

The original intentions of modernist architects concerned with how humans interact and function in space may well have been lost, but the rare occasions when architects have been commissioned to design buildings that prioritise wellbeing are striking in the solutions delivered, in terms of both the organisation of space and sensory stimulation. However, Jencks (2012) was frank about whether the healing qualities of Maggie's Centres could be measured and speculated about the potential of architectural placebo effects. Equally, these spectacular and unique environments are unlikely to be replicated in publicly funded healthcare settings (Jencks, 2012).

Numerous examples of design interventions in the environment suggest positive impacts on health and well-being (Condinhoto et al. 2009; Vaughan and Pachilova 2017). However, anyone working in this field should be wary of making absolute claims. The multiple components of physical environments and the individual differences of each inhabitant and their interactions present a highly complex combination of factors and variables, since *'there are too many relationships between the built environment and health outcomes to be empirically tested'* (Condinhoto et al. 2009, 151). Designers are therefore advised to be wary of claiming positive correlations; rather, they should apply findings carefully according to *particular* situations (Hamilton 2018). Those with participatory experience in using these methods see the relevance and value of adopting a participatory approach to research through design to explore personalisation that can *'address dementia, not as lack and deficit, but through a lens of possibility and potential'* (Kenning 2018).

Many designers and architects introduced to the constraints and complexity of situations faced by people with long-term conditions come up with brilliant prototypes and environments (Myerson 2001; Beka 2008). Lab 4 Living, for example. has been successful in replacing the stigma of clinical and institutional appearances with aspirational solutions. However, the path to implementation and dissemination that can benefit mainstream consumers is frustratingly slow.

Person in Space

Drawing on experience from the many multiple and complex issues encountered by people living with long-term conditions, one way for healthcare practitioners to affect change is by acting as advocates in the context of the design of the built environment. Working with commissioners, planners, housing developers and architects at an early stage in the design and build process offers an opportunity to raise awareness of the rationale for inclusive design and ensure that newly built homes are fit for purpose (Walker 2017).

Standard conventions for visual communication in architecture, such as scale drawings, plans and elevations, may include typical furniture layouts but rarely position the person in the environment. Three-dimensional renderings of the locality and the outdoor space may only include figures at the visualisation stage. The ergonomic and anthropometric dimensions of the person in space by Neufert (2012) (originally published in 1936 and now in its 39th Edition) and the Humanscale Manual (2020) exist but are not evident in architectural practices. In UK building regulations related to accessible and adaptable spaces (Department for Communities and Local Government (2015) the only indication of how a person takes up space is the use of a circle to indicate wheelchair turning. In the context of dementia, architecture less concerned with reliance on cognitive skills is advocated and warns against the *'all too reductive view of mankind that focuses exclusively on cognitive ability will restrict the ability for people with dementia to realise their own potential'* (Feddersen 2019, 56). The Reversible Destinies Project takes a more playful proposition. Inverting our notions of design to support function by suggesting that we need to design environments that are deliberately difficult to use can help us maintain health and well-being (Gins and Arakawa 2012).

The Complexity of the Human Experience

The value of *'situated, embodied and lived accounts, rather than that of the detached observers'* (Pink et al. 2018) is advocated by design anthropologists as a means to reveal possibilities. Ednie-Brown (2019) defended the value of creative practice research

- which, unlike conventional scientific research, needs to be generalisable or reproduceable - by claiming that it is capable of *'producing knowledge that is relevant to that very complexity intrinsic to all situated conditions'* (134).

This strikes a chord with the person-centred approaches advocated in occupational therapy, in which the starting point is that the person is the expert in their own life. A strengths-based empathic approach encourages us to work together with people to learn from the strategies that individuals employ. This has particular relevance to understanding the lived experiences of people living with long-term conditions that cannot be understood or imagined purely through observation and questioning.

Equally, in terms of a more appropriate approach to inclusive design, disabled scholars and activists recommend that designers and architects be invited into *'the spaces disabled people already inhabit, learning about our hacks and customs, learning where our barriers lie whilst understanding that no two people will face just the same barriers'* (Price 2017, 172).

Making Ideas Tangible

Introducing equipment and adaptations that are clinical in appearance into a home environment is not only invasive but also stigmatising. Creating homes that look like hospitals turns people into patients, along with all the associated dependencies that infers. If, as Galton proposes, *'a design PhD is about making ideas tangible'* (Grocott 2019, 166), research through design has the potential to draw on the imagination and aspirations of people facing these challenges. In a design for health context, design research practitioners demonstrate how visualisation skills can be used to create images and objects that embody concepts and ideas as a means to provoke new insights and conversations in a situated context (Chamberlain and Craig 2017; Craig et al. 2016). This is all the more pertinent to understanding the lived experience of dementia in which people may struggle to verbalise.

Designers are accustomed to using an iterative process. Issues are explored through immersion in the context, observing, doing, thinking through drawing and making, testing and trial and error. The double diamond methodology advocated as a framework for innovation (Design Council 2004) expands knowledge and understanding of the issues before defining and delivering solutions. In a design for health context, the use of participatory and co-design approaches that use visual communication techniques to support collaborative thinking, challenge hierarchies implicit in healthcare relationships and overcome the barrier of disciplinary-specific language can reveal new insights (Langley et al. 2020). A critical artefact methodology has particular potential for participants living with dementia for whom non-verbal communication methods may be more effective:

> *If codesign and methods of data collection is fundamentally a challenge of communication then design and creative practice can importantly play a role in engaging diverse and disenfranchised users. (Chamberlain and Craig 2016)*

Designers have long advocated the need for *'methodologies which recognise the distinctive quality of discovery in art and design'* (Seago and Dunne 1996/7, 1) rather than applying existing methodologies from other disciplines for many years. The value of research through design is that it can use an inductive approach to explore situations from which both artefacts and methods may emerge as part of the process. As Markussen asserts, there is potential for designed artefacts to represent an embodiment of ideas that can provoke thinking as 'the vehicle to create new theory' (Hagan and Barron 2019, 70).

The options offered by discursive design (Tharp, B and Tharp, S. 2019) and speculative design (Dunne and Raby, 2013) approaches challenge us to use design to ask questions, invert our assumptions, investigate implausible and improbable propositions and have the courage to embrace uncertainty and ambiguity rather than anticipate outcomes. In my own practice, I have been inspired to adopt these methods as a means to experiment with introducing provocations into the urban environment (Walker, 2010).

In design for health, in which the contribution to knowledge is reliant on learning from lived experience, these approaches have the potential to reveal new insights. It is of particular relevance to the focus of my study, which explores the relevance of aesthetic experience and preferences in relation to the visual appearance of everyday objects as a means of supporting identity for people living with dementia. In dementia care, the aspiration is to achieve a relationship between the caregiver and the person living with dementia that is empathic, equal and congruent (Brooker, 2019, p. 154). Hence, visual methods for expressing preferences have particular value in challenging assumptions about ability. As Kitwood (1997) put it:

> *There are strong reasons to believe that the reality itself, whatever it may be, is far too complex to be caught fully in any of our human nets of language. (17)*

Communication and Dissemination as Means to Influence Change

When entering the world of practice-based design research, I am struck by the force of academic conventions that generate huge archives of literature. Text is the predominant medium used to describe documents and disseminate design research. Admittedly, these may be illustrated, but where are the objects, artefacts, images and visual media that articulate the findings, innovations and insights that cannot be described in words? If there is a value in design as an embodiment of ideas – where can we view and critically appraise these artefacts?

If the design thinking, processes and creative probes used as means of enquiry in research through design can contribute to knowledge in an academic context, largely documented and disseminated through text-based journals, then how should it be documented? The use of annotated portfolios and workbooks that document design thinking and decisions has been advocated (Bower 2012; Gaver 2012). It is interesting to discover that a repository of creative practice of the outputs of design research does not exist or has been archived within individual institutions and is not widely accessible. Where are the systematic reviews of practice in practice-based creative research? An initial search found that the use of imagery to articulate research was limited to only a few publications. *CUBIC* pictorials and studies of material thinking are two examples. Potential alternatives are being proposed (Van Leeuwen 2020) and tested, including a pilot of a practice-based PhD that does not require a thesis (Gerrit Rietveld Académie 2020).

Application of Learning in Design Education

The contribution of learning from the user experience to the design of the built environment appears to be equally undervalued. Demonstrating knowledge of accessible and inclusive design principles is not a compulsory criterion for the accreditation of architects in the UK. As Chrysikou (2014) put it, *'User experience in terms of ordinary built environment is rarely the subject of architectural education.'* Where it may be most obviously relevant – in architecture, in which physical barriers are created by inaccessible buildings – the omission is harder to understand. Training on design for dementia in design education is being advocated by the World Alzheimer's Association

(2020), although the Built Environment Professional Education (BEPE) programme, launched in 2006 with the hope of addressing these issues, has faltered.

Conclusion

Being able to use my knowledge and experience as an interdisciplinary practitioner specialising in inclusive design to undertake practice-based design research is indeed a privilege. Having the time to apply my experience and challenge my assumptions and bias while at the same time discovering fields of knowledge and disciplinary perspectives in the context of design for health that chime with my own core values is a treat. The opportunity to explore the potential of discursive and speculative design thinking as a means to provoke dialogue with participants is an exciting prospect. New insights are already revealing themselves at the intersections where disciplinary paths converge and diverge. In an academic educational context, being able to share ideas and findings and contribute to the design for health discourse that can inform thinking in a new generation of designers has the potential to influence change in the real world beyond academia.

Seeking to gain an understanding of the lived experiences of dementia patients using practice-based design research offers iterative, discursive, playful and disruptive design approaches. Unlike purely social science approaches, design research that uses critical artefacts, objects and images as tools to provoke conversations has a particular value in supporting participation and communication in dementia. With increasing reliance on sensory stimuli, a more visceral and intuitive response to the world has the potential to reveal new insights beyond the limits of interviews and observations. Design through research can embody findings in objects that make ideas and experiences tangible. Seeking to learn from existing design research practices, the mystery is why it is not easy to find a centralised archive of the images and objects being generated. Reflecting on the journey that has led me to embark on this research has convinced me that this is the best place to explore the impact of the environment on lived experiences.

Notes

1. Royal College of Occupational Therapy, accessed October 1, 2020, https://www. rcot.co.uk/about-occupational-therapy/what-is-occupational-therapy.

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Bio

Central to **Marney Walker's** practice is an interest in the impact of the environment on behaviour, health and well-being. She has a unique combination of training and experience in occupational therapy and design, specialising in advising on the design of inclusive, accessible and adaptable housing, and has received an award for promoting the role of occupational therapy in housing. She has an MA in design research for disability and was the disability and society module leader on that programme for 5 years. She has a BA in 3D design. She is an inclusive design assessor for the Civic Trust and a member of the Access Association. This paper was written in the first year of a funded postgraduate degree at Lab 4 Living, Sheffield Hallam University, as part of the 100 Year Life and Future Home Project. Her doctoral study "Exploring the expression of everyday aesthetic preferences in dementia through design" (Walker, 2022) is due for submission this year.

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