**Community-based Participatory Research for Ageing in the Right Place:
Developments in Concepts, Theory, Methods, and Practice to Address Housing
Inequality for Older Adults**

Mei Lan Fang, B.Sc. (Hons), M.P.H.

Submitted for the degree of Doctor of Philosophy by Published Research

Primary Supervisor: Ryan Woolrych

Secondary Supervisor: Chris McWilliams

External Supervisor: Judith Sixsmith

Heriot-Watt University

School of Energy, Geoscience, Infrastructure & Society

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ABSTRACT

This thesis by publication critiques existing ageing-in-place concepts and discusses the need for a community-led, participatory approach to create effective housing solutions for older adults. It is argued that current understandings of ageing-in-place may perpetuate housing inequality through the dominant view that all older adults can live happily at home for as long as possible. Existing housing strategies developed in pursuance of ageing-in-place are limited by a lack of important theoretical and methodological insight necessary for acquiring in-depth holistic understandings of the place-based needs of older adults towards *ageing well in the right place*. To fully understand the experience of older adults' everyday lives as they age-in-place necessitates a collaborative research approach. Such an approach facilitates the active participation of the community and individuals directly impacted by the housing redevelopment process. This thesis introduces and discusses complexities that surround the housing development process for older adults. It consists of five published papers interlinked by an affordable housing redevelopment project in western Canada. These papers focused on: (1) a necessary progression towards ageing in the right place concepts; (2) the importance of collaborative, narrative and creative methods for developing age-friendly housing; (3) theoretical development of an intersectional place perspective; and, (4) the value of knowledge translation mechanisms to create a pathway towards real world impact. The papers present conceptual, theoretical, and methodological developments and contributions that are guided by a critical, community-based participatory research approach. They discuss the value of a community-based participatory research (CBPR) approach for the co-creation of effective place-based housing solutions for older adults. The application of CBPR principles helped shape the selection and implementation of methods as well as informed a new theoretical perspective that bridges place theories in Gerontology together with intersectional feminism.

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Research Thesis Submission

Name*:*	Mei Lan Fang		
School:	School of Energy, Geoscience, Infrastructure and Society		
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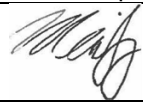
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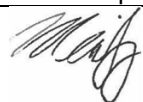
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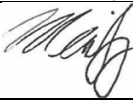| Citation details	Sixsmith, J., Fang, M.L., Woolrych, R., Canham, S.L., Battersby, L., & Sixsmith, A. (2017). Ageing well in the right place: Partnership working with older people. *Working with Older People*, 21(1), 40–48.
Author 1	Co-developing and co-writing of the manuscript with second author; led the submission of manuscript; co-led the background literature review with second author; co-led the design of the research methodology with second and third authors; and co-led the development of the methods including the research instruments with second and third authors.
Author 2	Co-led the background literature review; co-led the design of the research methodology with first author and third author; co-led the development of the methods including the research instruments with first author and third authors; acquired ethical clearance for the research; led the maintenance of existing partnerships and established new partners over the full duration of the project; led and co-conducted the research including, participant recruitment, data collection, and analysis with second and third authors; and, contributed and provided substantial input to the co-writing and co-development of the manuscript.
Author 3	Co-led the design of the research methodology with first and third authors; and co-led the development of the methods including the research instruments with first and third authors; reviewed, inputted and approved the final manuscript for submission.
Author 4	Co-conducted the research including, participant recruitment, data collection, and analysis with second and fifth authors; reviewed, inputted and approved the final manuscript for submission.
Author 5	Co-conducted the research including, participant recruitment, data collection, and analysis with second and fifth authors; reviewed, inputted and approved the final manuscript for submission.

Author 6	Advised on the design of the research methodology and implementation of the research; and reviewed, inputted and approved the final manuscript for submission.
Signature:	
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Author 1	Co-developing and co-writing of the manuscript with second author; led the submission of manuscript; co-conducted the background literature review with second author; and co-analysed the data with first author.
Author 2	Designed the research methodology with input from the research team; designed the research method (including all materials for the workshops) informed by Kingston's (2005) interpretation of Deliberative Dialogues; acquired ethical clearance for the research; led and implemented the workshops with third author; led research activities such as, participant recruitment, organisation and facilitation of the deliberative dialogue sessions; co-analysed the data with first author; contributed and provided substantial input to the co-writing and co-development of the manuscript.
Author 3	Co-conducted the workshops with second author; and reviewed, inputted and approved the final manuscript for submission.
Author 4	Advised on the design of the research methodology and implementation of the research; and reviewed, inputted and approved the final manuscript for submission.
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Author 1	Conducted the literature review with input and suggestions from the research team; co-designed

	the research methodology with second and third authors; developed the methods including all workshop materials; acquired ethical clearance for the research; led and implemented the workshops, with support from the research team, and led activities such as: participant recruitment, organisation and facilitation of the workshops; led and co-analysed the data with research participants, supported by the research team; led the writing, preparation, and submission of the manuscript (including revisions encompassing suggestions from reviewers) integrating feedback from the co-authors as necessary throughout the process.
Author 2	Co-led the design of the research methodology with first and third authors; and co-led the development of the methods including the research instruments with first and third authors; reviewed, inputted and approved the final manuscript for submission.
Author 3	Co-led the design of the research methodology with first and third authors; and co-led the development of the methods including the research instruments with first and third authors; reviewed, inputted and approved the final manuscript for submission.
Author 4	Co-conducted the workshops with first and fifth authors; and reviewed, inputted and approved the final manuscript for submission.
Author 5	Co-conducted the workshops with first and fifth authors; and reviewed, inputted and approved the final manuscript for submission.
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Author 2	Conducted the literature review; co-led the design of the research methodology with first and third author; co-led the development of the methods including the research instruments with first and third authors; acquired ethical clearance for the research; co-designed the theoretical framework with first author; acquired ethical clearance for the research; led and implemented participant recruitment and data collection process; co-analysed the data with first author; co-led the writing with first author and prepared, revised, and submitted and re-submitted the manuscript (having addressed suggestions from the editors) integrating feedback from the co-authors as necessary throughout the process.
Author 3	Co-led the design of the research methodology with first and second authors; and co-led the development of the methods including the research instruments with first and second authors; reviewed, inputted and approved the final manuscript for submission.
Author 4	Co-conducted the research including, participant recruitment, data collection, and analysis with second, fifth and sixth authors; reviewed, inputted and approved the final manuscript for submission.
Author 5	Co-conducted the research including, participant recruitment, data collection, and analysis with second, fourth and sixth authors; reviewed, inputted and approved the final manuscript for submission.
Author 6	Co-conducted the research including, participant recruitment, data collection, and analysis with second, fourth and fifth authors; reviewed, inputted and approved the final manuscript for submission.
Author 7	Advised on the design of the research methodology and implementation of the research; and reviewed, inputted and approved the final manuscript for submission.
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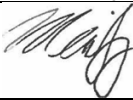|	
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Author 1	Conducted the literature review with input and suggestions from the research team; co-designed the research methodology with second and third authors; acquired ethical clearance for the

	research; led and developed the methods including the majority of study instruments with input and suggestions from the research team; acquired ethical clearance for the research; led and implemented all data collection activities with support from the research team; led and conducted the majority of data analysis, where possible with research participants with input, suggestions and support from the research team; led the writing, preparation, and submission of the manuscript (including the majority of the revisions encompassing suggestions from reviewers) integrating feedback from the co-authors as necessary throughout the process.
Author 2	Co-led the design of the research methodology with first and third authors; and co-led the development of the methods including the research instruments with first and second author; reviewed, inputted and approved the final manuscript for submission.
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Author 4	Co-conducted the research including, participant recruitment, data collection, and analysis with first, fifth and sixth authors; reviewed, inputted and approved the final manuscript for submission.
Author 5	Co-conducted the research including, participant recruitment, data collection, and analysis with first, fourth and sixth authors; reviewed, inputted and approved the final manuscript for submission.
Author 6	Co-conducted the research including, participant recruitment, data collection, and analysis with first, fourth and fifth authors; reviewed, inputted and approved the final manuscript for submission.
Author 7	Advised on the design of the research methodology and implementation of the research; and reviewed, inputted and approved the final manuscript for submission.
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LIST OF ABBREVIATIONS AND DEFINITION OF TERMS

I. Abbreviations

B
BC   British Columbia

C
CAD   Canadian dollars
CBPR community-based participatory research
Condo condominium

E
Eds   Editors
EEZ   Exclusive Economic Zone

H

HIE   Healthy Immigrant Effect

HWU   Heriot Watt University

I

IDDPP   Intersectional Dimensions of Differentiation Place Perspective

iKT   integrated knowledge translation

K

KMb   knowledge mobilisation

KT   knowledge translation

M

Metro metropolitan

MIF   Multi-dimensional Intersectionality Framework

P

PCMWs   participatory community mapping workshops

PEF   person-environment fit

PDF   portable document format

S

sq. ft.   square feet

SSHRC   Social Sciences and Humanities Research Council of Canada

U

UK   United Kingdom

UN   United Nations

W

WHO   World Health Organization

II. Definition of Terms

Ageing-in-place: Refers to "an established concept prominent in urban studies and environmental gerontology. Defined as the "ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level" (Centers for Disease Control and Prevention, 2013, p.1)." The definition includes "the desire, freedom, choice, and ability for older adults to be able to remain living in the community, self-sufficiently, as opposed to transitioning into residential care (Wiles et al., 2012)."

Appreciative inquiry: According to Cooperrider (2004); Cooperrider and Whitney (2005) "supports groups with different knowledge bases, points of reference and ways of thinking to share ideas and work practices in an atmosphere of valuing difference, openness and trust. It also encourages active listening and joint solution building. Moreover, appreciative inquiry emphasizes the key participatory principles of propositional knowing where people collaborate to design appropriate questions and methods, practical knowing in which knowledge is applied within practice, experiential knowing based on experiences in everyday and working lives and presentational knowing which highlights the application of new forms of understanding within collaborative frameworks (Heron and Reason, 2006)."

Autobiographic insideness: Refers to "a sense-of-place developed over time, shaped by memory and history, familiarity of place and routine, and most importantly, the relationships established within place (Rowles, 1983; Lindely and Wallace, 2015)."

Centring in the margins: Refers to a concept of bell hooks in which "the stories of seldom heard groups are fore-fronted (hooks, 2000)."

Co-creation: "To develop new knowledge and solutions to wicked problems with diverse stakeholders prioritising lived experience as expertise it its own right."

Community-engaged scholarship: The "collaborative knowledge generation by academics working alongside other stakeholders."

Community resilience: Refers to the "existence, development and engagement of community resources by community members to thrive in an environment characterized by change, uncertainty, unpredictability and surprise (Magis, 2010, p.401)."

Deliberative dialogue: Refers to a "Group discussion method aimed at generating thoughtful conversations, unique from other forms of public discourse techniques such as debating, negotiating, ideas mapping, and generating consensus. Key characteristics: multiple stakeholder participants; shared platform; informal; encourages ideas exchange and requires the generation of actionable tasks at the end of the dialogue session." It is "used to generate open, informal discussion on specific topic areas with a range of individuals who have different backgrounds (e.g., professional or educational) and unique interests (e.g., serving the community or generating profit)." It is also seen "as a method that facilitates research with action through "a joint endeavour where egalitarian partners, through conversation, search for true understanding and knowledge" (Kvale, 2006, p.483)."

Empowerment: "To provide persons most affected by the decision-making with opportunities and resources that will enable them to action and determine their own outcome."

Equity: "To ensure that fair and just distribution of power among diverse stakeholders."

Essentialising: In Narayan's (1998) approach, refers to "some groups are viewed as homogenous with distinct characteristics."

Go along interview: Involves "researchers accompanied individual informants on a participant-led tour of their immediate environments such as local neighbourhoods (Carpiano, 2009)."

Home: Refers to, according to Sixsmith (1986) "one's home is a place of physical, personal, and social experience that sustains a sense of security, safety, privacy, independence and choice."

Inclusivity: "To maximise opportunities for all stakeholders to participate in the research, planning and development process."

Identity: It "represents who a person is. Identity has been construed as both a personal and a social construction formulated and shaped by subjective individual experiences, creating a lens through which people perceive themselves in association with where and how they are situated within society."

In-depth interviews: *"*Narrative inquiry method to elicit in-depth information from participants. Key characteristics: open-ended questions; semi-structured; led by researcher to seek understanding and interpretation and is often audio-recorded or video-recorded."

Integrated knowledge translation: Refers to "an integrated and participatory way of working whereby researchers, practitioners and knowledge users (those who aim to use the resultant findings), collaborate to co-generate new knowledge that is relevant in real world settings (Battersby et al., 2017)."

Intersectional analysis: A concept that "has both drawn from and shaped similar methodological approaches particularly in women's health such as the well-established sex and gender based analysis (Doull et al., 2010), community-focused approaches (Creese and Frisby, 2011), and Indigenous methodologies i.e. integrating tribal knowledge and decolonising theory (Hankivsky, 2011)."

Intersectionality: Refers to "an analytic perspective and framework that understands individuals as situated in multiple social categories that intersect with structural barriers to cumulatively shape an individual's social identities, life experiences, and opportunities (Hankivsky and Cormier, 2011; Yuval-Davis, 2006)." It is a theory that "prioritises the *centring in of margins* — a notion that advocates bringing marginalised perspectives to the forefront (hooks, 2000), and is thus well aligned with CBPR."

Intersectional dimensions of differentiation place perspective (IDDPP): A concept that "merges key concepts of place theory together with intersectional feminism to propagate an analytical model informed by a life-course perspective that can help reveal socially determined and socially centred processes operationalised at the intersection of multiple identit(ies) and positionalit(ies) across place and time."

Inter-subjectivity: Refers to the "interchange of thoughts and feelings both conscious and unconscious between two individuals."

Key participatory principles: Refer to: equity, inclusivity, empowerment, partnership and co-creation.

Knowledge translation: As a concept it "emphasise[s] the co-production of knowledge and knowledge exchange with stakeholders (including persons with lived experience alongside decision-makers) (Bowen and Graham, 2013)."

Knowledge users: See also knowledge recipients.

Migration: Is "a sequence of movements that are linked to each other by periods of settlement in spaces of relationships, in socially-constructed places" Pascual-de-Sans (2004, p.350). In turn, Cardelus et al. (1999, p.123), views migration as "a complex mechanism by which populations adjust to the social organisation of space."

Multidimensional intersectionality framework (MIF): There are "various types of oppression are not only interrelated, but present interlocking dimensions of differentiation used to dominate and exclude those that diverge from normativity. MIF is predicated on the notion that people construct meaning through the various and multiple identities that they hold, the different and changing social positionalities they occupy, the multifarious oppressions they face as well as the opportunities that are presented, as they negotiate their everyday lives." Also, "MIF represents an expansion beyond the conventional analytical mechanism of an intersectional analysis, that is the focused understanding experiences of oppression through the examination of a narrowly focused and formulaic *tri-partite cocktail of social factors* that is gender, age, and race."

Narrative inquiry: An approach that "enables researchers to understand participants' experiences according to how they live them via time, space and personal relationships (Clandinin and Connelly, 2000)."

NVivo: A computer software package that uses qualitative data analysis.

Oppression: "Prilleltensky and Gonick describe oppressive social structures as "a state of asymmetric power relations characterized by domination, subordination, and resistance, where the dominating persons or groups exercise their power by restricting access to material resources" (1996, pp.129–130)." Oppression "can include facets of exploitation, marginalization, deprivation, persecution, powerlessness, cultural imperialism, and various forms of violence (Young, 1990)."

Othering: The process of becoming or being made the other "through the combined effect of their social identities including their age, ethnicity, income and gender."

Participatory mapping: Is a "Visual method to create a tangible display of people, places and experiences that make up a community through map-making exercises and community 'walk-alongs,' — a form of visual, in-depth qualitative interviewing often conducted while walking with the participants. Key characteristics: multiple stakeholders; participant-led; map-making; community walk-alongs; informal."

Participatory working: Refers to "a key aspect of transdisciplinary research, requiring specific focus on the complexity of a problem and co-production of knowledge solutions guided by participatory principles (Boger et al., 2017)."

Partnership: "To collaborate with diverse stakeholders as partners and work towards a shared goal."

Person-environment fit (PEF): Refers to "an individual's ability to adapt to a new place is determined by a balance of both personal requirements and environmental characteristics." PEF "consists of interstices that can only be filled through adequate consideration for the social, structural, psychological and cultural facets of place that determine a person's ability to age well in the place."

Photovoice: A "Visual method grounded in qualitative participatory research principles used to explore personal experiences of a particular phenomenon through photography. Key characteristics: participant-led; informal; uses photography to explore personal experiences of a particular phenomenon."

Physical environment: For example, amenity and community spaces.

Place: "According to Relph, formulation of 'place is comprised of three inter-related components, each irreducible to the other – physical features or appearances, observable activities and functions and meanings or symbols' (1976, p.61)." Canter (1977) builds on Relph's phenomenological conceptualisation "focusing more clearly on the linkage between the three features, emphasising, from a psychology perspective, the built features and individual conceptualisations of place as well as the activities that occur there."

Place actions: Are "focused on the built environment, including: outdoor spaces and buildings; transportation; housing; social participation; respect and social approval; civic participation; communication and information; community supports and health services; and the psychosocial aspects of belonging and sense-of-place when creating, designing and planning homes for older adults (World Health Organization, 2007)."

Place attachment: Refers to "a key concept in place theory that emphasises the emotional connections people have with their environment, and is frequently used to inform the planning and development of public spaces (Kyle et al., 2005; Moore and Graefe, 1994; Williams and Stewart, 1998). Described as the psychological and emotional bonds that individuals develop with places (Low and Altman, 1992; Williams

et al., 1992; Hidalgo and Hernandez, 2001; Giuliani, 2003; Manzo and Perkins, 2006), place attachment explains that through developing symbolic meaning in architectural design and physical traits of place, and sensory awareness of different spaces and relationships in shared environments, our human connection to places emerges (Stedman, 2003)."

Place identity: According to "Relph (1976), our place identity is shaped by built surroundings and importantly, our individual conceptualisations of place as well as the activities that occur in any particular place."

Positionality: Refers to "a way of 'being' or 'knowing' that is influenced by fluctuating social, political, and economic structures and institutional contexts." Also it is, "influenced by fluctuating social, political, and economic structures and institutional contexts (Allen, 2007). An "individual's locale or position in society is situated through the interweaving of multiple positions, such as a person's gendered position, financial position, etc., and unique facets of positionality are consolidated by an individual's pronounced or assigned identities (Anthias, 2012). Consequently, an individual's position (and their situation in relation to the social hierarchies) is often reinforced by subjective experience and shaped by interlocking identities in association with the physical and psychosocial environment (Collins. 2000; hooks; 2000)."

Pragmatism: Calls for, in the context of this thesis and as a CBPR principle, "community-based researchers to reflect early on scale and feasibility of CBPR methods, its applicability in the community, and likelihood of achieving tangible outputs that are useful in real world contexts."

Real-world impact: Calls for, in the context of this thesis and as a CBPR principle, "researchers to develop impact assessment indicators together with partners and interweave these throughout all stages of the research. In consideration of these recommendations and limitations identified by the body of work, there is some direction on how future research can take this forward with a more global focus." The result of this focus would be transnational knowledge creation.

Reflexivity: It "is an analytical process often used by qualitative researchers to help questions raised about relationships with the social world and how this relationship impacts research. Reflexivity is a form of questioning to make distinctions "between what is fact or fiction, the nature of knowledge and ultimately our purpose and practice as researchers" (Cunliffe, 2003, p.985).

Reflexive process: Is a "self-critical sympathetic introspection and self-conscious analytical scrutiny of the self as a researcher" by examining how, we (the researchers) are positioned within the research and vice-versa, how participants may position you (England, 1994, p.244). In Pini (2004), a "reflexive approach requires a critique and examination of one's own life accounts and how these experiences have influenced the co-construction of knowledge."

Renoviction: Is "a term coined in British Columbia, for the eviction of tenants on the basis that a large-scale renovation is planned."

Responsibilitisation: Is a term coined by Maasen and Lieven (2006, p.401). It is "the notion of accountability and an orientation toward the common good by all actors involved."

Sense of place: Refers to "an umbrella term used to describe aspects of place identity, sense of purpose, belonging and living a meaningful life (Kyle & Chick, 2007; Scannell & Gifford, 2010). Defined symbolically as "the subjective meaning and importance that individuals give to where they reside" (Eyles & Wiliams, 2008, 1), emotionally to describe humans "affective ties with the material environment" (Tuan, 1977, 93) and reflexively as "a confluence of cognitions, emotions and actions organized around human agency" (Canter, 1991, 214); sense-of-place is often constructed and negotiated within the context of everyday settings such as one's home and community." Additionally, "sense-of-place is not necessarily a stable experiential state and that sense-of-place can change depending on the different experiences people have in places (Williams, 2014)."

Social environment: For example, social programming.

Socio-spatial: For example, identities, positionalities.

Storytelling narrative inquiry method: Wherein "participants share personal stories about a topic or phenomenon. The storytelling method is unstructured and often led by the participant (as opposed to the researcher). Key characteristics: un-structured; led by participant to reveal, inspire understandings about a particular topic or phenomenon in relation to self, whilst simultaneously providing important, in-depth information to the researcher and is often audio-recorded or video-recorded." It is "a method that uses a reflexive approach, facilitates inquiry into a person's life story without having to use language that is difficult for a participant to comprehend."

The other: Refers to "those outside the accepted or dominant culture."

Transdisciplinary research: Refers to a "A key principle of transdisciplinary research is that the results and outputs should be targeted at generating positive social change (Boger et al., 2017)."

Transdisciplinary working: Refers to "a research philosophy that that involves scientists from diverse academic disciplines and experiential stakeholders." It "involves scientists from diverse academic disciplines and experiential stakeholders, for example older adults and caregivers, industry and financers, and policy makers, coming together to solve complex issues, known as 'wicked' social problems, by co-producing knowledge and innovation that have real-world impact (Boger et al., 2017)." It is "*not* research involving only one discipline or sector, nor does it represent research that includes experiential stakeholders only as research participants or subjects (Grigorovich et al., 2019)." Rather it's goal "is to develop a shared vision of a complex problem area (Rittel and Webber, 1973), and transcend current ways of thinking to progress towards understandings of the problem area such that innovation drives the co-production of problem solutions (Battersby et al., 2017)." Additionally, "Transdisciplinary working, according to Boger et al. (2017, p.2), is an attempt to access "the collective mind" of a team composed of different viewpoints to solve a difficult real-world problem known as 'wicked' problems for the purposes of generating transformative change."

Walk-alongs: "Established as the 'go-along' method." A form of qualitative interviewing conducted while walking with the research participant (Kusenbach, 2003).

Wicked: Refers to "a societal quandary that is deeply complicated, that is also riddled with complex and intransigent social issues with no perfect resolution, and that has neither conclusive nor objective answers (Rittel and Webber, 1973)."

Wicked problems: Refers to complex social issues that may "necessitate multiple solutions (Riva et al., 2014)."

World café: Refers to "a technique used to engage stakeholders in an informal discussion on a topical issue within a café style setting."

1.5 generation: Refers to individuals who immigrate before or during their early teens to a new country. In their new country, they hold both the characteristics of their country of origin as well as those of their new home.

1. CHAPTER ONE: BACKGROUND AND RATIONALE

This first chapter begins with an overview of the problem area and rationale for this thesis by publication (section 1.1). This is followed by an overview of the research context (section 1.2) concerning an affordable housing redevelopment project in western Canada, to geographically locate the body of work (sections 2.1 – 2.5) and set the context for the research presented in this thesis. This chapter concludes with section 1.3 highlighting how the publications presented in Chapter two are closely interrelated. It concludes with closing summaries describing the arrangement of the chapters in accordance with guidelines for thesis by publication.

1.1 Locating the Problem Area

Ageing-in-place is a well-known concept in urban studies and environmental gerontology (Costa-Font, Elvira, Mascarilla-Miró, 2009; Wahl and Oswald, 2010). It refers to the "ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level" (Centers for Disease Control and Prevention, 2013, p.1). The concept originates from the interaction between older adults and their living environment. It includes the challenges, barriers, accumulation of changes over the life-course (Vasunilashorn et al., 2012). More recently this concept "has been discussed as a phenomenon, goal or process" focused on both "place as a dwelling" incorporating broader aspects of home and belonging including "relationships in the community" (Ahn, 2017, p.1). Traditionally, ageing-in-place has been assumed to be a positive experience for older adults. However, research has indicated that when the built environment, for example a house or apartment, and community surroundings, such as services and supports can no longer adequately accommodate a person's everyday needs, the experience of ageing-in-place can become negative (Sixsmith and Sixsmith, 2008). At the individual level, for example, *home* can become a vulnerable and isolating place for older adults. This can occur if they are not able to benefit from living in a safe and secure home and in a residential community with access to health and social services and amenities (Angus et al., 2005; Hillcoat-Nalletamby and Ogg, 2014). At the household level, individual experiences are also influenced by decisions made at the structural level. This occurs when redevelopment policies, initiatives and housing renewal programmes fail to meet the needs of older adults, such as through a lack of awareness of age-specific place-based needs, funding and resources, and political pressures for cost saving, which do not create accessible environments (Wong, 2013).

To build more effective age-friendly home environments, therefore, requires a shift in thinking from ageing-in-place towards ageing in the right place (Golant, 2015). Ageing in the right place progresses ageing in place conceptualisations (Golant, 2015). First, it contests the idea that remaining in the same place is the best option for older adults. Second, it encourages development of understandings of what the right place is to determine what is are viable homes for older diverse adults. An example of which would be for older adults with challenges who may be constrained by their socioeconomic circumstances. Creating viable home environments that cater to the individual, specifically older adults, is a matter of urgency as there are approximately 962 million persons over the age of 60 years worldwide (United Nations, 2017). In Canada, there are an estimated 6 million older adults over the age of 65 (Government of Canada, 2014).

The dramatic increase of older adult populations globally has raised questions on how to best provide adequate housing, care and support necessary to support good quality of life for older adults until the end of life (Ahn, 2017). Failure to do so could result in detrimental individual, community and societal outcomes. These outcomes can include, according to the World Health Organization (2016b), a variety of issues. First, growing health and social care costs that includes direct (e.g., medical supplies) and indirect costs (e.g., work loss) for the individual/carers as well as societal costs accrued due to increased hospitalisation, service demands, early admission to long-term care and social security. Second, deterioration of the mental and physical health as well as well-being of individuals such as family members, friends, carers, service providers due to the pressures for ensuring appropriate care. Third, decreased morale of individuals, communities and society at large when they are unable or are struggling to provide adequate care for themselves, their loved ones and/or service users.

When considering these potential outcomes, the provision of appropriate housing and community supports that respond to diverse types of older adults has thus become a 'wicked' problem as it addresses diversity based on age, gender, race/ethnicity, ability, culture, and socioeconomic position. In this usage, the term 'wicked' refers to a societal quandary that is deeply complicated, that is also riddled with complex and intransigent social issues with no perfect resolution, and that has neither conclusive nor objective answers (Rittel and Webber, 1973).

The primary goal of this research is to develop ways to help address this social problem through the progression of concepts, theories and methods to arrive at better housing research and development. However, key difficulties in achieving this goal stem from both a *lack of* as well as *insufficiencies within* existing housing development processes that do not always consider the health and social age-related needs of older adults. This is found to be especially true of older adults who are more vulnerable as they may be living with multiple chronic conditions, residing alone and living with limited financial means (World Health Organization, 2011; United Nations, 2017). For some older adults this has meant that they are: (1) forced to relocate into long-term care facilities much earlier than necessary (Bekhet, Zauszniewski, & Nakhla, 2009); (2) are living alone at home and in the community with limited social supports and opportunities for social interaction (Aspinal et al., 2016); and, (3) may become homeless when they are no longer able to afford to live in their homes (Maglione, Kristoffer, and Iglewicz, 2018).

Redevelopment initiatives targeting sustainable, liveable, age-friendly environments have thus become essential global priorities (United Nations, 2017; World Health Organization, 2019). Yet, there have been longstanding drawbacks in the redevelopment process. Key debates have emphasised the focus on the physical and material aspects of housing and the lack of affordability of new developments over housing that is affordable with sufficient access to amenities, services and supports in the community. In the case of affordability, there appears to be a growing discussion and new initiatives for more affordable housing that is tailored to more vulnerable groups such as older adults. Although, housing policies do not focus attention on sense-of-place i.e., the "human connection to places" (Raymond, Kyttä, and Stedman, 2017, p.1). For example, it has been suggested that the social, cultural, relational and community aspects of place that determine good quality of life and shape the everyday lives of older adults have been overlooked in the housing development process (Hillcoat-Nalletamby and Ogg, 2014). This is perhaps due to a lack of knowledge and resources. Both are arguably linked to inadequate multi-stakeholder involvement that would comprise local service providers, local government officials and people living in the community (Polk, 2015). According to Raymond, Kyttä, and Stedman (2017, p.4), "it is the shared performance of individuals (e.g., by inventing, constructing, and deconstructing structures) that turn lived space into a special place." This could mean the participation of individuals, such as older adults, local health and social care

providers, housing providers and business owners, who could be valuable to the housing development process. It can be asserted, then, when multiple perspectives are not consulted the result means lost opportunities to understand people-environment relations that are active in creating the meaning of *place*. Having a sense-of-place, or the human connection to place, is the bond that people formulate with meaningful spaces, as they establish a sense of identity, e.g., the good neighbour; attachment to the community; and a social support network connected to a place (Scannell and Gifford, 2010).

The research presented in this thesis explores how community-participatory principles can create better housing opportunities for older adults through improved multi-stakeholder collaborations and the inclusion of voices that are seldom heard. This exploration will examine key concepts, theory, and methods of community-based participatory research (CBPR). The published works presented in this thesis will demonstrate how the application of participatory principles facilitated the engagement of multiple stakeholder perspectives, as well as the prioritisation of older adults' voices, and the co-creation of housing solutions in an affordable housing redevelopment project. This project was situated in western Canada and was entitled, the "Place-making with Seniors" project. The goal of this research is to advance the application of community-participatory principles that would work towards holistic and sustainable housing solutions. The goal, therefore, was to enhance the quality of life of older adults. Importantly, a key output of this thesis stems from the body of work consisting of the five academic papers as well as non-academic resources that can be potentially applicable across different cultural contexts and urban spaces. This application can inform the development of age-friendly environments using community-participatory principles.

Moreover, in recognising that rapid population ageing places increased pressure on the need to support older adults to age well in the right place, academics and non-academic professionals are prioritising more and more the need for efforts to integrate community perspectives throughout the creation of innovative housing solutions that cater to older adults and their everyday needs. A community-based participatory research (CBPR) approach was therefore chosen to provide a set of participatory principles that guided all stages of the Place-making with Seniors project. CBPR was selected because it enables collaborative working (Jagosh et al., 2015). This is particularly true in complex projects

that are characterised by participatory, action-oriented, people-centred research that requires input and participation from diverse stakeholder groups (Grigorovich et al., 2018). Principles, theory and methods derived from CBPR served to prioritise seldom heard voices and enhanced participation from all stakeholders throughout the entirety of the research process: in setting the aims and objectives; shaping the research's design; and, establishing co-researchers in the collection and analysis and in co-designing the research product. Stakeholder groups included older adults, housing providers, building design and development professionals, civil servants, health service providers, and researchers.

The application of CBPR principles was essential to: (1) transform mechanisms for collaborative working with diverse stakeholder groups in an affordable housing redevelopment project for older adults; and, (2) help progress the co-development of ageing in the right place opportunities to enable older adults to live longer with better quality lives at home and in their community. For this thesis by publication, a body of work that was the result of a longitudinal community-based Canadian housing initiative is introduced, critiqued, and also used to illustrate how CBPR principles progressed the development of place theory, through the insight of findings generated by using creative methods in the research process (such as storytelling, participatory mapping and photo tours). It also aided the production of academic and non-academic resources for advancing the movement towards helping older adults to *age well in the right place*.

The following section provides an overview of the research context surrounding an affordable housing redevelopment project for older adults in western Canada, which is the research focus of this thesis.

1.2 Research Context: Older Adults' Affordable Housing Project in Canada

The body of research presented in this thesis stems from a three year CBPR project funded by the Vancouver Foundation and the Social Sciences and Humanities Research Council of Canada (SSHRC) to evaluate the redevelopment process and co-create liveable age-friendly home and community environments for low-income older adults transitioning from cottage style housing into high rise condominiums in Richmond, British Columbia (BC), Canada. The City of Richmond is a municipality of Greater Vancouver, BC in Western Canada and home to the highest proportion of Chinese people in all of Canada. According to Statistics Canada (2019), Richmond had a total

population of 198,309 in 2017, which is approximately 8.0% of the population of Greater Vancouver (2,463,431), 4.6% of the population of BC (4,648,055) and 0.6% of the total Canadian population (35,151,728). Table 1.1 provides demographic details for this project, with a breakdown of city-, provincial- and national-level information as it pertains the body of research presented for this thesis.

Statistical characteristics (table 1.1) highlight how compared to the rest of Canada (i.e. cultural mix, income, and housing demographics), Richmond provides an interesting case for both housing initiatives and research towards addressing housing inequality in the Canadian context. First, in terms of cultural mix, compared to the national average, approximately six out of ten individuals do not speak the official Canadian languages (English or French), with one in two having some form of Chinese ancestry. Meanwhile, people living in Richmond receive approximately 16.3% less income than the national median figure. Yet, compared to the national average, people living in Richmond pay significantly more, for monthly housing costs, whether they are renters or home owners. Hence, it is no surprise that there are also far fewer individuals who report living privately in detached homes in Richmond (nearly 50% less than the national average).

Table 1.1. Demographic information breakdown by city, province and country.

Characteristic	Richmond 198,309	Greater Vancouver	British Columbia	Canada
Women 65 years and over (n, %)	18,155 (9.2)	210,780 (8.6)	453,425 (9.8)	3,240,485 (9.2)
Men 65 years and over (n, %)	15,495 (7.8)	176,530 (7.2)	395,560 (8.5)	2,695,150 (7.7)
Non-official languages (non-English, -French) (n, %)	122,990 (62.0)	1,020,250 (41.4)	1,267,460 (27.3)	7,321,065 (20.8)
Chinese languages (n, %)	88,310 (44.5)	385,355 (15.6)	408,415 (8.8)	913,365 (2.6)
Occupied private dwellings of single-detached house (n, %)	24,315 (12.3)	282,355 (11.5)	830,660 (17.9)	7,541,495 (21.4)
Occupied private dwellings of Apartments (n, %)	10,400 (5.2)	160,060 (6.5)	177,830 (3.8)	1,391,040 (4.0)
Number of total income recipients aged 15 years and over in private households (n, %)	169,445 (85.4)	1,978,880 (80.3)	3,727,715 (80.2)	27,488,530 (78.2)
Average after-tax income in 2015 among recipients ($)	—	38,512	37,922	—
Median after-tax income in 2015 among recipients ($)	25,842	—	—	30,866
Average monthly shelter costs for owned dwellings ($)	1,488	1,622	1,387	1,313
Average monthly shelter costs for rented dwellings ($)	1,334	1,242	1,149	910

Source: Adapted from Statistics Canada 2019.

The following sections provide further context for the housing redevelopment project and CBPR research discussed in this thesis. Building on the statistical information in table 1.1, the rationale and background for an affordable housing redevelopment initiative in Richmond is introduced.

1.2.1 Rationale behind the Housing Redevelopment Initiative in Western Canada

The case of an older adults' affordable housing redevelopment initiative is the focus of this thesis. This research was undertaken in Richmond, BC, Canada. Figure 1.1 provides a broad visualisation of the study locale in respect to the rest of Canada. Situated on the Pacific west coast of the province of BC, metropolitan (Metro) Vancouver provides residents with opportunities for enhanced safety and security, levels of educational attainment, physical activity and access to a vibrant city life alongside the natural environment such as the Pacific ocean, local mountains and lakes–making it the most sought after place to live in all of Canada (Taylor, 2019).
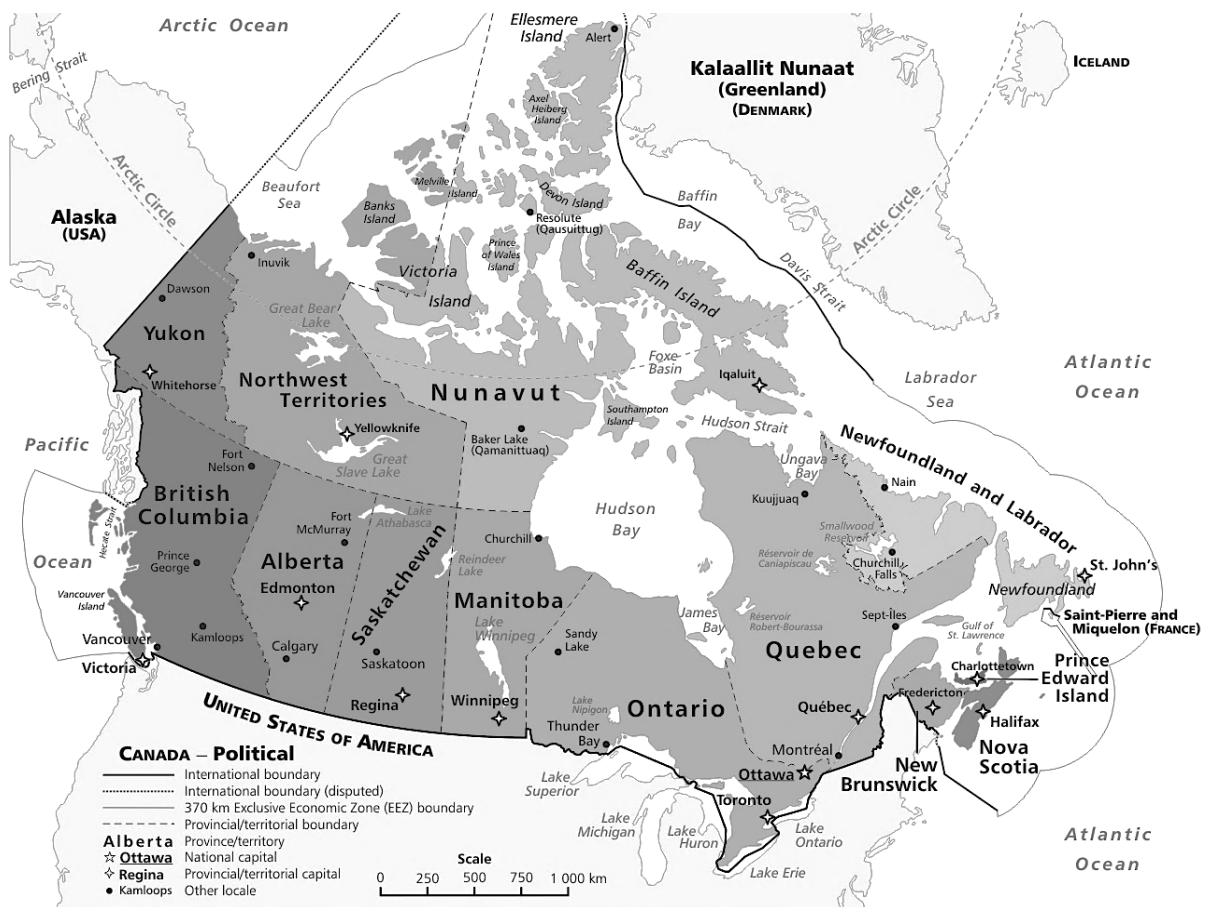
Figure 1.1. A map of Canada to provide geographical context of where the research was conducted. Source: Wikipedia Commons, drawn and adapted by E. Pluribus Anthony from the Atlas of Canada.

In 2019, Mercer Canada, a division of an international professional services firm, ranked Metro Vancouver the third best city to live in the world (Taylor, 2019). However, this stature occurs at a considerable price for local residents. Accordingly, Metro Vancouver is also ranked as having the second least affordable housing market, in terms of middle income housing affordability, worldwide (Cox and Bertaud, 2019). Figure 1.2 illustrates housing affordability by municipality in Metro Vancouver, denoting average housing prices for detached homes alongside the required household income to become a home owner in the area. Specific to the research, the average housing price for the municipality of Richmond, in BC, in 2018 is approximately $1,669,900 CAD necessitating a household income of $230,866 CAD (Metro Vancouver Board of Directors, 2019). It is important to note that, having grown up and living in Metro Vancouver for over 25 years, detached homes were frequent accommodations for families, couples and even single persons prior to the onset of Metro Vancouver's housing boom, i.e., before 2012. This boom peaked in 2016. Post 2016 detached housing prices increased at an unprecedented rate. Property taxes rose thereby forcing local residents to sell and downsize or move farther out of the city. As the property values rose so did the demand for housing, which increasingly exceeded the available supply. Consequently, young families and couples native to the city found it exceedingly difficult to invest in Metro Vancouver property. Unless inherited, detached homes were nearly impossible to attain.
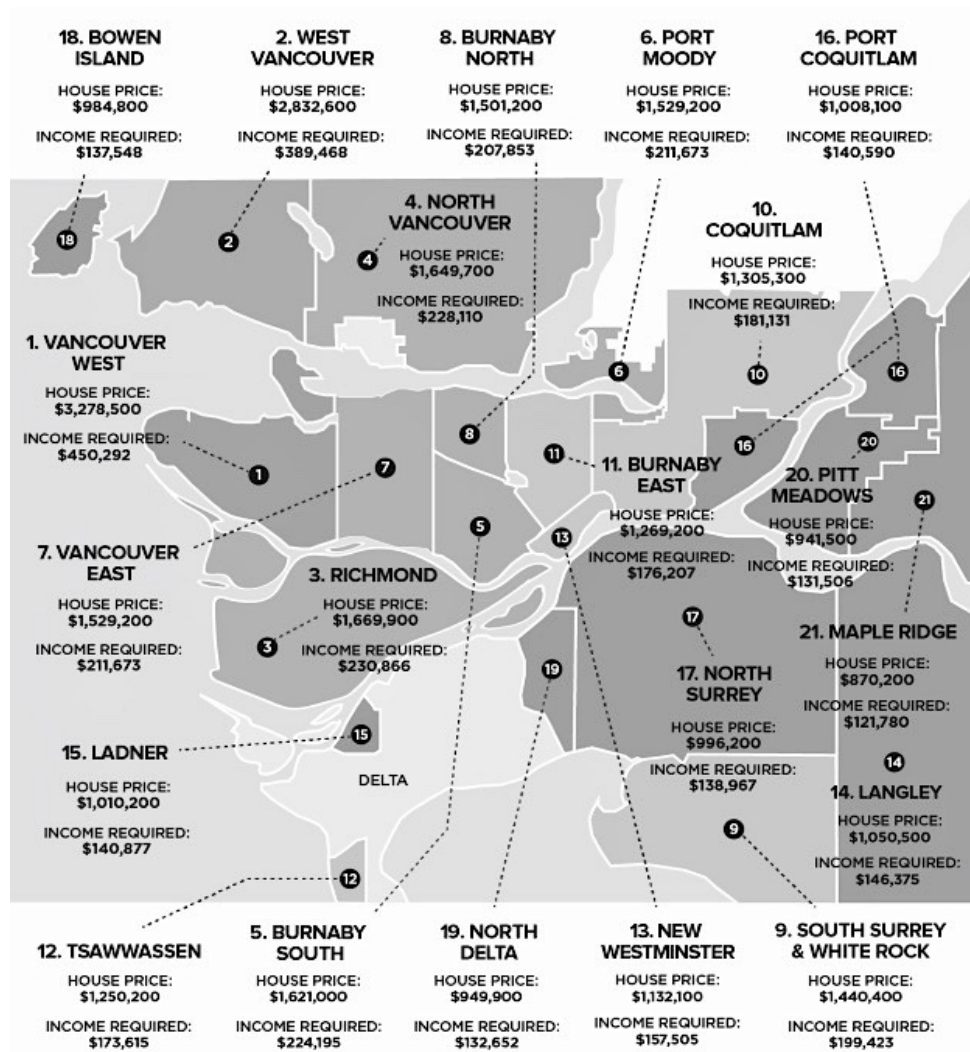
Figure 1.2. Presents house prices and required income for home ownership (by municipality) in Metro Vancouver. Source: Vancouver Sun, September 12, 2018, using data from Real Estate Board of Greater Vancouver, Fraser Valley Real Estate Board, August 2018.

At the height of the housing market surge in 2016, housing insecurity also became prevalent and impacted predominantly on older adults with limited financial means (Metro Vancouver Board of Directors, 2019). For instance, older adult homeowners struggled to maintain the upkeep of their properties requiring them to relocate to places with fewer amenities. For those who did not own their own homes, they were at increased risk of becoming homeless since increased property values had placed pressure on the rental market. In fact, they were directly proportional to one another, as both influence and are connected by, the housing supply versus demand ratio.

According to the Metro Vancouver Data Book, in 2016, persons at greatest risk of becoming homeless could be applied to over 15,000 households, with the primary group being individuals 65 years of age and over (Metro Vancouver Board of Directors, 2019). This figure has increased by almost 50% within a 10-year period, from 10,385 older adult households in 2006 (Metro Vancouver Board of Directors, 2019). The social housing waiting list for seniors' housing has also risen by over 100% in the last eight years, with reported figures of 1,949 in 2010 and 4,416 in 2018 (Metro Vancouver Board of Directors, 2019). As a result, older adults living in Metro Vancouver are still consistently experiencing forced relocation from their homes to reside in transient and inadequate housing arrangements such as living in damp, poorly lit, basement suites, and on couches of friends' homes. A possible consequence of these living arrangements is social exclusion and isolation, and being disconnected and segregated from the wider community that can lead to poor health and wellbeing outcomes for older adults (Vancouver Foundation, 2012). In contrast, living in adequate housing in a supportive environment facilitates a sense of community belonging (Morris, 2013).

1.2.2 History of the Redevelopment Initiative

Amidst increasing housing insecurity in Metro Vancouver, the experience of being forced to leave a familiar home and community, alongside the pressures of having to create a new home and reintegrate into a new community, can hinder the ability to age well in place for older adults (Greenfield et al., 2015). The issue of precarious housing and forced relocation is more prominent in municipalities with growing older adult populations. Richmond, a municipality of Metro Vancouver, for example, has a growing older adult population base consisting of approximately 40–50% middle-aged and older adult groups, i.e., over the age of 45 years of age (Metro Vancouver Board of Directors, 2019). Currently, the municipality of Richmond offers various types of housing options, such as social housing for low-income persons, assisted living, long-term care, to accommodate older adults who are no longer able to live at home and in their community, that is due to age-related health reasons or issues relating to affordability. However, these are limited and the buildings are generally older and in poor condition requiring repair, retrofitting or redevelopment. Costs to repair, retrofit and/or redevelop older buildings have also risen alongside elevated housing prices. Research focussed on affordable housing redevelopment initiative/place-making for older adults addressed issues of affordability and improving the structural integrity of older buildings whilst ensuring sense-of-place when creating housing and home for low-

income older adults. Figure 1.3 provides an overview of the timeline and sequence of events that led to the initial redevelopment of a housing community in the municipality of Richmond in Metro Vancouver, which is home to over 150 older adults with limited financial means.

Affordable Cottage-style Homes for Older People

1959

Establishment of original affordable housing development for older people in Richmond, BC

Safety Concerns

2005

Increasing unease regarding the age and quality of the original two-level apartment buildings.

2010

Housing society was presented an opportunity to finance and redevelop the affordable housing homes for older people

Opportunity for Housing Redevelopment

Announcement to Tenants

2011

Older people were made aware of plans for redevelopment of their homes and the need to seek out and secure other housing arrangements for the 3 year redevelopment period.

2012

Tenants were vacated and buildings were knocked down.

Redevelopment Initiation

Start of Place-Making with Seniors Research

2014

Initiation of research to encourage collaborative working across sectors; and generate data to provide guidance and ensure that the needs of older people were met.

2015

Completion of two 16-storey condominiums for older low-income people. Only 25% of grandfathered tenants moved back.

Building Completion

Figure 1.3. Illustrates a timeline of the history of events that resulted in the housing redevelopment initiative and research.

Note: timeline and details of the research activities for the place-making with older adults' research will be outlined in section 1.2.3.

In 1959, a housing society located in Richmond, a municipality of Metro Vancouver, acquired a five-acre building site, where approximately 122 units (24 wooden construction cottages and 98 bachelor suites in several two-level apartment buildings) were developed for older adults who were of limited financial means (BC Housing, 2018). Because the housing society was governed by its own board of directors and with its own charter and responsibilities, they had decision-making powers to mandate the use of the acreage to provide low-cost housing for ambulatory older adults, i.e., individuals who could live independently without additional care or health support at home. These units were rented to older adults with proven limited income at approximately one-third of the average market rental costs, up until the buildings were demolished as a part of the redevelopment initiative.

Over the years, there was gradual and increasing unease regarding the age and quality of the original two-level apartment buildings that triggered safety concerns in 2005 (BC Housing, 2018). Although the obvious solution at the time was to renovate, the cost to retrofit the buildings was extremely high. Subsequently, the housing society began searching for alternative means to replace the outdated building.

Approximately five years later, in 2010, the housing society was presented with an opportunity, under the auspices of the municipality of Richmond, to sell two-thirds of their land to a local developer that would produce over $20 million in capital (BC Housing, 2018). This land was later developed into market rate condominiums. The remaining, one-third of the five acre property was redeveloped into affordable housing units, in the form of high rise condominiums, for low-income older adults by the same developer at low cost. Since any building over a certain number of units in the municipality of Richmond was required to contribute 5% of their floor area towards affordable housing, the redevelopment would meet the developer's affordable housing requirement. The developer was thus commissioned by the municipality of Richmond and contracted by the housing society to redesign and reconstruct the two-level building. The final form was to consist of two 16-storey towers that totalled 296 one-bedroom units that were each approximately 600 sq. ft. (i.e., 55.7418 square meters), including two units for two caretakers. Details of the physical characteristics of the housing development pre- and post-redevelopment can be found in Appendix A.

The housing society and representatives from the developer had announced to older adult tenants the plans for redevelopment in December 2011, just before the Christmas holidays. What was presumed to be 'good news' for older adults, became instead a distressing experience. This was because they were also made aware of the need to vacate and find temporary homes for the next three years within six months of the announcement (approximately June 2012). This was also during a time where the housing demand had surpassed the available supply for residents in Metro Vancouver. As such, it was very difficult for individuals with limited income to find affordable housing in a safe and secure area with access to transportation, services, e.g., grocery, doctor, etc., and other amenities, e.g., community centre, shopping centre, etc. The current housing location was in a prime area with access to all of the aforementioned amenities.

The redevelopment began in mid-2012. Relocation issues encompassed only one aspect of the challenges experienced during the redevelopment process. For instance, there was the potential for older adults becoming lonely and socially isolated when transitioning from low rise two-level cottage-style housing to high-rise condominiums. Potential ways in which the physical and community environments can be shaped to address loneliness and social isolation became a key topic of discussion among stakeholders. The stakeholders included: representatives from the housing society, municipality of Richmond, developer, local non-profit housing associations, Canadian Mortgage Housing Corporation, and local health authority. Several recommendations were put forth on how to better support the health and well-being of older adults as they transitioned into the new build. Further consultations were later conducted across health care sectors, for example, with outreach workers and health nurses. The discussions resulted in specific space allocations in the new build for community health care nurses to conduct visits as well as secured parking spaces for health service providers.

Despite the 'push' by the municipality of Richmond to ensure that the built and community environments were conducive to older adults' health and well-being, there were no rules or regulations, at the municipal level, to guide the design and planning process. Furthermore, maintaining collaborative working across multiple sectors, e.g., housing, planners, developers, health and community care services, proved challenging. Professionals from each of these domains had their own interests, ideas and

expectations on how the building's spaces could be allocated and used, and the types of services and activities to include in the shared amenity space. The diversity of ideas and solutions presumably should have resulted in positive implications. However, individualised visions were 'siloed.' To the detriment of the project, both prior and at the start of the redevelopment, neither group was able to consider and see beyond their own disciplinary, sector-specific ideas and knowledges.

The redevelopment was further complicated by the lack knowledge and understanding of the needs of older adults by certain stakeholders, i.e., some members of the housing society, but particularly the developer. For example, even basic (often universal) physical features, such as handrails to prevent falls, wider doors for wheelchair access, and darkened blinds to cater for light sensitivity were absent from the new build. The building developer and urban planners experienced difficulties understanding the everyday lives of older adults such as the challenges, daily activities and routines inside and outside the home. They had difficulty understanding their needs, e.g., in-house activities to help overcome boredom, free Internet to connect with family members virtually as the condominiums prohibited pets for companionship, and lacked exercise equipment to enhance physical health, thick blinds for sensitive eyes, and wider doors for access.

During the process of forced relocation, it became evident that the general perspective of stakeholders, from the design and development domain was that older adults should have 'more gratitude' because they were being provided the opportunity to move into a new build and should thus refrain from 'complaining' about any difficulties associated with the shift from living in cottage-style apartments to high-rise condominiums. Moreover, according to local government members of the municipality of Richmond, planning approaches in Metro Vancouver had traditionally, focussed on land-use considerations and the building itself as opposed to creating a sense-of-place for older adults.

As the project progressed, it became more evident that the redevelopment project required a strong shift in perspective away from the built environment towards creating sense-of-place and home for low-income older adults with unique health and social care needs. This shift was ignited by a growing national concern for the social isolation of older Canadians against the backdrop of an increasingly ageing population in Canada

(National Seniors Council, 2014). In 2012, the International Federation of Ageing report, commissioned by the Employment and Social Development (ESDC) of Canada indicated that the most pronounced, emergent issue facing older Canadians was the ability to remain socially connected and active (International Federation of Aging, 2012) at home and in the community. This issue became a high priority for certain members from the municipality of Richmond who had decision-making power. Subsequently, members from the municipality of Richmond instigated a partnership with the Gerontology Research Centre at Simon Fraser University to develop research that aimed to prevent the social isolation of older adults relocating back into the new build by encouraging collaborative working across sectors to ensure that the needs of marginalised older adults were met and they were well-supported in terms of their physical, psychological, social and cultural needs to age well in place.

1.2.3 CBPR 'Place-making with Seniors' Project: Partnerships, Methods and Timeline
This section provides a concise overview of the partnerships and methods undertaken according to a timeline of events, which constituted a CBPR project to facilitate collaborative working across stakeholders and enable older adults to age well in the new homes.

As *partnership working* was a fundamental component of the redevelopment initiative and the place-making with older adults' project, it was important to initiate the CBPR research. The first step was bringing together key stakeholders. This included older adults who could provide important experiential knowledge regarding their everyday lives and members of the community who provided in-kind resources and opportunities for low-cost services into new build. It also included professional partner organisations (e.g. developer, housing society) and municipal government members; thus, enabling older adults' face-to-face access to people, who ultimately had decision-making power for creating their new homes. Finally, researchers i.e., the individuals who led the co-design, co-development and co-implementation of this study were also a part of this collaboration. To illustrate the inter-connection and the collaborations across both the redevelopment initiative and place-making with older adults project, a configuration of the partnership structure and the research team that highlights the key roles of partners and team members, is illustrated in figure 1.4. The partnerships that were established for the redevelopment initiative were in direct alignment with the partnerships for the place-making with older adults' project.
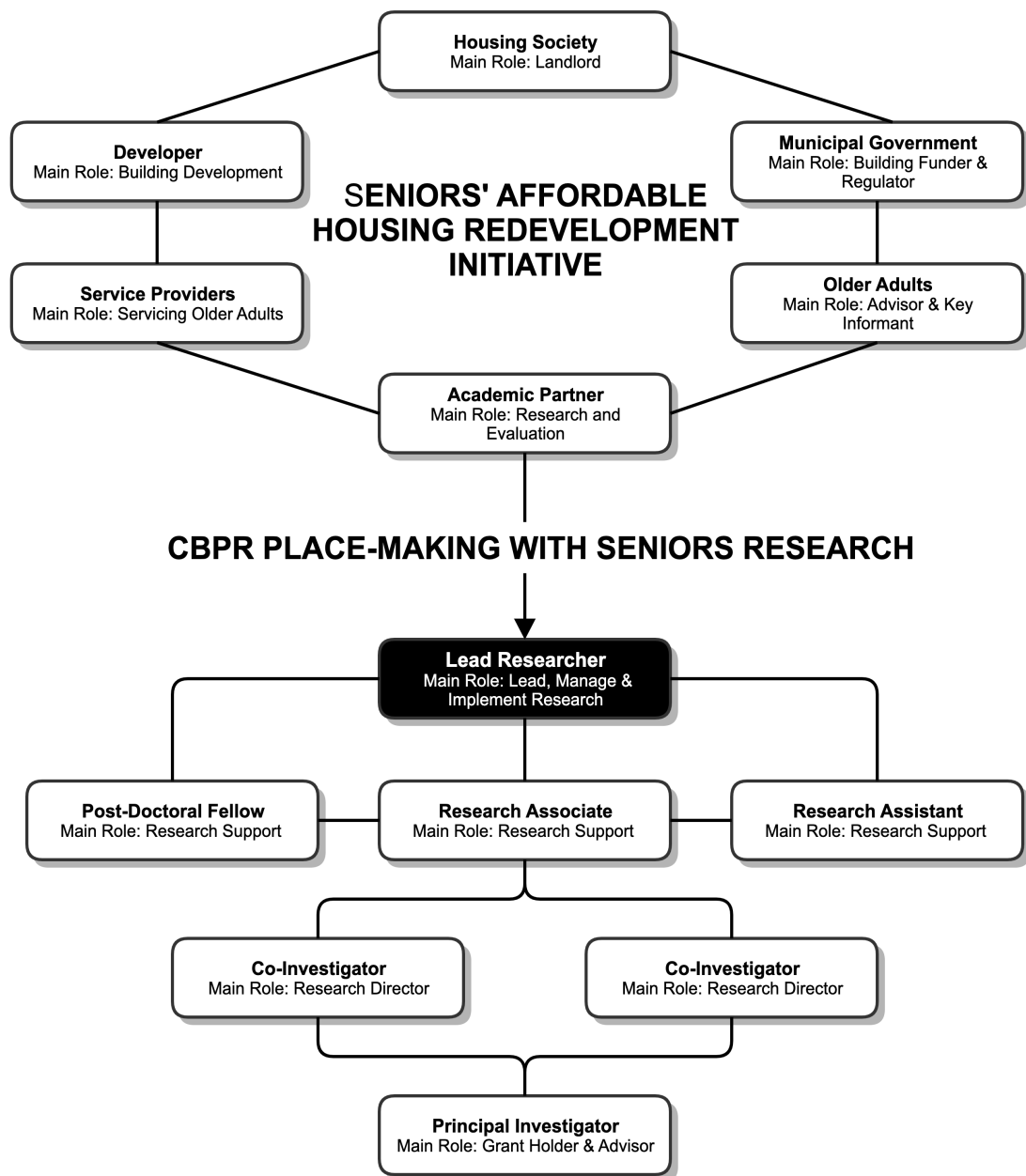
Figure 1.4. Describes the partnership and research team structure as well as the main role of each partner and team member. Note: The Lead Researcher is highlighted in black to denote my role on the project.

It is important to note that figure 1.4 is comprised of two components. The first component illustrates the interlinking of key partnership groups alongside their main roles. The redevelopment initiative was constituted of community, professional and government stakeholder partnerships with the intended goal of helping displaced seniors successfully transition from an older affordable housing complex into a newer one between 2012 and 2015 as discussed in the previous section (see figure 1.3). Essential partnerships and collaborative working across partners and between the research team

were crucial for the development of supports, such as in-house services and activities and infrastructural changes to the building, which fostered meaningful home environments for low-income older adults. The second component highlights the academic team and their key role in the place-making of the older adults' project. The academic team consisted of Co-investigators who had initially developed the project, and subsequently nominated a Principal Investigator whose main role was to act as a grant holder and added input into the implementation of the research where necessary.

In terms of my role, I was nominated and hired as the Lead Researcher. My responsibilities included leading, shaping, developing, implementing and managing the research. This involved managing the tasks and responsibilities of a research assistant, post-doctoral researcher, and a research associate who provided research support. My role also involved making key decisions on how to best conduct the research in the most effective way by making the best use of my background and expertise, which focused on theory, methods and practice for equity-focused, participatory health research. Hence, a key contribution, and personal responsibility, as the Lead researcher, was the reshaping of the project from a using traditional research approach towards a more collaborative, inclusive project guided by principles of CBPR. The project was initially commissioned as an 18 month evaluation to assess, track and monitor the redevelopment process and to elicit feedback from tenants to determine the purpose and use of shared amenity space. However, as a trained community-based researcher with past experience in addressing complex health and social problems, I knew that to fully engage individuals situated in vulnerable social positions in the research process, and ensure actionable change supported by decision-makers required a participatory research process (inclusive of theory and methods) that empowered and prioritised seldom heard voices, as well as facilitated the breakdown of traditional power imbalances and knowledge silos between professional and community stakeholders.

A CBPR approach was well-suited for this project because it is inherently complex (with multiple, voices, interests and agendas) and thus required knowledge generation methods that enabled shared decision-making, shared development of ideas and solutions and shared ownership of data and outputs, to ensure its success. Thus, the Place-making with Seniors project was guided by a CBPR approach to help ensure not

only shared working processes, but also to facilitate mechanisms of co-design[1] and co-production. Select methods were carefully chosen to facilitate both co-design and co-production mechanisms and these constituted: pre- and post-move semi-structured interviews; community mapping workshops; photo tours; story telling sessions; and knowledge mobilisation activities such as knowledge cafés, i.e., café style set-up of knowledge co-creation workshops, and seniors' feedback forums.

The utility of the CBPR approach and methods is described in-depth in papers one to five in Chapter two. Importantly, the CBPR approach and associated methods were selected to ensure that the older adults' 'voices' were accessed to understand their experience of place. Second, the approach and methods allowed for the perspectives of service providers and housing stakeholders to emerge. This shaped the subsequent development of in-house services and supports for older adults. Their input was crucial for understanding the facilitators and barriers to providing sufficient support for the older adults as they relocated into the new build in their current role and amidst their existing workload.

In terms of data collection, data were generated at key four time points (pre-move, 6, 12 and 18 months post-move) over the course of the place-making with the older adults' project. This coincided with the transitioning of two waves of older adults into the new affordable housing development at two different time-points. The first wave occurred upon the building's completion with the second wave occurring six months later. Figure 1.5 illustrates a timeline and brief details of the research's activities.

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[1] In this thesis, co-design refers to the co-designing of research instruments and dissemination materials jointly with key project partners (i.e. housing provider, developer, municipal government and older adult expert advisors); whereas co-production refers to ideas, knowledge, and recommendations co-constructed during data collection sessions with primarily older adult tenants and/or community service providers (with the exception of workshops where co-production also involved key project stakeholders).

**Pre-move
Interviews**

October
2014

Semi-structured
interviews were conducted
with older people to
capture pre-move housing
experiences.

**Pre-move
Photo-tours**

November
2014

Participant led tours of
older peoples' homes
and residential
neighbourhoods
captured by
photography.

**6-Month Post-move
Mapping Workshops**

February – April
2015

Deliberative dialogue was
conducted with service and
housing providers in
February. First wave of
older people moved into the
new build between
February – April.

**Dialogue Sessions &
Move-in: First Wave**

June – July
2015

Participatory mapping
workshops were conducted
with community and
professional stakeholders
and older people for the
purposes of mapping
community assets.

**12-Month Post-move
Storytelling**

August – October
2015

Second wave of older
people moved into the
new build.

**Move-in:
Second Wave**

April
2016

Storytelling sessions
were conducted with
older people to capture
past and present place
histories as part of 12
month follow-up.

February
2017

Feedback forum was
hosted for older people
to share project
findings and elicit
feedback as part of 18-
month follow-up.

**Feedback
Forum**

Figure 1.5. Illustrates the timeline of the CBPR activities undertaken between October 2014 – April 2017.

Semi-structured interviews (n = 25) and photo tours (n = 16) were undertaken with older adults prior to the relocation. They documented the impact of the transition process on their everyday lives and to learn their desires and expectations for the new build. Deliberative dialogue, discussions with the objective of arriving at a specific goal, sessions (n = 4) were conducted with service and housing providers to discuss preliminary findings to understand contextual challenges to providing appropriate supports for older adults, and to co-create potential solutions to improve the everyday lives of older adults moving into the new build. The sessions were conducted when the first wave of older adults was due to move into the new build. The overlapping timing of the two events was intentional and served to elicit buy-in into the research project. It also ensured the commitment of service and housing providers in preparation for the move-in. Service and housing providers were later recruited as participants for the participatory mapping workshops.

Participatory mapping workshops (n = 4) were implemented six months after the first wave of older adults had moved into their new residences. Participatory mapping workshops, which consisted of mapping exercises and walk along interviews, were conducted with: residents; housing providers; health service providers; community organisations; representatives of the municipal government; and other stakeholders. Their purpose was to ensure the mapping of older adults' needs regarding community services and supports as well as the new amenity space in the new affordable housing development. At 12 months post-move for wave 1 of residents (i.e., six months post-move for wave 2), storytelling sessions (n = 15) were conducted with older adults. They were to, first, explore their past place histories and how these experiences shaped their perceptions of sense-of-place in the present. Second, the researchers and other stakeholders used this opportunity to conduct a post-move follow-up with the older adults. Finally, at 18-months post-move, a feedback forum was hosted for older adults to share project findings in the form of Chinese and English lay briefing notes and to elicit feedback on their experiences of living in the new build. The 18-month follow-up with the older adults was the last key research activity for the project. In summary, the three year CBPR place-making with older adults project had accomplished the following:

(i)   Documented and critically assessed older adults' experiences of the forced relocation process during and after being rehoused within a new affordable housing development.

(ii)   Worked in partnership with the housing society, municipal government, developer, local service and housing providers, and older adults to ensure that the voices of older adult tenants were prioritised when determining the best use of the shared amenity space and opportunities for social engagement within a new affordable housing development.

(iii)   Provided opportunities to work with the local community and professional partners to co-develop the necessary social and community supports that enabled older adult tenants to age well in place in the new affordable housing development.

The following section describes the thesis structure. It first introduces the research questions for the overall thesis, alongside the aims and objectives of the papers and subsequently demonstrates how the publications are linked to formulate a coherent body of work.

1.3 Structure of Thesis

The structure of this dissertation comprises five publications that grew out of the CBPR project. The overall research questions of this dissertation are introduced in this section alongside the aims and objectives of each paper to demonstrate linkage and coherence across the body of work. The content (Chapter two) and critical analysis (Chapter three) of the published work serves to address the research questions highlighted in subsection 1.3.1, and also addresses the aims and objectives outlined in figure 1.6. The subsections following 1.3.1 will explain: (1) the unity of and rationale behind the body of work; and (2) the arrangement of the ensuing chapters which constitute this thesis by publication.

1.3.1 Situating Research Questions in the Aims and Objectives of the Body of Work

Prior research highlights the conceptual, theoretical, and methodological challenges and complexities of enabling older adults to *age in the right place* (Golant, 2008; Golant, 2015; Buffel and Phillipson, 2016). The integration of older adults' experiences, ideas and perspectives on ageing-in-place is critical to the development of age-friendly places at home and in the community (Buffel et al., 2012). However, to develop age-friendly

environments also requires a range of other knowledges and expertise including: family, service, voluntary and community sectors. Bringing together a diversity of perspectives can help capture more holistically the complexity of ageing-in-place issues to better understand them in a practical way.

Guided by CBPR, the aim of thesis is to introduce more nuanced ways of co-creating housing solutions that will more effectively help older adults to have a better quality of life living at home and in the community. At present, there is limited research that adequately scrutinises the conceptual, theoretical and methodological issues necessary for cultivating age-friendly environments that enable older adults to not only age well in place, but *age well in the right place*. This thesis, by publication, addresses the following research questions:

 i. What are the conceptual challenges in existing ageing-in-place research?

 ii. How do we instil notions of ageing in the right place in the development of ageing-in-place theory and methods guided by CBPR principles to inform housing solutions for older adults?

 iii. How can we enhance critical transdisciplinary thinking to address complex problems in a more transdisciplinary way, ensuring that housing development projects are helping diverse older adults to age well in the right place?

 iv. How to support housing professionals, such as developers, architects, planners, service providers and policy makers, to undertake a more community-focused approach, using less conventional methods to guide the integration of adults' voices in a housing development process?

The compilation of published research presented in this thesis, introduces, problematises and discusses the complexities that surround the housing development process for older adults. Each publication has a unique aim alongside a set of objectives to capture, critique and respond to conceptual issues, theoretical challenges, or methodological shortcomings of housing development projects for older adults. Collectively, the body of work aims to provide recommendations regarding how to address the complexities of working with a range of people with unique backgrounds and expertise. As well, to utilise their experiences to generate housing solutions for older adults that are practical and effective in real-world settings. Figure 1.6 presents a

conceptual flow diagram on four key elements that demonstrate the linkage between the five publications, and how together these formulate the basis of this thesis. Each element comprises a specific aim and accompanying objectives highlighting the contribution of each publication towards conceptual development, participatory principles, theoretical diversity and methodological complexity. All of these are necessary and important for addressing the challenge of creating housing that optimises ageing in the right place for a diverse cohort of older adults. Following this subsection, 1.3.2 details the consistency and connections across the papers informed by the following conceptual diagram.

Conceptual Development

•**Aim 1:** To provide a critical overiew of the conceptual underpinnings of 'ageing in the right place', encapsulating the background and rationale for the published works, which also serve as the backbone for linking the four publications.

•**Objective (1), Paper (1):** To articulate the concept of 'ageing in the right place' and the importance of multiple stakeholder groups working in partnership to consider and respond collectively to the environmental, psychosocial and cultural factors that attribute to aging well in the right place.

Participatory Principles

•**Aim 2:** Since the built environment is argued as only one component for achieving 'aging in the right place', there is a need to explore available community resources that consider psychosocial and cultural factors. The aim here is to present an approach that can do this effectively through prioritising the engagement of multiple stakeholders in the research and design process.

•**Objective (2), Papers (2 & 3):** To highlight the importance of community-based participatory research (emphasising CBPR principles of equity, inclusion, co-production and shared decision-making) principles and outline potential methods for engaging multiple stakeholder groups in the research process.

Theoretical Complexity

•**Aim 3:** Theoretical foundations serve to provide different optics for understanding a particular issue. Typically, one theory enables a persective on an issue from one viewpoint based on the tenets and assumptions of that theory. The aim here is to provide a more holistic view of the experiences of place through combined theoretical viewpoints.

•**Objective (3), Paper (4):** To integrate theoretical perspectives from urban studies and feminist thought, and create a theoretical framework that considers how conjoined social factors can impact experiences of place.

Methodological Diversity

•**Aim 4:** To showcase how the use of multiple interpretive methods including listening and visual methodologies can facilitate meaningful participation and interaction of multiple stakeholders to acquire important input and enhance the design process.

•**Objective (4), Paper (5):** To describe the application of nuanced interpretive methods such as in-depth interviews, deliberative dialogue, storytelling, photovoice, community mapping and walkthroughs as innovative techniques that can facilitate active participation from multiple stakeholder groups while enabling researchers to gain deeper insights into the everyday lives of older adults.
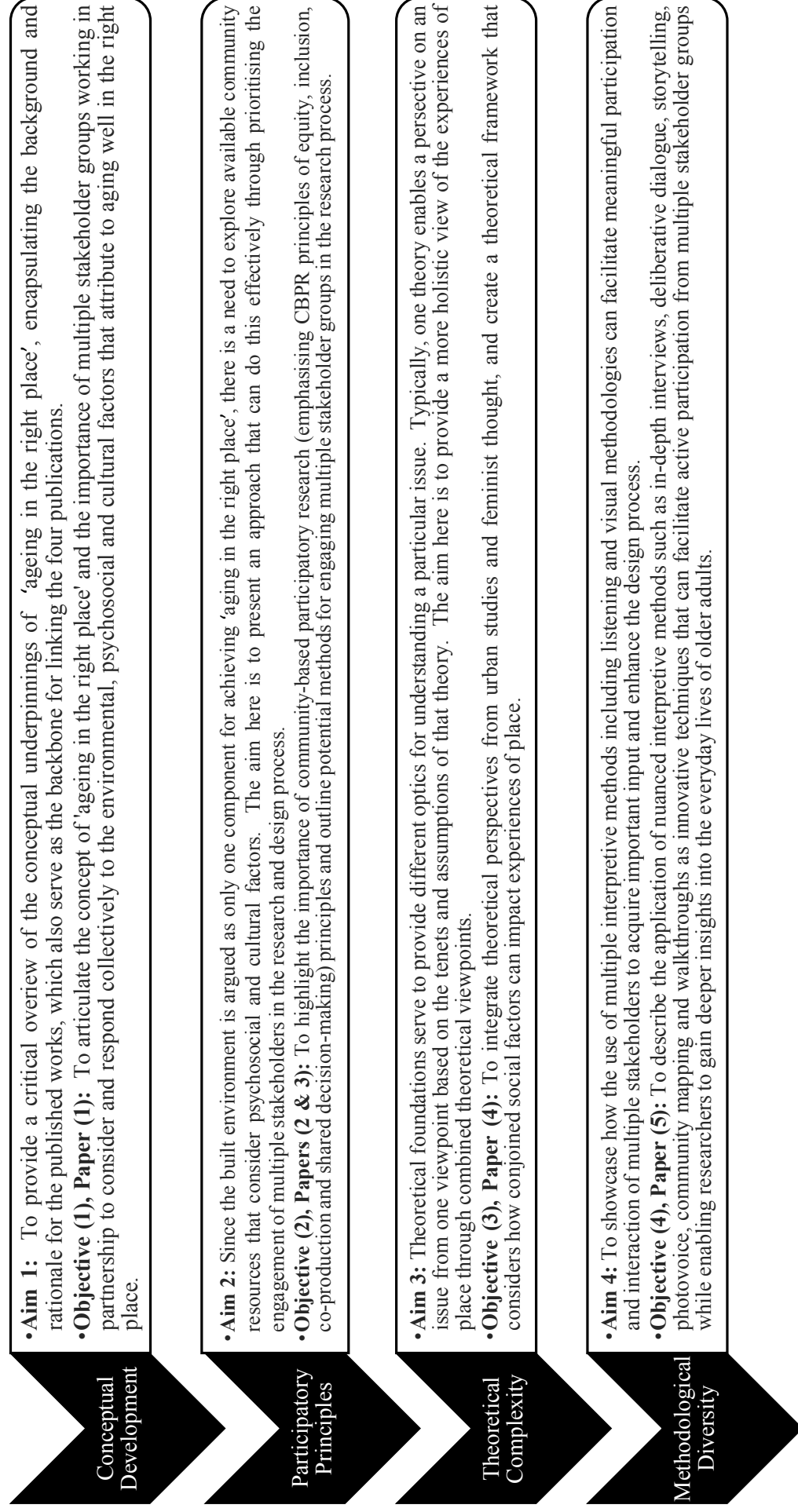
Figure 1.6. This conceptual flow diagram presents the aims and objectives of the publications, which are conjoined by four key elements that are central to the body of work for this thesis by publication.

1.3.2 Coherence of Published Works

The publications for this thesis, presented in Chapter two, are a coherent body of work. In this subsection, the focus is demonstrating how the flow and linkages among the thematic, conceptual, theoretical and methodological foundations of the papers contribute to the gerontological and environmental sciences. They are a unique collection of research publications that meet the stipulations noted in paragraph 9.4.2 of Regulation 43 of HWU in connection with the Degree of Doctor of Philosophy by Published Research.

Regarding thematic coherence, all of the papers focus on a complex social problem that surrounds an increased demand for adequate housing to accommodate a rapidly growing demographic of older adult populations. However, the conceptual emergence of ageing-in-place as a concept and policy driver to address this challenge focusses on a single aspect of the problem area — one that emphasises amending the physical aspects of housing as sufficient for enabling older adults to remain at home for as long as possible. Physical aspects could include, for example, accessible buildings and aides and adaptions around the home. This siloed focus for addressing a complicated problem area epitomises a reactive approach to ageing at home. It shows limited consideration for the community infrastructure required to ensure positive health and social outcomes. Housing that responds to the everyday age-related needs of older adults has become a widespread topic of interest in environmental gerontology. It also receives attention in related disciplines including Urban Studies, Human Geography, Health Sciences, and Social Sciences.

As was expressed by community stakeholders of the place-making with older adults' project, a further barrier to creating holistic housing solutions for older adults, that go beyond physical aspects of place, is the lack of guidance and resources on how to do this in a transdisciplinary way. This requires working across sectors and disciplines and prioritising community and lay perspectives in the development and decision-making process. Transdisciplinary working, according to Boger et al. (2017, p.2), is an attempt to access "the collective mind" of a team composed of different viewpoints to solve a difficult real-world problem known as 'wicked' problems for the purposes of generating transformative change. Aligned with transdisciplinarity, this body of work incorporates CBPR as both emphasise collective working and co-creation of solutions to address complex social problems. Each paper demonstrates the shaping of either theory,

methods and/or practice guided by CBPR principles, all of which helped produce in-house and community supports for older adults. This enabled them to age well in place upon their transition back into newly developed affordable housing condominiums.

Paper one introduces the problem area through a critique of the dominant conceptual understandings of ageing-in-place while proposing ageing in the right place as an improved, though complex, development to this concept. Because the collection of papers presented in this thesis is premised on the notion of ageing and housing as being a 'wicked' problem, the adoption of ageing in the right place as a conceptual shift does not inevitably resolve the structural challenges associated with developing adequate housing. According to the definition of a wicked problem, movement towards ageing in the right place tenets and assumptions could potentially further complicate the problem area since the parameters for supporting older adults to age well in place has expanded. Enabling older adults to age well in the right place requires more than helping them to remain living at home for as long as possible.   Ageing well also includes ensuring that older adults have a voice in where and how they prefer to live.   To address such complexities, therefore, requires transdisciplinary knowledge, expertise and action to ensure that multiple aspects of the problem area are addressed.   This may include having appropriate access to a combination of: community services and supports; transportation; multicultural care; green space; access to leisure and social activities; and technology.

CBPR is subsequently introduced as a methodological approach to facilitate transdisciplinary working in papers two and three. The papers demonstrate the potential for an enhanced partnership working to overcome housing development challenges and co-create housing solutions that will enable older adults to age well in the right place. Key challenges included: (1) difficulties of working effectively with individuals with different backgrounds and expertise with unique self-interests, agendas and perspectives on housing development (in general); and (2) acquiring and integrating older adults' experiences in the housing development process through research. Paper two develops the co-creation aspect of transdisciplinary working by presenting a CBPR dialogue method that provided mechanisms for developing the space and a platform that guided the delivery of an informal and inclusive dialogue session. This paper challenges the notion that traditional modes of stakeholder engagement, such as structured meetings, are conducive for multi-stakeholder co-creation. Outcomes included the co-production

of shared ideas to address contextual challenges of ageing-in-place across different community and professional stakeholder groups. While paper two highlights a method to engage community and professional service-oriented stakeholders, paper three introduces CBPR engagement methods aimed more at acquiring the perspectives of older adults.

For instance, existing research has indicated that the perspectives of persons we aim to serve are often not well integrated in the intervention (Foot et al., 2014; World Health Organization, 2016). This is especially the case for persons that live on the margins of society who often have less access to resources, and have more difficulties participating in research that can have direct impact on their lives. Due to sociocultural structural constraints, for example, difficulties in navigating resources in their immediate environment, certain individuals face difficulties participating in decision-making opportunities. In the case of the CBPR project, some barriers for older adults included: learning about the research; getting to the research event; understanding the language and/or the jargon of research; and participating in the research activities. Paper three illustrates how older adults' perspectives were prioritised, accessed and integrated via the implementation of accessible, visual- and sensory-oriented participatory mapping and walk along methods.

While the appropriate inclusion of diverse knowledges and perspectives constitutes the data gathering stage of CBPR, it is also equally important to capture the nuances of what individuals are conveying in a critically analytical way. Subsequently, paper four presents a theoretical framework informed by the tenets and assumptions of intersectionality, used to critically analyse the stories of older adults. Intersectionality is a theory that prioritises the *centring in of margins* — a notion that advocates bringing marginalised perspectives to the forefront (hooks, 2000), and is thus well aligned with CBPR. Paper four illustrates how the use of an intersectional framework enabled an intersectional and social justice oriented perspective of the data to emerge, shedding light on older adults' agentic experiences through their struggles with the forced relocation process.

The process of theoretical development also shaped the determination of methods most useful and appropriate for gathering older adults' stories, which can constitute personal

experiences of trauma, and how to effectively integrate these to inform the co-creation of housing opportunities for and with older adults.

Paper five subsequently illustrates how the purposeful selection and application of community-qualitative methods were conducive for generating effective, collaborative dialogue and shared solutions between resident, professional and academic communities. The purpose, use, strengths and limitations of select qualitative methods: in-depth interviews, storytelling, participatory mapping, walk alongs and photo tours are highlighted in paper five. For example, while in-depth interviews were applied as a *discovery-oriented* approach to build initial rapport and trust between the older adults and the researchers, it is explained in paper five that storytelling instead facilitated deeper inquiries into an older adult's life story. Paper five thus integrates the body of work by providing a detailed synopsis of the theory and methods chosen based on CBPR principles. It also shows how these helped generate valuable and coherent sets of data that functioned to create ideas and opportunities for the co-development of housing solutions that were motivated by notions of ageing in the right place.

The main connection among all five papers is demonstrated by the emergence of transdisciplinary working that occurred while undertaking a CBPR approach. All methods were specifically selected. The theory was developed according to principles of CBPR. This approach was found to be valuable for guiding the development of partnerships. It was also useful in acquiring, interpreting and reporting that addressed the problem of understanding achieving ageing in the right place. In this subsection are the concepts and methods that are the continuity in the published work. They inform the development of ideas and resources that address the challenge of creating adequate housing for diverse older adults. The following subsection describes the organisation of the remaining chapters.

1.3.3 Structural Organisation of Chapters

Chapters two, three, and four serve to contextualise and analyse the basis of the thesis's argument by addressing the research questions outlined in section 1.3.

Chapter two provides the published works (papers one to five). Each paper is accompanied by individual summaries, personal research contributions and individual reference lists. In Chapter two, for each manuscript introduced, a content overview highlighting the research aim, objectives, methods, results and conclusions is provided

as is required in paragraph 9.4.1 of Regulation 43 of the Heriot-Watt University thesis guidelines for completion of the Degree of Doctor of Philosophy by Published Research. This is followed by a breakdown of my personal contributions towards the development and completion of the manuscripts. As the Lead Researcher of the three year community-based participatory research project discussed in papers one to five, it is important that I fully disclose my personal contributions as well as acknowledge contributions by the research team. This is imperative because the overarching project discussed in the published works was informed by a CBPR approach, which is an approach that emphasises collaborative working and the recognition of all contributions from team members, no matter how small). Hence, all publications presented in this thesis are inclusive of the entire research team as co-authors. However, it is also important to clarify that the weight of the contributions is distinguished by the authorship order. The first and second authors from the published works provided the most substantial contributions towards the manuscripts, in terms of intellectual input, preparation of findings, data analysis, and writing. Particularly for paper four, the weight of contributions was the same between first and second authors.

Next, Chapter three expands on Chapter two via a critical analysis of the key concepts, methods and methodology and theoretical underpinnings introduced and discussed in the published research. It also provides an integrated critique of the concepts, theory, methods and findings presented in each of the five papers to comprehensively address research question one and completion of objectives one and two. Chapter three begins by deconstructing the conceptual issues associated with existing notions of ageing-in-place as an all-encompassing solution for housing older adults (subsection 3.1; addressing research questions i and ii). Ideas and concepts important for ageing in the right place are subsequently introduced, discussed and presented as a more holistic resolution to this wicked problem. As well, an overview of the participatory principles associated with a CBPR approach and a critical review of this approach when creating housing options for older adults are provided (subsection 3.2; addressing research questions ii and iii). Here, the discussion focuses on how we can better elucidate voices and integrate suggestions of older adults in the housing development process.

Chapter three continues with a discussion of the importance of understanding diverse place perspectives when transitioning between different housing contexts (subsection 3.3; addressing research question ii). For instance, as existing place theories are limited

for investigating evolving social factors that shape complex experiences of place, theoretical ideas from intersectional theory are extracted to inform the development of a more nuanced place perspective. Presented in subsection 3.3 is a theoretical framework for bridging this theoretical gap. Finally, the chapter (subsection 3.4; addressing research question iv) concludes with a critical analysis of the need for methodological diversity when addressing complex societal challenges, such as that of creating adequate housing for varying older adult groups. Collaborative, visual and narrative methods implemented in the research are probed through a critical discussion of the limitations of each method accompanied by its strengths for illuminating complex experiences of place.

The thesis ends with Chapter four, focusing on conceptual, methodological, and theoretical contributions to the field. Chapter four discusses how individually, and as a whole, the research papers as a part of this thesis, have demonstrated significant contributions to the expansion of knowledge in this field. It examines how the published works have demonstrated evidence of originality by either provision of new facts or exercised independent critical power, as specified in paragraph 9.4.3 of Regulation 43 of HWU for completion of the Degree of Doctor of Philosophy by Published Research. The discussion thus focuses on three interconnected questions addressed in Chapter four subsections 4.1 – 4.5:

(i) How is the evidence generated (through use of theoretical and methodological approaches introduced in the published works) new and original?

(ii) How does the research contained within the published works contribute to the broader development of providing adequate housing for older adults?

(iii) How does the research presented in the published works demonstrate independent critical power?

In terms of structure, chapter four begins with a discussion of the theoretical implications for older adults' housing initiatives (subsection 4.1; addressing research questions i and ii), and continues with a critical analysis of the research findings (subsection 4.2; addressing research questions ii and iii). Subsequently, implications for using a CBPR philosophy when working with vulnerable groups are discussed (subsection 4.3; addressing research questions iii and iv), followed by knowledge translation recommendations for policy and practice (subsection 4.4; addressing all

research questions). Finally, Chapter four concludes the thesis with a critical discussion of the overarching strengths and limitations for future research (subsection, 4.5; addressing all research questions). The thesis ends with a summary with of the overall impressions and key messages of the study.

2. CHAPTER TWO: CONTENT OF PUBLISHED WORKS

This chapter introduces five publications focused on research conducted in Canada between 2014 and 2017 that I led and/or helped develop and progress, and subsequently, manage and implement as the Lead Researcher, with support and input from the research team and with direction from the investigators. As community-based participatory research (CBPR) and its principles stress partnership when working across disciplines and sectors as well as collaborative working within teams, it is important to note that the publications introduced in this chapter not only originate from the collaborative efforts of the research team, but are also the product of valuable contributions from project partners including the older adults. Each subsection in this chapter begins with a brief overview that highlights the purpose of each paper. Each overview is followed by my personal contributions to each publication along with critical summaries of the work. Following each subsection's overview the publication in question is presented in full.

2.1 Paper One: 'Ageing Well in the Right Place'

Partnership building is an important element for solving 'wicked problems' (refer back to section 1.3.2, p.27 for definition). This includes helping older adults to age well in the right place. The purpose of this paper is to problematise notions associated ageing-in-place and present partnership working as one solution for achieving ageing in the right place within the context of a Canadian housing redevelopment project. As part of the collaborative efforts of the research team, my key contributions to this publication include the following:

- Co-led the background literature review;
- Co-led the design of the research methodology;
- Co-led the development of the methods including the research instruments;
- Acquired ethical clearance for the research;
- Led the maintenance of existing partnerships and established new partners over the full duration of the project;
- Led and co-conducted the research including participant recruitment, data collection, and analysis; and,
- Contributed and provided substantial input to the writing and development of the manuscript, led by Professor Judith Sixsmith, Project Co-investigator.

2.1.1 Critical Review of Paper One

This paper critiques the notion of ageing-in-place, in reference to the ability to live in one's own home and community, safely, independently and comfortably for as long as possible. The concern with this overly positive supposition is that it, first of all, assumes age, income and ability are effectively taken into account in urban planning and design decisions. Second, it assumes all older adults prefer to live at home and in the community for as long as conceivable and that this would be the best possible outcome. This assumption is problematic as it fails to consider important psychosocial and cultural factors, in addition to the built environment, that facilitate well-being and optimise experiences of home and place. In recognition of the limitations of ageing-in-place as an influential policy direction for planning and development initiatives Golant (2015) has advocated *for ageing in the right place*, which challenges the idea that *one place fits all* and considers the structural impediments that prevent some older adults from remaining in their homes. Critical discussions are offered for the issues surrounding: consideration for individual needs; responding to psychosocial, structural supports and service necessities that accompany housing developments for older adults; and the integration of multiple stakeholders (including older adults) in the decision-making process. These discussions facilitate providing input and creating shared solutions required to facilitate ageing in the right place. As partnership working is key to achieving holistic and shared solutions, CBPR is an approach highlighted in this paper with key principles that encompass prioritisation of seldom heard voices, equitable partnerships, and shared decision-making. Interpretive methods, including in-depth interviews and deliberative dialogue were selected on the basis that these methods aligned well with the key principles of CBPR and would facilitate productive, open dialogue together with multiple stakeholder groups and one-on-one with researchers. In this paper, the findings were derived from using a CBPR approach confirming that community partnerships are important and necessary to progress the notion of ageing in the right place. Prioritisation of seldom heard voices such as those of marginalised older adults through the application of CBPR principles and methods help older adults become decision makers in creating places that are suited to their needs. Collectively, engagement of multiple voices enabled consideration for and response to environmental, psychosocial and cultural factors that are conducive to ageing well in the right place.

Paper one provides the relevant background and the context surrounding the concept of ageing in the right place through examining the conceptual shortcomings of ageing-in-place. The data and analysis broadly addresses research question one by providing a critique of existing, popular ageing and place conceptualisations followed by introducing CBPR as a promising approach to supporting older adults to age well in the right place.

Ageing well in the right place: Partnership working with older people

Abstract

Purpose: The provision of home and community supports can enable people to successfully age-in-place by improving physical and mental health, supporting social participation and enhancing independence, autonomy, and choice. One challenge concerns the integration of place-based supports available as older people transition into affordable housing. Sustainable solutions need to be developed and implemented with the full involvement of communities, service organizations and older people themselves. Partnership building is an important component of this process. The purpose of this paper is to detail the intricacies of developing partnerships with low-income older people, local service providers and non-profit housing associations in the context of a Canadian housing development. *Design/methodology/approach:* A community-based participatory approach was used to inform the data collection and partnership building process. The partnership building process progressed through a series of democratized committee meetings based on the principles of appreciative inquiry, four collaboration cafés with non-profit housing providers and four community mapping workshops with low-income older people. Data collection also involved 25 interviews and 15 photovoice sessions with the housing tenants. The common aims of partnership and data collection were to understand the challenges and opportunities experienced by older people, service providers and non-profit housing providers; identify the perspectives of service providers and non-profit housing providers for the provision and delivery of senior-friendly services and resources; and determine actions that can be undertaken to better meet the needs of service providers and non-profit housing providers in order to help them serve older people better. *Findings:* The partnership prioritised the generation of a shared vision together with shared values, interests and the goal of co-creating meaningful housing solutions for older people transitioning into affordable housing. Input from interviews and photovoice sessions with older people provided material to inform decision-making in support of ageing well in the right place. Attention to issues of power dynamics and knowledge generation and feedback mechanisms enable all fields of expertise to be considered,

including the experiential expertise of older residents. This resulted in functional, physical, psychological and social aspects of ageing-in-place to inform the new build housing complex. Research limitations/implications — The time and effort required to conduct democratized partnerships slowed the decision-making process. *Originality/value:* The findings confirm that the drive toward community partnerships is a necessary process in supporting older people to age well in the right place. This requires sound mechanisms to include the voice of older people themselves alongside other relevant stakeholders. Ageing well in a housing complex requires meaningful place-making to include the functional, physical, psychological and social aspects of older people's everyday life in respect to both home and community.

Keywords: Partnership, Policy, Ageing well, Age-friendly society, Older people, User involvement

Introduction

With expected growth in the numbers of older people, especially those at oldest ages, a current societal concern has developed concerning how we will support and care for our older populations as they grow older and become frailer. By 2036 in Canada, one in four people is expected to be over the age of 65 years (United Way Lower Mainland, 2011). In the UK, adults over the age of 65 years account for 17.7 percent of the total population and this figure is projected to increase to 24.3 percent by 2039 (Humby, 2016). This demographic shift in population ageing is happening in most developed countries across the world, bringing with it new dilemmas on how best to support older populations' quality of life, health and wellbeing. The prospect of the growing cost of supporting an increasingly aged population has created a "tsunami of alarmism" (Means and Evans, 2012) which has propelled a variety of cost saving measures to be considered such as the development of health- and care-related technologies (Weiner et al., 2003), service rationalizations across the public sector (Federation of Canadian Municipalities, 2013) and policies centring on the concept of "ageing-in-place," especially in relation to housing and health (Sixsmith et al., forthcoming).

Ageing-in-place "refers to the ability to live in one's own home and community safely, independently and comfortably regardless of age, income, or ability level" (Centers for Disease Control and Prevention, 2013). This policy direction is driven by a number of assumptions that ageing-in-place enables personal choice, facilitating the preferences of

older people (Keating et al., 2013; Vasunilashorn et al., 2012) and their families, has tangible quality of life and health benefits, holds cost benefits for both older people and society and enables community participation conferring wellbeing benefits at social and intergenerational levels. However, research into actual ageing-in-place highlights a number of detrimental effects, in effect constituting an ideal force on older people to make them less expensive (Vik and Eide, 2011). Ageing-in-place at home and in the local community can, as Sixsmith and Sixsmith (2008) have argued, be a negative experience. Home can be perceived as a prison, burden or worrisome environment (Sixsmith and Sixsmith, 1991). This is especially so if the older people have limited financial resources with which to maintain their home (Carter, 2005), have physical, mental or mobility limitations which prevent them from getting out of the home or lacks the social and cultural capital needed to support social participation (Carter, 2005). Moreover, while ageing-in-place may be a desirable situation for some older people, it can be complicated by an increasing number of older people who need help amidst inadequate social programs and services (Lehning et al., 2013) and require home modifications (Hwang et al., 2011). As such, the goals of ageing-in-place with its positive assumptions may act to prevent older people from seeking appropriate solutions to challenging living circumstances.

Certainly, attention to the diversity of needs, desires and wishes of older people suggests that a "one size fits all" solution to ageing-in-place will not reap the personal and social benefits expected of such policy. Indeed, there is still much to be understood in terms of how older people live at home and in their communities and how to best enable them to achieve a good quality of life and mental health and how to tackle social isolation and exclusion (Sixsmith and Sixsmith, 2008). Simply helping older people to remain in their homes for as long as possible without providing for individual, social and cultural differences or improving housing is likely to leave many in sub-optimal, sometimes detrimental, living conditions. Further, the social and physical community as well as the service landscape needs to be conducive of positive ageing. This locates age-friendly communities as central to the social aim of ageing-in-place.

Acknowledging such problems, Golant (2015) has advocated for "ageing in the right place." However, the questions remain: Whose ageing? What place? Who decides? The stakeholders relevant to designing homes and communities for people to age in the right place include housing authorities, city planners and developers, builders,

architects, health and social care professionals, voluntary sector personnel and so on. However, at the heart of such provision is the requirement for the genuine participation of older people, their families and carers in planning and design; a necessary step if age-friendly communities and homes are to be realized.

Partnership Working

Building an understanding of the lived everyday realities of being older into the ageing-in-place transformation process may, as Rowles and Bernard (2013) have argued, need a strong disruption of current professional expertise-based planning processes and practices. This disruption requires more collaborative and partnership-based models of design whereby simultaneous "drawing on" and "letting go" of expertise in a safe, trusting environment is encouraged. The aim of these models is to overcome the "benign ageism" that is implicit in the power relationships that legitimizes and confers decision-making authority to particular professionals and practitioners. The basic principle is that no one body of expertise can provide effective solutions to complex social problems such as the provision of housing and community settings for ageing in the right place. What is needed is a transcendence of disciplinary, inter-professional and sectoral boundaries such that innovative ways of thinking and working can emerge (Boger et al., 2016). Such transdisciplinary, innovative approaches are important for ensuring that models of urban planning and ageing move beyond universal accessibility (i.e. adapting environments based on progressive disability) to ones that focus on environments that enable older adults to fulfil a positive role in old age (Fang et al., 2016).

A collaborative and partnership model of working toward designing and building new residences for older residents was undertaken in Vancouver, BC, Canada, in a project focused on building a new affordable rental housing for low-income seniors (approximately $300 per calendar month, significantly lower than market rental prices averaging $1,200 per calendar month in the region).

Rosewood[1] Manor was a rundown three-storey apartment block in Metro Vancouver, housing 149 seniors. In 2012, water damage to the structure resulted in a resident falling through the floorboard, provoking discussions of renovation and relocation between Rosewood City and the Rosewood Senior's Society who owned the land and the property. Rosewood Manor residents were reluctant to move, excluded from the

renovation and relocation discussions, and viewed the impending move as a forced relocation. The discussions transitioned into plans to create a new build, Rosewood Towers, a 16-storey purpose-built high-rise apartment block with 296 units for able bodied, independent living older people. Rosewood Senior's Society and Rosewood City envisioned this solution as a location for residents to age-in-place. Existing residents were not positive about this solution and felt that forced relocation would result in hardship and burden for them. To better include the residents in the development process, the research team at Simon Fraser University was asked to facilitate resident involvement and explore relocation experiences. In total, the relocation process spanned three years and transitions of residents from Rosewood Manor to the new Rosewood Towers were examined. Rosewood Manor was an established (but ageing) three-storey apartment building reserved for seniors with limited financial means where almost 70 percent were visible minorities of Chinese descent.

In order to provide for the voices of residents in the design, planning and development of Rosewood Towers, the research team formed a partnership with Rosewood City, the developers, Rosewood Senior's Society, residents and not-for-profit housing and service providers in the locality. The research was funded by the Vancouver Foundation to document and analyse residents' transitional experiences of forced relocation in order to foster meaningful ageing-in-place. A further objective concerned the promotion of older people as active "place-makers" in community planning and development. The remaining sections of this paper discuss the collaborative, partnership process.

The creation and maintenance of the partnership progressed was guided by the partnership synergy theory which holds that the fair and equitable combining of skills and resources of multiple stakeholders increases the research process and achievability of results over time (Lasker et al., 2001). Creating a partnership set the scene for positive conceptualizations of ageing-in-place that could translate into the development and implementation of sustainable solutions with involvement from communities, organizations and the people affected.

The research took a community-based participatory research (CBPR) approach over a two-year period. CBPR aims to bring marginalized, often powerless and

misunderstood, voices to the fore within social processes; in this case, the voices of residents in the planning process whereby tokenistic involvement is avoided and replaced with genuine community engagement. CBPR constitutes an approach to research in which researchers and community stakeholders (both individuals and organizations) form equitable partnerships and co-construct research for the mutual and complementary goals of community health improvement and knowledge production (Minkler and Wallerstein, 2008).

Partnership working began by developing a shared vision not just for the development of the new build, but also for engaging older people in design and planning process. This sense of share adventure created the medium for shared values, interests and goals underpinning the vision for the new housing development, and these emerge alongside a sense of solidarity between partners. In order to promote shared vision, values and interests, appreciative inquiry techniques were used. Appreciative inquiry (Cooperrider, 2004; Cooperrider and Whitney, 2005) supports groups with different knowledge bases, points of reference and ways of thinking to share ideas and work practices in an atmosphere of valuing difference, openness and trust. It also encourages active listening and joint solution building. Moreover, appreciative inquiry emphasizes the key participatory principles of propositional knowing where people collaborate to design appropriate questions and methods, practical knowing in which knowledge is applied within practice, experiential knowing based on experiences in everyday and working lives and presentational knowing which highlights the application of new forms of understanding within collaborative frameworks (Heron and Reason, 2006). Such forms of knowing are all deemed equally important to solving complex social problems. These principles were introduced to the Rosewood project partnership in committee meetings and in dialogues led by the research team.

Committee meetings were initiated with the development of terms of reference which all partners shaped and agreed. Dialogs during meetings progressed beyond the business of project management to an appreciation of power dynamics and differentials inherent in the partnership (Lawthom et al., 2007). In this way, there was a movement toward the democratization of content of the meetings as older people began to take control of shaping the meeting agendas and fully contributing to discussions and a democratization of method as joint decision-making was facilitated. Meetings were regularly held within local community settings to facilitate local attendance, bring

planners into the community and highlight value of the community. A key element of committee work was the celebration of achievements from all partners and feedback to the Rosewood residents. A further important aspect of committee work was the facilitation of site visits by "grandfathered" and future residents as the building progressed to provide reassurance that the structural and aesthetic promises of the developers were coming to fruition.

Informing the Partnership

As part of the CBPR approach, interviews were undertaken with older people (n = 25) once they had transitioned out of Rosewood Manor. These semi-structured in-depth interviews (Longhurst, 2009) captured resident relocation experiences. As many of the residents were of Chinese origin and did not speak English as their first language, the interviews were conducted, when necessary, in Mandarin or Cantonese. For residents who struggled to verbally articulate their experiences, the option to take part in the research extended to photovoice sessions. Photovoice is a visual method (Wang and Burris, 1997) grounded in qualitative participatory research principles used to explore personal experiences of a particular phenomenon (Nowell et al., 2006). This method is often used to facilitate community engagement whilst simultaneously producing powerful images that have the potential to influence policy agendas in the areas of public health, education and social work (Catalani and Minkler, 2010). As such, photovoice was well suited to serve the purposes of this research and was selected to capture sense-of-place needs of residents (n = 16).

A series of four participatory mapping workshops (Fang et al., 2016) were also conducted in which residents and service providers (n = 38) worked on visioning homes and community as age-friendly places. Participatory mapping is used in public health and policy realms to raise awareness of community issues, facilitate local decision making and empower communities to be active place-makers (Corbett, 2009). These workshops involved presentation of the ideas surrounding ageing-in-place within Rosewood Towers, presentation of the resident stories (drawn from the interviews and photovoice sessions) and experiential group walks around the community to map leisure, service and amenity spaces. Large scale maps and plans were used to focus attention on the local community and Rosewood Towers. The workshops concluded with discussions of ageing-in-place in the home and community and how this could translate into living in Rosewood Towers.

Finally, four collaboration cafés were held with service providers (n = 21) to enable them to identify the barriers and facilitators to providing existing services in the community and to identify actions that can be undertaken to meet the needs of the non-profit housing sector in order to better serve older people. Collaboration cafés are based on the idea of world cafés (Brown, 2002) which bring people together in informal café type settings to openly discuss a given topic of mutual interest, thereby surfacing collective knowledge, sharing ideas and deepening understanding of the issues involved. Café outcomes should lead to actionable knowledge in the form of action plans or improved decision-making and innovation practices.

Working toward Ageing Well in and around Rosewood Towers

The primary aim of the data collection was to translate experiences of relocation and sense-of-place into design for living. However, this information also served to input into the importance of building partnerships (Jones and Barry, 2011) to inform decisions on how Rosewood Towers could provide for ageing in the right place. Research findings were continuously presented in committee meetings so that all partners were fully aware of ageing-in-place functionality and participation issues. In terms of functionality, resident interview and community mapping findings indicated the need for access to grocery stores, health services and transportation close to Rosewood Towers. One problem was insufficient time allotted to cross the main road outside of Rosewood Towers in order to reach the shops opposite. Here, resident concerns very much reflect the World Health Organization (WHO, 2007) checklist of age-friendly cities which covers:

> Outdoor spaces and buildings; Transportation; Housing; Social participation; Respect and social inclusion; Civic participation and employment; Communication and information; and Community and health service (WHO, 2007).

To address these issues, the partnership worked with local shops and service providers to deliver groceries to apartments and support health service providers' use of communal spaces in the building. Transportation links were developed with local bus services and voluntary private transport services. Finally, work with the local municipality resulted in the installation of new traffic lights outside Rosewood Towers to lengthen the time allotted for pedestrians to cross the road safely. This meant that

residents were supported in their access to local shops, leisure and park facilities. As the research findings highlighted that residents were often unaware of local provision, the developers and local municipality undertook awareness raising promotions to ensure greater knowledge of local services. These reduced resident fears that living in high-rise apartments might limit mobility and participation. Central to any redevelopment initiative is, "the active development of trust and the social relationships" (Hibbitt et al., 2001, p.141) between persons who are directly (residents) and indirectly (local community stakeholders) impacted and those with decision-making powers (municipal government and developers).

Resident concerns highlighted the need for apartments to be safe, secure and comfortable, accessible, affordable and provide facilities for washing and drying clothes. In this way, residents reiterated that the psychological components of home (Iwarsson et al., 2007; Sixsmith, 1986) are as important as the functional requirements. Working with this knowledge, the partnership emphasized how these aspects of the new build were considered when developing the new apartments. As the rental cost of Rosewood Towers was significantly higher than it had been at Rosewood Manor (which caused concern to former residents), service providers and developers worked with the residents to access welfare support to pay a portion of the rental costs. Nevertheless, some Rosewood Manor residents were still unable to afford the higher rental costs and so decided not to move into Rosewood Towers.

In terms of social participation and reduction of loneliness, the research findings highlighted the need for acceptance of pets, places for family members to stay, social and communal spaces and a regard for cultural sensitivities and language differences. This last issue is particularly important given that immigrant older people are at a greater risk of experiencing social isolation, loneliness and reduced social participation (Stephens et al., 2011; de Jong Gierveld et al., 2006) and that those who are more socially integrated tend to live longer (Antonucci et al., 2014). Accordingly, there is evidence to suggest that pet ownership can directly enhance health and wellbeing or indirectly act as a buffer against stressful events, particularly for older people (Garrity et al., 1989; Winefield et al., 2008). Yet, despite strong representation from older people and the Rosewood Seniors Society that pets are perceived as family members and provide older people with necessary companionship, the management of Rosewood Towers maintained that no pets were allowed to live on premises. This meant that

several Rosewood Manor residents chose not to move in rather than lose their pets. However, in terms of providing for resident wishes, there were architect designed communal spaces for family and social gatherings, equipped with refreshment areas. The communal areas were located beside the washing and drying facilities so that residents could socialize while doing household chores. In addition, these facilities were not located in basement areas so that they remained light and airy, minimizing trip hazards. Secure locks on public facing doors also increased feelings of safety and security. Finally, the residents, service providers, the municipality and building management collaborated to put in place a range of in-house activities and programs based on knowledge gained from interviews and community mapping methods. Here, outside social groups and activity provision were made available to residents as well as resident groups being formed so that skills and resources could be shared between residents. For example, resident musicians were engaged in voluntarily providing music for social gatherings or teaching musical instruments. Finally, building management ensured that notices and alarm systems were posted and signaled in key languages of residents in the building (e.g. English, Cantonese). In this way, residents felt more at home and a sense of belonging to the apartment community and able to develop social roles and social ties which are so vital to good quality of life (Victor et al., 2009; Mistry et al., 2001).

An evaluation of the participation of older people within the partnership has begun and is ongoing. The older adult residents expressed a gradual reduction of the "us and them" (Perdue et al., 1990) mentality which was prevalent at the beginning of the process. This dissipated as the complexity of working with building regulations, organizational barriers and service provision restrictions were all jointly discussed and adequate feedback was provided to resident questions. Perhaps more importantly, their own role in decision making, considering such complexity, provided a sense of ownership of the outcomes of the partnership work. As residents moved into the building, their overall assessment of their new housing solution was overtly positive as a place in which to grow older. Interestingly, the high-quality finish of the building, communal furnishings and functional layout were all well received with some residents in disbelief that their home was a place of such beauty. Designing for ageing-in-place does not need to result in drab spaces and places.

Concluding Remarks

The drive toward ageing-in-place has progressed despite indications that this is not always the best housing solution for older people. It has been argued that ageing-in-place requires attention to community places as well as home spaces (Sixsmith and Sixsmith, 2008). In addition, the psychological, social and service landscape all need to be taken into consideration. Given the complexity of the problem area, transdisciplinary, collaborative partnership working provides one way to work toward ageing well in the right place. The involvement of older people in the partnership is a crucial element of the success of such enterprise. However, it is "genuine" active involvement in the work of the partnership rather than a tokenistic, passive "presence" that was instrumental in the effective creation of meaningful places for older people to live (Pratesi et al., 2013). Here, the voice of older people was enhanced through the principles of appreciative inquiry as well as the prioritization in committee meetings of the experiential relevance of their stories.

It is worthwhile to point out some limitations of this kind of participatory approach. The effort and commitment on the part of partners to meaningfully engage their organizations and communities can be very demanding and time consuming, extending the duration of projects and complicating the ability to make quick decisions. This could be frustrating at times. Moreover, there is no clear evidence that participatory approaches lead to significant health and social outcomes. Despite these caveats, the older people who took part in this partnership felt that their experience was valued, their expertise as older people was recognized and their power was enabled as joint decision makers. The democratization of partnership working in terms of both structure and process challenged conventional power relationships and opened opportunities for positive experiences of ageing-in-place.

As a lasting testament to the work of the partnership, the Rosewood Towers project has attracted both international and local acclaim. The project received a community excellence award from Rosewood City for building successful partnerships. As well, a Chinese delegation of scholars and architects visited Rosewood Towers and bestowed an annual fund for residents to enhance and sustain levels of social participation. The model of partnership working was embraced and an ageing-in-place tour was organized to mobilize knowledge from the project and associated research. Other benefits of the project have included the attraction of further funded projects stemming from

established community relationships between the Rosewood Seniors Centre and the University.

Further research into place-making with older people within the Rosewood project is planned and data analysis is continuing alongside dissemination of findings. At present, the project strongly suggests that well thought through partnership working can enhance opportunities for ageing well in the right place.

Note
1. The name of the housing complexes, the Senior's Society and the City have been changed to "Rosewood" to maintain anonymity.

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2.2 Paper Two: 'Contextual Factors for Ageing Well'

This paper highlights the utility of collaborative planning approaches through the undertaking of *deliberative dialogues* that resulted in rich data for informing enhancements in the social environment of independent, low-income older adults. Contextual challenges to service provision are discussed, including the need for the coordination of culturally diverse on-site programming.

With input and support from the research team, my main contributions for this piece include the following:

- Designed the research methodology with input from the research team.
- Designed the research method (including all materials for the workshops) informed by Kingston's (2005) interpretation of Deliberative Dialogues.
- Acquired ethical clearance for the research.
- Led and implemented the workshops with support from Ms. Lupin Battersby, Research Associate (2015–2017), and led activities such as participant recruitment, organisation and facilitation of the deliberative dialogue sessions.
- Co-analysed the data with Dr. Sarah Canham, Post-Doctoral Fellow (2014–2017).
- Contributed and provided substantial input to the writing and development of the manuscript led by Dr. Sarah Canham, Post-Doctoral Fellow.

2.2.1 Critical Review of Paper Two

Paper one established that partnership working, aligned with the principles of CBPR, is key to generating holistic and shared solutions for achieving living conditions conducive to ageing in the right place. Paper two provides an example of how partnership working can be facilitated through the use of a participatory and action-oriented method. This approach prioritises partnership building and shared decision-making through open dialogue and debate with diverse stakeholder groups.

Emphasising the importance of community-focused and service-enriched housing for older persons and their well-being, this paper begins by highlighting the significance of inter-sectoral partnerships and collective working for generating housing solutions that look beyond the built features. Solving 'wicked' planning and development problems of this kind requires input from individuals with diverse backgrounds and expertise.

Collective action from the municipal government, service providers, local housing association and the developer were required for redevelopment project, Rosewood Gardens, to ensure provision of safe, accessible, affordable housing. This included on-site support services to help older adult renters maintain their health, functioning, and independence. As expertise, knowledge, experiences and work practice varied among each of the professional and community stakeholder groups, a method that aligned with CBPR principles was necessary. It was also important for generating discussions that appreciated, recognised, and used the expertise, knowledge and decision-making power of all the stakeholder groups. The deliberative dialogue method was selected and implemented as a guide to capture and integrate the knowledge and experiences of the multiple stakeholder groups. Described in greater detail in paper five, deliberative dialogue is a method of discussion that enabled an open platform that encouraged diverse perspectives to be shared. This dialogue generated solutions for the common purpose of creating an environment that was conducive to helping low-income older adults age well in the right place. Distinct from other group-based qualitative methods such as focus groups, deliberative dialogues are informal and implemented without a discussion lead. This encourages a collaborative exchange of ideas while requiring generation of actionable tasks at the end of the dialogue session. Deliberative dialogue sessions resulted in direct and indirect impacts for achieving the overall shared goal of helping tenants age well in the right place. Deliberative dialogue sessions generated rich, problem-focussed discussions that encompassed on-site and community-based opportunities, within the periphery of redevelopment, to enhance social interaction and wellness among older adult tenants. The process also helped to identify contextual challenges for service providers when coordinating on-site programming in the shared amenity space of the redevelopment. Indirectly, the sessions also helped to develop new partnerships and establish rapport in addition to established new working relationships between the different stakeholder groups.

Paper two meets objective one by emphasising the importance of using participatory principles to facilitate better partnership working across different stakeholder groups by applying an innovative public dialogue method. The analysis presented in this paper helps address research question two. 'Deliberative dialogue' was introduced as a technique for generating constructive problem-focussed discussions for producing holistic, and shared solutions with professionals and community members who have diverse expertise, knowledge, and work practices. Subsequently, paper three

complements the findings and concerns of paper two, as it describes and critically discusses the application of visual- and sensory-oriented community engagement methods to prioritise seldom heard voices and to facilitate transdisciplinary working across different groups of stakeholders.

Contextual Factors for Ageing Well: Creating Socially Engaging Spaces through the Use of Deliberative Dialogues

Abstract

Purpose of the study: Home and community engagement are key contextual factors for aging well, particularly for older adults in vulnerable social positions. A community-based participatory action research project conducted in Western Canada examined how to best use the shared amenity spaces in a low-income seniors' apartment complex in order to connect services and programs with tenants and to provide opportunities for service providers and local stakeholders to build upon and create new relationships toward collaboration and service delivery. *Design and Methods:* Pre-move deliberative dialogue workshops (n = 4) were conducted with stakeholders (e.g., service providers, developers, and municipal government employees). Workshop participants (n = 24) generated ideas and plans on how physical and social environments can contribute to the social engagement of senior tenants. *Results:* Shared dialogue led to community investment and asset sharing by integrating the knowledge and experiences of multiple stakeholder groups into the planning process. This paper highlights how collaborative planning approaches for the effective use of the social environment (e.g., social programming), within the physical environment (e.g., amenity and community spaces), can generate rich and illuminating data for informing enhancements in the social environment of apartment dwelling low-income seniors. Contextual challenges to service provision are discussed, including the need for communication about and coordination of on-site programming, culturally diverse and responsive programming, and long-term funding. *Implications:* Prolonging independent community living with the assistance of support services should be a goal to both delay premature relocation into institutional care and meet the preferences of older adults.

Keywords: Housing, Access to and utilization of services, Home and community based care and services, Qualitative analysis, Thematic analysis

Introduction

The physical and social contexts of aging are important to an individual's ability to age well and have their psychosocial needs met, or conversely, impede one's ability to thrive. In later life, there are a variety of housing options available for seniors, ranging from independent living situations (seniors rent or own their homes), to supportive and assisted living situations (seniors receive minimal to moderate support with activities of daily living), to residential living situations (seniors are provided more significant levels of care). Among seniors with limited income who are situated in marginalized social positions, housing options are scarce, particularly compared to those with purchasing power who can reside in a living situation of their choosing.

In contrast to "service-enriched housing for older persons" (see Pynoos, Liebig, Alley, & Nishita, 2005), independent housing that does not provide on-site support for low-income seniors has been referred to as "unassisted affordable housing" (see Leviten-Reid & Lake, 2016) or "age-segregated services without housing" (see Gibler, 2003). Renters are challenged not only by the affordability of housing, but also by services and supports to enable independent living. This is especially the case in areas where rental costs have increased while incomes remain fixed (Weeks & LeBlanc, 2010).

Research has found that older renters, particularly those in subsidized housing, are disadvantaged for a variety of reasons, including activity limitations (Gibler, 2003), high rates of disability, and limited informal support (Spillman, Biess, & MacDonald, 2012). Seniors who are part of marginalized socioeconomic or cultural groups are often in greater need of supportive environments in order to age well (Park, Han, Kim, & Dunkle, 2015). The lack of informal support alongside minimal affordable formal support options situates low-income seniors, particularly those living with challenging health conditions, at increased risk for nursing home placement. Intersectoral recommendations have been put forth (World Health Organization, 2010) demanding the provision of safe, accessible, affordable housing with support services on-site to help older renters maintain their health, functioning, and independence thus delaying or avoiding nursing home placement, and reducing health and social care costs (Gibler, 2003; Spillman, Biess, & MacDonald, 2012). Thus, it is critical to determine solutions that support the needs of seniors who are living in affordable rental housing to reduce institutional costs, while enabling older adults to successfully age-in-place.

Home and community engagement are key contextual factors for aging well, particularly for older adults in vulnerable social positions (Erickson, Krout, Ewen, & Robison, 2006). Older people are often housed in settings that do not meet their current place-based needs in terms of amenity space and program and service delivery (Milligan, 2012). As a result, older people increasingly find themselves isolated and marginalized when they move into senior-specific housing that is not fit-for-purpose (Lindley & Wallace, 2015). Affordable housing that integrates services and amenities that address the physical, social, and environmental needs of older people can provide the necessary supports to age-in-place (Petersen & Minnery, 2013).

Seniors living in affordable rental housing have identified the importance of shared spaces (Leviten-Reid & Lake, 2016) as offering opportunities for social interaction, physical activity, and monitoring of neighbours' safety. For instance, social interactions could include having meals and informal meetings with other tenants, as well as engaging in various hobbies, games, activities, celebrations, and holiday events with other tenants (Fang et al., 2016). Common spaces have also been identified as locations in which community organizations could offer exercise classes and thus help support the health and wellbeing of tenants (Leviten-Reid & Lake, 2016). In this sense, the programming of amenities and services within communal spaces have the opportunity to bring residents together, creating spaces for social networks and for hosting meaningful activities, as well as acting as a bridge with local community organizations.

This article presents research from one phase of a longitudinal collaborative project in which a seniors' housing society in Western Canada financed an affordable housing development, inclusive of shared indoor and outdoor spaces for senior tenants, partnering with the municipal government and developers, and collaborating with community organizations to explore ways to develop informal services and supports in and around the building (Sixsmith et al., 2017). This offered the opportunity to redirect focus away from the material features of the built environment (often prioritized in housing and planning developments) towards cultivating non-physical, psychosocial supports for tenants. The research team was invited to join the partnership as academic experts to: 1) understand the challenges and opportunities experienced by seniors and service providers; 2) identify facilitators for and barriers to provision of services and supports to seniors; and 3) determine actions needed to better support service providers in serving seniors. To achieve these objectives, a longitudinal community-based

participatory research (CBPR) project followed the development of a low-income seniors' apartment complex over 18-months.

Research Setting

Rosewood Gardens (pseudonym used for anonymity) is made up of two 16-story towers, totalling 296 one-bedroom units, inclusive of two units designated for two full-time, live-in, multilingual caretakers. The role of the live-in caretakers is to ensure a safe and secure living environment and to support tenants with building maintenance needs, asserting building bylaws and maintaining safety regulations, but are not mandated to support social programming for tenants. Rosewood Gardens is located in an urban area within close proximity of transportation and other services and amenities.

The two Rosewood Gardens' towers are connected by centralized community amenity spaces, including a: large multipurpose room (with bar and kitchen area); secured-access boardroom; arts-and-crafts room; games room; and hair salon with manicure/pedicure services. Additional amenity spaces include the entrance lobbies of each tower with sitting areas; a large secured outdoor courtyard landscaped with a walking path and gardens; and courtyard-level lounges (each with a TV, microwave, kitchen sink, chair/furniture) adjacent to the laundry facilities on the second level of each tower. As one representative from the housing society explained:

> *"They're all connected; the two towers are connected with this hallway with centralized hobby room, et cetera, the games room. The idea is that we don't want the tenants of one tower to feel that that is their tower, and Tower 2 is not part of us or vice versa. We wanted them to feel like they can flow easily between one tower and the other. That is basically the concept of the amenities that we have."*

There is no amenity fee charged to tenants and no meals or intermediate care are provided to tenants. Stipulations for tenancy in Rosewood Gardens include being low-income, ambulatory, and aged 60+ years. Tenants of Rosewoods Gardens are culturally diverse, reflective of the local community, with approximately 70% of East Asian decent and 30% of European decent.

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This study presents findings from an engagement process with the housing society and community stakeholders (e.g., non-profit service providers), which identified how services and supports could be delivered to tenants in a sustainable manner while facilitating inclusion, accessibility and supportive environments. The aims of the current study are to: co-create solutions for the best use the shared amenity spaces in Rosewood Gardens; connect senior services and programs with tenants; and provide opportunities for service providers and local stakeholders to build upon and develop new relationships toward collaborative and effective service delivery. Other data were also collected from tenants and is presented elsewhere (Fang et al., 2016; Sixsmith et al., 2017).

Design and Methods

For this longitudinal project, a community-based participatory research (CBPR) approach was undertaken, recognizing the need for public participation and acknowledging that expert knowledge within communities can be mobilized to generate new understandings of innovative, sustainable, and inclusive community development. In line with CBPR principles, this project originated through consultation with key members of the housing society and municipal government. Representation from these organizations was foundational for decision-making and determining the direction of research throughout all stages of the study. As CBPR promotes the joint integration and transfer of expertise, inclusive participation, shared decision-making power, and data ownership across all partners (Minkler, 2004; Viswanathan et al., 2004), stakeholders were included from the outset of this research to ensure a transdisciplinary perspective (Boger et al., 2016) and advance cross-sectoral working.

Prior to tenants moving into Rosewood Gardens (tenants moved into the first tower March 2015; and the second tower August 2015), deliberative dialogue workshops were conducted with community and professional stakeholders. Deliberative dialogue is a method of discussion, unique from other forms of public discourse such as debating, negotiating, ideas mapping, and generating consensus (Kingston, 2005). It is aimed at creating a platform which purposefully invites diverse perspectives for generating collective thought toward potential solutions for a common purpose (Kingston, 2005). In research, deliberative dialogue provides an integrated framework for concurrently generating and analysing data, engaging participants, and synthesizing evidence (Plamondon, Bottorff, & Cole, 2015). By capturing and integrating knowledge and

experiences of multiple stakeholder groups, this method provides the opportunity to translate research into policy and practice through community investment and asset sharing. Participants worked together to generate ideas and future directions for creating supportive home and socially engaging environments at Rosewood Gardens focusing specifically on: the effective use of shared amenity spaces; identifying and mobilizing local resources and partnerships; bringing in senior-specific programming; and informing tenants of local resources.

Participants

Individuals were purposively recruited from a list of local service providers and existing project collaborators. Potential participants were invited to deliberative dialogue workshops by email if they were identified as having delivered senior-specific services in the local community or if they were a project collaborator. Inviting key stakeholders "to the table" to exchange ideas and to discuss opportunities, needs, and constraints for unassisted affordable seniors' housing has been recommended as necessary for co-creating sustainable solutions (Polk, 2015; Leviten-Reid & Lake, 2016). In total, 24 participants attended the dialogue workshops, including community and professional stakeholders (e.g., service providers, developers, and municipal government employees), with representation from the housing society, the building property management group, and the municipal government at each workshop. All participants provided informed consent and permission to be audio recorded; and no one was provided compensation for participation. Ethics approval was obtained from Simon Fraser University's Institutional Review Board and participant names have been removed to protect identities.

Data Collection

To accommodate the demanding schedules of participants, four deliberative dialogue workshops were conducted over a two-week period (one at the beginning and another at the end of the week); each lasting approximately 2 hours. Participants were asked to describe their understandings of how physical and social environments can contribute to the social engagement of senior tenants. Some example questions were: What are the different types of needs/aspirations of older adults for which they need services? What are your needs as service providers? What services and programs are available for older tenants (both by going out to the local community and being brought into Rosewood Gardens)? Open-ended responses were audio-recorded and transcribed verbatim;

transcripts were de-identified to ensure confidentiality and entered into the NVivo qualitative software program (QSR, 2012) where data were coded and managed.

Data Analyses

Two qualitative researchers independently conducted thematic analysis of the deliberative dialogue data to identify emergent themes and patterns (Braun & Clarke, 2006; Patton, 2002). Analysis began with a read-through of each transcript for general and potential meanings. An initial coding structure was created, based on low-level/descriptive coding that resulted from coding units of text as themes by labelling with a word or phrase closely related to the participant's account (Boyatzis, 1998). Through an iterative process of reading and rereading the text, codes were subject to constant comparative analysis to further refine the interpretation and definition of themes, the coding structure, and the patterns and relationships across codes (Braun & Clarke, 2006; Boeije, 2002). The result was a detailed coding structure agreed upon by both researchers. Initial findings were presented during community advisory meetings and confirmed with participants for accuracy.

Results

Participants discussed ways in which tenants could utilize the amenity space and bring in tailored services and programs. Dialogue data were organized into two overarching categories: 1) opportunities for social interaction and wellness programming; and 2) contextual challenges to service provision.

Opportunities for social interaction and wellness

Participants described several opportunities for social interaction and wellness programming both within the shared amenity spaces at Rosewood Garden and in the surrounding community. By understanding what community supports were available, the amenity spaces could be used for socialization and wellness programs unavailable elsewhere in the area.

On-site opportunities. According to participants from the housing society, the purpose of including amenity spaces in Rosewood Gardens was to create places for tenants to engage in self-organized activities and for service providers to offer on-site programs and activities that could enhance tenant wellness. One participant interested in seeing programs delivered in Rosewood Gardens stated, "What we want to do and what the

City has asked us to do, is to be aware of the wellness of the tenants that we have in there…." This participant elaborated on the goal of encouraging social interaction among tenants:

> *"We wanted to be able to provide services, activities, other sorts of opportunities within the complex, not only to help reduce the burden on the City facilities and other facilities around it, but also to build a sense of community within the complex, so that they didn't always have to go out for these other activities, and we get more of a mixing of the tenants and just more social interaction…."*

A key design feature conducive for the social programming at Rosewood Gardens was reported to be the purposeful location of shared spaces between the two towers and variety in amenity spaces:

> *"That area is accessible from both towers, so we're hoping that there'll be some inter-mingling between them, because we would expect that the two towers will be two different communities for the most part. We're trying to encourage more interaction between them."*

Additionally, lounge areas located outside the 2nd floor laundry rooms in each of the towers were intentionally designed to enhance social interactions between tenants:

> *"The reason we did that was so that while you are doing your laundry, you have a place to go. You don't have to go back to your suite. What we are striving to do is to get the tenants to intermingle. …This is basically the City's concern from a wellness point of view. They want to get people out of their suites, not locked away as quite often happens."*

Participants identified potential services and programs that could be delivered individually to tenants in their suites as well as to larger groups in the amenity spaces at Rosewood Gardens. Individual services included: housekeeping, meal delivery, transportation to appointments or the store, home visits, home care, and translation services. Programs and activities suggested for the shared amenity spaces included: blood pressure or glucose clinics; seminars on practical life skills; education on fraud and scams that target seniors; hearing health, aids, and tests; opportunities to stay active

in mind and body; opportunities to connect and engage with one other; and financial/estate planning and funeral planning. One participant suggested having regular monthly health days, or information fairs, during which different service organizations from the community could set up tables to provide tenants with health- and wellness-related information:

> *"[Tenants] could come down, get a cup of coffee and sort of see what's available in the community, to try and build that connection and then maybe get them out to different programs and services to make sure their needs are being met."*

Informal services were also suggested, which would be no cost and generated by tenants, such as neighborly check-ins (or doorknob card check-ins) or a lending library (with books, videos, puzzles) in the two lounge spaces. Notably, services offered to seniors would fluctuate according to changing needs: "As people's needs change, we've kind of changed with those needs…." As well, as one participant reported, it is important to not assume what tenants may want or need:

> *"What I'm hearing around the table is that there is interest in making sure that people have access to information about fall prevention, about healthy aging-in-place, about community supports, about transitions to other living arrangements should they need them, and again I think we need to be careful that we don't presuppose that we know what the tenants want."*

Participants described the importance of overcoming limitations of the built environment and reaching seniors who may be isolated in their apartments. A participant from the housing society described the design of Rosewood Gardens: "A typical floor plan has 10 units surrounding a central service core and elevators. This small number of units per floor, in a high-rise configuration reduces the opportunity for interaction between residents in the building." This participant continued to report a need:

> *"…to try to overcome that design limitation by doing other things in the building that would pull [tenants] out of their units and into other parts of the building and give them other things to do."*

"...Seniors are going to be healthier if they have more interaction, if they have friends. People can monitor each other in terms of how they're doing health-wise and any other situations that are going on in their life."

Thus, being able to get into buildings where people live offers socially isolated seniors more opportunity to engage and learn about available community programs.

Community-based opportunities. Beyond having services and programming brought on-site, participants discussed the close proximity of Rosewood Gardens to other senior-specific programming in the surrounding area. A participant from the housing society stated, "If our tenants want something that we haven't provided, there is the senior centre just down the street…or availability all within a close proximity." As well, participants identified the need for tenants to make use of services already available in various locations throughout the community. As one service provider stated:

"There are people already doing a lot of things that we've brought up here that the folks living there will need. The big thing will be the balance: Do we want to move some of it in there so they don't have to come out; or is it finding the ones that are isolated in there and using resources that are around the table to get them to come to already existing programs that are close to them?"

Services and programs identified by participants as available to seniors in the community included free access to Internet and computers, as well as low-cost technology training courses; self-care workshops and seminars around healthy aging, prevention, and coping with age-related changes; cooking classes; legal advice; financial planning; assistance with taxes and applications for subsidized housing and disability or old age benefits; advocacy; and counselling and support services for people with substance use or addictive behaviours. Participants suggested that if a single staff person at the different organizations could be dedicated to tenants of Rosewood Gardens, the tenants would have a 'go-to' person for helping with their various needs, easing the navigation challenges often experienced when accessing social supports. One service provider explained the need for multiple organizations to collaborate toward supporting seniors' independence: *"It takes a network of service providers and public service providers in order to maintain that independence."*

Contextual challenges to service provision

Participants discussed contextual challenges to service provision, including the need for communication about and coordination of on-site programming, culturally diverse and responsive services and programming, and long-term funding.

Key to the provision of social programming in Rosewood Gardens, participants noted that tenants need to be informed of the different service and program options. Though a challenge, participants reported on potential solutions. For instance, one participant suggested that representatives come on-site to present information on opportunities in the area. Announcements (in both Chinese and English) were a reported need, either via e-mail from the property manager or posted on notice boards in the lobby and elevators of each tower. Potentially, the housing society should develop a resource guide for their tenants. Understanding the communication needs of tenants and the best way for the different parties to communicate into the 21st century was noted as important. Participants identified a variety of communication methods, including suggestion boxes, an assigned tenant steward from each floor, or online communication tools (e.g., email and website posts).

Participants emphasized the need for program coordination in Rosewood Gardens, either by an individual (e.g., a paid employee or unpaid volunteer) or a group (e.g., a tenants' committee). Though there is an on-site building manager and two caretakers employed by the housing society, program coordination is not part of their job description. As one service provider cautioned, however, *"Most people may be coming [to Rosewood Gardens] assuming it is independent living, and they don't want to be treated like…they have a recreational programmer or all that kind of stuff; that's not of interest to them."* While participants suggested that a program coordinator could be valuable, this might not be of interest to all tenants. Instead, tenants may want to lead the program coordination themselves, as one participant stated:

> *"[There is] a huge pool of talent within the building itself, people who actually live there. They're not just looking for somebody else to do something for them; they're quite capable of doing something for themselves and for their neighbours."*

Having sustainable service coordination and communication was also identified as a challenge in the context of not-for-profit service delivery. With competing time demands, providers reported often being over-stretched. Participants expressed the need for contact information of key personnel responsible for management and operations of Rosewood Gardens to enable the development and implementation of programs and activities in the shared amenity spaces. Moreover, participants reported a need for coordination between management of Rosewood Gardens and community service providers to serve seniors with complex health issues:

> *"It's probably a bit naïve to think that there won't be issues of mental health or addictions or different care needs that are going to come up and where services from outside are going to need to come in. And so that's where there'll have to be some collaboration. I know for myself, some of the outreach work that I've done, there's been times when I'm concerned about one of my clients inside, they're not answering their phone, they're not answering their door."*

So, to be able to call a manager and say, *"Can you let me in or go knock yourself, or however that works, because I'm concerned about this person,"* without having to go get the police involved to come and break that door. There needs to be sort of that collaboration between the actual building and whoever's managing it, and our agencies.

Further, participants expressed that policies surrounding space usage should be established to determine which organizations and service providers are eligible to host programs, activities, and events in the shared amenity spaces. For example, participants suggested that some organizations may use the amenity space as a business opportunity to market products and services to tenants. As such, organizations and providers should be vetted to ensure appropriateness and tenant safety.

Another challenge noted by participants was the need for culturally diverse and responsive services and programming. Within the community in which Rosewood Gardens is situated, there is a large Chinese population, and having services and programs offered in Cantonese, Mandarin, and English was reported to be an important component toward generating culturally responsive service delivery. One notable service gap was that free English language classes were only available for people living in the area for less than 5 years, though many seniors have lived in Canada for 10 to 20

years, yet still have limited English language skills. Service providers who speak a variety of languages are needed at various access points, both within Rosewood Gardens and in the wider community.

A final challenge noted by participants was the need for long-term funding. As an unassisted independent living residence for low-income seniors, financial challenges for establishing on-site social programming were reported by the housing society. It was anticipated by one participant that low or no cost programs could be introduced into the shared amenity spaces to support tenants:

> *"Because of the nature of the rents, keeping them low, we cannot fund the cost of programs...it's our hope that...we can attract people to come in and put programs on for our tenants whether it's yoga...whatever games they want to play, or whatever."*

A representative from the housing society stipulated that their role and responsibility within Rosewood Gardens is that of landlord and as such, it is important that sustainable funding is acquired to employ an individual to coordinate on-site programmatic development:

> "If someone came forth and said, "we will fund a coordinator" then we [housing society] would give consideration to it. And that coordinator could arrange all these things that you're talking about. But that is not our job; we are a landlord trying to do the best we can for a particular group of people who are seniors."

Indeed, for the housing society, one of their primary goals for participating in the research process was to determine ways of acquiring funding for a staff program director since building management and maintenance personnel do not have time to undertake the task of program coordination.

Discussion

Provision of services and supports for low-income seniors in unassisted housing has been identified as imperative for both individual wellbeing and operationally within government structures (Redfoot & Kochera, 2005; Pynoos et al., 2005). With encouragement from the municipal government, the housing society that manages

Rosewood Gardens identified the need for services in and around this development. Through a series of deliberative dialogues, the present study identified opportunities for enhancing social interaction and wellness programming in the shared amenity spaces, bringing in community-based supports, and addressing contextual challenges to service provision. By grounding this work in experiences identified through a participatory process, the current research has immediate application for Rosewood Gardens (Fang et al., 2017). Though context-specific, findings can also inform the development of future low-income service-housing collaborations to serve low-income, independent seniors. Collaborative planning for the effective use of the social environment (e.g., social programming) within the physical environment (e.g., amenity and neighbourhood spaces) can generate rich and illuminating data for informing enhancements in the social environment of apartment dwelling low-income seniors.

Research on seniors' living situations largely acknowledges the importance of the built environment in enabling or disabling aging well, and as a result, home modification initiatives have been popular (Rosso, Auchincloss, & Michael, 2011). However, initiatives to address the psychosocial needs of community-living seniors, including enhanced social connectedness, remain sparse. Research has explored how the physical environment supports or impedes the ability to age-in-place often driven by a model of person-environment congruence that compares a person's physical and mental capacity against environmental demands and how these impact on a person's ability to perform activities of daily living (Iwarsson, 2005). While this approach has been useful, less attention has been given to the experiential dimension and the way older adults develop a sense of home, community, identity, and belonging.

Aligned with participants' reports, Stone (2013) argues the importance of having service coordinators available to senior tenants in multi-unit rental properties as a mechanism to efficiently organize, deliver, and purchase affordable services. Supporting seniors through the organization and provision of services and supports can lead to healthcare cost savings. Furthermore, appointing a service coordinator in rental buildings can increase efficiency and affordability of services that enable senior tenants to remain independent (Gibler, 2003; Pynoos et al., 2005; Redfoot & Kochera, 2005; Stone, 2013). Importantly, findings from the present study offer support for the idea that older tenants are able to self-organize and create a democratized body to act in a service coordination capacity. The prospect of leading governance roles in building

committees, with opportunities to participate in decision-making, has been identified as an interest of older adults (Leviten-Reid & Lake, 2016). Thus, services are not simply provided to seniors, but seniors should be acknowledged as active participants in creating and acquiring activities, services, and support. This form of empowerment enables older adults to not only become and remain engaged through positive contributions to their communities, but more importantly, it serves to enhance their quality of life (Alley et al., 2007).

Participants identified the potential for older tenants to become socially isolated in Rosewoods Gardens as a result of the built environment (i.e., architecturally through the 16-story tower design), which has been recognized (Bramley & Power, 2009; Helleman & Wassenberg, 2004). The negative impact of social isolation on older adults has been widely acknowledged (Cacioppo & Hawkley, 2003) and initiatives to reduce isolation in order to promote health and wellbeing are on the rise (Findlay, 2003). Meanwhile, the development of socially inclusive amenity spaces within a comfortable and known setting (i.e., Rosewood Gardens) provides the opportunity for service providers to better engage with socially isolated tenants who may be unlikely to seek community services off-site. Social connection through the affordance of common areas in affordable housing has been identified as an opportunity to reduce isolation among tenants (Leviten-Reid & Lake, 2016).

In addition to identifying and introducing services and programs into Rosewood Gardens, encouraging tenants to engage in social activities in the community was an important goal. As such, on-site services can be augmented by community-based services (Stone, 2013). Previous research has highlighted the importance of access to affordable transportation to provide older renters better access to community services, such as family doctors or shopping facilities. Though it is not a mandate of independent housing management to offer transportation services to tenants, arranging this kind of service (at low or no cost) with the municipal government would serve to improve the quality of life of senior tenants (Leviten-Reid & Lake, 2016). Having accessible opportunities for social engagement and having housing linked with, or in close proximity to, amenities, services, and social activities can enable independence in later life (Alley et al., 2007).

Challenges to service provision identified by participants included the need for communication about and coordination of on-site programming, culturally diverse and responsive services and programming, and sustainable financial support. The need for culturally responsive services is reflected in previous research, which has also identified how poor language skills can limit social inclusivity, reducing a sense of acceptance by older adult members of minority groups in Canada (Weeks & LeBlanc, 2010).

One limitation to deliberative dialogues is that these are a series of 'dialogues', emphasizing the exchange of ideas with less prioritizing on the execution of actionable items. For instance, a central challenge identified by participants was the lack of financial resources to ensure the implementation and sustainability of on-site services and supports. Though solutions (e.g., developing a voluntary tenants' board and fundraising to hire a program coordinator) were offered, there were no commitments made to follow-through. Instead, the onus was placed on the researchers to put these actions into place, which was neither feasible nor appropriate. Hence, what would further enhance this method is the appendage of an 'accountability' feature where civil servants 'pledge' (McCoy et al., 2002) to carry out an action at the end of the deliberative dialogue. A second limitation was that workshop participants did not include tenants of Rosewood Gardens, though this was an intentional decision made in collaboration with the housing society for this stage of the research. In other phases of this longitudinal research, tenants have been engaged in place-making research (see Fang et al., 2016; Sixsmith et al., 2017). The engagement of local service providers and other community members with vested interest in seniors' wellbeing led to community investment and asset sharing through a shared platform that enabled the generation and integration of knowledge and experiences of multiple stakeholder groups into the planning process. Key successful features of deliberative dialogues, which informed recommendations and solutions included bringing together diverse voices, establishing a common purpose at the outset of each dialogue, and having realistic expectations for what 'real-world' (Boger et al., 2016) solutions 'should' resemble.

Conclusion

The value of supporting low-income senior tenants of multi-unit properties should not be understated. As affirmed by participants, affordable rental housing is intended for tenants who can independently live in these settings; and when this is no longer possible, they are often forced to move to a more supportive location. In corroborating

the notion that low-income seniors can do well in supported living contexts, when compared to older adults living in private homes, residents of senior housing have reported higher quality housing and neighbourhood safety; as well, low-income older adults in senior housing reported better self-rated health compared to low-income older adults in private home residents. Because low-income seniors are more limited in their options, it is up to government and social service organizations to provide services in the least restrictive and most supported housing and social environment. Prolonging independent community living with the assistance of support services should be a goal to both delay premature relocation into institutional care and meet the preferences of older adults.

Conflict of Interest

None

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2.3 Paper Three: 'Place-making with Older Persons'

This paper illustrates applications of community-based participatory research methods. Participatory community mapping workshops (PCMWs), involving community mapping and group walk-along methods, were useful for accessing experiences of place, identifying facilitators and barriers to accessing the built environment, and co-creating place-based solutions. This was accomplished through the prioritisation of older adults' voices in a new affordable housing development for low-income older adults in western Canada.

With direction and support from the co-investigators and members of the research team, my key contributions for this piece include the following:

- Conducted the literature review with input and suggestions from the research team.
- Co-designed the research methodology.
- Developed the methods including all workshop materials.
- Acquired ethical clearance for the research.
- Led and implemented the workshops, with support from the research team, and led activities such as: participant recruitment, organisation and facilitation of the workshops.
- Led and co-analysed the data with research participants, supported by the research team.
- Led the writing, preparation, and submission of the manuscript (including revisions encompassing suggestions from reviewers) integrating feedback from the co-authors as necessary throughout the process.

2.3.1 Critical Review of Paper Three

While paper two focuses on broad participatory principles of an inclusive stakeholder perspective, paper three specifically highlights the importance of bringing older adult tenants into a decision-making dialogue about processes directly impacting their living conditions. This allowed the tenants to prioritise their desires, expectations, and recommendations. Similarly, effective engagement and participation of older adults requires innovative methods that are not only effective for bringing marginalised persons to the decision-making table but ensures that their voices are the main focus. Participatory mapping is a research process involving methods that stem from

agricultural geography. Shaped by principles of equity, participatory mapping has become an integral part of CBPR. It is often used in public health and policy realms to forefront community issues and to give precedence to local decision-making. Informed by participatory mapping, participatory community mapping workshops, inclusive of innovative methods such as experiential group walk throughs and map making exercises, were hosted to create a platform for older adults to share their ideas, and recommendations for the redevelopment. This was done to better understand how they would like to build their new community. The participants represented approximately 70% older adult tenants and 30% local service providers and persons from the municipal government. This was the intended participation ratio as the older adults were present to lead the conversation while individuals who provided servicing, and those individuals with decision-making power were there as active listeners and contributors. Through the use of participatory mapping and the implementation of participatory community mapping workshops, older adults were able to establish their role as active place-makers, empowering them to be more than just tenants living in a building. Findings from participatory community mapping workshops included the identification of services and needs by older adults alongside potential solutions to overcome cross-cultural challenges. All of which were actioned as priority items by local service providers and persons from the municipal government.

In summary, this paper meets objective two, illustrating the importance of using participatory principles to empower older adults to become active decision-makers and place-makers amongst persons with more decision-making power. Paper three also addresses research question two through introducing the implementation of participatory community mapping workshops. They created a unique opportunity and space for the co-creation of shared solutions together with local services providers and persons from the municipal government — individuals who would typically make the decisions for older adults.

To expand on ideas introduced in papers two and three, the development of innovative theory is required to progress how we acquire important place stories from seldom heard groups as well as optimise how we critically analyse experiential data. Thus, paper four further unpacks notions of ageing in the right place through the development of intersectional theory, which utilises theoretical concepts and ideas from the social sciences and gender studies to further theoretical understandings in urban studies.

Place-making with Older Persons: Establishing Sense-of-place through Participatory Community Mapping Workshops

Abstract

Principles of aging-in-place emphasize the importance of creating sustainable environments that enable older people to maintain a sense of belonging, autonomy, independence, safety and security. Simply altering the built environment is insufficient for creating more inclusive environments for older persons, as creating 'meaningful' places for aging involves consideration of psychosocial and cultural issues that go beyond issues of physical space. This paper illustrates how applications of community-based participatory research methods, in particular, participatory community mapping workshops (PCMWs), can be used to access experiences of place, identify facilitators and barriers to accessing the built environment and co-create place-based solutions among older people and service providers in a new affordable housing development in Western Canada. Founded on tenets of empowerment and relationship building, four PCMWs were undertaken with 54 participants (N = 38 older people; N = 16 local service providers). PCMWs comprised (i) experiential group walks around the community to access understandings of place and community and (ii) mapping exercises, whereby participants articulated their place-based needs within the context of the new affordable housing development and surrounding neighbourhood. Dialogues were digitally recorded, transcribed and thematically analysed. Visual data, including photographs taken during experiential group walks were categorized and integrated into the narrative to illustrate place meanings. PCMWs enabled senior housing and social care professionals and decision-makers to co-construct knowledge with older tenants that facilitated place action and change. Key themes identified by participants included: identifying services and needs for health and wellbeing, having opportunities for social participation and overcoming cross-cultural challenges. PCMWs were found to be a nuanced method of identifying needs and resources and generating knowledge.

Background, Rationale and Theory

Aging is a process associated with various individual, social and structural vulnerabilities, such as difficulties navigating health and social care systems, frailty, chronic health conditions, mental health and mobility challenges, ageism, and social exclusion (Bergman et al., 2007; United Way Lower Mainland, 2011); whilst the concept of 'age' in itself is also a key social determinant of health (Raphael, 2004). In Canada, the aging population is rapidly increasing with adults over age 65 years currently comprising 13.2% of the total population and projected to rise to 24.5% by 2036 (Statistics Canada, 2010; Turcotte & Schellenberg, 2007). One important determinant of health in later life garnering increased attention in public health and policy is where one lives. The concept of aging-in-place is the "ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level" (Centers for Disease Control and Prevention, 2013).

Concepts of home and community have consistently been linked with the notion of 'sense-of-place,' an umbrella term used to describe aspects of place identity, sense of purpose, belonging and living a meaningful life (Kyle & Chick, 2007; Scannell & Gifford, 2010). Defined symbolically as "the subjective meaning and importance that individuals give to where they reside" (Eyles & Wiliams, 2008, 1), emotionally to describe humans "affective ties with the material environment" (Tuan, 1977, 93) and reflexively as "a confluence of cognitions, emotions and actions organized around human agency" (Canter, 1991, 214); sense-of-place is often constructed and negotiated within the context of everyday settings such as one's home and community.

According to Sixsmith (1986), one's home is a place of physical, personal, and social experience that sustains a sense of security, safety, privacy, independence and choice. Peoples' attachment to home and place is reliant on prospects for enhancing relationality (Kyle & Chick, 2007). Hence, it has been argued that for individuals to transform spaces into meaningful places, supportive social and structural environments are required to enable individuals (particularly marginalized older people) to gain localized, insider status (Hay, 1998). Relph (1976) refers to the concept of insideness as the extent to which people feel as if they belong in place. If a person feels 'inside a

place' then they feel a sense of inclusion, security and safety, which results in stronger feelings of identity (Relph, 1976). Opportunities for building social relationships within interpersonal, community, cultural and societal spheres (Low & Altman, 1992) cultivate a "rooted sense-of-place" (Hay, 1998, 5) in different geographical contexts. Even when living conditions might be considered suboptimal older people may want to maintain 'rootedness' and 'insider status' to counter individual, social and structural vulnerabilities (Hay, 1998; Klein, 1994; Mutschler, 1992). Conversely, a person can feel separated or alienated from place (what Relph (1976) terms outsideness), which can undermine well-being as it leads to exclusion, loneliness and isolation from social and community life.

'Having choices' in where and how one lives are particularly important for older adults to achieve not only aging-in-place, but positive aging in the 'right' place (Golant, 2015), which requires consideration of psychosocial and cultural issues as well as physical space (Bjornsdottir et al., 2015; Wiles et al., 2012). Bringing together gerontological and geographical perspectives, it has been highlighted that developments of communities that are supportive of aging and mindful of cultural diversity requires careful consideration of how individuals connect within physical and social spaces (Greenfield et al., 2015; Andrews et al., 2009). This can be achieved through post-modern perspectives, qualitative approaches and visual methods (Skinner, Cloutier & Andrews, 2015) that capture "hidden cultural practices and social processes" when describing the "social and spatial relations, between older people, health and place" (Andrews et al., 2007, 151).

It is also important to note that aging-in-place can sometimes be a negative experience when an older persons' housing is substandard or services in the community are unable to meet their needs (Sixsmith & Sixsmith, 2008). To build age-friendly communities, conducive of positive aging in the 'right place' (Golant, 2015), housing authorities, planners and developers need to incorporate the psychosocial realities of everyday life, and disrupt existing planning processes and practices grounded on positivist epistemology by using collaborative and partnership models of design (Rowles & Bernard, 2013; Harper & Laws, 1995). This is important for ensuring that models of urban planning and aging move beyond universal accessibility (i.e., adapting environments based on progressive disability) to one which focuses on environments that enable older adults to fulfil a positive role in old age.

Such goals can be difficult to achieve amidst hierarchical barriers that give certain stakeholders authority and decision-making powers while leaving others out of planning and development processes (Woolrych & Sixsmith, 2013). For instance, marginalized voices are often 'negotiated out' of the planning process, the result of a utilitarian perspective to planning where what is in the 'public interest' gets approved, and where minority perspectives (be it by age, gender, race or class) are ignored (Sandercock, 1998). This has resulted in the criticism that marginalized voices are 'tokenistically' sought in an insincere attempt to claim local involvement has taken place. Subsequently, the implication when designing homes for older adults is that a 'one-size fits all' approach likely ignores the heterogeneity of older adults and limits the use of design elements that support diverse socio-cultural backgrounds. Thus, our guiding research question was: how can the concept of 'place' be effectively articulated and translated into solutions for older people when designing and developing their 'home'?

Since a strong sense-of-place is produced via synergies of access to culturally appropriate supports for active participation and opportunities to build social networks and assume meaningful roles in the community, we applied this principle in our participatory community mapping workshops (PCMWs) methods. In this short communication of an innovative approach in health geography, we problematize conventions of collecting and generating information from older people; with the aim of articulating the use of PCMWs as a valuable, innovative method that enables deeper understandings of the challenges of aging-in-place for older people through co-creation of knowledge with multiple stakeholders. This paper demonstrates the application of PCMWs when examining transitions into affordable housing by a culturally diverse group of seniors over the age of sixty in Western Canada. Participants also included stakeholders with decision-making powers such as local service providers from government agencies, housing associations, community centres, charitable organizations, and health authorities; all of whom have vested interest in regeneration projects and planning for older adults.

Community-Based Participatory Research: Participatory Mapping Methods

Participatory mapping is a research process that provides the opportunity to create a tangible display of people, places and experiences that make up a community (Corbett, 2009). Over the last decades, participatory mapping has been used by various

disciplines for an array of different research and development purposes such as land use, crime prevention, education, and health (Chambers, 2006).

Through its application in multiple disciplines, participatory mapping has become a valuable, interactive technique for local knowledge production, moving from data description to map based representation, through discussion and visual output (Corbett, 2009). Participatory mapping is used in public health and policy realms to raise awareness of community issues, facilitate local decision-making and empower communities to be active place-makers (Corbett, 2009). Shaped by principles of equity, participatory mapping has become an integral part of community-based participatory research enabling scholars to satisfy their research aims and objectives whilst empowering participants to build on community strengths to generate a shared awareness and understanding of community assets (Corbett, 2009).

PCMWs were adapted for the current project to further understand sense-of-place among older adults. PCMWs enabled researchers to access layers of information through the application of multiple methods, enhancing holistic understandings of aging-in-place. A key methodological distinction between the PCMWs conducted for this research and existing methods is the extension of visual methods to include other senses such as hearing, smell and touch through experiential group walks. Visual mapping exercises enabled imagistic geographical depictions of social, health and recreational resources in the community, however, this process was not able to help us fully understand and critically appreciate the complexities of the everyday lives of older people through the intersections of sight, smell, sound and touch (Mason & Davies, 2009).

According to Elwood and Martin (2000), geographers have over the years scrutinized the ways in which locations of data collection and inquiry impact power differentials between researchers and participants. To this effect, in order to facilitate an atmosphere conducive to equitable information sharing, experiential group walks involved researchers walking with groups of older adults and stakeholders to explore the neighbourhood context, enabling participants to be the expert, highlighting (in real-time) meaningful places, spaces and activities in their local environment (Garcia et al., 2012). Experiential walks allowed researchers to access older people's attitudes and knowledge, and further understand the types of relationships they maintain within their

community (Carpiano, 2009). Positive synergies of mapping exercises and experiential group walks in PCMWs also facilitated the seniors' participation in the community by creating networking space for engagement with other seniors as well as with service providers. The combined effect of both methodological approaches sets PCMWs apart from previous applications of participatory mapping enabling the production of intimate and contextualized understandings of older peoples' sense-of-place. The next section describes how PCMWs were conducted to access ideas of place among seniors with input from local service providers connected to a new affordable senior housing redevelopment in Western Canada. To comply with ethical procedures and the wishes of participants and community partners, specific project details (such as names of building, places, people and other identifying information) will not be used.

PCMWs in Practice

Four PCMWs were conducted in English (with Mandarin and Cantonese-interpretations) at a seniors' community centre. The goals of the PCMWs were to generate visual representations of how seniors value, understand and interact with place and identify the significant features (e.g., services, amenities, open spaces) within the community to make it a positive place to age (Corbett, 2009; Manzo & Perkins, 2006). Workshop participants consisted of residents of a new affordable seniors housing development (N = 38) from diverse cultural backgrounds over the age of 60, and local service providers (N = 16) from government agencies, housing associations, community centres, charitable organizations, and health authorities who have a vested interest in housing and service planning for older adults. In terms of recruitment, it is important to note that strong relationships and community ties were developed prior to the PCMWs in earlier research. Participants were recruited by phone by the lead researcher, through word of mouth by other seniors and local service providers, and through advertisements using recruitment flyers in English and simplified Chinese. Where possible, the same participants were involved in all four workshops.

Two key methods were applied in the PCMWs: 1) experiential group walks (N = 2) conducted once around the community (in small groups of eight to ten consisting of seniors, service providers and researchers) and once within and around the periphery of the building (in one large group ten consisting of seniors, service providers and researchers); and 2) mapping exercises (N = 2) were conducted after the experiential group walks where participants located services and supports on a large map. Each

workshop had a unique objective for generating ideas and solutions, and each subsequent workshop built on outputs from the previous workshops (see Figure 1).
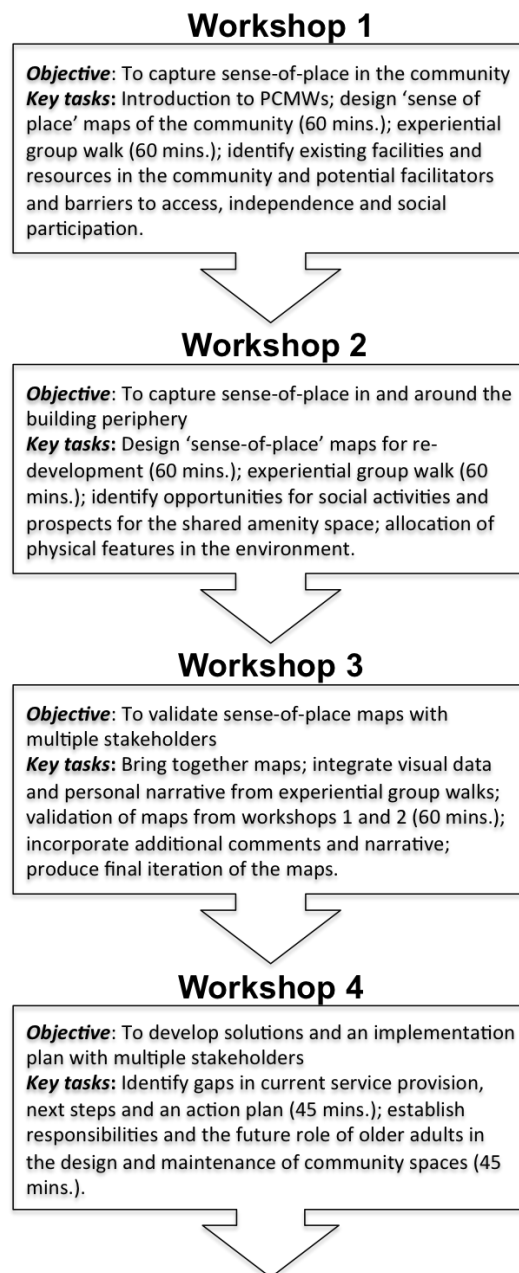
Workshop 1

Objective: To capture sense-of-place in the community
Key tasks: Introduction to PCMWs; design 'sense of place' maps of the community (60 mins.); experiential group walk (60 mins.); identify existing facilities and resources in the community and potential facilitators and barriers to access, independence and social participation.

Workshop 2

Objective: To capture sense-of-place in and around the building periphery
Key tasks: Design 'sense-of-place' maps for re-development (60 mins.); experiential group walk (60 mins.); identify opportunities for social activities and prospects for the shared amenity space; allocation of physical features in the environment.

Workshop 3

Objective: To validate sense-of-place maps with multiple stakeholders
Key tasks: Bring together maps; integrate visual data and personal narrative from experiential group walks; validation of maps from workshops 1 and 2 (60 mins.); incorporate additional comments and narrative; produce final iteration of the maps.

Workshop 4

Objective: To develop solutions and an implementation plan with multiple stakeholders
Key tasks: Identify gaps in current service provision, next steps and an action plan (45 mins.); establish responsibilities and the future role of older adults in the design and maintenance of community spaces (45 mins.).

Figure 1. PCMW design and plan.

The experiential group walks and mapping exercises offered visual cues to help participants describe their relationship to place; such triggers were captured via audio recording and photography. Visual (Rose, 2012) and sensory methods (Mason & Davies, 2009) provided a window of understanding and interpretation of the unique cultural and social nuances into the everyday lives of participants. To further support the process, learning, and data, observations from each workshop session were recorded in field notes and researchers generated post-event reflective summaries. Discussions during mapping exercises were audio-recorded. An audio recorder was placed at each

table (four in total) and monitored by the table facilitator. Audio recorders were also brought along during the experiential walks; held with the recording function 'on' by designated researchers. Additionally, since this was largely a Mandarin- and Cantonese-speaking community, two researchers fluent in both dialects and English (including the event host) facilitated the workshop activities (mapping exercises and experiential walks).

Participants directed the mapping process (with facilitation by researchers — see Image 1) and retained co-ownership of the maps. For instance, final crude versions of the maps were left with the community for presentations, workshops and seminars held by staff from the local seniors' centre; whilst researchers retained photographs of the maps for reporting and dissemination purposes.

Image 1. Photo taken during mapping exercise demonstrating the map-making process.

Experiential walks were within a 1 km radius of the workshop venue which encompassed the vicinity of the building that the older adults resided. This decision was deliberate not only to limit the length of walking time for participants but to also capture, in-depth, the extent of local resources available to the older adults. None of the participants had extensive mobility issues that prevented them from participating in the experiential walks, however, it was emphasized that they may stop the walk at any time and a researcher will escort them back to the venue. Similarly, to address potential power differentials between participants and researchers, experiential group walks were led by seniors living in the community, which enabled the older adults to determine walking pace whilst identifying areas of interest and walking routes (see Image 2).

Researchers were reminded not to dominate walking discussions and to allow the walk-along process to be led by seniors. Walking alongside seniors, researchers prompted, questioned and took photographs of places in the community that provided activities and services of value to the seniors. Functional place-based needs (e.g., traffic lights, gateways to green space), service gaps and existing strengths were identified.

Image 2. Photo of the experiential group walk led by senior participants.

Building on relationships between older people, service providers, and researchers during workshops 1 – 3, the aim of workshop 4 was to generate solutions and develop an implementation plan with achievable goals and actions. This was accomplished through a review/analysis of findings from the experiential group walks and mapping exercises, followed by group discussions to develop an implementation plan that incorporated needs, assets, potential solutions, and action items. The fourth workshop concluded with the completion of evaluation forms by the participants.

In total, there were three layers of data analysis. The first and second layers of analysis were co-conducted with seniors and service providers at the beginning of workshops 2 and 3; this included a validation process through the collection of field notes and reflective summaries to ensure agreement and consistency of findings from previous workshops (i.e., workshops 1 and 2). For the co-analysis, it was emphasized at the

outset that the workshops prioritized the everyday place experiences of older adults transitioning into affordable housing. Hence, local service providers and decision-makers were made aware that their main role was 'knowledge user' or 'learners' of the process. Stakeholders that served the needs of seniors contributed to discussions and the analysis with input that focused on the availability and accessibility of local resources available to seniors or lack thereof. None of the researchers reported any disharmony or disagreement between the seniors and service-oriented stakeholders during this process.

Subsequently, the researchers conducted a third layer of analysis to further annotate the maps. The visual mapping data were categorized and recreated in digital form. Audio files were recorded in English (Tables 1 & 2) and in Mandarin or Cantonese (Tables 3 & 4), transcribed in English by a professional transcriptionist or to English by experienced multilingual researchers and thematically analysed using Braun and Clarke's (2006) six steps of thematic data analysis: i. Familiarization; ii. Generation of initial codes; iii. Searching for themes; iv. Reviewing themes; v. Defining and naming themes, and; vi. Write-up of themes analysed.

Ethics approval was obtained from, (blinded for review), Office of Research Ethics preceding the PCMWs and informed consent was obtained from all participants whose privacy and confidentiality are protected.

PCMWs: Reflections and Lessons Learned

An important process to ensure success in all community-based research is building trust and accountability. We achieved this through active communication with appropriate interpreters (to reduce language barriers), and proactive researchers who worked in open and friendly manner to establish strong community ties. These established collaborative, trustful relationships facilitated the researchers to access local community space and support to host the workshops and have attendance.

According to the evaluation data, service-oriented stakeholders found the workshops to be a useful method for engaging with older adults and learn about the challenges in the community and the available resources from the perspective of seniors. Older adults highlighted the workshop process to be an effective way of bringing the tenants together to form a community. Not only did the event enable the voices of the seniors to be fore-

fronted, it also created a social environment for older adults to network and build new relationships. Some logistical challenges included the room size. Participants reported that it was difficult to hear as the room was too small for the number of attendees. On the day of the event, many seniors attended without having provided an RSVP. As a team, we decided to caution on the side of inclusivity, however, this resulted in overcapacity. With respect to the experiential walks, some participants reported having lived in the area for several years and as such they had not benefited from this process since they were already familiar with the area and the resources that were available to them.

For the researchers, one challenge that became eminent was reaching the 'hard to reach.' Potentially, more outspoken and active tenants attended than those with mobility or communication difficulties. Similarly, given we had limited resources, we had only two Chinese-speaking facilitators (one of which was the event host), other non-English, non-Mandarin and Cantonese speaking tenants' participation was limited. Finally, while inclusion of multiple stakeholders had advantages, it was also challenging to balance the representation of and power dynamics between service providers and tenants within the groups.

Finally, researchers found that key strengths of the PCMW method included being able to identify needs, resources and generate solutions with seldom heard groups. The visuals and walking activities facilitated the bridging of cultural communities: facilitating relationships, communication, and understanding between English and non-English speaking groups which will likely carried forward in the building. Additionally, engaging decisions-makers in this proactive process provided them direction and the potential to ignite change.

Key Findings: Establishing Opportunities for Positive Aging-in-Place
PCMWs enabled the identification of various features that could enhance aging-in-place (Figure 2) and actionable solutions for beginning to establish these into spaces, otherwise not possible using methods such as questionnaires and interviews. Presented here is a summary of the key themes from the workshops including: identifying services and needs for health and wellbeing, opportunities for social participation, and overcoming cross-cultural challenges.

Identifying services and voicing needs. Health and wellbeing are high priorities for participants and can be supported by positive living environments and physically and mentally stimulating activities (see Figure 2). Some examples of facilitators for maintaining health and wellbeing included positive living environments, for example smoke-free buildings as indicated by an older woman expressing that she had "a little asthma and usually cough when I smell smoke," so she was pleased when she "learned that smoking was not allowed in the building;" and secondly, physically (e.g. tai chi and ping pong) and mentally (e.g., chess and pottery) stimulating activities. Though senior-specific programs and activities were available through the local seniors' centre, some older adults were less mobile than others, making these difficult to access. Hence, it was suggested that some older people would benefit from various 'in-house' activities. The main challenge was acquiring human capacity to organize and implement programs that "involve our hands and minds." Coordination and implementation of age-friendly activities required time, space, and place organization. One solution generated by participants was to raise funds to hire a program coordinator to organize activities and establish a tenant board. Other key services and amenities identified are presented in Figure 2. It was voiced that the availability of services and amenities would enable seniors to stay independent and age better in their current living environments.

ACTIVITIES	SERVICES/CLASSES	OTHER
• Tai Chi • Barbeques (twice per year) • Dancing • Mah Jong • Knitting • Bible study • Book club • Life history learning lessons about residents • Ladies coffee hour • Learn to paint • Calligraphy • Glee club singing • Holiday / birthday parties / potlucks • Sculpturing • Making frames • Scrabble • Theatre	• Language Classes (e.g. English, Mandarin, Spanish) • Assistance with tax returns • Family practitioner • Grocery store / help with groceries • Cooking classes • Health and wellbeing seminars • Fire safety seminars • Health checks & monitoring • Balance classes • Art Classes • Music classes • Manicures • Massage • Pedicures • Yoga Classes	• Culturally-sensitive emergency evacuation plan • Pedestrian crosswalk needed on the main street outside the building • Age-friendly exercise equipment • Reduced membership fee at the seniors centre • Air conditioning in games / hobbies room • Replacing blinds • More ping pong tables • Peer-to-peer training on 'living in the condo'

Figure 2. Activities, services and other social and physical features voiced by seniors to enhance positive aging in place.

Opportunities for social participation. Geographic proximity to places that provided opportunities for community engagement such as libraries, cultural centres and community centres was reported to help reduce social isolation. For instance, one person revealed that "the main reason I chose to live here is because it is to close places that I always go." Equally important is the accessibility and availability of age-friendly programs, activities and social gatherings. It was expressed that many older people living in the new development had lived alone and "don't have family here." One individual suggested that to promote social participation the management could arrange for a "band from time to time" and "once in a while, have a little barbecue." The desire for more social activities was echoed by several older persons. Some felt that if "older people can get together, it might make them feel less lonely and increase their sense-of-place attachment." For example, "they could set up a weekly event to bring people together to either sing, dance or just chat." According to older persons, to prevent social isolation and facilitate participation and engagement, it is important that social activities are: held in convenient locations, are frequent, available at different times and accessible for persons of various cultural backgrounds.

Overcoming cross-cultural challenges. Approximately seventy percent of the residents in the new development are of Chinese ancestry, as a large proportion of this group spoke little to no English. Beyond communication barriers, there was a general concern over differences in cultural norms, behaviours and expectations, yet, several participants stressed, "I don't want to isolate myself from the English-speaking or European people." Similarly, many English-speaking residents expressed the desire to actively engage with and/or befriend non-English speaking persons. Recommendations for encouraging and facilitating participation across cultures included having "management that has sympathy and an understanding of different cultures and what seniors are going through," and the organization of activities that showcase or are rooted in different cultural values, beliefs and practices: "one thing is to have an activity for example for the moon festival or something and encourage all people that are from different ethnic groups to join." Although it is "extremely difficult to integrate all the ethnic groups," bringing in interpreters during activities such as workshops, seminars and other craft and learning events was recommended as one method of encouraging and facilitating participation of non-English speaking persons.

Conclusions

Developing age-friendly communities requires careful consideration of how individuals connect and interact with the physical and social characteristics of their neighbourhood spaces. PCMWs were applied as a method to enhance community empowerment and create change in one community by highlighting the value of sharing awareness, building on community strengths to generate new knowledge and ideas for action, and understanding community resources and assets. PCMWs encouraged participation of all stakeholders in active dialogue and shared learning bringing together older adults and local service providers. This form of collaborative learning was important for challenging top-down practices and attitudes around urban planning, centrally positioning the older adult and their stories, visual depictions, and co-created maps in the dialogue process with other stakeholders as active listeners and learners.

Despite demonstrated strengths, this method is not without limitations. First, it is important to note that our workshops were not video recorded, video recording would be useful for capturing and understanding how maps are drawn and how places get sequentially added. Second, despite its socially-driven and equity-focused principles, participatory methods are often resource intensive and time consuming, particularly since the research is embedded within the community and gaining access to community members require dedicated time to build partnerships, demonstrate accountability and ultimately to develop trust. Subsequently, two of our biggest challenges, as this project draws to an end, are maintaining relationships built with community members and assessing long-term impact and outcomes.

In summary, PCMWs were established through trial and application in an urban community as a nuanced method of identifying needs and resources and generating knowledge. Using an approach grounded in everyday experiences, older persons who are often marginalized shared a platform with decision-makers to discuss ways of facilitating change. Prioritization of older peoples' voices is a foundational aspect of human geography methodologies (Harper & Laws, 1995). Through effective visual representations, participatory maps (co-created by multiple stakeholders) illustrated community functionalities, values and perceptions of place, and, ultimately, identified significant features within the environment that facilitate positive places for aging.

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2.4 Paper Four: 'Intersectional Experiences of Place'

Building on intersectional perspectives, this paper introduces a theoretical framework to explore how older, low-income women and men of diverse backgrounds construct oppressive and opportunistic experiences of place shaped by the positions they hold in society and the identities they assume (or are imposed upon them), as they transition into affordable housing.

As the designated project lead, my contributions for this paper, with critique and recommendations from my primary supervisors (also the co-authors), include the following:

- Conducted the literature review.
- Co-led the design of the research methodology.
- Co-led the development of the methods including the research instruments.
- Acquired ethical clearance for the research.
- Co-designed the theoretical framework with Professor Judith Sixsmith.
- Acquired ethical clearance for the research.
- Led and implemented participant recruitment and data collection process.
- Co-analysed the data with Professor Judith Sixsmith.
- Co-led the writing with Professor Judith Sixsmith.
- Prepared, submitted and re-submitted the manuscript (having addressed suggestions from the editors) integrating feedback from the co-authors as necessary throughout the process.

2.4.1 Critical Review of Paper Four

Paper four builds on the need to empower older adults to become active place-makers in their community by scrutinising the narrow focus of dominant conceptualisations of ageing-in-place, which do not sufficiently consider the social and agentic factors that shape experiences of ageing in the right place. For instance, because experiences of place are extremely heterogeneous across populations and subgroups an intersectional lens is required to better understand how broader socio-societal factors shape unique place experiences. Currently, however, there are no analytical frameworks that sufficiently allow for an in-depth exploration of place experiences that meaningfully examines processes both socially determined and centred. Hence, in this book chapter, a theoretical framework that was developed and introduced highlights the combined

effect of multiple social factors that impact experiences of oppression and opportunity: the Multi-dimensional Intersectionality Framework (MIF).

MIF is a theoretical framework developed for the analysis and aimed to: (1) introduce and describe the central tenets and utility of an intersectional place perspective; and (2) illuminates how older adults' lived experiences are shaped by multi-dimensional social factors that evolve over time. The MIF was created through researching and integrating tenets and assumptions that stem from feminist thought, i.e., specifically the works of Patricia Hill Collins, Kimberly Crenshaw, bell hooks, and Olena Hankivsky. MIF builds on ideas from these feminist scholars by addressing their critiques of intersectional theory in its evolution. MIF represents an expansion beyond the conventional analytical mechanism of an intersectional analysis, that is the focused understanding experiences of oppression through the examination of a narrowly focused and formulaic *tri-partite cocktail of social factors* that is gender, age, and race.

The multidimensional intersectional analysis forces a consideration for the combined influence of individual social identit(ies) and positionalit(ies) that shape both experiences of oppression as well as experiences of opportunity. Guided by this framework, two case studies were selected to capture unique, intersectional place experiences from two older adults of distinct cultural backgrounds. Using MIF, the analysis revealed participants' identities, positionalities and experiences of oppression and opportunity prior to relocating into the new affordable housing condominiums. Findings were nuanced, highlighting experiences of oppression, e.g., the mistreatment of older adults as 'invaders of our space' and opportunities for well-being, e.g. finding housing with convenient access to health and social supports and networks. This, therefore, effectively conveys how some people modify their place of residence and negotiate agency through a series of constraints or decisions, which carry unique meaning and significance.

To conclude, this paper meets objective three through the development of a theoretical framework (MIF) that allowed for a critical analysis of the data. Emboldened by the discernment of socio-societal place determinants, the intersectional analysis resulted in more holistic understandings of place experiences. The critical analysis enabled insight into the everyday lives of participants' highlighting their constraints, successes, resilience and agency across and during place transitions. This paper also addresses

research question three. As an analytical perspective, MIF allowed for further scrutiny of ageing-in-place, since the analysis provided more evidence for discounting the notion that experiences of place are one dimensional, and challenges of place associated with the ageing process can be remedied by one solution alone.

Paper four provides important theoretical development, creating a space for non-traditional methods to emerge in this field.

Aging-in-place for Low-income Seniors: Living at the Intersection of Multiple Identities, Positionalities, and Oppressions

Abstract

Aging-in-place refers to the ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level. Often, aging-in-place is assumed to be a positive experience, however home is not always a positive place and can be perceived as prison-like, or a burdensome or worrisome environment. For older, ethno-cultural groups in Canada, acquiring adequate, comfortable housing is a challenge, especially when living with limited financial resources and lacking social and cultural capital. Using a community-based participatory research approach, we explore how older, low-income women and men of diverse backgrounds construct sense-of-place as they transition into affordable housing. A multidimensional intersectionality framework (MIF) is described and applied to case studies to identify a person's positions in society, identities they assume or are imposed upon them, and the oppressions and often successes experienced within the dominant community, as well as organizational and policy contexts. This MIF is informed by Collins' (2000) concept of intersectionality, as an interweaving of multiple systems of oppression; specifically, how these systems are organized through interrelated domains of power. This chapter problematizes dominant, positive aging-in-place policy discourses and provides experiential data to inform place-based policy directives for enabling older people to age well at home and in the right place. Policy implications of this work include further developing current understandings of sense-of-place that emphasize community participation, wellbeing, and nuanced experiences of older people.

Introduction

In Canada, the older population is rapidly growing as the baby boom generation enters older adulthood (Statistics Canada, 2012). Adults over age 65 years comprise 13.2% of the population which is projected to increase to 24.5% or 1 in 4 persons by 2036 (Statistics Canada, 2010; Turcotte and Schellenberg, 2007). This trend is similarly reflected in the province of British Columbia (BC). Globally, the number of older adults (60+) is expected to more than double from 841 million individuals in 2013 to over 2 billion in 2050 (United Nations 2013). While older populations are growing fast in most low and middle income countries, the rate of older adults is growing extremely fast, in the more developed regions (United Nations, 2013).

With respect to social and health inequities, globally, as a social group older adults are more likely to experience poverty, particularly in developing countries where social and financial assistance mechanisms are limited or lacking (United Nations, 2013). Within the context of BC, Canada, some seniors of particular ethnic and cultural sub-groups are often situated in vulnerable positions experiencing challenges such as social exclusion and isolation, mental and mobility limitations, economic insecurity, inadequate and unaffordable housing, inaccessible transportation and environments, food insecurity, and language barriers (United Way Lower Mainland, 2011). In Metro Vancouver the seniors most likely to encounter barriers to maintaining quality of life include: women aged 85+; visible minorities; Aboriginal and recent immigrant groups; low-income seniors (i.e., unattached, single income seniors; seniors with low education); and seniors with chronic illnesses or mobility issues (United Way Lower Mainland, 2011).

A key determinant of vulnerability in later life is the ability to age-in-place, which refers to the "ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level" (Centers for Disease Control and Prevention, 2013). Notions of home and community are typically imbued with positive connotations of identity, sense of purpose, and living a meaningful life. Research consistently suggests that one's home is a place of personal and symbolic attachment that sustains a sense of security, safety, privacy, independence, and choice (Sixsmith, 1986). Home, however, is not always consistently experienced in such positive ways and may also be perceived as a prison, a burden, or a worrisome environment (Sixsmith and Sixsmith, 1991). For instance, exorbitant rental rates and housing inadequacies in Metro Vancouver skew positive perceptions of home, threaten the health and wellbeing of vulnerable citizens, and place seniors at risk for isolation,

disconnection, and reduced community engagement (Vancouver Foundation 2012). Similarly, belonging to a community can give rise to both positive and negative feelings and experiences (Sixsmith, Boneham, and Goldring, 2003). It is in this complex psychosocial and environmental context that the policy drive toward aging-in-place needs to be examined and better understood.

The aging-in-place policy agenda has predominantly concentrated on the physical and service environment in response to the declining health needs of older adults and assumes positive health and social outcomes as a result of maintaining people in their homes. However, according to the UN Secretary General Ban Ki-moon, "…making cities inclusive of older persons means generating opportunities for their economic and social participation in accessible and safe environments. It also means providing affordable housing as well as the health and social services needed to support ageing-in-place. A key oversight of this work is that it often takes an explicit environmental congruence perspective (Iwarsson et al., 2007), emphasizing commonalities rather than exploring the diverse everyday experiences of older people thus creating less nuanced understandings of aging-in-place and appropriate solutions. For instance, the WHO Global Age-Friendly Cities guide states that a "city's landscape, buildings, transportation system and housing contribute to confident mobility, healthy behaviours, social participation, and self-determination, or, conversely, to fearful isolation, inactivity, and social exclusion" (World Health Organization, 2007 p.72). Thus, aging in place policy decisions should consider the determinants of active ageing, including physical accessibility, proximity, security, affordability, and inclusiveness as important characteristics through intersectional explorations and analyses that link individual experiences to broader structures and systems.

Many older people do prefer to stay living in their familiar home and neighbourhood for as long as possible even when these might be considered "suboptimal" in instrumental terms (Klein, 1994; Mutschler, 1992). Building on this, recent work has found that older people prioritize 'having choices' in where and how they want to live, to achieve not only aging-in-place, but positive aging in the right place (Bjornsdottir, Ceci, and Purkis, 2015; Wiles et al. 2012). In consideration of these preferences, it is important for policies to incorporate diverse people's varied experiences of aging-in-place, particularly for those situated in positions where they are less able to exert control, express preferences, access resources, and navigate social systems. Aging-in-place is often seen as a panacea for good quality of life and improved wellbeing as people get older. As Sixsmith and Sixsmith (2008) argue, this is

not always the case; sometimes aging-in-place can be a negative experience when the older persons' housing is substandard or services in the community do not meet their needs. In this sense, it is important to focus on the development of public policy concerning aging-in-place (i.e., in terms of governmental and organisational efforts to address the housing and community needs of older people in relation to their circumstances as well as the public and private purse), which considers not just the complexities of people's everyday lives, but acknowledges the way in which structural power relations are embedded in policy based decisions and actions.

Where environmental, psychosocial, and financial contexts are supportive of quality of life and wellbeing, aging-in-place can be very successful. For example, it has been well documented that older people residing in affordable, adequate housing are more likely to report living a life which they value (Morris, 2009). Yet, in recent years, changing economies have created social and financial divisions between older adult groups impacting their ability to access resources leaving some with minimum capacity to control and enjoy their everyday lives (Clapham, 2002; Phillipson, 2007). When financial resources are not sufficient to enable people to remain in the home of their choice or when processes of urban regeneration and development force relocation, older people's lives become substantially disrupted. Forced relocation contributes to poor health and wellbeing; feelings of anxiety, fear, and uncertainty (Hrybyk et al., 2012); social isolation (Ayalon and Green, 2013); and can result in long-term negative impacts on psychosocial wellbeing (Fullilove and Wallace, 2011).

For recent ethno-cultural immigrants to Canada, access to adequate housing continues to be a key challenge, particularly for those with limited financial resources and low social and cultural capital (Carter, 2005). For older Canadians, this challenge is further complicated by vulnerabilities associated with aging, such as difficulty navigating health and social care systems, frailty, long-term health conditions, mental and mobility challenges, and ageism which contributes to social exclusion (United Way Lower Mainland, 2011; Bergman et al. 2007). These vulnerabilities make older adults susceptible to living in poor or substandard housing or shared accommodation with strangers of similar ethnic backgrounds (Teixeira 2014). Aging in a place of choice is also complicated for seniors in many inner city areas by the lack of available and affordable housing.

The development of communities that are supportive of aging and mindful of cultural diversity requires careful consideration of how individuals connect within physical environments and social spaces (Greenfield et al., 2015). Barriers to successful

aging-in-place include limited finances, complex health and social care systems, lack of social and cultural capital, language barriers (particularly for newcomers), and unfamiliarity with and lack of availability of community supports and services (Greenfield et al., 2015). Such problems are shaped as much by organizational and policy constraints as by individual contexts and circumstances, including positionalities, identities, and oppressions experienced over the life course. By focusing on the intersections between the person and the organizational and policy context, such complex social problems (Polk, 2015) can more comprehensively be understood and addressed.

This chapter aims to problematize dominant, positive policy discourses on aging-in-place using a multidimensional intersectionality framework (MIF). We developed this MIF (Figure 1) based on Collins' (2000) notion of intersectionality as an interweaving of multiple systems of oppression; specifically, how such systems are organized through interrelated domains of power. This framework identifies peoples' positions in society, identities they assume or are imposed upon them, and the oppressions experienced within the dominant community, as well as organizational and policy contexts. Using an intersectional lens we completed a community-based study with older people aging-in-place to inform new policy directives for enabling older people to age well in the right place. In this chapter we present two case studies and provide recommendations for place-based policy and practice in order to inform guidelines for future senior housing projects.

Theoretical Framework

An intersectional lens guided our explorations of experiences of aging-in-place for older, low-income women and men of diverse cultural and historical backgrounds who transitioned from an out-dated apartment complex into a purpose-built affordable housing project on the same property. Intersectionality refers to an analytic perspective and framework that understands individuals as situated in multiple social categories that intersect with structural barriers to cumulatively shape an individual's social identities, life experiences, and opportunities (Hankivsky and Cormier, 2011; Yuval-Davis, 2006). The notion of intersectionality was fore-fronted during the Black feminist movement in the United States whereby oppressions experienced by white women within society were reframed to include issues of colour, providing the motivation to understand social problems through multiple and intersecting social classifications (Crenshaw, 1995). Although Crenshaw's work was a key moment in

the emergence of intersectionality, it is important to note that ideas and concepts of this paradigm precede her works and have since established new roots by Black activists and feminists, as well as Latina, post-colonial, queer and Indigenous scholars (Hankivsky, 2014). Since its inception, intersectionality has developed beyond notions of gender and race to encompass other social markers such as income, religion, age, and so on. Poorly articulated within intersectionality is the idea of place, which can be conceptualized as a structural barrier creating a locus of experiences of inequity, power, and privilege.

An intersectional framework is particularly well-suited to examine policies related to aging-in-place as it considers interlocking social and cultural drivers of inequity such as ethnicity, gender, age, and socio-economic status situated within place. Another key principle of intersectionality crucial for this study concerns the prioritization of minority experiential perspectives through the concept of 'centring in the margins' whereby marginalized experiences are prioritized (hooks, 2000). To achieve these goals, an intensive engagement with older people experiencing housing transitions is required, focusing on 1) the ways in which older people see themselves (i.e., their identities), 2) the older person's locations within broader society (i.e., positionalities), and 3) the difficulties older persons' face (i.e., oppressions) when negotiating the organizational and policy landscape.

In relation to identity, Kohon and Carder (2014), suggest that 'identity,' in simplistic terms, represents who a person is. Identity has been construed as both a personal and a social construction formulated and shaped by subjective individual experiences, creating a lens through which people perceive themselves in association with where and how they are situated within society (Yep, 2002). Such experiences can shape a person's behaviour, mannerisms, and ultimately their role in society (Yep, 2002). Identity can be further understood as an amalgamation of personal and social interpretations, emphasizing distinct characteristics and traits which distinguish oneself from others, as well as identities within relationships — all of which involve ascribed attributes reinforced by societal norms and expectations (Andersen and Chen, 2002; Ashmore, Deaux, and McLaughlin-Volpe, 2004; Sedikides and Brewer, 2001). Within the MIF, identity is not seen solely as a personal and singular construction, but rather people personify and express multiple identities. Categories of identity capture an individual's race, age, class, and religious affiliation, amongst others (Yep, 2002). People can hold simultaneous identities such as mother, sister, professor, and caregiver. While some identities are held in higher esteem than others (Stryker and

Statham, 1985), identities can also be characterized as multiplicative and shaped by political and historical contexts (Brah and Phoenix, 2004). Societies, however, experience paradigm shifts across time and thus the embodiment of various identities and how they are expressed will also traverse time and change in sociopolitical and economic contexts (Deaux and Martin, 2003; Ellemers, Spears, and Doosje, 2002).

'Positionality' is a way of 'being' or 'knowing' that is influenced by fluctuating social, political, and economic structures and institutional contexts (Allen, 2007). According to the tenets of intersectionality, an individual's locale or position in society is situated through the interweaving of multiple positions, such as a person's gendered position, financial position, etc., and unique facets of positionality are consolidated by an individual's pronounced or assigned identities (Anthias, 2012). Consequently, an individual's position (and their situation in relation to the social hierarchies) is often reinforced by subjective experience and shaped by interlocking identities in association with the physical and psychosocial environment (Collins. 2000; hooks; 2000). Ultimately, varied positionalities in society establish inequitable social divisions between groups enabling some people to be in elevated positions of power compared to others. Such inequities linked to both identity and positionality can contribute to poor health and wellbeing. It is in this context that the current research examines the intertwined notions of identity and positionality to reveal the underlying problems that arise from an uncritical application of aging-in-place policy.

The notion of disadvantage is often conceptualized in the context of oppressive social structures and practices. Prilleltensky and Gonick describe oppressive social structures as "a state of asymmetric power relations characterized by domination, subordination, and resistance, where the dominating persons or groups exercise their power by restricting access to material resources" (1996, pp.129–130). Oppression has been previously referred to as "the systematic abbreviation of possibilities of mastery of most or all facets of life for a specifiable group" (Adam, 1978, p.8). Oppression has also been described as a force that is imposed on a person or persons, consisting of unwanted experiences, unexpected circumstances, and undesired living conditions, that detracts from wellbeing (Hanna, Talley, and Guindon, 2000). Oppression can include facets of exploitation, marginalization, deprivation, persecution, powerlessness, cultural imperialism, and various forms of violence (Young, 1990). Watt (1999) posits that oppressors embody a sense of entitlement fueled by social privilege; when privilege is left unquestioned and unchallenged, the oppression of some groups becomes pervasive and normalized in society. Young (1990) furthers this, arguing that some groups are

subject to oppression not through explicit or blatant acts, but rather through "the everyday practices of a well-intentioned liberal society" (p.41). Social and health inequities are reproduced through an imbalanced system that is reinforced by group stratification that ultimately creates social segmentation between 'us' and 'them' (White, 1994). In the current research, the status quo of housing for disadvantaged older people is confronted and challenged.

For this chapter, the perspectives of older people are analyzed to exemplify ways in which aging-in-place policies can be informed by a multidimensional intersectional framework. This framework prioritizes the voices of older adults who experienced forced relocation from an out-dated low-income housing project to a purpose-built high rise tower in Metro Vancouver. These housing transition experiences are examined in relation to the interweaving of older adults' identities, positionalities, and oppressions.

Research Context

Housing that is both affordable and supportive of the psychosocial needs of seniors is fundamental to the wellbeing of aging populations in Canada. This research was conducted in the Metro Vancouver municipality of the City of Richmond; an area experiencing a significant increase in the size of its older adult population with a corresponding period of rapidly rising market rents. This situation threatens housing adequacy of older citizens and places them at risk for isolation, social disconnection, and retrenchment from community life (Vancouver Foundation, 2012). Local and regional policies have advocated for affordable housing as a potential solution to provide stable, secure housing for older people who are at-risk of economic eviction. According to Teixeira (2014), older newcomers living in Richmond spend over half of their monthly household income on rent, which increases the risk of food insecurity and homelessness.

The current research focuses on exploring relocation experiences of older ethno-cultural adults living in the City of Richmond. In total, the relocation process spanned three years and transitions of tenants from the out-dated Rosewood Manor (pseudonym) to the new Rosewood Towers (pseudonym) were examined. Rosewood Manor was an established (but aging) three-storey apartment building reserved for seniors with limited financial means. In 2012, significant water damage resulted in a senior falling through the floorboard, which ignited discussions of renovation between the City of Richmond and the Rosewood Senior's Society (pseudonym). Rental prices at Rosewood Manor of

approximately \$300 per month were significantly lower than market rental prices in Metro Vancouver, which average \$1,200 per month. Tenants of Rosewood Manor were reluctant to move, excluded from the renovation and relocation process, and viewed the move as a forced relocation. Rosewood Towers, a 16-storey purpose-built high rise was presented by developers, Rosewood Senior's Society, and the City of Richmond as a location for tenants to age-in-place. However, tenants feared that forced relocation would result in hardship, increased burden, and ultimately be a great imposition on their everyday lives.

In order to provide for the voices of tenants in the design, planning, and development of Rosewood Towers, our research team formed a partnership with the City of Richmond and received funding from the Vancouver Foundation to document and analyze tenants' transitional experiences of forced relocation. Several objectives underpinned this work: (i) to understand how sense-of-place is experienced by older adults transitioning into affordable housing; (ii) to translate tenant experiences into formal and informal supports that foster meaningful aging-in-place; and (iii) to create a role for older people as active 'placemakers' in community planning and development. The research question addressed in this chapter is: *How can we better inform policy to ensure that older people of diverse backgrounds and experiences are aging well in the right place*?

Methods

To understand complex housing relocations at the macro-, meso-, and micro-levels (Bronfenbrenner 1979), to engender a sense of engagement among research participants, and to ground the research in the lived experiences of older, low-income women and men of diverse backgrounds, a multiple-method, qualitative community-based participatory research (CBPR) approach was adopted.

Research Design

A CBPR study design was selected to provide older adults with the 'space' and platform to voice their perspectives and to generate collaborative dialogue as a catalyst for challenging existing attitudes and practices towards planning for older adults. Aligned with the tenets and assumptions of intersectionality, our CBPR approach was underpinned by principles of equity, empowerment, inclusion, and partnership. In general, CBPR operates against oppressive practices and promotes reciprocal transfer of knowledge and expertise; inclusive participation; power sharing and equity; and data ownership across all partners (Jones and Wells, 2007). CBPR provides an

alternative to traditional research approaches which may not be appropriate to generate the necessary insights into how older, low-income women and men of diverse backgrounds relocate within the context of their social, cultural, and built environment. The multiple-methods research design utilized in-depth, semi-structured, in-home, pre-move interviews (n = 25; approximately 45 minutes in length) and visual photo tours around the home and local community (n = 16; approximately 1–2 hours in length) to generate deeper, individual understandings of sense-of-place as well as community and societal barriers and challenges experienced throughout the relocation process. These methods resulted in a series of individual case studies.

Participants

Twenty-five tenants transitioning into an affordable housing development have been involved in the research to date. The tenant sample reflected both former tenants of Rosewood Manor (those temporarily relocated from an out-dated development) and new tenants of Rosewood Towers. Participants were identified through community stakeholders and organizational leaders and invited to participate in the research. Written informed consent was obtained from all participants and the research was conducted in accordance with the British Psychological Society's (2010) ethical guidelines whereby issues of confidentiality, privacy, anonymity, protection from harm, support, and capacity to withdrawn from the research were attended to. All identifying information, such as participant locations and names, has been replaced with pseudonyms. Ethical approval was received from Simon Fraser University's ethics review board.

Data Analysis

Data were analyzed in collaboration with local tenants to prioritize participant's voices, facilitate storytelling and ownership, and ensure rich capture of experiences of sense-of-place. In-depth interviews and data were thematically analyzed (Braun and Clarke 2006) in NVivo 10 using a structured Framework Method (Ritchie and Lewis, 2003) where a coding framework was developed systematically by three researchers through initial coding of three transcripts. Subsequent transcripts were analyzed using the framework by case and by code (Gale et al.. 2013). Visual data were co-analyzed with tenants in order to explore the different understandings of sense-of-place through the prioritization of the voices of older, low-income women and men of diverse backgrounds. The relationships between interview and visual

imagery have been triangulated to enrich "different ways of knowing" (Pink 2013, p.144), particularly understandings of persons who are often excluded and seldom heard. The analysis was guided by the following intersectional analysis questions:

- *What are the key experiences of aging-in-place and how do these personal experiences relate to social and structural locations and processes (e.g., gender, ethnicity, socio-economic status, age, patriarchy) in the current policy area?*
- *How do identity, social positioning, and oppression influence the transition experience, such that existent inequalities can be identified and subsequently frame place-based policy?*

Building on Collins' (2000) conceptualization that various types of oppression are not only interrelated, but are interlocking modes of differentiation used to dominate and exclude those that diverge from normativity, we contend that a MIF is predicated on the notion that people construct meaning through the various and multiple identities that they hold, the different and changing social positionalities they occupy, the multifarious oppressions they face and often the successes they achieve as they negotiate their everyday lives—all of which coalesce to create a system that drives multiple configurations of discrimination and privilege experienced in inequitable ways. The MIF assumes that a person's experiences can be understood in relation to the multiple identities they inhabit, alongside the multiple social positions they occupy and the multiple socio-structural oppressions they encounter, and consequently in more implicit ways, the successes acquired through negotiations of their agency within dominant structures. We depict this analytical conceptualization in Figure 1, which portrays how a person's experiences are simultaneously understood within a matrix of identity, positionality, and oppression.
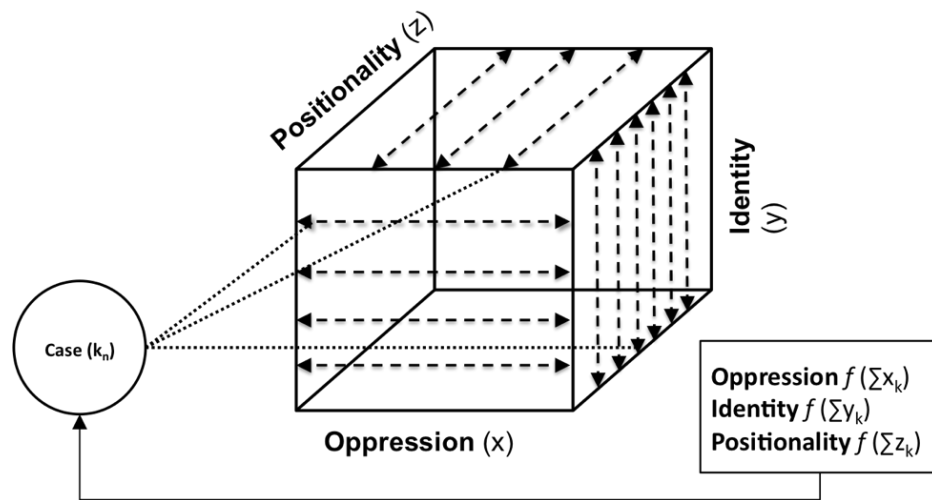
Figure 1: Framework for a Multidimensional Intersectionality Analysis.

Individual case examples of two study participants are presented next to exemplify the intersections between identity, positionality, and oppressions that shape older people's experience of housing transitions. The two cases were selected to reflect differences in privilege shaped by normative and marginalized social identities. Each case reveals social identities that were either successfully or unsuccessfully used to negotiate their agency and shape their social position towards positive outcomes. The implications of this analysis for aging-in-place policy and practice are subsequently discussed in order to generate recommendations and offer guidelines for future housing development projects for older adults.

Application of the Multidimensional Intersectionality Framework: Stories of Seniors

The Case of Mr. Zhao

Mr. Zhao (pseudonym) was 72 years old when he participated in the research; he had lived in an apartment in Rosewood Manor for approximately 16 years prior to relocation. Table 1 summarizes the different positionalities, identities, and oppressions expressed by Mr. Zhao during his interview (conducted in Mandarin due to his limited ability to converse in English) and photo-tour sessions. Of note, the contents of Table 1 were identified by Mr. Zhao during the telling of his story rather than imposed at the start of the research by the researchers. This is an important distinction since Jones et al. (2008) have shown that a person's 'socially-assigned' identifier often contradicts how they view themselves in the social world. Hence, we argue that personal agency can be expressed, and wielded, by allowing participants to use language and identifiers verbatim rather than impose our academic or otherwise privileged terminology. By

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honouring the participants' own designation of social identifiers important to them, we do not limit their ability to highlight potential opportunities for resistance and resilience across places. By taking an intersectional lens, we understand Mr. Zhao's self-expressed social constructs and can relate to them as interlocking, thereby enabling a more nuanced understanding of aging-in-place to emerge. The categorically displayed distinctions of positionalities, identities, and oppressions shown in Table 1 were constructed for analysis only and are not mutually exclusive.

Table 1. The case of Mr. Zhao (in his words)

Positionality	Identity	Oppression
Poor	72 years of age	Unemployment
Non-English speaking	Male	Inadequate Housing
Inability to navigate structures and systems	Chinese	Lack of recognized Canadian qualification
Divorced	Immigrant	Loss of social networks
Living alone	Grandparent	'Othered'

Mr. Zhao saw himself as an older person, and simultaneously as a male provider and the family patriarch of two children who immigrated to Canada. Mr. Zhao and his wife, like many other immigrant grandparents (VanderPlaat, Ramos, and Yoshida, 2012), were sponsored to move to Canada from China to care for their grandchildren in 1998. Once the children no longer required childcare, Mr. Zhao's role in the family was somewhat devalued. When Rosewood Manor was demolished in 2012 and all tenants were forced to relocate, Mr. Zhao and his wife separated and subsequently divorced. The housing relocation acted as a catalyst for their marital separation amongst other factors, such as persistent arguing and conflicting desires over geographical relocation (Mrs. Zhao moved to Toronto after the marital split). In addition, the relocation accentuated the ways in which Mr. Zhao and his wife had changed over the years, which highlighted their individualism and differences rather than cementing their togetherness:

> I have been in Canada for 16 years. I came here with my wife but we divorced. It is not a big problem. When people grow old, we have our own odd personalities. It is hard to have commonalities. We were tired in arguing with each other so decided to live alone. There is limited time (to stay in the world).

She is two years older than me. If we continue[d] to stay with each other, we may feel sick [unhappy]. We separated since moving out [of Rosewood Manor].

In this case, Mr. Zhao emphasized the interconnected notions of age, gender (as a husband), and immigration status (16 years in Canada) and how this impacts relationality in place. Here, getting older was evaluated as having less time to live a happy life, which enabled Mr. Zhao to frame the forced housing relocation as a way to break with an unhappy past and focus on a future to improve his happiness. Indeed, it may be that after 16 years living in Canada, Mr. Zhao had established himself within Canadian culture thus helping him to envision a new life without dependency on his wife.

Following his forced relocation, Mr. Zhao moved into a 'family hotel'. A 'family hotel' is a privately owned house where rooms or parts of rooms are illegally rented to multiple tenants. In Mr. Zhao's case, 12 tenants each paid $400 per month, netting $4,800 per month. These types of rental accommodations are often over capacity, dilapidated, and unfit for habitation. However, despite being exploitative, they do offer people with limited incomes a place to live. In Mr. Zhao's case, his bedroom was divided for co-habitants by a bed sheet, which afforded little privacy, comfort, or basic hygiene. While he felt successful in finding an affordable accommodation and a supportive network of immigrants in similar financial and social circumstances to himself, he found it difficult to negotiate better living conditions with the owner because he lacked the ability to communicate proficiently in English; feared being evicted and becoming homeless; was financially constrained and could not find another affordable housing solution; and had a limited understanding of his rights as a tenant and resident in Canada.

In Mr. Zhao's case, his subjective assessment of success masked the matrix of oppressions which locates him as an older Chinese immigrant with little status and power in Canada. His positionalities of poverty, non-English speaker, and inability to navigate bureaucratic structures combined to exacerbate his poor housing situation. Despite this, Mr. Zhao preferred to remain in the family hotel rather than relocate to the newly built Rosewood Towers. He explained this in terms of his fear of losing well-established social connections with his roommates who he considers to be family, as well as the unaffordable increased rental rates:

I have a good relationship with my roommates. Because all of us come from mainland China, we consider each other as family members. Here is far from our hometown. If someone here has any difficulty, we of course will do a favor. We are a big family [laugh]. We didn't know each other before moving in. I have been here for about three years. I moved here from the Rosewood Manor. …Why I don't want to move back? The rental increases. The rent there was $400 before but will increase to $710. And the electronic fees are excluded. We have to pay the electricity to cook and heat. Besides, we have to pay the telecom and Internet. It will be almost $1,000. My pension is $1,040. I know we can apply the subsidy from the government but I have no idea how much I can receive.

Mr. Zhao's difficult housing situation is perpetuated by his age, which he felt prevented him from finding employment to increase his weekly income:

I am older now and hard to find a well-paid job. I survive depending on my pension almost and have to save the cost. Of course, the environment of the new building would be great. The roof in my room now is leaking when it is rainy.

Mr. Zhao is 'othered' by his age, alongside a bureaucratic system which requires service users to speak English well and to have adequate education to enable them to complete complex forms and understand their rights. Without sufficient social supports he has little social capital to draw on, leaving Mr. Zhao aging in a suboptimal place that may be detrimental to his health.

The Case of Mrs. Smith

In order to demonstrate varied ways in which the MIF can be applied and interpreted, the next case example was selected for the personal and social characteristics (see Table 2) of Mrs. Smith (pseudonym), which contrast from those of Mr. Zhao. Mrs. Smith is an 84-year-old white Canadian woman who lived in Rosewood Manor with her husband for many years before he passed away. She described herself as a widower, living alone, not well-off financially, yet coping well with her social and housing situation.

Table 2. The Case of Mrs. Smith (in her words).

Positionality	Identity	Oppression
Not well-off / managing	84 years of age	Bullied by neighbours
Having more acquaintances than friends	Female	Treated inappropriately by the medical system
Not settled into a place considered a home	White Canadian	Burdened by multiple roles and associated responsibilities
Widowed	Grandmother	Inadequate housing (seniors only)
Living alone	Carer	Forced relocation

In her story, Mrs. Smith expresses pride in being a grandmother, mother, and carer; ultimately, a strong woman who previously managed a farm and raised several children as well as a grandchild. Mrs. Smith's positionality shifted when her husband passed away, as she became a widow with limited social supports and financial means. In addition, she became a carer for her own children who developed cancer; and, when her children died, she became a full-time carer for her grandchild: "I've had four of my children with cancer. So they (*died*) in their fifties, around that age, and that has been a big strain on me."

When children die prior to their parents, this contradicts the 'norms' of aging, which are based on the notion that parents die first (Howarth 1998). Mrs. Smith struggled in her advanced age and poor financial situation to care for her grandchild, yet succeeded in this role by providing a clean home and emotional support for the child. Being the carer of a young child 'othered' Mrs. Smith in the "seniors only" Rosewood Manor, and she was bullied by her neighbours who perceived her as flouting the "seniors only" rule. This meant that she struggled to secure friendships with Rosewood Manor tenants. Rather than demand the help of social services to relocate her and her grandchild to more child-friendly housing, Mrs. Smith adopted a philosophy of acceptance, expressing that "life goes on" and "it keeps changing". Mrs. Smith accepted her family obligations rather than electing to place responsibility on social welfare systems. In doing so, she became socially ostracized and lonely as she emphasizes, "I was taking care of my granddaughter, she was only about three years old when we moved into Rosewood [Manor] and the seniors in Rosewood [Manor] were very angry with me because I had this child."

It is important to note that societal and gendered expectations of caring place women in such situations with little choice but to adopt caring roles. Older than other mothers, yet caring for a young child, Mrs. Smith struggled to find her place in mainstream society. Because of her older age combined with her carer status, Mrs.

Smith felt excluded from the everyday activities and social connections normally associated with growing older. Adopting the carer status did open up opportunity for one meaningful relationship in her life: she provided care to another tenant in Rosewood Manor. When talking about her lack of social connectedness in Rosewood Manor, she said:

> I don't call them friends. I had a lot of acquaintances and there was one lady that I took care of because she was old and a very proud woman and wouldn't…use a walker and so I used to drive her around wherever she wanted to go and I used to do her housework for her and whatnot and I made good friend with her.

Mrs. Smith was proud of her achievements as a carer. However, despite this role, aging-in-place for Mrs. Smith was a lonely experience.

Discussion

Our analysis shows how individual experiences are highly complex and require an in-depth understanding of various identities, positionalities, and structural and experienced oppressions. Age by itself tells us little about the challenges and disadvantages older people face in their housing situations. It is only when age is considered in relation to other identities, such as immigration status or being a Chinese person, that the deficiencies in place-based policy agendas are evident. With this in mind, our research question was: *How can we better inform policy to ensure that older people of diverse backgrounds and experiences are aging well in the right place*?

In order to answer this question, we applied a MIF, which was informed by Collins' (2000) notion of the matrix of oppression, and conducted an intersectional analysis of two case studies. The case studies, depicting the everyday lives of two older adults, illustrate unique experiences of aging-in-place. Key experiences observed in these cases that detract from aging in the right place included experiences of distress, fear, exclusion, feeling unsettled, burdened, and being 'othered' (Jenson 2011) — all of which are linked to being situated in an indeterminate state, dislocated in time and place. The analysis indicated the sorts of macro-, socio-structural issues that define experiences of aging-in-place that are shaped by the social identities of being poor, a non-English speaker, and a carer (with concomitant gendered roles and responsibilities).

Taken together, these can locate older people in situations of loneliness and exclusion, preventing them from aging in the right place.

Meanwhile stories of housing and circumstantial (i.e., carer) transition presented in the case studies are underpinned by both oppressive experiences of powerlessness, displacement, and dislocation within place, time, and space as well as social exclusion. However, evidence of positive experiences was revealed in the successes highlighted in both case studies — those of gaining community, social belonging, and sense of family or maintaining pride and personal integrity. For instance, Collins (2000) argues that an individual can acquire agency even in oppressive circumstance since both power and oppression can be experienced concurrently in different contexts, at varying time spaces. What is particularly interesting about the notion of success lies in the complex interrelationships between the subjective feeling of success and the ways in which this subjectivity locks individuals into their oppressive states. For example, the success of securing a home in a 'family hotel', despite its dilapidated state, afforded social supports and networks for Mr. Zhao; and similarly, the embodiment of a successful carer role enhanced self-pride, personal integrity, and feelings of empowerment for Mrs. Smith. Ironically, though, these facets of their experience constrained both individuals vis-à-vis their oppressive positions. The fear of losing a sense of belonging, family, and community confined Mr. Zhao to his current substandard living conditions, while the gendered roles, responsibilities, and obligations of being a carer secured Mrs. Smith a place of exclusion in a seniors-only community. This reflects Collins' (1986) argument that individual subjectivity is dangerous because it can keep people relatively accepting of their marginalized locations. In fact, it seems that Mr. Zhao and Mrs. Smith have both internalized dominant societal discourses of gendered roles, aging ideologies, and immigrant status, which serve to mask the oppressive nature of their situations, while simultaneously enabling them to feel successful.

Recent aging-in-place policy considerations are based on assumptions of access to adequate housing and positive experiences of home and community. However, these would not operate to improve the circumstances of older adults experiencing the sorts of disadvantages described in the case studies. Alongside romanticised notions of aging-in-place, and working towards meeting the needs of community members, it is recommended that local government, planners and designers consider:

- the everyday lives of older people by understanding the existent heterogeneity in such populations,

- the spaces of marginalisation with organisational contexts and within community places, and

- the socio-structural practices that dislocate tenants without adequate support. This includes meeting the language needs of tenants, supporting the navigation to social and housing services, advocacy to address difficult and unjust rental systems, and opportunities to live in communities where people are valued for their unique experiences and contributions.

As Rowles (2013) argues, housing authorities need to plan beyond the physical and spatial environment, engaging more with the psychosocial realities of everyday life and challenging existing planning processes and practices with more collaborative and partnership models of design. Housing redevelopments and re-zoning are constantly in progress in cities such as Metro Vancouver, which have limited land for new developments. If such redevelopments are to enable older people to age in the right place, then city policies and planning would profit by taking account of the power and privilege exerted over low-income, older adults with 'othered' positionalities. If not, then such people run the risk of further marginalization and isolation. City planning initiatives could thus benefit from intersectional perspectives on relations of power through considering concepts of *power over* and *power with* (or working together with) older people during development stages (Guinier and Torres, 2003)

Implications of this research for policy planning and development lie in the area of aging in the *right* place (Golant 2015), especially with respect to housing and urban regeneration. The problem with existing planning models is that they are foundationally driven by unitary 'general public/older adult' approaches (Andrew, Graham, and Phillips, 2003) to designing housing for older adults, despite more recent efforts to understand and address the complexity of the person-place relationship and attachment to place (Scannell and Gifford, 2010). Furthermore, such models have yet to consider how sense-of-place differs across different identity lines (such as gender, sexuality, age, class, and race), topics which are receiving only marginal attention in the planning literature (Barton and Tsourou, 2000). A recommendation drawn from the current analysis would suggest the integrated working of policy makers and planners with gerontologists and social scientists to ensure the complexities of place, the heterogeneity of people and their different identities are fore-fronted in aging-in-place policy developments.

Equally important is the broader issue of social justice — a crucial component of intersectionality. Theoretical perspectives of social justice emphasize tackling inequities through their root causes and challenging people in positions of power to query differential social and power relations (Lawthom, Sixsmith, and Kagan, 2007). This way of thinking is currently under-developed in planning initiatives, as there is an crucial need for attention to advocacy concepts such as 'rights to the city' (Harvey, 2005), particularly within the context of the citizenship rights of older adults to age in the right place, regardless of their combined identities and positionalities which subjects them to certain oppressions and subjectively realized successes. Consequently, it is recommended that the notion of citizenship is built into policy developments around ageing-in-place.

Policy makers are often quite removed from policy outcomes and recipients (Biggs and Helm, 2007). This deficiency can result in the privileging of professional ideas over community-based knowledge. Furthermore, mainstream policy frameworks often rarely account for the everyday lived experiences of individuals nor do they encourage multiple layers of analysis. One further recommendation is that working collaboratively is built into the policy development process, ensuring the participation of heterogeneous groups of older people who can draw on their experiences of aging-in-place can pay dividends in place liveability and can mitigate some of the oppressive structures that combine to make everyday life for older people difficult and unpleasant. Intersectionality policy-based analysis encourages policy analysts to ask a series of interlinked questions that facilitate nuanced understandings of older peoples' everyday realities to emerge (Hankivsky 2014). Asking such questions can reveal experiences that unpack the social positionalities marginalized people are situated in, delineating pathways towards oppression or (in some cases) agency harnessed through navigating the confined structures and systems they are obliged to negotiate. Using the MIF as a framework for orienting designers and planners to the complex intertwining of identities, positionalities, and oppressions will not necessarily result in perfect living places, but can provoke a more thoughtful inclusion of community needs, thereby challenging professionals to confront their biases and to re-examine often inaccurate (i.e., ageist) notions about older people that are influenced by dominant discourses and norms about aging.

As demonstrated in the analysis, the MIF is a potential resource for future policy analyses. For instance, we have demonstrated here how application of the MIF enhances more in-depth inquiries into the ways in which peoples' identities,

positionalities, and oppressions are invoked in the stories they tell about their housing situations. By understanding the in-depth, social and cultural nuances associated with different barriers and facilitators to securing adequate housing, we can begin to uncover the processes of privilege and oppression that enable some and inhibit others in their efforts to age in the right place. However, it is important to note that the MIF is most effective when applied to multiple cases creating a storyboard of shared experiences to inform place-based policy development. A key to this might lie in linking mainstream ideas of oppression to understandings of place to highlight how oppression is manifested in the different personal, social, and physical dimensions of place (Sixsmith 1986). In this way, the semiotics, the functionalities, and the spatiality of physical space and tangible objects can be observed together with the ways in which social spaces are cultivated and colonized, owned, and populated by particular groups and individuals. Without such nuanced understandings of the interlocking interrelationships of people and places, aging-in-place is likely to continue to be the driving force behind policy and planning, making aging in the right place less attainable.

Key Messages:

1. Aging-in-place policy assumes positive wellbeing outcomes, yet aging-in-place can be a negative experience for some.
2. Current urban regeneration initiatives concentrate primarily on transforming the physical space while negating the psychosocial and cultural realities of everyday life.
3. The multidimensional intersectionality framework is a resource that helps contextualize everyday aging-in-place experiences to inform place-based policy development taking into account the structural power relations within which everyday lives are lived.
4. The development of housing policy for older people needs to progress with a collaborative working structure to build into the process the voices of older people, consideration of citizenship and gerontological/social theory so that aging in place can transform into aging in the right place.

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Author Biographies

1. Judith Sixsmith, PhD, is a Professor of Health at the School of Nursing and Health Sciences at the University of Dundee in the UK and Professor of Public Policy at Simon Fraser University. She is an expert in qualitative methodologies and is experienced in working with marginalized groups using community-based participatory action research methods.

2. Mei Lan Fang, MPH, is a Research Associate at the STAR Institute at Simon Fraser University and a PhD student in the School of Energy, Geoscience, Infrastructure and Society at Heriot-Watt University in Scotland. Mei is the lead researcher on a community-based participatory research project examining how seniors engage in 'place-making' in their communities. Her background is in critical public health where she addresses social and health inequities through critical theory.

3. Ryan Woolrych, PhD, is an Assistant Professor in the School of Built Environment at Heriot-Watt University in Scotland and an Adjunct Professor in the Gerontology Research Centre at Simon Fraser University. Ryan's work surrounds examining the

impact of urban renewal initiatives on the health and wellbeing of marginalized groups using participatory and visual methods.

4. Sarah Canham, PhD, is a Postdoctoral Research Fellow at the Gerontology Research Centre at Simon Fraser University. Trained as a gerontologist, Sarah has over 15 years experience working in the field of aging and health using multiple methods to explore mental health and social isolation in later life.

5. Lupin Battersby, MA, is a Research Associate at the Gerontology Research Centre at Simon Fraser University where she is also a PhD candidate in the Faculty of Health Sciences at Simon Fraser University. Her doctoral research looks at research centres' knowledge translation practices and outcomes. Lupin has 15 years experience in qualitative research and project coordination.

6. Tori Hui Ren is a PhD student in the Department of Human Ecology at the University of Alberta where she conducts interdisciplinary research in environmental design for seniors with dementia; integrating environmental gerontology, material culture, and architectural design. Tori's background is in architecture and has previously worked as an architect for three years in Shenzhen and Shanghai, China.

7. Andrew Sixsmith, PhD, has been Professor and Director of the Gerontology Research Centre at Simon Fraser University since 2007. He is the Scientific Director of AGE-WELL Network of Centres of Excellence. His research interests include development of technologies for independent living, modeling wellbeing of seniors, long-term care and theory, and methods in gerontology.

2.5 Paper Five: 'Integrating Sense-of-place within New Housing Developments'

This book chapter critically explores the potential of a community-based participatory research (CBPR) approach encompassing multiple qualitative methods selected to forefront valuable, distinct viewpoints of local community stakeholders with vested interest in a Canadian affordable housing redevelopment project.

With guidance from the co-investigators and support provided by members of the research team, my key contributions for this piece include the following:

- Conducted the literature review with input and suggestions from the research team.
- Co-designed the research methodology.
- Acquired ethical clearance for the research.
- Led and developed the methods including the majority study instruments with input and suggestions from the research team.
- Acquired ethical clearance for the research.
- Led and implemented all data collection activities with support from the research team.
- Led and conducted the majority of data analysis, where possible with research participants with input, suggestions and support from the research team.
- Led the writing, preparation, and submission of the manuscript (including the majority of the revisions encompassing suggestions from reviewers) integrating feedback from the co-authors as necessary throughout the process.

2.5.1 Critical Review of Paper Five

Building on paper four, paper five details the CBPR approach and describes methods that can be used in older adults' housing development research and practice to facilitate partnership working and acquire nuanced data (such as historical, contextual place experiences) to capture important social facets (place identit(ies), positionalit(ies), oppressions and opportunities) of urban ageing populations.

Paper five effectively links papers one to four by specifying methodological details and implications for practice for all methods discussed in the aforementioned papers. Hence, the Canadian affordable housing redevelopment project for older adults of low socioeconomic status serves as a case study to demonstrate application of a CBPR

approach in practice. The importance of this paper is that it provides readers with a how-to resource for employing a CBPR approach. Paper five offers a critical analysis of the strengths of CBPR, alongside a discussion of the existing challenges and limitations involving effective partnership working, methodological challenges and inclusive decision-making. Thus, paper five aims to explain while simultaneously problematizing the CBPR approach.

There are limited guiding resources that serve to provide direction for developing housing initiatives when undertaking projects that involve persons situated in marginalised positions. As such, redevelopment projects often focus on primarily the built features, not because developers and architects are reluctant to consider the psychosocial factors of place, but because this approach was not a part of their discipline-specific training. This paper addresses this key challenge by outlining an approach that demonstrates how project leads can bring in a variety of expertise by including diverse stakeholder groups, as partners, at the start of the project. A conceptual framework is presented that highlights important components. These components include: collective impact; inclusive research approach; sustainability from the ground up and identifying person-place needs and community assets for consideration conducive to creating healthy sustainable environments that enhance positive ageing in the right place. Alongside a description of the approach and the framework, this paper details promising data collection methods and analytical processes that can be used to facilitate partnership working, acquire in-depth knowledge from individuals directly impacted by the development project and visualise their unique and important place experiences.

Integrating sense-of-place within new housing developments: A Community-based participatory research approach

Paper five meets objective four, and it also addresses research question four by illustrating how exploratory and collaborative methods, alongside innovative analytical techniques encouraged enhanced partnership working, and simultaneously allowed deep insights into the everyday lives of older adults to emerge. As part of the collection of published works for this thesis, this book chapter provided an effective, in-depth overview of the foundational, theoretical, and methodological elements — essential for developing positive ageing in the right place solutions. Next, Chapter three provides a critical analysis of the papers presented in chapter two according to the key elements that conjoin the body of work.

Editorial introduction

This chapter presents work from a Canadian project exploring the potential of community-based participatory research for drawing out how communities play a role in resilient ageing. The project used creative approaches as part of the research method rather than as the subject of the study. The chapter focuses on the importance of place and the authors helpfully explore the nuances of 'place'. This common interest in community resilience, ageing and place is one of the features that draw Chapters five, six and seven together. Another is the action-oriented nature of the research. The research discussed here, much like Chapter seven, was intended both to explore the views of older people in the community and, through that, to give those people a voice in local processes of housing development.

Introduction

This chapter critically explores the potential of an action oriented community-based participatory research (CBPR) approach to reveal ways in which communities can be resilient to the opportunities and challenges of ageing-in-place. In particular, the chapter

considers the potential for using qualitative and creative methods to bring distinct viewpoints of local community stakeholders to the fore in terms of embedding aspects of place into the development of affordable housing for older adults. Community resilience refers here to the 'existence, development and engagement of community resources by community members to thrive in an environment characterized by change, uncertainty, unpredictability and surprise' (Magis, 2010, p.401). This is particularly important in the context of supporting ageing-in-place where living in resilient communities can provide opportunities for civic participation, remaining active and sustaining community identity (Woolrych, 2017). Within the field of urban studies, there has been a shift towards a more transdisciplinary appreciation for community resilience, which combines the physical and psychosocial aspects of urban resilience (Coaffee, 2008). As such, the affordances of physical space play a role in supporting or constraining community resilience particularly for older adults who may rely on the immediate neighbourhood for service supports and maintaining social roles (Hildon et al, 2008). This is important both in terms of the everyday life of the community as well as responding to the challenges and opportunities of old age, as Dainty & Bosher (2008, p.357) have suggested, 'a resilient built environment should be designed, located, built, operated and maintained in a way that maximises the ability of built assets, associated support systems (physical and institutional) and the people that reside or work within the built assets' to withstand, recover from, and mitigate societal challenges.

The affordable housing redevelopment project, based in the City of Richmond, British Columbia, Canada centred on the demolition of an existing low-rise block of housing units replaced with the construction of a new housing development for older adults. For the redevelopment process, the research team were invited by the City of Richmond in British Columbia as community partners to: (i) capture sense-of-place as experienced by older people transitioning into an affordable housing development; (ii) understand the lived experiences of older adults to inform the provision and programming of effective formal and informal supports within the development; and (iii) develop practical guidelines and recommendations for supporting the place-based needs of older adults. Research conducted alongside the project presented a unique opportunity, through the application of a CBPR approach (described later), to inquire, understand and document nuanced meanings of place, identity, attachment and detachment to place from the perspective of a sample of low-income, older adults comprising a unique cultural mix (seventy percent Chinese and thirty percent European). The research spanned a three-

year period and involved a collaboration between academics, older adults, city government and community organisations. Community resilience, which enabled and enhanced shared solutions between multiple stakeholder groups, was found to help older adults transition and age well in their new homes.

Older people and 'a sense-of-place'

Research has explored the, often complex and multifaceted, relationship between individuals and their immediate environment and revealed a person-place dynamic where place acts as a strong determinant of individual, social and community well-being (Devine-Wright & Lyons, 1997; Dixon & Durrheim, 2000; Proshansky, Fabian, & Kaminoff, 1983; Relph, 1976; Sixsmith, 1986; Tuan, 1977; Twigger-Ross & Uzzell, 1996). According to Relph, formulation of 'place is comprised of three inter-related components, each irreducible to the other – physical features or appearances, observable activities and functions and meanings or symbols' (1976, p.61). Such components are directed by our visual senses and cognitive processes. They have been argued to capture our emotions and generate meaningful linkages to place (Relph, 1976). Canter (1977) builds on Relph's phenomenological conceptualisation of place by focusing more clearly on the linkage between the three features, emphasising, from a psychology perspective, the built features and individual conceptualisations of place as well as the activities that occur there.

Alongside this understanding of place, and of particular relevance from a gerontological perspective, is the notion that as people age, the number of place experiences accumulate, and as such, various memories of home and community become important (Oswald & Wahl, 2003). Environmental studies of older adults place particular importance on sense-of-place, as older people depend upon close social and community ties to place, and are sensitive to immediate changes to their home and community environment (Phillips, 2012). Establishing home and community belonging are key factors in creating the most favourable environmental conditions for older adults to live out their lives (Sixsmith & Sixsmith 1991). However, a substantial number of older adults experience dislocation of place (Sixsmith et al, In press). An example of dislocation of place can occur through both voluntary and forced relocations in old age (e.g. to more institutional forms of living or moving to alternative neighbourhoods) which can be driven by urban changes including gentrification and urban renewal (Walks & Maaranen, 2008; Woolrych and Sixsmith, In press). The process of

displacement can negatively impact older adults with limited financial means, casting a shadow on dominant over-positive notions of ageing-in-place (Golant, 2015; Sixsmith and Sixsmith, 2008; Sixsmith et al, 2017). This problematizes the simple assumption that ageing-in-place is an inherently good thing and draws attention to Golant's (2015) notion of ageing in the right place by ensuring that the necessary supports and resources are in place. Yet, through community resilience, individuals who are displaced can regain their agency through the process of negotiating, managing and adapting to change.

Evoking 'a sense-of-place' in research and service provision

To understand sense-of-place for older adults, it is important to acknowledge that sense-of-place is not necessarily a stable experiential state and that sense-of-place can change depending on the different experiences people have in places (Williams, 2014). Accordingly, it is necessary to explore how older adults place experiences can shift and change giving rise to new and different perspectives and different experiences of place. The research team took the position that an over-reliance on traditional research techniques conducted in isolation (e.g., surveys, face-to-face interviews and focus groups) can create limitations in understanding the social and relational aspects of place since they each limit the data in specific ways. Both focus groups and face-to-face interviews are strongly dependent on older people's confidence, comfort with being interviewed and verbal communication skills. In addition, they can overly prioritise researcher preconceptions in the pre-design of the data collection schedule as well as the way the research is conducted (Anyan, 2013). Nevertheless, interviews and focus groups can generate rich, contextual information about the topic area. Often undertaken face-to-face in a single location (e.g. home, office, community centre), these methods alone may not always generate the necessary insights from older marginalised people, such as important memories of place and/or objects of importance. Such memories may be accessible through more creative, participant-led methods, such as storytelling, photovoice and community 'walk-alongs' (Carpiano, 2009). Application of multiple research methods also enables triangulation, a process that can strengthen the depth of information gathered (Guion, Diehl, & McDonald, 2011). Triangulation prioritises in-depth understanding of a problem area by acquiring knowledge from different standpoints, which in turn enables the development of solutions that are holistic and multifaceted (Farmer, Robinson, Elliott, & Eyles, 2006).

Meanwhile, local community stakeholders, such as older adults and non-profit service providers, who are often invited to vocalise their knowledge during redevelopment phases, are absent from the decision-making process (Woolrych & Sixsmith, 2013). As such, a CBPR approach was selected as a guiding framework to ensure equity among partners. In this chapter, we first outline the principles of CBPR and its importance as a guiding framework for the research and redevelopment process, particularly, when determining the most effective and engaging research methods; and secondly, we demonstrate the purpose, applicability and combined use of five qualitative methods carefully selected for generating nuanced information about older adults' specific needs, desires and expectations when transitioning into new housing.

CBPR: A Guiding Framework for Collaborative Research

Community-based participatory research (CBPR) has become a popular approach across academic disciplines, government and non-government sectors and other philanthropic domains (Jagosh et al, 2015; Minkler & Wallerstein, 2008). This collaborative approach promotes the reciprocal transfer of knowledge and expertise; inclusive participation; power sharing and equity; and data ownership across all partners (Jones & Wells, 2007).

To prioritise the perspectives of older adults, CBPR was selected for our research, principally, to provide older adults with the space and platform to share their experiences. Achieving genuine involvement of local older adults as active decision-makers and knowledge experts required a conscious shift from the notion of developing urban places for older people to building meaningful environments with and by older people (Buffel, Phillipson, & Scharf, 2012). This approach enabled effective, collaborative dialogue between resident, professional and academic communities (Canham et al, In press; Fang et al, 2016; Sixsmith et al, 2017). Together, local researchers, community stakeholders (e.g., older adults and service providers) and professionals with a vested interest in an affordable housing redevelopment project (e.g., housing providers, service providers, developers and the municipal government) asserted community resilience through the formulation of equitable partnerships to co-create action-oriented research (Sixsmith et al, 2017) with the shared goal of improving community health and social outcomes and knowledge production and exchange (Jagosh et al, 2015; Minkler & Wallerstein, 2008).

It is important to establish, at the outset of a CBPR project, a set of priorities that emphasise the presence of older adults during the research and development process. Older people's viewpoints need to be taken into account during the research planning, development and implementation phases in order to empower them to voice their desires, needs and expectations for determining place initiatives in their community (Davitt, Lehning, Scharlach, & Greenfield, 2015). As such, a conceptual model integrating principles of CBPR (see Figure 6.1) evolved during the research to: (i) establish a process for equitable decision-making among multiple stakeholders with shared, and at times, varied aims, objectives and goals; (ii) direct the selection of interactive methods that prioritised community engagement and local knowledge; (iii) generate creative and sustainable solutions that were relevant to the needs of older adults utilising resources available from the local community.

Figure 6.1: Conceptual framework for an inclusive, participatory redevelopment strategy for seniors transitioning into new housing
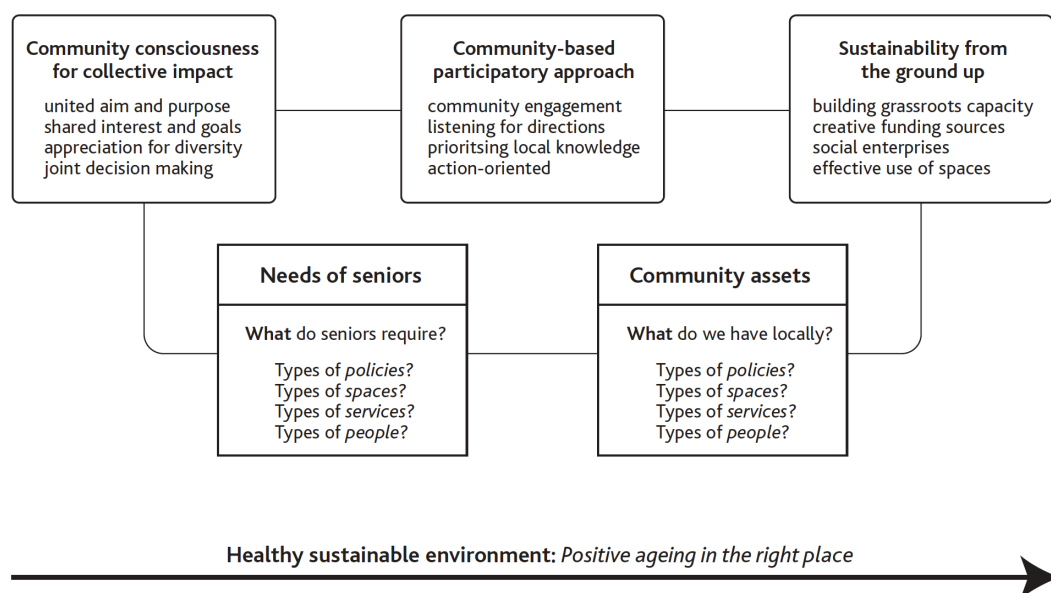
The conceptual model described in Figure 6.1 depicts, at a fundamental level, the shared vision of this action research: to create a healthy, sustainable living environment for low-income older adults who are transitioning into a newly developed sixteen-storey affordable housing development. This underlying vision is associated with Golant's (2015) idea of positive ageing in the right place which argues that positive ageing experiences are not solely determined by a place for older adults, but are dependent upon the appropriate environmental and social conditions for creating the right place for older adults to age well (e.g., necessary financial supports, opportunities for social participation, accessible health and social services, age-specific built features in the home, green spaces and, policies to ensure safety and security).

Accordingly, several key elements were identified in the conceptual model to ensure that research outcomes coincided with the needs of older adults. Firstly, to facilitate collaborative working and equitable partnerships, it was important that we established collective thought with the shared intent of achieving 'real-world' impact (Boger et al, 2016). This required collective team decision-making at the outset to establish the aims and objectives of the project which were based on identified shared interests and goals (e.g., creating spaces for brainstorming, discussion and debate), appreciation for diverse expertise and knowledge bases (e.g., ensuring multiple stakeholders are given a voice), and that systems were in place for joint decision-making (e.g., mechanisms for eliciting input from hard-to-reach older adults; protocols for sharing research findings; and, generating input to and from local leaders and experts). Secondly, the methods had to be grounded in participatory concepts such as community engagement, prioritisation of local knowledge and action-oriented solutions. These methods needed to be carefully selected and implemented by project investigators with sufficient training in and experience of conducting CBPR with combined expertise in urban studies and gerontology. Thirdly, this model is based on the recognition that long-term resilience can often be achieved through building community capacity and implementing creative solutions to address complex problems. As a result, team members worked together with community partners (e.g., developer, building management, non-profit housing association and municipal government) to develop creative ideas for acquiring funding sources for activities for older tenants (e.g., hosting learning tours in the new building for international scholars and professionals) and to develop engaging community environments for older tenants (e.g., establishing a tenant-led social events committee).

In terms of analysis, all narrative (e.g., in-depth interview, storytelling) and discussion (e.g., deliberative dialogue) data were transcribed and analysed thematically via HyperResearch 3.7.2 or QSR NVivo 10 and coded and categorised using a structured framework approach (Gale, Heath, Cameron, Rashid, & Redwood, 2013). Where possible, visual data were co-analysed with participants through discussion generated from jointly reflecting on the captured images (Pink, 2013).

Ethical approval was obtained from the Office of Research Ethics at Simon Fraser University, Canada, for which informed consent was obtained from all participants whose privacy and confidentiality were protected.

Applying Multiple Qualitative Methods to Prioritize Marginalized Place Perspectives

To embed CBPR principles in the research process, specific creative and qualitative methods (highlighted in Table 6.1) were selected and applied in combination, including: narrative inquiry techniques (including storytelling); photovoice; and, participatory mapping.

Table 6.1: Purpose and use implications of the five qualitative methods selected for this CBPR study.

Method	Population(s)	Description	Purpose	Use Implication(s)
In-depth Interviews	▪ Older adults transitioning into affordable housing	▪ Narrative inquiry method to elicit in-depth information from participants; ▪ Key characteristics: open-ended questions; semi-structured; led by researcher to seek understanding and interpretation and is often audio-recorded or video-recorded	▪ Applied as a 'discovery-oriented' approach to help the researcher obtain rich background stories of tenants throughout the phases of redevelopment	▪ Elicited depth of contextual information from relatively few participants (as opposed to surveys, which tend to be more quantitative and are conducted with larger numbers of people)
Storytelling	▪ Older adults transitioning into affordable housing	▪ Narrative inquiry method whereby participants share personal stories about a topic or phenomenon ▪ Key characteristics: un-structured; led by participant to reveal, inspire understandings about a particular topic or phenomenon in relation to self whilst simultaneously providing important, in-depth information to the researcher and is often audio-recorded or video-recorded	▪ To acquire richer and more complex understandings of participants' experiences that trigger memories that revealed their emotional ties to place	▪ Generated richer contextual information from relatively few participants than in-depth interviews, whilst simultaneously enabling the participant reveal understandings of self; technique was led by the participant which shifted the power dynamic away from the researcher to the participant which can often be a therapeutic process for both the participant and the researcher
Deliberative Dialogue	▪ Stakeholders with vested interest in the redevelopment project (local service providers, developer, housing management and municipal government)	▪ Group discussion method aimed at generating thoughtful conversations, unique from other forms of public discourse techniques such as debating, negotiating, ideas mapping, and generating consensus ▪ Key characteristics: multiple stakeholder participants; shared platform; informal; encourages ideas exchange and requires the generation of actionable tasks at the end of the dialogue session	▪ To facilitate the exchange of diverse perspectives from multiple stakeholders in order to generate solutions for creating socially engaging spaces in the new build	▪ Enabled multiple stakeholders to work together with researchers to generate ideas and future directions for developing supportive home environments focused on: the effective use of shared amenity spaces; identifying and mobilizing local resources and partnerships; bringing in senior-specific programming; and informing tenants of local resources
Photovoice	▪ Older adults transitioning into affordable housing	▪ Visual method grounded in qualitative participatory research principles used to explore personal experiences of a particular phenomenon through photography ▪ Key characteristics: participant-led; informal; uses photography to explore personal experiences of a particular phenomenon	▪ To empower older adults to share stories of place though creative and collaborative photo-taking and analysis	▪ Enabled older adults to capture or direct the taking of photographic images to illustrate their everyday experiences, engage in visual narrative interviews and work with each other and researchers to discuss related themes and potential actions; provided an avenue to visually portray experiences and share and discuss personal knowledge about issues that may be difficult to express through words alone
Participatory Mapping	• Older adults transitioning into affordable housing and Stakeholders with vested interest in the redevelopment project (local service providers, developer, housing management and municipal government)	▪ Visual method to create a tangible display of people, places and experiences that make up a community through map-making exercises and community 'walk-alongs,' – a form of visual, in-depth qualitative interviewing often conducted while walking with the participants ▪ Key characteristics: multiple stakeholders; participant-led; map-making; community walk-alongs; informal	▪ To identify locally available services and resources and pinpoint desired service and resource gaps through community walk-alongs and on a large map depicting the affordable housing and development and surrounding community	▪ Enabled the researchers to access older people's attitudes and their expert knowledge, to understand the types of relationships participants have with their community and surrounding environment whilst empowering participants to build on community strengths, generate a shared awareness and understanding of community assets; created networking space for engagement with service providers as well as other seniors in the community

Because the participants were of Chinese or European heritage, two researchers who were fluent in Mandarin, Cantonese and English led the data collection process. This comprised of 25 in-depth interviews with older adults; 16 photo-voice sessions with older adults; 15 storytelling sessions with older adults; four deliberative dialogue workshops with building management, local service providers, members of the municipal government and members of the building development team and four participatory mapping workshops with older adults, local service providers, building management and members of the municipal government. In the following section, we demonstrate how the combined application of these innovative methods enabled older adults to share their lived experiences.

Narrative inquiry: Storytelling and in-depth interviews

Storytelling and in-depth interviews are methods of narrative inquiry that can be used to acquire deep understandings of self and the relationships of individuals to their immediate environment (Bruner, 1990; Polkinghorne, 1988). Place scholars (Relph, 1976; Tuan, 1991) have explored the holistic nature of 'being-in-place' by collecting narratives on how people construct their sense of self through attributing and attaching meanings to place. The storytelling method is unstructured and often led by the participant (as opposed to the researcher). It has been argued that this method can enable participants to link multiple meanings and identities associated with a particular place together (Taylor, 2003). As such, in-depth interviews were applied as a 'discovery-oriented' approach (Guion et al, 2011) in order to elucidate the tenants' experiences throughout the phases of redevelopment. Concentrating on different places where residents had lived throughout the redevelopment process helped shape the structure of storytelling sessions.

For instance, prior to the move, many of the older adults agreed with the sentiment of one participant who described having "been shuffled around here, there and everywhere". One of the main difficulties revealed by older adult participants was the relocation process. Finding a new home and all the associated tasks is challenging for most people, but can be particularly so for older adults with limited financial resources. This can lead to heightened stress, anxiety and poor mental and physical health outcomes. Due to the nature of the redevelopment process, older adult participants were required to find temporary accommodation for three years while the new building was under development. According to some older adult participants, this had an impact on their ability to establish new social networks and relationships. One individual stressed that it

can be challenging to "get out into the community" and "that it takes a lot of work to make friends" so they did not "want to have to do it twice". Transient dwellings impinged on some older adult participants' ability to firmly adjust and re-establish themselves in the community where they lived during the transition period. Through interview data it was established that the notion of home is much more than just a physical space and shelter; that home is also about community faces and places. Making new friends, finding useful service locations (e.g., grocery stores, pharmacies, family doctor) and establishing social support takes time and effort, which can be rewarding, yet also daunting and stressful. Temporary living spaces were considered by many participants to not be homes, but rather as transient dwellings.

Accordingly, in place research, narratives can provide participants and researchers with the opportunity to share and acquire rich and more complex understandings of participants' experiences, creating new perspectives and knowledge (Keats, 2009). Of importance to this study was the acknowledgement that an individuals' place experiences are complicated by the interlocking or intersection of the social positions they hold and the social factors that shape their everyday lives; that is, an interweaving of multiple systems of oppression (Collins, 2000) and opportunity. How such systems are organized through interrelated domains of power and what this means for the ways in which their lives can be lived is of critical importance in understanding how and why particular places are experienced in the way they are. As such, an intersectional analysis (Hankivsky & Christoffersen, 2008) was included as a part of the study design to provide a better understanding of how experiences of oppression and opportunities across place and time are influenced by a person's position and social identity. Storytelling, a method that uses a reflexive approach, facilitates inquiry into a person's life story without having to use language that is difficult for a participant to comprehend. For instance, instead of, 'Tell me about your social position(s) in society?', we asked the participant to, 'Take us to a time and place when you were the most happy, or felt the most challenged'. This technique enabled a conversation that naturally drew out the information that we aimed to acquire. Simultaneously it offered older adults a means of sharing their stories and triggered experiences which highlighted participants' emotional ties to place and observations of their physical surroundings. Also, further ideas were generated through a two way process of storytelling involving mutual recognition of experiences and situations. In this way, the researcher exchanged stories which touched their own lives, creating a sense of reciprocity and inspiring new ideas to emerge.

Table 6.2 presents an example summary of data analysis categories from a storytelling session with one older adult participant, outlining at three different significant 'place time points' the individual's social identity, position in society, the opportunities, oppressive experiences and local place environments.

Table 6.2: Example of data analysis matrix of categories through a storytelling session with an older adult participant.

TIME POINT (1): MAINLAND CHINA				
Identity	**Positionality**	**Opportunities**	**Oppression**	**Places**
Chinese	Having work	Education	Place restrictions	School
Student	Married		Cultural revolution	
	Living with partner			
	Wealthy in-laws			
TIME POINT (2): HONG KONG				
Identity	**Positionality**	**Opportunities**	**Oppression**	**Places**
Widower	Married	None identified	Overcrowded	Apartment
Chinese			Uncomfortable weather	City
Housewife			Oppressive political culture	
Mother			Living in small spaces	
TIME POINT (3): CANADA				
Identity	**Positionality**	**Opportunities**	**Oppression**	**Places**
Hospitable	Living alone	Establishing ownership	Being unwell	New building
Consumer	Has a social support network	Place affordance	Reliance on others	Long-term care home
Unwasteful	Poor	Higher powers	Getting old	Hospital
Prudent	Middle class	Self-care	Lack of or restricted place agency	Supermarket
Indonesian	Debilitated	Convenience	Fear and shame of being burdensome	Chinatown (area of the city)
Immigrant		Social welfare system	Moving homes	Church
Older person			Transient places	
Carer		Place freedom	Lack of mobility	
Grandparent		Having more space	Stolen or wasted time	
Chinese		Engaging with cultures different than your own	Self-care	
Canadian citizen		Appreciating other cultural norms	Experiencing urban development	
Dual national identities		Living in a democratic society	Social and cultural shift	
Ordinary or common			Carer responsibilities	
Not a gossip			Limited employment opportunities	
Quiet			Agentic limitations by circumstance	
Reader			Place restrictions	
Mother			Ageism	
			Language barrier	
			Negative experiences with different cultural groups	
			Inappropriate window blinds let in too much light	
			Enduring cigarette smoke	
			Lack of knowledge and understanding of technology	

The study of narrative information in Table 6.2 revealed important aspects of combined social identities (e.g., Chinese, widower, grandparent) and positionalities (e.g., wealthy in-laws, married, poor) reflecting oppressions (e.g., cultural revolution, living in small spaces, lack of mobility) and opportunities (e.g., education, place freedom) experienced at

three key time points in different places and national homes (e.g., Mainland China, Hong Kong, Canada).

In line with previous research (Caine, 2010), the application of combined narrative methods enabled, compared to single data collection methods, more comprehensive understandings of place experiences from older adults through a three-dimensional inquiry which included time, space and relationality. Narratives consisting of rich descriptions facilitated the discovery of participants' relocation experiences. The stories of older adults helped to depict the physical attributes of place and the intimacies of place over time by revealing the socio-spatial (e.g., identities, positionalities) and relational aspects, as well as, oppressions and opportunities experienced in the different communities.

Visualizing place through photovoice

Narrative data was complimented by visual imagery in order to identify the ambiguities and complexities of the intersecting social factors that impacted the everyday lives of the older adults. As our research required in-depth understandings of key place moments, photovoice was used. Photovoice is a visual method (Wang & Burris, 1997) grounded in qualitative participatory research principles used to explore personal experiences of a particular phenomenon (Nowell, Berkowitz, Deacon, & Foster-Fishman, 2006), in this case personal experiences of place. This method has been used to facilitate community engagement whilst simultaneously producing powerful images that have the potential to influence policy agendas in the areas of public health, education and social work (Catalani & Minkler, 2010). This visual technique not only provided participants with a creative activity to engage with, but also helped generate important conversation pieces.

During the photovoice sessions conducted in this research, older adults took or directed the taking of photographs to illustrate their everyday experiences. The images were used to stimulate conversations with researchers where themes and potential actions were identified. For older adult participants, photovoice provided an avenue to visually portray experiences and share and discuss personal knowledge about issues that may be difficult to express through words alone. For example, through visual imagery and personal narrative, one participant was able to describe the importance of Christianity as not only as a religion, but as a part of her everyday spiritual and social life. Figure 6.2 is of the participant's bible translated into Chinese characters.

Figure 6.2: An older adult participant shows her bible.

During data analysis, this photograph, paired with the participant's narrative, enabled a deeper understanding of her sense-of-place. As she showed us her bible, this participant revealed how religion and religious activities were central to her daily routine:

> 'Everyday I get up and cook breakfast for myself. After eating, I read bible and pray. In the afternoon, I watch the Hong Kong news and then I read bible again and go to bed at 9:00pm. Tuesdays every week, I go to church for a group activity and Saturdays I attend another group activity for older adults at church.'

Through this creative process, participants were able to direct and communicate understandings of their everyday realities, and the specific meanings and significance they attached to place.

Photovoice was a particularly useful tool for this study as it empowered older people to share stories of place though creative and collaborative photo-taking, self-reflection and joint-analysis. When supplementing narratives of older adults, the photographs provided 'additional stimulus to the participant(s)' (Nowell et al, 2006, p.31) to bring up and navigate difficult conversations. The visual stimulus often presented opportunities to discuss issues that can be difficult to conceptualise. The recalling of place memories also enabled participants to become self-aware of personal resilience through the disclosure of

the challenges they had overcome, especially for some Chinese migrant participants who described overcoming socio-cultural, political challenges experienced during the Cultural Revolution.

According to Baker and Wang (2006), photography is a creative outlet that enables some people to better identify and present important aspects in their lives, since it acts as a conduit for individuals to both define a phenomenon of interest and link it with the meaning it has for them. The next example demonstrates how one older woman participant visually captured where she had her meals every day to describe another phenomenon (see Figure 6.3).

Figure 6.3: Photo captured by a participant highlighting her kitchen table and chairs.

As we reflected on Figure 6.3, she expressed, "Yes. I usually eat here. I have no fancy furniture, nor other pretty items." On the surface, she was identifying the place where she had her meals. However, the underlying message conveyed was that she was poor. For this participant, it was easier to capture her social position through the image, which ultimately helped facilitate later discussions on how she had lived a humble life and her previous struggles living in China during the Cultural Revolution.

Methodologically, photo images facilitated the storytelling process and improved the rapport between the researcher and participant, which subsequently enabled a shared-analytical process. The active agency involved in choosing to photograph or choosing existing photographs often involves a process of personal in-depth thinking about why such an image represents the topic area and so represents a representational resource which is simultaneously and generative of new insights. Data co-creation in this context involves a rich personal analytical process which is then further transformed into a more social analytical framework in the development of and the sharing of stories. Such depth of personal and then shared analytics is often difficult to achieve in more traditional data collection methods. For example, survey methods are typically formulaic; providing a selection of answers to questions, rather than allowing the participant to self-describe, self-identify and self-prioritize important and complex historical aspects of their past. While in-depth interviews can provide the opportunity to reveal nuances of participant day-to-day experiences, they often do not require pre-preparation and an intense level of personal analysis prior to the co-creation of data. An unexpected benefit of this technique was the extent to which the storied use of photographs encouraged participants to identify new issues to discuss and foreground aspects of their lives they were proud of, further generating an awareness of their personal agency. However, the difficulties of using this method were also evident where people were less comfortable with taking photographs or felt inhibited or anxious about photographing their surroundings. In these instances, the researchers offered to accompany participants and shoot the actual photographs under the participants' instructions. Careful attention to ethical issues was also necessary, and participants were informed about the problematics of taking photographs of people when this might constitute an invasion of privacy, and of ways to gain verbal consent. When existing photographs were used showing people or family scenes, then ensuring participants had gained the permission of others in the photo was emphasised. Knowing how the photographs would be used in the context of the research was also an important part of the photovoice negotiation process. These issues, encountered whilst using this photovoice method, paralleled those encountered by Mountian et al (2011) in their use of the experience sampling method to investigate wellbeing in the workplace.

Facilitating knowledge co-creation, ideas exchange and actions for change

Deliberative dialogue is a method aimed at generating thoughtful discussion, unique from other forms of public discourse techniques such as debating, negotiating, ideas mapping, and generating consensus (Kingston, 2005). This method provided an opportunity for

concurrently generating and analysing data, engaging participants and synthesizing evidence with the end goal of establishing a set of actionable items (Plamondon, Bottorff, & Cole, 2015). Deliberative dialogue workshops enabled a shared platform for building management, developers, local service providers and representatives from the municipal government to exchange diverse perspectives toward potential solutions for creating socially engaging spaces in the new building (Canham et al, In press). While the process of deliberative dialogue was immensely helpful in focusing different stakeholders on the key issues at hand and potential solutions, difficulties were experienced in terms of supporting them to transcend the boundaries of their different knowledge bases as well as levels and types of expertise. Initially, some stakeholders were perceived as more knowledgeable or powerful than others which meant some deferred to others or expected direction in what to think from them. With careful facilitation, active listening, re-iteration of which expertise participants held and reinforcement that all perspectives were equally valued, a more trusting and open attitude developed where constructive challenges were welcomed and important agreements made. In this way, discussions generated directions for effective use of design features to enhance social connectedness between tenants. The discussions also helped stakeholders to design features, shared community spaces and social programming to enhance independent living for older adults in the new building. Key discussion topics and quotes exemplifying deliberative dialogue data are highlighted in Table 6.3.

Table 6.3: Key discussion topics and associated quotes from the deliberative dialogue sessions.

Discussion Topics	Quotes
Design features to enhance social connectedness with neighbours	"They're all connected, the two towers are connected with this hallway with centralized hobby room, et cetera, the games room. The idea was, is that we don't want the tenants of one tower to feel that that is their tower, and Tower 2 is not part of us or vice versa. We wanted them to feel like they can flow easily between one tower and the other. That is basically the concept of the amenities that we have."
Design features to enhance independent living	"And we have dedicated space in both buildings for power scooters. There's plug-ins in them, and also room in them for bicycle parking. So we're trying to encourage these other alternative means of moving around the community."
Community spaces	"We made every attempt we could to promote a more healthy social atmosphere. So we started right with the lobby area. It's going to be a busy place… what we did was, we have the main entrance and then we have a little seating, reading area, waiting area off the side, that kind of allows [tenants] to sit down there comfortably. It's got a little electric fireplace in it. It has a little ambience."
Social programming in the new building	"That is one of the things…is to find people that want to come in and put on these programs for our tenants. And there is the key: it is limited to our tenants. We are not trying to service an outside community. And if our tenants want something that we haven't provided, there is the senior's centre just down the street…or availability all within a close proximity. So, what we are trying to do is to find those programs that our tenants want, that we can attract somebody to come and put those programs on, whether it's dancing, yoga, bingo, or whatever."

The use of deliberative dialogue promoted community resilience as several community groups came together to co-create ideas and actionable solutions using community assets to help residents to overcome the disruptive relocation change. Unlike traditional focus groups, we argue that deliberative dialogue sessions provided the opportunity for local stakeholders to view themselves as contributors and decision-makers in the community. They were able to develop shared visions at the outset and confirm appropriate actions and changes at the individual, group and community level. For instance, participants worked with researchers to generate ideas and future directions for developing supportive home environments. They focused on the effective use of shared amenity spaces; identified and mobilized local resources and partnerships; brought in tenant-specific programming; and informed tenants of local resources (Canham et al, In press). Participants who attended the deliberative dialogue sessions were also invited to attend subsequent participatory mapping workshops with tenants.

Participatory mapping is a research process that provides the opportunity to create a visible display of people, places and experiences that make up a community through map-making (Corbett, 2009). Stemming from Participatory Rural Appraisal (developed in the 1980s to further understanding of rural life), it is part of 'a growing family of approaches and methods to enable local people to share, enhance and analyse their knowledge of life and conditions to plan and act' (Chambers, 1994, p.953). Established as a collaborative approach for generating understandings of locations and sense-of-place (Fang et al, 2016), participatory mapping is grounded in local knowledge with resulting spatial solutions co-created with stakeholders. Resultant maps are subsequently owned by local people (Chambers, 1994). As such, the method begins with the knowledge that community members hold, enabling them to take charge of the narration of the places that are meaningful to them.

To further understand older adults' sense-of-place (generated via storytelling and photovoice methods), and the necessary actions and changes required to rebuild the community for older adults (acquired through deliberative dialogue), we conducted a series of co-created mapping exercises (see Figure 6.4). Older adults and service providers were invited to four participatory mapping workshops. During the workshops participants identified locally available services and resources and pinpointed service and resource gaps on a large aerial map depicting the housing development and surrounding

area. Other materials were made available to annotate the map and identify opportunities and barriers within the local community to age-in-place.

The use of maps themselves are reflective of, and productive of, power and mapping practices can reinforce those dynamics (Wood, 2010). Once again, mediating the established power hierarchies was necessary between the groups to ensure older adults were able to situate and position their own knowledge in relation to the map. Even amongst the community there were diverse perspectives and experiences and common agreement was sometimes difficult to achieve. In this respect the maps were neither neutral nor unproblematic with respect to positionality, and partiality of knowledge from different sections of the community. The map itself can exert a form of power, e.g., in assuming that space is fixed and invariable rather than fluid and contested. This it might be wise to begin with the premise that maps are rooted in and essential to power and knowledge (Harley, 1989).

Those people much more comfortable with maps were initially more involved than those self-identifying as not able to navigate the community using maps. Community mapping was anathema to many and top-down aerial maps were not necessarily commensurate with how older adults constructed their understandings of community at a street level. As a new type of exercise for many, the dynamics of mapping took much facilitation to ensure that collective understandings of place emerged. Sitting at tables restricted people from reaching the parts of the map they were concerned about. Once the decision was made to stand and walk around the room was taken, more people got involved in pointing out aspects of their community to share and discuss. This created small group situations who talked together and then collectively joined the mapping process.

Figure 6.4: Photograph of the set-up for the participatory mapping workshop.

A key methodological variation from traditional participatory rural appraisals was the integration of community 'walk-alongs' in the research process. Established as the 'go-along' method (Carpiano, 2009; Garcia, Eisenberg, Frerich, Lechner, & Lust, 2012), it is a form of qualitative interviewing often conducted while walking with the research participant (Kusenbach, 2003). Community 'walk-alongs' were used to further explore neighbourhood contexts, enabling older adult participants to adopt the role of the expert, highlighting in real time (as demonstrated in Figure 6.5) meaningful places, spaces and activities in their local environment (Fang et al, 2016).

Figure 6.5: Photograph depicting the community walk-along with older adult participants.

Community 'walk-alongs' were a crucial component in this study (Fang et al, 2016). The ability to visualise existing community assets helped older adult tenants realise additional types of programs and activities (see Table 6.4) they could have taking place in the new building, alongside those already in existence in the neighbourhood. The joint process of walking and talking tends to mimic more friendship relationships, tending to minimise to some extent the research-participant power dynamics by placing participants in control of the walk. The movement of walking also tended to provide a natural rhythm to the data collection process whereby silences (sometimes experienced as uncomfortable in focus groups or interviews) were no longer problematic but experienced as more companionable. The 'walk-along' process revealed participants' desires, hopes and expectations for their new community by facing them with the difficulties or deficiencies in the current surroundings. However, the process was difficult to track as some people walked more quickly than others, splitting the group and meaning that some conversations were lost to the data collection process. Additionally, it was, at times, difficult to establish a walking route with different residents wanting to show different aspects of their community. Care was also needed to address the needs of less mobile

participants, ensuring adequate resting places were on hand. In retrospect, the research team needed to scout out the area, finding resting places and understanding the topographical features of the environment to enable the walk along to progress more smoothly.

Table 6.4: Activities, services and other social and physical features voiced by seniors to enhance positive aging in place.

ACTIVITIES	SERVICES/CLASSES	OTHER
• Tai Chi • Barbeques (twice per year) • Dancing • Mah Jong • Knitting • Bible study • Book club • Life history learning lessons about residents • Ladies coffee hour • Learn to paint • Calligraphy • Glee club singing • Holiday / birthday parties / potlucks • Sculpturing • Making frames • Scrabble • Theatre	• Language Classes (e.g. English, Mandarin, Spanish) • Assistance with tax returns • Family practitioner • Grocery store / help with groceries • Cooking classes • Health and wellbeing seminars • Fire safety seminars • Health checks & monitoring • Balance classes • Art Classes • Music classes • Manicures • Massage • Pedicures • Yoga Classes	• Culturally-sensitive emergency evacuation plan • Pedestrian crosswalk needed on the main street outside the building • Age-friendly exercise equipment • Reduced membership fee at the seniors centre • Air conditioning in games / hobbies room • Replacing blinds • More ping pong tables • Peer-to-peer training on 'living in the condo'

Earlier research suggested participatory mapping as a useful tool to encourage collaboration as well as dialogue and relationship building among participants (Amsden & VanWynsberghe, 2005). Participatory mapping both in terms of workshops with actual maps and 'walk-alongs' enabled the researchers to access older adults' attitudes and knowledge. This provided further understandings of the types of relationships participants have with their community and surrounding environment, and the types of programs and activities they wanted (Carpiano, 2009). Community 'walk-alongs' also facilitated older adults' social participation by creating a networking space for engaging with service providers and other older adults. Participant evaluations identified these strengths of this method. Evaluation feedback emphasised the value of having opportunities to network with others who they could engage with after the workshop to establish 'in-house' activities, programs and services. However, the difficulties of 'walk-alongs' were also identified by participants, as well as researchers frustrated by knowing some potentially important information had been lost.

In summary, the multiple methods applied in this study provided older adults, community partners and local stakeholders various opportunities to contribute to decision-making and enabled them to articulate their views on the redevelopment process. This helped redirect focus away from the purely physical aspects of the built environment to include non-physical, psychosocial support for residents.

Conclusions: Outcomes and Limitations

As part of the 'Place-making with Seniors' housing redevelopment project, a community-based participatory research (CBPR) approach was applied, to understand sense-of-place of older adults through multiple vantage points. A variety of qualitative methods were used (see Table 4.1), some of which are inherently creative in nature (e.g., storytelling, photovoice and mapping exercises). Knowledge and solutions were co-created with local stakeholders who had a vested interest in the health and wellbeing of older adults. This resulted in a number of positive outcomes which revealed how community resilience and empowerment, articulated through their voices within the action research project, transformed the redevelopment in ways which were beneficial for older adults. As such, and in recognition of community requirements and aspirations, a number of changes were implemented to create a better living environment for older tenants. These included the establishment of a social committee which was led and organised by tenants living in the building; several annual cultural and social events, which were funded by building management; also, a number of on-going, in-house, age-friendly activities and strategies were established to generate income to fund equipment and events (e.g., hosting international tours for architects and designers from Mainland China, bake sales, and grant submissions).

In terms of study limitations, participatory methods are resource intensive and time consuming, particularly since the research is embedded within the community. Gaining access to community members requires dedicated time to build partnerships, demonstrate accountability and develop trust. This drawback can lead to small recruitment numbers and a lack of perspectives from harder to reach people. Also, if participants are not involved in all stages of the project, involvement can seem tokenistic. An important step towards gaining access to the community and establishing trust was through employing researchers fluent in Mandarin, Cantonese and English who could communicate with participants in their first language.

As participatory methods are firmly grounded in principles of empowerment, this methodological strength superseded its limitations. As such, we highly recommend CBPR for future place research especially for its ability to capitalise on and enhance community resilience through joint approaches to decision-making by drawing on knowledge and expertise from a full range of professional and community groups. In order to avoid some of the challenges described throughout the chapter we suggest establishing partnership building and developing relationships with stakeholders before the start of the project (ideally, during the proposal development phase). Frequent meetings with partners are needed to enable active and open communication. In order to access harder to reach participants it is recommended that researchers meet participants at their homes. When recruiting participants, information sheets with photos of people involved in the project helps participants to know what to expect and makes them feel less intimidated. Importantly, all stakeholders need to be included in all aspects of the research to avoid tokenistic engagement. Finally, as researchers, we need to aware and reflect upon the power dynamics that are inherent in participatory research and the need to document how methods reinforce and reproduce power, not only through the different stakeholders involved in the research, but in how we use research materials such as maps and ask people to document their experiences in relation to place.

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3. CHAPTER THREE: CRITICAL ANALYSIS

A critical analysis of the key concepts, methods and methodology and theoretical underpinnings introduced in the published papers is discussed in this chapter. Conceptual issues associated with existing ageing in place notions are deconstructed. Ideas and concepts important for ageing in the right place are subsequently introduced, discussed and presented as an enhanced concept for creating housing solutions for old people. This is followed by an overview of the participatory principles associated with a CBPR approach and a critical review of this approach when creating housing options for older adults. Chapter three continues with a discussion of the importance of understanding diverse place perspectives when transitioning between different housing contexts and introduces a theoretical framework (intersectional place perspective) to help such nuances to emerge during data analysis. Finally, the chapter concludes with a critical analysis of the need for methodological diversity and discusses opportunities for collaborative, visual and narrative methods for illuminating complex experiences of place.

3.1 Conceptual Development: Ageing in the Right Place, A 'Wicked' Problem

Paper one provides a critique of ageing-in-place — an established policy driver that has heavily influenced housing initiatives for older adults worldwide (World Health Organization, 2015). Ageing-in-place concepts and ideas have underpinned the progression of: independent living programmes for ambulatory older adults (Fang et al., 2018); home-like environments in long-term care (Wada et al., In press); inter-generational co-housing options (Jolanki and Vilkko, 2015); strategies to tackle homelessness in old age (Canham et al., 2018a); and age-friendly cities (World Health Organization, 2007). While ageing-in-place has been presented as a key driver for addressing housing challenges for older adults, various studies have critiqued this notion particularly regarding the complexities in implementing ageing-in-place processes in real-world settings (Andrews and Phillips, 2004; Wiles et al., 2012).

Here, in paper one, understandings of ageing-in-place are presented alongside a critique and discussion of its limitations. This is followed by recommendations that advocate for a movement towards Golant's (2015) notion of 'ageing in the right place' through a methodology that supports partnership working across multiple stakeholder groups. These groups can include: older adults; service providers; housing providers; government bodies; developers; and, planners. The following subsections further analyse notions of *ageing-in-place* and *ageing in the right place* integrating arguments presented in relevant

literature, with reference to findings discussed in papers one to five. The subsections conclude with identifying the need for an approach that prioritises participatory principles for partnership working.

3.1.1 Deconstructing 'Ageing-in-place'

Ageing-in-place is an established concept prominent in urban studies and environmental gerontology. It is defined as the "ability to live in one's own home and community safely, independently, and comfortably regardless of age, income, or ability level" (Centers for Disease Control and Prevention, 2013, p.1). This definition has been extended to capture the desire, freedom, choice, and ability for older adults to be able to remain living in the community, self-sufficiently, as opposed to transitioning into residential care (Wiles et al., 2012).

From its foundational concept, notions of ageing-in-place extend from contributions by Lawton and Nahemaw as well as other key Gerontology scholars who have established the importance of the role of the environment in the ageing process (Lawton and Nahemow, 1973; Rowles, 1978; Lawton, 1982; Rowles, 1983; Carp, 1987; Rubenstein, 1987; Rubenstein, 1989). The person-environment fit perspective proposes that an individual's ability to adapt to a new place is determined by a balance of both personal requirements and environmental characteristics. Upsetting this balance could lead to the risk of maladaptation resulting in poor health and well-being outcomes. For instance, the lack of handrails in a bathroom can result in a home environment that is too challenging for self-care. This results in an inability by some older adults to complete certain activities of daily living. Conversely, an individual requiring a minimal level of support relocated to an environment with a high-level of care may become inactive and docile due to lack of physical and mental stimulation. This is particularly the case for individuals in late life who are more sensitive to imbalances in person-environment interactions; such as those who live with health conditions that restrict their mobility yet who are cognitively sound (Lawton and Nahemow, 1973).

There is a general consensus across disciplines that if inappropriately conceptualised and designed, the built environment has the potential to introduce significant challenges and constraints to an older adult's everyday life (Wahl et al., 2012). Alternatively, having an appropriate environment, inclusive of housing that is supportive of older adults' needs with conveniently located community supports and services as well as opportunities for social engagement and civic participation, could enhance prospects for ageing well

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(Beard and Petitot, 2010). Conceptually, this is the overarching argument for the research introduced in this thesis because it focuses on addressing housing inequality experienced by older people — a complicated, wicked problem that is yet to be solved. Unpacking ageing-in-place as a concept is the first step towards understanding the contextual challenges that limit older adults' ability to live a good quality of life, for as long as possible, at home and in the community.

Conceptualisations of ageing-in-place are grounded in knowledge drawn from the ecology of ageing and environmental gerontology (Wahl et al., 2012). This knowledge claims that individuals prefer to *age-in-place* to maintain their independence and connections to their social world such as friends, family and other social supports (Callahan, 1993; Keeling, 1999; Lawler, 2001). The perception of *place* in ageing-in-place research and initiatives has been largely articulated as the 'home and community'. It is generally perceived as the environments an individual has spent the majority of his or her life in specific residential settings to surrounding neighbourhoods and their broader communities (Black, 2008). Helping older adults to remain in their homes and in their communities for as long as possible, therefore, is often portrayed as the ideal policy solution to *house* older adults. Such interventions may also help minimise public costs by avoiding, often but not always, more expensive options of institutional care and is thus favoured by policy makers, and health care providers (World Health Organization, 2007).

Meanwhile, the notion of *home* in itself is a phenomenon that has been widely explored (Sixsmith, 1986). Contrary to popular belief, home is found to have distinct negative connotations, particularly in old age, some that include feelings of imprisonment fuelled by financial obligations, as well as loneliness and distress (Sixsmith and Sixsmith, 1991). Akin to critiques of ageing-in-place, discussed in papers one and four is that although the home has been largely romanticised as a place of personal and symbolic meaning that affords an individual with safety, security, privacy, independence and agency; such ideas and meanings of home are not consistently experienced by all persons (Iwarsson et al., 2007; Sixsmith and Sixsmith, 2008; Park et al., 2017).

Given the heterogeneity of the population of older adults, experiences of ageing-in-place may not be the same across subgroups (Iwarsson et al., 2007). Currently, there appear to be few ageing-in-place derived interventions that consider: loneliness and social isolation (Plath, 2007; Barrett et al., 2012); alienation (Rabiee, 2012); vulnerability (Park et al.,

2017); disempowerment (Percival, 2002); fear of living alone (Grundy, 2006); and the financial burden (Brown et al., 2016) of remaining at home in old age. As problematised and discussed in papers one through to five, persons situated in lower socioeconomic circumstances are more severely affected by the loss or absence of social support that can arise as a result of disruption to the home environment. Furthermore, older adults who live with chronic health conditions without support are at greater risk of increased vulnerability in the home (Hamilton and Round, 2017). Therefore, it is important to understand the different individual, social, and environmental contributors of vulnerability and how these intersect to influence experiences of disadvantage, isolation and exclusion. Though existing place theories emphasise the environmental and psychological aspects of place, they are lacking in consideration of socio-structural factors and how these conjoin to shape the built environment, and subsequently, the individualised experiences of place. In section 3.3 a theoretical lens was developed to address this gap (see in paper four)

Notwithstanding, older adults have consistently voiced their personal preference to stay living in their homes for as long as possible (Hillcoat-Nalletamby and Ogg, 2014). Contrary to a growing body of evidence (Askham et al., 1999; Sabia, 2008; Fausset et al., 2011; Kelly et al., 2014), this perspective has provided policy makers with the justification to continuously support ageing-in-place as a type of housing policy for older adults. However, to remain in the same place may not be the best option for enhancing older adults' health and well-being, especially as people begin to lose their partners and friends, develop chronic physical and/or mental health conditions, and/or lose their financial ability to be independent (Oldman and Quilgars, 1999; Oswald and Rowles, 2006; Means, 2007; Golant, 2008).

Nevertheless, ageing-in-place, despite much scrutiny, offers the potential to generate positive health and social outcomes. This is particularly true if appropriate environmental conditions are met that are conducive to supporting a good quality of life, and thus ageing-in-place can result in healthy ageing for older adults. Renovations and adaptations in the home, for example, are viewed as a primary means to facilitate ageing-in-place (Heywood and Turner, 2007), because they enable older adults to maintain their daily activities and continue to live independently (Hwang et al., 2011). The evidence, however, is mixed in terms of how these adaptations may decrease the risk for reoccurring injuries, such as falls, in the home (Gitlin, 1998; Lyons et al., 2006). This

demonstrates that physical modifications have a place, but in and of themselves do not create meaningful environments to age well within them.

Additionally, there is growing recognition of the benefits of moving home in old age so long as it is *the right place*, in that one environment does not fit all. Arguably, long-term attachments to place have been shown to influence well-being in older adults (Taylor, 2001). However, having stable accommodations may not always be beneficial especially when there is limited opportunity to move away from a negative situation (Aneshensel, 2007). This is exemplified in papers one to five whereby older adults moved out of their stable homes, which had become dilapidated, into newly built condominiums. This change resulted in positive place outcomes. Findings indicated that although moving home in old age was not ideal, nor preferred, many new opportunities and benefits had emerged upon resettlement into the new building. Here are the views of two older adult study participants:

> "But we survived. Yeah, we muddled through it. We got through it. And things are good. Things are good. Well, things never stay the same, you know. They change all the time. Everything changes. Nothing stays the same. Ever. Yeah. You can be happy today and sad tomorrow. Rich today, poor tomorrow." (Older Canadian Woman)

> "I have to say that this new living model is heaven for a Chinese elderly person. It is close to the park, the library and the mall. Richmond centre is not far away. The Skytrain station and the market are very close. We can buy Chinese foods from the market that is only 10 minutes walking distance. Therefore, it is very comfortable. The built environment of this building is much better than the ones in China for the elderly." (Older Chinese Man)

Hence, for some older adults, in some instances, there are potentially more benefits from relocating than staying put. Nevertheless, limited attention has been paid to research that demonstrates the potential value and benefit of moving into a new environment with greater advantages and opportunities for achieving positive health and well-being outcomes in old age (Peace et al., 2011; Seppänen, 2012; Hillcoat-Nalletamby and Ogg, 2014).

Despite an abundance of research supporting older adults to remain at home indefinitely as the most viable housing option, there are several challenges to this assumption, including safety, security, privacy, independence and agency that impact older adults' ability to age well in place. Arguably, remaining in one place until the end of life may not be suitable for the diverse populations of older adults. This is true as physical, psychological, cultural and social needs change over time. As such, in this thesis, the notion of *ageing in the right place* is discussed as a potential way forward.

3.1.2 Towards 'Ageing in the Right Place'

Ageing-in-place can be a rather unhelpful and ambiguous term with vague meanings. It is used when examining the need to help older adults remain in their homes for as long as possible, though with little or no clarity and direction on what this actually looks like or how it might be achieved. Consequently, without clarity there is lack of consensus regarding what constitutes the *right* environment, i.e., one that is conducive to ageing-in-place. In recent times, there has been a shift in perception that emphasises that, beyond the home, neighbourhoods and communities play an important role in shaping older adults' ability to age well in place (Oswald et al., 2010).

There is a need to enrich understandings of ageing-in-place by incorporating ideas that surround ageing in the right place (Golant, 2015). However, the notion of helping older adults to age well in the right place is a complex process. It requires recognition that older adults are continuously reintegrating with places and renegotiating place meanings and identities in the face of changing social, political, and cultural landscapes (Wiles et al., 2012). For instance, there is growing concern for the lack of quality and appropriateness of housing stock and the necessary community supports required for older adults to age well in place (Means, 2007; McCall et al., 2018). According to Wiles et al. (2012, p.358), 'treating place as a mere "container" and older people as a "homogenous category" is limiting', often resulting in an inadequate response to older peoples' diverse needs, necessary for successful readjustment to new places and spaces. Findings from Wiles and colleagues also highlight that although the physical aspects of home are important, older adults have other priorities, desires and expectations that determine the acceptability of their living environment. Accordingly, the research presented in papers one to five aims to address this critique by focussing on identifying and addressing often overlooked factors conducive to ageing well in the right place,

through enhancing concepts, theory, methods and strategies that facilitate collective partnership working across a diversity of stakeholders.

The World Health Organisation's (2007) *Global Age-friendly Cities* guide identifies key facilitators and required actions that can help enable older adults to age well in the right place. *Place actions* that require consideration, in addition to those focused on the built environment, include: outdoor spaces and buildings; transportation; housing; social participation; respect and social approval; civic participation; communication and information; community supports and health services; and the psychosocial aspects of belonging and sense-of-place when creating, designing and planning homes for older adults (World Health Organization, 2007). These crucial components of place should be debated and operationalised across individuals, within communities and structures inclusive of design and policy decisions that create environments conducive to supporting older adults with diverse needs such as immigrants, persons living with a disability or experiencing frailty (Wiles et al., 2005). Findings presented in papers two and three helps to articulate this point. They highlight that factors which contribute to older adults' ability to age well can also include: the importance of living in a centralised location; having access to good quality local services and amenities; feeling safe in the neighbourhood; participating in activities and events chosen and organised by older adults; having multicultural support; and very importantly developing and maintaining positive relationships with neighbours. Examples of healthy ageing-in-place determinants voiced by the older adults in prior research also indicate the cruciality of inter-connectedness among people within the place they live, and in the community where their home is located (Adriaanse, 2007; Canter and Rees, 1982; Carp and Carp, 1982; Golant, 1984; Francescato, 2002; Kahana et al., 2003; Rioux and Werner, 2011).

It was clear at the outset of the place-making with the older adults' project that participants were very invested in their surrounding neighbourhood environments and were highly expressive about their needs, desires, and expectations for their new homes. This included the desire for more internal and external opportunities for social participation to remain socially, mentally and physically engaged. Research suggests that the accessibility and availability of in-house and external services, amenities and supports as a part of any planning and design initiative is foundational for creating the *right* place for older adult's (Lawler, 2001; Fang et al., 2017). Aligned with existing research, findings from papers two and three also found that older adults' ability to age well was

highly dependent upon an environment that considers psychological, social, and physical needs. This means taking into consideration the safety and security of older adults; built features that consider physical challenges experienced in older age; appropriate in-house services including, health care (e.g., health seminars, and visiting nurses); social supports (e.g., neighbours, building caretakers); technology access (e.g., free WiFi in common spaces); and social events, especially those that bridge cultural differences (e.g., dancing, celebrating holidays from different cultures).

Nevertheless, there continues to discrepancy between the physical, social, cultural environments and the homes created as a part of housing initiatives for older adults, as well as the capabilities of those who reside in them (Levitt, 2013). To age well in the right place requires a balance between the different environments and personal agency (Wahl et al., 2012). This is especially the case when people transition into later life, because their functional and economic abilities to navigate, use and benefit from the systems and structures within their immediate environments become diminished, alongside their options to make the best choices for the well-being (Golant, 2003; Wahl et al., 2012;). Thus, the dissonance occurs when planning and design mechanisms fail to create the necessary environmental conditions for people to live well as older adults. However, this is not to say that existing physical, social, and cultural structures of place are not amendable to enhance the place agency of older adults. Since, according to Wahl et al. (2012) and Park (2017), and findings from papers one to four, even those with functional and economic constraints can age well in place if the necessary environmental features are in place to compensate for these limitations.

Overall, it is clear that findings from the published works combined with existing research indicates a growing need for housing, neighbourhoods and communities that support the health and well-being of people during old age (Sheets and Liebig, 2005). Yet, addressing this need is a complex task that requires input beyond the perspectives offered by individuals in urban planning, architectural design, and the development professions. As emphasised in paper one, determining what is the *right* place for older adults requires input and action from a range of professional stakeholders. This should involve input by the people who are directly affected and whose perspectives have not been accessed as effectively in the past, i.e., older adults. The redevelopment project, described in the body of work, thus created inclusive opportunities through CBPR, and the use of participatory methods. Methods included participatory mapping workshops,

community walk alongs, photo tours, storytelling, and feedback forums, as discussed in section 3.2, to enable older adults to become more actively engaged in the decision-making process i.e. interior designing, determining functional requirements such as storage, and in-house supports and activities. Key findings of the study that expand on previous research (Young et al., 2004; Muramatsu et al., 2010; Cramm et al., 2012), suggest that older adults generally prefer to be involved in developing and designing their homes as well as their community. By ensuring accessible data generating locations, facilitating collaborations across stakeholder groups (i.e., through partnership building activities), and making inquiries into the participants' past place experiences and preferences (i.e. using creative methods), older adults felt more empowered to create their own opportunities that would not only enable them to age well in the *right* place, but to take charge of creating *their* place (Fang et al., 2017; Fang et al., 2018a).

In order to generate housing initiatives that can support the diversity of older adults requires an approach that prioritises older adults' voices and can comprehensively identify and integrate place features that enhance personal agency. As there is strong evidence in the literature affirming the need for more nuanced, holistic, and integrated approaches for designing age-friendly environments and creating age-friendly communities (World Health Organization, 2019), CBPR was used to effectively engage multiple stakeholders with varied decision-making powers and expertise in the planning and designing of homes for older adults. The next section highlights, discusses and critiques the community-based participatory research. It emphasises CBPR principles of equity, inclusion, co-production and shared decision-making and outlines potential methods for engaging multiple stakeholder groups in the research process.

3.2 Participatory Principles: A CBPR Approach

There continues to be a trend towards ageing-in-place initiatives despite research to indicate that this may not always result in the best outcomes for older adults. Conversely, ageing in the right place argues for restructuring the social, cultural and the immediate physical environments in addition to home spaces while seeking out the best possible housing solution for the individual.

Emphasised in papers two and three is the importance of conducting a thorough inquiry of what ageing in the right place means to older adults and implementing results of the inquiry to inform supportive housing initiatives. Joint efforts via a participatory approach

involving professional and community stakeholders is necessary and important for facilitating this process (Fang et al., 2016b; Canham et al., 2018b). Although not an entirely new approach, CBPR is still not well used in planning and design at large (Scheidt et al., 2006). In the next subsections, the role of integrating CBPR principles when creating housing for older adults is discussed.

3.2.1 CBPR Approach: Transdisciplinary Housing Development 'with' Older Adults

The planning process for redevelopment initiatives has in the past taken a top-down approach whereby the developer, architect and planner are positioned in roles that represent *the expert*, granting them a dominant decision-making power (Davitt et al., 2015). Residents that reside in the community — the real 'experts' within this context — are generally perceived as having less voice. In contrast, those who are deemed as experts are likely to have an insufficient neighbourhood knowledge to fully understand the needs of the community, and the extent of community resources and assets that are available to address the unmet needs of older individuals (Nowell et al., 2006). In recognition of this, a participatory approach was undertaken, as noted in the redevelopment project highlighted in papers one to five, including the use of specific stakeholder engagement methods (i.e., the deliberative dialogue discussed in paper two, and the participatory mapping and walking interviews discussed in paper three) to ensure a holistic understanding of community needs and the extent of available community resources and assets.

Integrating residents' experiences in the housing process has been identified as crucial for the success of redevelopment projects (Halpern, 1995), because of the residents' experiential knowledge (Pratesi et al., 2013), strong ties to the community (Shanas et al., 2017), and ability to mobilise (Yotsui et al., 2016). Older adults have the knowledge power and ability to alter their immediate surroundings to meet their unique needs and maintain their independence (Oswald and Rowles, 2006; Golant et al., 2010). Yet, regardless of having extensive neighbourhood context and place experience, residents of a community, particularly older adults, are often the last to be integrated in regeneration initiatives (Buffel et al., 2012). Currently, there is a trend to create cities that are more age-friendly. In this movement, older adults are involved in the creation and maintenance of their neighbourhoods and communities and this is key to producing urban environments that facilitate their health and well-being (Buffel et al., 2012). To maintain or even advance this movement, will require a shift from developing urban places for

older adults, who are construed to be passive recipients, to building meaningful environments with and by older adults who are active agents (Buffel et al., 2012).

In this thesis, to prioritise the perspectives of older adults, CBPR was selected as the overarching approach which guided the research presented. CBPR is a valuable approach to research as its principles inspire researchers and community stakeholders, such as people who live in the community, service providers, business owners and civil servants, to formulate equitable partnerships for the co-creation of research with the shared goal of improving community health and social outcomes and knowledge production and exchange (Minkler and Wallerstein, 2008, Jagosh et al., 2015). This approach has become an increasingly popular approach across academic disciplines, government and non-government sectors and in other philanthropic domains (Minkler and Wallerstein, 2008; Jagosh et al., 2015).

CBPR is underpinned by participatory principles of equity, empowerment, inclusion, and partnership and operates against oppressive practices. CBPR is valued by health researchers for its promotion of reciprocal transfer of knowledge and expertise; inclusive participation; power sharing and equity; and data ownership across all partners (Jones and Wells, 2007). The implementation of CBPR and its associated principles was crucial for the success of the Place-making with Seniors' project. Outlined in table 3.1 is an interpretation of the key participatory principles based on prior research and developments of CBPR (Minkler and Wallerstein, 2008; Jagosh et al., 2015; Spears Johnson et al., 2016). Each principle informed the selection of methods and actions undertaken, which resulted in positive outcomes for the study.

Table 3.1. Summary of participatory principles.

Principle	Purpose	Method/Actions/Outcomes
Equity	To ensure that fair and just distribution of power among diverse stakeholders.	Established a representative advisory committee consisting of professional and community stakeholders before the start of the project to enable informed and shared decision-making.
Inclusivity	To maximise opportunities for all stakeholders to participate in the research, planning and development process.	Created opportunities for participation through the use of methods (specifically participatory mapping and community walk-alongs) that enabled meaningful engagement by individuals with diverse knowledge, expertise and skills in the research.
Empowerment	To provide persons most affected by the decision-making with opportunities and resources that will enable them to action and determine their own outcome.	Implemented feedback forums that provided the space for researchers to share interim findings and allowed older people to digest and respond to the information which enabled contributions towards key decisions and the ability for coordinated actions to ensure their own wellbeing.
Partnership	To collaborate with diverse stakeholders as partners and work towards a shared goal.	Developed a shared platform through the use of deliberative dialogue sessions to encourage informal conversations across diverse stakeholder groups and ensure equitable voice, contribution and decision-making.
Co-creation	To develop new knowledge and solutions to wicked problems with diverse stakeholders prioritising lived experience as expertise it its own right.	Applied the use of methods (specifically photo tours, and storytelling) that allowed for co-production of knowledge by individuals with diverse knowledge, expertise and skills.

Source: Adapted from Jagosh et al. 2015.

The operationalisation of CBPR enabled older adult participants in the project to become active change- and place-makers in their community (Fang et al., 2016b). Facilitated by CBPR methods, older adults were empowered to actively seek out and create solutions to determine their own health and well-being in the place-making with older adults' research. For instance, through applying participant-led participatory methods such as participatory mapping and walk alongs, older adults were empowered to co-produce a

range of ideas for supporting their well-being in the new build (see paper three, figure 2), and together, mobilised efforts to ensure the solutions' fruition. The application of collaborative, participant-led methods resulted in the implementation of low-cost or no-cost in-house activities in the new build, managed by a tenant-led social committee (see paper three) (Fang et al., 2017).

With its associated principles and methods, CBPR provided an alternative to traditional research approaches that may not be able to generate the necessary insights into how older, low-income women and men of diverse backgrounds experience forced relocation within the context of their social, cultural and built environment. Application of CBPR methods facilitated the inclusion of older adults at the outset in the research planning, development and implementation phases, which in the context of place research, empowered them to voice their desires, needs and expectations enabling them to shape place initiatives in their community (Davitt et al., 2015).

The following subsection describes CBPR opportunities for creating better housing for older adults, highlighting strengths and limitations of this approach.

3.2.2 CBPR Approach: Promising Prospects and Potential Limitations
There is robust evidence to suggest the need for more holistic, collaborative and integrated approaches to creating age-friendly living environments that are suitable and sustainable for the growing number of older adults (Oswald et al., 2010; Greenfield et al., 2015). However, there are several important criticisms of the existing research.

First, there is limited in-depth knowledge surrounding the everyday realities of older adult's lives and what is required of *senior housing* to support positive health and social outcomes of older generations (Golant et al., 2010). Second, many existing ageing-in-place housing research have predominantly focused on pilot projects situated within unique cultural and geographic settings with a limited ability for applied learning in different contexts (Golant et al., 2010). Third, no study has yet used a longitudinal, community-based approach to examine the everyday impact of senior-specific housing developments, designed especially to accommodate *independent living* for older adults (Fang and Place-making with Seniors SFU Research Team, 2017). Fourth, to date, benign ageism still exists within the urban planning, design and development process which legitimises sole decision-making by professionals and practitioners (Sixsmith et

al., 2017). These criticisms have been addressed at various capacities by applying a CBPR approach in the place-making with older adults research. Importantly, the appropriate integration of older adults' perspectives into the redevelopment process requires dedicated knowledge sharing, exchange and mobilisation efforts in urban planning, development and design (Rowles and Bernard, 2013). Application of CBPR in the research provided a framework for developing partnership-based models and methods of planning and design (detailed in papers one, two and three) that encouraged bi-directional exchange and assimilation of ideas between professional and community stakeholders facilitated in an environment of co-creation.

At the core of CBPR, as it pertains to ageing in the right place initiatives, is the acceptance that neither one person nor group is the expert in regard to the all-encompassing expertise necessary for generating effective solutions to complex social problems, such as providing home and community supports for ageing-in-place. As such, consolidated efforts are needed, through the use of inclusive and accessible methods such as deliberative dialogue and community mapping and walk along methods, to overcome disciplinary, inter-professional and sectoral boundaries that enable innovative ideas and ways of working to emerge (Boger et al., 2017). This aspect of CBPR can be characterised as transdisciplinary working and was crucial for ensuring that the redevelopment process was conducive for older adults to become agents for change in their own community.

However, transdisciplinary working as a part of CBPR can be challenging and is not without limitations. Despite its socially driven and equity-focused principles, transdisciplinary, participatory ways of working are often not well articulated, they can also be resource-intensive and time-consuming (Grigorovich et al., 2018). This was found to be the case as the redevelopment project was heavily embedded within the community. Furthermore, as experienced within the context of this project, there was limited guidance from the start on how to effectively conduct participatory and transdisciplinary research, with limited evidence, to indicate that conducting research in this way would generate better outcomes and enhanced impact. For instance, the project was situated at the heart of Metro Vancouver within walking distance from the main shopping complex, cultural centre, aquatics centre, library and older adults' recreational society. Thus, it was determined during the project's proposal stage, that this research would not be possible without longitudinal data collection, analysis and follow-up over

two years with the older adults involved alongside professional and community stakeholders.

Gaining access to members of an older adult community required dedicated time to involve them in all stages of the research as Sixsmith, Boneham, and Goldring (2003) have argued. Often, this aspect of CBPR can lead to small recruitment numbers and a lack of inclusion as it is difficult to reach people. The effort and commitment required by all partners to meaningfully engage their organisations and communities can be extremely demanding. As well the need for sharing of information and consultation often complicates the ability to make quick decisions. This specific challenge resulted in the delayed completion of the redevelopment project by approximately six months. Conversely, if participants were not involved in all aspects of the project, their participation would have been deemed as tokenism. Hence, full and integrated involvement of older adults was vital for formulating new relationships and partnerships, alike, in order to demonstrate accountability and develop trust. To do this effectively, an integrated knowledge translation (iKT) plan was developed (see Chapter four) to ensure that the ideas and solutions for positive ageing in the new development were co-produced via an iterative feedback knowledge exchange loop with older adults and decision-makers.

Though rewarding in many ways, CBPR can also be an incredibly frustrating approach. Currently, there is no clear evidence that participatory approaches can lead to significant health and social improvements in different research contexts (Bergold and Thomas, 2012). In addition to micro- and/or meso-scale research challenges (e.g., recruitment and follow-up), researchers are also confronted with more high-level problems that are more difficult to resolve and often not solvable during the timeframe of the project (Slaymaker et al., 2005). For example, in terms of identifying the problem area, while there is consensus that community-based approaches are more inclusive and responsive to the needs and priorities of the community, the beneficiaries may not have the necessary background knowledge to pinpoint specific problem areas or develop solutions that are manageable, feasible and sustainable (Slaymaker et al., 2005). Hence, projects that use a CBPR approach must invest a substantial amount of time building relationships and engaging multiple stakeholders, with various knowledge, resources and decision-making power, even prior to the start of the research (Grigorovich et al., 2019).

However, the reality is that it is often not possible to involve and gain commitment from everyone, particularly those with the necessary resources and decision-making power, e.g., members of parliament, directors of hospitals, and chief executive officers of businesses, who may not view local issues as priorities. As well, solutions identified by the community often require substantial external technical, operational, and financial supports. Such resources are scarcely readily available upon identification of the problem area and they require negotiations to occur to balance the requirements of the community and the constraints of the environment to address local needs (Slaymaker et al., 2005). Finally, priorities and goals of the local community may not always match with those of society at large. This may be especially true as they relate to issues of equity, viability, efficiency, and sustainability. For instance, in terms of housing solutions for older adults, there were participants who voiced the need for legislation that prohibited foreign buyers from purchasing property in Metro Vancouver. Despite being quite prominent in recent discourse, a ban of foreign buyers does not appear to be the dominant societal view to tackle the issue of affordable housing in major Canadian urban centres (Gerster, 2019).

To address micro- / meso-scale obstacles for the current research, an important step toward circumventing challenges, specifically regarding communication and establishing trust, was through the use of innovative engagement methods that minimised any misunderstandings by ensuring that all stakeholders regardless of their abilities were included in the decision-making. Additionally, a high-level of cultural humility was maintained (Foronda et al., 2016). Cultural humility is a concept that has progressed in health care, which emphasises the need for openness, self-awareness, egolessness, supportive interactions, self-reflection, and critique when interacting with for example in service and/or work contexts, recognising that we are diverse and unique in our own ways (Foronda et al., 2016). Cultural humility within the context of the research required a deep sense of awareness of cultural differences and needs as well as power imbalances among the researchers, decision-makers, and participants. This applied to those individuals viewed socially and were assigned politically to being visible or ethnic minorities, which in this case were the Chinese participants.

To ensure that Chinese participants were actively involved and their voices heard throughout the research and redevelopment process, strong cultural and community ties were built at the outset via outreach by two bi-cultural researchers of Canadian nationality with Chinese lineage. Both were fluent in Mandarin, Cantonese, and English and were

equipped to negotiate and respond to the cultural differences between the White European and Chinese participants. Cultural responsiveness in the research process was facilitated in part by: maintaining consistent dialogue with the majority of participants in their first language (e.g., regular phone calls, email updates, feedback sessions) and ensuring all research materials were in available both Chinese and English. Additionally, workshops and other research events were also held in both languages. This process enabled participants' longevity in the project since many of the participants were of Chinese origin. Older Chinese participants generally felt that they were adequately represented, their voices were heard, and their perspectives were considered and prioritised the same as White European participants.

Despite notable caveats, the use of CBPR helped ensure that the older adults, as well as the professional and community stakeholders who took part in this partnership, understood that their presence was valued, that their diverse expertise and experiential knowledge was recognised, and their power, was enabled so that they could contribute as joint decision-makers. The democratisation of partnership was accomplished by collaborative working through CBPR. This was evident in terms of both structure and process that challenged traditional power imbalances and created opportunities to include conjoined efforts towards ageing in the right place.

There is value in ensuring that the ideas, knowledge and solutions generated through the co-creation process are reflective of the everyday realities of older adults. This can be achieved through the application of a critical analytical perspective. Thus, the following section presents a theoretical discussion of the research that resulted in the development of an intersectional place perspective.

3.3 Theoretical Perspectives for Ageing in the Right Place

Aligned with the research presented here, across the life-course, individuals are continuously relocating homes, reintegrating with places and renegotiating meanings, identities and resources that the new environment affords (Andrews et al., 2007). This all-encompassing person-place unity occurs amidst fluctuating social (i.e., norms, values, expectations); political (i.e., leadership, power, influence, authority); and cultural (i.e., influx of new cultural beliefs and practices as a product of migration) landscapes. Importantly, consideration for the multi-layered aspects of place that shape ageing in the right place requires a theoretical perspective that encapsulates varying individual,

community and structural factors. This includes the individual's identi(ties), positionalit(ies), and experiences of oppression and opportunities across time and place.

The following subsections present the development of, and opportunities to progress an intersectional framework that served as an analytical resource to expose and analyse dynamic socio-societal and cultural facets of place. These informed the development of housing solutions to support older adults to age well in the right place.

3.3.1 Integrating Theories and Concepts of Intersectionality and Place

Intersectionality describes an analytic perspective and framework that recognises individuals as situated in multiple social categories that interlock to shape their social identities, positionalities, life experiences, and opportunities (Johnson et al., 2012); and, within the context of urban studies, experiences of place. First coined by Crenshaw (1995), the concept of intersectionality stems from a social justice context with the aim of foregrounding power relations and prioritising previously disregarded populations in research, programming and policy (Hankivsky and Cormier, 2011). Although Crenshaw's work was a key component in the emergence of intersectionality, the ideas and concepts of this paradigm precede her work and have since established new roots by Black activists and feminists, as well as Latina, postcolonial, queer and Indigenous scholars (Hankivsky, 2014). Notably, Black, Indigenous and postcolonial scholars were responsible for cultivating this influential perspective based on their critique of approaches that addressed social inequities based on singular categories of *race* or *gender*, to the exclusion of other social categories such as age, class, nationality and ability (Airhihenbuwa, 2007; Phoenix, 2009; Kobayashi and Prus, 2011; Dhamoon, 2011; de Leeuw and Greenwood, 2011). This *essentialising* (Narayan, 1998) approach, in that some groups are viewed as homogenous with distinct characteristics, was perceived as limiting and harmful as it privileged the interests of primarily White, heterosexual, middle class persons above the experiences and realities of individuals whose lives were deeply affected by racism, homophobia, poverty, and class discrimination (Narayan, 1998).

However, since Crenshaw's (1995) research, intersectionality has developed beyond notions of gender and race to encompass other social markers such as class, religion, age, etc. (Hankivsky, 2014). Intersectional analysis can be as simple as examining whether age differences operate in the same way for women as opposed to men in determining, for

example, access to housing or can be as complex as analysing multiple social dimensions, which intersect to shape experiences of inequality (Sen et al., 2009). Past, and arguably more recent, critiques of intersectionality as a theoretical framework include: (i) the lack of a clearly defined method (Nash, 2008); the difficulties in adapting intersectional theory to quantitative research i.e. to capture the additive versus multiplicative of social variables (Veenstra, 2011); (ii) the uncertainties of determining which intersections are relevant and at what time; (iii) the omission of structural and systemic issues; and (iv) the complexities of ascertaining a range of data which adequately capture the various social determinants of health (such as age, gender, sexuality education, and disability, etc.). Despite these challenges, there is literature which finds that ignoring intersectionality in research "has significant human costs" (Iyer et al., 2008, p.13), in terms of both morbidity and mortality associated with health disparities.

Intersectional analysis has both drawn from and shaped similar methodological approaches particularly in women's health such as the well-established sex and gender based analysis (Doull et al., 2010), community-focused approaches (Creese and Frisby, 2011), and Indigenous methodologies i.e. integrating tribal knowledge and decolonising theory (Hankivsky, 2011). Yet, it is distinct in "how it conceptualises social identity or categories of difference; by how it places power and the complexity of processes of domination and subordination at the centre of analysis; and by how its main objective is the pursuit of social justice through intersectoral and counterintuitive coalitions" (Hankivsky et al., 2009, p.10). Poorly articulated within intersectionality is the idea of *place*, since place can be conceptualised as a structural barrier creating a locus of experiences of inequity, power and privilege (see paper four).

For decades, place theories have shaped developments in environmental psychology, human geography and population, and public health to progress understandings of the human condition in their built surroundings (Tuan, 1977; Relph, 1976; Proshansky et al. 1983; Sixsmith, 1986; Twigger-Ross and Uzzell, 1996; Devine-Wright and Lyons, 1997; Dixon and Durrheim, 2000). Place attachment is a key concept in place theory that emphasises the emotional connections people have with their environment, and is frequently used to inform the planning and development of public spaces (Kyle et al., 2005; Moore and Graefe, 1994; Williams and Stewart, 1998). Described as the psychological and emotional bonds that individuals develop with places (Low and Altman, 1992; Williams et al., 1992; Hidalgo and Hernandez, 2001; Giuliani, 2003;

Manzo and Perkins, 2006), place attachment explains that through developing symbolic meaning in architectural design and physical traits of place, and sensory awareness of different spaces and relationships in shared environments, our human connection to places emerges (Stedman, 2003). Individuals may feel attached to a place, however, to embody place as an identity requires time to establish roots (Tuan, 1977).

According to Oswald and Wahl (2003), and as argued in this thesis, there is a need for a life-course perspective when conceptualising place. This is because in order to formulate meaningful bonds, ongoing interactions between a person and his or her environment are required over time. Such interactions include engaging in everyday routines (Sixsmith and Sixsmith, 2008), establishing territoriality (Pascual-de-Sans, 2004), generating symbolic representations in place (Gustafson, 2001), and creating place memories (Lewicka, 2008).

From a Gerontology perspective, as people age, the number of place experiences increase and memories of home and community remain important (Oswald and Wahl, 2003). The literature centralises home as the most favourable place for older adults to live out their lives (Canham et al., 2017), yet as highlighted in paper four, older adults experience place transitions during the lifetime, either voluntarily, or enforced by circumstance. To understand the impact of transitional place experiences, it is important that we capture and explore place histories to better understand unique meanings of place, identity and attachment to place that are a part of older adults. This requires an analytical perspective that centralises experiences of marginalisation (Hooks, 2000), and considers the psychosocial, cultural and structural factors of place that shape individual agency across time.

Building on Collins' (2000) conceptualisation of intersectionality, viewed as interweaving multiple systems of oppression that are organised by interrelated domains of power, the multidimensional intersectionality framework (MIF) contends that various types of oppression are not only interrelated, but present interlocking dimensions of differentiation used to dominate and exclude those that diverge from normativity. MIF is predicated on the notion that people construct meaning through the various and multiple identities that they hold, the different and changing social positionalities they occupy, the multifarious oppressions they face as well as the opportunities that are presented, as they negotiate their everyday lives.

In progressing notions of MIF, it is important to highlight that these interweaving dimensions of differentiation coalesce to create a system that drives multiple configurations of inequity and privilege across the life course. Hence, although the MIF was particularly well-suited to explore older adults' experiences of marginalisation and opportunity (see paper four), notions of MIF can be further developed to interpret the varying social and cultural factors that shape inequity and opportunity throughout place and time. For example, the analysis in paper four reveals how ethnicity, gender, age, and class amongst other characteristics conjoin as dimensions of identit(ies) and positionalit(ies) to shape experiences of oppression and opportunity during a single place transition event. There are pointed questions to be considered in this examination such as: How does a person's identit(ies) and positionalit(ies) shift and fluctuate across places and different temporal locations?; How does living in different places, amidst varying socio-societal and cultural norms, beliefs, values and other influences, shape current experiences of place?; and, How does it contribute to older adults' ability to wield agency within place amidst structural constraints?

To meaningfully attend to these questions, paper five introduces the use of storytelling as a research mechanism applied to conduct further inquiries into older adults' place histories, which are shaped by identit(ies), positionalit(ies) amidst place transitions at various points in time. The goal here was to further explore the place histories of older adults and to use the analysis to inform the progression of the critical analytical ability of MIF thereby bringing together key theoretical concepts from feminist research and urban studies to devise a new theoretical framework.

Recently developed, and yet to be published, is an intersectional place concept entitled the Intersectional Dimensions of Differentiation Place Perspective (IDDPP) (Fang, Sixsmith, and Woolrych, Forthcoming). The IDDPP merges key concepts of place theory together with intersectional feminism to propagate an analytical model informed by a life-course perspective that can help reveal socially determined and socially centred processes operationalised at the intersection of multiple identit(ies) and positionalit(ies) across place and time. This theoretical progression is important for developing conceptualisations of ageing-in-place because beyond notions of place attachment, as seen in the work of McAndrew (1998), there are no analytical perspectives that effectively conjoin place attachment and social theory for an in-depth exploration of marginalisation. Illustrated below is my suggested formulation of the IDDPP (figure 3.10), amalgamating Scannell

and Gifford's three-dimensional framework of place attachment (figure 3.8), which emphasises temporality and environment with tenets and assumptions of intersectionality highlighted in the MIF (figure 3.9). The IDDPP offers a progression towards developing ageing in the right place.
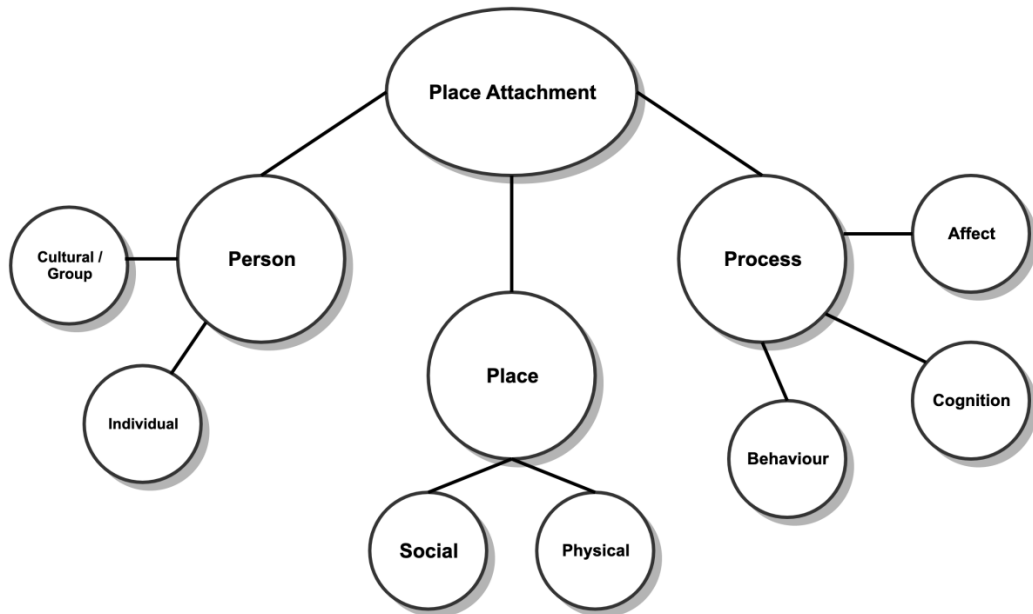

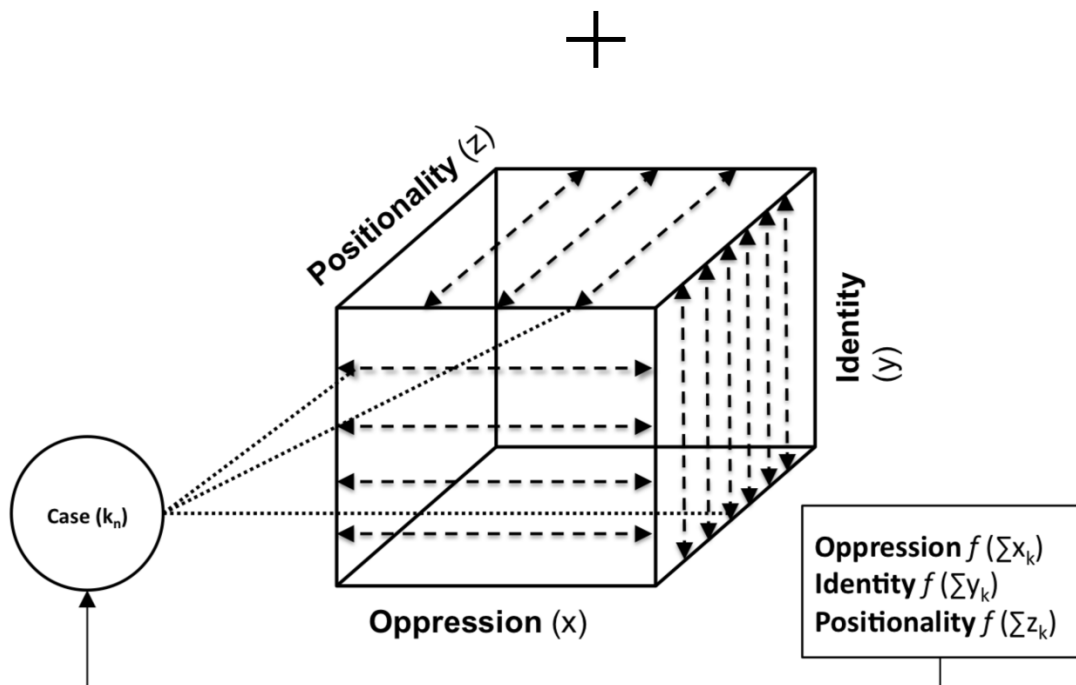**Figure 3.8**. The tri-partite model of place attachment.

Figure 3.9. Framework for a Multidimensional Intersectionality Analysis.
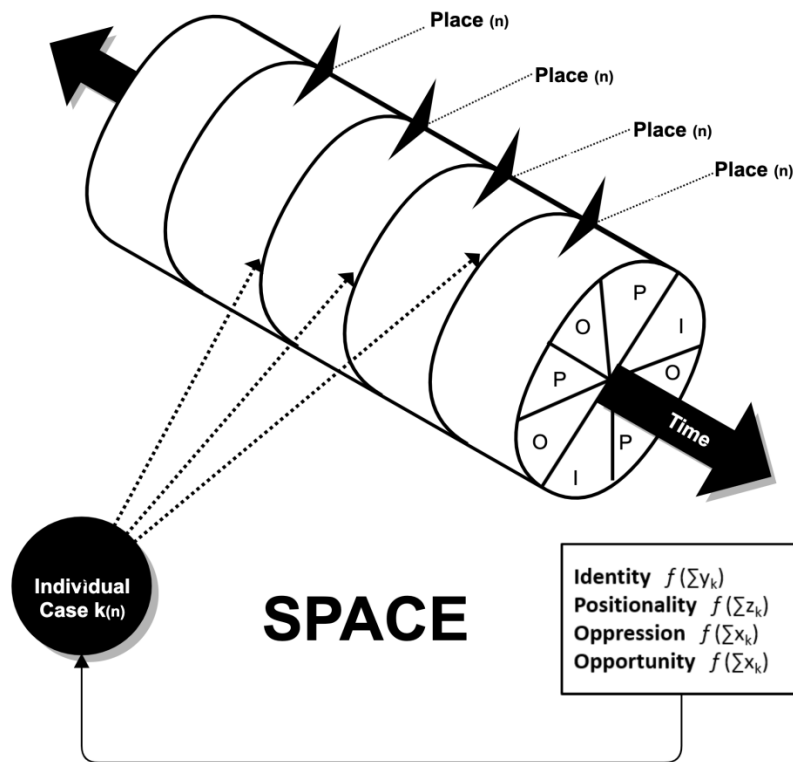
Figure 3.10. Illustrates an intersectional place perspective entitled the Intersectional Dimensions of Differentiation Place Perspective (IDDPP).

The subsection that follows, examines how inter-connected, migratory experiences over a lifetime can shape sense-of-place in the present.

3.3.1 Importance of Migration, History and Place

Throughout the life course, individuals may encounter several migratory experiences in different places, not all of which carry the same meaning and significance (Ferrer et al., 2017). According to Rowles (1983), there are places that create deeper emotional connection than others. His notion of autobiographic *insideness* is a sense-of-place developed over time, shaped by memory and history, familiarity of place and routine, and most importantly, the relationships established within place (Rowles, 1983; Lindely and Wallace, 2015). Some people believe that it is *the people that make the place* and thrive on building social connections and creating networks of relationships (Szreter and Woolcock, 2004). Yet, places also serve as facilitators for bridging social connections as well as maintaining old and establishing new traditions with those individuals that surround a person. However, one critique of *insideness* is that it fails to explain *how* places link individuals and groups and *how* such changes occur over time (Devine-Wright and Lyons, 1997).

According to Pascual-de-Sans (2004, p.350), migration is viewed "as a sequence of movements that are linked to each other by periods of settlement in spaces of relationships, in socially-constructed places." Establishing permanence and settlement in a new place requires consideration for the built or physical features of place (Relph, 1976), alongside the necessary social and emotional bonding to place also known as rooting or rootedness (Tuan, 1977). Both are shaped by pre-arrival histories (Fang et al., 2015), and simultaneously impact post-arrival successes and challenges. There are factors that make relocation easier, for example wealth, transferrable social status, established social support networks and/or prior knowledge of the place. As well, others make it more challenging, for example, pre-arrival experiences of hardship and trauma, poverty, lack of familiarity, and family ties.

To understand the complexities of relocation experiences, there are required explorations into cultural and socio-societal factors that shape experiences of place. These should also include past migration histories (Fang et al., 2015; Ferrer et al., 2017). Currently, there are no empirical studies examining place-based histories and the impact on the everyday lives of older adults. Pascual de Sans (2004), provides an exploratory text on the subject and an essay on methodology with an analysis of place history. However, to progress this work and to build theoretical context to include fluctuating experiences across different social and cultural contexts, this section will focus on how the intersectional framework (i.e., MIF), presented in paper four, can be expanded to: (1) improve our understanding of sense-of-place across place transitions; and, (2) inform how we can better support older adults to age in the right place.

Often, migration disrupts the social and relational aspects of place, leaving details of such disruptions imprinted into our minds as we transition from place to place. However, the particulars can be revealed through the prompting of important place memories (Lewicka, 2008). For example, in the case of Mrs. Smith (see paper four), storytelling was used to help stimulate her past intersectional experiences of place, as she described growing up on a farm on Canada's east coast. Upon her move to Richmond, BC, which was a rural landscape in the 1960s, she viewed that space as having important place characteristics that represented *home*, because of her upbringing on a farm. However, rapid urbanisation and migration took hold in the late 1980s. Richmond's quaint countryside features had eroded in the process, gradually replaced by concrete buildings. This left Mrs. Smith feeling lost and displaced. In this example, environmental features that constituted the

same place across a different period triggered memories of comfort and home, but simultaneously represented experiences of forced displacement, which induced a sense of *placelessness* (Relph, 1976). Placelessness can be experienced through "the re-development or regeneration of 'home' community or town or city" (Phillips et al., 2011, p.75). Thus, in the case of Mrs. Smith, who was shaped by social, cultural and environmental regeneration over time, her place identity had transitioned from a place of empowerment upon her initial move to Richmond to a present place of marginalisation. Using an intersectional place perspective to explore the continuum of sense of place experiences (Fullilove and Wallace, 2011), helped reveal the migratory processes and subsequent changes to place that determined opportunity and oppression within place for Mrs. Smith.

According to Cardelus et al. (1999, p.123), migration is "a complex mechanism by which populations adjust to the social organisation of space." Pascual-de-Sans (2004) explains this as an aspect of place history shaped by the various interactions with places over time. It could be argued, as well that, first, migratory place experiences are solidified not only through interaction with places alone, but also through continuous interactions with individuals in places across time; and second, the social organisation of spaces are also influenced by the systems that can constrain them. Therefore, they can change according to the sociocultural norms that dominate that space. However, realising opportunity and oppression amidst complex social hierarchies and systems that govern different spaces can seem inconsequential and not fully recognised. For instance, in the case of Mrs. Smith, she also tells the story of how experiences of gender constraints at an early age (i.e., women were not allowed in certain social places and spaces) had driven her to live a nomadic lifestyle and, in her mind, this freed her from a gendered system of restrictions. Yet, living in a constant state of 'migration' placed her in dangerous situations where she experienced inappropriate and threatening advancements from men because she travelled alone with her female friend. However, through unpacking person-place interactions across different place-time locations such as using an intersectional place perspective, sparked the realisation that the gendered system that had previously limited her agency is also what afforded her protection during that sociocultural time and space. Thus, the process of adjusting to the different social organisation of spaces can be complicated. Often, the opportunities afforded and the constraints of these spaces are not immediately realised without an appropriate theoretical lens to guide us.

Nevertheless, to enhance our understandings of how people interact with, experience and appropriate place, it is important that we attempt to learn and understand the socio-societal and cultural context of their place histories (Lim, 2010). Tuan (1977) argues that the process of ascertaining place-histories provides an interstitial cultural space for learning, engaging, and making sense of place from the perspective of those with lived experience. Hence, as researchers, it is important to capture the meaning and significance of place. This can be accomplished by unravelling individual place identities while at the same time being aware of the everyday activities that create place memories that are actively connecting the individual's past with her or his present. Currently, there are no theoretical frameworks that encompass all the necessary components to fully capture place identities and an ongoing individual's past/present identity making. Therefore, as argued, a key contribution of this thesis is the progression of theory development through the integration of place and time together with components of intersectional theory to enable a better understanding of one's agency across time and place. The conjoining of intersectional perspectives with notions of place can help reveal how social identities and positionalities, in shaping of opportunity and oppression, operate across place and time. The next sections link these theoretical developments with methods used to capture older adults' experiences of empowerment and of marginalisation.

3.4 Methodological Complexity: Collaborative, Visual and Narrative Methods

The key tenets of MIF and IDDPP align well with the assumptions of CBPR. Both analytical perspectives aim to address marginalisation by forefronting notions of equity, social justice and inclusivity. CBPR principles were engrained in the place-making research to ensure that seldom heard voices were heard and responded to through collaborative action across diverse stakeholders. Notions of intersectional perspectives combined with concepts from place theories informed the purposive selection and implementation of methods guided by the CBPR philosophy. To meaningfully capture the data and sufficiently address the research questions, specific collaborative, visual, and narrative methods were selected and applied.

In the next sections, methods of deliberative dialogue, participatory mapping, community walk along, storytelling, and photo tour methods are discussed.

3.4.1 Collaborative Methods

Within the CBPR approach are collaborative methods that have been used to facilitate partnership working through systematic inquiry, *especially with those affected by the issue being studied*, to co-create solutions that address social and/or health-related challenges via action-oriented change (Green et al., 1995). A key strength of CBPR is the "integration of researchers' theoretical and methodological expertise with non-academic participants' real-world knowledge and experiences into a mutually reinforcing partnership" (Cargo and Mercer, 2008, p.327). However, to achieve this requires a considerable amount of planning, coordination, organisation, communication as well as dedicated time, resources and effort by all stakeholders. Creating successful partnership working at the outset can help ensure more effective implementation of methods to acquire rich data and generate shared solutions. In this section, three methods applied to facilitate partnership working in the research are discussed and critiqued: deliberative dialogue, participatory mapping and community walk alongs.

Deliberative dialogue is a method, see paper two, used to generate open, informal discussion on specific topic areas with a range of individuals who have different backgrounds (e.g., professional or educational) and unique interests (e.g., serving the community or generating profit). This method is different from other public discourse techniques (e.g., debating, negotiating, ideas mapping, and generating consensus). The structure of the dialogue sessions provided space for concurrently generating and analysing data, engaging participants and synthesising knowledge and information with the end goal of establishing a set of actionable tasks (Plamondon et al., 2015).

Utilised along with the principles of CBPR, deliberative dialogue was used to solidify partnerships early on in the project by ensuring that the needs, desires and expectations of community and professional stakeholders, who serve older adults living in the community, were heard and responded to. A key principle of CBPR is to valorise the knowledges and perspectives of the participants or the population of focus in this case older adults (Kesby, 2000). Noteworthy is that often the voices of other important stakeholders such as individuals that provide essential services, e.g., housing, health, social care, are inadvertently left out of the process. For this redevelopment project, the participation of those who serviced the needs of older adults was foregrounded in the redevelopment initiative. This initiative aimed to use community-driven research to

ensure the best use of the shared amenity spaces for sustaining optimal health of older adult tenants by bringing in no-cost or low-cost services and activities.

Deliberative dialogue has been seen as a method that facilitates research with action through "a joint endeavour where egalitarian partners, through conversation, search for true understanding and knowledge" (Kvale, 2006, p.483). This was demonstrated in paper two, where a clearer understanding of the challenges, needs and expectations of local service providers, when providing services to older adults, was revealed through purposeful conversations whereby participants collectively created new understandings of the problem area (Plamondon et al., 2015). Key discussion points thus informed actions that enabled the developer, housing society and municipal government bodies, who were also present in the discussions, to better accommodate, plan and establish in-house servicing provisions for older adults.

When creating research through action, researchers require procedures that can facilitate engagement across a diversity of stakeholder groups (Bowen and Graham, 2013). Inspired by the research of Freire (1990), which promotes joint integration and transfer of expertise in addition to inclusive participation and shared decision-making power, the deliberative dialogue process encouraged participants to express, examine, and extend their collective understandings. This enabled mutual recognition of the complexity of issues associated with the transitioning, re-integrating and readjustment of older adults into affordable housing. It also resulted in deliberate conversations across 24 public non-profit stakeholders, e.g., local social service providers and municipal government employees. This, in turn, led to opportunities and actions for enhancing social interaction and improving wellness programming in shared amenity spaces. Private and for-profit stakeholders, such as the building developer, were also included in these sessions that ensured that any physical building related aspects of the project influencing service provision could be addressed simultaneously. These aspects included space issues, by-laws and parking.

Institutionalisation, according to Goffman's research (1961), as performed by people relies on having a *stage*, such as environmental, social, cultural structures, which shape spaces such as lecture rooms and board rooms. As well, people rely on *props*, such as suits, laptops, and briefcases to uphold socio-normative identities that allow membership and enable participation in particular spaces. Both stage and props work in tandem to

retain social position and maintain power and dominance in institutional settings (Goffman, 1961). An important strength of the deliberative dialogue method is its ability to disrupt traditional cooperative social agreements by stripping the technical, logistical rituals and supports used to buttress dominant forms of engagement structures. For example, changing the orientation of where people stood and sat, not assigning a meeting chair or designating a note taker to record meeting minutes altered the conventional setting for negotiating decision-making. These forced individuals who normally led the discussions to relinquish some of their power and to readjust their mode of engagement. The informal structure of the dialogue sessions, therefore, introduced a sense of power equilibrium to the table, as any expected posturing, reinforced by more formalised and structured meeting settings, was minimised by disruptions to corporate normative forms of engagement.

Yet despite being accessible, practical, community-focused and action-oriented, the formalities of implementing this method had challenges. When implementing collaborative methods in general, there are difficulties associated with a lack of appreciation for and the enactment of transdisciplinary working (Grigorovich et al., 2019). This is particularly the case when multiple interests and agendas exist across stakeholders of varying socioeconomic positions when attempting to make decisions for the greater good. Often, it can be difficult to maintain a *veil of ignorance* when the appearance of elevated socioeconomic positioning, such as education and occupation, is perceived by the group to be a key indication of ability and expertise (Rawls, 1971). As such, individuals will unconsciously look to their socioeconomic position as a means to steer decision-making processes (Rawls, 1971). For example, some knowledges and expertise were consistently prioritised over others despite efforts to minimise the formal, corporate nature of the discussion and decision-making environment through the deliberative dialogue process. As a result, some stakeholders were still perceived as more knowledgeable or powerful than others simply by their positionality, such as being Canadian educated with a strong ability to articulate opinions and suggestions in English and holding some form of leadership in the community, or role on the project such as developer, building manager, or working for a municipal government body. Meanwhile, individuals who felt less secure about their knowledge or expertise and their ability to communicate these were less vocal and often deferred their opinions to others for direction. This likely stems from a lack of recognition for informal learning and knowledge as a form of expertise. As well, because the majority of stakeholders viewed

the project as a *building development venture* rather than as a *community redevelopment initiative*, urban planning, architecture and development topics frequently dominated the discussions.

There was also an expectation of action-oriented change at the end of the deliberative dialogue sessions. Although this was the goal the outcome of the sessions resulted more in the *exchange of ideas* rather than the *execution of actionable items*. This is often the case in research where often more ideas are generated rather than real world change. The lack of immediate action created concern among housing and service providers. The concern might be explained by the quick turnaround that is a necessary and normalised part of frontline work such as health providers servicing the community and social service providers implementing new programs and making programmatic changes. Consequently, there is an inherent expectation that tangible change should also be immediate in research. For example, while there were lots of ideas generated for in-house social programming, actual implementation and sustainability were challenged by the lack of financial resources. Although solutions, such as developing a voluntary tenants' board and fundraising to hire a program coordinator, were offered there were no dedicated commitments made.   Instead, the onus was placed directly on the researchers to implement these actions. This was neither feasible nor appropriate, and, was a key limitation identified in paper two, whereby expectations across stakeholders were not appropriately managed. Nevertheless, one of the goals of the dialogue sessions was to engage and gain commitment from all of the stakeholders to joining the research process. At the start of the research, the dialogue sessions were an entry point for stakeholders to participate. The sessions provided an opportunity to commit to co-creation aspects of the project such as the participatory mapping workshops that involved map making exercises and a community walk along.

As discussed in paper three, participatory mapping is a method that stems from Participatory Rural Appraisal, an approach developed in the 1980s to develop deeper understandings of the everyday experiences of people that lived a rural life (Chambers, 1994). This approach comprised methods, Chambers (1994, p.1) noted, which "enable local people to share, enhance and analyse their knowledge of life and conditions to plan and act." Participatory mapping is also known for its alignment with CBPR or *activist participatory research* that stems from earlier works of Freire (1968). In his research on the pedagogy of the oppressed, Freire maintained that community members have the

knowledge and expertise to self-actualise and determine their own reality. This intellectual movement has been widely influential despite remaining a minority view among industry professionals. It has also resulted in a constellation of approaches and methods that strive to enhance "people's awareness and confidence, and to empower their action" (Chambers, 1994, p.3).

In terms of real-world applications, a key strength of participatory mapping is the accessibility and inter-activeness of the process itself. It is informed by Indigenous traditions and practices such as: drawing; diagramming; recovery of place-history; valuing and applying folk culture; collective working; family meetings; socio-dramas; and the production and diffusion of new knowledges that are transmitted through written, oral and visual forms including systematic walks and observation (Cornwall et al., 1993). Thus, to mobilise the required actions and changes necessary for rebuilding the community for older adults, which are determined via deliberative dialogue, a series of co-creation mapping exercises alongside community walk along were conducted. Older adults together with local service providers and members of the municipal government participated in four participatory mapping workshops.

For the map-making exercise, large aerial maps displaying the housing development and surrounding neighbourhood were made available to the participants where they interactively and collectively identified locally available services and resources. Participants annotated the maps with perceived service gaps and desires for other service needs that would support them to age well in place. These annotations were effective in that the visualisation, mapping and discussion process encouraged any person with little or no expertise in planning or design to participate. Because this activity was hosted in the local community, the participatory mapping workshops were led by both older adults as well as community service providers, which helped ground housing solutions in local knowledge that were produced by and with all local stakeholders. As a result, the elitism that often surrounds the traditional academic data collection process was minimised.

Despite the effectiveness of maps to enhance inclusivity and balance power differentials through Indigenous problem-solving techniques and practices (Cornwall et al., 1993), more recent Eurocentric development and use of maps have been critiqued as in and of themselves as being re-enforcers of disproportionate power dynamics (Wood, 2010). To address the view that the maps may be less accessible to some than others, the research

facilitators provided a detailed explanation in English, Mandarin and Cantonese. It addressed the purpose of the mapping exercise; what the map represented; and how it can be used advantageously to communicate the gaps in current community spaces. The research facilitators added what their hopes and desires were in creating a community that will enable positive ageing-in-place. In an effort to capture in-depth experiences of place, the research facilitators also encouraged the older adult participants to situate their own knowledge and experiences relative to the map by prompting the recovery of important place histories such as past experiences of hardship due to service gaps; housing challenges; social isolation; and, opportunities for health and well-being.

During the mapping exercise, the recovery of past and present place challenges unexpectedly created some disagreement across stakeholders. For instance, internal community conflicts surfaced as stakeholders debated over *whom* the services were created for and *who* the service providers prioritised — that is, Chinese migrants versus Canadian born citizens. It is important to reiterate that historically in the post-colonisation era, Metro Vancouver's population was of 90–95% White European descent. Since the late 1970s the city gradually experienced an increased fluctuation in migrant groups, mainly individuals from Hong Kong and China. Naturally, the city evolved as signage, food, amenities, building design and structure as well as various services, such as social, health, grocery, and hospitality, etc., grew both more culturally tailored and responsive to the needs of the dominant cultural group, which were of Chinese origin. For older adult participants who were native to western practices, beliefs and values, the notion of having increasingly more bilingual, culturally tailored services was perceived by some as threatening to their own cultural needs.

Thus, even though the maps and the mapping process served its purpose of generating input, discussion and debate across a diversity of groups, the emotions that arose signaled that the power dynamic was neither neutral nor did it become unproblematic. This was highlighted by the fact that some older adults felt empowered by the process and the discussions and actions that ensued while others felt disempowered. Such a difference in experiences from a process that was designed to facilitate inclusivity and collaboration appeared to be influenced by the older adults' social position and cultural background, which shaped their understandings of what is available and what might be possible in their own community and whether this was fair or unfair or just or unjust. Essentially, the maps became a token of power (Harley, 1989). Those who felt more control over the

maps and the discussions that had emerged also felt that they had benefitted more from the map-making process because they were able to have the most influence in the resultant outcomes.

For some, the practical map-making aspect was perceived *as not useful* because the top-down aerial view of the maps did not necessarily coincide with how older adults perceived the community at street level. However, once the community walk along aspect of the workshop was introduced more people became involved and thus created further opportunities for discussion. The community walk along was another related method adding a further visual dimension to the participatory mapping exercise. Known as a *go along* interview, researchers accompanied individual informants on a participant-led tour of their immediate environments such as local neighbourhoods (Carpiano, 2009). In addition to identifying significant features on a map, the necessary supports and services required for older adults to age well in a new community, groups of older adults led the service providers and members of the municipal government on a tour of their neighbourhood, and their new homes. During the walk along, which consisted of 30–40 people, the older adults identified places that were important to them such as the older adults' centre, library and park. They also discussed any key physical challenges that surrounded the built environment such as the need for traffic lights adjacent to the building, more parking, fair distribution of designated space for community gardening.

The community walk along method has been demonstrated, in the literature, to be crucial for enabling seldom heard voices (Gaventa, 1982). For example, through the process of this participant-led technique, Appalachian communities gained confidence in their own unique knowledge and abilities, and were empowered to take control of their lives through community mobilisation, participation and political action (Gaventa, 1982). The idea of standing together is also reminiscent of several social movements inspired by Lefebvre's urge for urban transformation through the collective power of local citizens to enact their *rights to the city* (Lefebvre, 1966). Similarly, the empowerment of older adults of low-incomes to lead the community walk along and to add their observations and discussions to this research was a positive disruption of the traditional power dynamics between the researcher and the participant. Aligned with principles from CBPR this was a key strength of the community walk along method. Another, more practical benefit of the walk along method was that it created an opportunity for physical, social engagement activity, as sitting at a table restricted people from physically reaching parts

of the map they were concerned about. Additionally, it created a barrier for social engagement with others from different tables.

Nevertheless, the community walk along method is not without limitations. High-level stakeholders, such as government workers and service providers, as well as those individuals who were more familiar with the neighbouring area, found the walk along to be futile as they expressed not having gained new insights from the process. Furthermore, older adults with some mobility challenges did not wish to participate. This created an added ethical challenge as these older adults remained in the space where the workshops were held, which meant that their voices were not as well represented. Finally, due to the sheer size of the group it was difficult to explore the more in-depth sensory aspects of place and memories associated with place even though there was one researcher available for every 10 participants.

To summarise, collaborative methods to facilitate transdisciplinary working enabled the development of new relationships and partnerships for the research project. This helped enhance recruitment and participation of harder-to-reach populations, such as older adults. The use of collaborative methods also facilitated opportunities for knowledge input and generation by individuals who typically would be excluded from the research process, as often the knowledge production via traditional methods use less accessible formats for some groups of people. For example, online surveys requiring technology devices and applications completed individually with little or no support. Although partnership building methods helped generate important partnerships and practical solutions towards positive ageing in the right place, they are not as effective for generating more in-depth nuanced information to contextualise the problem area. The next subsections discuss how narrative and visual methods can bridge this gap.

3.4.2 Narrative Inquiry Methods

Descriptive, text-rich story-based methods are techniques used in narrative inquiry. Narrative inquiry is an approach that enables researchers to understand participants' experiences according to how they live them via time, space and personal relationships (Clandinin and Connelly, 2000). As discussed in paper five, this generated a three-dimensional level of inquiry through temporal, spatial and relational dimensions (Caine, 2010). To further this point, it should be noted that place is another dimension that shapes individuals' experiences and how individuals understand, perceive and identify

themselves because people formulate bonds with their environment through attaching meanings to place (Devine-Wright and Lyons, 1997). Place identity is subsequently solidified through engaging in various activities, and assuming roles and responsibilities and abiding by the social rules that are gradually developed within place over time (Devine-Wright and Lyons, 1997). Therefore, by incorporating place as another dimension, a four-dimensional mode of inquiry was enabled for the research. The Intersectional Dimensions of Differentiation Place Perspective (IDDPP) (see figure 3.10) was important for understanding the complex realities of forced relocation experiences across the life course. Specific narrative inquiry methods, for example in-depth interviewing and storytelling, were implemented to facilitate a four-dimensional mode of inquiry (i.e., IDDPP). In-depth interviewing and storytelling were purposively selected for their reflexive features. These features were believed to have helped participants realise their intersectional place experiences.

Rooted in qualitative research traditions, qualitative methods have "a common epistemological ground: the researcher determination to minimise the distance and separateness of researcher–participant relationships'' (Karnieli-Miller et al., 2009, p.279). In-depth interviewing is known as one type of discovery-oriented qualitative method (Guion et al., 2011). In-depth interviewing was applied in the study as the first set of narrative inquiries. They were to, first, acquaint the researcher and participants with one another. Second, they were to enable the researcher to gather initial impressions or understandings of the problem area. For instance, in-depth interviews were conducted prior to the tenants moving into the new build that generated rich information that surrounded feelings of forced relocation, hardships associated with finding temporary homes and the moving process, fears around financial instability, as well as optimistic desires, hopes and expectations for their new homes. Through this initial form of narrative inquiry, trust and rapport had been built between the researcher and the participant, as prior to the research no other person had taken the time to meaningfully inquire as to how the older adults had felt.

It is important to note that in most qualitative research encounters, the researcher is not the sole benefactor or person holding the privilege because participants often bring their own agenda to the situation (Råheim et al., 2016). For example, during the in-depth interviews, the majority of participants perceived the Lead Researcher as a gateway person to communicate their demands for their new homes to the developer, housing

society and building manager. These demands included free Wi-Fi, extra storage space, more parking, in-house social activities, personal laundry facilities, multilingual caretakers, etc. Thus, many of these demands were later responded to and actioned. As a result, the Lead Researcher's status in the eyes of the older adults became elevated as the Lead Researcher became an ally or confidant. However, this status was not without difficulties because not all demands could be met and, therefore, dedicated efforts were made to manage expectations at the cost of lost time and loss of trust.

According to Brinkmann and Kvale (2005) empathy, care and prioritisation of empowerment to gain trust of the participants through qualitative interviewing may hide hidden power imbalances. This is evidenced by Råheim et al. (2016, p.5) who stated that the "researcher's dependence on the trust of participants to get their stories can indicate that the dialogue taking place is used as a strategic instrument that works as a cover for the exercise of research-related power." Consequently, though in-depth interviewing was useful for establishing initial research engagement and trust, it was important to consider the underlying power imbalances that still existed as a part of the process. In particular, the question and answer format created a barrier for bi-directional information sharing and co-construction. Hence, it was important to subsequently employ the storytelling method that operated on the mutual exchange of knowledge and knowledge co-creation.

According to Bruner (1990), individuals construct the world through stories. Therefore, storytelling is a method that can be valuable for acquiring deeper understandings of ourselves and our everyday lives. For example, Tuan (1991, pp.684–685) argues that verbal processes via storytelling are particularly useful for understanding and explaining the "physical motions that produce place without overhearing, as it were, the speech — the exchange of words behind them." Tuan and other place scholars believed that using narrative inquiry to uncover the all-encompassing phenomenology of being-in-place can be achieved through storytelling; and by exchanging stories, we can learn about how older adults construct their sense of self and how they attach meanings to place (Relph, 1976; Tuan, 1977; Polkinghorne, 1988; Bruner, 1990).

In place research, it has been shown that the mutual sharing of stories between the researcher and the researched can offer researchers the opportunity to ascertain richer and more complex understandings of participants' experiences through the co-creation of new perspectives and knowledge (Keats, 2009). As Sarbin (1983) has observed, the process

of sharing personal stories can enable individuals to connect relationships and activities in physical and metaphysical place settings, which can thus shape their place identity. In the Place-making with Seniors project, storytelling was a useful technique for triggering past experiences of place used to stimulate place memories in the research to understand how older adult's sense of place had been shaped by their migration experiences. For example, storytelling helped older migrants to reflect on their shared experiences of the Chinese Cultural Revolution. This storytelling emphasised: the relationships that had emerged during their time of exile in rural China; the activities that they were forced undertake together; and how the inter-connectivity between being forced to live, work and relate to one another on a day-to-day basis, such as on a farm, had shaped their post-migration identities. They came to see themselves in roles such as survivor, hard worker, and loner. Importantly, the depth of the stories only revealed itself when the Lead Researcher had shared her father's experiences of the Cultural Revolution. This included how the father was also forced to relocate out of Shanghai to undertake hard manual farm labour and was banned from returning to the city for eight years. The act of story-sharing can thus transport an individual into the past by triggering replaying memories through the exchange of narratives, which can subsequently enable the linking of a multitude of established meanings and identities associated with a particular time and place (Taylor, 2003).

Overall, in recognition of the power differentials that can exist between the researcher and the participant, the storytelling method was determined to be well suited to gather both past and present as well as in-depth stories that participants often considered shameful and traumatic. This was primarily because the format is unstructured and participant-led, which allowed a shifting of power from researcher to the researched. As well, to adequately address the research questions, a robust application of theory was required. Hence, it was necessary to use a method that was welcoming and accessible. The method thus had to be understandable to the older adults who participated. As well, it had to be robust enough to obtain nuanced data that were derived from a complex theoretical framework as embodied in MIF and IDDPP. The data elicited had to make visible interlocking social identities, positionalities, experiences and oppressions across time and place. Thus, the method had to be straight forward, but capable of immense complexity.

Narrative methods historically, and more recently, have been used by scholars to:

- o explore phenomena in a more holistic way (Savin-Baden and Van Niekerk, 2007);

- o enhance understandings of phenomena within the diversity of sociocultural and environmental contexts (Caine, 2010);

- o humanise both the participant and researcher within in the research process through the narrative exchange of everyday realities and (Sinclair Bell, 2011); and

- o immerse in self-reflexive processes via self-realisations that occur during the exchange and co-construction of stories (Denzin, 1997; Keats, 2009).

For the current research, as rich narratives were exchanged and were mutually constructed through shared experiences in the research, trust and rapport were also established. This enhanced the process of knowledge co-construction allowing for more personal stories to emerge. Accordingly, language and the use of language to convey life stories was identified as the force that binds individuals to places and that it is through the art of dialogue that the everyday relational experiences of self-in-place formulate and transform (Tuan, 1991). Danzinger (1997) explains that it is through the process of dialogue that social constructions of place and realisations of connectivity of place emerge. A key benefit of implementing the narrative inquiry approach using methods of discovery and description, such as in-depth interviews and storytelling, respectively, was that the processes of both techniques were very accessible for persons situated in marginalised positions such as older adults with a low-income. Findings in paper four and discussions in paper five highlight how the use of narrative methods created an easy platform for older adults to voice their perspectives in the redevelopment process. They also enabled self-realisations to occur in a way that allowed them to confront and reconcile past experiences of trauma, to realise hope and find a way forward.

Conversely, it has been argued by Denzin (1997, p.5) that "Language and speech do not mirror experience: They create experience and in the process of creation constantly transform and defer that which is being described. The meanings of a subject's statements are, therefore, always in motion." The interplay between researcher and participant during a narrative inquiry session is reflective of a type of symbolic interactionism that occurs whereby the interaction and exchange between the two persons can shape the story (Denzin, 1997). This can be viewed both as a benefit, through the co-

construction of knowledge, or as a challenge that can result in a number of scenarios including the production of knowledge that is not relevant to the research question. For instance, as observed in the one-on-one storytelling sessions with older adults, the unstructured nature of the method resulted in an overwhelming amount of data, and some of which were either irrelevant or extremely cumbersome and difficult to thematise. This is particularly the case for storytelling methods because the interaction between researcher and participant required a two-way exchange and was thus far more intimate. The dialogue appeared *almost endless*, and richer than during the in-depth interviews. However, the semi-structured nature of the in-depth interviews resulted in data that was often more relevant and far more manageable. For the in-depth interviews, there existed a predetermined set of guiding topic items, which helped keep the dialogue in focus, but at the same time limited the exploratory depth of the conversations. To address this challenge and to avoid an over-reliance on the finer details for extracting information that is relevant and important for the research questions, it was useful to draw on applying reflexivity in the collection of data (see section 4.2). Subsequently the thematic analysis of the findings to helped to discern facets of the story that diverged from the research questions.

Last, it is important to highlight that narrative methods are often accompanied by visual methods. The use of visual imagery can often enable triangulation to occur. It provides another data medium for observation that can result in another perspective for understanding the narrative data on a deeper level. The following subsection examines the use and integration of visual methods.

3.4.3 Visual Methods

The purpose of using a visual method in conjunction with narrative inquiry was to introduce another knowledge dimension that can further elicit an understanding of experiences of forced relocation across, housing, homes, cities, countries, and societies. According to Lynn and Lea (2005), visual imagery can be examined and accompanied by both an internal and external narrative that can help researchers make sense of social phenomena. The internal narrative is explained as the content of the image that may be perceived differently by those viewing the image and the image-maker; whereas the external narrative is the context that surrounds the internal narrative (Lynn and Lea, 2005). Based on Lynn and Lea's interpretation, it should also be added that the internal narrative reflects how the individual understands or perceives her or his story. The

external is how the researchers understand the narrative that is being told. The external interpretation and subsequent presentation of the participants' narrative is influenced by the researchers' social and cultural background. As such, the internal piece is often more difficult to convey through storytelling alone and this expression of oneself through the sharing of past lived experiences can be very challenging. Accordingly, the adage 'a picture is worth a thousand words' suggests that the use of visual imagery in research can empower an individual to communicate her or his lived experiences beyond the ways in which language alone can express (Barnard, 1927).

Meanwhile, photo tours, is a visual method grounded in participatory research principles, and used to facilitate the expression of older adults' personal reflections of home, community, place and well-being and experiences of forced relocation. The use of visual methods in health research was forefronted by Wang and Burris (1997) through the coining of the 'photo voice' method to explore the everyday lived experiences of rural Chinese women. By enabling voice through photography, Wang and Burris (1997, p.370) recognised that "people have expertise and insight into their own communities and worlds that professionals or outsiders may lack." Since the emergence of photo voice several visual methods have surfaced affirming the notion that "visual imagery can evoke human consciousness that words alone cannot" (Asaba et al., 2015, p.155). Visual methods have been consistently used by community-based researchers to encourage the participation of seldom heard groups and to propagate their voices in research and decision-making processes. Over the years, the use of this method has proliferated in disciplines such as Social Work, Public Health, Women's Studies, Education, Sociology and Gerontology as it was quickly realised that the resultant images have the power of knowledge co-production to influence policy and practice that enhance the health and well-being of society's most marginalised populations (Catalani and Minkler, 2010).

For the purposes of the research discussed in the five published works, photo tour, a method inspired by photo voice was used to capture the essence of neighbourhood and place as older adults provided a guided photographic tour of their home and community. A key strength of the photo tour method was that it provided a methodological platform that served both the interests of the researcher and participant through the participation of a real-time shared data collection event. The feature of *real-time shared-ness* is what makes the photo tours distinct from a standard photo voice process. The use of photography is a well-known imaging technique that older adults felt comfortable with

and empowered them to take part in this creative research process (Ponzetti, 2003). This allowed the mutual sharing of stories of place between the researcher and participant through collaborative photo taking and analysis. Providing a tour of meaningful items, such as figurines, paintings, or a sewing machine, etc., as well as the everyday routines and activities of importance located within familiar inside and outside places, helped draw out important past experiences of place. Therefore, by exploring their relationships with their immediate environment via visual cues and narrative exchange, which are fundamental aspects of photo tours, individuals are motivated to reflect and reminisce on their place attachment (Scannell and Gifford, 2010; Phillips et al., 2011). This outcome would not have been more challenging using photo voice because this method has been traditionally used as a *lone-process* whereby participants are provided imaging devices and encouraged to capture images of importance that relate to a specific topic of interest (Oliffe et al., 2008).

In general, participant-led photo elicitation has four key advantages. According to Van Auken, Frisvoll, and Stewart (2010, p.373) this creative process:

> "can provide tangible stimuli for more effectively tapping into informants' tacit, and often unconscious, consumption of representations, images and metaphors; produce different and richer information than other techniques; may help to reduce differences in power, class and knowledge between researcher and researched […] have unique potential to empower participants' involvement in activities related to local planning for sustainable community development and natural resource management efforts."

The older adults' photo tours helped reveal the positive aspects of the older adults' current situation, and for that they were grateful. It allowed them to develop an appreciation of the present time and the everyday. This view considers Auken and colleagues' first point wherein trauma from forced relocation trauma could be reassessed.

Several older adults appeared uplifted by the prospect of providing a tour of their home and neighbourhood. Additionally, they were appreciative of the social time with the researcher, and the opportunity to participate in a one-on-one extensive walk lasting 1–2 hours around the neighbourhood. During the tour the participants captured images using an iPad provided by the researcher or pointed to important places that they wanted

photographed by the researcher. Through discussion and under the direction of the older adults the everyday realities, meanings and significance of place emerged. This was highlighted in papers four and five. In one photo tour, the participant and the Lead Researcher were greeted by neighbours. This brief interaction demonstrated the importance and role of the participant as 'the neighbourhood keeper and watcher.' This type of exchange is a concept known as "action space" whereby the participant engages in their everyday activities or practices during walk along interviews (Cummins et al., 2007, p.1830). Hence, the nuanced features of photo touring provided an avenue to observe the everyday realties of participants. The activity also provided opportunities to share and discuss personal knowledge regarding realised and unrealised issues that may be challenging or less obvious to express for the key participant through using words alone.

There is criticism of the use of interpretive methodology in research, particularly regarding applications of visual techniques. Visual methods have been critiqued as lacking generalisability, validity, reliability and objectivity (Heider, 1976; Goodwin, 2002; Lynn and Lea, 2005). It is important to stress that the research's purpose was not to generate answers to questions. Rather, the aim was to engender insight for ways to co-create solutions to address a complex problem. For instance, as is often the case with positive research paradigms that aim to determine causality, the place-making with older adults research did not focus on proving that poor housing leads to poor health outcomes for older adults. Instead, it was important to demonstrate that to alleviate housing inequality for older adults, required more nuanced approaches, methods and theories that facilitated the co-development of age-friendly housing options.

Overcoming this conventional scientific process foregrounded in determining causality can be a barrier for the use of creative, visual methods and narrative methods alike; despite all the insight versus foresight it can bring towards understanding social and health phenomena (Howard et al., 2016). This is partly the result of a lack of knowledge and understanding of the interpretivist approach and associated qualitative methods, but is also largely due to an over reliance on scientific or post-positivistic paradigms that tend to dominate specific fields of scientific progress within both biomedical and social science fields (Howard et al., 2016). However, it is important to highlight that, depending on the type of research and associated question(s), undertaking an interpretive research approach using associated qualitative methods can be equally valuable in many ways, distinct from

more post-positivist paradigms (Rahman, 2017). Research mechanisms that stem from an interpretivist approach are incredibly useful for establishing research dependability, authenticity, integrity and credibility; while also producing action-orientation as well as equitable researcher-participant relationships and partnerships (Råheim et al., 2016; Rahman, 2017). Importantly, a key role of visual methods in research has been to decolonise traditional research processes by using imagery, as opposed to text and numbers, to generate dialogue, empower access to information, and co-construct knowledge to enrich understandings of individual experience (Rose, 2012; Pink, 2013; Asaba et al., 2015).

Despite their notable value, the use of visual methods for research purposes is not without challenges. Firstly, discussed in previous sections, the health and social condition of the individual participant can, at times, hinder participation in various research activities associated with participatory research. For example, during photo tours, some participants preferred not to take photographs on their own, but preferred that the researcher did so under their direction. This could be due to safety and security issues, self-efficacy issues when using technology relating to self-doubt, and/or a misunderstanding of the expectation and goal of the use of visual methods. The goal is not about capturing beautiful images, but rather used as a form of expression. It is also an opportunity to engage and discuss every day and taken for granted issues via non-conventional data collection methods. Nevertheless, participant-directed photography can introduce limitations of accuracy since the researcher may not always capture the correct image or an image that is of importance to the participant for articulation and further analysis.

Secondly, the use of photography can result in hundreds of images, each of which has unique importance and significance. Yet, limiting the number of images could constrain the creative process, and thus an issue arose as to what to include or omit (Lynn and Lea, 2005). This is the case when there is audio recording alongside the photographic images, where the analysis becomes time intensive as the audio must then be matched with the images. Co-analysis with participants was challenging, especially as older adult become quickly fatigued due to co-morbidities experienced in old adults such as poor sleep, mobility issues and cognitive decline. This challenge was managed through reducing the duration of the co-analysis sessions.

A key advantage of technology development is that co-analysis of images, in recent times can be performed immediately after a session (given its digital nature) to gather initial thoughts whilst in the moment. However, this can be too overwhelming when working with older adults. Reflexivity can help with such difficulties, as reflexivity, in itself, is an analytical process (see paper five). Integrating opportunities for in the moment meta- or group-reflexivity during the photo tours enabled a form of co-analysis with the participants. As the older adult participant identified important aspects of the environment or entity to visually capture, a discussion would ensue regarding its meaning and purpose as it related to their everyday lives, and impact on health and well-being. It is important to note that the inter-subjectivity i.e., "interchange of thoughts and feelings both conscious and unconscious between two individuals" (Cooper-White, 2014, p.1) of visual methods — a feature often under scrutiny in Science — is precisely its strength. Both researcher and participant directly influence the collection and subsequent analysis of the visual data. Contrary to positivist or post-positivist methods, the interpretivist approach and emancipatory research forces us to contemplate questions such as "What we are doing?," "Why we are doing it?," and "How is it important?." through explicit interaction with the participant and the data.

Methodologically, the resultant images, highlighted in papers four and five, enabled deeper understandings of the everyday through an accessible, reflexive, co-analytical process that is often lacking through the use of interviews and focus groups alone (Nowell et al., 2006). When supplemented with participant narratives, photographs provided additional stimulus to the participants to recall, for the purposes of this study, place memories and histories. The use of photo tours provided a unique platform for older adults to capture nuanced understandings of home and community issues in association with the everyday and its impact on health and well-being. As creating action and social change was a key goal of the project, the photos were subsequently provided rich material for KT outputs and activities.

Chapter four provides the discussion and implications of this thesis by publication. Key aspects of focus for discussion are the: (1) bridging of intersectional and place theories to inform ageing in the right place research; (2) a critical, reflexive analysis of theory, methods and findings; (3) integrating participatory principles in housing initiatives; and (4) incorporating iKT to inform housing development, policy and practice.

4. CHAPTER FOUR: DISCUSSION AND IMPLICATIONS

This thesis by publication discusses conceptual, theoretical and methodological developments and contributions towards urban planning and practice when creating housing solutions for older adults, using a CBPR approach. The research questions outlined in Chapter one, page two, are addressed in this chapter in the following ways:

- o Research questions one and two are answered through: (i) a critical theoretical inquiry of what it means to age well in the right place for older adults and key existing challenges followed by; (ii) a discussion on how we can enable older adults to age well in the right place via CBPR derived theory, methods and research processes. Section 4.1 highlights the theoretical developments of this research that helped to better integrate social components of place in place research. Section 4.2 provides a reflexive analysis of papers one to five through an examination of the immigrant experience, as experienced by the immigrants who are a part of this specific research, to discover more nuanced understandings towards ageing in the right place solutions. The practicalities for achieving this goal are through a blended application of theoretical approaches that address housing inequality for older adults.

- o Research questions three and four are addressed through (1) a critical discussion of the importance of using participatory approaches motivated by transdisciplinary ways working practices to inform holistic housing solutions for older adults (in section 4.3). This is followed by (2) an introduction and discussion of iKT practices and their importance for translating academic discoveries of this research into real-world practice, and to inform and inspire housing professionals to undertake a more community-focussed approach in the housing development process (see section 4.4).

- o Finally, all research questions are addressed through a discussion of the key strengths and limitations of this study in section 4.5.

4.1 Bridging Intersectional and Place Theories

The thesis has prompted new theoretical developments by the bridging of place theory together with intersectional feminism and interlaced with mechanisms of equity and social justice. The following section provides a discussion of the much needed

progression of theory in urban studies. It presents the theoretical contributions made towards the field of planning generated from the research. These contributions are found in the body of published works for this thesis.

4.1.1 Resurgence of 'Social Justice' to Develop Inclusive, Age-friendly Environments

In general, the process of *redevelopment* is viewed as an egalitarian, socially transformative initiative that constitutes a series of regenerative events and invigorating activities for the public good (Steele et al., 2012; Osborne, 2015). However, according to some place scholars the redevelopment process has been hampered by vested interests through the prioritisation of elite capitalists (Yiftachel, 1998; Frisch, 2002). Accordingly, redevelopment projects in the past have perpetuated environmental and economic injustices. A key example stems from Canadian history, whereby the notion of 'redevelopment' was derived from the colonisation, displacement and deculturation of Indigenous people (Rutherford, 2010). Despite being a key historical moment, the 'noir history of planning', as noted by Sandercock (1998, p.166), is rarely mentioned as evidenced by the lack of acknowledgement in the literature (Osborne, 2015). This nullification of important knowledge has shaped responses and stimulated discussion on planning philosophy more recently—particularly driven by a movement towards more inclusive and age-friendly environments (World Health Organization, 2007; United Nations, 2019). In fact, there continues to be an inequitable distribution of power in some redevelopment initiatives (Frisch, 2002; Doan and Higgins, 2011). Globally, the gradual expansion of cities has been driven by a neoliberal agenda that has often focussed on economic sustainability as a marker of urban growth, rather than the social transformation of communities (Frisch, 2002; Doan and Higgins, 2011).

In the new millennium, housing development priorities have tended to benefit the wealthy over the poor. This is demonstrated by the progression of gentrified neighbourhoods. These neighbourhoods have notably displaced some groups, such as older adults, who have been kept out of the decision-making process because of their positionality (Walks and Maaranen, 2008; Bélanger, 2012; Buffel et al., 2012). As emphasised by Morris (2009), older adults who reside in affordable, adequate housing accommodations are far more likely to report leading a valued life. However, fluctuating economies shaped by macro global events, (i.e., 9/11 and 2008 global financial crisis) have broadened social and financial disparities worldwide, limiting some peoples' ability to access resources and opportunities for housing that is supportive of their health and well-being

(Bacigalupe and Escolar-Pujolar, 2014). When financial resources are insufficient for individuals to remain in their family homes or when urban redevelopment fuels *renovictions*, a term coined in British Columbia, for the eviction of tenants on the basis that a large-scale renovation is planned, the result are forced relocations that disrupt the lives of some of society's most vulnerable groups (Wong, 2013).

There has been some progress over recent years, whereby, increasingly, housing policy and practice has shifted to focus more on challenging power differences to be more inclusive by advocating for more participatory approaches in the design and development process (Buffel et al., 2012; Speak, 2012; Steele et al., 2012; Woolrych and Sixsmith, 2013a; Woolrych and Sixsmith, 2013b; Osborne, 2015; World Health Organization, 2019). It was suggested by Osborne (2015), that this shift may in part be due to a growing public awareness concerning high profile globalised issues such as the gentrification of neighbourhoods and climate change. Hence, researchers across disciplines have been implored to develop impactful, socially conscious research that responds to the need for sustainable, age-friendly environments accessible to all regardless of age, ability, gender, class and ethnicity (United Nations, 2019).

For example, as it pertains to understanding vulnerability within the context of ageing in the right place for older adults, place scholars have alluded to the fact that to age in the right place requires consideration for multiple social factors including age, culture, gender, ethnicity, socioeconomic status, immigration status, marital/partner status, generation status and religion to name a few (Tuan, 1977; Proshansky et al., 1983; Rowles and Chaudhury, 2005). However, as Osborne (2015) argues, less widely understood and discussed is the combined effect of these social determinants that shape the everyday experiences of place across time. As such, this paradigmatic shift towards a *socially just* way of thinking and working reinforces the use of a participatory approach when working with vulnerable groups. It also strengthens the need for an intersectional perspective when developing more inclusive and age-friendly environments for older adults.

The following subsection discusses an intersectional place perspective developed from the research based on CBPR principles.

4.1.2 An Intersectional Place Perspective for Research, Policy and Practice

A key scientific contribution was the development of an intersectional place perspective to inform ageing in place research, policy and practice. This theoretical framework combines theories of intersectional feminism and place to guide research questions, study design, data analysis and knowledge translation towards real-world impact. The intersectional place perspective was developed to enhance understandings of intersectional place experiences revealed by older adults during the initial pre-move interviews. Supported by stories of place vulnerabilities and opportunities, older adults described how their intersectional identit(ies) and positionalit(ies) had shaped experiences of ageing, poverty, migration, loneliness, privilege, well-being, and historical trauma. However, the emergence of this data created two research challenges. First, examining intersectional experiences of place was outside of the original scope of the Place-making with Seniors research. Second, at the time, there was no suitable theoretical framework to allow for intersectional experiences of place to emerge. The challenges were addressed through seeking additional resources to enhance the scope and depth of the work.

Informed by principles of CBPR, it was important to engage in a process of *responsibilitisation* to the project and the older adults by ensuring that their intersectional experiences of place were captured and reported in a meaningful way (Polk, 2015). To do this, more funding was acquired to build on the original Place-making with Seniors research aims and objectives to expand MIF and to develop a theoretical perspective that bridged feminist thought and place theory. Additional research funded by SSHRC had employed the storytelling method to explore temporal, intersectional experiences of place that enabled enhanced understandings of ageing in the right place from the perspectives of the older adults. The additional funding allowed for the development and the piloting of IDDPP using the storytelling data to perform an intersectional place analysis. The IDDPP and intersectional place analysis were thus key outputs of paper four, which highlights MIF as the precursor to this theoretical perspective.

The IDDPP emerged from the MIF developed by Sixsmith and Fang (2016) to challenge extant *over-positivised* notions of ageing-in-place and to explore how agency is manifested by older adults in vulnerable social positions when negotiating for permanent housing solutions. The MIF was derived based on Collins' (2000) notion of intersectionality as an interweaving of multiple systems of oppression. Specifically, it was based on how such systems are organised through interrelated domains of power.

This framework enabled the identification of older adults' positions in society, the identities they assumed or were imposed upon them, and the oppressions they experienced within the dominant social, structural systems as well as organisational and policy contexts. However, the MIF lacked the necessary analytical features, such as temporality and place, to sufficiently capture experiences of opportunities and oppression across different socio-societal and -cultural environments, structures and time.

Across time, older adults' experiences of place mature. During maturation, new opportunities will have emerged. Subsequently, constructions of meanings and memorable experiences associated with past experiences of home can now shape the present (O'Bryant and Murray, 1987; Burholt, 2006; Scheidt et al., 2006; Hillcoat-Nalletamby and Ogg, 2014). Older adults can, therefore, use their past experiences of oppression to become more resilient as they learn, with varying degrees of success, to manage, align or *fit* their changing physical and cognitive abilities within the confines the physical, social, cultural, and structural dimensions of their new home (Kahana et al., 2003).

Subsequently, the MIF was reshaped to enable a deeper analytical process that allowed for temporality when examining intersectional experiences of oppression and opportunity across different places. IDDPP encompassed analytical features that were well-suited for responding to both the shortcomings of ageing-in-place through an analysis of the interlocking social and cultural drivers of inequity such as age, gender, ethnicity, socioeconomic status, immigration status, partner status and generation status across place and time. Another key principle of intersectionality crucial for the analysis concerned the prioritisation of minoritised experiences through the concept of *centring in the margins* whereby the stories of seldom heard groups are fore-fronted (hooks, 2000). This aspect aligned well with the CBPR approach through the application of methods that prioritised seldom heard voices described in papers two, three, and five.

Meanwhile, the evolution of IDDPP from the MIF, described in paper four, furthers both extant intersectional and place theorisations in two ways. Firstly, applications of intersectionality in both quantitative and qualitative analyses have been scrutinised for their tripartite focus on social markers of gender, race and one other marker such as age, class, sexuality, etc. (Choo and Ferree, 2010). IDDPP addresses this critique by viewing social markers not as individual social features, but instead as dynamic systems of

differentiation (Collins, 2000). These are situated within the systemic process of social stratification that creates inequitable power distribution between groups (Deacon, 2002). A continuum of structural differentiation, ranging from limited to exorbitant access to material resources and opportunities is thus consistently reinforced by mechanisms of social stratification deployed and controlled by a select few. This notion resonates also with Marxist urban political ecology stipulating that "the material conditions that comprise urban environments are controlled and manipulated and serve the interests of the elite at the expense of marginalised populations" (Swyngedouw and Heynen, 2003, p.902).

IDDPP is informed by both Foucauldian notions of power and Marxist views on material distribution (Deacon, 2002; Swyngedouw and Heynen, 2003). It, therefore, visualises societal members as being situated within this social continuum according to their identities and positionalities, i.e., class position, which determines access to important resources and thus shapes experiences of oppression and opportunity. As well, IDDPP perceives inequality and inequity according to intersecting systems or dimensions as opposed to intersecting social factors, allowing for the visualisation and contextualisation of marginalised experiences at a broader level. For instance, instead of coupling one social identity together with a social position, we can view these as dimensional axes that encompass systems of identities and positionalities, which are conjoined and transform across time and place. This, thus, enables experiences of hardship and prosperity to emerge.

Yet importantly, as was discovered in the analysis highlighted in paper five, the identities and positionalities one holds shift with temporal and environmental change. The merging of intersectional theory together with theorisations of place, thus, becomes crucial for both theoretical spheres. This is particularly the case when determining how older adults age well in place according to environmental gerontology perspectives. Consistently, ageing-in-place initiatives have been predicated on notions of Lawton and Nahemaw's (1973) person-environment fit whereby the emphasis is heavily placed on how the built environment can be shaped to match physical and cognitive capabilities as one ages. Psychosocial determinants are also frequently discussed as key theoretical proponents of place, in that of *place attachment* with consideration for the personal, behavioural and emotional bonding of place (Low and Altman, 1992; Brown et al., 2003; Oswald et al., 2006). Yet, several theorists have critiqued the insufficiency of existing place theories to

address systems and structures that shape power and access to resources (Fainstein and Servon, 2005; Friberg, 2006; Steele et al., 2012; Osborne, 2015). This raised some important questions. First, how can experiences "of neighbourhood quality and perceived neighbourhood attachment represent *a resource* for life satisfaction" (Oswald et al., 2010, p.239), when such experiences are being destined by those who build systems and structures to benefit elite groups? Second, how can older adult's sense of attachment to their environment be understood without an exploration of their past experiences of place across the life course?

IDDPP was developed to address these complex questions and to provide a critical, analytical lens to inform the development of more inclusive age-friendly environments. As introduced in paper five, an intersectional place analysis enabled a contextualisation of place-time events as it related to both experiences of oppression and opportunity. This is evidenced, for example, in persecution during the Cultural Revolution; social and structural discrimination by older migrants; and forced displacement of Canadian born residents. It also provides opportunities for well-being such as securing a new, purpose built home for low-income seniors; development of new social networks and supports; and living in a more egalitarian society evidenced by shifts in identities and positionalities across different cultures and environments throughout the life course. Temporality is a crucial analytical feature of IDDPP because individuals tend to build emotional attachments to where they have lived as memories and meanings accumulate over time (Hillcoat-Nalletamby and Ogg, 2014). As such, it is important to emphasise that IDDPP provides for a deeper exploration of the *historical, contextualised experiences of place* to capture important social facets such as identity, positionality, oppression and opportunities across time and place, which helped to enhance understandings of how past experiences shape older adults' perceptions of home and place, and of their current health and well-being.

The process of developing MIF and in its progression to IDDPP enabled self-reflexivity to occur and helped to realise how researchers, as knowledge creators and elites, often contribute to the privileging of elitism through the producing and re-producing of certain knowledges over others. The critical, social justice roots of MIF and IDDPP implore researchers to be reflexive about the impact of our process, as we take steps towards better, more socially informed mechanisms to facilitate welfare-oriented initiatives such as helping order adults to age well in the right place. To enable positive social

transformation outcomes through redevelopment initiatives, requires place researchers and developers to consistently scrutinise their approach, by asking important questions such as: "Who dominates?; Who benefits?; and, Who gets left behind?" (Steele et al., 2012, p.80). By using an intersectional place perspective to understand: "What places have people have come from?"; "How do they perceive themselves within the context of place?"; "Where are they positioned on the social place hierarchy?"; and, "What were their past experiences of place?" We can include the persons who are affected positively in the change process and make more informed decisions about the social impact of housing redevelopment initiatives. The following section actions a reflexive process for this research by providing a critical, reflexive analysis of the study findings.

4.2 Critical, Reflexive Analysis to Inform Ageing in the Right Place

In interpretivist research, reflexivity is an analytical process often used by qualitative researchers to help questions raised about relationships with the social world and how this relationship impacts research. Reflexivity is a form of questioning to make distinctions "between what is fact or fiction, the nature of knowledge and ultimately our purpose and practice as researchers" (Cunliffe, 2003, p.985). A reflexive process involves "self-critical sympathetic introspection and self-conscious analytical scrutiny of the self as a researcher" by examining how, we (the researchers) are positioned within the research and vice-versa, how participants may position you (England, 1994, p.244). Reflexivity can thus help to enable a more holistic understanding of who and what we are investigating (Pini, 2004).

The next sections apply a critical, reflexive analysis to discover and provide for more nuanced understandings on how, as a researcher, this author shaped the research process and co-constructed ideas and solutions presented in this thesis to help progress ageing in the right place solutions for older adults.

4.2.1 Unpacking the Immigrant Experience: A Reflexive Analysis of 'the Right Place'
According to Pini (2004), a reflexive approach requires a critique and examination of one's own life accounts and how these experiences have influenced the co-construction of knowledge. For me, this process entailed a revisiting of my experience growing up as a 1.5 generation immigrant, in that of a child to first generation immigrants to Canada (Rumbaut, 2004). I will reflect on how my intersectional migration experiences have shaped the development of theory, selection of certain methods and the co-development

and interpretation of the data to generate place solutions that draw on shared experiences of marginalisation.

In 1988, my parents and I emigrated to Vancouver, BC, Canada, through sponsorship by my father's older sister. As newcomers to Canada, we experienced many different obstacles associated with the process of acculturation (Berry and Kim, 1988), in an attempt to integrate and adapt. For example, similar to many immigrant experiences, my parents struggled with: navigating complex government services and systems; locating meaningful employment that matched their training and skillset; adjusting to the weather and food (acquiring new tastes and accessing ingredients for traditional Chinese food); finding child-care; building new social networks; learning English; securing a place to live and adjusting to downward social mobility with concurrent loss of social status and wealth. In situating these experiences within the current research, I used an intersectional place perspective to reflect on how such experiences shaped our new identit(ies), and positionalit(ies) in Canada. For instance, my father was no longer a middle-class, home-owner, and licenced electrician living in Shanghai. Upon relocation to Canada, he became a working class, immigrant who rented his sister's basement suite and worked as a machine operator in an automotive factory. Accordingly, guided by the tenets and assumptions of intersectionality and place, these reflections had helped me to cultivate MIF and progress its contextual and analytical ability to IDDPP. Both theories were essential for revealing intersectional place experiences of older adults in the study.

However, sharing these complex stories can make one feel small, ashamed, vulnerable and even confused because they are hard to express (Trimble and Fischer, 2006). I had guarded and cautioned myself to refrain from revealing any personal experiences that may have caused me some form of trauma — because they made me feel powerless. In realising this about myself, I knew that I would not be able to gain the trust of older adults who presumably had comparable experiences, unless I was able to divulge my own accounts of vulnerability. Due to this self-realisation, I felt it was imperative that I revisit my place histories because it would allow me to better relate to the older adults, who, firstly, all had been migrants themselves; and secondly, shared similar experiences of trial and tribulation. This is mirrored in the experience of not having a permanent home, having to readjust to a new environment, not knowing how to navigate new surroundings and having limited social support channels.

It is important to note that none of the research participants were native-born to Canada. Often, there is an assumption that having a 'White' racial identity equates to being a Canadian, a perspective shaped by centuries of White, colonial rule. However, having learned much later as an immigrant to Canada, Whiteness was clearly not an indication of indigeneity nor does it signify a lack of migration experiences (Salter, 2013). In present day, most Canadians are essentially settlers to Canada (Knowles, 2016). The older adults that I had spoken to all had embodied to some extent the immigrant identity, despite their race. For example, older adults of White European descent, originated from countries such as Germany, United Kingdom, Norway, and the Netherlands. Despite having distinct migration pathways, all of us appeared to have shared similar place challenges aligned with those previously identified above. But because the determinants of these challenges are so complex, being, multi-levelled, multi-layered and changing across place and time, I found it difficult to, at first, think of a way to capture all the complicated nuances. Secondly, to do this while simultaneously building trust and rapport with people who had experienced a great ordeal such as been forced from their homes for three years to then find temporary homes, and subsequently moving back to a new place where all sense of familiarity was lost.

To find a resolution, I sought advice from a feminist scholar, Olena Hankivsky at the School of Public Policy at Simon Fraser University, BC, to inquire of any methods that could capture the level of depth and complexity sufficient for an intersectional analysis. She recommended the work of Bowleg (2008). Bowleg's research unpacks the methodological challenges of both qualitative and quantitative intersectionality research. The read of her article, "When Black + Lesbian + Woman ≠ Black Lesbian Woman: The Methodological Challenges of Qualitative and Quantitative Intersectionality Research" helped me to realise that thankfully I was not alone in this research quandary. She had cited other intersectional feminist scholars Weber and Parra-Medina (2003) with questions akin to the challenges experienced in my research journey. Namely, in the case of marginalised Latina women, they interrogated rhetorically: "How can a poor Latina be expected to identify the sole — or even primary — source of her oppression?, and, How can scholars with no real connection to her life do so?" (Weber and Parra-Medina, 2003, p.204).

As a means towards remedying data collection issues, Bowleg had recommended a style of ascertaining rich experiential data with joint consideration for the methodological

pitfalls of intersectional research (identified earlier on p.176). She called this mechanism: "ask precisely what you want to know" through a direct inquiry on *how participants would describe their day to day challenges in accordance with their social identit(ies) and positionalit(ies)*. On reflecting on my experiences, socialising and conversing with my grandparents, aunts and other older adults, this forward approach felt almost too invasive. This tactic also appeared to lack a mutual knowledge sharing and exchange component, which for me did not resolve the issue of building relationality. Subsequently, I reflected on different forms of communication mechanisms that, to me, were more effective in conveying complex, relatable, issues. During this time of consideration, I contemplated how I had managed difficult times as a young adolescent immigrant and thought about communication outlets that helped me to cope. The first thing that came to mind was films. Films are told like stories encompassing a beginning, middle and end. They often serve to abet escapism from the day-to-day struggles through a juxtaposition of the everyday realities of life (Van de Peer, 2017). The process of storytelling has existed since the dawn of human existence and thus its power to empower, communicate and transfer knowledge transcends all societies, cultures, places and nations (Freeman, 2015).

Informed by Bowleg's (2008) directions on *how-to do good* intersectional research, storytelling became the outlet for co-constructing important intersectional place knowledge with older adults. Storytelling allowed for mutual information exchange and served as a vessel to journey into difficult topic areas. This included my asking older adults in the research to tell me stories (in their native language) that focused on the most rewarding and the most challenging events before and after migrating to Canada. During this time, they were asked how they perceived themselves, in terms of their identity and positionality at each temporal location: pre-migration; post-migration; pre-move; and post-move.

As older adults revealed their stories, I also shared mine. I told the story of a 1.5 generation immigrant child, with parents who had experienced similar place challenges to them. In my story, I conveyed that my ability to learn and adapt to the new environment was a much more fluid process than my parents' who were already set in their social and cultural identity as Chinese people. I, therefore, had the opportunity to progress through the Canadian educational system, and learn the language, social and cultural norms, beliefs, values and expectations through my teachers and peers. In my story, I also

revealed feeling burdened by the responsibility to support my parents — because this was a non-traditional role for a female child in the family — to navigate the Canadian social, health and welfare service system as they experienced a downward shift in their social status. Hence structural barriers, to me, were at the core of my experiences of oppression growing up as a 1.5 generation immigrant. Importantly, my experience of the structural challenges in Canada and downward social mobility had resonated with the older adults in the research, which helped progress the research through mutual knowledge exchange and co-construction.

Through the mutual exchange of shared experiences of marginalisation, I was able to align my positionality with the older adults, who subsequently felt safer vocalising their vulnerabilities. For instance, we both had felt oppressed to some degree by the Canadian system such as: struggling with difficulties knowing what public services and supports were; who to contact for support; and how to make effective communication. Furthermore, we learned from each another, similar struggles of being 'lost in translation' in a place that felt alien to us. Older adult participants (both Chinese and White European) also shared experiences of feeling imprisoned by a web of socio-cultural normativity that bore little resemblance to our own beliefs, values, norms and expectations (as both an immigrant and/or an older adult). It is important to note, however, that although our stories overlapped, the stories may be experienced differently. For example, feelings of exclusion and being unseen should not be generalised as the immigrant experience; and 'mistook' as stemming from the lack of 'White-ness', or young-ness and old-ness, or being too Chinese. Such sentiments radiate as part of the intersectional place experience. Older adults, for example, have likened the experiences to that of being the 'newcomer', whereby concerns of *invisibilisation, marginalisation, helplessness* and *displacement* emanate from a socio-cultural, structural world that one no longer felt a part of.

Through a reflexive interrogation of the problem space, I became convinced that the research issue required the co-creation of spaces and places where older adults felt a sense of belonging and to be valued, heard, seen, and supported socially, culturally, psychologically and structurally. For instance, when drawing on the immigrant experience, I often thought that finding a place to live was not enough. But rather, it concerned being able to remain in it, without having to worry about whether it was too far for my sister to walk to school, or whether my father could get his Chinese newspaper, or

whether the rent was going to get too high and so we would be forced to move again for a third or fourth time. Such thoughts had troubled me and led to an additional line of inquiry involving the necessary social (e.g., child-care); structural (e.g., navigating systemic bureaucracy); cultural (e.g., language and integration); and, psychological (e.g., mental health) supports for newcomers and why these were not available or not accessible. I also pondered: Why were newcomers not consulted about what they needed?; and, Why were existing services, which were supposedly tailored to support the immigrant experience, insufficient and one-dimensional? In hindsight, I believe that often there is some unwillingness, both intentional and unintentional, by those with decision-making power to inquire, listen and consider, the multi-level factors that determine health and well-being. There may be a mix of several reasons for this, including for example, a lack of: knowledge and understanding of the issues; financial and human resources to facilitate collaborative working; and/or general care or concern.

Upon reflection, this self-inquiry raised important questions and considerations that influenced the selection of a collaborative method to encourage inquiry and consideration, and facilitate active listening across multiple stakeholders with decision-making authority. As denoted in paper two, a key goal of deliberative dialogue was to bring service providers from government and non-government sectors to engage in conversation together with the housing society and developer to listen to and discuss preliminary interview findings with older adults, and co-produce solutions to help them age well in their new homes. One important tangible area to support change that emerged during the dialogue session was introducing in-house social programming within the new build (i.e., paper two, p.61). This solution tackled several challenge areas discovered in the preliminary findings: social isolation; building relationality across cultural groups; mental and physical stimulation; and empowerment of older adults. My lens of observing my own father in his old age and reflecting on some of his challenges helped me to discern the important areas of focus in the in-depth interviews. For instance, for my father, living in a residential area that was not within walking distance to services and activities had contributed to his social isolation. As well, his lack of confidence in his language ability and discomfort with other people of other cultures played a barrier to building relationships with people that were not of Chinese origin.

Therefore, creating shared opportunities for 'easy' and accessible social participation, that is activities that do not require too much conversing such as cross-cultural potlucks, and,

in a place that was easy to get to, such as the shared amenity space, I believed was important for enticing older adults to leave their apartments and formulate social connections. More importantly, creating social activities that exposed individuals to the stories, beliefs, values and norms of cultures other than their own, can promote shared appreciation for *difference* and for *the other* (Amin, 2002; Lee, 2007). However, additional structural barriers were identified during the deliberative dialogue (i.e., paper two, pp.66–67). For example, although the physical space was designed, developed and available within the new builds to host such activities, the service providers experienced structural barriers for implementing some services 'in-house.' Local service providers from health, immigration, parks and recreation sectors were more than willing to facilitate in-house services. However, a lack of funding, staff and coordination prevented this from occurring early on a regular basis. This finding confirmed the conclusions of my reflexive process, that in order to help older adults successfully age in the right place, solutions need to be dynamic. Despite consideration for social, cultural, psychological and environmental issues, our in-house programming solution was hindered by structural challenges, for example, a lack of sustainable funding, dedicated service provision, buy-in from municipal government.

Meanwhile, although some progress has been made, ageing-in-place redevelopment projects have lacked consideration for the multidimensional aspects of place and how these intersect to shape one's experiences of the home and the community such as the psychosocial, structural and cultural (Buffel et al., 2012). For example, research has explored how the physical/built environment can directly support or impede a person's ability to age in place through the model of person-environment congruence (Lawton, 1982; Rowles and Bernard, 2013). However, despite being published decades ago, emphasis on this model and the built environment appears *still* to be at the core of environmental gerontology and ageing-in-place policy. Yet, when envisaging the immigrant experience and relating to this to the experiences of older adults, the mental image that comes to mind regarding, person-environment fit (PEF), is that this model has become *porous*. The structural integrity of PEF consists of interstices that can only be filled through adequate consideration for the social, structural, psychological and cultural facets of place that determine a person's ability to age well in the place.

The following subsection builds on the reflexive analysis of the immigrant experience towards the development of a multipronged approach that considers the multidimensionality of place to engender the *right place* for older adults.

4.2.2 Reflection to Practice: A Multi-Pronged Approach for Ageing in the Right Place

As a 1.5 generation, Chinese immigrant to Canada and having undertaken caregiver responsibilities to an older, low-income parent, I have observed first-hand challenges to those revealed to me by the older adults. My immigrant experience has considerably shaped the interpretation of data. It forefronted challenge areas that encompass multidimensional aspects of ageing-in-place: the environmental (e.g., living physical spaces that are not conducive to persons with disabilities); the social (e.g., being situated in vulnerable social positionalities such as having low-income and living alone); the cultural (e.g., experiencing different language, food and etiquette); and, the structural (e.g., confronting bureaucratic challenges that prevent access to essential services such as financial supports).

To expand on the reflexive analysis in subsection (4.2.1), this section focuses on translating previous reflections into opportunities for practice. Organised according to a multipronged approach, the following points of discussion focus on helping older adults to age well in the right place through environmental, psychosocial, cultural or structural considerations of place. The multi 'pronged' approach was used because it aligns well conceptually, theoretically and methodologically with the research. For instance, according to notions of transdisciplinarity, to address a wicked problem, requires a solution that considers several different directions, aspects, or elements of the problem area. The next paragraphs describe the operationalisation of the four-pronged approach, such as when addressing different levels of complexity, drawing on co-constructed place challenges through reflexive working.

The environmental prong. Experiences of witnessing older family members struggle with the inability to navigate their immediate home space (e.g., use the toilet independently), and access essential services (e.g., grocery, family doctor) due to age-prominent health conditions, enabled me to position myself as participant observer in the research, through observing, relating and participating in the everyday lives of older adult participants. This form of research immersion enabled me to extract the appropriate

information and make sense of the data, particularly as it relates to environmental factors that shape health and well-being.

Aligned with prior research, findings from papers two and three highlight the importance of safety and security, and having accessible social activities and services to enhance and maintain health and well-being in older adults (Leviten-Reid and Lake, 2016). According to participants, health and well-being was a high priority and could be supported by appropriate physical environments and access to mentally stimulating activities (i.e., paper three, p.89). For older adults, there is a clear difference between having a home and being housed. For example, a home should foster both physical and psychological safety and security. In the new build, this entailed protection afforded by building rules and regulations (e.g., building safety regulations, no smoking rules), having opportunities to engage in physically (e.g., Tai Chi, a gym with exercise equipment) and mentally stimulating activities (e.g., chess, Mahjong). According to Relph (1976), our place identity is shaped by built surroundings and importantly, our individual conceptualisations of place as well as the activities that occur in any particular place. Such features are directed by our visual senses and cognitions capturing our emotions and generating meaningful linkages to place, which affords us psychological protection.

Nevertheless, the task of ensuring a suitable environment for a diversity of needs can be challenged by various socio-cultural and structural obstacles. For instance, some rules and regulations can impinge negatively on aspects of everyday life, particularly in old age (Brownie et al., 2014). In the new build, one older adult indicated that most of the tenants had lived alone yet were only allowed visitors for a few days at a time and were obliged to register their guests with the building management. Although this rule protected the physical safety of older adults, research highlights that having frequent visits from friends and family members is important for preventing loneliness and social isolation (Landeiro et al., 2017). This rule, instead, promoted the opposite effect and challenged the notion of independent living for older adults, which created an institutional feel in the new build and were likened to visitations in long-term care. Similarly, in the case of *no smoking* inside the building and on balconies, this regulation had various effects on the older adults, depending on their individual health status and social identity (i.e., paper three, p.90). For the older adults who identified as smokers, they were required to enact their smoking identity off building premises. This became an issue for less mobile individuals with difficulties travelling offsite to have a cigarette. As a result, some older adults began

smoking in their apartments, which filtered through to other parts of the building. This, in turn, negatively impacted the health of neighbouring individuals, particularly those with chronic breathing difficulties.

Moreover, having social activities which are acceptable across different cultures is important for promoting social interactions, and averting loneliness and social isolation, particularly as older adults are being limited to only short visitations from friends and family (i.e., paper two, p.65 and paper three, pp.89–90). However, organising social activities in the new build was bound by both structural barriers such as a lack of funding and cross-cultural challenges ensuring cultural sensitivity (Walker et al., 2019). For example, in-house social programming required additional funding and staff resources to organise and select activities that were accessible across the different cultural groups. However, the building management was adamant that this was not a part of their responsibility as the 'landlord.' Consequently, there was an initial delay in initiating in-house social programming for older adults. These examples of psychosocial, cultural and structural constraints demonstrate that the environmental facet of ageing-in-place cannot be supported in a holistic way on its own. The environment encompasses the building, and surrounding spaces. It is also influenced by intangible factors that require consideration for cultural needs, physical and psychological well-being. Additionally, the capacity to support programming needs was also important. All of these elements intersect with individual social factors such as gender, age, income and ability. An intersectional place perspective can thus help provide insight for addressing diverse needs of older adults to support them to age well in the right place.

The psychosocial prong. Revealed by an intersectional place perspective, experiences of ageing-in-place are shaped by multiple social factors that shift across time. This became apparent through the reflexive process and having shared and exchanged many similar place migration stories with the older adults. Over the life course, people may encounter several place experiences and not all of which carry the same meaning, the same struggle or the same opportunity (Rowles and Chaudhury, 2005). This is because our experiences of place, be they positive or negative, are shaped by our social identities and positionalities at specific points in time and place. Combined, these can impact experiences of oppression or opportunity, neither of which are static. According to Mr. Zhao's and Mrs. Smith's accounts in paper four (p.110; p.113), positive or negative experiences of ageing-in-place are felt disproportionately across a continuum of varying

social positions ranging, for example, from indigence to affluence. However, often there is overlap even though the degree of quality of life experiences may vary as people relocate across time and place, especially as such experiences are socially constructed. For example, my father's story highlighted experiences of trauma and persecution during the Cultural Revolution in China, dating roughly from 1966 to 1976, yet his narrative had resonated with most of the older adults in the study regardless of ethnicity, immigration status or gender. Particularly for older Chinese adults, the convergence of social experience was significant (i.e., paper five, p.141–142). One specific account had struck a chord with older adults who subsequently revealed feelings of severe trauma and oppression. At the peak of the Communist regime, individuals who self-identified as affluent were punished by positionalities of privilege because this was misaligned with the communist ideology. Akin to stories of some older adults, to escape experiences of oppression and/or persecution my father left his home and his country. Yet, because positionalities shift across time and place, the immigrant experience often constitutes loss of wealth and position upon resettlement into a new place, which can result in several social and economic oppressions, and impact health and well-being.

For instance, Canadian migration research has highlighted that upon arrival, the health status of immigrants is superior to that of most Canadians. This is known as the Healthy Immigrant Effect (HIE) (Asanin Dean and Wilson, 2010) and is evidenced by the fact that newcomers report better health, have reduced incidence of chronic conditions and have lower rates of disability than their Canadian-born counterparts (Chen et al., 1996; Dunn and Dyck, 2000; McDonald and Kennedy, 2004; Gold and DesMeules, 2004). However, studies reveal that as time progresses, the health of new immigrants declines to a level on par and even below that of Canadian-born groups upon settling in Canada (Chen et al., 1996; Ali, 2002; Dunn and Dyck, 2000; Jolly et al., 1996; McDonald and Kennedy, 2004; Asanin Dean and Wilson, 2009). This gradual process is inversely proportional to the length of time spent in Canada, meaning that the health of immigrants gets poorer the longer they reside in the country (Ng et al., 2005; Asanin Dean and Wilson, 2010). Consequently, for immigrants, migration and resettlement can be a daunting process inducing a myriad of mental health effects such as stress, anxiety and depression (Asanin Dean and Wilson, 2010). Although this may help explain the decline of immigrants' well-being over time, it is also noteworthy that such struggles are often felt alongside experiences of opportunity. Because like my father, upon arriving in Canada, some of the

older adults were no longer bound by an ideology where elevated social positioning was socially constructed as a crime.

Notably, the intersectional experiences of ageing-in-place are complex. They are often shaped by evolving social, cultural, economic and political contexts, for example norms, values and expectations, across different places and spaces (as denoted in paper four). Revealing how place is experienced can thus elucidate how place transitions can build strength and resilience. It can also ultimately impact health and well-being as people establish permanence and settlement in new places. Promoting shared spaces to learn about one another's past experiences of place can help facilitate shared understandings of struggle and opportunity to bridge cross-cultural differences (Lee, 2007). Finally, learning about and accommodating for the continuum of social positions of older adults can help determine the necessary services and supports required in a community to ensure that the psychosocial needs of all tenants are sufficiently met.

The Cultural Prong. The unique values, beliefs, practices and expectations of our cultural upbringing impacts our experiences of place across time (Rowles, 1983). Since emigrating to Canada, I have lived a bi-cultural life. I have shared identities that would interchange depending on whether I was inside or outside my parents' home for example, at school, work or at a place of leisure. With 'Chinese' being my parents' primary cultural identity, their beliefs, values, traditions, décor, food, language, mannerisms and more, had dominated my cultural sense-of-place at home. Conversely, outside my parents' home, I conversed with people in English, ate hamburgers, went on dates and danced at clubs. All of which are activities and behaviours that I had associated as being shaped by Western conceptualisations of place. Importantly, my bi-cultural identity and experiences have helped me come to the realisation that we are constantly influenced and bound by our culture or cultures whether they are ethnicity- or generational-based. With the understanding that bridging cultures in shared spaces can be both immensely rewarding and challenging, I was able to refer to back to my experiences of cultural congruence and dissonance to make sense of the research findings.

Contextually within the new build, cross-cultural difference was identified by community and professional stakeholders, as a key challenge because of the bi-cultural mix of older adults residing in the new build (i.e., paper two, p.70). Approximately 70% of the tenants were of Chinese ancestry and a large proportion of this group spoke little to no English.

Beyond communication barriers, divergence in sociocultural norms created some tension between Chinese speaking and English speaking Europeans. The initial perception by White European older adults in the study was that Chinese seniors preferred to segregate themselves, and conversely, some Chinese seniors felt that they experienced discrimination by the Canadian system (i.e., paper four, p.112). These issues, however, are more deeply rooted. Historically, the formulation of Canada as a country is based on the colonisation of Aboriginal land by White Europeans, a gradual progression embedded in processes of cultural genocide, social exclusion, discrimination and persecution (Dhamoon, 2015). Such practices were visited on Chinese migrants who were brought to Canada to carry out manual labour. For instance, between the years 1875–1923 numerous laws, rules and regulations were passed against Chinese persons in British Columbia, Canada. These included: prohibited access to vital resources such as the ability to acquire Crown lands; the ability to inhabit provincially established homes for older adults and persons with disabilities; and the ability to secure public employment. It also included the denial of voting rights as well as a levied head tax on Chinese people as a mechanism to halt Chinese immigration to Canada (Lee, 2008). Thus, place histories of this type can create a lasting imprint on society such as segregation by creating cultural enclaves to feel safe.

Yet, because places and societies change across time and are shaped by processes of migration, political paradigm shifts, and technology development amongst others, Canada now has a substantial Chinese population ~1.76 million people or 5% of total population in Canada (Statistics Canada, 2017). In Richmond, BC, there are ~107,080 Chinese residing in Richmond encompassing 54% of the city's total population (City of Richmond, 2017). Consequently, older adults of European descent, who have spent decades as the dominant group, now felt a sense of cultural displacement. The City of Richmond in its current cultural enclave, reflect restaurants, signage, food, fashion, building design mirroring that of major metropolitan cities in China and Hong Kong. Chinese Canadians have thus shaped the landscape around them. Consequently, because the new build was situated at the heart of Richmond, a collective effort by building management, the housing society, service providers in the community, municipal government and older adults was required to co-create opportunities for reconciliation, cultural awareness and the sharing of values, beliefs, practices across cultures to bridge this cultural divide.

Culture plays a part in shaping our other identities, influencing what we believe and value, how we communicate and socialise with one another, and how we treat those outside the accepted or dominant culture known academically as *the other* (Amin, 2002). Therefore, a caution should be stated against viewing culture as static and one-dimensional. In general, people experience *othering* through the combined effect of their social identities including their age, ethnicity, income and gender. This othering has been highlighted in literature. For example, in the case of Mr. Zhao, he found it difficult to negotiate better living conditions, due to a lack of funds and the inability to communicate proficiently in English. This is a requirement that was necessary for overcoming bureaucracies in the Canadian social service system. Conversely, in the case of Mrs. Smith, because she was a widower, living alone, was not well-off financially, and was a carer for a young child in 'older adults only' housing, she experienced othering through the social distancing from the older adults that lived in her building. Hence, notions that surround culture are complicated and to effectively reduce cultural dissonance requires a conscious effort to identify cross-cultural difference and subsequently overcome misconstructions through establishing commonalities and building on shared experience.

Accordingly, visual data presented in papers three and five, which showcase collective working during the mapping exercises and walk alongs, highlight the possibility of improving solidarity through community-based research, demonstrating that opportunities for building relationships and friendships can be cultivated across cultural groups. Undoubtedly, tensions between individuals may still exist. However, rebuilding communities through collective working has proven to be effective across different sociocultural contexts (Freire, 1990).

The Structural Prong. Structural barriers that prevent older adults from accessing the necessary resources to age well in place are one of the least visible, yet are the most prolific and difficult to address (Fang et al., 2019). Having been exposed to and having attempted to navigate the social service system for an immediate family member, I fully comprehend the complexities involved when attempting to acquire essential services, for example, financial support for older adults of low-income. A key structural barrier for older adult participants of the study was associated with the required paperwork to secure housing benefits for low-income seniors (i.e., paper four, p.113). Although the new build was purposefully built for older adults with limited finances, the buildings were not registered in the social housing system and thus, tenants could not officially apply for the

necessary housing benefit that would enable them to live there. This was very stressful for several participants of the study as they were required to physically travel to the social housing services agency to inquire about the status of the building. Inquiries made by telephone were possible, however, many of the older migrants had little or no English-speaking skills.

Moreover, structural barriers often emerge at multiple levels. Individuals who worked in the system such as local health and senior service providers also revealed having experienced structural barriers, on a different level, which prevented them from providing necessary and important services for older adults (i.e., paper two, p.67). For instance, despite experiencing minimal national austerity measures, various social care organisations across Canada, have experienced funding cuts (i.e., community health, social care, parks and recreation), resulting in reduced human resources and staff burnout (BC Care Providers Association, 2018). Several service providers, during deliberative dialogue sessions and community mapping workshops, expressed having little or no capacity to provide free or low cost services, for example, craft classes, health seminars, and other activities. This indicated that resources drawn from the organisation would put increased pressure on the organisation, as a whole, which had an already limited capacity.

With limited in-house funding, older adults who resided in the building took matters into their own hands and began to organise self-funding opportunities in the shared amenity space such as bake sales, seeking charitable donations, bottle and cans recycling — a recommendation that stemmed from the research, highlighted in papers two and three. Community organisation and mobilisation is an established strategy for generating solutions to address structural barriers and even for challenging inequitable structural systems at large (Phulwani, 2016; Shand, 2018). However, often, the burden is placed on non-profit organisations and community members who voluntarily invest their time for the broader social good, but who have limited skills and resources to do this at scale (Kisby, 2010). As such, it is important to establish meaningful partnerships with persons that shape such structures at the start of redevelopment projects. For instance, in the current project, members of the municipal government were heavily involved, up until a key member was transferred to another municipality. Subsequently, the leverage acquired at the outset was no longer available midway through the project. Fortunately, the difficult tasks of the redevelopment project had been mostly accomplished with help

from other stakeholders, confirming that undertaking a CBPR approach can be highly advantageous for projects that require multiple partnerships to ensure its success.

Nevertheless, despite its socially driven and equity-focused principles, my experiences undertaking a CBPR project revealed challenges in the process, for example being under-resourced, managing expectations. This realisation helped affirm that a CBPR approach may not always be suitable for various types of research. This is mainly because CBPR can be extremely resource intensive and time consuming requiring a substantial amount of dedicated planning in advance of securing the necessary funding (Spears Johnson et al., 2016). For example, as place research is often embedded within the community, gaining access to community members requires having established relationships with gatekeepers to the community (Sixsmith et al., 2003). Accessing the community, particularly harder to reach groups such as homeless individuals, asylum seekers and refugees, and other socially isolated older adults demands extensive time investment (Fang et al., 2015; Canham et al., 2019). This access necessitated, firstly, locating and building trust and rapport with gatekeepers, and subsequently initiating the same process again with potential study participants.

For the Place-making with Seniors research, developing trust with older adults was challenging. Thus, it was important that I acknowledge my own privileged positionality, as a second-generation immigrant woman, educated in Canada and in the United Kingdom, with notable access to resources and privileges. For this research, such social advantages at times created a barrier for accessing Chinese community members who felt a certain mistrust of people who held such privileges. For example, some older Chinese migrants would not engage in the research because they perceived me as an outsider based on my physical appearance, proficiency in English, and my relationships with building management, the housing society and members of the municipal government. However, having shared cultural values, beliefs and practices alongside similar experiences of ethnic and migration challenges potentially reduced the social distance between the participants and me. This also enabled a thoughtful and meaningful analysis of the findings having witnessed my parent's similar migration histories and post-arrival difficulties that enabled deeper connection with the data.

In summary, it is important to highlight that to build *the right place* for older adults to age well, requires not only focus on the environmental features of place, but also

consideration and integration of the psychosocial, cultural and structural facets. The overall critical, reflexive analysis provided multipronged considerations for the environmental, psychosocial, cultural and structural dimensions of place. A critical, reflective analysis can thus be useful for shedding light on more deeply rooted place issues. It may allow for promising solutions to emerge that are conducive to the everyday realities of older adults.

The next section speaks to how application of participatory principles can be used to harness the experiential knowledge of persons situated outside academic and industry sectors by building partnerships across disciplines and sectors and working with members of the community.

4.3 Participatory Principles for Working with Vulnerable Groups

The integration of participatory principles was paramount for ensuring: an inclusive research process, equal power dynamics across stakeholder groups, empowered voices of seldom heard groups, collaborative working, and co-creation in all stages of the Place-making with Seniors project. Emphasised in earlier sections, CBPR principles are synergistic with the tenets and assumptions of intersectionality, as both concepts are underpinned by equity, empowerment, inclusivity, partnership-working and co-production of knowledge. To demonstrate how participatory principles facilitated place solutions with older adults, the following subsections situate participatory principles according to notions of transdisciplinarity. They provide a critical discussion of participatory principles (equity, inclusivity, empowerment, partnership and co-creation) in practice, for enabling the co-creation of place solutions to support older adults to age well in the right place.

4.3.1 Situating Participatory Research in Transdisciplinary Working

Movement towards ageing in the right place initiatives has progressed despite indications that preceding ageing-in-place notions, as a policy driven model, may not always result in the best housing options for the diversity of older adults (Sixsmith and Sixsmith, 2008; Golant, 2015). As emphasised, older adults are not a homogenous population; and to help older adults to age well in the right place requires consideration for the social, psychological, cultural and structural dimensions of place, in conjunction with the built environment (Philibert et al., 2015). Given the complexity of the problem area, a participatory, and more specifically, *a transdisciplinary* way of working was necessary

and important for a way forward when creating housing solutions that enable older adults to age well in the right place.

Foundational to CBPR is the notion of transdisciplinarity. Transdisciplinary ideas have fuelled transdisciplinary working, a research philosophy that involves scientists from diverse academic disciplines and experiential stakeholders, for example older adults and caregivers, industry and financers, and policy makers, coming together to solve complex issues, known as 'wicked' social problems, by co-producing knowledge and innovation that have real-world impact (Boger et al., 2017). Importantly, transdisciplinary working is *not* research involving only one discipline or sector, nor does it represent research that includes experiential stakeholders only as research participants or subjects (Grigorovich et al., 2019). Experiential stakeholders, such as the older adults, should serve alongside researchers as research partners. And together, all share information, knowledge and expertise in a collaborative and co-creative context such that a shared vision of the problem area emerges alongside shared objectives, integrative conceptual models, innovative methodological approaches, data collection methods, analysis and interpretation strategies and practices (Polk, 2015).

Accordingly, participatory working is a key aspect of transdisciplinary research, requiring specific focus on the complexity of a problem and co-production of knowledge solutions guided by participatory principles (Boger et al., 2017). Akin to CBPR, the goal of transdisciplinary working is to develop a shared vision of a complex problem area (Rittel and Webber, 1973), and transcend current ways of thinking to progress towards understandings of the problem area such that innovation drives the co-production of problem solutions (Battersby et al., 2017). A key principle of transdisciplinary research is that the results and outputs should be targeted at generating positive social change (Boger et al., 2017).

Meanwhile, transdisciplinarity holds that the complexity of *ageing in the right place*, as a social challenge, can also be explained by the notion of a 'wicked' problem. This is a concept that originated from urban studies, which emphasises that in planning, design and development, researchers, planners, designers and developers alike, are confronted with problems that often necessitate multiple solutions (Riva et al., 2014). Often, the proposed solutions can, in turn, create more difficulties; thus, requiring a diverse team of experts,

including those who bring to the table their lived experience, to view the problem at different angles and co-produce ideas to generate more dynamic solutions (Polk, 2015).

The emergence of transdisciplinarity and its influence on research, policy and practice is timely because across the world, societies are becoming overwhelmed by socioenvironmental challenges that stem from growing social and health inequities, poverty, resource scarcity, climate change and population ageing (Chan, 2017). Interrelation of these profound global challenges requires collaborative involvement of actors across nations, organisations, communities, and individuals all of which have unique perspectives on the problem area and distinct ideas for innovative solutions (Polk, 2015). Hence, in the case of creating age-friendly environments to adequately support and house older adults, it is important that there are swift and intelligent responses to this social problem, through the strategic use of integrative and participatory approaches to harness both scientific and lay knowledge. To do this, the current research was guided by five principles of participatory research, equity, inclusivity, empowerment, partnership and co-creation.

4.3.2 Contextualising Participatory Principles for Ageing Well in the Right Place
Introduced earlier in section 3.2.1 are key participatory principles (equity, inclusivity, empowerment, partnership and co-creation), which underpinned the Place-making with Seniors project. Currently, there is robust research describing CBPR and its utility in health research. However, application of CBPR in practice, particularly as it relates to housing development processes for older adults are not well articulated. To progress understandings CBPR of in practice, the following discussion aims to unpack the operationalisation of these principles, and their shaping of the redevelopment process for the affordable housing initiative presented in this thesis.

Equity. In the context of the current redevelopment project, equity was framed according to the equitable representation of voice and decision-making to facilitate the co-creation of shared solutions towards a more liveable environment for older adults. Large-scale urban redevelopment projects, such as the affordable housing one discussed in the body of work for this thesis, required and involved many actors from different levels of society and all with various interests and agendas. These included the housing society, developer, government bodies, community service organisations, individuals living in the community and most importantly, the older adults who were eager and ready to re-create

their new homes. Despite the magnitude of the impact on a number groups, the creative input and decision-making aspects of redevelopment projects at large, often become stratified according to a hierarchy where groups who possess the most monetary means, are provided the most voice (Stewart and Lithgow, 2015). Undoubtedly, this unequal distribution of power and input has raised serious democratic and social justice related issues within urban planning, research, development and design (Watson, 2003; Rydin, 2007; Healey, 2012; Watson, 2014).

Equitable participation in this project was facilitated by increasing and operationalising the accountability and responsibility of all those affected and involved. The act of increasing "responsibilitisation" (Maasen and Lieven, 2006, p.401), i.e., the notion of accountability and an orientation toward the common good by all actors involved, was demonstrated by the collective participation and involvement in decision-making of all stakeholders. These stakeholders encompassed members from the housing society, developer, municipal government, community service providers, academia and the older adults. To ensure that the involvement of various actors was genuine, specific participatory methods and techniques were implemented which removed any structural challenges to participation by those who are most easily affected and constrained by structural barriers. For instance, the involvement of community service providers was crucial for the project if there was any chance of making in-house social programming possible in the new build. As such, deliberative dialogue sessions were held at four different times of the day, once per week for a month to accommodate for varying work schedules. The sessions were structured in such a way that limited opportunity for 'one voice' to dominate the conversation, i.e., they were held at a round table, with an experienced discussion convener.

To encourage the active involvement of older adults, age-related barriers associated with mobility challenges, for example, were mitigated by ensuring the community mapping workshops were held at an accessible location. The local older adults' community centre was located less than half a kilometre from the homes of the older adults, which made it convenient for them to get to. The workshops were also structured in a way that facilitated the participation of persons with tacit as opposed to formal or discipline-specific knowledge. Interpreters were present to minimise language barriers for older Chinese migrants. A key priority was to bring older adults of diverse backgrounds together with persons with decision-making power to make certain that the desires and

expectations of those who were most impacted were prioritised, and where possible, were met.

A key advantage from undertaking non-traditional techniques for the current research was through the ability to challenge the existing status quo of knowledge generation; namely, that science and industry sectors have traditionally valorised certain knowledge and knowledge production mechanisms over others. This was strongly enforced by an ethos embedded at the outset of the CBPR project, emphasising that evidence and knowledge is not solely determined and produced by that of science and industry, and that experiential knowledge is as equally as valuable. Guided by CBPR principles, the research process prioritised the view that knowledge is dynamic, multifaceted and often embedded in social processes. Hence, to expose the social nuances of how ageing well in place is perceived and how it can be facilitated, collaborative research opportunities were created. This enabled important experiential knowledge to be acquired and integrated, which brought to the forefront, the everyday living realities of older adults:

- o bright rooms can cause dizziness and disorientation resulting in falls and injury;
- o dark rooms/communal spaces can be trip hazards and difficult to negotiate, especially for people with visual impairments;
- o living on the 16th floor can mean not being able make it down 16 sets of stairs during a fire or a fire drill;
- o not understanding the emergency message because it was in another language could result in a fatality;
- o leaving your cat behind because your new home prohibits pets can created the onset of depression;
- o crossing the busy road to get to the shopping concourse frightens you because there are no traffic light; and
- o not knowing or not having socials supports around to reveal the extent of your memory loss.

These examples were reported by older people to have shaped the organisation, development and planning of the building itself and their immediate neighbourhood.

Accordingly, participatory and equitable modes of facilitating knowledge production and voice have raised much concern and controversy regarding democratic implications, practical value and scientific quality in urban planning and design initiatives and research (Zierhofer and Burger, 2007; Wiek et al., 2014). However, neglecting tacit, experiential knowledge as evidence not only creates a disservice to science, i.e., omission of evidence, but it can also mean partial solutions to a complex problem. This can, consequently, result in more challenges in the long run, i.e., interventions that are not fit for purpose.

Inclusivity. Progressing ageing in the right place initiatives is, notably, complex particularly in light of limited resources, multiple political agendas and interests, and palpable demand for market growth by developers (Robert Lovan et al., 2003). Consequently, seldom heard voices are often left out of the decision-making process (Robert Lovan et al., 2003). In accordance with a participatory research approach and in recognition of the importance of lay perspectives, the involvement of older adults and community service providers was a high priority. Inclusivity to progress urban planning, design and development initiatives requires more than just identifying who is missing from the discussion, as it also requires strategies to keep participants engaged over time (Robert Lovan et al., 2003). This is particularly the case when working with more vulnerable populations because their health status and other life circumstances may change over the duration of the project. For example, some older adults' health had deteriorated during year 1 of the project, reportedly due to the stress of the forced relocation; while others had passed away over the transitional period, i.e., when they were between homes. As such, some participants were lost over the duration of the study and others did not have the opportunity to experience living in the new development.

Thus, it was important that I maintained frequent contact with participants of the study and was especially flexible and responsive to the varying needs of the older adults such as mobility challenges, language barriers, loneliness, chronic health conditions and frailty. To do this, I implemented routine and non-routine strategies, as described by Zweben et al. (2009), to improve researcher-participant interaction. Examples of routine strategies included:

- o providing detailed information about the expected role of participants for all research activities, for example, in-depth interviews, storytelling, community mapping, photo tours feedback forum including explaining information about

study protocol, duration, and expectations about follow-up so that participants felt comfortable and included in the entirety of the research process;

- o addressing any anticipated barriers to participation, for example, doctors' appointments, transportation and mobility issues, language barriers, voluntary work conflicts, etc., through open communication with participants and flexibility in study protocol to be responsive to participants' needs;
- o providing consistent scheduled reminders including phone calls, and rapid follow-up at time of study design and integrating these strategies into the study protocol; and,
- o offering compensation for invested time through continued participation and engagement in study activities so that participants felt appreciated.

Nevertheless, some participants were particularly difficult to access due to the nature of their housing situation such that they were forced to live in a place that was a two-hour drive outside the City of Richmond to afford housing costs. In such cases, non-routine retention strategies were undertaken that included:

- o designing flexible meeting times, e.g., later in the evening;
- o setting convenient locations for meet-ups, e.g., shopping malls, and arranging to go to the participant's location of choice to collect a data;
- o negotiating the use of research funds for mileage and other travel expenses in order to reach research participants that lived further outside the city;
- o providing participants transport for getting back home after a research activity;
- o having up to date phone numbers and addresses of participants and their family members in case, they are unreachable for any particular reason;
- o offering participant's paid refreshments so they felt appreciated;
- o accepting participant's refreshments provided to you even if the offerings appeared unappetising; and,
- o organising to provide multilingual researchers to facilitate communication with non-native English speakers.

Akin to other past research, prioritising inclusivity in participatory research can be a tasking and time consuming process that requires incredible flexibility and impeccable inter-relational skills, as well as an overall shift in traditional research thinking (Fang et al., 2015; Spears Johnson et al., 2016). Often, to be inclusive requires partnerships

outside of the academic sector, where community service providers become gatekeepers to individuals who are the hardest to reach (Grigorovich et al., 2019). Individuals who are well-established in the community, with strong social ties, can be very effective at creating opportunities to engage those who are seldom heard (Cheng, 2018). For this project, a local older adult service provider helped connect researchers with harder to reach individuals. This included older adults who opted not to move back into the new build because they were confronted with challenges that would introduce negative publicity for the developer, if exposed. For example, all 'grandfathered' tenants were promised financial support by the developer to cover their moving expenses from their temporary place of residence back into the new build. However, some older adults were forced to move very far out of the city, due to lack of affordability, and were only later informed that a cap had been placed on how much the developer could offer for relocation costs. Consequently, these individuals could not afford to move back into the new build. To avoid negative exposure, their names were omitted from the property manager's list of recommended people to include in the study. However, because there was a gatekeeper into the community, it was possible to conduct pre-move interviews with some of those who opted not to relocate back and understood the reasons behind the decision. This is an important example of how experiential knowledge and expertise are increasingly becoming indispensable for uncovering hidden issues, such as additional costs, quality of materials, and actual square footage, in planning and development (Gibbons et al., 1994; Nowotny, Scott, and Gibbons, 2001; Maasen and Lieven, 2006). Hence, to acquire a holistic understanding of a problem area, every effort should be made to ensure the inclusion of seldom heard individuals and those who are more difficult to reach.

Empowerment. In general, research has shown limited progress toward the genuine engagement of communities in decision-making (Stewart and Lithgow, 2015). The insufficient integration of lived experience when creating homes for older adults is another example of a common and unfortunate reality in research, development and innovation at large (Greenhalgh et al., 2016a). For example, in city planning initiatives, experiential knowledge and expertise by actors outside of academia or planning profession are often undervalued or viewed as less relevant for addressing the problem area (Buffel et al., 2012; Natarajan, 2015). The impact is a lack of engagement from members of the community to shape the outcome; and this is often attributed to structures that prevent meaningful engagement such as bureaucracy and standard practices (Head,

2007); power imbalances such as between developers and the community (Nelson, 2008); limited resources such as funds and human resources (Stewart, 2015); and political demands such as financial pressures to approve development plans (Stewart, 2009). As well, obligations and efforts to include lay perspectives subsequently appear disingenuous because "participants feel like they are being asked to approve predetermined plans" (Nelson et al., 2008, p.40) rather than to influence decisions and outcomes from the outset. Yet, who better to provide suggestions and solutions regarding the needs of older adults, *than older adults themselves?*

The idea that lay perspectives are less relevant or valuable has generated self-stigma whereby persons feel that they are not educated or knowledgeable enough to actively participate and contribute to research (George et al., 2014). Nevertheless, notions of participatory research encouraged not only the inclusion and prioritisation of lay perspectives, but also the enablement of older adults to become empowered participants in the research process. This was particularly the case for the affordable housing redevelopment project, as the research was methodologically structured around participatory principles that facilitated the active participation of older adults. For instance, methods such as photo tours, storytelling and participatory mapping all contained elements of empowerment and ownership that enabled older adults to participate as active place-makers in their community. Accordingly, all three methods were participant led. During photo tours, older adults directed where the tours would take place, dictated which meaningful aspects of place to photograph, and conducted the preliminary co-analysis of the data wherein an older adult would lead the analytical discussion of the images. Similarly, the unstructured nature of the storytelling method, allowed for the participant to convey and shape their past place stories. During storytelling sessions, it was evident that reliving past place memories, particularly ones that involved overcoming trials and tribulations; subsequently helped enable realisations of personal strength and resilience, appreciation for their current situation, and hope for the future such as surviving the Cultural Revolution. Lastly, during community mapping alongside the walk alongs the older adults led the important discussions about the features of their place such as: surrounding environment (e.g., need for traffic lights adjacent to the building); social (e.g., need for mentally and physically stimulating in-house activities for seniors); structural (e.g., need for affordable Internet); and cultural features (e.g., need for more cultural events that bridged the two cultural communities), that were conducive for them to age in well in place. Older adults felt emboldened to voice their perspectives

and articulate their concerns, such as gaps in community services, built features not suitable for the older adults, because the mapping workshops were structured to facilitate informal conversations through visual cues.

In essence, encouraging older adults to feel empowered in urban planning, design and development is highly dependent on creating a social and structural environment, where older adults who are less confident about their knowledge and expertise feel motivated to take a stance and contribute to solution-focused discussions to address a complex problem area such as that of achieving ageing well in the right place for older adults. The democratisation of power through the participatory research process enabled older adults to not only become and remain engaged through their positive contributions to their own communities, but more importantly, it served to enhance their quality of life in the new build.

Partnership. Past research highlights the struggle planners and developers have when employing a participatory design methodology, resulting in the omission of necessary and important tacit knowledge available through the use of participatory processes (Moore and Elliott, 2016). Importantly, planning and development projects can impact the everyday lives of people at multiple levels (Robert Lovan et al., 2003). At the community level, local service agencies, businesses and surrounding residents are indirectly impacted as they experience an influx of older adults to service and acculturate to the social norms of the community. At the structural level, governments must then also ensure that older adults have the necessary and accessible supports so that they may live independently for as long as possible. Subsequently, the number of specific direct and indirect urban challenges experienced at multiple levels require dynamic partnerships to develop holistic solutions (Polk, 2015). Accordingly, different perceptions and ideas on how to address the multiple framings of sustainable development for ageing well in place can be promoted and progressed by various urban actors (Petts et al., 2008). For the current project, the partnerships developed with individuals from the housing, planning, developing, servicing, government and lay sectors, resulted in a diversity of knowledge and expertise captured via participatory methods. For instance, through the series of deliberative dialogues, opportunities for enhancing social interaction and wellness programming in the shared amenity spaces were identified. Transdisciplinary working across sectors had informed the implementation of a range of sustainable solutions to ensure well-being of tenants in the new build that included:

- free Wi-Fi for tenants in the shared amenity spaces on the second floor, including the reading room, laundry room waiting area, lobby and lounge areas;
- a set of traffic lights adjacent to the building connected to the shopping mall;
- a range of exercise equipment for the fitness room;
- a social committee led by select tenants responsible for organising events and activities provided to all tenants (non-exclusionary);
- supportive and friendly onsite building management who efficiently address building maintenance issues;
- desired social and learning activities implemented by older adults (e.g., line dancing group, cultural food events);
- commitment by a range of local service providers to provide free or low cost services; and,
- additional funding for activities for older adults through the provision of building tours for foreign scholars and architects.

The use of participatory principles resulted in meaningful, long-term relationships with local service providers, housing providers, developers and municipal government workers which resulted in 'communities of co-production' to facilitate ageing in the right place initiatives. Different worldviews, past place experiences, mandates and values produced different understandings of sustainable urban development for ageing in the right place as was demonstrated by the varied practical solutions that otherwise would not have emerged. Such diverse knowledges and approaches to address complex problems are all legitimate sources of expertise which can result in innovative solutions. The integration of multiple knowledge sources is a key aspect of transdisciplinary working through a participatory approach and must be prioritised if we are to progress in urban planning, design and development.

Co-creation. According to Godemann (2008), participatory research and practice in planning and redevelopment initiatives can be facilitated by meta-reflexive approaches across diverse groups of professionals and lay persons to evoke co-creation of solutions. Methods discussed in the current body of published works reflect and are analogous to the practicing of meta-reflexivity, which emphasises that knowledge integration and exchange occurs via a group recognition and appreciation for diverse knowledge claims and sources of knowledge through informal and meaningful discussion (Godemann,

2008). For example, through deliberative dialogues, sessions that were informal, problem focussed and discussion based (Kingston, 2005), co-production opportunities were identified that included: strategic planning for enhancing social participation of older adults in the building's shared amenity spaces; bringing in community and neighbourhood supports for senior-specific programming; and addressing contextual challenges to service provision experienced by service providers.

In alignment with past research (Battersby et al., 2017), by grounding the discussions in the focused area of creating optimal environmental conditions for older adults of low-income to age well in place through a participatory process, the current research had immediate applications. For instance, collaborative planning across the diversity of stakeholders resulted in solutions for the effective use of the social environment, e.g., social programming, within the physical environment, for example the amenity and neighbourhood spaces, that ultimately enhanced the health and well-being of older adults. The meta-reflexive use of deliberative dialogues with stakeholders aided the development of action steps and helped to identify facilitators for and barriers to the provision of culturally-tailored services and events that bridged communication and reduced social distance across the two dominant cultural groups. As well, the engagement of local service providers and other community members with vested interest in older adults' health and well-being committed all partners to community investment and asset sharing. This was largely due to the fact all stakeholders were engaged in a shared platform during the deliberative dialogues which enabled the generation and integration of transdisciplinary knowledge and experiences into the planning process. Similarly, the participatory mapping workshops and walk alongs enabled the co-identification needs, resources and solutions required for the older adults to age well in the right place in the new build. Here, seldom heard groups in the planning process, namely the older adults relayed their wants, needs and expectations to persons with decision-making power. Meta-reflexivity via discussions during community walk alongs facilitated the building of relationships, communication, and understanding between English and non-English speaking groups that carried forward in the building as was demonstrated by the number of cultural events. Additionally, engaging decision-makers in a meta-reflexive, action-focused process provided them with direction for bringing about change, e.g., traffic lights were built shortly after the workshops. Hence, through meta-reflexivity — as highlighted in committee meetings and constituted as part of the ongoing development process — all stakeholders were encouraged to participate in active dialogue and shared

learning. This form of co-productive learning and problem-solving (Wenger, 2003) was crucial for challenging traditional top-down practices and attitudes that surrounded urban planning, design and development. It provided an opportunity to centralise the older adults' stories, visual depictions, and co-created maps in the dialogue process while positioning other stakeholders as active listeners and learners.

Overall, the consideration, integration and implementation of participatory principles can help achieve social robustness — in particular, as it pertains to the quality and usability of both research findings and application in the real world (Nowotny et al., 2001). Interactive and participatory modes of knowledge co-production via principles of equity, inclusivity, empowerment, partnerships and co-creation enabled transdisciplinary working across disciplines and sectors that ultimately facilitated problem solving in *real life* in the project. The next section discusses how we can build a pathway towards achieving research impact.

4.4 Integrating Knowledge Translation for Policy and Practice

Over the last decade, research councils across North America and the United Kingdom have begun to mandate KT activities for translating research outputs to inform policy and practice (Ward et al., 2010). As researchers, it is important to ensure that findings are accessible and applicable in real-world settings. With the generation of any new knowledge comes responsibility to translate this information to ensure that it is fit for frontline consumption and that the research has served its purpose (Gorman and Batra-Garga, 2014). Because outreach and communication are important aspects of CBPR, a series of KT activities were undertaken. In addition to peer-reviewed publications, other outputs included resources to assist the development of affordable housing developments to support the age-specific needs of residents in the home and the community, as well as policy directions and best practice guidelines for future redevelopments for older adults.

KT concepts, processes, activities and outputs are presented in the next subsections.

4.4.1 Informing Research and Development through Knowledge Mobilisation

Expectations on how knowledge is produced in research and development have evolved over the last 20 years (Polk, 2015; Osborne, 2015; World Health Organization, 2019). This has aligned with research on public engagement in academia which has prioritised the gradual removal of social and structural barriers between academic scholarship and

society through the creation of infrastructure for knowledge co-production (Research Councils UK, 2014). Hence, this new vision for research, development, policy and practice, is one that encourages open scholarship, the co-creation of knowledge, transdisciplinary and community-based research, as well as public engagement in research and research governance (Canadian Institutes of Health Research, 2004; Research Assessment Exercise, 2009). However, the practical implications for achieving this vision raises persistent conceptual and institutional challenges linked with the conjoining of knowledges generated by science and society (Grigorovich et al., 2019). While some challenges can be addressed through guidance and requirements for research have an effect at the national level, it can be argued that through individual practitioners, researchers and professional networks, new cultural practices become embedded, integrated and normalised in everyday social and work contexts (May and Finch, 2009).

Nevertheless, there has been strong recognition that the value of research and development, in general, is only truly realised through the impact it has on individuals, communities and societies at large (Research Councils UK, 2014). Research impact is the demonstrable social and economic contribution that can be achieved through important developments in methods, theory and applications in the real-world (Research Councils UK, 2014). Aligned with new visions for knowledge sharing and co-production, research impact can materialise through the everyday practice of co-creation and knowledge transfer at multiple levels, benefiting individuals, communities, organizations and across nations (Polk, 2015). Hence, central to CBPR, and, the research discussed in the body of work for this thesis, is KT, which introduces and facilitates various pathways towards achieving research impact.

Defined as "a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve" health and social outcomes (Canadian Institutes of Health Research, 2004, p.1), the term KT encompasses several constituents. KT has been applied in the Canadian context to describe the transfer of new knowledge from academic institutions to knowledge recipients, commonly known as *knowledge users* (Canadian Institutes of Health Research, 2004; Grimshaw et al., 2012). Knowledge users typically include those who work in government, industry, non-profit and academic sectors, but they can and *should* also involve members of the community. This is particularly the case in the field of planning, and in that of creating holistic housing solutions for older adults. Increasingly, urban planning researchers and

practitioners are being encouraged to rethink the language and processes of knowledge production in their research and practice, in terms of knowledge mobilisation (Fainstein and Servon, 2005; Phillipson, 2007; Buffel et al., 2012; Wahl et al., 2012; Osborne, 2015; World Health Organization, 2019).

Situated under the umbrella of KT, knowledge mobilisation (KMb) is a process of knowledge co-creation and circulation that occurs with diverse groups of stakeholders to co-create positive social impact and change (Canadian Institutes of Health Research, 2015). KMb is an intrinsic part of transdisciplinary research and has been denoted as a key component for successful research and development (Boger et al., 2017). Several major granting agencies in Canada (e.g., Networks of Centres of Excellence, Canadian Institutes of Health and the Social Sciences and Humanities Research Council of Canada), and more recently in the United Kingdom (e.g., National Institute for Health Research and the Department for Education) have incorporated KMb as a core conceptual criterion for their funding model. Although KMb was emphasised as an important determinant for ensuring research impact, there remains considerable, cultural and structural barriers for the effective integration of KMb into the research and practice. The concept of 'not reinventing the wheel' is heavily engrained across academic disciplines and often across work sectors. Hence it becomes the cultural norm to work in 'silos' using conventional methods and approaches that have been tried and tested (Grigorovich et al., 2019). This challenge is analogous to a key argument presented in this thesis, regarding the struggle to 'do things differently' within the context of urban planning, design and development. Moreover, integrating KMb into planning represents more than a request to adopt new ways of thinking and new ways of working. The challenge is deeply rooted in the traditions of planning norms and cultures (Osborne, 2015). Integrating models of knowledge co-creation and knowledge sharing implores urban planners and researchers to critically reflect on the way they work.

Yet as emphasised in earlier sections, there is growing appetite for undertaking participatory approaches and less conventional methods in planning research and practice that align well with KMb (Andrews, 2018). Conceptually, KMb was derived with the objective of creating collaborative and engaged learning spaces whereby the exchange of knowledge is facilitated by the inclusion of all knowledge users (Gagliardi et al., 2016). It would therefore be advantageous to consider KMb in terms of generating a nascent culture of KMb working that would pervade popular planning philosophy and practice.

While changes in funding criteria, policies and structures can play a significant role in developing and advancing KMb, the primary agents of change for KMb have arguably emerged from the ground up (Greenhalgh et al., 2016b). Hence, a promising model for progressing KMb in urban planning and development could involve a mix of CBPR and knowledge co-production principles, reflective of a fundamental concept in community-engaged scholarship understood as the, "collaborative knowledge generation by academics working alongside other stakeholders" (Greenhalgh et al., 2016b, p.392).

Aligned with the tenets and assumptions of this thesis, KMb embraces complexity and collective working, and is thus, not a simplistic process in practice because at its core, KMb embraces the plurality of diverse approaches (Graham and Logan, 2004). Subsequently, the emphasis for an implementing philosophy for KMb in place and planning research is discussed in the following subsection. An iKT plan created for the Place-making with Seniors research is presented and showcases the breadth of knowledge mobilisation activities, events and processes undertaken to facilitate effective knowledge co-production and exchange across the diversity of stakeholders.

4.4.2 Integrated Knowledge Translation in Place Research and Practice

Ensuring a pathway towards societal impact through the democratisation of knowledge and effective knowledge transfer is central to CBPR. KT is a concept that has gained significant recognition in research and policy (Ward et al., 2010). The notion of KT has been furthered developed over recent years to emphasise the co-production of knowledge and knowledge exchange with stakeholders (including persons with lived experience alongside decision-makers) (Bowen and Graham, 2013). This more nuanced conceptualisation of KT "is commonly referred to as integrated knowledge translation (iKT) and defined as an ongoing relationship between researchers and decision-makers" (Gagliardi et al., 2016, p.1) in the KT process. iKT refers to an integrated and participatory way of working whereby researchers, practitioners and knowledge users (those who aim to use the resultant findings), collaborate to co-generate new knowledge that is relevant in real world settings (Battersby et al., 2017). Fundamentally, iKT is grounded in the theory of research utilisation (Phipps and Stan, 2009). Three key features of this theory to enhance research utilisation are: producer push, user pull and knowledge exchange (Lavis et al., 2003). Accordingly, this paradigm promotes unidirectional methods of knowledge transfer, exchange and translation, but was later enhanced by

Phipps and Shapson (2009) to include the notion of iterative co-production between researchers, practitioners and knowledge users (Hart and Wolff, 2006).

Informed by the theory of research utilisation, an iKT plan was created for the Place-making with Seniors project during the project initiation phase. Development of an iKT plan at the start of any research is important because it allows for researchers and knowledge users to make any necessary adjustments if KT activities have not demonstrated effectiveness (Gorman and Batra-Garga, 2014). For the current project, producing an iKT plan at the outset also helped to provide for a funding rationale, in addition to helping ensure that the intended impact was more likely to be achieved in the real world.

Illustrated in table 4.1 is the iKT plan created for the research to aid the mobilisation of innovative developments in the project. The iKT plan comprises methods, activities and subsequent outputs (select few for the purposes of this thesis) — organised according to the theory of research utilisation and facilitated by the 'producer push', 'user pull' and knowledge exchange mechanism. First, 'producer push' is the process whereby research producers engage in the active and effective dissemination of their work; for example, by making research findings more accessible by disseminating these in various formats via different knowledge fora (Levin, 2011). In table 4.1, 'producer push' constituted activities undertaken by the knowledge producer(s) to extend the reach and brokerage the translation of research findings for uptake in practice. In the case of the affordable housing redevelopment project, briefing notes for service providers and housing associations, lay summaries for the older adult community and an article for an architectural design magazine based in China, targeting architects and designers were developed to ensure the readership of a range of audiences. This was purposeful, and stems from a multipronged approach described earlier whereby multiple actors and influencers are targeted to facilitate a pathway for change that influences environmental, cultural, social and structural aspects of place. Similarly, as a part of the producer push, academic audiences were reached through peer-reviewed publication of study findings in established first tier journals that span the scope of health, planning, social sciences, medicine, and gerontology.

Table 4.1. Knowledge translation plan detailing knowledge mobilisation activities and select outputs.

METHODS	ACTIVITIES	DETAILS	SELECT OUTPUTS
Producer Push	Lay Summaries, Briefing Notes, Magazine	Clear language summaries of findings according to research themes derived from the analysis were developed and translated into policy and practice briefing notes and made publicly available via institutional websites, and newsletters.	**Briefing Notes** • Fang, M.L., Battersby, L., Canham, S., Ren, T. H., Woolrych, R., Sixsmith, J. & Sixsmith, A. (2017). Aging well at home: An implementation and sustainability plan. http://www.sfu.ca/content/dam/sfu/starinstitute/Reports/Implementation Sustainability Guidelines 28April2017_Final.pdf • Fang, M.L., Woolrych, R., Sixsmith, J., Canham, S., Battersby, L. & Sixsmith, A. (2015). Our place, our space: Resident stories and place priorities. http://www.sfu.ca/content/dam/sfu/starinstitute/Reports/English Sense of Place.pdf **Lay Summaries** • Fang, M.L. (2016). Kiwanis tower project — research update. Seniors' Housing Update, 25(2), 3. • Fang, M.L. (2015). Kiwanis Tower – Community Mapping Workshops. Seniors' Housing Update, 24(3), 1. • Fang, M.L. (2015). Kiwanis Towers. Seniors' Housing Update, 24(1), 7. **Magazine Article** • Fang, M.L., Canham, S., Sixsmith, J., Woolrych, R., & Sixsmith, A. (2018). Designing Homes for Seniors: The 'Ins' and 'Outs' of an Affordable Housing Project in Western Canada. Design Community, 4(86), 72 – 85.
	Peer-reviewed Publications	Academic manuscripts were drafted and submitted to high impact journals.	**Peer-reviewed Publications** • Fang, M.L., Woolrych, R., & Sixsmith, J. (under-review). Understanding Place Histories to Inform Positive Ageing-in-Place: Intersectional Experiences of Forced Relocation. Health & Place. • Fang, M.L., Woolrych, R., Sixsmith, J., Canham, S., Battersby, L., & Sixsmith, A. (2016). Place-Making with Older Persons: Establishing Sense-of-Place through Participatory Community Mapping Workshops. Social Science & Medicine, 168, 223-229. • Canham, S., Fang, M.L., Battersby, L., Woolrych, R., Sixsmith, J., & Sixsmith A. (2018). Contextual Factors for Aging Well: Creating Socially Engaging Spaces Through the Use of Deliberative Dialogues. The Gerontologist, 18(58), 140-148.
	Research Translation	Lead researcher seized an opportunity to connect with knowledge users (e.g. seniors, community members, local decision-makers, service providers).	**Public Seniors' Forum** • Fang, M.L., Woolrych, R., Sixsmith, J., Canham, S., Battersby, L. & Sixsmith, A. (2015). Voicing Stories for Change. Panel presentation for the Affordable Housing Breakout Session at the System Change for Seniors Care Forum, Burnaby, BC. * *internal post-move feedback forums were also conducted with older people in the new build to assess impact*

METHODS	ACTIVITIES	DETAILS	SELECT OUTPUTS
User Pull	Research Translation	Knowledge users created opportunities to connect with researchers. A knowledge broker (Lead Researcher) translated research findings into accessible information for community members, local decision-makers, service providers.	**Presentations to the Community** • Fang, M.L., Woolrych, R., Sixsmith, J., Canham, S., Battersby, L. & Sixsmith, A. (2016). "Place-making with Seniors". Working with Community Stakeholders to Achieve Solutions for Positive Aging in Place. Presentation for the Richmond Community Services Advisory Committee, Richmond, BC. • Fang, M.L., Woolrych, R., Canham, H., Sixsmith, J. & Sixsmith, A. (2014). Place-making with Seniors: Preliminary Findings from the Kiwanis Towers Project. Presentation for the Richmond Intercultural Advisory Committee, Richmond, BC. • Fang, M.L., Woolrych, R., O'Reilly, C., Canham, H., Sixsmith, J. & Sixsmith, A. (2014). Place-making with seniors: Transitions into affordable housing. Presentation for the Richmond Homelessness Coalition, Richmond, BC.
Knowledge Exchange	Research Forums & Opportunities for Public Dialogue	Examples include: • Knowledge Cafés • Feedback Forums • Academic Conferences • Community Engagement Events • Radio Podcast • News Media • Video Storytelling	**Academic Conferences** • Fang, M.L., Woolrych, R., & Sixsmith, J. (October, 2018). Intersectional Experiences of Forced Relocation: A Life-course Exploration of Older Migrants' Place Histories. Paper for the 47th Annual Scientific and Educational Meeting of the Canadian Association on Gerontology, Vancouver, BC. • Fang, M.L., Canham, S., Battersby, L., Woolrych, R., & Sixsmith, A. (July, 2017). Perspective Workshops: Co-creating Service Solutions for Seniors in Affordable Housing. Paper for the International Association of Geriatrics and Gerontology 2017 World Congress, July 23-27, 2017, San Francisco, CA. • Fang, M.L., Woolrych, R., Sixsmith, J. Canham, S., Battersby, L. & Sixsmith, A. (August, 2015). Place-Making with Older Persons: Establishing Sense-of-place through Participatory Community Mapping Exercises. 16th International Medical Geography Symposium, Vancouver, BC. **Radio Podcast** • The Life Course — trauma, migration and 'renoviction' in Vancouver. CBC Radio, CBC Ideas, October 9, 2018. Available at https://www.cbc.ca/radio/ideas/the-life-course-trauma-migration-and-renoviction-in-vancouver-1.4855729 **News Media** • Canadians should 'buy smaller' homes in response to interest hike, Bank of Canada head says featured in Global News Online, July 11, 2018. Available at https://globalnews.ca/news/4326278/canadians-buy-smaller-homes-interest-hike/ **Video Storytelling** • Fang. M.L. (2018). Understanding Place Histories to Inform Positive Ageing-in-place. SSHRC Storytelling Showcase. Available at https://www.youtube.com/watch?v=apkPMvZNaxg&list=PLww1dvjSoO4PO1a17d5VDea_VDhdCYhck&index=1

METHODS	ACTIVITIES	DETAILS	SELECT OUTPUTS
Co-production	Research partnerships & community-based research	Applied principles of community-based participatory research at the outset. Where possible, engaged community stakeholders throughout all stages of the research process.	**Book Chapters** • Sixsmith, J., Fang, M.L., & Canham, S.L. (in press). Co-creating Home and Community: Building Partnerships to Support Older Adults to Age-Well-in-Place. In Peel, E., Holland, C., Murray, M. (Eds.), Psychologies of Ageing: Theory, Research and Practice (pp.189-220). Cham: Palgrave MacMillan. • Fang, M.L., Woolrych, R., Sixsmith, J., Canham, S.L., Battersby, L., Ren, T.H., & Sixsmith, A. (2018). Integrating sense-of-place within new housing developments: A Community-based participatory research approach. In Goulding, A.M., Davenport, S.B. & Newman, A. (Eds.), Resilience and Ageing: Creativity, Culture and Community (pp. 129-156). Bristol: Policy Press.
	Funding Opportunities	Built research partnerships with community stakeholders to develop ideas and acquire additional funding that prioritised CBPR to expand on research questions drawn from study findings.	**Additional Awarded Funding** • Fang, M.L. (2016). Mapping Relocation Experiences: An Exploration of Older Peoples' Place-based Histories through an Intersectionality Lens. Doctoral Award, awarded by the Canadian Social Sciences and Humanities Research Council (SSHRC). $80,000. Role: Project Lead. • Sixsmith, A., Fang, M.L., Battersby, L. & Canham, S. (2015). Cultivating a Wellness Program for Positive Aging in the Right Place - Vancouver Foundation Test Grant Proposal Development for the City of Richmond. Funded by the City of Richmond. $9000. Role: Co-Investigator.
	Knowledge Cafés	Discussed research findings, identified community members' place priorities to co-create solutions.	**Lay Report** • Fang, M.L., Canham, S., Battersby, L., Ren, T. H., Woolrych, R., Sixsmith, J. & Sixsmith, A. (2016). Collaboration Café: Co-creating Solutions with Non-Profit Housing Providers. http://www.sfu.ca/content/dam/sfu/starinstitute/Reports/Collaboration%20Cafe%20Briefing%20Note%20Final.pdf

Second, 'user pull' occurs when knowledge users who have learned about the research, connect with the knowledge producers to further discuss and share the research (Levin, 2011). An example of research translation through 'user pull' in the project, was through an invited panel presentation for a forum hosted for older adults. The purpose of the forum was to enable older adult communities to be up-to-date with current research associated with the health and wellbeing of older adults and to ensure their contributions to ensuing discussions. Key challenges regarding affordable housing in the city, voiced by older adults about the research were presented in plain language alongside a discussion of the implications of the research findings. Similarly, members of the servicing and civil servant community sought to learn about the study findings. Presentations were provided to the city's community services and intercultural advisory committees, and the homelessness coalition. These took place in the evenings. This is noteworthy, since effective KT (akin to CBPR), also requires non-routine outreach strategies such as connecting with members of the community outside regular work hours.

Third, knowledge exchange was facilitated by various public events and media activities. For instance, a collaborative café was conducted with representatives from various housing sectors, including independent living, supported living, and campus of care. The collaborate café is a creative knowledge exchange method adapted from *the world café* (Brown and Isaacs, 2002). This is a technique used to engage stakeholders in an informal discussion on a topical issue within a café style setting. The Collaboration Café, see Fang et al. (2016a), was used to engage a group of housing providers to formulate 'collaborations', share knowledge and generate ideas to enhance housing provision for older adults living in Metro Vancouver. The session began with a brief presentation of the project followed by small group discussions based on a set of guiding questions that were subsequently summarized and explored within the larger group. Themes that emerged for each discussion questions were analysed and summarised in lay language which were subsequently used to generate a briefing note and a conference paper. As well, feedback forums were conducted with groups of older adults in English and in Mandarin to facilitate an iterative feedback loop between the researchers and the participants. This generated input not only for the research but also for the building manager and housing association that older adults an opportunity to anonymously convey their satisfaction of the new build and the surrounding environment.

Subsequently, the past stories of forced relocation events shared by older migrant participants inspired the creation of a digital soundbite in the shape of a video (see 'Video Storytelling' in table 4.1 for the weblink). This video was selected for an award by the Social Sciences and Humanities Research Council of Canada and resulted in a partnership with producers of a CBC radio show called 'CBC Ideas and Myself.' The podcast featured migration experiences of older migrants that now reside in the new build and opened-up discussions about difficult topic areas such as the cultural revolution, institutional racism, and mental health and addiction (see 'Radio Podcast' in table 4.1 for the weblink). Other public advocacy activities that evolved from the series of KT activities included a media interview with Global News to discuss increases in mortgage rates and the potential impact on first-time homebuyers struggling to join the housing market (see 'News Media' in table 4.1 for the weblink). In essence, effective knowledge mobilisation, once initiated, facilitates a consistent cycle of knowledge generation, feedback and dissemination such that social impact is produced no matter how small even if only by raising the consciousness of a few individuals.

To maintain an iterative knowledge cycle requires a ubiquitous knowledge production and circulation network (Phipps and Stan, 2009; Levin, 2011). This is where co-production becomes crucial. As emphasised, partnerships with various stakeholder groups that included members from the housing society, developer, and the municipal government were developed at the outset and maintained throughout the research. Regular team meetings (prior to the submission of the grant proposal) were organised with partners to develop and refine research goals and objectives. Throughout the project, the research team worked closely with partners to refine the method and ensure findings were relevant in practice. It was important that partner members were engaged throughout all stages of the research project as they also served as gatekeepers to local service providers and older adults who participated as co-researchers on the project.

Highlighted in paper five were the various ways in which the diversity of stakeholders contributed to the project. A conceptual framework (figure 1 of paper five) for an inclusive participatory redevelopment strategy was created to: establish a process for equitable decision-making among multiple stakeholders with shared, and at times, varied aims, objectives and goals; direct the selection of interactive, co-creation methods that prioritised community engagement and local knowledge; and generate creative and sustainable solutions that pertained to the needs of older adults using

resources available within the local community (see 'Implementation and Sustainability Plan' under 'Briefing Notes' in table 4.1 for the weblink).

Guided by this framework, older adults, service providers and civil servants contributed to the knowledge production in different ways. The older adult participants shared intimate place stories that constituted experiences of trauma and resilience, participated in meta-reflexive process together with the researcher regarding such experiences, provided neighourhood tours during photo tour sessions, co-analysed photo data, as well as led and contributed to important discussions regarding unmet place needs necessary for older adults' health and well-being. Meanwhile, service providers and civil servants switched between roles as active knowledge contributors and listeners. This was important because as emphasised throughout, in planning, seldom heard groups such as the older adults are typically the listeners with limited opportunities to join as producers of knowledge. The switching of roles helped prioritise a focus on mutual respect and knowledge symmetry, in that of the legitimacy given to different forms of knowledge in the planning and research process.

Lastly, findings as well as outcomes of the project were communicated and discussed through a series of knowledge cafés hosted by the research team as described in table 4.1 (see Fang, Canham, et al. [2016] on collaboration cafés). Best practice resources developed to assist the development of future affordable housing developments and support the place needs of tenants, were disseminated during the cafés. This form of knowledge engagement is facilitated by creating a space for a large group of intersectoral stakeholders to participate in concurrent smaller group dialogues aimed at exploring a single question or use a progressively deeper line of inquiry through several conversational rounds (Brown and Isaacs, 2002). Although, the information learned during the knowledge cafés were not used for research analysis, the emphasis was placed on embracing a philosophy of KMb that promoted not only the knowledge co-created by academics, but knowledge that is co-created by all groups of knowledge users. Subsequently, it was through the engagement of the series of co-production activities that cultivated additional funding, which allowed for further exploration of themes that were outside the scope of the research as well as opportunities to further initiatives towards ageing in the right place for older adults.

It is important to note that knowledge mobilisation is only a pathway for generating positive social change through research impact. Though KMb efforts create co-production opportunities for problem-solving and action-oriented discussion with diverse stakeholder groups, ensuring real-world impact requires monitoring and measuring long-term. Quantification of impact can be obtained through additional efforts toward evaluation and mapping of direct and indirect effects of the research or intervention in the worlds of people, systems and institutions. This extra step requires knowledge producers to incorporate this into the project proposal or plan at the outset; otherwise additional funding must be sought to undertake an impact assessment.

In closing, as KMb and CBPR became popularised around the same time, there is great synergy between the two concepts. Hence, for the Place-making with Seniors project, integration of the two, worked hand-in-hand to encourage the union of diverse stakeholders for knowledge co-creation and subsequently using knowledge outputs to influence social change. Minkler and Wallerstein (2003) denotes that CBPR is effectively a research approach and philosophy that encompasses elements of knowledge mobilisation. The difference is that knowledge mobilisation is perceived as the action-oriented aspect of CBPR, which constitutes KT methods, activities and services to support research development and ensure a pathway towards research impact (Phipps and Stan, 2009).

4.5 Study Limitations and Recommendations for Future Research

Chapter four concludes with a discussion of the key study limitations and future research recommendations. Highlighted throughout this thesis (specifically in papers one to five) are the strengths of the place-making with older adults research through applying a CBPR approach to enhance housing solutions for, by and with older adults together with industry and community professionals. However, the research presented here guided by CBPR is not without limitations. There are several issues unpacked in this section: the contextual application of findings in other settings; the use of a transdisciplinary working approach in practice; structural and methodological challenges for reaching seldom heard individuals; theoretical development and application; and extending reach and impact evaluation of outcomes for creating effective change.

Contextual application. The Place-making with Seniors research focused on a unique population mix of approximately two-thirds Chinese and one-third White European low-income seniors situated in place with housing market challenges. The study design, methods of engagement and framework for data analysis were thus designed with consideration for specific housing challenges. These challenges included language barriers, access to social services, financial insecurity due to immigration status, precarious housing situation, combined with age-related difficulties such as caregiver challenges, lack of mobility, and other chronic conditions. Research findings were focused on creating housing solutions for these distinct groups of people living in a municipality of Metro Vancouver experiencing rapid housing market growth alongside a substantial cultural shift, in recent decades. towards East Asian beliefs, practices, language, routine and overall lifestyle. As a result, the findings and housing solutions, heavily shaped by these contextual issues, may not always be applicable or useful in other sociocultural and environmental contexts. Such contexts can include rural settings, for example in other Canadian cities, or countries with different city planning rules and regulations, sociocultural norms, and values and expectations specific to the cultural mix of people who reside there. Subsequently, to avoid undertaking essentialist research processes i.e., the perception that migrants are homogenous groups with distinct characteristics (see Nicholls, 2009), it should not be assumed that all experiences of inequality are the same and housing solutions generated here will be useful for other migrant groups in similar urban settings. Rather, future research should focus on developing more case study evidence and using the body of work as a model for collaborative working with multiple stakeholder groups in housing studies to enhance understandings of housing inequality experienced by older adults in various contexts and settings.

Transdisciplinary working. The research process, that is proposal development, design, methods selection, recruitment, data analysis and knowledge mobilisation was informed by principles of CBPR. However, transdisciplinary working at its core was not fully achieved. Primarily due to lack of time, human resources and funding, there was no specific, dedicated effort to transcend disciplinary or sectoral boundaries. There were not enough engagement opportunities aimed to fully understand and challenge one another's (e.g., academics, developers, planners and designers, housing society members, social service providers, and municipal government bodies) disciplinary or sector-specific beliefs, values, and practices. This shortcoming may have limited the

effectiveness and range of solutions to help older adults of low-income from different cultural backgrounds to age well in the right place. For example, perhaps if developers, planners and designers had the opportunity to learn the language and discipline-specific teachings of local social service providers (and vice-versa), there may have been further prospects to develop more accessible and integrated health, community, servicing and social supports in and around the redevelopment for older adults of diverse cultural origins. Akin to CBPR, transdisciplinary working requires extensive, time, financial and human resources, as well as buy-in from key project stakeholders (see Grigorovich et al. 2019). Future projects, research related or otherwise, should develop a transdisciplinary working strategy and build it into the initial proposal and project plan to ensure that the project team works as effectively, cohesively as possible, and project outcomes are optimised for achieving real-world impact.

Reaching the seldom heard. Many efforts were made to reach and include older adults who are seldom heard, particularly, older non-English speaking Chinese migrants and individuals who were not on the recommended list of older adults to contact, provided by the property manager. To ensure meaningful engagement with Chinese older adults, a doctoral student with a background in Environmental Gerontology, and fluent in English, Mandarin and Cantonese, was hired to conduct data collection, interpretation, translation and co-host knowledge mobilisation events. The Lead Researcher was also of Chinese origin and fluent in both Mandarin and English. With good knowledge and understanding of Chinese beliefs, values, expectations and sociocultural norms, the researchers quickly built trust and rapport with the Chinese participants. Established relationships with participants improved recruitment and enhanced the depth of discussions during data collection activities and events. However, the same level of engagement was not achieved for other ethnocultural groups. Approximately 10% of tenants consisted of a mix of other non-English speaking with varying ethnic origins such as Filipino, Japanese, Korean, Vietnamese and Punjabi, Bulgarian. The same level of engagement effort was not made for these other cultural groups, due to structural challenges such as the lack funds to acquire interpretation and translation services or hire additional researchers who were familiar with specific cultural nuances. Hence, the data set reflected the majority groups: Chinese and White European, English-speaking older persons. Consequently, important insight from these individuals may have been missed which could have improved the comprehensiveness and depth of findings and resulted in more nuanced housing solutions. To address this shortcoming and improve

the reach of various cultural groups, a comprehensive outreach plan should be developed together with stakeholders shortly before or at the start of the project to create contingencies, such as recruiting a range of ethno-cultural volunteers to assist with research activities, or cost in funds for interpretation and translation, to ensure the inclusion of participants from minority ethnocultural groups.

Theoretical development and application. This study was developed and funded to conduct a 2-year evaluation of a redevelopment project that forced groups of low-income older adults to transition from one affordable housing accommodation to another. The focus of the evaluation project was geared towards more 'applied' versus 'pure' research, prioritising practical implications to enhance quality of the built environment and service provision. Upon preliminary analysis of the findings, the data revealed the need to improve understandings of past and present, sociocultural and environmental factors that influenced the complex ways in which older adults coped with ageing-in-place challenges (highlighted in paper four). The need for additional data collection and analysis required a level of theoretical understanding that necessitated not only the inclusion of theory, but the development of a theoretical framework that was not readily available at the time of the study nor is it currently accessible in urban studies. For example, there have been some developments towards promoting the use of an intersectional lens in place research (see Osborne, 2015). However, there are no frameworks available to guide an intersectional place analysis that fully consider shifts in positionalities, identities and experiences of oppression and opportunity across place and time and how these shape sense of place. IDDPP was developed late in the study to provide for an intersectional perspective that guided the research process and enabled an intersectional place analysis. However, theory and theoretical development was not prioritised during the initial phases of the research for the reasons stated earlier. Theory is important for understanding and explaining a phenomenon (Chibucos et al., 2005). Without theory, it is difficult to conceptually understand and empirically explain, *what is happening* and *why* and *how is it happening* (Chibucos et al., 2005). Therefore, although theory and theory building constituted later phases of the research process, earlier findings could have further unpacked the key issues (structural, individual and temporal), which often prevent appropriate housing for all people. This gap calls upon future research to make more in-depth inquiries to better understand for example: Why do some older adults experience poor housing or no housing more than others?; What are the social factors, pathways and processes that

situate some people in positions of vulnerability while creating opportunities for others?; How do these factors, pathways and processes change over time and how are they shaped by paradigm shifts and changes in ideology? Such questions have important research and practice implications for future work. Application of an intersectional place perspective may be a useful theory for helping to answer these questions. Similarly, this framework can be further developed to also embed the different social processes and pathways as intermediate mechanisms which shape housing outcomes. In this way, it is recommended that future research applies and progresses the intersectional place perspective for researching housing solutions that enable older adults to age well in the right place.

Extending reach and evaluating impact. The final key limitation is associated with extending project reach and evaluating long-term research impact. Despite having created and implemented an extensive iKT plan, study findings may not have comprehensively reached researchers and professionals outside the field of Gerontology and the Social Sciences. For example, in terms of academic reach, manuscripts were published in mainly Gerontology or Social Science journals and papers were presented largely at Gerontology conferences. Practice-based resources are also situated on a website hosted by an institute focused on ageing populations. To create effective change in the areas of city and community planning and architectural design, implications of findings could have extended further, i.e., if more dedicated knowledge mobilisation efforts targeted professionals from these fields, as well as members of the community such as older adults. For example, though highly relevant to planning, design and development, only one article was published in an architectural magazine (see table 4.1 publication in *Design Community*). However, this magazine is based in China, with the information reach extending mostly to a Chinese readership. As well, in terms of tracking, monitoring and evaluating impact, as an extension of KT efforts, no impact evaluation plan was created for the study. Omission of this step was similarly strained by lack of funding, since the original project budget had not included a long-term impact evaluation plan. Arguably, most researchers find the process of tracking impact daunting. Research projects rarely, if at all, have an impact tracking and monitoring component embedded in the work plan (Penfield et al., 2014; Tsey et al., 2016). In fact, the importance of research impact has only become a recent priority in research as a requirement of the Research Excellence Framework (Research Excellence Framework, 2014).

In light of these study limitations, it is crucial that future research in this area, first, prepare an outreach plan with input from stakeholders to identify a list of potential 'knowledge users,' i.e., from various academic, professional and community disciplines, sectors, institutions, organisations and bodies, to enhance the reach of the findings. For example, as a part of the outreach plan, the assembly of knowledge groups such as an international scientific reference group, alongside a professional steering committee and an older adults' advisory group at the start of the project can help extend reach to stakeholders on a global scale, across sectors, and communities. The outreach plan should also be interwoven as an integral part of the iKT plan to ensure that the knowledge groups are imbedded in the knowledge mobilisation process, as a part of the 'producer push', 'user pull' and knowledge exchange mechanism. Subsequently, to ensure impact, it is recommended that a long-term research impact tracking and monitoring evaluation plan be developed with knowledge groups and built into the project budget. This is important for generating traction, because even if the project funding does not permit for an impact evaluation, the groundwork has already been completed, which will facilitate proposal development for additional funding to complete this important research phase.

Despite the limitations of the study, overall, the body of work presented in this thesis has helped make a strong case for applying a CBPR approach to reduce inequality in the housing development process. The knowledge presented has shown that through the implementation of an inclusive community-driven approach, the voices of those with lived experience and frontline expertise were prioritised. As a resource, the body of work inclusive of both published and non-published materials, can be used as an informative tool to progress future housing initiatives for older adults.

5. CONCLUSIONS

This thesis by publication concludes with a summary of overall impressions and key messages, emphasising the strengths of CBPR and opportunities for creating effective housing solutions for older adults.

5.1 Overall Impressions and Key Messages

In light of the growing number of older adults, there has been a global trend towards creating age-friendly cities. Involving older adults in the development and maintenance of their immediate surroundings is crucial for developing urban environments that also facilitate their health and well-being. However, achieving this objective requires a shift from developing urban places for older adults to building meaningful environments *with* and *by* older adults as active place-makers in their community. Yet, conventional planning procedures have in the past undertaken a top-down approach with planning professionals, architects and designers perceived as the experts and decision-makers. This thesis by publication has aimed to challenge (1) existing problematic notions of ageing-in-place, often, used as a conceptual tool in age-friendly redevelopment initiatives; and, (2) provides an approach towards more inclusive planning practices for better integration of local knowledge and expertise in the decision-making process.

Demonstrated by the published research highlighted in papers one to five, local knowledge is vital for ensuring that any environmental change reflects the place needs of the community and effectively uses existing resources and assets. This was shown to be important for the development of a new build that was sustainable across diverse sociocultural contexts. To effectively integrate local knowledge and the perspectives of diverse stakeholder groups, a CBPR approach was at the heart of the published research. The application of CBPR principles helped shape the selection and implementation of methods as well as informed the culmination of a new theoretical perspective that bridges gerontological place theories, together with intersectional feminism.

Past research has found inadequacies in traditional research and planning methods for acquiring the necessary and nuanced relocation insights of older adults marginalised the process. Thus, CBPR provided for a methodological direction that created opportunities for alternative planning engagement techniques. Through the application of a variety of community-focused methods, the voices of seldom heard (such as older adults) were provided for. Enabling the 'space' and platform to facilitate cross-sectoral,

interdisciplinary and lay dialogue created enhanced understandings of the sense-of-place of older adults. Data acquired through the use of narrative, visual and participatory methods provided multiple vantage points and facilitated the co-creation of place knowledge and solutions that included the provision of social programming led by older adults in the new build, opportunities for social engagement between tenants of different cultural backgrounds, options for additional funding for in-house activities, and lasting partnerships across stakeholders with vested interest in the health and wellbeing of older adults. Calls for joint-interdisciplinary overseas research collaborations is one avenue that can be explored to maintain and build on these partnerships.

By and large, CBPR was demonstrated to be an effective approach for collective working across a diversity of stakeholders: housing providers, developers, civil servants, service providers, researchers and most importantly, the older adults. Multiple partnerships were formulated that contributed to the co-creation of solutions and ideas with the shared goal for improving community health and social outcomes and knowledge production and exchange. Collaborative and inclusive features of the CBPR approach enabled strategic planning to occur with stakeholder groups who had varying expertise, agendas and interests. CBPR provided a guided process for listening to various perspectives and integrating a range of expertise when developing housing solutions for older adults, which brought us one step closer towards helping them to age well in the right place. Yet, there is still room for growth and improvement in CBPR as an approach for research in practice.

CBPR was established based on pragmatic philosophy grounded in the collective formulation of solutions to address issues experienced in communities (Harney et al., 2016). However. there appears to a lack of pragmatism and guidance for implementation in practice, i.e., securing sufficient funding, managing community expectations, and adjusting to time constraints (Cook, 2012). Realising the need for pragmatism in this approach can maximise its effectiveness and impact in real world settings (Cook, 2012). Thus, CBPR as an approach can be enhanced through the integration of two additional principles: *pragmatism* and *real-world impact*. Pragmatism as CBPR principle calls for community-based researchers to reflect early on scale and feasibility of CBPR methods, its applicability in the community, and likelihood of achieving tangible outputs that are useful in real world contexts. In terms

of impact, there is a general assumption among community-based researchers that applying this approach would eventually lead to social change, though there are no clear mechanism on how this can be assessed. Thus, the principle of real world impact in CBPR urges researchers to develop impact assessment indicators together with partners and interweave these throughout all stages of the research. In consideration of these recommendations and limitations identified by the body of work, there is some direction on how future research can take this forward with a more global focus. Through transnational knowledge creation, sharing, learning and integration, we can be one step closer towards achieving the goal of providing equitable and appropriate housing for all older adults.

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7. APPENDIX A

Physical characteristics of the housing development pre- and post-redevelopment

I   *Pre-development housing – Kiwanis Court.* Kiwanis court was established in 1959 by Kiwanis Senior Citizens Housing Society because there was a need for more affordable housing to accommodate older adults with limited financial means. Subsequently, 24 wooden construction cottages were developed on 5-acres of (what was in the past) rural agricultural land. The 2-level bungalow style cottages consisted of 122 units with 80 bachelor suites. Together, these formed the Kiwanis Court community for *older adult living* in the Richmond area. Gradually over decades, the surrounding area became increasingly urbanised. Incidentally where Kiwanis Court was located had become the town centre and one of the most sought after areas to live in Richmond and in Greater Vancouver. Kiwanis Court was situated on a street called Minoru Boulevard, which was very centrally-located and within walking distance from the shopping mall, SkyTrain line, seniors' community centre, aquatics centre library, cultural centre and theatre. As well, it was surrounded by an abundance of green space because it was next to a 65-acre park. **Note:** As the Place-making with Seniors research project was initiated well into the redevelopment, and with an emphasis on Kiwanis Towers, details of the interior physical characteristics of Kiwanis Court were limited.

Image 1. Photo depiction of Kiwanis Court pre-development.

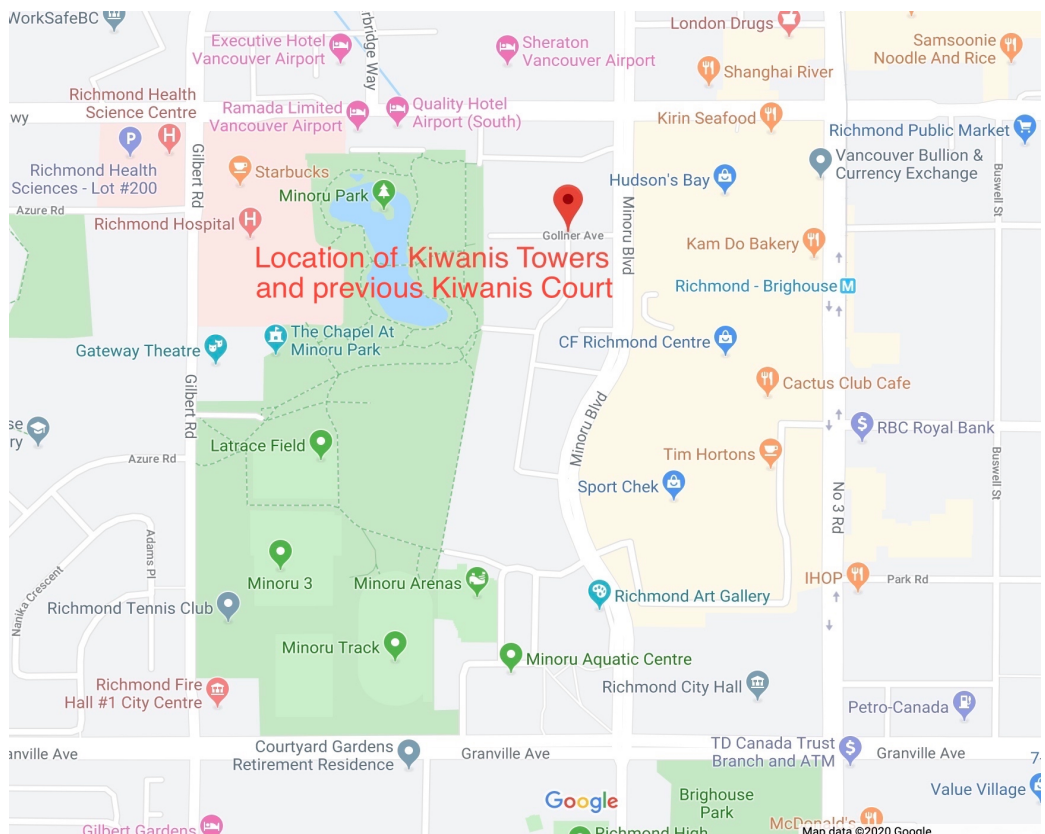**Image 2.** Photo depiction of Kiwanis Court pre-development in street view.

Image 3. Neighbourhood map illustrating location and surrounding area of Kiwanis Court pre- and post-development (Source: Google Maps 2020). **Note:** location map pre-urbanisation of the city centre to illustrate rurality of the area was not available and therefore not included in this appendix.

II   *Post-development housing – Kiwanis Towers*. Kiwanis Towers (adjacent to Carrera Apartments i.e. market condos) was built in 2015 and consists of two towers with 148 units in each of the 16 level buildings. Each level comprises 10 units surrounding a central service core and elevators. There are three dedicated, shared, indoor amenity spaces (i.e., the Arts & Crafts room, the Games room and the Multi-Purpose room) on the ground level, which two towers and are used for a variety of activities (e.g. dancing, yoga, holiday social events, workshops and seminars). The Multi-Purpose room can be subdivided with a moveable wall to allow for a range of activities to take place concomitantly or on its own to accommodate larger gatherings with capacity for all tenants in both towers. The Multi-Purpose room also has a large kitchen with a full stove and refrigerator, and microwave for the purposes of food preparation activities or provide a catering area for events. Adjacent to the amenity spaces, is a room that serves as a commercial beauty salon to provide low-cost services (e.g. hair aesthetics and manicures) to service tenants. Resident parking is very limited due to space availability and additional cost to construct underground parking. Kiwanis Towers was designed according to Universal Design features intended to create environments which are inherently accessible to older adults including persons with and without disabilities. However, while 85% of the units in Kiwanis Towers are "universally" accessible, they are not "wheelchair" accessible.

Image 4. Rendering of Kiwanis Towers and immediate surrounding area.

Image 5. Photo depiction of Kiwanis Towers post-redevelopment in street view.
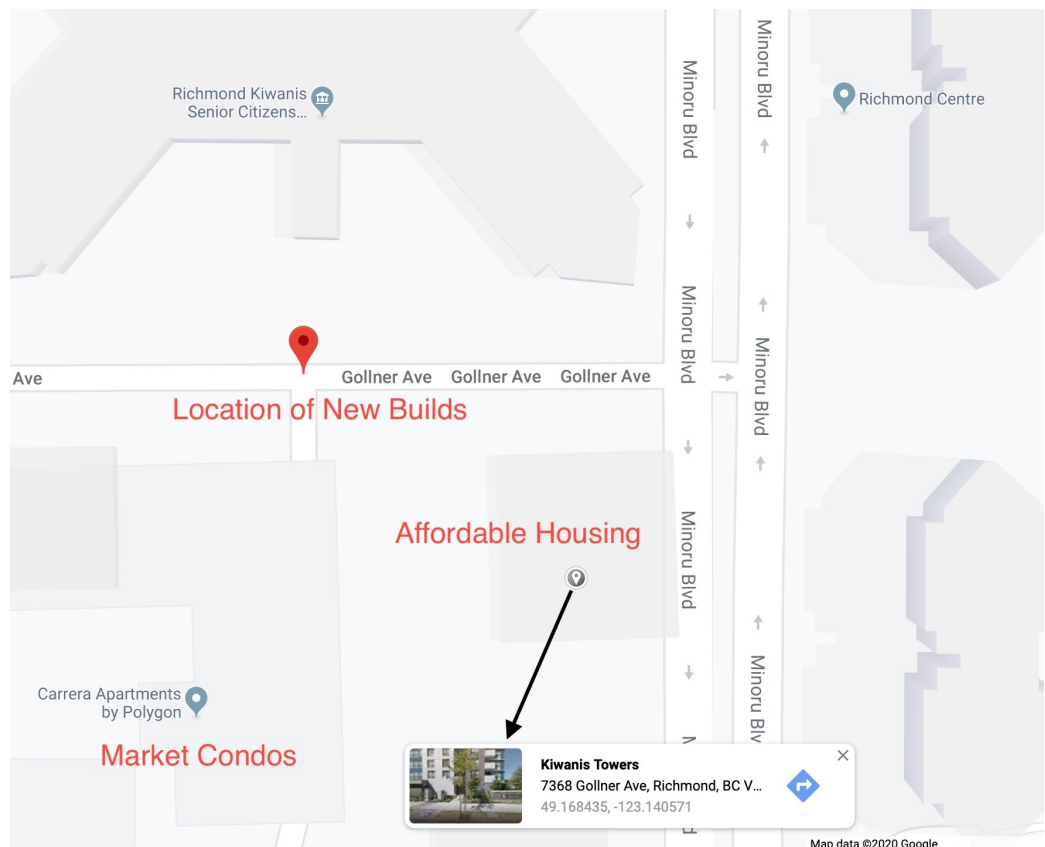

Image 6. Location map of new builds post-redevelopment inclusive of land use for market housing in addition to the affordable housing development (Source: Google Maps 2020).