

# **Ageing, Urban Environments and Place: Moving towards a transdisciplinary research agenda**

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## **Introduction**

Designing 'friendly' places for older people requires consideration of the ageing process, the physical environment, the resource, service and policy landscape, and the psychological meanings and social affordances of place. Consequently, creating age friendly places is a complex and 'wicked' real world problem. Wicked problems refer to problems which can be framed by different levels of conceptual and practical abstraction, where no clear solutions exist and are complicated by ethical, historical, political or professional dimensions (Stahl and Cimorelli, 2013). Transdisciplinarity is an approach well fitted to tackling such wicked problems as it requires an integration of different disciplinary, inter-sectoral and experiential knowledges to focus on the problem area, developing new ways of thinking, new methodological approaches and new practices to produce solutions which are holistic in nature (Wickson et al, 2006). The fundamental aim of transdisciplinarity is to make a positive difference in the world by addressing social problems, rather than simply developing theoretical or methodological knowledge bases, through transcending knowledge boundaries, co-production and co-creation, action oriented research, and challenging existing power based hierarchies that constrain knowledge production (Boger et al, 2016).

These key transdisciplinary principles drive a new ESRC research funded project entitled *Place-Making with Older Adults: Towards Age-Friendly Communities* (2016-2019). The project will explore the role of sense of place in promoting age friendly communities in Brazil and the UK in order to inform age friendly city policy, planning and design. Drawing on a total of 18 neighbourhoods in 6 different Brazilian (Brasilia, Pelotas and Porto Alegre) and British cities (Edinburgh, Glasgow and Manchester), the project involves over 10 academic partners, bringing together various academic disciplines including gerontology, architecture, urban planning and community psychology. The project incorporates knowledge mobilisation activities to facilitate knowledge sharing and collaboration between older adults, academia, policy and practice. This paper outlines the case for transdisciplinary research on ageing and place, describing some of the theoretical, methodological, empirical, and practical challenges and opportunities to achieving greater transdisciplinarity in ageing research.

## **Ageing, Sense of Place and Urban Environments**

Ageing populations have generated complex challenges in how to design urban environments that support and promote healthy urban living for older people. As they age older adults face declining physical and cognitive capacities, changes to their living arrangements and loss of social supports. In response to this, the ageing-in-place agenda has become an important issue in redefining policy for older people (Sixsmith and Sixsmith, 2008). The notion of ageing-in-place posits that the preferred environment for older adults to age is in the community, where they can remain active, engaged and socially connected (Wiles et al, 2011). Yet ageing-in-place is dependent on older adults having the place-based supports for social participation, mobility and active living (Sixsmith et al, 2014).

International policy and practice has focused on the creation of age friendly cities and communities as environments to encourage active ageing (Davies and Kelly, 2014). In working towards these environments, best practice guidelines have been developed to support walkability and the design of outdoor spaces (HAPPI, 2012; IDGO, 2012). However, changing the physical form is not sufficient in itself to create a more inclusive environment for ageing since places are more than physical spaces (Buffel et al, 2014). Viable environments are articulated through a strong *sense of place*, defined as the social, psychological and emotional bonds that people have with their environment (Manzo and Perkins, 2006). A strong sense of place results from having access to supports for active participation, opportunities to build and sustain social networks, and assuming a meaningful role in the community (Seamon, 2014).

Whilst research has focused on understanding sense of place amongst older people within urban environments (Rowles and Bernard, 2013), an impediment has been the lack of transdisciplinary work. Ageing itself is a complex and nuanced process, drawing upon inter-related issues across different disciplines, including urban studies, ageing, environmental psychology, and gerontology. Understandings, interventions and solutions impacting ageing and place are cross-cutting requiring the pooling together of expertise to find viable solutions. Achieving this raises a number of theoretical, methodological, empirical and practical challenges and opportunities.

### **Challenges and Opportunities for Transdisciplinary research on Ageing and Place**

**(i) Theoretical Challenges:** Research has explored the way the physical environment supports or impedes the ability to 'age-in-place', driven by a model of person-environment congruence (Wahl and Weissman, 2003), a theory within environmental gerontology that compares the person's physical and mental capacity with environmental demands and how these impact on the person's ability to perform activities of living. Whilst this approach has been useful, more research is needed to explore experiential dimensions and how these intersect with place meaning. Age friendliness requires attention to the person-in-the-place and the 'transactional' nature of place use and meaning that is negotiated and constructed through an ongoing 'interaction' between person and environment (Seamon, 2014). This involves construction of perceptions, feelings, behaviours and outcomes, developed as a response to the qualities or affordances (physical, social and cultural) that a place provides (Eyles and Williams, 2008). It is therefore important that different theoretical approaches are recognised, where the experiential knowledge of older people themselves sits alongside practice-based and academic theory. In this way, the physical environment, access to and use of places combine with functionality of place based resources and services as well as sensory and relational experiences of place (largely missing from the published urban design interventions concerning age-friendly communities). Such complex combinations of disciplinary, cross-sectoral and experiential expertise require transdisciplinary work that bridges theoretical understandings of place from multiple perspectives. The challenge lies in identifying the relevant perspectives and working towards synthesising understandings to co-produce new ways of thinking that reveal more of the problem area and point towards effective and sustainable solutions. Bridging disciplines and theoretical approaches can create conflict across research teams as 'preferred' theories are transformed or dismissed. Polk (2015) suggests that a strong focus on co-creation is necessary at the outset of the project, enabled by extending the ideas generation and initiation period and revising ideas as the project progresses in a more reflexive frame.

In the ESRC place-making project, theoretical and conceptual pluralism is embraced and co-creation of ideas has been enhanced by frequent meetings and open and honest discussion is encouraged. This has required team members setting aside existing disciplinary assumptions, embracing new ways of approaching the problem area and to be open to new theoretical paradigms for interpretation. Consequently, the theoretical frame for the project has developed through multiple reflexive phases. A consequence of this has been a strong feeling of ownership of the project by all partners and the emergence of new ways of approaching age-friendly communities.

**(ii) Methodological Challenges:** Scientific research which depends on a single method approach to understanding the way older adults experience ageing and home is valuable, but may fail to fully capture the complexity of everyday lived experiences of place. This is because every method has the possibility to highlight some information but hide others e.g. interviews can access information on thoughts, feelings, attitudes etc. but cannot show actual behaviour in environments. More innovative methods including visual and creative methodologies (such as 'go-along' interviews and participatory mapping) have emerged and been largely welcomed as they capture relational aspects of place and the neighbourhood context in which people live (Evans and Jones, 2011). These reveal more immersive experiences of place, for example, the role of walk-along interviews as a method for allowing older adults to articulate emotional and sensory understandings of place (Carpiano, 2009).

Such immersive methods are planned into the ESRC place-making project to encourage a wide variety of different understandings to be captured. When methodologies derive from different research disciplines then new knowledge, insights and solutions into ageing and place can be fore fronted. The point here that there is no specific transdisciplinary methodology (Harris and Lyon, 2014), rather we should be open to a range of different methods, through dialogue, collaboration and negotiation. Such openness highlights the transformational potential of research methods to expand current disciplinary understandings and enable a thorough questioning of our assumptions about what works (in terms of collecting evidence) and how knowledge is created. Moreover, transdisciplinary research should extend beyond academia into cross sectoral domains to fully incorporate different ways of thinking that lead to the co-creation of innovative methods and co-production of data interpretation. This will help to 'bridge' academia, older adults and practice, such that learning from academia can be transferred and used by stakeholders, and where in turn practice can better inform academia.

**(iii) Empirical Challenges:** There is a lack of empirical research into cross-cultural understandings of place amongst older adults and how established links with the built environment are developed in specific socio-cultural contexts. As a result, we know little about comparative experiences of place (between and across communities, cities, regions and international contexts). Transnational working is required to examine how sense of place can be facilitated across diverse social and cultural contexts as well as planning and development frameworks. A key problem here relates to the development of a shared vision, shared understandings and shared language through which mutual reflective learning can happen; a fundamental requirement of transdisciplinarity (Boger et al, 2016). To enhance such learning within a transdisciplinary frame, research needs to create knowledge sharing opportunities that enable reflective exchange across cultural and social divides.

The current ESRC project has strong communication processes specifically designed to create an ethos of trust and openness to promote project visioning across the UK and Brazilian teams. A series

of three month cross institutional and cross country internships are also planned at critical points in the research pathway to promote shared understandings and working practices. This will allow better understanding of the experiences of older adults and identify opportunities for place-making across different cultural contexts. It will also enhance the knowledge base from which policy making in the area of age friendly communities and cities can derive.

**(iv) Practical Challenges;** The ageing-in-place policy agenda has received some support via local and national policy and the WHO Age Friendly Cities programme (WHO, 2007). The WHO Age Friendly Cities movement recognises cities that support active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age. However, whilst there are concerted efforts at the city and regional level to implement age friendly programmes, research itself has been limited in terms of its real world impact on policy and practice. A major weakness has been the lack of effective knowledge mobilization, and the absence of 'meaningful' participant engagement in the research process. Research based in the transdisciplinary approach emphasises an action orientation which focuses on making a positive difference in the real world (Lawrence, 2004). This requires the integration of older people and other key stakeholders in the research process which in turn requires attention to team-building, setting research agendas that prioritise social change and tool development to target issues and problems relevant to both older adults and those responsible for bringing about change

In the ESRC project, collaborative working with older adults, policy makers and practitioners throughout the research process will provide the dialogue space to enable the co-creation of design guidelines that support sense of place and the development of age friendly environments. Many gerontological research activities emphasise the genuine involvement of older adults in the research (Pratesi et al, 2013), ongoing collaborative dialogue and partnership-working that will build capacity beyond the research and thereby enable transdisciplinary working. This is needed to situate the voice of older adults in contemporary debates on place, the built environment and urban planning and design, and to enhance the quality and sustainability of environments for older adults.

### **Moving Forward**

The absence of transdisciplinary working is an impediment to understanding how older adults experience place and thereby a barrier to designing effective solutions for age-friendly environments. Research processes that enable different forms of shared learning and thinking to emerge provide the context for exchange between knowledge bases and for that thinking to be used to transform current understandings and question our own positions. These processes are complex and require navigating and working across multiple perspectives and scales. For example, this might require negotiating the project vision, aims, objectives and priorities, identifying the value of different methods, discussing the potential implication and relevance of the research results and how they can be effectively disseminated to create social change. Central to transdisciplinarity is the importance of co-creation and co-production, between the older adult, academic and professional community, such that people can challenge their own understandings and practices in terms of how we see the world and question where knowledge resides. Within this process, we need to recognise the important of experiential or lay knowledge, from older adults, practitioners and community groups and learn how to better mobilise that knowledge into more effective interventions. Finding

solutions to support ageing-in-place requires a transdisciplinary approach, not just in terms of academic disciplines, but in engagement with the various policy arenas and the wider public.

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