*Journal of Aging Studies* (JAS) Special issue - entitled *Aging Body and Society: Critical Perspectives, Future Challenge*

Manuscript number: AGISTU\_2016\_193

**ENVISIONING BODIES AND ARCHITECTURES OF CARE: REFLECTIONS ON COMPETITION DESIGNS FOR OLDER PEOPLE**

Sarah Nettleton email: sarah.nettleton@york.ac.uk

Christina Buse email: christina.buse@york.ac.uk

Daryl Martin email: daryl.martin@york.ac.uk

Department of Sociology, Wentworth College, University of York, Heslington

YORK, YO10 5DD, UK

**Corresponding author:** Sarah Nettleton (sarah.nettleton@york.ac.uk)

**ABSTRACT**

Architects shape future dwellings and built environments in ways that are critical for aging bodies. This article explores how assumptions about aging bodies are made manifest in architectural plans and designs. By analyzing entries for an international student competition *Caring for Older People* (2009), we illustrate the ways in which aged bodies were conceived by future architectural professionals. Through analyzing the architectural plans, we can discern the students’ expectations and assumptions about aging bodies and embodiment through their use of and reference to spaces, places and things. We analyse the visual and discursive strategies by which aged bodies were represented variously as frail, dependent, healthy, technologically engaged and socially situated in domestic and community settings, and also how architects inscribed ideas about care and embodiment into their proposals. Through our analysis of these data we also attend to the non-representational ways in which design and spatiality may be crucial to the fabrication of embodied practices, atmospheres and affects. We end by reflecting on how configurations and ideologies of care can be reproduced through architectural spaces, and conclude that a dialogue between architecture and sociology has the potential to transform concepts of aging, embodiment and care.

**Keywords:** architecture, design, images of aging, embodiment

**INTRODUCTION**

Bornat and Jones have called for researchers of later life to explore visions of the future as they are imagined in the daily activities of people in a variety of settings and at different stages of the life-course. Analyzing imaginings of future users, they argue, ‘tells us important things about the social construction of age, aging and the life-course’ (2014, p.6). In this article, we examine how young architects anticipate the future by exploring their designs of care homes for people in later life. Specifically, we review entries submitted for the *Caring for Older People* international student design competition (DWA/RIBA, 2009), in order to explore how aging bodies are implicitly and explicitly represented in their architectural plans.

This allows us to extend previous work which explored the accounts of established architects reflecting on designing care homes for older people (Buse et al., 2017). We begin by reviewing debates on the intersection of architecture and embodiment and, in particular, how architectural conceptions of bodies may facilitate the ‘character’ of places (Abel, 2013). We then proceed to decipher the various bodies ‘imagined’ and inscribed within entries for the *Caring for Older People* competition. We end by reflecting on the interconnectedness of place and lived experiences of care in later life, and suggest that whether and, if so, how architects address and anticipate embodiment is critical to future challenges associated with planning care for later life.

**ANTICIPATING FUTURES AND ARCHITECTURAL AGENCY**

Although we do not hold that architecture alters behaviour in any deterministic sense, we do argue that architects articulate ideas and ideologies of care, and contribute to the construction of aging bodies through their designs. Design reproduces cultural expectations and political visions about how we ‘ought’ to live (King, 1980). Spatial layouts and spatial vocabularies etched in architectural plans ‘carry encoded messages of how bodies are expected to move in space’ (Hofbauer, 2000, p.170), and provide visible documentation of socio-cultural assumptions, power relations and the organisation of daily life (Prior, 1988; 2003). Furthermore, non-representational approaches look beyond what architecture might ‘represent’ and direct attention to experience, embodiment and practices as they play out through relations between spaces, places, people and things. They point to the potential for architecture to invoke atmosphere and affect and explore how materials and spaces may be choreographed to create ‘mood catching environments’ (Thrift 2009, p.123). Kraftl and Adey, for example, compared the design strategies of architects working on two contrasting settings - a school and an airport prayer room - and found similar methods were used ‘to engineer affect’ in order ‘to encourage children, passengers, and airport workers to inhabit, and to inhabit “well,” in their spaces’ (2008, p.227). Engineering atmosphere involved the recruitment of ‘a wide variety of materials, practices, bodies, events, and memories’ in order to invoke ‘homely and retreat-like feelings’ (227). This speaks to an emergent literature on the ‘materialities of care’ (Buse et al 2018), which explores how everyday artifacts are imbued with meaning and impact on identity and comfort (Lovatt, 2018). Such mundane things may even hold political purchase through what Molnárdescribes as the ‘domesticating power’ of material objects that can ‘mitigate the disruptive effects of social change (Molnár, 2016, p.207).’

In their aspirational visions of places for inhabitation, designers work with implicit as well as more explicit notions of what they presume to be ‘appropriate’ spatial configurations for particular settings. Architectural plans may therefore provide a freeze frame of how anticipated buildings are represented. However, we can also recognise that design plans are embedded, active documents ‘woven together out of on-going stories’ (Massey 2005, p.131) that invoke emotional responses and debate. Houdart (2008) describes architectural drawings as ‘cosmologies in the making’ (p.48); not only virtual renderings of buildings and space, but also of how human and non-human bodies fit into the picture. Design plans are inherently social and give clues into the relation between spatiality, materiality and projections of aging bodies.

Architectural artifacts such as drawings submitted for competitions can be viewed as ‘paper architecture’ (Prior, 2013) that gives scope for critical reflections upon past, present and future conceptualisations of the aging body. The very idea of a ‘care home’ designed for residents in later life to be occupied by men and women by virtue of their age and presumed inability to care for themselves, says much about our assumptions of later life, as does the way rooms are configured and classified. We can see how spatial norms have shifted over time as, for instance, when observing the current vogue of activity rooms and single en-suite bedrooms, as opposed to wards or dormitories in mid twentieth century care homes. Andersson documents changing ideas of aging by studying architectural competitions of care homes for older people in Sweden (2015), moving from small asylums in the early twentieth century (emblematic of the humane aspirations of emergent welfare policies) towards later homely designs that reflected the perceived therapeutic benefits of familiar environments. Designs, Andersson argues, are essentially ‘socio-political statements that define spatial frameworks within an ideological view on how ethically to provide care for dependent and frail older people in a welfare regime’ (p.837) – now and in the future.

Architecture is intrinsically future orientated, with designers invariably ‘perceiving in hypothetical mode’ (Murphy, 2004, p.269). According to Abel, architectural students are encouraged towards ‘imageability’ and ‘this work resolves around the concept of a mental “image” by which individuals anticipate events and actions and generally find their way about the world’ (Abel, 2013, p.107). Engaging with literatures on architecture and embodiment, Abel argues that architects can engender a potent sense of place through ‘creating intimate spaces’ where ‘people can identify with, and feel they belong to’ (p.111). For him the starting point should be the body. He cites Bloomer and Moore’s suggestion that the most ‘memorable sense of three-dimensionality originates in the body experience and that this sense may constitute a basis of understanding special feeling in our buildings’ (1977, in Abel, 2013, p.111-12).

Nevertheless, as Blaikie (1993) claims, designers will invariably be influenced by cultural representations of aging dominated by images of ‘the elderly’ as a ‘problem category’, alongside images of the third age - ‘choice’ and ‘lifestyle’ - and the fourth age - ‘dependency’ and ‘decline’. Visions of old age tend to be negative and homogenised, reflecting wider cultural representations of aging (Bytheway, 2011; Featherstone and Hepworth, 1991). Old age envisioned as a source of worry (Neikrug, 2003) seems to endure despite attempts to rearticulate later life narratives by cultural intermediaries in contexts where older people have resources to consume and participate in an array of cultural practices (Gilleard & Higgs, 2015). With this in mind, an exploration of how young architects anticipate and imagine the bodies of older people seems worthwhile.

**THE COMPETITON**

The 2009 *Caring for Older People* competition was open to all students registered on a Royal Institute of British Architecture (RIBA) recognised architecture course. The design brief was succinct at only two pages long and students were asked to ‘think about what the care home of the future might look like’ and ‘design a care home for older people that would be suitable ‘in 60 to 70 years’ time.’ The brief did not pose any fixed assessment criteria, stating that there are ‘no restrictions, for instance, your design may consider the larger design issues or maybe the smaller ones’ and need not comply with current legislation or recommendations (DWA/RIBA, 2009). Instead the brief raised a series of questions for consideration, including: the location of the care home, and its relation to the community; what sort of ‘activities’ residents might engage in; how to make the care home a ‘real home’; the implications of layout and level of accommodation for residents’ experience (rather than just layouts for efficient and economic staffing levels). Sixty-nine international entries were submitted, with first, second and third prizes awarded and a further three highly commended designs. The judges comprised a professor of dementia studies, a director of a large commercial care home provider, the chief executive of an Alzheimer’s charity, and the director of an architectural practice. The judges’ assessments are concisely minuted in the judging report which notes that each entry was considered ‘in relation to the brief, development of concept and the quality of presentation’.

The authors of this paper reviewed design entries, paying particular attention to the visual and discursive strategies by which aged bodies were represented and in which architects inscribed ideas about embodiment in the proposed care settings. Our analytic assessment of the entries was informed by our knowledge of the social science literature on the body and embodiment. This scholarship offers a range of conceptualisations of bodies such as; biomedical, technological, consuming, experiential, biographical bodies and so on (Crossley 2001; Shilling 2013; Shilling, 2016; Turner 2008). These notions served as sensitising concepts (Bulmer 1979) as we studied and discussed the submissions. As well as attending to the bodies which are visible in the text and images featured in the designs, we also reflected on absent bodies, and what these absences might mean. When thinking about processes that link people to places (Rubinstein, 1989) we argue that design and spatiality is crucial to the fabrication of embodied practices, atmospheres and affect (Kraftl and Adey 2008; Schillmeier & Heinlein, 2009; Latimer & Munro, 2009). First, though, we consider the variety of bodies imagined by architectural students.

**ARCHITECTONIC VISIONS OF THE BODY IN LATER LIFE.**

Throughout the competition designs we find framings of five categories of bodies: socio-biological bodies, socio-technological bodies; active / consuming bodies; biographical bodies; and phenomenological bodies. We came to recognise these gradually through our analytic strategy that involved an iterative reading of the entries, knowledge of literatures on embodiment and debate between the research team. We focussed not only on the text included on some of the designs but also on how bodies were portrayed either explicitly or implicitly in the drawings. We were attentive too to how spaces and material things might encourage or constrain bodies and embodied practices, and the speculative designs could ‘create sets of possible actions’ and ‘architecture’s abilities to affect bodily experience’ (Kraftl and Adey 2008, p.227). We explore each of these types of bodies in the following sections.

***Socio-biological Bodies***

Although the biomedical ‘body based narrative’ (Gullette, 1997) of mental and physical deterioration is often challenged, it nevertheless endures as a strong discursive frame in relation to aging (Pickard 2014). Indeed, whilst encouraging innovation the competition brief reproduced normative narratives. ‘As people grow old’, it states, ‘they become less independent due to physical, physiological and mental changes which create disabilities’ (DWA/RIBA, 2009). Certainly some design narratives articulated this lifecycle approach, with one entry entitled ‘*Circle of Life’* (D49) premised ‘on the concept of natural lifecycle. We are born helpless. As we grow old we become helpless again’. Old age here is figured as a ‘second childhood’ (Hockey & James, 1993), where the body is once again physically and mentally vulnerable. The design includes a ‘cognitive training room’ containing technologically futuristic equipment for cerebral stimulation, implying that older people ‘ought’ to be encouraged to be mentally active. A figure whose ‘age’ is signified by gait and physical decline through the presence of a walking stick, and gender by his dress (Bytheway & Johnson, 1998), is placed amongst laser like strobes stimulating cerebral responses. The training room is located within a building that replicates the zoning of embodied needs familiar in conventional care homes, with communal daytime and exercise spaces, an inner green court, dining area, living spaces and (in contrast to many submissions) a staff room. The temporal rhythms of residential life (cf Zerubavel, 1985) are spatially encoded through the rooms that afford daily-embodied practices (e.g. communal activity during the day, and shared dining) and therefore potentially foreclose others, a design trope replicated in many of the entries and one which we return to below.

While the *Circle of life* articulates linear decline, the third placed Spanish entry *Integral Centre for Older People* (D65) speaks to systems biology. ‘Integrate’, the text explains, derives from the Latin *integrare* - ‘to form a whole; a complex’. Inspired by ‘chromotherapy’, the entry argues that ‘colours and behaviour are intimately related’, with individual colours linked to psycho-physiological responses: ‘yellow - antidepressant, generates muscle energy, stimulates bile flow’; ‘magenta – increases energy level, dignity’; ‘dark violet calms down motor, lymphatic and cardiac system’ and so on. Although the scientific basis for chromotherapy is problematic (Whitfield and Whelton 2015), as acknowledged in the judges’ comments, references to colour recur throughout wider interdisciplinary research on dementia and design, indicating that the students’ ideas echo broader debates on the merits and demerits of colour for care. Davis et al. for example, writes about the importance of colour to orientate designs for dementia care suggesting that ‘use of warmer, stronger colours in dining rooms encourages conversation and interaction, and coral, peach or soft yellow are known to encourage eating’ (Davis et al, 2009, p.189). Similar claims are replicated in authoritative research reviews and design guidelines (Cooper, 1994; Fuggle, 2013) that tend towards experiential rather than social-biological approaches. Assessing these approaches is beyond the scope of this paper, but what is salient is how recourse to biological, neurological and physiological evidence is garnered to support claims made in the designs.

The figure of the biomedical body lies at the heart of the design, with a sketch of skeleton with anatomical organs reproduced alongside a sketch of the brain reminiscent of those in medical text books [Figure 1]. The scheme overall attends to the biological body in its use of colour, layout between rooms, acoustics and outdoor spaces. While the socio-biological figure is prominent, this same design is attentive to socio-environmental considerations. There is an integration of inside and outside spaces in the use of glass walls so that ‘the public’ might be drawn into ‘activities’, reflecting the ubiquity of this notion across gerontological and professional literatures (Katz, 2000). The integration of community life recurs in other plans, including those we analyse because of their ‘socio-technological’ bodies.

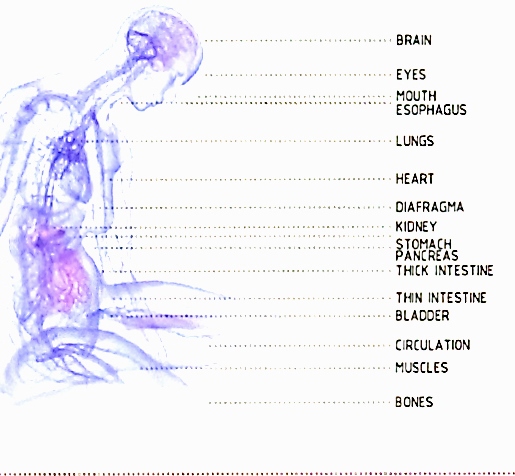


Figure 1: The Socio-biological body (D65, Marta González Ruiz)

***Socio-technological bodies***

There is a vast multidisciplinary literature on technological aids designed to ‘assist’ the lives of older people, with sociologists keen to reflect on the socio-cultural significance of ‘technological bodies’ (Shilling 2004). Sociologists tend to be cautious of ‘technological fixes’, indicating that these are ‘not an easy solution to demographic aging, “care crises”, personnel crises, or budget crises in aging societies’ (EFORTT Research Team, 2012, p.3). Greenhaugh et al. (2013, p.86) suggest ‘a ‘bricolage’ approach, combining familiar technologies with new, and tailoring technologies to lived experiences. We see the highly commended entry D25 *The Future of elderly care* as a ‘bricolage’. The ‘inspiration’ for this design, oriented for those with dementia, ‘was to create a village within the city’, complete with pastoral elements such as a church, village hall and green. The village green portrays greyed out bodies relaxing in this communal space with the game of bowls (an outdoor game, popular among older people, in which a ball (known as a bowl) is rolled toward a smaller stationary ball called a jack), the gait and fuller figures acting as signifiers of age. *The Future of elderly care*,located in a city centre, intends to attract non-residents to mix with residents, and for the residents to ‘make use of the amenities of the city’. Here we find the location helping to ‘destablise dementia as a taken-for-granted category’ (Kontos & Martin, 2013, p.288).

Care is also enacted through an *advanced control system* comprising networked display screens designed to foster independence. Every room in the resident’s apartment has a computer screen prominently positioned. Included in this entry is an image of the living area where a greyed out figure is looking at such a screen. The bedroom screen, the narrative suggests prompts visits to the bathroom; the bathroom screen prompts washing, cleaning teeth and taking medication; the living room screen is ‘multi-functional’ with ‘reminders of meal times’ and upcoming social events within the ‘village’; and screens have rolling displays of personal photographs to ‘trigger memories’. On the one hand, this might presume passive, confused, lost residents as technological devices act to monitor and direct their activities in socially appropriate ways. Furthermore, the reliance on monitoring and surveillance technologies to enact bodily care and body maintenance displaces the emotional, physical connectedness of hands-on ‘body work’ (Twigg et al., 2011). On the other hand, it could be that the design anticipates ‘embodied computer users’ (Lupton, 1995), for whom screens are likely to be familiar within their embodied biographies. This resonates with Buse’s concept of ‘embodied technobiographies’, developed through her empirical exploration of men and women’s use of computers, which meshed biographies and embodied technological competences acquired over a life time (Buse, 2009; 2010). Socio-technological bodies in this design are imagined in ways that facilitate independence and reconceptualise dementia (cf. Wigg, 2010).

Nevertheless, as Mort et al. (2013) have found, smart technologies invariably generate tensions between ‘care’ and ‘coercion’ at the level of daily use. Socio-technical bodies also emerge in other designs that highlight these tensions – the highly commended entry *Dear Martha* (D78) presents technical solutions to frail older bodies through ‘an intelligent floor’, with lights integrated into the floor: ‘the floor can listen to where you want to go and lead you there.’ This design also attends to technology use as situated within personal and generational biographies, as well as enfolded within the practices of active and consuming bodies. These somewhat related categories are explored in the next two sections.

***Active, consuming bodies***

Throughout entries there is a view that residents should be active, reflecting Katz’s (2000) observation that ‘activity in old age appears to be a universal good’ (p.135) or ‘ethical key word’ (p.136). This also reflects the direction of students toward consideration of ‘activities’ in the briefing document. These designs therefore ‘emplace positive age identities, notions about successful aging’ and ‘active’ lifestyles (Lucus, 2004, p.449). Textual descriptions and visual images represent older people as active participants in leisure, lifestyle and consumer culture (Gilleard & Higgs, 2015; Shilling 2016).

Shops, cafes and gyms feature in a number of entries, representing ‘highly symbolic spaces of consumption’ (Lucus, 2004, p.253). Several designs are located in retail saturated spaces: for instance, *Dear Martha*’s central image features a large image of older people walking in the city, against a back drop of familiar brands such as ‘H&M’ and ‘Starbucks’ whose marketing and (in the case of H&M clothing) products are explicitly oriented towards a younger clientele. Physical activity and consumption practices are conflated, in line with ‘neoliberal anti-welfarist agendas’ that serve as gloss of empowerment to obscure the retreat of collectivist provision of care (Katz, 2000, p.147). The first placed design *How often do you visit your grandad/grandma/dad/mum in a care home?* (D74) features commercial space on the ground floor of its building, to be staffed by residents, maintaining the ‘busy ethic’ (Ekerdt, 1986). Manifest here is an ‘older social tension between productivity and unproductivity being replaced with a spectrum of values that spans activity and inactivity’ (Katz, 2000, p.147), bridging working lives and retirement.

Consumer lifestyles are also related to ownership, and the possibility of ‘buying into’ spaces of care (Lucus, 2004). The design *Growing old in Bow* (D102) is a co-housing model for residents electing to move within the community whilst still at an ‘active age’, anticipating future ‘personal decline, both mental and physical.’ In contrast, *How often do you visit your grandad/grandma/dad/mum in a care home?* (D74) is targeted at relatives, who are often the focus for the marketing and design of care homes (Buse et al, 2017). The design is located in a dense urban setting, with a pictogram identifying a plethora of relatives’ daily commitments [Figure 2], indicating that the care home location will be conducive to the scheduling of their visits, enabling familial responsibility, and perhaps moral opprobrium for generalised others who fail to take care of their own.



Figure 2: Pictogram (D74, © Jeremy Whall and Wyan Yeung Li-shung)

The gym is a spatial exemplar of the active aging discourse in many designs, reflecting a wider cultural conception of exercise as a prescription for health, and the increased marketing of physical activity towards older consumers (Tulle, 2008; Tulle & Dorrer, 2012). The gym is a very specific architectural device that invites and valorises particular embodied practices and lifestyles. Nevertheless, whilst in keeping with current trends to include gyms in designs across the social care sector, images and descriptions of older people in these designs also often featured ‘subdued’ physical activity, such as playing bowls and socialising outdoors in the *Village in the City* design. As Edkert argues (1986, p.243), it ‘is not the actual pace of activity but the preoccupation with activity and the affirmation of its desirability that matters.’ Yet these images are in contrast with images of fashionably dressed older people engaging in vigorous physical activity, which are often associated with successful aging (Lucus, 2004; Ylanne et al., 2009). The images of older people in *Dear Martha* (D78) juxtapose signifiers of consumer life-styles with more traditional material signifiers of old age, ‘walking sticks’ and ‘outdated clothing’ (Bytheway & Johnson 1998, p.249). This indicates limits to ideas of ‘active aging’ and reflects the emphasis in the competition brief on older people in need of care, and the focus on the care home, which anchors images of frailty (Gubrium & Holstein, 1999).

We therefore see architectural solutions to influence how aging bodies ‘ought’ to move through space. In some cases, this social engineering is more explicit still; for instance, the designers of *Dear Martha* (D78) include written text on their design entry which reads:

Each of the residents’ rooms contains only the most necessary – a bed, a bathroom, and a big screen window. This is to make the residents get out and meet other people to make them use their bodies*.*

Researchers have suggested that attempts to emplace the ‘moral edict’ of remaining active (Katz & Laliberte Rudman, 2004) may, counterintuitively, undermine independence. For example, one study of 38 care homes found that ‘residents who spent more time in their own rooms during the day had higher levels of environmental control and spent proportionately more time engaged in active behaviour’ (Barnes, 2006, p.599). Nord (2011a) too found residents of care homes who opted to stay in their rooms ‘lived an active life in their small but quality space’ (p.141) and creatively engaged with material things, with ‘mundane objects’ being the most poignant for them in harbouring strands of their personal biographies.

***Biographical bodies***

Although some entries revealed a tendency amongst younger people to homogenise older people, others attempted to realise biographical contexts of anticipated users. *Dear Martha* uses ‘narrative vignettes’ (Blythe & Wright, 2006) of imagined residents, providing details of their name, age, work history and interests, together with extracts of letters written in 2080. ‘Alan’, aged 81, writes:

‘Well I couldn’t ask for more. Isn’t it fantastic to sit and work in such an environment! I still do a lot of consulting work even though I have retired from my job as an economist. I used to work from my home so this suits me’.

‘Sophie’, aged 78, writes, ‘I love to wake up in the morning and have a warm cup of tea on the balcony, me and Amy who I met here are sharing rooms.’ Others enjoy gaming nights, playing *World of Warcraft* ‘all night long’ while ‘Charlie aged 85’, watches *Pulp Ficton* in the cinema. This suggests engagement with consumer culture as generationally located (Gilleard & Higgs, 2008), challenging the opposition of ‘older people’ and ‘new technologies’ in cultural imagery (Jaeger, 2005). Technology here is situated within embodied technological practices acquired over the life-course (Buse 2010; Bolin & Westlund, 2009).

*Dear Martha* presents a playful image of growing older disgracefully (Gilleard & Higgs, 2011), yet by locating old age within personal and generational biographies it challenges depictions of ‘old age’ as a static category (Bornat, 2002). It gives a sense of the residents absent from many designs and yet the narrative vignettes remain potentially ‘unconvincing because they are composites’ (Blythe & Wright, 2006). Ideas of generation and futures are somewhat confused – the dress of older people on the most prominent image (headscarves for women, military style dress for men) is suggestive of the Second World War generation, whereas their cultural references (films and gaming technologies) evoke a generation growing up in the 1990s. This may be because figures in this image appear to be photographs imported into a Computer Aided Design (CAD) programme, reflecting the tendency for the reuse of photographs to produce standardised images of later life (Bytheway & Johnson, 1998). Or, in keeping with on-going ‘debates over whether or not people possess a generational consciousness’, the designers may ‘have overlooked that, perhaps rather ironically, generational belonging can be a temporal issue tied to a person's stage in the life-course’ (May and Muir 2016, para 8.4).

Other designs situate later life and biographical relations to the materiality of place and everyday things, which become ‘entangled in the events of a person’s life and used as a vehicle for selfhood’ (Hoskins, 1998, p.2). In their entry ‘*Growing old in Bow*’ (D102) the students write about growing old as ‘returning to’ a place, where ‘a sense of self derives from the experience of particular places and their associated meaning.’ Landscapes as a ‘refracted biography’ tap into a long cultural tradition that entwines the understanding of landscape with biographical experience (Jones, 2011), and are articulated through the reference to familiar urban topographies [Figure 3]. The entry *My Home* (D61), which was awarded second prize in the competition, discusses the potential of familiar things to ‘import memories’, acting as potent mnemonic devices through their relationship to embodied practice (Hallam & Hockey, 2001). Such sensitivities to material cultures and physical landscapes prompt a ‘dwelling perspective’ and recognition of the ‘canniness of home’ when conceiving care (Schillmeier & Heinlein, 2009). They also imply a person-centred approach to care for those living with dementia (Kitwood, 1997; McColgan, 2004), recognising the significance of narrations of the embodied self (Buckley, McCormack & Ryan, 2014). A focus on biography and memory may also reflect a broader cultural tendency to depict older people in terms of an orientation towards the past (Bornat & Jones, 2014). For instance, in *My Home* there is a focus on ‘commemorating, recollecting, or remembering’ and ‘reviving thoughts of the past.’ Yet this is situated within a nuanced understanding of the lived body, and phenomenological experience of place, to which we now turn.



Figure 3: Biographical bodies, in familiar urban topographies (D102, © HarperPerry)

***Phenomenological bodies***

In keeping with empathic design approaches (Kouprie & Visser, 2009), some entries sought to enter the affective experiences of anticipated users and their embodied sense of being-in-the-world. *My Home* is an explicitly ‘phenomenological response’, as a text caption on the entry reads:

The phenomenological response can propose a solution to avoid the changing fads of fashion and the unpredictability of the future. The comfort of a carefully crafted timber seat or the patina, texture and smell of a leathery armchair will always bring delight. The feel of warm sunshine on your skin on a cold winter morning will forever be a pleasant sensation – just as closing heavy shutters on a dark, rainy evening will still offer security, enclosure and safety seventy years into the future. (D61)

Here we see what Rubenstein (1989) calls ‘entexturing’, ‘the fine turning of the extra body environment to sensory modalities in connection with daily routines’ (p.S46). A sense of comfort and the ‘sensual experience’ of being-at-home (Angus et al., 2005, p.169) is evoked: ‘the feel of warm sunshine on your skin’, the ‘texture and smell of a leathery armchair.’ These multisensory pleasures (haptic, thermal, visual) are presented as transcending age divisions and temporal change, although perhaps suggesting a universalising, classed vision of being in place. We see how everyday objects (Molnár, 2016) and building materials (Edensor, 2013) in particular are deployed to connote a sense of inhabitation where feelings of belonging, attachment, and familiarity are thought to be important. ‘Being’ is privileged here, as opposed to the ‘doing’ which characterises the active/consuming bodies described above.

The sense of being at home in this design is engendered through practices of ‘keeping’ and ‘giving room to things’ (Latimer & Munro, 2009, p.318). The design features an unconventional sectional plan in which the building is reduced to a faint outline, but is filled with vividly depicted everyday mundane objects - a kettle, lamp, clock, television etc. - artifacts which conjure ideas of home, in line with Nord’s (2013) findings that such things are critical to dignified experiences lived in the here and now. The proposal emphasises the ‘sense of belonging’ and identity entangled with a ‘lifetime of collected possessions’ that hold ‘layers of memory and a deep-rooted sense of belonging’. It aims to help older residents to reconstruct this sense of home within the context of home, by allowing,

as many belongings to be brought with the owner as is possible as the ability to inhabit, appropriate and personalise their room and surroundings offers the possibility of generating a new sense of home.

Home is depicted as a ‘state of being’ (Mallet, 2004) and an ‘imaginary’ (Bachelard 2014), which can be reconstructed in a care context through ongoing practices of ‘home-making’ (Blunt & Dowling, 2006). There is an emphasis on maintaining ‘everyday acts of routine’ and relations with things which constitute a sense of ontological security (Giddens, 1992): images of an older people making tea with a stove kettle [Figure 4], a bath with a ‘running brass rail’ providing a ‘tactile frame offering support.’ Age is downplayed in the sketchy figures represented in this design, suggesting continuity of identity and an ‘ageless self’ (Kaufman, 1986).



Figure 4: The Phenomenological Body, maintaining ‘everyday acts of routine’ (D61, © Rachel Witham and Chris Wilkins)

In the judges report they note that in this design ‘levels of care’ are ‘developed well’. Care workers are absent, and instead the design configures ‘care as an art of dwelling’ which ‘enacts being-at-home by reassembling bodies, emotions, technologies and places’ (Schillmeier and Domenech 2009, p.288). The objects acquired over a life-time come to act as a ‘convoy of material support’ (Smith & Ekerdt, 2011, p.377). Care is enacted materially through things and careful design; a ‘brass strip’ near the basin and bath provides a ‘place for leaning or steadying’ and ‘physical aide integrated into the design so as not to be an overt admission of requirement for support.’ The design is in keeping with the aspirations of person-centred care which recognise the significance of materialities, moving beyond ‘clinical efficiency’ and using objects for sensory and emotional stimulation (McCormack et al., 2011). As noted in relation to dress, a sensitive use of materials in design can challenge meanings of care settings in later life as a ‘transition into a hard, plastic, easy wipe, easycare, polyester world where there is little in the way of tactile pleasure’ (Twigg 2010).

The entry *Growing old in Bow* (D102) similarly invokes a sense of home through embodied, habitual connections to place, the ‘urban topography with which individuals are familiar’ [Figure 3]. This moves expectations away from institutional models of care to small-scale flats aligning with ‘housing terrace, typology and experience of the area.’ Again the idea of ‘dwelling’ is invoked: the kitchen is construed as a significant space of ‘ownership’, which is often ‘one of the first luxuries to be removed’ in care institutions. This echoes *My Home*, where the kitchen is described as the ‘hearth’ and ‘focus of home’, a design strategy used in other healthcare spaces to engender a sense of homeliness (Buse et al, 2017) and comfort (Martin, 2018). It is explicitly focused on the art of living where care is understood as a mechanism for affording individuals, no matter what their life stage, and their carers room for creativity and joy (Latimer, 2013, p.55), indicating the salience of architectural spaces to the meanings and practices of care.

**REFLECTING ON ARCHITECTURE AND EMBODIMENT IN LATER LIFE.**

Critical analyses of architectural competitions can yield insight into the configuration and changing ideologies of care (Andersson, 2015). Thus competition entries raise numerous questions about the cultural constructions of care and implicit assumptions of aging and aging bodies. What is care? How is care can enacted? Who does caring? Who is being cared for or cared about? In our data some designs focus on care through technological solutions, facilitating independent living through design as problem solving and invoking inhabitation by biomedical or technological bodies. Other designs focus on ‘care as art of dwelling’, enacting a sense of ‘being-at-home’ through relations with familiar material environments and objects (Schillmeier & Domènech, 2009), and allowing a practice of ‘caring through things’ (Puig de la Bellacasa, 2011). The designs alert us to the salience of the connectedness between persons and places; certainly the biographical and phenomenological framings of bodies resonate with contemporary non-representational approaches to the analysis of architecture found in the writings of Pallasmaa, who foregrounds how buildings are perceived, experienced, lived in multifarious ways with and beyond the five senses (2014). These also include:

‘…the dimension of time as experiencing implies duration and the experience fuses perception, memory and imagination. Moreover, each space and place is always an invitation to and suggestion of distinct acts: spaces and true architectural experiences are verbs’ (Pallasmaa 2014, p.231).

This reminds us that design intentions, architecture and spaces are not neutral, in the sense that they suggest ways of being, hint at appropriate and inappropriate embodied practices and guide modes of care, caring and being cared for. These occur in ways that are not static or stable but will be made and remade over time as inhabitants with their assortment of memories and aspirations move through them.

Those designs that configure, either explicitly or implicitly, biographical and phenomenological bodies are attuned to the interpenetration of bodies, spaces and care through processes of ‘entexturing’ and narratives of domesticity (Rubinstein, 1989). We have seen in our analysis how some plans sought to combine sensation and familiarity, tapping into understandings of comfort as enacted simultaneously through the physical qualities of material artifacts, the semiotic meanings associated with their designs and the relations they encourage between people, place and things (Bissell, 2008). This reminds us of the fragility of being at home: for all the cultural tropes of domesticity associated with ideas of stability and security (Bachelard, 2014), our lives and our bodies invariably change and bring a degree of provisionality to the places we call home, troubling the distinction between domestic and institutional spaces of, and for, care. Schillmeier and Heinlein (2009) capture this sense of contingency in their notion of ‘(un)canniness’ - ‘the mediating and altering relations of changing bodies, emotions and things that enact the specificities that make up the very feelings and practices of being at home’ (p.218). Latimer (2013) similarly argues that spaces for care should not merely be conceptualised as arenas for the ‘provision of fulfilment of needs’; instead, ‘a space for care can be rethought for how it affords people (staff, patients, family, friends) a life of creativity, vitality and building, no matter how frail some participants are. The point is how we organise spaces of home care’ (p.55)

Related to recurrent tropes of domesticity and the making (and re-making) of home, one striking finding in our analysis was that care as body work (Twigg et al., 2011)was largely absent, with care-workers receiving only scant attention in very few of the designs. This may represent efforts to counter images of dependency (Hockey & James, 1993), and students’ efforts to emphasis the agency of potential residents. It may also reflect the steer of the brief, which focused on the experiences of residents, with staff only mentioned in passing, in relation to economics and efficiency. This is perhaps an indication of the marginal status of care-workers, who have received less attention in user-centred design. Only a very few of the care homes feature separate spaces for staff: indeed, the entry *Dear Martha*, explicitly states:

There is no private room for staff. This is to make them spend as much time as possible with residents. If the staff and residents live and eat together they will have much closer relation and care more about how the atmosphere is.

This chimes with Latimer’s challenge to the idea of ‘care-as-provision’ which presumes those cared for in deficit terms and her suggestion that we think instead in relational terms, ensuring spaces of care are ‘as much about making a life’ and ‘bringing being-with alongside being-in-the world’ (Latimer, 2013, p.37). However, this approach risks obfuscating and potentially neglecting the emotional and physical demands of care work, which in turn involves dealing with not only physical bodies but also living bodies. Care work in the context of formal care demands attentiveness to biographies and personhood (James, 1992; Twigg et al., 2011) which has the potential to be emotionally rewarding but is labour nevertheless.

A radical view of architecture suggests the first response of the architect to any brief should be to question the terms of a brief and even whether a new building is needed at all (Price 1984). We see a majority of these design entries moving away from the traditional care home model, and questioning whether a brief for care homes should necessarily be answered by yet more care home designs. Rather, many of the student designs more closely resemble extra care housing which aims to ‘enable residents to remain physically and mentally active, independent and socially engaged’ (Shaw et al., 2016, p.1). Indeed, there are broader trends in design that ‘shift care provision from institutional settings toward more independent housing typologies’ (PRP, 2014, p.23). This move away from care as provision can again be read as a positive portrayal of later life to counter the aging body as ‘increasingly in deficit’ (Latimer, 2013, p.35). Certainly, the designs were often in keeping with the ‘new generation of spaces’ for later life (Barnes, 2002), with a particular emphasis on ‘successful’ aging (Lucus, 2004). They configured care facilities as spaces for socialising, reminiscing, and keeping active, rather than a place where care ‘needs’ are met. However, these discourses are consistent with neoliberal agendas that promote empowerment through activity (Katz, 2000). This, in concert with the absence of separate staff facilities in many designs, marginalizes body care and bodily dysfunction, and that may also reinforce the wider marginalization of the fourth age and frailty as a residual category (Gilleard & Higgs, 2010). It is argued that there is a ‘shift in the resident profile’ of care homes, ‘towards the upper end of the care spectrum, either involving extreme frailty or dementia sufferers’ (PRP, 2014, p.23). This suggests the fourth age is being spatially displaced, repositioned and potentially excluded from newer models of independent living. Our analysis here offers further evidence of the extent to which ideologies of care, and categorisations of aging bodies, are echoed in and formalised by architectural spaces.

**CONCLUSION**

In examining constructions of aging bodies in architectural competition entries and turning the lens to the perspective of student architects, this article opens a new avenue for research on cultural images of aging. As found in previous research on how younger people envision their aging futures, their designs reproduced dominant ‘cultural repertories’ of aging (Phoenix, Smith & Sparkes, 2007, p.245). However, the designs do not exclusively focus on the narrative of decline, as they are also attentive to the lived bodily experience of later life, perhaps reflecting an increased awareness of ‘empathic’ design (Imrie & Luck, 2014) and efforts to imbue spaces with vitality and feeling. In contrast to our previous research with practicing architects we found the design narratives by students focussed less on (dys)functional bodies in need of body care, perhaps reflecting the competition context which freed entrants from the constraints associated with implementing real world design (Buse et al., 2017).

Blaikie (1993) urges designers to address a wider spectrum of experiences and images of aging, not only the extremes of frail old age or visions of positive aging accessible to a privileged few. He also calls for creative solutions, encouraging design disciplines to work with sociology to develop more nuanced approaches for engaging users’ perspectives. Such collaborative approaches may enhance the development of user-centred designs (Imrie & Luck, 2014), and are found in the alternative participatory architectures of ‘spatial agency’ pioneered by Awan and her colleagues (2013), where architecture becomes a collective endeavour, attuned to social responsibilities and affordances. Such developments might offer more radical designs for later life with a greater awareness of diversity of bodies and embodiment. Grosz (2001) rightly critiques architectural practitioners for their indifference to the mess of corporeality and diversity, and their failure to engage with sexualised and radicalised bodies. She argues for on-going political engagement where architects should relentlessly question how best to configure spaces, bodies, and their interconnections.

Beyond this a creative dialogue with architectural data (e.g. interviews with practitioners, analysis of design drawings, and observations of working practices) may harbour the potential to be transformative for sociology. Through their shaping of our social worlds, designs prompt us to revisit and rethink concepts of the aging body, care and later life. Architects implicitly and explicitly engage with social life, such that working ‘*with* architecture’ rather than simply undertaking a study ‘*of* architecture’ (Ingold, 2013, p.10) offers much potential for the sociology of later life. It may help to foster creative ways of envisaging later life care in order to challenge the ‘architectural genotype’ (Dovey, 1999, cited in Nord, 2011b) that ‘reproduces organisational restrictions’ and ‘steers the organisation of care’ (p.55); as we have seen, this risks reinforcing the marginalisation of care workers and of embedding notions of ‘frailty’ as an association of later life. Further dialogue between an embodied sociology and architectural practice (Martin et al., 2015) may therefore contribute to a greater understanding of, and potentialities for, lived, embodied experiences of growing old and the cultural and political contexts within which we age.

**References**

Abel, C. (2013). The extended self: tacit knowing and place identity. In R. Bhat (Ed.), *Rethinking Aesthetics: The Role of Body in Design* (pp. 100-140)*.* London: Routledge.

Andersson, J. E. (2015). Architecture and the Swedish welfare state: three architectural competitions that innovated space for dependent and frail older people. *Ageing and Society*, *35*(4), 837-864.

Angus, J., Kontos, P., Dyck, I., McKeever, P., & Poland, B. (2005). The personal significance of home: habitus and the experience of receiving long-term care. *Sociology of Health and Illness*, *27*(2), 161-187.

Awan, N., Schneider, T., & Till, J. (2013). *Spatial agency: other ways of doing architecture*. Routledge.

Bachelard, G. (2014[1958]) *The Poetics of Space*. New York: Penguin Books

Barnes, S. (2002). The design of caring environments and the quality of life of older people. *Ageing and Society*, *22*(6), 775-789.

Barnes, S. (2006). Space, choice and control, and quality of life in care settings for older people. *Environment and Behaviour*, *38*(5), 589-604

Bissell, D. (2008). Comfortable bodies: sedentary affects. *Environment and Planning A*, *40*(7), 1697-1712.

Blaikie, A. (1993). Images of age: a reflexive process. *Applied Ergonomics*, *24*(1), 51-57.

Blaikie, A. (1999). *Ageing and popular culture.* Cambridge: Cambridge University Press.

Blunt, A. & Dowling, R. (2006). *Home*. Oxon: Routledge.

Blythe, M.A., & Wright, P.C. (2006). Pastiche scenarios: fiction as a resource for user centred design. *Interacting with Computers*, *18*(5), 1139–1164.

Bornat, J. (2002). Doing life history research. In A. Jamieson, & C.R. Victor (Eds.), *Researching ageing and later life* (pp. 117-134). Buckingham: Open University Press.

Bornat, J., & Jones, R.L. (2014). Introduction: the future as a topic in ageing research. In J. Bornat, & R.L. Jones (Eds.), *Imagining futures: methodological issues for research into ageing* (pp. 1-11)*.* The representation of older people in ageing research series (13). Centre for Policy on Ageing. Retrieved from: <http://oro.open.ac.uk/43540/1/Imag%20Futures%20intro%20for%20ORO.pdf>

Accessed 27.06.16

Buckley, C., McCormack, B., & Ryan, A. (2014). Valuing narrative in the care of older people: a framework of narrative practice for older adult residential care settings. *Journal of clinical nursing*, *23*(17-18), 2565-2577.

Buse, C. (2009) Online @ home in retirement: Situating computer and internet use within bodies, spaces and biographies. Doctoral Thesis, Available Online at: <http://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.516612>

Buse, C. E. (2010). E-scaping the ageing body? Computer technologies and embodiment in later life. *Ageing & Society*, 30(6), 987-1009.

Buse, C., Nettleton, S., Martin, D., & Twigg, J. (2017). Imagined bodies: architects and their constructions of later life. *Ageing and society*. 37, 7, 1435-1457.

Buse, C., Martin, D., & Nettleton, S. (2018). Conceptualising ‘Materialities of Care’: making visible mundane material culture in health and social care contexts, *Sociology of Health & Illness* special issue "*Materialities of Care'*In Press.

Bolin, G., & Westlund, O. (2009). Mobile generations: the role of mobile technologies in shaping Swedish media generations. *International Journal of Communication*, *3*, 108-124.

Bytheway, B. (2011). *Unmasking age: the significance of age for social research*. Bristol: Policy Press.

Bytheway, B., & Johnson, J. (1998). The sight of age. In S. Nettleton and J. Watson (Eds.), *The body in everyday life* (pp. 243-257)*.* London: Routledge.

Cooper, B. (1994). Long-term care design: current research on the use of colour. *Journal of Healthcare Design*, *6*, 61–67.

Davis, S., Byers, S., Nay, R., & Koch, S. (2009). Guiding design of dementia friendly environments in residential care settings: considering the living experiences. *Dementia*, 8 (2), 185-203.

DWA/RIBA. (2009). *Caring for older people.* RIBA HQ, London [Exhibition]

Edensor, T. (2013). Vital urban materiality and its multiple absences: the building stone of central Manchester. *Cultural Geographies*, 20 (4), 447-465.

EFORTT (Ethical frameworks for telecare technologies for older people at home) Research Team. *Deliverable 7: Final research report*. Lancaster: University of Lancaster. Retrieved from <http://www.lancaster.ac.uk/efortt/documents/Deliverable%207%20Final%20Research%20report.pdf> Accessed 13.05.16.

Ekerdt, D. (1986). The busy ethic: moral continuity between work and retirement. *The Gerontologist*, 26 (3), 239-244.

Featherstone, M., & Hepworth, M. (1991). The mask of ageing and the postmodern lifecourse. In M. Featherstone, M. Hepworth, & B.S. Turner. *The body social process and cultural theory* (pp 371-389)*.* London: Sage.

Fuggle, L. (2013). *Designing interiors for people with dementia.* Stirling: Dementia Services Development Centre.

Giddens, A. (1992). *Modernity and self-identity*. Cambridge: Polity Press.

Gilleard, C., & Higgs, P. (2008). Internet use and the digital divide in the English longitudinal study of ageing. *European Journal of Ageing*, *5*(3), 233-239.

Gilleard, C., & Higgs, P. (2010). Frailty, disability and old age: a reappraisal. *Health* *15*(5), 475-490.

Gilleard, C., & Higgs, P. (2011). Ageing abjection and embodiment in the fourth age. *Journal of Aging Studies*,25 (2), 135-142.

Gilleard, C., & Higgs, P. (2015). The cultural turn in gerontology. In J. Twigg, & W. Martin (Eds.) *Routledge handbook of cultural gerontology*. Abindon: Routledge.

Greenhalgh, T., Wherton, J., Sugarhood, P., Hinder, S., Procter, R., & Stones, R. (2013). What matters to older people with assisted living needs? A phenomenological analysis of the use and non-use of telehealth and telecare. *Social Science & Medicine*,*93*, 86-94.

Grosz, E. (2001). *Architecture from the Outside: Essays on Virtual and Real Space*. Cambridge, Massachusetts: MIT Press.

Gubrium, J. F., & Holstein, J. A. (1999).The nursing home as a discursive anchor for the ageing body. *Ageing and Society*, *19***(**5), 519-38.

Gullette, M. (1997). *Declining to decline: Cultural combat and the politics of the midlife*. Charlottesville, VA: University Press of Virginia.

Hallam, E., & Hockey, J. (2001). *Death, memory and material culture.* Oxford: Berg.

Hockey, J., & James, A. (1993). *Growing up and growing old: Ageing and dependency in the life-course*. London: Sage.

Hofbauer, J. (2000). Bodies in a landscape: on office design and organisation. In J. Hassard, R. Holliday, & H. Wilmott (Eds.), *Body and Organisation* (pp. 166-191). London: Sage.

Hoskins, J. (1998). *Biographical objects: how things tell the stories of people’s lives.* New York: Routledge.

Houdart, S. (2008). Copying, Cutting and Pasting Social Spheres: Computer Designers’ Participation in Architectural Projects. *Science Studies*, 21(1) 47-63.

Imrie, R., & Luck, R. (2014). Designing inclusive environments: rehabilitating the body and the relevance of universal design. *Disability and Rehabilitation*, *36* (16), 1315-1319.

Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture*. London: Routledge.

Jaeger, B. (2005). Introduction. In B. Jaeger (Ed), *Young technologies in old hands: An international view on senior citizens utilization of ICT* (pp. 9-23). Copenhagen: DJOF Publishing.

Jones, O. (2011). Geography, memory and non-representational geographies. *Geography Compass*, *5*(12), 875-885.

Kaufman, S.K. (1986). *The ageless self: sources of meaning in later life*. Wisconsin: University of Wisconsin Press.

Katz, S. (2000). Busy bodies: activity, aging, and the management of everyday life. *Journal of aging studies*, *14*(2), 135-152.

Katz, S., & Laliberte-Rudman, D. (2004). Exemplars of retirement: identity and agency between lifestyle and social movement (pp.45-64). In E. Tulle (Ed.), *Old Age and Agency.* New York: Nova.

Kitwood, T. (1997). *Dementia reconsidered: the person comes first*. Berkshire: Open University Press.

Kouprie, M., & Sleeswijk-Visser, F. (2009). A framework for empathy in design: stepping into an out of the users’ life. *Journal of Engineering Design*, *20*(5), 437-48.

King, A. (Ed.) (1980). *Buildings and society: essays on the social development of the built environment*. London: Routledge.

Kraftl, P. & Adey, P. (2008) Architecture/affect/inhabitation: geographies of being-in buildings, *Annals of the Association of American Geographers* 98: 213–231.

Latimer, J., & Munro, R. (2009). Keeping and dwelling: relational extension, the idea of home, and otherness. *Space and Culture*, 12(3), 317-331.

Latimer, J. (2013). Home care and frail older people: relational extension and the art of dwelling. In C. Ceci, M.E. Purkis, & K. Björnsdóttir (Eds.), *Perspectives on care at home for older people* (pp. 35-61). New York: Routledge.

Lovatt, M. (2018). Becoming at home in residential care for older people: a

material culture perspective. *Sociology of Health and Illness* (forthcoming).

Lucas, S. (2004). The images used to “sell” and represent retirement communities. *The Professional Geographer, 56*(4), 449-459.

Luck, R. (2014). Seeing architecture in action: designing, evoking, and depicting space and form in embodied interaction. *International journal of design creativity and innovation*, *2*(3), 165-181.

Lupton, D. (1995). The embodied computer/user. *Body & Society*, *1*(3-4), 97-112.

May, V. (2016). Belonging from afar: Nostalgia, time and memory. *The Sociological Review*.

Martin, D. (2018). Between bodies and buildings: the place of comfort within

therapeutic spaces. In L. Price, D. McNally, & P. Crang (Eds.), *Geographies of comfort*. London: Routledge.

May, V., & Muir, S. (2015). Everyday belonging and ageing: Place and generational change. *Sociological Research Online*, 20 (1), 8.

McColgan, G. (2004). Images, constructs, theory and method: including the narrative of dementia. In A. Innes, C. Archibald, & C. Murphy (Eds.), *Dementia and social inclusion* (pp.169-183). London: Jessica Kingsley.

McCormack, B., Dewing, J., & McCance, T. (2011). Developing person-centred care: addressing contextual challenges through practice development. *Online Journal of Issues in Nursing*, *16*(2), Manuscript 3. Retrieved from

<http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-16-2011/No2-May-2011/Developing-Person-Centred-Care.html> Accessed 24.06.16

Mallet, S. (2004). Understanding home: a critical review of the literature. *Sociological Review*, *52*(1), 62-89.

Molnár V. (2016). The Power of Things: Material Culture as Political Resource *Qualitative Sociology,* (39) 205-10

Mort, M., Roberts, C., & Callén, B. (2013). Ageing with telecare: care or coercion in austerity? *Sociology of Health & Illness*, *35*, 799–812.

Murphy, K.M. (2014). Imagination as a joint activity: the case of architectural interaction. *Mind, Culture and Activity*, *11*(4), 267-278.

Neikrug, S. M. (2003). Worrying about a frightening old age. *Aging & Mental Health*, *7*(5), 326-333.

Nord, C. (2011a) Architectural space as a moulding factor of care practices and resident privacy in assisted living. *Ageing and Society*, *31*(6), 934-52.

Nord, C. (2011b). Individual care and personal space in assisted living in Sweden. *Health & Place*, *17*(1), 50-56.

Nord, C. (2013). Design according to the law: juridical dimensions of architecture for assisted living in Sweden. *Journal of Housing and the Built Environment*, *28*(1), 147-55.

Martin, D., Nettleton, S., Buse, C., Prior, L., & Twigg, J. (2015). Architecture and health care:: a place for sociology. *Sociology of Health and Illness: A Journal of Medical Sociology*, 37 (7), 1007-1022

Pallasmaa, J. (2014). Space, place and atmosphere. Emotion and peripheral perception in architectural experience. *Lebenswelt*, 4 (1) 230-245.

Phoenix, C., Smith, B., & Sparkes, A.C. (2007). Experiences and expectations of biographical time among young athletes: a life course perspective. *Time and Society*, *16*(2-3), 231-252.

Pickard, S. (2014). Biology as destiny? Rethinking embodiment in ‘deep’old age. *Ageing and Society*, *34*(08), 1279-1291.

Pols J. (2012). *Care at a distance: On the closeness of technology*. Amsterdam: Amsterdam University Press.

Price, C. (1984). *Cedric Price: Works II*. London: Architectural Association.

Prior, L. (1988). The architecture of the hospital: a study of spatial organization and medical knowledge. *British Journal of Sociology*, *39*(1), 86-113.

Prior, L. (2003). *Using documents in social research*. London: Sage.

PRP. (2014). *Integrated by design - housing and care for older people in the UK: current provision and emerging trends: an overview by PRP.* Retrieved from <http://www.housinglin.org.uk/_library/Resources/Housing/Integrated_by_Design_report.pdf> Accessed 23.05.14

Puig de la Bellacasa, M. (2011) Matters of care in technoscience: assembling neglected things. *Social Studies of Science*, *41*(1), 85-106.

Rubenstein, R.L. (1989). The home environments of older people: a description of psychosocial processes. *Journal of Gerontology*, *44*(2), S45-S53.

Shilling, C. (2004). *The body in culture, technology and society*. London: Sage.

Shilling, C. (2013) *The Body and Social Theory.* London: Sage. Third Edition.

Shilling, C. (2016) *The Body*. Oxford University Press.

Schillmeier, M., & Domènech, M. (2009). Care and the art of dwelling: bodies, technologies, and home. *Space and Culture*, *12*(3), 288-291.

Schillmeier, M., & Heinlein, M. (2009). Moving homes: from house to nursing home and the (un-)canniness of being at home. *Space and Culture*, *12*(2), 218-231.

Shaw, R.L., West, K., Hagger, B., & Holland, C.A. (2016). Living well to the end: A phenomenological analysis of life in extra care housing. *Qualitative Studies on Health and Well-being,* 11. Retrieved from <http://dx.doi.org/10.3402/qhw.v11.31100>.

Accessed 27.06.16

Smith, D.V., & Ekerdt, D.J. (2011). Confronting the material convoy in later life. *Sociological Inquiry*, 81(3), 377–391.

Thrift, N. (2009). Different Atmospheres: Of Sloterdijk, China, and Site. *Environment and Planning D: Society and Space*, 27 (1) 119 - 138

Tulle, E. (2008). *Ageing, the body and social change: running in later life.* Basingstoke: Palgrave.

Tulle, E., & Dorrer, N. (2012). Back from the brink: ageing, exercise and health in a small gym. *Ageing and Society*, *32*(7), 1106-1127.

Turner, B. S. (2008) *Body and Society*. London: Sage. Third Edition

Twigg, Julia. “Clothing and Dementia: A Neglected Dimension?” *Journal of Aging Studies* 24: 4 (2010): 223–30.

Twigg, J., Wolkowitz, C., Cohen, R. L., & Nettleton, S. (2011). Conceptualising body work in health and social care. *Sociology of Health and Illness*, *33*(2), 171-188.

Whitfield, A.T.W. and Whelton, J. (2015) The arcane roots of colour psychology, chromotherapy, and colour forecasting, *Color Research and Application*, 40(1), p.99-106.

Wigg, J. M. (2010). Liberating the wanderers: using technology to unlock doors for those living with dementia. *Sociology of Health & Illness*, *32*(2), 288–303.

Ylanne, V., Williams, A., & Wadleigh, P.M. (2009). Ageing well? Older people’s health and well-being as portrayed in UK magazine advertisements. *International Journal of Ageing and Later Life*, *4*(2), 33-62.

Zerubavel, E. (1985). *Hidden rhythms: Schedules and calendars in social life*. University of California Press.

**Acknowledgements:** This research reported here was undertaken as part of a larger study called *Buildings in the Making: A Sociological Exploration of Architecture in the Context of Health and Social Care* funded by the ESRC grant reference: ES/M008398/1. We are grateful to staff at DWA Architecture for facilitating access to the competition submission, and to: Marta González Ruiz; Rachel Witham and Chris Wilkins; Claire Harper and James Perry (HarperPerry); and Jeremy Whall and Wyan Yeung Li-shung for allowing the reproduction of their work in this paper. We are grateful for the constructive comments of the anonymous referees.