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Using non-representational theory to explore older people's travel to and from the supermarket

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ABSTRACT

This article presents non-representational theory as a methodological approach to illuminate the lived experiences of older people's everyday mobilities using the example of travel to and from the supermarket. Previous studies have explored older people's everyday mobilities and highlighted a number of challenges, but few studies address specific journeys, such as grocery shopping, and none empirically engage with non-representational theory. In this article we draw on a qualitative research study with participants over the age of 65 living in the UK as we investigate their journeys to and from the supermarket. We present three vignettes/personas of individuals with differing needs and experiences and find that their grocery shopping journeys are not just about procuring food but also sociomaterial events that both affect, and are affected by, bodily capabilities and mental wellbeing. We conclude with some recommendations for designing older people's local travel experiences and argue for non-representational theory as a method for accessing the socio-material world in which everyday mobilities play out.

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Introduction

This article adopts non-representational theory as a methodological approach to elucidate the lived experiences of older people's everyday mobilities, using the example of travel to and from the supermarket. An important aspect of successful ageing is the ability to remain mobile and engaged with everyday practices such as grocery shopping, social visits, and medical appointments (Schwanen, Banister, and Bowling 2012; Shergold, Lyons, and Hubers 2015; WHO 2007). Recent qualitative studies have explored older people's everyday mobilities in the UK and further afield, but none have done so using the framework of non-representational theory, to the best of our knowledge, although others have begun to adopt more-than-representational methods to other aspects of ageing (see Barron 2019).

Originating from human geography, non-representational theory (NRT) encourages scholars to move beyond representation in order to consider the world as experienced from an embodied state. It is a useful tool for studying older people's mobilities because movement, and the subsequent taking-place of practices, is central to NRT. For that reason it has been used in recent years to explore visibly discernible mobilities such as recreational running (Barnfield 2016; Larsen 2019), and dance (Duffy, Atkinson, and Wood 2019), but it remains under-utilised as an empirical method for more subtle mobilities.

To study older people's everyday mobilities we focus on supermarket shopping as an example of a localised service that many older people frequent. We define 'supermarket' as a large retail store characterised by a wide range of product categories and operated through

a self-service format. Larger stores are usually situated out of town, and although their primary role is grocery retailer, they may provide other services including a café, dry cleaners, currency exchange, and clothing. There has been considerable concern in the UK over the collective power of corporate supermarket brands (Clarke and Banga 2010), with less than 2% of grocery sales taking place through independent grocery stores between 2017 and 2020 (Statistica 2021). Compared to other demographic groups, older people are more likely to shun out-of-town supermarkets and shop locally due to mobility limitations; however, supermarkets still remain the foremost route for procuring groceries (Lesakova 2016; Wills and Dickinson 2016), and therefore provide the focus of our study. Acknowledging the barriers and hindrances to older people's everyday travel as identified in existing studies, such as unsatisfactory public transport and physical hazards in the built environment (Musselwhite, Holland, and Walker 2015; Ziegler and Schwanen 2011), this article investigates the mobility experiences of seniors connected to the mundane but vital practice of grocery shopping as a case study for everyday mobilities.

This article begins by situating the study within the extant literature on older people's everyday travel needs and age-friendly travel policy. Following this we introduce the theoretical framework of non-representational theory, charting its use within mobilities research to date. Next comes the description of our qualitative methodology and approach to data analysis. We then present our findings as three vignettes that illuminate the journey-making experiences of three individuals who travel to the supermarket in different ways. By focusing on just three examples, we are able to take a narrative approach that addresses the vitality and multiplicity of what could otherwise be considered an inconsequential, ordinary practice. This leads into a discussion where we situate our findings explicitly within a non-representational epistemology, before presenting some recommendations and implications arising from the study.

Older people's everyday travel experiences: policy and practice

The global trend of increased lifespans and declining fertility has produced an ageing population in many countries, including the UK (ONS 2019.). The natural ageing process brings with it a range of physiological changes that impact on mobility (Shrestha et al. 2017). Within the context of ageing, the preservation of independence, wellbeing, and social engagement is closely related to mobility (Graham et al. 2018; Meijering 2019). Mobility can be defined as the physical movement within and between places that leads to mobility patterns (common configurations of journey making) and mobility experiences (individual, embodied practices) (Meijering 2019). At the individual level, mobility is associated with psychosocial effects such as autonomy and freedom on the one hand, and isolation and loneliness on the other (Mollenkopf et al. 2004; Musselwhite, Holland, and Walker 2015; Musselwhite and Scott 2019). In addition, active mobility (walking, cycling) is medically proven to promote physical and cognitive health (Kelly, Murphy, and Mutrie 2017; NICE 2012). Therefore, understanding the mobility and transport needs of the ageing population has become a significant area of interest (Luiu, Miles, and Michael 2017).

Metz (2000) proposed five interlinked factors we can use to study and describe the mobility needs of seniors: 1) accessibility to desired people and places; 2) health benefits of movement; 3) psychological benefits of movement; 4) benefits of social engagement in the local community; 5) benefits from potential travels. We could categorise access to a grocery store as a 'serious need', as opposed to a 'discretionary' need (Siren et al. 2015); and primarily a 'practical need', as opposed to a 'social' or 'aesthetic' need (Musselwhite and Haddad 2010). That said, there are psychosocial benefits of participating in everyday retail spaces, where these spaces facilitate social interaction and community building (Watson and Studdert 2006; Stjernborg, Wretstrand, and Tesfahuney 2015). Despite the development of these typologies of need, much of the scholarship on older people's outdoor mobility experiences has not specified a particular journey in their methodology. Therefore we still have relatively little knowledge on different types of journeys, for example, social travel versus travel for errands, and whether these have varying implications.

When Stjernborg, Wretstrand, and Tesfahuney (2015) conducted a longitudinal study of one older couple's mobility experiences in the Swedish suburb in which they lived, they found that in one seven-day period, the couple visited a grocery store every day. The couple in question travelled by car to an out-of-town grocery store, thus demonstrating how the ability to drive facilitates easier access to services. They preferred this because buses were inconvenient, and as they aged, the woman could no longer walk to the bus stop because her physical mobility severely declined. This reflects research in retail geography that has found that store location is an important factor in where consumers choose to shop (Wrigly and Lowe 2002). With the shift, therefore, from local high street shopping, to shopping in supermarkets largely situated in out of town centres, marginalised groups (including the elderly) are excluded from exercising the consumer choice mobilised by others (Leighton and Seaman 1997; Musselwhite and Scott 2019; Wrigly and Lowe 2002; Wills and Dickinson 2016).

In relation to mobility barriers, Musselwhite and Scott (2019) argue that 'infrastructure capital' is the most significant factor influencing the extent to which older people can fulfil their travel needs. Infrastructure capital refers to the accessibility of travel to the individual, in terms of service provision, maintenance of the local built environment, and the financial costs of travel. For example, despite walking being a free and healthy form of travel, studies have found that poor provision of safe and well-maintained pavements can impede an older person's journey on foot (Michael, Green, and Farquhar 2006; Stafford and Baldwin 2018), and even lead to them not going out at all (Stjernborg, Wretstrand, and Tesfahuney 2015). In rural areas, where transport infrastructure is weaker, social networks play a key role in the mobilities of older people, either through informal support from others (family, friends, neighbours), or community services like volunteer-led minibuses schemes (Shergold, Parkhurst, and Musselwhite 2012; Shergold and Parkhurst 2012).

Many transport challenges need to be addressed and managed at the local level, yet since 2010 the UK government has invested most heavily in large infrastructure projects and cut local level budgets (Holly-Moore and Creighton 2015; Graham et al. 2018). There has been a roughly 40% cut in rural bus services and community transport schemes, for example (Graham et al. 2018).

Mobility challenges are not limited to rural populations however. Research by the World Health Organisation (WHO 2007) for the report 'Global Age-friendly Cities: a Guide' highlights various global concerns facing the urban-dwelling older population. This includes accessibility of the built environment, accessibility of services, personal safety, ageing-friendly vehicles, and availability, reliability, and affordability of public transport. Musselwhite (2018) argues that age-friendly travel policies must be considered in a holistic manner, taking account of individual mobility (walking, cycling, driving), followed by public transport; all bolstered by age-friendly planning and policy. Yet, in order to achieve this, policies must recognise the heterogeneity of older people's lives (Hjorthol 2013; Shrestha et al. 2017).

In a review of the literature on unmet travel needs of the ageing population, Hall and Winton (2017, 500) state that age, gender, income and education 'do not appear to be significant in several studies', but this may be, as noted by another review article (Graham et al. 2018), due to relatively few studies outlining the sociodemographic characteristics of their study sample. The oldest old are often found to have more challenges with travel and mobility, but as the authors state, this is due to deteriorating physical and mental health, rather than age per se. Income and class may be correlated with travel needs, as Nordbakke and Schwanen (2015) note that older people on lower incomes make fewer and shorter journeys compared to others. They are also less likely to own and drive a car and therefore experience less flexibility in their travel patterns (Moniruzzaman et al. 2015). Because we cannot assume that older people's travel experiences are homogenous, further research that explores these experiences on an affective and emotional level is critical (Meijering 2019; Shergold, Lyons, and Hubers 2015). We respond to this call in our article by demonstrating how non-representational theory can be used to explore the nuances of these everyday mobilities.

Theoretical framework: Non-representational theory (NRT)

The mobilities turn coincided with an expansion in more-than-representational methods. Schwanen, Banister, and Bowling (2012), for example, drew on actor-network theory (ANT) to explore the relationship between independence and mobility in late life through in-depth interviews with adults over the age of 70 in the UK. ANT shares many characteristics with non-representational theory (NRT), namely that agency is the outcome of association; people can act only through their engagement with other people and other things (Latour 1996). Schwanen, Banister, and Bowling (2012, 1314) found ANT to be a fruitful framework for exploring independence because it shifted ‘attention away from attempts to stabilize its meanings towards the *processes* through which independence emerges and evolves’ (authors’ emphasis).

NRT emerged from human geography in the 1990s as ‘a style of engagement with the world that aims to attend to and intervene in the *taking-place* of practices’ (authors’ emphasis) (Gregory et al. 2009, 503). Evolving predominantly from the work of Nigel Thrift (1996, 2008) and his research students, NRT is less a theory per se, than a school of thought challenging social constructivism (some prefer non-representational theories). According to NRT, subjects can only know about the world from particular socio-material contexts, in which spaces and timescapes are practiced, embodied, and lived (Cadman 2009). Lorimer (2005, 84) provides a lively definition of NRT as,

how life takes shape and gains expression in shared experiences, everyday routines, fleeting encounters, embodied movements, precognitive triggers, practical skills, affective intensities, enduring urges, unexceptional interactions and sensuous dispositions ... which escape from the established academic habit of striving to uncover meanings and values that apparently await our discovery, interpretation, judgment and ultimate representation.

In particular, NRT attends to mundane practices ‘that shape the conduct of human beings towards others and themselves in particular sites’ (Thrift 1997, 127). In doing so, it assumes that mundane practices play a vital role in our everyday experiences, and as such, our lives. Practices are thus co-produced through encounter (Whatmore 2002) as part of an assemblage of human and non-human parts (Deleuze and Guattari 1993). These assemblages of human and non-human actants then produce particular trans-affective states that can be experienced by individuals and help us understand the feelings associated with space and mobility (Andrews 2014).

NRT and mobilities studies are natural bedfellows. A heightened attention to embodied practice enables scholars to consider the differing and complex ways in which people experience place as an assemblage of socio-material processes; process being ‘how things come to be and make their presence felt in the world’ (Greenhough 2010, 38). NRT has been applied to health and wellbeing (Andrews 2014; Andrews, Chen, and Myers 2014), and to corporal analyses of movement, including running (Barnfield 2016; Larsen 2019), dance (Duffy, Atkinson, and Wood 2019) and disability (Hall and Winton 2017). Although the geography of ageing has been entered into arguments for NRT (see Andrews and Grenier 2015), there is a significant gap in empirical studies that apply NRT to analyses of older people’s mobilities. This article therefore does two things: 1) we demonstrate the use of NRT for exploring older people’s mobility experiences, and 2) we add to the empirical gap in understanding older people’s travel to and from the supermarket in the UK.

Methodology

Research design

Scholars of various stripe have explored older people’s grocery shopping experiences (Lesakova 2016; Meneely, Strugnell, and Burns 2009; Myers and Lumbers 2008; Yin, Pei, and Ranchhod 2013), but none have, to date, taken a comprehensive look at the whole shopping journey. This is what we sought to do as part of a wider Economic and Social Research Council funded project that explored supermarket service design for older people in the UK and China.

Mobilities studies have been fundamental in developing and promoting mobile methods (Büscher, Sheller, and Tyfield 2016). Researchers have also experimented with socio-material methods that attempt to illuminate embodied experiences of ageing in place, including, walk-along participant interviews (Barron 2019), photovoice (see Mysyuk and Huisman 2019 for a review) and participatory co-design methods (Bindels et al. 2014). We were tasked with developing a method that supports the ethos of NRT and enabled us to capture authentic experience, without burdening the participants with too much complexity. We settled on a mixed-method approach of filmed participant observation of the shopping journey followed by interviews in which we reviewed the video with the participant.

Participants were fully briefed either over the telephone or in person before agreeing to take part in the study. Participants were then visited a further two to three times over an eight-week period by a member of the research team. A background interview was conducted on the first visit to the participant's home. Lasting anything from 15 to 35 minutes, this focused on lifestyle, health, eating and shopping habits. Following this, the researcher then observed and filmed a typical journey for the participant to and from the supermarket. A Go-Pro camera was attached to the researcher's chest and used to document the journey from the point of preparing to leave the house and returning home again. The participant was asked to ignore the researcher and continue their normal practice; so for example, if the participant normally drove to the store then we got in their car with them (still filming), or if they travelled by bus, we too travelled by bus. Typical trips lasted between 45 and 100 minutes.

After returning home (and usually after a tea break) we reviewed the video with the participant and interviewed the participant for a second time. We adopted this approach rather than 'walk-along' interviews because we wanted to observe the older person's interactions with their surroundings, capturing their body movements and the environment on film as it unfolded around them. We did find, however, that some participants wanted to talk to us at various points on the journey, to describe their practices as they went along, and we did not stop them from doing so when this was the case. This process was repeated for a second shopping journey approximately three weeks later.

Study sample

The study ran with 30 participants aged 65 and over, residing in the UK. They were based in one of three regions identified through Office for National Statistics (2011) data as having a higher than average proportion of people aged over 65 years, and represented the South, Midlands and North of England, as well as rural and suburban places. These areas were a rural town in Northumberland, a city in Shropshire, and coastal town in Dorset. The project ran with the support of a leading UK supermarket who granted access to their stores for fieldwork and provided a £50 voucher incentive to each participant.¹ The incentive was also motivated by the fact that we were asking participants to go and buy things at the store in order to complete the observation. Ethical approval was obtained through the University of Southampton (Ref: 8177) and for filming within the store notices were fixed to the store entrance to inform other shoppers. One supermarket was used for filming in Northumberland and two were visited in both Shropshire and Dorset – a larger, out-of-town store and a smaller residential/town centre store. This diversified the range of journeys we could explore, but it is important to note that we did instruct the participants to visit these designated stores, and although they did discuss other retail spaces that they frequented to access groceries (such as outdoor markets, butchers or bakers), a dedicated exploration of these practices was beyond the scope of our study.

Participants were recruited through mixed means including networking with local charities, churches, charity shops (where older people volunteered) and libraries. Four participants were recruited directly through the supermarket as a last resort to boost participant numbers, either by an advert on the store noticeboard or by direct approach from one of the researchers. Participants had to be normally capable of doing their own grocery shopping and therefore

we did, by design, not include the frailest elderly (those who wouldn't normally shop for themselves). We also only recruited participants who would normally visit a supermarket at least once a month. This did therefore limit our sample to older people who already used supermarkets as part of their food provisioning practices. In total, 19 women and 11 men participated. Ten were aged 65–69, eleven were 70–74, and nine were 75 years or above, with the eldest participant being 90 years old. All were white British. We did not collect data on income. 16 participants self-described their health as 'good', five 'very good', seven 'fair', and 2 'bad'. Their family situations varied but most (20) participants were in heterosexual marriages, one was separated/single, and nine were widowed. One participant had her teenage granddaughter living with her and her husband. Even when a married woman took part in the study, there were some journeys where the husband joined us on the trip and/or for part of the interview. In one instance, both the wife and husband from the same household took part in the study as two separate participants.

Data analysis

We were left with more than 50 shopping journey audio-visual files and the separate corresponding audio recorded interviews, in addition to an initial 30 briefing interviews in which we asked participants contextual questions about their lifestyle, health and relevant biographic information. All recorded interviews were transcribed in full. For the interview transcripts, we followed the framework for thematic analysis presented by King and Horrocks (2010). Using Nvivo software to digitally code, we started by applying descriptive codes to categorise different parts of the journey, such as 'home' and 'travel by car'. Under the parent nodes, we started a second round of coding focused on identifying issues in the participant's journey. Examples of these codes are 'parking bay too narrow' and 'difficulty carrying heavy bags'. The aim was to capture practical issues that were evidenced in the video file and/or interview as well as the participant's self-reported emotions towards those issues. The audio-visual files were analysed separately, applying a similar strategy of interpretative thematic coding to identify issues, which we captured as screenshot stills, and added to the NVivo codes in the same way. This enabled a form of triangulation between what was said on the interview, and what was visible in the video data.

For the purposes of this article, we chose to then return to the stories of individuals to present key findings. We can call these stories vignettes or personas. Whilst the vignette approach in research formally corresponds to the use of individual narratives as interview stimuli (i.e. as method) (Sampson and Johannessen 2020), the term also responds to a narrative form of presenting data. It can be argued that vignettes only represent a selected snapshot of data and fail to demonstrate the frequency of shared experiences (Hughes 1998). Despite this limitation, we follow the view that vignettes offer researchers the opportunity to 'manage the complexity' of sociomaterial experiences by 'isolating' certain stories that do, when reproduced with care, shed light on shared experiences (Barter and Renold 2000, 312). Three individuals were selected based on the frequency of issues identified in their travel experiences, i.e. we have deliberately included those who experienced more mobility problems, as evidenced through the data we collected. We balanced this with exploring a range of travel modes: mobility scooter; on foot; bus; and car. By focusing on the challenges, we have thus excluded participants whose journeys were relatively unburdened, i.e. the fit and well who often drove to the supermarket and completed their shopping with ease. However, following the philosophy of inclusive or universal design, if we design services and products for the most extreme user needs, then those services and products still fulfil average user needs without discriminating (Newell et al. 2011). Working from an interdisciplinary design perspective, as we the authors do, vignettes or personas are often used as a tool to identify and humanise user needs (Siddall et al. 2011). From that perspective, and complimenting the NRT epistemology, we chose this approach in order to 'bring to life' the participants' experiences.

Findings

This next section presents the stories of three individuals who provide differing accounts of their shopping journeys but are nonetheless illustrative of the key challenges we identified. Pseudonyms are used for all three participants and the participants authorised the publication of the image stills.

Maggie

Three of our participants used a mobility scooter for at least one of their shopping trips during our study. While two were only using scooters temporarily, Maggie had been confined to a wheelchair for a number of years. Maggie, a female in her late 60s, was diagnosed with Multiple Sclerosis (MS) forty years previously and had to take early retirement fifteen years later. MS is a condition that affects an individual's brain and spinal cord. Maggie therefore has a chronic disability distinct from natural ageing, but her story illuminates those of others who use mobility aids in later life.

Maggie has two adult children and lives with her second husband, Malcolm, in a detached bungalow in the South East of England. Malcolm also lives with MS but the condition affects the two in different ways, leading Maggie to explain, 'what I can't do, Malcolm can. We're quite happy as long as we can do what we want to do.' Maggie has poor dexterity, whereas Malcolm lives with poor eyesight. Maggie also lacks the strength to stand unaided most days so relies on a mobility scooter both in and outside the home. Despite Maggie's mobility problems she says that she enjoys grocery shopping and visits the local supermarket at least once a week, often more. Maggie explains:

I enjoy my shopping. I like the supermarket because you have food, clothes, homeware, cards, everything. You don't need to go any further and we consider it a privilege to have it on our doorstep.

Maggie's local supermarket is very close to her home, separated only by a busy dual carriageway. In this sense the store feels further than it is, not least because Maggie travels there in her mobility scooter and has to cross the road over a footbridge. For Maggie, access to a supermarket that 'has everything' supports her mission to remain independent because she can access the various things she may need or want (she specifically mentioned birthday cards and a new kitchen kettle). That said, a visit to the supermarket is not without its difficulties. While we may consider grocery shopping an everyday, mundane activity, for Maggie it is an event.

Maggie's shopping journey from home to store incorporates three mobility scooters. Starting in her domestic scooter at home, Maggie prepares herself for the trip by changing her shoes, adding a jacket and picking up her shopping list, bottled water, and handbag. She then travels to the back door where she lifts herself into a second scooter that carries her from home to a garage at the side of the house. Inside the garage Maggie lifts herself into a third scooter, a bulkier but more powerful scooter, that Maggie explains provides a faster, safer way to get her to the supermarket:

Interviewer: Do you feel safe in the scooter?

Maggie: I do! Yes. I feel quite, I mean I have used it for years so, I have got used to it like ... yes I do, I feel confident. I know lots of people in scooters hate the bridge but it doesn't bother me.

I'm always a little bit wary when I go past those bollards, not bollards, the rails there that one day, somebody might just lose the steering and come over. And that, that's something that's bothered me but, no, generally.

In the above extract (see [Figure 1](#)) Maggie describes both human and non-human actors as part of her journeying experience. There is the scooter, the bridge, the railings and the 'somebody' in the cars on the road. Like Maggie in her scooter, the arrangement of people inside their cars on the road, shifts what could be two discrete subjects (the person and the car) into one new whole. It is this particular assemblage that concerns Maggie – a person 'losing' control of their vehicle, mounting the railings and hitting Maggie in her scooter. A parked car, or a person without a car, would not produce the same affect. Instead it is the specific socio-material arrangement of a person inside a moving car that causes fear. We could consider Maggie and her scooter a similar socio-material force, whereby her body cannot



Figure 1. Maggie travelling on the pavement next to roadside barriers in her mobility scooter.

achieve a trip to the supermarket without the help of her scooter, nor could her scooter go to the shops alone.

For Maggie, these socio-material assemblages can produce particular affective states. Although Maggie stated that she enjoyed grocery shopping, she only enjoys it in particular circumstances. In-store, she describes how she can feel 'in the way' of other people due to her scooter. For this reason she has adapted her shopping routine to go early in the morning before the store is busy: 'On Saturday morning I'm there before 7:30.' Shopping with the researcher late morning on a weekday, Maggie said:

It's busier than usual, I don't like it, I don't enjoy it at all. You have to concentrate so hard ... Easter is coming up, it will be absolutely impossible for me to get in there (the supermarket) near Easter unless you want to have a nervous breakdown. Too busy, too many children, it just makes it very hard work.

Maggie's difficulties in-store are clearly visible in the filmed observation as she has to manoeuvre around people and objects and wait patiently for space to be made. Observation alone though cannot illuminate the way in which Maggie is feeling nor capture the 'energy' of the store. We return to this discussion later in the article.

As part of Maggie's socio-material assemblage she wears a high-visibility yellow jacket. This helps her feel more confident on the roads and in busy places:

I wear it so that I'm visible because people do not tend to see you. I mean, it's silly, I know. I mean one lady (in the supermarket today). I was, I was going forward and she said, "Oh, sorry! I didn't see you!"

The contrast between the feeling of invisibility against the feeling of being 'in the way' points to the fluidity of the environment and shifting transpersonal sensations. Sometimes Maggie feels like she stands out awkwardly, other times she feels invisible. Both constructs suggest that Maggie is hyper-aware of her own embodied state and the way in which she interacts with those around her.

When Maggie cannot easily get to the supermarket, or wants to buy bulky or heavy items, she shops online and has her order delivered to her home. It could be argued that Maggie could save herself a lot of time and energy by doing all of her shopping online but she goes to the store because it is a practice she associates with independence:

We want to remain independent for as long as possible. And retain our dignity and privacy for as long as possible because it's something that's very easily lost.

John

John is a 75 year-old male. A widower with no children, he lives alone in a small flat in a town in Northumberland. He used to be a 'wagon' driver but no longer owns a vehicle, preferring to walk or use public transport. Similarly to Maggie, grocery shopping for John is something of an event, albeit a routine one. John's approach to grocery shopping is very organised and follows the same pattern every week. He is on a limited budget and was anxious about over-spending at the supermarket; this was exacerbated by his self-doubt over his numeracy skills and concerns he might be 'caught short' at the checkout. He shops three times a week, on weekday mornings, buying small quantities of food to last him a couple of days. One of the reasons for John's frequent supermarket trips becomes apparent when he discusses his journey to the store:

Interviewer: Why is it that you walk to the store?

John: Well about 50 years ago I broke my femur, and in the old hospital he told me if you take plenty of exercise you'll have no trouble with your leg. I've walked ever since then. I've walked for miles and miles. I don't walk now as much as I used to, I used to walk for miles, and that's why I walk along there.

John uses the everyday act of grocery shopping as part of a purposeful mobilities project. He heeds advice given fifty years ago and this shapes his everyday routine in the present. His walk to the store takes at least half an hour, and sometimes he stops on route to take a friend's dog out on a further thirty-minute walk. In addition, John met a number of friends and acquaintances on the trip we observed:

Interviewer: I noticed you met quite a few people along the way today; they all seemed to know you?

John: I always meet a lot of people aye.

Interviewer: And you didn't stop to talk to any of them, would you normally stop?

John: I would normally stop and talk to that lass (referring to woman captured on video). She'll be wondering why I didn't stop. She's the lady I usually meet on a Sunday morning and go for coffee together.

Unlike traveling by car, or even bus, walking to the store ensures that John is out in the community, taking an active role in the social life of the town. He expects to meet people whom he knows during his grocery shopping trips, saying later that he's 'an offender' for blocking aisles 'because if I meet somebody else I'll stop and have a talk'. Or, 'I'd say to them, or they'd say to me do you want to go for a cup of coffee?' Although claims that grocery shopping provides an active source of socialisation for seniors could be seen to unfairly typecast older people, in John's case it is true that he relies on this trice-weekly excursion to facilitate social contact. Because John does not experience the same mobility challenges as Maggie, he is able to enjoy the trip as a leisure activity.

That said, John's shopping trips are not without perceived risk. When we asked John about his sense of safety walking to the store, he raised concerns around both the pavements and crossing roads:

John: I'm very careful with the pavements because some of those pavement slabs are sometimes up and you catch your feet on it, in fact I caught my foot on one.

Interviewer: So do you look down a lot?

John: I look down, I always make sure, that's my biggest fear is falling because being elderly my bones are more brittle you see. I would hate to break my bones again.

John is once again referring to his historic leg injury, where he broke his femur when he fell out of a truck at work. Despite spending much of the interview emphasising his physical abilities (he said he was not tired from the walk and did not experience physical difficulties in the store), John describes himself as elderly here. However during his background interview, John says, 'I don't feel 75, I feel about 50 ... I feel pretty young, the only time where I feel old is from getting out of bed'. Yet here, the

fear of falling and injuring himself makes John feel 'elderly' and vulnerable. It is the material world, in this case the pavement, which creates a threat for John and produces fearful affects that he does not necessarily experience in other contexts.

John has a similar reaction on the bus. Although he travels to the store on foot, he relies on the bus for his return journey because 'I couldn't carry that (shopping), it's a long walk. I have done it before, but I've had to stop several times.' Returning by bus is part of John's regular routine (see [Figure 2](#)). On the occasion we observed, the bus was quite busy and John had to migrate to the back of the bus in order to get a seat. This involved negotiating the internal steps, not to a top deck but to a higher level on the single deck bus:

John: I'm not keen on them steps, I had to step up because there were only seats higher up.

Interviewer: And they're a bit too high are they?

John: I'm always wary of them sometimes in case I forget there's a step there, I'll maybe fall. I think it is, I was frightened I'd forget it's there. I never usually go as far back as that, I usually just sit on those seats where the well is. There were people sitting there today.

Again, we see how the fear of falling affects John's journey. He questions his ability to remember or notice the step, which, perhaps like the pavement, he considers an inconspicuous threat within his environment.

Henry

At 90 years' old, Henry was the oldest of our participants. Another widower, he spoke of his late wife fondly. Henry had spent his career as a gas engineer in the North of England where he still lived. He lives on a fairly busy road outside the town in a detached house with a large garden. He relied entirely on his car to get around, including to the supermarket. Although he no longer plays golf, a pastime he enjoyed for 30 years of his later life, he keeps active by tending to the house and garden and enjoying a social game of bridge.

Henry showed signs of cognitive decline through his forgetfulness; on one of the research trips he left his home unlocked and forgot to take his house key out with him. On the second trip, he forgot his shopping (paid for and bagged) and the cashier had to return it to him. Henry seems aware of his cognitive limitations and this influences his movements. For example, when discussing why he



Figure 2. John queuing to board the bus on his return journey from the supermarket.



Figure 3. Henry walking across the supermarket car park.

parked his car in a particular part of the supermarket car park, Henry explains, 'That's why I park by the crossing. I deliberately park there, just in case I'm not alert.' Parking near the pedestrian crossing enables Henry to feel he can more safely cross the road to reach the supermarket (see [Figure 3](#)).

Henry also parks at the furthest end of the car park because he finds it easy to park. He likes to park so that there is space around his car and he doesn't feel limited by the proximity of other parked cars, 'because I like to put my shopping in the passenger seat so it's easier if I can get the door open'. This requires a longer walk to the store, but Henry frames this in a positive way by presenting it as an opportunity for 'a bit of exercise'. He says, 'that bit doesn't worry me, it's just the fresh air in the lungs'.

Henry expresses disbelief on seeing himself on the video recording. Noticing his bodily posture and movement, Henry tries to make sense of the man he sees on film:

Henry: I seem to be walking a bit stooped there, I think that's my back starting to give way a bit.

Interviewer: I imagine its quite strange seeing yourself walking away.

Henry: Yes, that's not me really surely? I think I'm getting stooped in my walk. I was always straight but you can see it there. I think it's the wind.

During Henry's first interview he described himself as 'more like a 70 year old' than a 90 year old. He doesn't see himself as a particularly old or frail man; therefore seeing himself as an old man on screen did have an affect on Henry. The man on screen is not the man he recognises as himself, and so he tries to find a reason for this discrepancy by blaming his stooped frame on the force of 'the wind'. It was indeed windy that day, as the researcher too cowered against it.

Despite Henry's age-related impairments, he talks more positively about his environment than Maggie or John. His common answer to questions related to the navigation of steps, doors, and other cars, is 'no problem', but the observational data does demonstrate short-term memory and self-awareness limitations, which Henry downplays.

Discussion

These three stories do not attempt to provide a comprehensive account of older people's everyday mobilities. Instead, we have selected three different stories that present the vitality of journey-making and illuminate the kinds of socio-material assemblages that facilitate everyday mobilities. It just so happened that by focusing on needs and challenges, two of the individuals

that provided the liveliest stories were widowed men. This was not representative of the demographic of our participants overall and highlights the need for more research with this user group, many of whom find themselves responsible for household provisioning for the first time in their lives after the death of a lifelong partner. To demonstrate the usefulness of NRT here, we draw on Andrews, Chen, and Myers (2014) ten defining characteristics of NRT. These are: onflow; relational materialism; transpersonal sensations; practice and performance; vitality; virtuality and multiplicity; everyday; wonderment; witnessing, changing, boosting; and, diverse and lively theory.

We have stayed close to Thrift's original ideas of NRT in this article, but others may wish to adopt it as one method in a broader pool of non-representational approaches. By applying NRT to super-market shopping mobilities as an 'everyday' practice we were encouraged to approach the study with a sense of 'wonderment', looking at the mundane detail of everyday practices that would normally be overlooked or taken for granted. Our methodology enabled us, the researchers, to 'witness', but also to participate in, the everyday lives of the older people. We got the bus with them, talked to them whilst they unpacked their shopping, and listened to stories about their family, friends, and favourite meals through both formal interviews and 'off the record' conversations. The video data enabled us to re-visit these shopping journeys with the participant to consider how mobility is enacted through routine practice. We learnt that older people's shopping mobilities may be habitual, but they are not passive. They are often carefully considered practices shaped by access to transport, the weather, bodily sensations and abilities on any one-day, social practices, exercise routines, temporal rhythms, other strangers, and the landscape. The grocery shopping journey, as a specific routine of mobility, is also influenced by the purchases older people make, as John adapted his return journey to accommodate for carrying heavy bags. NRT enabled us to explore the subtleties of these everyday practices.

Maggie's story provides a particularly good case for considering 'onflow', 'relational materialism' and 'transpersonal sensations' as we learnt how her experiences shifted depending on her position within the environment and the nature of others around her. When asked how she felt in her scooter, Maggie said she felt 'confident', but the interview demonstrates the fragility of this feeling when 'relational materialism' and the resultant 'transpersonal sensations' come into play. Home, the outdoors, and the supermarket, all produce different transpersonal sensations due to the relational affects of human and non-human others. We learnt how the relational materialism of passing cars produced an affective fear for example, disrupting Maggie's natural confidence and comfort. It also became clear that Maggie's enjoyment of shopping was restricted to her regular early-morning trips. When the research trip forced Maggie to shop later in the day, she was jolted into a different time-space and this caused Maggie distress.

Maggie's physical difficulties in-store are clearly visible in the filmed observation as she has to manoeuvre around people and objects and wait patiently for space to be made. Observation alone though cannot capture the energy or 'affect' of the store. Maggie, the researcher, and everyone else in the supermarket are working from individual embodied states but linked through 'affect'. Whilst emotional states are confined to the internal sphere of the bodily, affects are fluid, temporal, and not constrained within the embodied subject (Bissell 2010). The affective state of the supermarket created a tension through its 'busy' activities. We know that this feeling was not restricted to Maggie alone, as the researcher felt a kind of tension too, with similar feelings of discomfort from perceiving ourselves as being 'in the way' of other shoppers.

Furthermore, the video interviews enabled us to focus on 'practice and performance' as opposed to structuring an interview protocol around reported behaviours and motivations. Sometimes this unnerved the participants, such as Henry's discomfort at viewing his ageing body on screen, but in general they took to the method very well. The interviews also allowed us to illuminate some of what couldn't be immediately seen on screen. For example, the concept of 'virtuality' draws attention to the non-fixed nature of the present. John's fear of falling and breaking a bone is produced from his previous injury (some fifty years ago), and the knowledge that bone density weakens with age.

Although John still climbs the steps on the bus, it does alter his affective experience and the vitality of that moment in time.

Implications

NRT illuminates the lived mobilities of older people as they come to be through more-than-human entanglements of the body, practices and affects. Hall and Winton (2017, 736) work on the relational geographies of disability are also helpful for understanding Maggie's experience, when they say 'bodies are capable of action only to the extent that they enter into relations with other non-human bodies'. This is the case for Maggie, whose visit to the supermarket would not be possible without the support of her scooter. It is also the case for other older people in our study who relied on walking aids (including bearing weight on a shopping trolley) and public and private transport in order to do their shopping. Where we might design products and services for precise practices, this article demonstrates that these practices (even something mundane, such as grocery shopping) are not fixed but rather are forever shifting. This has implications for the design of the places in which older people live so that older people are able to move around freely and without unnecessary fear. It is difficult, nigh impossible, to capture these transpersonal affects through traditional research methods such as surveys and focus groups.

Mobility is fundamental to older people's independence, wellbeing, and social engagement (Meijering 2019). We see all three of these things highlighted in the stories in this article, where Maggie explicitly states that her independence is important to her, and John uses his walk to the supermarket as an opportunity to exercise and to participate in community life. This independence is important for older people's wellbeing, and although some participants, including Maggie, did supplement their grocery shopping with online deliveries, our study suggests that grocery shopping itself provides an opportunity to be mobile, active and engaged in everyday practices of living, and that this is important to older people's life worlds. If these journeys are hindered by poor public transport and poorly maintained urban infrastructure, older people's mobility options are impeded and as such so is their independence and wellbeing.

Considering the growth of online shopping, it is tempting to present this to older or less-mobile people as a way of procuring groceries more easily. Yet, our study shows that older people want to visit a physical store, albeit on their own terms, even if they supplement those trips with online grocery deliveries for bulkier or heavier items that are very difficult to transport without a car. Therefore, rather than creating means and methods for older people to simply have shopping delivered to them, policy makers, charities, and service providers should consider methods to support older people's access to retail spaces. This could be a dedicated minibus service for out-of-town supermarkets (many of which are already run in the UK by charities and volunteers), improved or protected council bus routes, and dedicated assistance in-store, for example a 'slow lane' checkout and a greater consideration for wheelchair accessibility.

Beyond the supermarket, this article has reinforced issues found by previous studies that influence older people's mobility experiences out and about. For example, fear of crossing traffic, accessibility of buses, and pedestrian trip hazards in the built environment (Michael, Green, and Farquhar 2006; Stafford and Baldwin 2018). We have highlighted how these physical environments affect people's practices and their affective state, in turn, having an impact on their mental wellbeing. The process of designing age-friendly spaces and services can benefit from in-depth, user research that looks at mobility processes and practices through a sociomaterial, non-representational lens.

Conclusion

This article achieves two things: 1) we demonstrate the use of non-representational theory for bringing to life older people's mobility experiences; and 2) we add to the empirical gap in

understanding older people's everyday travel to and from the supermarket in the UK. Far from being a trivial practice, being able to shop for groceries is vital to experiences of ageing well. As an example of an everyday mobilities project, doing ones' own grocery shopping promotes positive wellbeing, community engagement, and independence. In this article we have presented qualitative research from the north and south of England that provides the first in-depth investigation of the older person's complete shopping journey, from the point at which they prepare to leave their home and returning back home again. We used filmed participant observation and interviews in an attempt to capture the lived experiences of older people's shopping mobilities drawing on the theoretical framework of non-representational theory. In doing so we highlight examples of where bodies, material things, and the built environment, seem to work against older people, and where particular socio-material assemblages produce an affective discomfort or fear. An understanding of the corporeal strains that influence older people's embodied experience of grocery shopping, as an everyday mundane practice, has significance in extending the independence and wellbeing of the older generation. We conclude by arguing for the protection of services and environments that support older people's personal mobilities connected to grocery shopping, in an age where online alternatives are becoming the norm.

Note

1. A further £50 was provided to those who participated in an aligned study that required participants to keep a diary and carry out supermarket inspections. This study is not covered by the scope of this article.

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References

- Andrews, G. 2014. "Co-creating Health's Lively, Moving Frontiers: Brief Observations on the Facets and Possibilities of Non-Representational Theory." *Health & Place* 30: 165–170. doi:10.1016/j.healthplace.2014.09.002.
- Andrews, G., and A. Grenier. 2015. "Ageing Movement as Space-Time: Introducing Non-representational Theory to the Geography of Ageing." *Progress in Geography* 34 (12): 1512–1534. doi:10.18306/dlkxjz.2015.12.003.
- Andrews, G., S. Chen, and S. Myers. 2014. "The 'Taking Place' of Health and Wellbeing: Towards Non-Representational Theory." *Social Science & Medicine* 108: 210–222. doi:10.1016/j.socscimed.2014.02.037.
- Barnfield, A. 2016. "Grasping Physical Exercise through Recreational Running and Non-representational Theory: A Case Study from Sofia, Bulgaria." *Sociology of Health & Illness* 38 (7): 1121–1136. doi:10.1111/1467-9566.12434.

- Barron, A. 2019. "More-than-representational Approaches to the Lifecourse." *Social & Cultural Geography* 1–24. doi:10.1080/14649365.2019.1610486.
- Barter, C., and E. Renold. 2000. "'I Wanna Tell You a Story': Exploring the Application of Vignettes in Qualitative Research with Children and Young People." *International Journal of Social Research Methodology* 3 (4): 307–323. doi:10.1080/13645570050178594.
- Bindels, J., V. Baur, K. Cox, S. Heijing, and T. Abma. 2014. "Older People as Co-Researchers: A Collaborative Journey." *Ageing and Society* 34 (6): 951–973. doi:10.1017/S0144686X12001298.
- Büscher, M., M. Sheller, and D. Tyfield. 2016. "Mobility Intersections: Social Research, Social Futures." *Mobilities* 11 (4): 485–497. doi:10.1080/17450101.2016.1211818.
- Cadman, L. 2009. "Non-Representational Theory/Non-Representational Geographies." *International Encyclopaedia of Human Geography* 456–463. doi:10.1016/B978-008044910-4.00717-3.
- Clarke, I., and S. Banga. 2010. "The Economic and Social Role of Small Stores: A Review of UK Evidence." *The International Review of Retail, Distribution and Consumer Research* 20 (2): 187–215. doi:10.1080/09593961003701783.
- Deleuze, G., and F. Guattari. 1993. *A Thousand Plateaus*. Minneapolis: University of Minnesota Press.
- Duffy, M., P. Atkinson, and N. Wood. 2019. "Thresholds of Representation: Physical Disability in Dance and Perceptions of the Moving Body." In *Non-Representational Theory and the Creative Arts*, edited by C. Boyd and C. Edwardes, 243–262. Singapore: Palgrave Macmillan. doi:10.1007/978-981-13-5749-7_16.
- Graham, H., S. De Bell, K. Flemming, A. Sowden, P. White, and K. Wright. 2018. "Older People's Experiences of Everyday Travel in the Urban Environment: A Thematic Synthesis of Qualitative Studies in the United Kingdom." *Ageing and Society* 40 (4): 842–868. doi:10.1017/S0144686X18001381.
- Greenhough, B. 2010. "'Vitalist Geographies.'" In *Taking Place: Non-Representational Theories and Geography*, edited by A. B. In and P. Harrison, 37–54. London: Ashgate.
- Gregory, D., R. Johnston, G. Pratt, M. Watts, and S. Whatmore. eds. 2009. *The Dictionary of Human Geography*. 5th ed. Malden, Mass: Blackwell.
- Hall, E., and R. Winton. 2017. "Towards a Relational Geography of Disability." *Progress in Human Geography* 41 (6): 727–744. doi:10.1177/0309132516659705.
- Hjorthol, R. 2013. "Transport Resources, Mobility and Unmet Transport Needs in Old Age." *Ageing and Society* 33 (7): 1190–1211. doi:10.1017/S0144686X12000517.
- Holly-Moore, G., and H. Creighton. 2015. "The Future of Transport in an Ageing Society", report for Age UK, available at https://www.ageuk.org.uk/globalassets/age-uk/documents/reports-and-publications/reports-and-briefings/active-communities/rb_june15_the_future_of_transport_in_an_ageing_society.pdf
- Hughes, R. 1998. "Considering the Vignette Technique and Its Application to a Study of Drug Injecting and HIV Risk and Safer Behaviour." *Sociology of Health & Illness* 20 (3): 381–400. doi:10.1111/1467-9566.00107.
- Kelly, P., M. Murphy, and N. Mutrie. 2017. "The Health Benefits of Walking." In *Walking: Connecting Sustainable Transport with Health*, edited by Mulley, Corinne, Gebel, Klaus, and Ding. Bingley, UK. 61–79: Emerald Publishing. doi:10.1108/S2044-994120170000009004.
- Larsen, J. 2019. "'Running on Sandcastles': Energising the Rhythmanalyst through Non-representational Ethnography of a Running Event." *Mobilities* 14 (5): 561–577. doi:10.1080/17450101.2019.1651092.
- Latour, B. 1996. "On Actor-Network Theory: A Few Clarifications." *Soziale Welt* 47 (4): 369–381.
- Leighton, C., and C. Seaman. 1997. "The Elderly Food Consumer: Disadvantaged?" *Journal of Consumer Studies and Home Economics* 21 (4): 363–370. doi:10.1111/j.1470-6431.1997.tb00294.x.
- Lesakova, D. 2016. "Seniors and Their Food Shopping Behaviour: An Empirical Analysis." *Procedia – Social and Behavioral Sciences* 220 (31): 243–250. doi:10.1016/j.sbspro.2016.05.496.
- Luiu, C., T. Miles, and B. Michael. 2017. "The Unmet Travel Needs of the Older Population: A Review of the Literature." *Transport Reviews* 37 (4): 488–506. doi:10.1080/01441647.2016.1252447.
- Meijering, L. 2019. "Towards Meaningful Mobility: A Research Agenda for Movement within and between Places in Later Life." *Ageing and Society* 1–13. doi:10.1017/S0144686X19001296.
- Meneely, L., C. Strugnell, and A. Burns. 2009. "Elderly Consumers and Their Food Store Experiences." *Journal of Retailing and Consumer Services* 16 (6): 458–465. doi:10.1016/j.jretconser.2009.06.006.
- Metz, D. H. 2000. "Mobility of Older People and Their Quality of Life." *Transport Policy* 7 (2): 149–152. doi:10.1016/S0967-070X(00)00004-4.
- Michael, Y., M. K. Green, and S. A. Farquhar. 2006. "Neighborhood Design and Active Aging." *Health & Place* 12 (4): 734–740. doi:10.1016/j.healthplace.2005.08.002.
- Mollenkopf, H., F. Marcellini, I. Ruoppila, Z. Szeman, M. Tacken, and H.-W. Wahl. 2004. "Social and Behavioural Science Perspectives on Out-of-Home Mobility in Later Life: Findings Form the European Project MOBILATE." *European Journal of Ageing* 1 (1): 45–53. doi:10.1007/s10433-004-0004-3.
- Moniruzzaman, M., A. Chudyk, A. Paez, M. Winters, J. Sims-Gould, and M. Heather. 2015. "Travel Behaviour of Low Income Adults and Implementation of an Accessibility Calculator." *Journal of Transportation & Health* 2 (2): 257–269. doi:10.1016/j.jth.2015.02.006.
- Musselwhite, C. 2018. "Community Connections and Independence in Later Life." In *Psychologies of Ageing: Theory, Research and Practice*, edited by E. Peel, C. Holland, and M. Murray, 221–252. Cham, Switzerland: Palgrave Macmillan.

- Musselwhite, C., C. Holland, and I. Walker. 2015. "The Role of Transport and Mobility in the Health of Older People." *Journal of Transport & Health* 2 (1): 1–4. doi:10.1016/j.jth.2015.02.001.
- Musselwhite, C., and T. Scott. 2019. "Developing A Model of Mobility Capital for an Ageing Population." *International Journal of Environmental Research and Public Health* 16 (18): 3327. doi:10.3390/ijerph16183327.
- Myers, H., and M. Lumbers. 2008. "Understanding Older Shoppers: A Phenomenological Investigation." *Journal of Consumer Marketing* 25 (5): 294–301. doi:10.1108/07363760810890525.
- Mysyuk, Y., and M. Huisman. 2019. "Photovoice Method with Older Persons: A Review." *Ageing and Society* 1–29. doi:10.1017/S0144686X19000242.
- Newell, A., P. Gregor, M. Morgan, G. Pullin, and C. Macaulay. 2011. "User-sensitive Inclusive Design." *Universal Access in the Information Society* 10 (3): 235–243. doi:10.1007/s10209-010-0203-y.
- NICE (National Institute for Health and Care Excellence) .2012. "Public Health Guideline: Walking and Cycling. PH41." <https://www.nice.org.uk/guidance/ph41>
- Nordbakke, S., and T. Schwanen. 2015. "Transport, Unmet Activity Needs and Wellbeing in Later Life: Exploring the Links." *Transportation* 42 (5): 1129–1151. doi:10.1007/s11116-014-9558-x.
- ONS. 2019. "Living Longer: Is Age 70 the New 65?" Office for National Statistics, [accessed 9 May 2020]. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/livinglongerisage70thenewage65/2019-11-19>
- Sampson, H., and I. Johannessen. 2020. "Turning on the Tap: The Benefits of Using 'Real-life' Vignettes in Qualitative Research Interviews." *Qualitative Research* 20 (1): 56–72. doi:10.1177/1468794118816618.
- Schwanen, T., D. Banister, and A. Bowling. 2012. "Independence and Mobility in Later Life." *Geoforum* 43 (6): 1313–1322. doi:10.1016/j.geoforum.2012.04.001.
- Shergold, I., G. Lyons, and C. Hubers. 2015. "Future Mobility in an Ageing Society – Where are We Heading?" *Journal of Transport and Health* 2 (1): 86–94. doi:10.1016/j.jth.2014.10.005.
- Shergold, I., and G. Parkhurst. 2012. "Transport-related Social Exclusion Amongst Older People in Rural Southwest England and Wales." *Journal of Rural Studies* 28 (4): 412–421. doi:10.1016/j.jrurstud.2012.01.010.
- Shergold, I., G. Parkhurst, and C. Musselwhite. 2012. "Rural Car Dependence: An Emerging Barrier to Community Activity for Older People." *Transportation Planning and Technology* 35 (1): 69–85. doi:10.1080/03081060.2012.635417.
- Shrestha, B. P., A. Milonig, N. B. Hounsell, and M. McDonald. 2017. "Review of Public Transport Needs of Older People in European Context." *Population Ageing* 10 (4): 343–361. doi:10.1007/s12062-016-9168-9.
- Siddall, E., C. Baibarac, A. Byrne, N. Byrne, A. Deasy, N. Flood, and C. Goulding. 2011. "Personas as a User-centred Design Tool for the Built Environment." *Proceedings of the Institution of Civil Engineers - Engineering Sustainability* 164 (1): 59–69. doi:10.1680/ensu.1000015.
- Stafford, L., and C. Baldwin. 2018. "Planning Walkable Neighborhoods: Are We Overlooking Diversity in Abilities and Ages?" *Journal of Planning Literature* 33 (1): 17–30. doi:10.1177/0885412217704649.
- Statista. 2021. "Market Share of Grocery Stores in Great Britain from January 2017 to December 2020". Data available at <https://www.statista.com/statistics/280208/grocery-market-share-in-the-united-kingdom-uk/>[accessed 20 January 2021]
- Stjernborg, V., A. Wretstrand, and M. Tesfahuney. 2015. "Everyday Life Mobilities of Older Persons – A Case Study of Ageing in A Suburban Landscape in Sweden." *Mobilities* 10 (3): 383–401. doi:10.1080/17450101.2013.874836.
- Thrift, N. 1996. *Spatial Formations*. London: Sage.
- Thrift, N. 1997. "The Still Point." In *Geographies of Resistance*, edited by S. Pile and M. Keith, 124–151. London: Routledge.
- Thrift, N. 2008. *Non-Representational Theory: Space, Politics, Affect*. London: Routledge.
- Watson, S., and D. Studdert. 2006. *Markets as Sites for Social Interaction: Spaces of Diversity*. Bristol: Policy Press.
- Whatmore, S. 2002. *Hybrid Geographies: Natures, Cultures, Spaces*. London: SAGE.
- WHO. 2007. "Global Age-friendly Cities: A Guide", Report by the *World Health Organisation*. WHO Press, Switzerland.
- Wills, W., and A. Dickinson. 2016. "Improving Food Shopping for Older People." University of Hertfordshire Research Briefing. https://www.herts.ac.uk/_data/assets/pdf_file/0008/174194/improving-food-shopping-for-older-people-uh-research-briefing.pdf
- Wrigly, N. and M. Lowe. 2002. *Reading Retail: A Geographical Perspective on Retailing and Consumption Spaces*. London: Arnold.
- Yin, Y., E. Pei, and A. Ranchhod. 2013. "The Shopping Experience of Older Supermarket Consumers." *Journal of Enterprise Information Management* 26 (4): 444–471. doi:10.1108/JEIM-05-2013-0025.
- Ziegler, F., and T. Schwanen. 2011. "'I like to Go Out to Be Energised by Different People': An Exploratory Analysis of Mobility and Wellbeing in Later Life." *Ageing and Society* 31 (5): 758–781. doi:10.1017/S0144686X10000498.