People in the later stages of life make up one of the most differentiated and experientially rich groups in society which should make design for an ageing population one of the most stimulating areas for design practice. Yet ‘old’ age in the UK is largely framed as a problem to be solved; a position that design often (unconsciously) serves to perpetuate and reinforce. This case study will outline the context for an undergraduate course that seeks to overturn this negative frame that not only ‘others’ older people but also begets a paradoxical self-othering of our future selves. Picking up on the themes of power and voice in framing activities alongside the way problems are conceived and who defines them, the case study will outline the context, content and theoretical underpinnings of the course. It will also use student feedback and responses to demonstrate the value of addressing these issues at an undergraduate level and the ways in which this learning can be applied more widely to other areas of social design.

Keywords: ageing, situated design, framing, reflexive practice, participation

Introduction: The Context for a course on Design for Ageing
This case study reflects upon a single semester, 3rd year undergraduate, course titled Design for Ageing which addresses issues of age discrimination and normative concepts of ageing rooted in deficit and decline which still underpin much design practice today. The course sits within a suite of options run by the Design Cultures group in the School of Design that deliver interdisciplinary critical and contextual studies courses that aim to give dedicated time to develop theoretical knowledge and understanding that is integrated with practice. Drawing on critical and cultural gerontology and its related theoretical underpinnings combined with design theory and methodology emerging from participatory and situated design, the course explores ways in which design can re-conceptualise ageing and create more inclusive and emancipatory environments and experiences. Reflective practice and action research theory (Schön, 2008; Burgoyne and Pedler, 2008) underpins the course design as students are encouraged to think reflexively about their personal (and changing) attitudes to ageing as well as how they might develop their own ethically informed design research. This extends to how they might engage with people in more equal partnerships that acknowledge and build on the different and multiple knowledge cultures at play. In analysing the course, I aim to demonstrate how some of the questions asked in the track theme Alternative Problem Framing in Design Education: Moving Beyond ‘Pain-Points’ can be woven into design education. Of key importance are issues of othering and unequal power relationships in design practice and education which will be addressed alongside that of problem framing.

The groundswell in publications and research into design for an ageing population over recent years is testament to the growing sense of urgency that design must respond to the transformative demographic changes taking place in British society and other nations in the global north. According to the UK Government report the ‘Future of an ageing population’ (2016) the UK is at cross roads: either we face a future society which supports and empowers people in later life or one in which we will be "increasingly unhealthy, disempowered and dependent" (The Rt Hon Oliver Letwin quoted in Harper and Walport, 2016, p.3). Which of
these futures we meet depends partly on how the designed environment will enable or disable people to fulfil their lives in meaningful and positive ways. Universal design has for many decades addressed issues of accessibility and assistance but this can perpetuate a deficit model grounded in a medical understanding of ageing and ‘old’ age (Bates, Imrie and Kullman, 2016; Myerson, 2017).

This notion of deficit also ties into a deep-rooted framing of old age as a problem. The World Health Organisation for example warns that action to support healthy ageing will be “impossible unless we change the way we all think, feel and act on age and ageing” and that “negative attitudes and assumptions about older people” form significant barriers to quality of life (WHO, 2017, p. 1 & p. 12). Susan Pickard argues that this negative framing is in turn underpinned by a fear of ageing that represents a “defining existential crisis” of our times (Pickard, 2016, p. 4). This fear drives the two dominant representations of ageing in contemporary culture: on the one hand that ageing is a pathological problem, characterised by a whole set of negative characteristics, whether that’s decrepitude, passivity, dependency, withdrawal from public life etc; and on the other, a seemingly more positive image of active ageing which Featherstone and Wernick nonetheless class as a consumer-driven strategy of denial, “its message is essentially one of denial, keep smiling and carry on consuming” (Featherstone and Wernick, 2005, pp. 9-10). Cultural gerontologists also point out that the pursuit of active ageing, represented by the ‘third age’ is also highly exclusive and “encodes other dimensions of social difference or advantage, for example ethnicity (this is a largely white world) or relationship status (this is a vision of coupledom)” (Twigg, 2013, p. 39).

More recently, designers, especially those working in the field of social design have pointed to the lack of regard for older people in design practice, our refusal perhaps to envisage our future selves, or even outright discrimination towards older people that has led to design that actively reduces access and capacity. A lack of accessibility to public spaces, neighbourhood facilities, varied housing options and accessible public transport has also been the subject of a growing number of national reports (such as the first HAPPI Report published in 2009 and more recently the Future of an Ageing Population Report, 2016). In 2019 the Housing Learning and Improvement Network hosted its annual conference titled: Is the UK institutionally ageist? Joseph Coughlin, Head of the MIT Age Lab, suggests one reason for this failure of design to adequately address the needs and wants of older people, or to even exacerbate the stigmatisation of older people through poorly considered assistive design is the age gap between designer and user (Coughlin, 2019). Coughlin’s observation speaks to issues of inclusion in the design workforce but it also speaks to a lack of education if design graduates can complete their degrees without any consideration of ageing. Therefore, if art and design institutions want to avoid the charge of institutional ageism I would suggest it is vital that they explore with their students how ageism works across society including the design professions and what strategies can be employed to challenge this and find alternative, socially just ways of working.

This then was the motivation for the course which requires to students to consider: how do we challenge these discriminatory views of ageing and think about ageing in more constructive ways; how do we step outside of our own aged experiences and come to understand the needs and wants of older people; and what design methods best support these endeavours? All of this begins with a rejection of old age itself as a problem and an emphasis on approaching design ‘problems’ from a critical standpoint. This foregrounds the need to address firstly: who defines and articulates the ‘problem’; secondly whether such problems need to be challenged, deconstructed, redefined or reframed; and thirdly who should be involved in these processes and in the process of developing potential responses. In the following section I will unpack how this can be done in an educational setting and the challenges this can involve.

Problems and Framing
A critique of the problem-solution model of design and its weaknesses has been well established in design theory since at least 2001 when Dorst and Cross argued that the relationship between problems and solutions is never neat or linear and that the two should instead be understood as emergent and co-evolving through multiple discourses (Dorst and Cross, 2001; Dorst 2006). Nonetheless, in an educational context where courses take place over ten to twelve weeks and may only consist of a few dozen contact hours the pressure to move quickly from problems to solutions can be difficult to resist particularly for students who are keen to hone their making skills. To circumvent this pressure the learning outcomes for the Design for Ageing course are not tied to the articulation of a solution or presentation of a designed output. This gives students time to sit with and explore a potential problem and critique it from multiple perspectives.

In line with this aim, the course assessment brief has been kept as open as possible to enable students to explore self-identified topics that tie in to their own area of practice (the course is open to students across the School of Design, encompassing 10 disciples) as well as individuals or community groups that they may already
have established relationships with. The assessment brief intentionally avoids setting a ‘problem’ that students are asked to solve, and instead they are invited to explore an existing area of design practice that engages with older people or issues that affect them. Within this the students are expected to critique the way in which older people are framed by the design case in question, consider what implications this has for older people and whether alternative approaches could be adopted. Within this they are also expected to think through the application of research methods, ethics, and the role of older people in the design process, or their exclusion from it. As part of this they must think about how they can draw older people into their research, and in what capacity; for example, as a critical friend or as a co-investigator/participant. To support this, they are given exercises throughout the course designed to develop their skills and understanding of doing research with people.

In connection with this, and developing previous research (Gieben-Gamal and Matos 2015; Matos and Gieben-Gamal, 2017), the course seeks to provide students with a rigorous critical foundation that provides context to the methodological tools that they might want to employ in the service of social design. To support this, the course is split into two parts. Drawing on critical and cultural gerontology alongside complementary theory from critical disability studies, feminist and intersectional theory, posthumanism, (critical) phenomenology, and theories of place and space, the first part revolves around theory-driven lectures and seminars exploring age discrimination and its roots as well theoretical perspectives that support more emancipatory approaches and constructive framings that build on notions of accumulated capacity, knowledge and experience. Tying into critical perspectives that foreground the lived experience of ageing (Biggs, 1997; Richards, Warren, and Gott, 2012), students are also challenged in this part of the course to consider their own experience of ageing as well as their relationships with older people. Within this, they are introduced to the theory of situated knowledge (Haraway, 1988). To explore this further, they are asked to reflect on their own subject position and think through the unconscious assumptions they might make about older people and their potential for bias. In week one for example they are asked to note down words they associate with the terms ‘old’, ‘ageing’ and ‘elderly’. They are then asked to note down words they associate with an older relative like a grandparent, or a family friend (see figure 1 below). The difference in the two sets of words is striking with each exercise producing the reverse outcome (see table 1 and 2).

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Figure 1. Author’s own image (2019) Post-it-note exercise exploring the student’s own associations with ageing. The left image shows post-it notes with words associated with ‘old’, ‘ageing’ and ‘elderly’ the right-hand image shows post-it notes with words associated with older people the students know.
Table 1. Post-it-note exercise, September 2019: words associated with old age, ageing, elderly

<table>
<thead>
<tr>
<th>Positive associations</th>
<th>Negative associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loved, respected, knowledgeable, wisdom experience and knowledge, gentle, wise, influential, cute</td>
<td>Needy, bored, frail lonely, despondent, health problems, rigid, dependent, dying, fragile, silly, slow, boring, alienated, senile, OAP, dependent, grey and frail, lonely, reliant, slow, slow, grateful, dependent, conservative, bored, incapable, senile, death, ill-health, vulnerable</td>
</tr>
</tbody>
</table>

Table 2. Post-it-note exercise, September 2019: words associated with older people known to the students

<table>
<thead>
<tr>
<th>Positive associations</th>
<th>Negative associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wise, money, grandparents, feisty, smiling, creative, religious, strong, baking, intelligent, senior, determined, alive, care-free, nostalgic, smart, funny, warm, kind, rebellious, sweet, kind, warrior, independent, experience, love, active, fun, adventurous, calm, loving, happy</td>
<td>Ill, tired, fidgety, childish, grumpy, afraid</td>
</tr>
</tbody>
</table>

Another self-reflective task, based on Susan Pickard’s work on age consciousness (Pickard, S. 2016), invites students to write about their feelings towards the ageing process. Finally, they are asked to design and conduct an interview with an older person they know about perceptions of ageing to further encourage reflexivity around their own preconceptions and enhance their skills as empathetic researchers.

Having sought to equip students with the theoretical and reflexive grounding to move beyond normative and common-sense understandings of ageing and to critique their own potential for bias which may frame older people as ‘Other’, the second part of the course is designed to enable them to put this learning into practice. Key within this is the question of whose voices should be centred in design processes and how design ‘problems’ should be approached and conceived. To allow for an exploration of this, the second half of the course is structured around workshops during which students develop their own self-directed research projects and explore in more depth issues around research ethics and methods, with a focus on participatory and situated design methods and theory (for example the work of Ehn, Nilsson and Topgaard, 2014; Haraway, 1988; Sanders and Stappers, 2008; Simonsen et al., 2014; Suchman1994).

While full participatory design is beyond the scope of the course, the principles that can be drawn from it are nonetheless important in foregrounding questions of power in design processes. Drawing on Sanders and Stappers idea of the ‘participatory mindset’ (2008) students are encouraged to think speculatively about how they might (re)shape the design methods employed in the case they are studying and to consider who should be involved in this process. Key to this is the way in which the situated knowledge of participants can and should be centred, while de-centering that of the designer (Matos and Gieben-Gamal, 2017; Wilson, McNaney, Roper, Capel, Scheepmaker, Breerton, Wilson, Green and Wallace, 2020). To support this, particular attention is also paid to design research methods specifically addressing work with older people such as the work of Kathrina Dankle (2017) and Prendiville and Akama (2016) who look to design anthropology as a way of foregrounding lived experience as well as developing a reflexive sensitivity to the establishment and maintenance of research relationships. By encouraging students to use their own established relationships with older people in their research, rather than working on a live brief with expectations for resolutions and outcomes, greater emphasis can be placed on methodological reflection rather than solution generation.

Students are thus able to think through problem-framing using techniques such as speculative prototyping, cultural probes, design hacks and so forth (Galloway and Caudwell, 2019; Sanders and Stappers, 2014) alongside the possibilities of co-creation, in ways that allow them to take risks and be experimental.

Transferability of key insights

The course is only in its second year and its last iteration was shaped by the Coronavirus pandemic which meant that it was delivered online and opportunities for engagement with older people were more limited. Nonetheless, each year students have responded positively to the course, and have reflected on their reappraisal of ageing and its significance for design: “It was an eye-opening course, that connected theories on design with design work. I very much enjoyed the course and learned so much. This is a really important topic and especially young people are not aware of ageism” (Anonymous, 2020, Course Enhancement Questionnaire, ECA, UoE). The previous year a student noted that “I found it interesting learning about a
community I wouldn't have considered the same until our discussions and lectures making me think more about my future and how older people aren't represented as they should be within society” (Anonymous, 2019, Course Enhancement Questionnaire, ECA, UoE). In the mid-course review students also noted: “I've learned a lot about ageism, and ageing, a topic which is not being addressed that commonly” (Anonymous, Mid-course Feedback Review 2019) and “I learned a lot about ageing and about myself, and that I had this sad reflection on ageing. This is changing right now” (Anonymous, Mid-course Feedback Review 2019).

On reviewing the student submissions, it is also clear that students were able to take on board the key objectives of the course to challenge age discrimination and think through the relationship between design methods, issues of power, voice, and problem framing in critically and theoretically informed ways. Moreover, they were able to produce work that that could address the challenges that older people face due to the disabiling effects of poorly designed products and environments but which rejected a framing of older people themselves as a problem to be solved. Figure 2 for example shows the work of a student who explored the representation of older people in advertising and used her own drawings to flip the visual language employed in the representation of younger models and older people as a means to propose counter representations as part of her critique.

Figure 2. Violet Colley, drawings taken from the student’s Design for Ageing course submission, December 2019. Source: Edinburgh College of Art and with permission of the student.

Likewise, another student examined what he termed the ‘sickroom aesthetic’ of assistive devices through a visual analysis of walking sticks and presented small but significant changes that would challenge a deficit model of older age (see figure 3).

Alternate Walking Stick

Main Body Design:

Figure 3. James Crang, drawing detail, taken from the student’s Design for Ageing course submission, December 2019. Source: Edinburgh College of Art and with permission of the student.
Many other students also focused on design products and the built environment as well as aspects of visual culture such as representation in film, theatre and advertising. However, submissions also focused specifically on methodological questions. One student explored how a cultural understanding of ageing could be used to confront the more dominant medical model in an exploration of collaborative film making that addressed ageing and disability, while another student provided a critique of persona creation in user-centred design, driven by a consideration of research ethics and participatory methods (see figure 4).

Figure 4. Karolin Lüneburg, Persona Template design, taken from the student’s Design for Ageing course submission, December 2020. Source: Edinburgh College of Art and with permission of the student. The front page depicts a person’s possessions and their reflections about them rather than an image of a person to minimise unconscious bias caused by ‘in-group’ identification. The student’s approach also calls attention to the interconnectedness of a person’s identity and the materiality of their lived experience and challenges a deficit-model of ageing.

As well as the quality of work produced by the students, which provides one measure of the success of the course, the level of self-reflexivity that they gained also presents a key transferable outcome. Throughout the course there was an emphasis upon self-reflection and reflexivity and an acknowledgment of the importance of the learning journey, not just for their undergraduate studies but also for professional practice. Underscoring this, Prendiville and Akama argue that “if designing is a process of transforming materials or generating a new value-creation process we must also remember that such transformation firstly occurs within ourselves” (Prendiville and Akama 2016, p. 32).

Thus, in conclusion, a significant shift was seen in the students’ attitudes towards ageing and its relevance to design suggesting a need for this subject of study. Moreover, the value of the approach outlined here, where there is no demand for solutions or project outcomes (although these may be arrived at) is that students have time to unpack and understand the complex social, cultural and political contexts in which design takes place (Janzer and Weinstein, 2016) alongside theoretical and methodological considerations, including their own situated subject positions. The encouragement to students to seek the views of older people or to include them as co-investigators or critical friends also encourages deeper insight into the way people and problems are framed alongside methodological choices and the importance of inclusive perspectives. In so doing students learn to be reflexive and critical practitioners whom, I would argue, are equipped to apply rigorous approaches to designing with people of all ages – and background - in the future.

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Emma Gieben-Gamal
Edinburgh College of Art, University of Edinburgh, United Kingdom

e.gieben-gamal@ed.ac.uk

As a Lecturer in Design Cultures my research and teaching centres around design for social justice with a focus on ageing and disability. My work is driven by critical and participatory perspectives and I am interested in how design and design education can learn from critical methodologies that challenge dominant ways of knowing and doing. I am also Co-Director of Equality, Diversity and Inclusion for Edinburgh College of Art.