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# Chapter 1: Introduction: Conceptualising travel, transport and mobility for older people

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Running head: Conceptualising mobility for older people

## **Abstract**

Countries across the globe are both seeing an ageing population and an increase in mobility. This chapter looks at how society deals with an ageing population that also want or needs to be mobile. Lack of mobility is synonymous with poorer health and wellbeing, with research suggesting it can lead to loneliness, isolation and even death. Hence, it seems appropriate to keep older people as mobile as later on in life as possible. The car is often seen as the panacea to this, but older people are the group most likely to have to give-up driving. How society provides alternatives to the car depends on how mobility is viewed. This chapter argues that we need to see older people's mobility as a human issue, understanding their needs and realising there are affective and emotive relationships between people and mobility. We still provide mobility for older people based purely on functional journeys to hospitals, services and shops. Yet research suggests mobility to connect people, for a day out, for leisure purposes and for its own sake are vital to the wellbeing of older people. Services for older people need to recognise this and provide for it and there are some good examples in the community but these are too few and far between. Additionally, because transport is seen as functional for older people, there is a lack of emphasis on the aesthetic or on providing attractive services for older people, as if this isn't important to older people. Finally, mobility doesn't always have to be literal for older people and there is an argument that needs can be met through potential, virtual and imaginative mobility.

Keywords: demographic change, ecological models, motivation, needs, wellbeing, health.

#### 1. Demographic change

Many countries across the world are embracing an ageing society. Western countries are seeing both a significant decrease in birth rate and an increase in life expectancy. This results in both a higher number and a higher percentage of people aged in their latter years. In 1950, there were 384.7 million people aged over 60 years of age, totalling 8.6 per cent of the global population (UN, 2013). There are now 840million people over 60 across the World, totalling 11.7 per cent of the population. Projections suggest there will be 2 billion people aged over 60, representing 21.2 per cent of the global population by 2050 (UN, 2015a). As an example, the population of the United Kingdom aged over 65 years, is around 11.1 million (17.4% of the UK population), of which around 3 million were aged 80 and over (Office for National Statistics, 2015a). Looking forwards, the proportion of people aged 65 and over is expected to rise to 23.5% in 2034 (Office for National Statistics, 2015b). In addition, the population that is aged 85 and over is predicted to double in the next 20 years, and treble in the next 30 years (Office for National Statistics, 2015b). Changes in lifestyle as a result of increased longevity and better health and social care mean that older people are more healthy for longer in their lives and as such are more active and more mobile than ever before (Tomassini, 2004). Naturally, these changing demographics have huge impacts for transport policy and practice, especially as we live in a 'hypermobile' society where high levels of mobility are needed in order to stay connected to communities, friends and family and to access shops and services which have become dispersed across space.

In addition, older people are driving later on in life and more miles than ever before (Tomassini, 2004). In the UK, 70% of adults (an estimated 32.2 million people) currently hold full car driving licences (DfT, 2014). Of those aged 70 and over, 47% hold a driving licence, which has increased from 32% in 1989 (DfT, 2014). The last 30 years has shown a substantial increase in drivers who are 65 years and over in the UK, with this increase is most markedly found amongst female drivers – a 200% increase in male drivers and a 600% increase in female drivers over 65 years (DfT, 2001; Oxley, 1991). This rise is expected to continue, and Noble (2000) predicts that 4.5 million people over the age of 70 in the UK will have a driving licence by 2030. The importance of mobility has been linked to life satisfaction and quality of life for older people (Schlag, Schwenkhagen and Trankle, 1996). The need to be mobile and to travel is also related to psychological wellbeing and reduced mobility and independence has been shown to be strongly correlated with an increase in depression and loneliness (Fonda, Wallace & Herzog, 2001; Ling and Mannion, 1995).

## 2. Importance of mobility

Being mobile is linked to quality of life (Schlag et al.,1996). In particular, giving up driving in later life has repeatedly been shown to be related to a decrease in wellbeing and an increase in depression

and related health problems and feelings of stress, isolation and also increased mortality (see AA Foundation, 2015 and Ormerod et al. 2015 for overviews)). In many high income countries, older people are generally in good health. Despite this older people still may have physiological or cognitive changes associated with ageing that restrict or make mobility difficult. For example, compared to younger people, they may find walking or cycling for long periods of time difficult to do without fatigue or muscle ache. They similarly may have increased difficulty accessing and public transport (Schlag et al., 1996). They are, more than any other age group, also likely to reducing driving or giving up driving altogether (Box et al., 2011). Difficulty in accessing mobility has resulted in mobility deprivation among older people (DfT, 2001), and those aged 75 and over report the greatest difficulties in accessing shops and services and engaging with and feeling part of their local community (Shergold et al., 2012). A survey from the United Kingdom suggests around 12% of older people feel cut off from society, 9% feel trapped in their own home and 6% leave their house less than once a week (TNS Loneliness Survey, 2014). Over-65s are estimated to spend an average of 80% of their time in the home - 90% for people over 85 (*Older People, Decent Homes and Fuel Poverty*, Help the Aged, 2006) and 30% would like to go out more often (TNS Loneliness survey, 2014)

# 3. Changing perspectives

An examination into the importance of mobility for an ageing population results in studying transport and mobility from different perspectives than traditionally is found. It emerges that we need to view transport from a social perspective, that it is more than just moving from A to B and that non-vital mobility is important to older people yet often neglected by policy and practice. We aren't that good at providing mobility for older people who don't drive and when we do it is functional at best but largely cumbersome and unattractive, like older people don't have any aesthetic desire at all. Finally, mobility may not actually always be about being literally mobile and different types of mobility can help.

## 3.1 Transport is about people

Examining relationships between people as they age and mobility and transport reveals the importance of studying transport and mobility from a different perspective than is traditionally found. It is difficult not to study transport in any other way than within the social context of which it is embedded. Traditionally, transport was studied as a rather abstract concept divorced from its social context which has resulted in transport policy and practice with negative unintended consequences for society. The resulting system has seen a discourse dominated by reductions in travel time, of championing the private motor vehicle at the expense of the environment and personal health and safety. In turn the unfettered growth of motoring has created a fragmented society, depleted of local

shops and services, dependent on oil and high levels of mobility just to meet basic needs, with an unhealthy acceptance of injury and death. The negation of the social element of transport has reduced the concept of travel and transport to a mere mechanism of getting to a destination as quickly and efficiently as possible for the greater majority at the exclusion of localness and the positive utility of the journey itself.

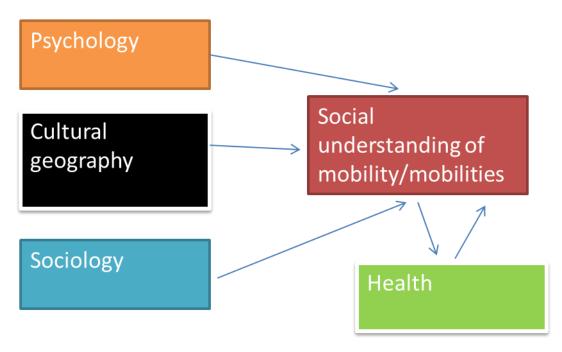


Figure 1: New approaches to transport studies showing social understanding of mobility and relationship to health and wellbeing.

The growing disciplines of traffic and transport psychology, the mobilities movement in Sociology, and the cultural spaces and mobility movement in Human Geography emphasise the importance of placing people at the centre of investigating and understanding transport and mobility (see figure 1). A greater emphasis on the transport as embedded within social context is found in these disciplines. Efficiency, speed and economic benefits of mobility are placed against the needs of individuals, the neighbourhood and community, revealing social exclusion and severance in society.

Many applied subjects discuss the need for an integrative approach, to bring together the best knowledge and practice from different disciplines, but transport and mobility in later life is certainly a discipline where this is necessary. In order to fully understand and embrace how we achieve better mobility for older people, there is a vital need to draw on research findings, theory and practice across many disciplines. Yet this cannot be done without understanding the relationship of mobility and transport with society. Overall, there is a realisation that social elements of transport are vital to understand the full picture of mobility in later life. As Haglun and Aberg (2000) state, "traffic and transport should be viewed as a social situation where drivers interact and influence each other" and

O'Connell (2002) notes, transport studies "must not be based on an erroneous model of humans as abstract rational actors, isolated from their social context and operating on purely 'objective' criteria" (pg. 201).

Ecological models are increasingly being used to explain such interactional relationships between the external environment including a social context and an individual's behaviour. Such models suggest the behaviour of the individual cannot be isolated from the immediate physical and social environment within which they have a bidirectional relationship. Examples of ecological models used in terms of ageing and the transport and mobility context include Webber et al. (2010)'s conical model of mobility and Bronfenbrenner's Ecological Systems model (Brofenbrenner, 1979, 1989, 2005) which has been applied to transport (Musselwhite et al., 2014; Musselwhite, 2016; Ormerod et al., 2015). Musselwhite (2016), building on work by Ormerod et al (2015), suggests a four stage model based on an ecological approach (see figure 2). At the centre is the older person and their needs, desires and motivations. Surrounding this is a legible, attractive local neighbourhood for walking and cycling, followed by an accessible attractive public and community transport system. At the outer layer, these elements are supported by safe, age friendly transport strategy, policy plans.

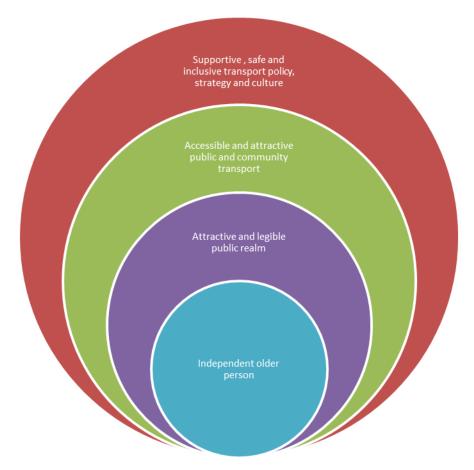


Figure 2: Domains of an age friendly transport system utilising an ecological approach (adapted from Musselwhite, 2016)

# 3.2 Transport and mobility isn't just about moving from A to B

Coupled with the notion that transport and mobility can be studied separately to society is another misconception that the importance of transport and mobility is simply a utilitarian one; that transport and mobility is simply a means to meeting individual needs, a way of getting from A to B. Research with older people, and indeed with people at differing ages, suggests that mobility is more than the product of going from A to B as quickly, reliably and efficiently as possible.

Musselwhite and Haddad (2010) propose a three-tier model of needs and motivations for travel in later life (figure 3). The levels are hierarchical and are based on awareness of need by the participant themselves. Musselwhite and Haddad (2010) used re-convened focus groups and interviews with the same participants and the needs mentioned primarily are found at the base of the hierarchy, broadly described as the practical or utilitarian needs which include the need to get from A to B at quickly, reliably, safely and cheaply as possible. The next level of needs mentioned in the focus groups is termed psychosocial need, which relates to how travel fulfils psychological, affective or emotional needs such as a need for independence, control and the need to be seen as normal in society relating to concepts such as roles, identity, self-esteem and impression management. A top level of need,

articulated much later on by participants in the research, was the need to travel for its own sake, to get out and about, to people watch, to see nature, to test their own ability, this level of discretionary need is termed aesthetic needs. The model suggest that all three levels of need are important in later life. However, the prevalence of transport meeting each need varies throughout the lifecourse and throughout society. It is very common, for example, for older people, practitioners and policy makers to discuss travel at the utilitarian level. It is less common for them to mention social, affective or emotional issues of transport and mobility and even less common is discussion of travel for its own sake or for 'luxury' or 'discretionary' purposes; the aesthetic needs. Hence, transport provision in later life is usually centred on practical or utilitarian support at the expense of fulfilling needs at other levels. Older people's utilitarian transport needs are most likely to be provided for. This is seen in transport solutions of older people being provided through public or community transport, for example. So older people with mobility difficulties who may have given up driving can actually get their utilitarian needs satisfied somewhat (though this can still be difficult). However, their social, affective and aesthetic needs tend to go unmet. Importantly, in our hypermobile world, driving a car readily fulfils all three level of needs.

Similarly, psychosocial needs for mobility are expanded in the model by Mollenkopf et al (2011).. These were (1) out of-home mobility as a basic emotional experience; (2) physical movement as a basic human need; (3) mobility as movement and participation in the natural environment; (4) mobility as a social need; (5) mobility as an expression of personal autonomy and freedom; (6) mobility as a source of stimulation and diversion; and finally (7) the ability to move about as a reflective expression of the person's remaining life force. The psychosocial element is especially absent if driving is stopped. As Musselwhite and Haddad (2010) and Zeigler and Schwannen (2011) note those who stopped driving feel a particular loss of independence, especially in very car dependent areas and for those who were frequent drivers throughout life (Adler and Rottunda 2006; Davey 2007; Siren and Hakamies-Blomqvist 2009).

# TERTIARY MOBILITY NEEDS

Aesthetic Needs
e.g. The need for the journey itself, for relaxation, visit nature.
No explicit purpose.

## SECONDARY MOBILITY NEEDS

Social/affective Needs

e.g. The need for independence, control, to be seen as normal. Linked to status, roles, identity, self-esteem. Impression management

# PRIMARY MOBILITY NEEDS

Practical/utilitarian Needs
e.g. The need to get from A to B as safely, reliably, cheaply and
comfortably as possible.

Figure 3: Hierarchy of travel needs in later life (after Musselwhite and Haddad, 2010)

Allardt (1975) model defined welfare or wellbeing as satisfaction of needs relating to three aspects of life – having, loving and being. Income, hosing, standards, employment, health and education are having needs. Loving needs are relationships with others, and with family and friends in particular. Being needs are related to self-esteem, reputation, leisure activities. These map onto Musselwhite and Haddad's (2010) needs to some extent – having as utility, loving and being as psychosocial and aesthetic. This was applied by Hjorthol (2012) to transport in later life. She found a lower level of activities than people desire for all three dimensions. Activities related to the 'loving' and 'being' are more in demand than those in the having dimension. All three increase in demand for higher frequencies with age. If access to transport is taken into account, there are no gender differences; females tend to have higher demand for frequencies of all three elements but this is due to not having access to transport, rather than different demand, showing males still tend to hold more of the transport resources. Shopping is a quite well satisfied need and it often covers two elements,

especially in rural areas, both having (the need to purchase goods) and loving (the social nature of shopping). In rural areas especially shopping would often be combined with a trip to a cafe to meet others.

#### 3.3 Discretionary mobility is important

The highest level of need noted in Musselwhite and Haddad's (2010) hierarchy is that of aesthetic needs. This can be further broken down into further sub-set of needs (See Musselwhite, 2017, for example), often really missed in later life. First, the need to be mobile in order to reach an end product that is discretionary is important to older people. The notion of touristic style mobility, to have a day out somewhere, for mainly leisure purposes, is seen as important to older people. However, in mobility provision for older people it is an often overlooked area of need. There is secondly, a need to traverse through environments to see them. This is often combined with more practical journeys, though sometimes is a journey in its own right. This is driving the long-way round to visit a forest, or to drive past the seaside, for example. Again without a car in later life, these journeys are harder to make. This can make the car or mode of transport a third space, a vessel to watch the world go round from, in relation to an individual themselves. There is also mobility for its own sake, to feel the kinetic property of movement and mobility as opposed to stillness. This is particularly felt through cycling and even motorcycling where exposure of the body to the outside and closeness to elements is noted, but is also felt through driving or being a passenger on public transport. Musselwhite and Haddad (2010) also not the importance of completing the skill required to travel as being a motivator. Mastery of the skill of driving is noted by Ellaway et al (2003) as a motivator for driving in particular. In terms of older people, Musselwhite and Haddad (2010) note the importance of this as a display of impression management to other people, to show they still can drive, that they are not too old to do it! This could extend to other modes of transport, for example, the successful completion of a set of complex or long public transport journeys, especially in unfamiliar places, however, it is still more noted in drivers than passengers.

## 3.4 Alternatives are barely functional and certainly not attractive

There is still a tendency to situate mobility solutions for older people around the purely functional level. Services are created on the basis of being cheap, reliable, minimal travel time and getting from A to B. Public transport and community transport vehicles are designed to be accessible and reliable. In this we are treating the situation as simply a functional, rather than an aspirational issue. Aspirational or aesthetics are secondary in nature. Public or community transport is not seen as desirable from the point of view of the individual. There has been some change to this over the past few years in many countries. Buses are more comfortable, offering wi-fi, leather seats, ambient lighting and large windows on many showcase bus routes throughout the world (for example bus rapid transit corridors) but this is till the exception rather than the rule. Of course no one can benefit

from mobility if functional aspects are not addressed, but without understanding the aspirational or aesthetical motivators, this will have limited success. This is seen in options for those who do not drive and in the built environment. In terms of public transport, for example, there is still a tendency to create services that are purely functional. There is an assumption that the built environment should cater for issues older people might have with mobility. This is of course important but without creating an attractive built environment, it will have limited success in drawing people in to use it. Older people are no different to any other age group on wanting attractive environments, though we are still planning and developing our cities around what younger people want. An attractive city and its marketing is synonymous with growth and economic development, which s often erroneously viewed solely with younger and middle aged people. There needs to be challenges to development of place. A vibrant city space is surely one that inhabits people of all ages and a variety of backgrounds without segregation.

# 3.5 Mobility doesn't have to be about literally moving

Connections to places of greater geographical distance, further away places become difficult to achieve in a physical sense (Parkhurst et al., 2014). Rowles (1978) describes the potential for older people to become prisoners of space, where physiological and cognitive change associated with ageing, along with economic deprivation an cause older people to withdraw from wider outside world. Time spent at home indoors increases in older age and research suggests those aged 65 and over can spend around 80% of their time at home, increasing to 90% for those aged 85+ (Handler, 2014; Help the Aged, 2006). Older people can then reconstruct their world and have deep attachment around a very local space. This local space is first and foremost the home but can extend to the immediate neighbourhood and wider community if it is accessible. Parkhurst et al. (2014) discuss how literal mobility can be replaced recollection, remembrance and imaginative connections and propose a model that involves virtual, potential and imaginary mobility as well as literal or corporeal mobility (see figure 4; Parkhurst et al., 2014). Virtual mobility refers to the use of computing and information technology to satisfy mobility needs, for example ordering shopping online, keeping in contact with family and friends over teleopne or video links, remotely accessing health or social care with telehealth or telecare. Potential mobility, first coined by Metz (2000) is the perception of being able to be mobile should the individual need to do so. For example, how the car gives people the potential to travel where and when and how often they like should they wish or need to. Shergold et al. (2012), term this potential as motility and include the perceived ability to use different modes, for example knowing and understanding the norms of the mode of transport. Imaginary mobility can be broken into two different strands, first a construction of travel and mobility in the mind and communicated through story-telling or art, often based on previous travel experiences can occur, sometimes using photographs or props to describe and reminisce about the journeys and places visited. Secondly,

imaginative mobility might refer simply to observing movement from a still place, such as looking out of the window (or watching television.

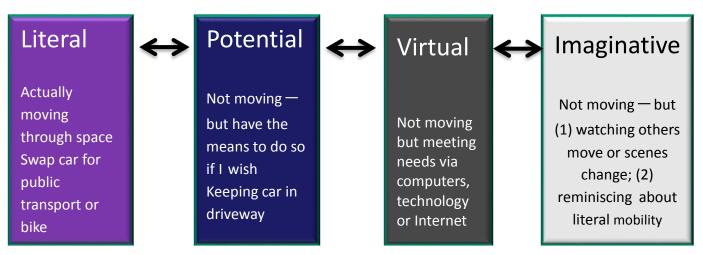


Figure 4: A continuum of modes for connectivity (adapted from Parkhurst et al., 2014)

#### 4. Conclusion

The following chapters provide an overview of the current knowledge, statistics, debates and concepts in terms of transport and mobility in relation to later life. Each chapter considers some, if not all, of the principles laid out in this chapter. There is an overarching view that, although there are important barriers to be overcome for older people in terms of transport and mobility, over concentration on a deficit approach is unhelpful without understanding the wider social context. In all countries mobility is wider than simply getting from A to B and examining it in isolation to psychosocial issues misses the point. A change of priority is needed in terms of how mobility is viewed for older people. It requires a change in attitude from policy makers and practitioners to lead this change but also a change in how researchers approach mobility in later life with a more human-centred approach to transport studies.

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