

Cultivating Home: Our Home for All Ages & Stages of Life

by

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Abstract

Although the desire is strong among Canada's rapidly aging population to age-in-place, research reveals few have adequately prepared their current homes to support them later in life. While environmental gerontologists and occupational therapists have studied the meaning of home and the impact of imposed home modifications on residents who age-in-place, no known research has brought together material culture and the renovation experiences of older homeowners who proactively have modified their home in an age-friendly manner. This research sought to answer the question: What material culture themes are revealed, and knowledge gained, by examining the perceptions of older homeowners' multifaceted meanings of home involved in independently making the decision to transition their home from a non age-friendly to an age-friendly space? An exploratory, ethnographically orientated, case study methodology was adopted to investigate two households who undertook age-friendly renovations. Data collection included a home artifact analysis, homeowner guided tour, life history interview, home renovation interview, and participant journaling. Thematic analysis revealed the material culture themes of affordance, identity, memory, and attachment, were active in the renovation process. Affordance occurred when the homeowners perceived the renovation supported their desired tasks and activities. Common to the homeowners' identities were the personal traits of being autonomous, prideful, up-to-date, patient, mindful, prudent, talented, and resourceful. The force an object has to illustrate the past, invoke involuntary recall, and serve as a historical record, informed their memories. Attachment to possessions further fostered their sense of identity, for as they aged, possessions were increasingly valued for their linkage to others, alive and passed on. Examination of attachment to place, within the context of the emotional historical experiences of their childhood and a lifetime of functional knowledge based experiences, highlighted how these contextualized human experiences combined to spark actions that resulted in age-friendly renovations. Eye opening was the degree to which the homeowner's attachment to the home's immediate exterior space, including the garden, influenced their decision to modify their home's interior space.

Keywords: affordance, age-friendly home renovation, age-in-place, attachment, garden attachment, identity, material culture, memory

Preface

This thesis is an original work by Linda Marie Johnson. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project Name “CULTIVATING HOME: OUR HOME FOR ALL AGES & STAGES OF LIFE”, No. Pro00055133, January 8, 2016.

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I began this endeavour never having anticipated that completing a Masters was something I would undertake. In September 2010, I simply returned to the University of Alberta committed to completing my Home Economics degree, which I had left unfinished some 30 years prior. Three years later, with that undergraduate degree in hand, I was presented with the opportunity to continue.

To the Social Sciences and Humanities Research Council of Canada, I thank you for the funding that I received. It allowed me to work with Canadians in a region of the country literally thousands of kilometers from home. To be a Canadian is to be blessed.

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Glossary of Terms

Age-in-place: “The situation where older people live into late old age in the same place that they lived in their middle years” (Novak, Campbell, & Northcott, 2014, p. 358).

Age-friendly home: A home that is easy to move around in regardless of age or ability, so any one that lives in or visit it does so in comfort.

Age-friendly home renovation: The rebuilding or modification of a home, the result of which is to create a space deemed more accessible for anyone, of any age or ability, to live in or visit more comfortably.

Material culture of the home: “A discipline that retains at its core the sense of humanity and empathy that comes from being in the presence of ordinary life at the place where it is increasingly lived” (Miller, 2001, p. 16).

Older couple: Canada Mortgage and Housing Corporation (CMHC), in its 2012 publication *Housing for Older Canadians*, defines older Canadians as anyone 55 years or older (p. 1). To increase the chance that the couples may still be working, and therefore possibly more likely to be financially able to take on a renovation, *Cultivating Home*'s age criteria has been dropped to 50 years.

CHAPTER 1: INTRODUCTION

If asked “where do you intend to live in your senior years?” about 85% of Canadians over age 55 years will answer, “at home” (Canada Mortgage and Housing Corporation, 2012, p. 14). When asked “have you prepared your home to adapt to your changing needs, as you age?” most older individuals admit they have done “little.” While the Canada Mortgage and Housing Corporation (CMHC) found a strong desire amongst older Canadians to age-in-place (CMHC, 2012, p. 14), it also discovered that few are adequately preparing their current homes to support them in the later stages of life (CMHC, 2012, p. 27). The implications of this are expected to be significant, as the ratio of older Canadians to youth is increasing at a formidable pace. “On July 1, 2015 ... the number of persons aged 65 years and older exceeded the number of children aged 0 to 14 years” (Statistics Canada, 2015, para. 2). This has lead researchers to look at how this population transformation will influence older Canadians’ housing situations and choices.

Background

Historically, material culture research has drawn attention to our relationship with home in numerous ways, including: meaning of home (Busch, 1999; Rybczynski, 1987), as a foundation to people’s lives (Miller, 2001), and the role of culture in how our homes are “both constructed space and space of construction – a framework within which, with which, and thanks to which one lives” (Bourdier & Minh-ha, 2011, p. 15). Furthermore, environmental gerontologists have begun to use material culture themes to examine the meaning of home for those individuals aging-in-place (Oswald & Wahl, 2005, p. 21), and occupational therapists have used material culture themes to explore the meaning of home for aging-in-place residents impacted by imposed modifications on seniors’ public housing (Tanner, Tilse, & de Jonge, 2008). Despite this, no research appears to bring together material culture and the renovation experiences of older homeowners making the proactive decision to modify their home in an age-friendly manner.

Research Questions and Objectives

Cultivating Home explored the transitional experiences of two households who had renovated their long-time home in an age-friendly manner. Its central aim was to answer the research question: What material culture themes are revealed, and knowledge gained, by

examining the perceptions of older homeowners' multifaceted meanings of home, involved in independently making the decision to transition the home they own, from a non age-friendly to an age-friendly space? In answering this question, I also investigated three secondary questions, each addressing corresponding objectives. Table 1-1 highlights these research questions and objectives.

Table 1-1

Cultivating Home: Research Questions and Corresponding Objectives

	Research question	Corresponding objective
Primary research question	What material culture themes are revealed, and knowledge gained, by examining the perceptions of older homeowners' multifaceted meanings of home, involved in independently making the decision to transition the home they own from a non age-friendly space to an age-friendly space?	To make known, through material culture, what society may learn about the multiple dynamic relationships older homeowners have with their homes that prompts and supports their ability to undertake an age-friendly renovation, facilitating their desire to age-in-place.
Secondary research question #1	What practical consideration factors are influencing older homeowners' desire to age-in-place and the decision-making process concerning the undertaking of an age-friendly renovation to their home that would facilitate the attainment of this wish?	To underscore an appreciation of the everyday reasoning involved in older homeowners' complex decision-making process concerning taking a proactive course of action to implement home renovations that may be required to age-in-place.
Secondary research question #2	What cultural variables influence these older homeowners' personal meaning of home, and what bearing do they perceive this relationship has on their capacity to achieve their wish to age-in-place via the undertaking of an age-friendly home renovation?	To draw attention to the ways in which cultural variables impact older homeowners' meaning of home, specifically the likelihood and ability they will make the decision to age-in-place, as well as complete an age-friendly renovation to their home that facilitates this decision.
Secondary research question #3	What are the expectations and resulting reactions of the older homeowners pertaining to their personal process of transitioning their home from a non age-friendly space to an age-friendly space?	To highlight how these older homeowners comprehend the concept of age-friendly renovations and the impact they anticipate them having on their ability to age-in-place.

A material culture lens was selected through which to study this phenomenon given that it is a field with an interdisciplinary focus. Based on the material presented in the literature review and the research questions, a research design was developed that employed an exploratory, ethnographically orientated, case study methodology: exploratory as this appears to be a phenomenon with little prior research, none of which was undertaken from a material culture perspective; ethnographically orientated since *Cultivating Home* sought to capture the perspectives of the homeowner-home relationship, necessitating that data collection occur with participants within their home environment. A case study methodology was fitting as the phenomenon under study involved gaining understanding of major decisions in these older individuals' lives regarding their commitment to age-in-place, and the undertaking of age-friendly home renovation.

Engagement in multiple data collection approaches over a period of time assisted in gaining a more holistic, in-depth, rich description of the participants' experience. Data collection conducted solely by the researcher included maintaining a reflexive journal and carrying out a home artifact analysis of both homes. Combined researcher and participant engagement data collection methods included a homeowner guided tour, life history interview, and a home renovation interview with each household. Participants also kept a 1-day journal and member-checked transcripts.

Thematic analysis revealed that the material culture themes of affordance, identity, memory, and attachment were active in the participants' meaning of home, as well as instrumental to the age-friendly renovation process. Affordance was valued for the ease and pleasure it brought to their everyday tasks of home making. To accomplish this, it was discovered these individuals possessed eight personal traits. These older homeowners are: autonomous, prideful, up-to-date, patient, mindful, prudent, talented, and resourceful in their relationship with their home. Memory further served to strengthen the homeowner-home relationship through the mechanism of illustrating the past, invoking involuntary recall, and serving as a historical record. Together, attachment to possessions and places not only transformed the home into a museum containing their life's treasures but also served as a means of providing human context to the stories the home

contained. Three human contexts were used to demonstrate how the homeowners' emotion (history) combines with cognitive knowledge of the situation (function) to generate their future expectations, resulting in behaviour that shapes their respective home's spaces (intentionality), which in turn materializes in the stimulus for affordance within the home. This material culture study made evident the ways in which the four themes of affordance, identity, memory, and attachment encouraged and shaped the homeowners' experience with the age-friendly home renovation process.

Finally, serendipity was central to the researcher's finding that the home's exterior space significantly intensified these older individuals' meaning of home, further motivating the introduction of interior age-friendly design. The findings show the garden's blend of private and public spaces may be a valuable tool to increasing awareness of the benefits of age-friendly home design. Numerous existing communication channels were identified, which at a minimal cost could be used to increase awareness and familiarity with age-friendly home design, promoting the ways it may benefit older individuals who desire to age-in-place.

Thesis Outline and Summary

This thesis is made up of six chapters. Chapter 2 provides a review of the literature that explores various topics related to aging-in-place such as understandings around "house" and "home," foundational works on home completed by scholars of material culture, previous work on aging-in-place predominantly done by environmental gerontologists, and themes in material culture that provide a lens to examine the details of aging-in-place as it relates to the phenomenon of age-friendly renovation. Chapter 3 presents the research design, outlining how the study was conducted. It includes detailed accounts of the methodology, researcher reflexivity, and ethical considerations in working with older homeowners and their home. In addition, it addresses the issues regarding data collection methods and techniques, data analysis, and the credibility of the research. Chapter 4 opens with a brief discussion of the varying approaches Elaine and Gerry versus Ann took in their commitment to aging-in-place and engage in the age-friendly renovation process. Next, it unveils the findings of this research through a series of narratives on affordance, identity, memory, and attachment to possessions and place. Chapter 5 discusses what is considered the main

take-away of this research, the role of the garden relative to older individuals' meaning of home and the aging-in-place homeowners' propensity to incorporate age-friendly design in the home's interior. Finally, this thesis is concluded in Chapter 6 wherein the research is summarized by elaborating upon the anticipated contribution this research will make, potential considerations for future research, and a debriefing.

CHAPTER 2: LITERATURE REVIEW

This literature review establishes that a gap exists in the literature regarding the transitional experiences of older homeowners who have renovated their home in an age-friendly manner to support their desire to age-in-place. The application of a material culture perspective to aging-in-place research in general is an approach few have worked with. To date, it has primarily been environmental gerontologists, and a few occupational therapists, who have dabbled with material culture themes while studying aging-in-place. However, upon reviewing these scholars' research and results in detail it appears their work is limited, narrow in focus, and often encompasses superficial findings, particularly when involving themes from material culture.

The literature review begins by differentiating the terms *house* and *home*. The second section reviews what is known about Canadians' ideas and behaviours related to aging-in-place. This includes a brief exploration of the current community and academic initiatives directed at aging-in-place. Next, the focus shifts to a closer examination of the academic fields that have explored the relationship between aging-in-place individuals and the home, and in doing so have often introduced material culture themes. Consequently, in the third section, an environmental gerontologist quantitative approach to studying aging-in-place individuals' meaning of home is examined. In the fourth section, the research of occupational therapists who have investigated the impact of imposed age-friendly renovations on older individuals aging-in-place in public housing is presented in some detail. The fifth section discusses what material culture may add to the community's knowledge and understanding of aging-in-place and more specifically the role of age-friendly home design renovations. Lastly, material cultures' themes of attachment, memory, identity, and affordance are highlighted as a constructive means by which understanding of the aging-in-place individual's experiences with age-friendly renovations may be sought out.

House and Home

In order to undertake research that involves the meaning of home it is critical to comprehend the distinction between the terms house and home. While people often alternate freely between these intimately connected terms, they possess distinctively different meanings for researchers; "a house is simply a building while a home is a domestic setting, filled with human

meanings” (Ward, 1999, p. 6). Although *Cultivating Home*’s research acknowledges that it is the transformational experience of two older households undertaking an age-friendly renovation to their *house* that invokes the phenomenon under study, more importantly, *Cultivating Home* strives to appreciate the multifaceted meanings embedded in the long-time homeowner-*home* relationship experienced within the age-friendly renovation.

Rapoport (1995) questioned whether a term such as home even exists, as it is not easily articulated. He reasoned that at its core “home = house + x [emphasis added]”, x being any number of typically positive attributes, such as feelings of security, personalization, and belonging (p. 29). Researchers from other disciplines have attempted to identify the essential qualities of home, or x. Their findings most frequently include: continuity, privacy/refuge, relationship with friends and family, statement of self-image, and a centre for activity (Deprés, 1991; Hayward, 1977; Sixsmith, 1986; Smith, 1994; Tognoli, 1987). Smith (1994) concluded that the defining qualities of a home fall into three general categories: the personal, the social, and the physical (p. 36). When people are asked to verbally describe their home, 92% of females and 82% of males will mention the home’s physical features (Smith, 1994, p. 36). Moreover, it is significant how the home’s physical structure also appears in what individuals’ perceive their home affords them socially and personally. The physical features of a home act as an “orienting, memory-jogging device” (Smith, 1994, p. 39) for recalling social relationships and as a means by which people personalize their “environment to suit themselves” (Smith, 1994, p. 37). Nonetheless, Rapoport (1995) points out that the house’s “physical features seem to play a minor role in the research literature on home” (p. 42), even though, as Robinson, Thompson, Emmons, and Graff (1984) have shown, the physical elements of a home may have a profound impact on an individual’s, particularly elderly individuals’ behaviour within the setting (p. 1). Rapoport’s observation rationalizes the need to further investigate the unique relationship homeowners have with their house’s structural features to better understand their desire to age at home.

Aging-in-Place

In 1993, Callahan wrote aging-in-place is “among the newer terms to be included ... in the lexicon of gerontology” (p. 1). While still not universally understood outside of “policy makers and

service providers” (Wiles, Leibing, Guberman, Reeve, & Allen, 2012, p. 360), it is a sentiment expressed by about 85% of Canadians over 55 years of age when asked where they intend to live out their later years (CMHC, 2012, p. 14). In Canada, this desire is reinforced by current policy regarding seniors housing, which endeavours to provide the necessary “environmental, social, and economic supports so that they can stay in their own homes as they age” (Novak et al., 2014, p. 260).

While it is possible to somewhat mitigate the physical challenges associated with healthy aging, eventually most will encounter “familiar problems associated with aging bodies” (CMHC, 2012, p. 22). Even though today’s seniors are “wealthier, better educated, and more active” (CMHC, 2012, p. 1) than their predecessors, by age 65 41% will live with some form of disability (CMHC, 2012, p. 22). Despite their best intentions to mitigate the typical decline in physical health, by maintaining or increasing mental and physical competencies, the reality for many is inescapable; limited control over the natural aging process. To remain autonomous in their homes, most people will eventually require changes to be made to the home. This underpins the need to investigate what motivates and supports the decision to proactively act on the eventual restrictions of their home’s environment (CMHC, 2012, p. 27).

Grey Literature and Aging-in-Place

The focus of a wealth of the grey literature regarding aging-in-place is the study of design, “an active, purposeful adaptation method that people use to adjust their world to their needs” (Steinfeld & Maisel, 2012, p. 1). Universal Design is a “soft tool” (Steinfeld & Maisel, 2012, p. 3) that emphasizes “democracy and equity” (Iwarsson & Ståhl, 2003, p. 61) while also recognizing “how design priorities change as people pass through the life span” (Steinfeld & Maisel, 2012, p. 46). Mace (1985) defined Universal Design as “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (as cited in Steinfeld & Maisel, 2012, p. 1), a concept that not only limits the repetitive need to renovate as one’s abilities alter over a lifetime, but that discreetly integrates empowering features into one’s home. It consists of seven guiding principles, some of which are: simple and intuitive use, tolerance for error, and requiring low physical effort (Story, Mueller, & Mace, 1998).

These design features possess the capacity to address the many physical challenges the body imposes on individuals as they age. A wide variety of grey literature “encourages housing producers to adopt universal design features [as] a key aspect of design for aging in place” (Steinfeld & Maisel, 2012, p. 38). This includes: checklists that allow homeowners to assess their home’s level of accessibility, and websites providing examples of age-friendly designs (City of Edmonton, *n.d.*). Importantly, Universal Design ascertains the idea that an older homeowner may remain secure and competent in a familiar and attractive age-friendly home environment. Yet even with this information available in the community, there is a noticeable absence in the uptake of age-friendly home design incorporating the principles of Universal Design.

Academic Literature and Aging-in-Place

Academic development and testing of Horowitz, Nochajaski, and Schweitzer’s (2013) Home Safety Self-Assessment Tool (HSSAT) highlights the overlap between the public’s and scholars’ interest in aging-in-place. Academic research on aging-in-place has recently mushroomed, applying a multitude of contemporary perspectives. Recent topics of study include: Health – Safety benefits of home modifications on fall prevention (Keall et al., 2014), and determining if occupational therapists should adopt a proactive adaptive approach versus their historic remedial approach to the aging-in-place environment (Chippendale & Bear-Lehman, 2010); Cultural Studies – Aging-in-place experiences in Southeast Iran (Saber, Asadollahi, Hoseinzadeh, & Ahmad, 2015); Psychology – Hoarding behaviours of older adults aging-in-place (Whitfield, Daniels, Flesaker, & Simmons, 2012); Gerotechnology – Unobtrusive, intelligent smart homes (Kaye et al., 2011); Consumer Science – Impact of home modifications on aging-in-place length of stay (Hwang, Cummings, Sixsmith, & Sixsmith, 2011); and Housing Studies – Challenges associated with home maintenance (Coleman, Kearns, & Wiles, 2016; Fausset, Kelly, Rogers, & Fisk, 2011). A common thread amongst today’s researchers is the emphasis on collecting data directly from primary stakeholders: those currently aging-in-place and those expressing a future resolve to do so. Increasingly, researchers are searching out a “nuanced exploration of what ‘aging-in-place’ means to older people themselves” (Wiles et al., 2012, p. 359; see also Bacsu et al., 2014; Bigonnesse, Beaulieu, & Garon, 2014). Research that engages the homeowner, the physical features of the home, and what their

home means to them is critical to understand their perceptions of the dynamics of age-friendly home design.

Environmental Gerontology and Aging-in-Place

Historically, gerontologists have focused more on appreciating the physical relationship the elderly have with their home and less on the complex emotional aspects of individuals' relationships with their environment. However, Europe's extensive, 2002-2004 environmental gerontology ENABLE-AGE project's novel scope included explicit consideration of "subjective ... person-environment relationships" (Iwarsson et al., 2004, p. 1) by collecting directly from very old aging-in-place participants' "understandings of the meaning and experience of home" (Iwarsson et al., 2004, p. 5). ENABLE-AGE aimed to "explore the home environment as a determinant for autonomy, participation, and well-being in very old age" (Iwarsson et al., 2004, p. 1). Gerontologists experimented with utilizing intangible material culture themes to develop a more holistic understanding of environmental gerontology's more traditional tangible concept of the person-environment fit. The concept of the person-environment fit, introduced in Lawton and Nahemow's (1973) General Ecological Model of Aging, maintains that a "person's life satisfaction and ability to function" (Novak et al., 2014, p. 259) is directly related to their abilities and the burden of the environment.

Environmental gerontologists Oswald and Wahl (2013) used ENABLE-AGE data to support their notion that the material culture themes of belonging and agency are "two key processes" (p. 54) of an aging-in-place individual's "person-environment exchange in later life" (p. 54). However, troubling is that they analyzed person-environment agency and belonging, which are highly personal themes, through scale-based questionnaires generating only empirical results data. The researchers did not provide context to their quantitative findings by incorporating qualitative findings. Still, Oswald and Wahl (2013) claimed that "the study represents the most comprehensive empirical attempt so far to assess" (p. 60) the themes of agency and belonging, and their association with the older individual's homeowner-home relationship. This pattern of environmental gerontologists presenting quantitative data results to reveal qualitative findings, without an accompanying rich description of the context of the findings, is also evident in earlier

environmental gerontology papers. In 2007, Nygren et al. reported as statistical findings the “relationships between aspects of objective and *perceived* [emphasis added] housing” (p. 85). In the same year, Oswald et al. explored “healthy aging, defined as independence in daily activities and *subjective* [emphasis added] well-being” (p. 96) quantitatively. What was described as ENABLE-AGE’s qualitative, in-depth, semi-structured interview data (Iwarsson et al., 2004, p. 5) appears to have been excluded from the data analysis of several other studies utilizing its data. A material culturist would challenge that aging-in-place individuals’ perception of subjective, emotionally laden themes, such as agency and belonging, must include an analysis of rich, descriptive story details of their experience, supported by direct quotes. Work that digs deep into the fertile material culture themes of a person’s relationship with home, including those undertaking age-friendly renovations to support their desire to age-in-place, must incorporate the voice of those individuals’ experiences.

Occupational Therapy and Aging-in-Place

More recently, the aim of Tanner et al.’s (2008) study Restoring and sustaining home: The impact of home modifications on the meaning of home for older people, was to “deepen understandings of the subjective world of older people in relation to their home and the impact home modifications have on this world” (p. 199). The research design of this study was qualitative, involved semi-structured interviews with older individuals’ aging-in-place experiences, and focused on age-friendly renovations. Tanner et al. sought to understand the transitional experience of older individuals’ meaning of home related to their home’s age-friendly renovation.

Tanner et al.’s (2008) study was conducted with the support of Australia’s public housing authority. Not only did the participants not own their homes, but also the decision to initiate the age-friendly renovations was made by the housing authority, not the residents. The researchers allege this lessened the complexity of the investigation by reducing often key barriers to “home modification up take, such as cost, access to services, and lack of informed service providers” (Tanner et al., 2008, p. 200). However, this meant that not only was the decision-making process absent from the residents’ lived experience, but the burden of the task, and the risk taken, rested with the housing authority, not the residents. Furthermore, Tanner et al.’s (2008) participants

were identified through occupational therapy reports (p. 200), which indicates that the age-friendly renovation decision was a reactive measure.

It is also notable the depth to which Tanner et al. (2008) fully explored material culture themes, such as how identity informs an individual's meaning of home. The data collection involved only one semi-structured interview, rather than the in-depth case study approach common in material culture studies. This not only substantially limited the amount of data gathered, and the possibility of triangulation, but also did not permit an inductive method of data collection, whereby themes identified early on could be reintroduced for further exploration in subsequent discussions.

Critical as well to the investigation of material culture themes is the collection of observational data of the phenomenon's artifact. In Tanner et al.'s (2008) study, it is not clear whether the interviews took place in the home, and additionally, only limited reference is made to the home's modifications. Valuable data investigating the tangible components of the home's age-friendly features appears to have been overlooked. This is particularly interesting given that secondary objects, such as household possessions, were recognized as "representing life events, personal history, and meaning" (Tanner et al., 2008, p. 202).

Woodward (2007) wrote that objects possess "autonomous communicative capabilities" (p. 173). They hold the power to tell the reader much about the individuals that created and use them. Tanner et al.'s (2008) study, while focused on the perspectives of the user's experience with age-friendly home design, did not address what the physical object, the home, may tell us about the aging-in-place residents' meaning of home. Furthermore, the data collected from the residents was limited and did not provide a wealth of rich, descriptive details from multiple sources; a requirement to facilitate an in-depth exploration of material cultural themes. Consequently, while Tanner et al. introduced material culture themes, this was not a material culture study. What can an in-depth material culture study bring to the investigation of the aging-in-place individual's meaning of home, and their experience with age-friendly renovations? The next section offers a response to this question.

Material Culture of the Home

Individuals' homes are critical in empowering them to lead the lifestyle they desire, influencing not only where and with whom they live, but also the nature of the activities in which they partake. Buchli (2002) appreciates the intricacy of peoples' relationships with home and the medium within which it exists; he identifies the home "as an artefact of great complexity, but also as the context in which most other material culture is used, placed and understood" (p. 207). Bourdieu's (1971) foundational work, *The Berber house or the world reversed*, in which the physical structure of the Kabyle private home in Africa was deconstructed, "re-launched the material culture of the home" (Miller, 2001, p. 5). Bourdieu (1971) demonstrated how he was able to interpret the Kabyle's more public worldview based on the study of "a series of core symbolic oppositions" (Miller, 2001, p. 5) present in the home's unassuming spaces. Bourdieu believed that as people routinely and privately interact with their home, it unconsciously functions as an instrument through which they acquire cultural practice. The home becomes an expressive physical form of the individual's beliefs and values, or "habitus a system of acquired dispositions functioning on the practical level as categories of perception and assessment" (Bourdieu, 1990, p. 13). Conceptualized as a place of refuge, free from public scrutiny, Bourdieu (1973) argued that home defines how a person lives, as well as how an individuals' lifestyle is informed by their home's culturally appropriated physical structure, for the house is "endowed with a double significance: if it is true that it is opposed to the public world as nature is to culture, it is also, in another respect culture" (p. 105).

Miller (2001) in his book *Home possessions: Material culture behind closed doors* introduces contemporary ways to observe "the process by which a home and its inhabitants transform each other" (p. 2). Researchers are encouraged to focus closely on the entangled relationship between the home and the specific qualities of its residents. Miller sheds light on the public persona of home and how cultural change transforms the homeowner-home relationship. Home is a vibrant, constantly evolving process where changes in people's private lives are reflected in their home's altered public presence. Miller writes, "the transformation of the house is integral to the transformation of social relations, and ... these develop in tandem" (Miller, 2001, p. 4). Blunt and

Dowling (2006) suggest the “most significant argument of [Miller’s] book is his re-development of the material culture perspective” (p. 23), redirecting our gaze on the material object of the house, deciphering the home as an imaginative process of dwelling (pp. 22-23).

Not unlike Miller (2001), Lawrence (1987) earlier emphasized that “it is crucial to comprehend which cultural variables have an impact on the design and use of houses and how these variables function in the domestic realm during the course of the life-cycle” (p. 157) to understand one’s personal meaning of home. What’s more, these cultural values are not stagnant. Cultural values mature over the homeowners’ life course, creating a need to specifically examine how change to their home’s built-environment transpires as people age. While Lawrence (1987) suggests the best way “to show that the design, the meaning, and the use of home interiors are intimately related” (pp. 155-157) is to examine the daily activities carried out within the home (p. 157), Miller (2001) cautions that we must be careful not to let the cultural forces present in the lifestyles of the homeowners overshadow the importance of the physical entity of the house (p. 12). For:

Once one acknowledges the degree to which the home itself is both a site of agency and a site of mobility, rather than simply a kind of symbolic system that acts as the backdrop or blueprint for practice and agency, then the rewards of this focus upon material culture in trying to understand the social relations that pertain to the home become apparent. (Miller, 2001, p. 12)

Where Lawrence (1987) rationalized that by investigating the dweller’s culture, researchers may increase their understanding of the home and its meaning, Miller (2001) stresses that by scrutinizing the dweller’s actual home, the study of home may reveal a better understanding of the resident’s culture. While Lawrence explores the intangible culture of the resident to reveal the tangible structure of the home, Miller uses the tangible home to understand the intangible cultural meaning of the home to the residents, a direction typically easier to comprehend. Moreover, this position upholds the idea that there is value in research demonstrating that the physical entity of the home is not merely an emblematic representation of the individual; rather it is a partner in the realization of the aging-in-place resident’s practical and emotional culturally appropriated lifestyle. It is therefore rational to ask what can material culture reveal about the design of the aging-in-place home and the homeowners’ daily activities within the home, that may provide

insight into their cultural perspective, either supporting or limiting their capacity to engage in age-friendly renovations to secure their desire to age-in-place?

Material Culture Themes Tied to Home

Material culture scholars explore the meaning of object-person relationships, such as home, through what Woodward (2007) labels “narrative stories” (p. 151) and “social performance” (p. 151). Narrative stories involving an object as important as a person’s home, inadvertently displays individuals’ perceptions of their lifestyle and experiences, thereby revealing their beliefs and values (p. 152). Narratives become extremely valuable tools when researching older individuals’ future expectations regarding home due to the extensive history shared with their homes throughout their lifetime. Social performance, conversely, occurs innately in how an individual communicates through a material object, both consciously and unconsciously (McCracken, 1988, p. 74; Woodward, 2007, p.152). Alexander (2004) equipped these personal objects with the power to “dramatize and make vivid the invisible motives and moral they are trying to represent” (p. 532). It seems fitting to imagine the home of older individuals as both an object infused with a lifetime of stories, as well as a stage or prop (Marcus, 1995, p. 11) whose role in daily life is constantly in flux. The themes of attachment, memory, and identity appear prominent in the stories and performances that emerge within people’s meaning of home.

Attachment

Attachment is relevant via possession and place attachment. Kleine and Baker (2004) understand people’s attachment to possessions as a “vital and ubiquitous way people value goods” (p. 1). Furthermore, McCracken (1988) asserted that an object’s value is dependent on its ability to acquire and stow meaning (p. 70). He further suggests that valued goods, such as one’s home, “become irreplaceable via possession rituals” (McCracken, 1988, p. 85). Practices such as the care, display, and comparison of the item allows the owner to “lay claim and assume a kind of ownership of the meaning” (McCracken, 1988, p. 85) they assign to it. The value of an ordinary object to a person is acquired through shared experiences, and as a consequence objects as intimate as one’s home often become an irreplaceable autobiographical symbol of personal meaning over time.

Place attachment “is a complex phenomenon that incorporates several aspects of people-place bonding” (Low & Altman, 1992, p. 4) and encompasses interwoven properties of emotion, cognitive knowledge, and behavioural practices (p.4). Kleine and Baker (2004) additionally recognize that place attachment, such as with one’s living space, also holds the capacity to add value and meaning to a person’s ability to adapt by facilitating “self-continuity/change” (p. 17). Over time, “interactional processes” comprised of memories with and expectations of a place lead to the formation of an “emotional bond” between the individual and the physical site (Milligan, 1998, p. 2). Milligan (1998) states place attachment leads one’s “experiences within and in relation to a specific site” to inform the individual’s future expectations for the site (p. 2). Individuals’ attachment to place has the potential to inform how they modify a space. Due to objects possessing the ability to expand or restrict “the scope of that person’s actions and thoughts” (Csikszentmihalyi & Roachberg-Halton, 1981, p. 53), material objects may become “potent facilitators of later-life adaption” (Kleine & Baker, 2004, p. 10; see also Kamptner 1989, p. 166). Therefore, possession and place attachment legitimize the investigation of how peoples’ everyday practices of homemaking in their familiar home environment, may over time ultimately motivate and influence the age-friendly renovation decision-making process.

Memory

The establishment of perception over time is also an intrinsic quality of memory. Kwint’s (1999) profession of the contribution of material culture in revealing “the subjective nature of memory” (p. 2), observed that “objects serve memory in three main ways” (p. 2); they illustrate the past, invoke involuntary recall through serendipitous encounters with an unsuspecting object, and become a historical sensorial record. Objects, particularly the possessions of older individuals, have the ability to act “as lightning rods for feelings and memory” (Rubinstein, 1992, p. 63). Morton (2007) alleges that homes hold the capacity to materialize memory; not only is the way people live embedded in the physical structure of the home, but how a person’s memories are summoned is structured by the material culture of the home (p. 166). Furthermore, memories of experiences with an object form the basis of peoples’ plans for future objects. Glassie (1999) proposes “plans blend memories with a reading of the immediate situation” (p. 228); interaction

with existing things initiate plans, plans lead to decisions, decisions manifest in intensions, and intensions ultimately materialize in the creation of a new object. As such, exploring the theme of memory by studying the materiality of the home resonates as a means of unpacking the personal decision-making process of planning an age-friendly renovation.

Identity

While people's perspectives of objects reveal autobiographical stories or memories, a researcher's observation of the same person-object relationship construes what Hoskins (1998) terms a "biographical object" (p. 7), objects that become individualized by situating owners in a time and place. They bear witness to the daily practices and experiences of their users. Objects "share our lives with us ... we recognize our own aging in the mirror of these personal possessions" (Hoskins, 1998, p. 9); over time individuals' identities become invested in their possessions, particularly those as complex as their homes. As a consequence, "the process of developing an identity is a gradual one" (Dittmar, 1992, p. 84), one that older individuals have invested considerable resources in. Marcus (1995) acknowledges the home is so personal that it may be portrayed as a "mirror of the self" (p. 17). He likens one's home to a dramatic set filled with props in which people act out their lives (Marcus, 1995, p. 11). The home provides the stage and objects that allow the person to present stories of who they are, both as an individual and a family member (Pallasmaa, 1995, p. 137).

George Herbert Mead identifies three perspectives relied on to inform the individual of their identity: How the individual perceives themselves, how others perceive the individual, and how the individual believes others perceive them (Miller, 1982). This theory is human centered, requiring the skill of self-reflection (Dittmar, 1992, p. 75). Clarke (2001) applies these ideas directly to the home, stating "the house itself actually becomes the 'others.' The house objectifies the vision the occupants have of themselves in the eyes of others and as such it becomes an entity and process to live up to, give time to, show off" (p. 42). A person's identity is complex and society's understanding of it cannot rely only on simply studying the immediate private and public behaviour of the individual. Rather the older individuals' identity, and their experiences with age-

friendly renovations, must be considered over the course of their lifetime and within the context of their approach to aging-in-place.

Affordance

Just as people's identity changes over time, so to do their relationships with home, leading some to make changes to their home and what it affords them. James Gibson (1977) coined the term affordance to describe what exists between an individual's abilities and the multiple possibilities inherent in what their environment affords them. He defined affordance as "a specific combination of the properties of its substance and its surfaces taken with reference to an animal" (Gibson, 1977, p. 67). Norman (1999) later simplified affordance to "the actionable properties between the world and an actor" (p. 39), the dynamic properties of individuals' environment and what they may make of it. More recently, Pols (2012) succinctly stated it as "opportunities for action" (p. 113). Affordance illuminates the codefining relationship between the homeowner and their home (Greeno, 1994, p. 338). The information pertaining to affordance is found in events involving the environment, the individual, and the consequences and relationships that ensue (E. Gibson, 2000, p. 54).

Greeno (1994) argues "affordance is a property of whatever the person interacts with" (p. 340). Any complex environment or object, such as a home, will possess many different affordances. However, the presence of an affordance does not "cause behaviour but simply makes it possible" (Withagen, de Poel, Araújo, & Pepping, 2012, p. 250). An individual could live in an age-friendly home without ever taking advantage of its age-friendly spaces. Why might this occur? It may be due to homeowners' lack of awareness of a particular affordance their home possesses. By definition, an affordance does not have to be visible (Norman, 1999, p. 39). Norman (1999) makes the distinction between "real" and "perceived" affordances, the former being all the affordances that exist within a specific environment, and the latter being only those that are visible to the individual (p. 39). What's more, Withagen et al. (2012) suggest that some perceived affordances are more inviting of certain behaviour than others, making it easier for the user to access them. Ultimately, the definition of affordance asserts self-control to homeowners; it is their choice whether they utilize a particular affordance of their home. This affirms that affordances are value

laden, holding meaning unique to the user. Reed (1996) reasoned that the individual's beliefs and values serve as the motivation around what affordances are exacted (Chapter 7). Gibson (1977) believed that individuals' determination of the affordances they utilize ultimately determines their lifestyle (p. 69). To establish an appreciation of the dynamics of the homeowners' age-friendly renovation decision-making process, it is necessary to determine what drawbacks or benefits they perceive will be afforded from undertaking these changes.

The creation of "a home is the product of the interrelations between many variables" (Bernard, 1991, p. 193), including the residents' attachment to it, memories associated with it, understanding of how it reflects their identity, and the affordances they perceive it possesses. Furthermore, since a home cannot typically be relocated outside of the "social and moral context" in which it has been created and used (Buchli, 2002, p. 207), it becomes an invaluable means of discovering an individual's beliefs and values. A central tenet of material culture is that tangible objects are capable of holding complex meanings within themselves (Harvey, 2009, p. 6), which may be read to understand the intangible aspects of a given phenomenon. Integral to *Cultivating Home* is determining how meaning, and the meaning making of the home, is reflective of aging-in-place individuals' practical factors, cultural variables, and expectations and reactions to their age-friendly renovations.

Undertaking renovations to one's home is a major decision, situated within multiple social, political, historical and economic contexts. When material culture researchers undertake a study, it is important to note they often do so from a specific perspective. *Cultivating Home's* primary focus is on the social context of the homeowner-home relationship, and to a lesser extent the participant's personal life history perspective. This study did not focus on the political or economical implications associated with the age-friendly renovation process. To encompass all these contexts effectively, this research would have had to be much more complex than the available time and resources allowed. In particular, the political and economic context, as it pertains to age-friendly renovations, is a policy area currently of interest to many Canadian provincial governments. A number of regions in the country have introduced grant and loan programs to assist with funding of age-friendly renovations aiming to facilitate the desire of older

residents to age-in-place safely and comfortably (Alberta Ministry of Seniors and Housing, *n.d.*, Seniors home adaptation and repair program). These policy initiatives, and the political and economic dynamics they may add to the phenomenon of renovating to age-in-place, while valuable to study through material culture research, introduce complexities beyond the scope of this study.

Benjamin (1995) concluded that studies that examine how the built environment may be improved could help identify forthcoming “difficult or unimaginable problems” (p. 10); issues many older people seem hesitant to forecast when anticipating their home’s ability to safely and comfortably meet their changing needs as they age. In order for researchers to be able to assist individuals in overcoming this barrier, “we need to ... listen more closely to what dwellers tell us today” (Benjamin, 1995, p. 10) and use this information to empower peoples’ ability “to make a healthy and meaningful future” (Benjamin, 1995, p. 10); one that supports the older individual’s desire to age-in-place in their age-friendly home.

Summary

Although some interesting studies have been conducted that explore aging-in-place, an extensive literature review did not reveal any related scholarly research that merged the field of material culture with aging-in-place. Additionally, although literature searches were done on a variety of topics, in various disciplines, around aging-in-place related to themes or issues relevant to homeowners, no evidence of scholarly research that sought to gain an understanding of the role of older homeowners’ practical considerations, cultural variables, or their expectations and reactions that prompted and supported their ability to independently make the decision to undertake a proactive age-friendly renovation was found. As such, this literature review highlighted a variety of concepts, studies, and perspectives on aging-in-place that influenced the research in this thesis and provided a foundation for this thesis.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

Cultivating Home asks the question: What material culture themes are revealed, and knowledge gained, by examining the perceptions of older homeowners' multifaceted meanings of home, involved in independently making the decision to transition the home they own, from a non-age-friendly space to an age-friendly space? In order to tackle this challenging assignment, three secondary research questions have been identified that break the primary question down into a more manageable task. These secondary questions seek answers to what practical factors, cultural variables, and expected reactions are influencing the older homeowners' desire to age-in-place and the decision-making process concerning the age-friendly renovation. When the answers being sought open up a topic for the first time, the researcher must find an innovative way to conceive the research design that builds on previous studies, across disciplines, that has explored some aspect of the phenomenon. *Cultivating Home* has relied on environmental gerontologists' exploration of the person-environment fit and occupational therapists that have examined the impact imposed age-friendly home modification on older individuals living with disability, because they have attempted to introduce material culture themes into their work. The design of the research, the methodology adopted, the identification of the data sources, the methods and tools selected for data collection, as well as the structure of data analysis were therefore all driven by what *Cultivating Home's* researcher wished to learn. They are discussed in detail below.

Research Design

Cultivating Home brings together material culture and aging-in-place studies in an original way. Given that little precedence can be found upon which to base its structure, *Cultivating Home* draws on traditional identification and progression stages of research, and from this has formulated a more blended methodological approach. Figure 3-1 visually depicts *Cultivating Home's* research design, chronologically highlighting each stage of the research process; its methodology, the methods selected, the techniques of data collection, and its approach to analysis. *Cultivating Home's* structure encourages the identification of multiple themes active in the homeowner-home relationship early in the data collection process and builds upon them, recognizing that the outcome of one decision is relevant to subsequent decisions.

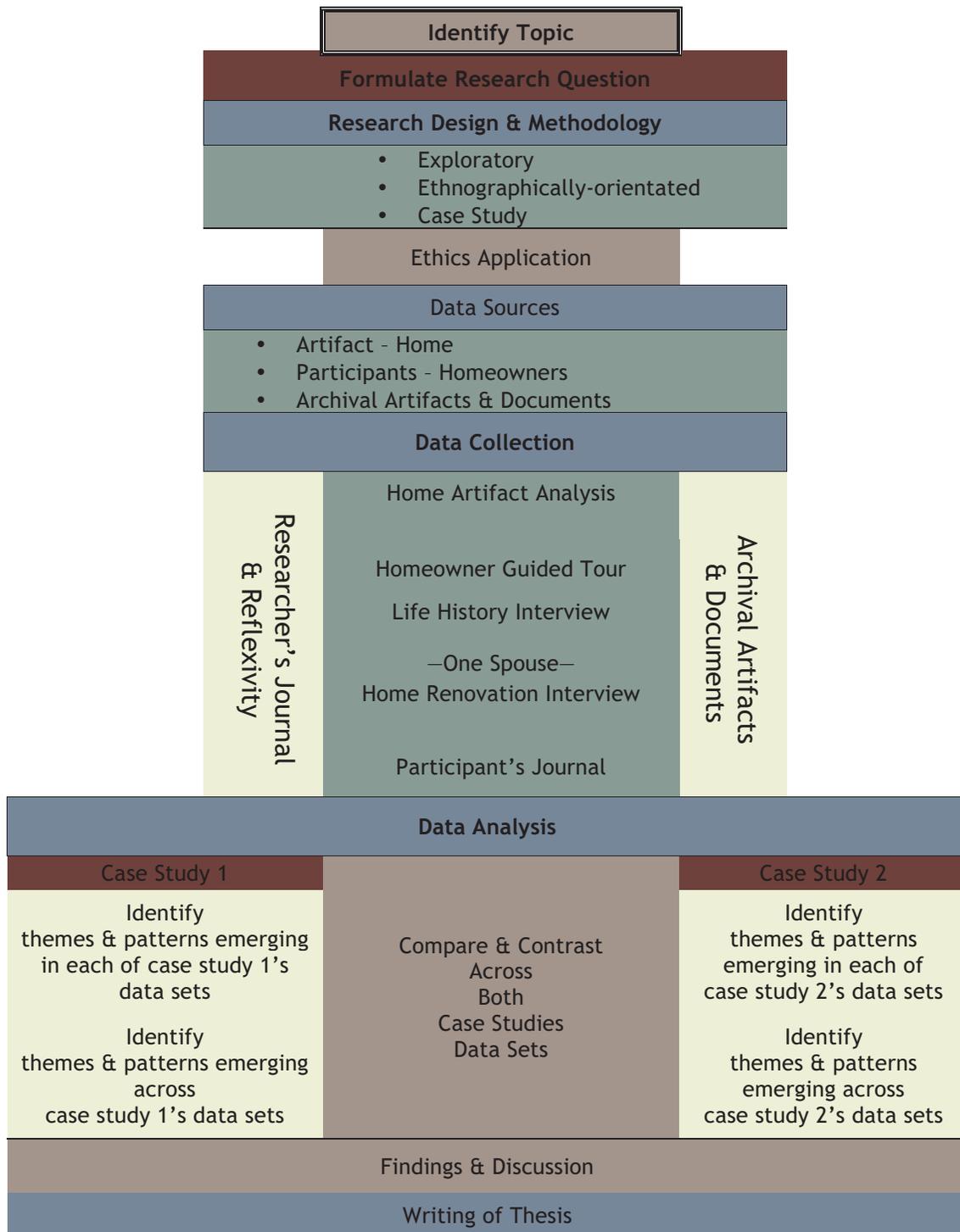


Figure 3-1. Cultivating Home: Research design.

Methodology

Material culture's interdisciplinary "authors draw on the distinctive characteristics of the historical discipline...but they simultaneously put into practice approaches and techniques garnered from other disciplines" (Harvey, 2009, p. 8). Meaning, and meaning making, is multifaceted and central to material culture. The meanings existing in the homeowner-home relationship were identified via the themes revealed as the homeowners' transition their homes into an age-friendly space. With consideration given to the research questions and design, as well as the constraints of time and resources, *Cultivating Home's* participants' perceptions of their experiences were considered through the methodological lens of an exploratory, ethnographically orientated case study.

Exploratory: Exploring Openly

The literature review has found no evidence of research that has specifically looked at the dynamics of the age-friendly renovation experience. Ray (2006) states that the adoption of an exploratory methodology is fitting if after "following an extensive library search for relevant information, a scientist may realize that almost nothing is known about a particular phenomenon" (p. 36). This necessitated that *Cultivating Home's* methodology and data collection process included methods and techniques that remain adaptable, allowing for modification that accommodated the subject matter and the manner in which participants chose to share their experiences. As Stebbins (2001) pointed out, for exploratory researchers "to explore effectively a given phenomenon, they must approach it with two special orientations: *flexibility* in looking for data and *open-mindedness* about where to find them" (p. 8). *Cultivating Home* demonstrated flexibility by utilizing three data sources and exhibited open-mindedness by employing seven diverse data collection methods.

Ogawa and Malen (1991) reasoned that "the exploratory case study is employed to inductively generate, rather than, deductively confirm, insights regarding the phenomenon of interest" (p. 271). Therefore, *Cultivating Home's* aim was not to determine whether age-friendly renovations were a viable solution to addressing the housing needs of all older individuals; rather, it established an early awareness and understanding of the perceptions and embedded meanings of

two households proactively preparing their home to accommodate a healthy, physical aging process. By undertaking an exploratory study, *Cultivating Home* breaks new ground, promoting further scientific research on this phenomenon.

Ethnographically Orientated: Context Is Paramount

Cultivating Home erects a bridge of trust between the researcher and the participants intimately familiar with the age-friendly renovation, creating what LeCompte and Schensul (2010) call “a safe and open environment in which the voices or opinions and views of the participants emerge in an authentic way” (p. 16). *Cultivating Home* appreciates that only those people who have experienced the phenomenon of renovating to age-in-place can tell their stories, hence there is a focus on these individuals’ perceptions.

The term “ethnographically orientated” highlights that *Cultivating Home* investigated two cases over a short time frame but in a more in-depth way. This study is ethnographically oriented because it does not contain some of the distinctive elements of a traditional ethnographic study. Ethnography typically occurs over an extended period of time and involves a larger cultural community. It also involves the basic premise of the exploration of “how these people view the situations they face, how they regard one another, and also how they see themselves” (Hammersley & Atkinson, 2007, p. 3), which is a feature of the research herein. Tilly (2008) recognized that to fully grasp the context of the individualized, as well as common actions and convictions of people, it is key to recognize and discern the complexity of the cultural forces and societal protocols existing within the home environment (pp. 5-6). Investigation of the homeowners’ meaning of home, practical considerations, cultural variables and influences, and expectations and reactions involving the age-friendly renovation process required observation and interviews, disclosing the cultural background and past experiences of their home life. No story can exist outside of cultural context. Understanding the often hidden active social forces was vital to interpreting the story. As Patton (2015) emphasizes, ethnographic research asks the question “how does culture explain ... [individuals’] perspectives and behaviors?” (p. 97). *Cultivating Home* unpacks how individuals’ cultural views pertaining to the concepts of aging, aging-in-place, and age-friendly renovations, impacted both their decision-making process and meaning of home.

It was imperative that data collection occurred within the participants' home, as *Cultivating Home* made a "commitment to producing a story about events *as they occur in their natural settings*" (LeCompte & Schensul, 2010, p. 13). Studying the home from the inside afforded the opportunity to conduct an introductory, general assessment of the advantages and constraints I believed the participants' home provided within the context of their daily lives. Sharing conversation with the individuals in their home also provided the chance to establish what the homeowners' perceived as necessary to age-in-place. Both my *etic* external observations of the home and the homeowners' behaviours, plus the participants' *emic* internal description of their experiences, provided "immediate access to different sorts of information" (Hammersley & Atkinson, 2007, p. 87). Furthermore, collecting the data within the participants' home environment facilitated the serendipitous discovery of concepts that had not been previously anticipated (Wolcott, 2010, p. 56).

LeCompte and Schensul (2010) suggested that "ethnography is very useful in the identification of new trends, new ideas for action, and ... the implementation of new policies" (p. 45); hence, as Canada's population ages, *Cultivating Home* is timely. This ethnographically orientated approach provides a respectable degree of insight into some of the challenges, and advantages, these older individuals encountered which may be of interest to their peers.

Case Study: Start Small, Dig Deep

Studying the decision-making process and outcomes of undertaking an age-friendly renovation, *Cultivating Home* exemplifies Schramm's (1971) characteristics of a case study, which "tends to deal with a major decision, its genesis and its apparent effect, or, more often, with the reasons for, the execution of, and the apparent effects of the entire project" (p. 3). Creswell (2013) stated, "a hallmark of a good qualitative case study is that it presents an *in-depth understanding*" (p. 98) which requires multiple types of data (Gerring, 2007, p. 33). *Cultivating Home* incorporated three data sources – the home, the homeowner, and their archival artifacts – and the seven data collection methods identified in the research design. Since such all-encompassing work is labour intensive, Patton (2015) has stated a case study necessitates "placing a boundary around some phenomenon of interest ... [determining] the focus of inquiry" (p. 259).

Therefore, *Cultivating Home* only investigated the experiences of two households' age-friendly home renovation.

“The case study stands on its own as a detailed and rich story about a person, organization, event” (Patton, 2015, p. 259). As such, *Cultivating Home* provided several opportunities for the study to become familiar with “real” people’s homes and hear their genuine stories via the deep reflection of both households. Capturing a more holistic perspective facilitates *Cultivating Home*’s readers’ ability to judge whether they deem these stories as believable and realistic. Stake (1978) stated that case studies are “useful in the study of human affairs because they are down to earth and attention holding” (p. 5). *Cultivating Home*’s illustration of these peoples’ experiences allows other homeowners to test their “readiness” (Stake, 1978, p. 7), or desire, to commit to an age-friendly renovation.

Cultivating Home’s exploratory, ethnographically orientated, case study methodological approach is a novel research approach to aging-in-place that has the potential to reveal new information about homeowners and their relationship with their home as they age. As Sandelowski (2010) has ascertained, “all methods become what they are in the hands of users; that is, methods are re-invented every time they are used” (p. 78). *Cultivating Home*’s methodology, informed by the use of numerous methods, should be embraced. From the start, the study’s structure was clearly defined, including the methods selected, its objectives, sources of data, techniques of data collection, and approach to data analysis. Given this, creative material culture research, such as *Cultivating Home*, encourages a unique approach to ascertain findings that other disciplines may be unlikely to consider.

Ethics: The Three Pillars of Practice

The supporting pillars of material culture research are the researcher, artifact, and participants. Each must be active for the study’s findings to come forward in a believable and constructive manner. Figure 3-2 demonstrates the three fundamental pillars of material culture research.



Figure 3-2. Material culture research's three pillars of practice.

To ensure that the smaller triangles remain upright, integrity and respect must be demonstrated in each area. Figure 3-3 identifies the principal concerns applicable to each pillar to ensure that *Cultivating Home's* practices remain ethical.

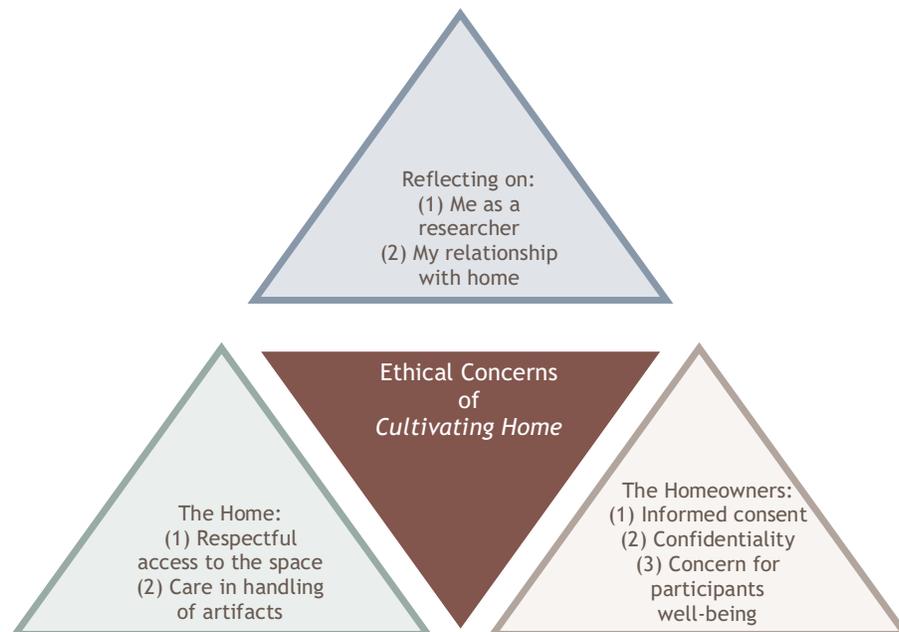


Figure 3-3. *Cultivating Home*: Principles of practice.

Researcher Reflexivity: Me as the Researcher

Guba and Lincoln (2005) have maintained that reflexivity “is a conscious experiencing of the self as both inquirer and respondent, as teacher and learner, as the one coming to know the self within the processes of research itself” (p. 210). Early on, I elicited what I brought to the research, as well as how I would track the impact my responses had to my work’s progression. Maxwell (2012) calls this “thinking on paper” (p. 99), an exercise that guided me to single out the skills, fragility, beliefs, and values I relied on, as well as conveyed, during my research. Additionally, it allowed me to recognize how I was transformed by my exposure to the phenomenon. This type of reflexivity is common to ethnographic research and is one way to check the validity of the research being accomplished. For the most part, my reflexivity is tracked through a researcher’s journal that was kept from start to finish of the research, including prior to data collection and throughout data analysis (see Data Collection, Researcher’s Journal).

Articulating “I” on paper. As a first time researcher, the skills brought to my work had predominantly been acquired through life experiences. My age, and 28 years of being a homeowner with my spouse, predisposed me to appreciating how confronting, and balancing, an evolved sentiment of home, with practical implications, complicates an age-friendly renovation decision. In addition, I have experienced collaboration with my spouse when making critical decisions about our house and home. It is important to note that my spouse and I have owned and lived in the same home for 22 years.

Directly impacting my capacity to enter other people’s homes and observe these spatial environments was my 2013 experience as a practicum student with architect Ron Wickman, who specializes in barrier-free design. Ron not only taught me how to identify accessible features of home design, but also how to spot deficiencies and recognize a space’s potential for positive change. While with him, I was invited into the homes of homeowners who had experience addressing accessibility issues. This included a couple that designed their new home with an extensive commitment to aging-in-place. Additionally, as a previous Statistics Canada census taker, I gained experience interviewing a wide demographic of individuals in their homes. It was incumbent upon me during the interview process to make personal, but compulsory, inquiries

regarding their relationship with their home in the strictest of confidence. I had also been well trained for this research through my academic courses, having worked with a wealth of talented professors from different fields. Above all else, I did not complete this research alone, but continually had access to the support and guidance of my supervisor Dr. Megan Strickfaden.

Defining “my” home. What does my home signify to me? Can I recognize the divergent relationships I have had with home? I have been extremely fortunate to have always lived in houses that extend beyond meeting basic needs. Both my childhood and present family home were custom built and located in safe, well-regarded, metro Edmonton neighbourhoods.

Edmonton is a young city. Its early growth occurred in the 1950s when oil, “liquid gold”, drew a young population to the city’s newfound wealth. The city’s development was based upon modern, urban neighbourhood planning models, with house construction tightly controlled by advanced building codes. The houses that became my homes have been “cookie cutter” versions of post-World War II designs, tweaked in minor ways. Each is a two-storey house, comprised of multiple rooms with specific uses, and an attached garage. While these features describe my life’s two seminal houses, they do not describe either home.

Home, for me, equates to family, exemplifying the rhythm of everyday life and is best summarized by the word “warmth.” Warmth has multiple meanings and can be experienced in numerous ways. First, our home’s physical structure fulfills our basic need for warm shelter. Second, its configuration affords our family the pleasure, or warmth, of accomplishing day-to-day routines and enjoyable activities without struggle. Third, its commendable presence in our community invokes warmth of pride. Fourth, our home’s financial value provides warmth of security, affirming our belief that in the future, our children’s families should financially be able to continue to live in a comfortable home. Fifth, our home intensifies the feeling of belonging, or warmth, all family members share with each other, by physically drawing our family together in close proximity to one another. Sixth, our home is a place of storage, both for our physical belongings, as well as warm family stories and memories.

My consistent reference to the houses I have lived in as a plural, rather than singular, noun stems from the fact I have never lived alone. I grew up the oldest in a family of seven. In college, I

always had a roommate. Directly after college, I married and with my husband, have raised three children. My physical experiences with my *houses* have always been with an object designed for, and used by, more than one person at the same time. Therefore, any perceptions I hold today regarding how I perceive a house as a *home* can only be expressed as a plural noun; as my family's home.

While it was impossible to forecast how this research experience would impact me, I anticipated that it would result in personal change. The subject matter is close to me, as I am also entering a stage of life where I can expect to have to address housing needs as an “older individual” over the following decade or two. Provided with the opportunity to learn first-hand from these homeowners, I expected that insights would linger in my thoughts and translate into actions at my own home.

Respecting the Artifact: Material Culture's Treasure

Without access to the artifact, material culture research cannot take place, as Busch (1999) captures so eloquently:

I rarely write about people. Instead, I write about the places in which they live, attempting in some way to interview their homes ... the rooms they arrange. By gathering news from the edges in such a way, the presence of places and the people who inhabit them tends to emerge. ... I am certain these places reveal something about who we are. (pp. 15-16)

My objective was to uncover an understanding of various homeowners' perceptions of their respective home's age-friendly transition, studying the space responsible for shaping their daily lives – past, present, and future. A space that possesses the potential to empower these homeowners' belief that they may confidently age-in-place.

Since homeowners are the gatekeepers to their homes, our relationship had to be one of great trust, to allow for permission to be granted to me to enter their house and thereby gain an understanding of their home. An individual's home is exceedingly personal, therefore respect of the privacy and day-to-day needs of the individuals in their home environment was vital, and it was necessary that my visits accommodated this. The participants were made aware of who would be present, the purpose of the visits, and how they could expect the day's data collection process to proceed. Formal written consent was requested at the commencement of *Cultivating Home*, along

with permission to photograph, videotape, and audio record. Images of individuals and their homes that could possibly lead to their identification were blurred to safeguard confidentiality.

Possessions were handled in the presence of the homeowners with their approval and prior verbal consent. Removal of objects from the home was not necessary; instead analysis was assisted by the use of sketches, photos, video, and audio recordings.

Respecting the Participants: What They Can Expect

While a relationship of trust was necessary to gain access to the home, it was only through the homeowners' full commitment and co-operation that I became "actively involved in co-constructing previously untold stories by asking curious questions that help thicken and deepen existing stories and invite the teller into territory beyond what is already known to him or her" (Etherington, 2007, p. 600). *Cultivating Home* strived to retain the respect of the participants, not only throughout the study, but also long after the conclusion of the research. In both cases, I met these individuals through close personal friends. Therefore, I anticipate there will be events in the future where we will meet again. These individuals have become dear to me, so much so that in conversation with old friends I continue to inquire as to how they are doing, always interested in what is new in their lives.

Establishing informed consent. Three documents, the Recruitment Notice (Schedule A), Home Walkthroughs & Participant's Journaling (Schedule B), and Information Sheet (Schedule E), each written in layperson language, advised the participants of *Cultivating Home's* procedures and purpose. Only individuals able to provide free and informed consent were considered, and they were then required to sign the Research Participant Consent Form (Schedule F). All of the forms were available to be sent digitally, providing the participants the opportunity to review them ahead of the first visit if necessary. None of the participants required this. The participants were encouraged to go over the research material with other family members and friends, and at any point in the study, involve anyone else in the research process they wished. To my knowledge, one participant spoke at length with a mutual friend and her sons before agreeing to participate. The other two participants discussed the study beforehand with their daughter, and were pleased when she could attend a portion of the life history interview and the entire home renovation interview.

Participants could choose at any time to end their participation by simply contacting myself, or my supervisor, and verbally communicating their intention to withdraw. However, they had to agree that any data collected that had been transcribed and member-checked prior to deciding to withdraw would be deemed to have entered the data analysis stage of the study and could not be removed. The homeowners were also informed that once they had asked to withdraw, no further information would be collected. None of *Cultivating Home*'s participants asked to withdraw from the study.

Confidentiality and anonymity. The names and telephone numbers of the potential participants were collected to permit contact. The individuals' addresses were collected after a telephone enquiry, which allowed me to vet their eligibility and make arrangements to visit them in their home. During this visit, after demonstrating a commitment to participate throughout the entire study, they were asked to sign the Research Participant Consent Form (Schedule F). Additional personal information was only collected to describe the participants' demographics. There was no concern if participants wished to reveal their identity, provided both partners agreed. However, if either partner requested anonymity, both spouses were required to remain anonymous and pseudonyms would be used. Should any private matters, like toileting or bathing, be discussed, the participants were guaranteed this information would remain anonymous. As per the ethics application approved by the University of Alberta that outlined how data collection and storage would be handled, Elaine and Gerry choose to have their real names used in the study, while Ann decided to remain anonymous, even suggesting the pseudonym she was identified by.

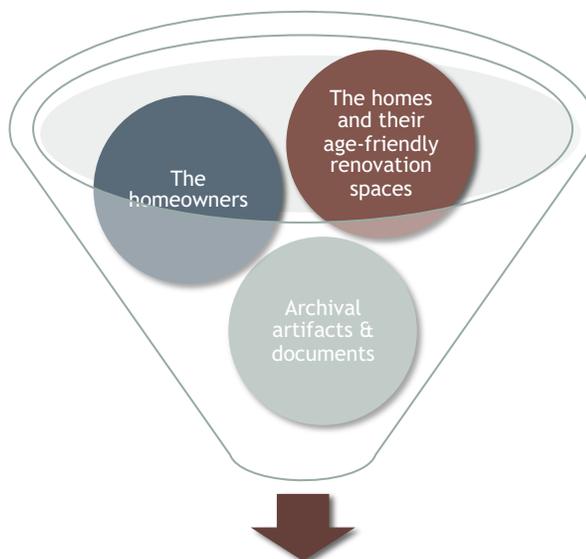
All electronic research data was stored on password-protected computers belonging to my supervisor or myself. Transcripts, written material, photographs, and video and audio recordings were stored in a locked location. If a videographer assistant had been required, they would have been asked to sign a non-disclosure agreement, the Team Member Consent Form (Schedule G). However, no videographer was required. Data of a non-sensitive nature will be retained indefinitely. Otherwise, on completion of *Cultivating Home*, all personal information and data was destroyed. Information stored digitally was electronically deleted. Photographic and video material relevant to the research question has been retained and any identifying features of the individuals

or their homes, was blurred. The potential application of data retained includes use in further research, the publication of academic papers, and academic presentations.

Care and compassion above all else. When working in the two homes, participant care and compassion was practised above all else. It was anticipated that should one participant within the couple become upset, their spouse and/or daughter would assist with the matter. For the participant living on her own, it was anticipated that the researcher or her supervisor would assist. Additionally, if any of the participants experienced distress while in the presence of the researcher, inquiries would be made as to whether there was anyone who could be called to assist. *Cultivating Home's* supervisor would also be advised and asked for further direction and assistance if necessary. The participants would also be given the opportunity to conclude the visit to their home. A follow-up call would be made, either later that day or the day following, to inquire how they were doing. The participants would be asked when it might be possible to reschedule a follow-up visit to continue the research. At this time, participants would also be reminded that they were free to withdraw from the study without repercussion. No participants experienced any difficulty with their participation in *Cultivating Home* at any time during the study.

Data Sources

Cultivating Home's data sources consisted of three homeowners, two homes, the age-friendly renovation spaces, as well as archival artifacts and documents. Figure 3-4 indicates that each data source assumed a role in addressing *Cultivating Home's* research questions. Each data source revealed information differently. As such, the homeowners and homes selected were based on specific criteria that were predetermined by the researcher. This ensured that the data sources were well suited to study's research questions and had a role in the phenomenon under study. A description of *Cultivating Home's* criteria for each of the three data sources is followed by an introduction of the selected participant homeowners and their homes.



What material culture themes are revealed, and knowledge gained, by examining the perceptions of older homeowners multifaceted meanings of home, involved in independently making the decision to transition the home they own, from a non A-F space to an A-F space?

Figure 3-4. Cultivating Home: Data sources.

The Homeowners: Those Who Create, Use, and Own the Home

The life expectancy gap is narrowing between males and females, most notably due to the rapid increase in life expectancy for males, therefore more senior Canadians, 62.7% of women and 77.9% of men in their late sixties, are living out their years as part of a couple (Hudon & Milan, 2016, p. 13). Of women aged 75-79 years in 2011, 43.0% were living as a couple, versus only 36.5% 10 years earlier (Hudon & Milan, 2016, p. 13). The vast majority of senior couples are also married (Hudon & Milan, 2016, p. 14).

In Canada, where the primary household maintainer is 75 plus years of age, 50.6% live in single detached homes (CMHC, 2012, p. 21). As well, recent data indicates that an increasing number of individuals over the age of 65 now own their home, 74.6% in 2016 versus 72.2% in 2006 (Statistics, 2017, p. 5). While the researcher recognized that as they age, many seniors will eventually move out of their single detached homes, Canadian Census data reveals that even at age 85, roughly a third of eldest seniors still live in single detached housing (Statistics Canada, 2012, p. 4).

Given the prevalence of Canadian seniors living as couples in owner-occupied single detached homes, two households comprised of seniors in Canada were sought for participation. Initially it was felt that the selection of these households would have ideally represented two varying aspects of the age-friendly renovation experience; one in the midst of the planning or construction process, and the other having completed their renovations. It was believed this would provide some contrast between the two cases' experiences; the nuances of the first household focused on their intended expectations, the second household focused on their perceptions of how well their expectations were met. Additionally, as the researcher had also expressed an interest in potentially examining gender differences between participants in the same household, an attempt was made to select households comprised of married male/female couples. However, it proved very difficult to identify senior households willing to participate in the study. Furthermore, after an extensive search, no aging-in-place homeowners currently undertaking an age-friendly renovation could be found. For these reasons, after discussion with the researcher's supervisor, the initial participant criterion was amended to accommodate households where both had already completed the interior renovation. Additionally, the female homeowner accepted as the second participant was recently widowed.

All participants had to be over the age of 50 and, in the case of couples, were to be comprised of a married male/female couple. They had to have lived in the home for over 5 years and possess a typical understanding of age-friendly home design. Typical understanding was defined as none of the individuals, nor their immediate family and friends, were professionals in age-friendly design, or specialists who work with disability. In Figure 3-5, the overlapped area in the diagram identifies the requirements common to both households. The selection process, based on the established criteria, involved a non-random purposive intensity sampling. This meant that individuals were deliberately sought out from the population at large who not only met the eligibility criteria but also possessed marked differences from each other and demonstrated the ability to work effectively with the researcher. This facilitated the opportunity to juxtapose the expectations and data collected from the two households to deepen and strengthen *Cultivating Home's* findings. Additionally, the selection process aimed to work with households that were

representative of other older individuals dealing with the decision to undertake an age-friendly renovation.

The goal of *Cultivating Home* was to present stories that would be of interest to an increasing population that could envision themselves in a similar situation, and learn from these participants' experiences. If the trends outlined above continue, examining older homeowners living in single detached homes, particularly married couples when possible, appears to be a rational approach.

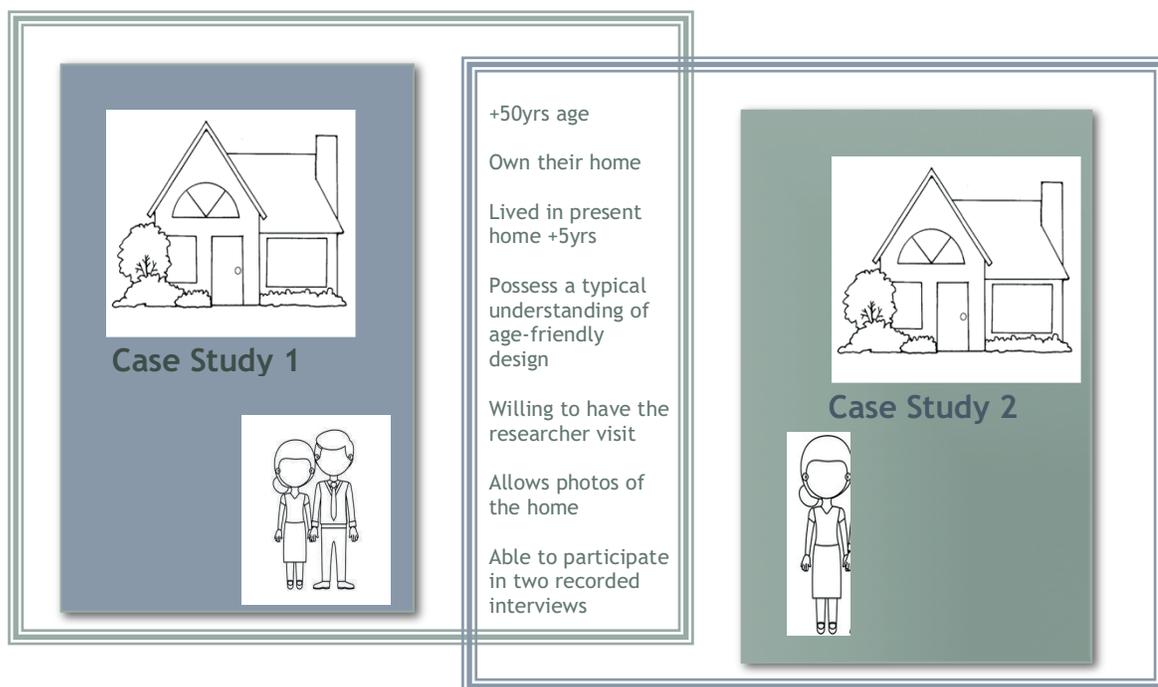


Figure 3-5. *Cultivating Home*: Participant eligibility criteria.

Working with two Canadian households provided access to a large population experiencing common traits of daily life (e.g., weather, access to healthcare). In stipulating an age over 50, *Cultivating Home* targeted households whose children – if they had children – had already moved out. Therefore, these older individuals were currently living on their own, impacting their spontaneous access to assistance. Canada Mortgage and Housing Corporation (2012) defines a Canadian senior as someone 55 years of age and older (p. 1). By working with people as young as 50, *Cultivating Home* sought to increase the chance of capturing proactive, versus reactive, behaviour undertaken to address the anticipated physical challenges of aging. Having owned their

homes for at least 5 years, *Cultivating Home's* extended time frame of home ownership facilitated the development of a strong homeowner-home relationship; hence the households were in a strong position to commit to aging-in-place.

It was vital that *Cultivating Home* was able to compile a complete makeup of the homeowners' individualities, such as their expectations of the aging experience and what was behind their desire to age-in-place. They had to be capable of investing the time and energy to provide deep personal reflections of their age-friendly renovation experiences. Ultimately, these homeowners were not only the gatekeepers to their homes, but they also controlled the experiences they chose to talk about and the sharing of any other objects or documents they believed had a bearing on their age-friendly renovation decision.

Introducing Elaine and Gerry: Case study 1. Born of Italian heritage, 80-year-old Elaine and 85-year-old Gerry have been married for 59 years. They built the home they currently live in 52 years ago. Elaine, a nurse by profession, worked in a number of environments including hospital critical care units, community health, and family physician offices. Gerry was the Catholic School Board building maintenance supervisor for the vast majority of his career. Together they raised three children and, in later years, briefly cared for Elaine's dying father in their home.

Elaine grew up in a working class neighbourhood of Niagara Falls and, except during training and a few months with classmates working in California, lived in her paternal grandparents' home until marrying at age 21. There, Elaine lived with her grandfather and grandmother (who passed away when Elaine was 2), her parents, her father's teenage sisters, and her younger brother and sister. In stark contrast, Gerry immigrated to Canada on his own at 17 years of age, after his father had briefly visited North America. Upon arrival, Gerry lived on the upper floor of a Niagara Falls boarding house.

Elaine takes great pride in her homemaking skills and enjoys cooking. She is involved in community activities, sings in the church choir, and attends weekly aqua-fit classes. Gerry is passionate about his yard and garden, having spent countless hours over the years working on the outside and inside of their home. One of the earliest home modification decisions the couple made was the addition of a backyard pool. This was meant to entertain the family during the summer, as

Elaine and Gerry perceived their modest lifestyle would allow few opportunities to spend time away from home with their children. Literally, from the earliest days of their marriage until today, Elaine and Gerry's life continues to evolve around the family home and the opportunities and pride it affords them.

Introducing Ann: Case study 2. Immediately following their wedding, Ann and her husband Alvin, emigrated from England, part of an international program encouraging young teachers to Edmonton's suburban communities. Two years later, with Ann pregnant with their first son, they bought a bungalow in a mature Edmonton neighbourhood. After several trips home to England to scout out employment closer to family, they eventually decided to stay in Edmonton because of the career opportunities in Alberta's schools and the quality of education they felt the local schools could provide their two sons. Alvin passed away approximately 3 years ago, in 2014.

As a young child, Ann's family was well known as skilled bakers. Just prior to World War II they installed one of the first full electric bakeries in the Bootle region. During the 1941 blitz, the entire bakery was lost, along with her uncle and aunt's residence located above it. Next door, the big home, as Ann calls it, was heavily damaged and her family had to vacate it. After it was repaired, her extended family – including her uncle and aunt, grandfather, three sisters, and parents – moved in together. Ann lived there until she married. Alvin grew up in Liverpool with his mother and sister, living with his grandparents in their home. He attended boarding school from an early age.

Alvin enjoyed writing and music. As well, he cared for and enjoyed creating paintings of Ann and his home's massive backyard gardens. Once retired, Alvin began updating the home that had undergone a professional renovation early in the marriage. He redid the two main bathrooms in the home; unfortunately, it appears, without knowledge of age-friendly design.

At the age of 79, Ann continues her family's tradition, spending time baking in her modern European kitchen. She regularly attends exercise class, and though she still drives, she also takes advantage of the many amenities within walking distance of her home. She has continued to extensively renovate the home – now with a strong age-friendly focus – hiring professionals that she and her sons, who live in Edmonton, work together with.

Table 3-1 summarizes the profiles of these two households. The table allows the reader to compare and contrast these highlights.

Table 3-1

Cultivating Home: Profiles of Participant Households

Parameter	Case Study 1		Case Study 2
	Elaine	Gerry	Ann
Participant's profile			
Sex	Female	Male	Female
Age (yrs.)	79	84	78
Marital status	Married	Married	Widow
Country of birth	Canada - Niagara Falls	Italy	England
Location of extended family	Niagara region	Italy	England
Residential status	Original owner		Owner
Marital status time of purchase	Married < 3 yrs.		Married < 3 yrs.
Length of residency			
Childhood home (yrs.)	21	N/A*	29
Present home (yrs.)	52		42
Home's profile			
Age (yrs.)	52		70-75
Style	Ranch bungalow		Raised bungalow
Size			
House			
Main Floor	2200 sq. ft. (with addition)		900 sq. ft.
Basement	Full		Full
	Partially developed		Fully developed
	Used rarely		Used daily
Yard (approx.)	80 ft. x 175 ft.		50 ft. x 160 ft.
Construction	Wood		Wood
Builder	Elaine & Gerry		Unknown
Home's location			
City	Niagara Falls		Edmonton
% City residence > 65 yrs. (2016)**	20.3		12.3
Neighbourhood			
Age of development	1960's		Post WWII
Maturity at time of move-in	New development		Mature
Distance to downtown (km.)	< 10		< 10
Walkability score (approx.)	< 25		70
Public transportation service, level	Yes, poor		Yes, excellent
Proximity family (km.)			
Children			
1 st Born	< 5		<15km
2 nd Born	< 5		<20 km
3 rd Born	< 150		N/A
Renovation method			
Primary	DIY		Age-friendly professional renovators
Secondary	Family & friend		DIY

Note. DIY = Do-it-yourself.

*Only for those participants who completed the life history interview was this data recorded.

** Statistics Canada. (2017). *Census Profile, 2016 Census*. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>

The Home: Material Culture's Distinctive Object-Focused Contribution

Material culture explores how the home and its physical age-friendly renovation spaces have been influenced by the homeowners' perception; how their senses, thoughts, and emotions responded to the modification of the home. Albeit, while the intangible homeowner-home relationship was critical to gaining an understanding of the transitional experience that *Cultivating Home* sought to reveal, it was imperative that the tangible change in the home's built environment was also thoroughly scrutinized. For *Cultivating Home* to resonate with as many people as possible, it was important that it pursued the examination of an "average" Canadian home, in this case defined as having no more than four bedrooms and three baths. The home's criteria are depicted in Figure 3-6. It was imperative that my research recorded as many details of the characteristics of the home and its age-friendly renovation spaces as possible, such as: construction materials, layout, features, and its aesthetic style. However, the knowledge describing the interaction that intuitively draws the individual into the space and how they use it came from the homeowners.



Figure 3-6. *Cultivating Home*: Home criteria.

At home in Niagara Falls: Elaine and Gerry's home - Case study 1. The 1941 international Rainbow Bridge, which spans the United States and Canada border in Niagara Falls, crosses the

Niagara River gorge, home of the celebrated Niagara Falls. The falls, along with a vast array of entertainment attractions, make the Niagara region a worldwide tourist destination for approximately 14 million vacationers per year (Niagara Falls Tourism, 2017).

Elaine and Gerry built their home themselves in 1965, with the assistance of Elaine's family, particularly her father and his contacts in the community. The young married couple drew up their own house plans and presented them to Elaine's father. They proceeded to buy a lot in a new residential area emerging from a local cherry orchard in the north end of the city. They were the first members of their family to move into this area, approximately 7 km from the Niagara Falls city centre. Shortly after, numerous members of Elaine's family followed, including her sister in the next block, her parents on the same street, and a first cousin with his family next door. Today, the couple are minutes from their daughters' family homes. The neighbourhood has remained primarily residential, with limited bus service and few amenities within walking distance.

Everyone, friends and family alike, enter the home through the side door, just off the attached garage that opens into the always busy kitchen area. Today, the three bedroom, one and a half bath bungalow is roughly 2,200 square feet, after the addition of a 400 square foot, three season sunroom about 25 years ago. The home has a full basement that once housed the three children's play space, Gerry's workshop and wine making hobby, and the family laundry.

The home's ranch design, with its typical living wing and sleeping wing, remained virtually untouched until the children had grown and left. Today, in addition to the south-facing backyard sunroom, the living room has been opened up to the dining room, that has also been extended, and serves as the sunroom's entrance. The interior décor of the home has kept pace with the many changes in fashion, through continual updates of the rooms' paint colours, soft furnishings, furniture presentation, and flooring over the past 52 years. The kitchen has seen the modification of its physical space, with changes made to the layout of the appliances, the removal of the meal counter in favour of a circular kitchen table, and, most recently, the addition of laundry facilities. The relocation of the laundry from the basement to the main floor was the key age-friendly renovation that recently impacted Elaine and Gerry. Gerry is a skilled do-it-yourself individual with numerous construction skills. What's more, he has shared his talents with many in the community.

As a result, the couple are, in turn, the recipients of gratis skilled assistance when necessary. The vast majority of Elaine and Gerry's age-friendly projects they have completed themselves or with the aid of other family members, such as their son-in-law, and friends. The home's floor plan lays out the main floor, including the sunroom addition and basement, as shown in Figure 3-7.

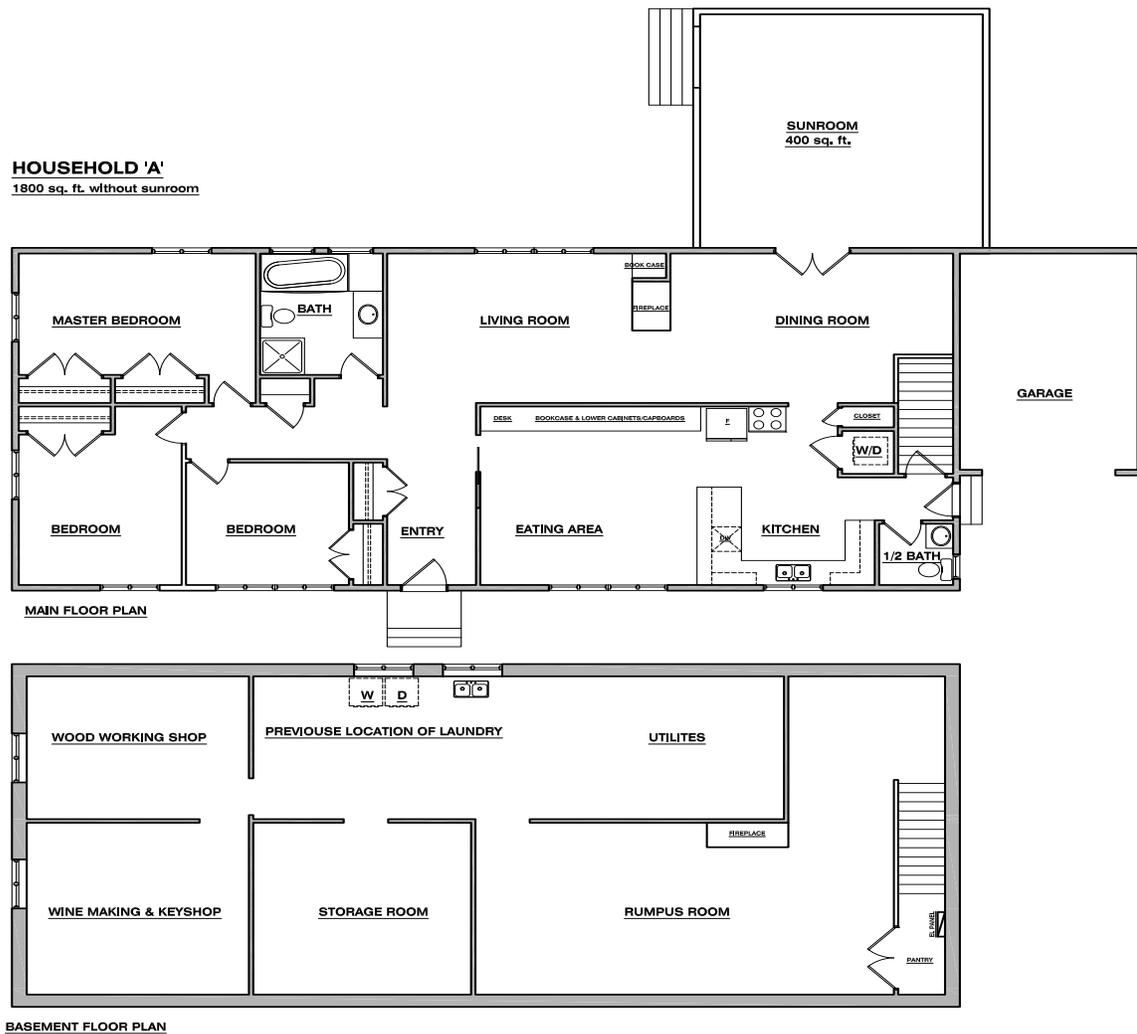


Figure 3-7. Elaine and Gerry's home's floor plan.

The yard, a living space equally important to that of the home's interior, has an expansive front lawn and an extremely large backyard with multiple trees, flower gardens, vegetable garden, BBQ patio area, and pool. In addition to the natural rooms within the yard that welcome fun fulfilled activities with family and friends, there are other quiet reflective areas created within the

space through the placement of meaning-filled mementos and plants. Elaine and Gerry gain assistance from their grandsons with the pool's opening and closing, as well as some yard work.

For every aspect of the home's features and furnishings that have seen change over its existence, the spaces and objects within have remained equally harmonious to the home's original integrity. This home, intrinsically, is the same home as the one in which Elaine and Gerry, with pride, raised their family.

At home in Edmonton: Ann's home - Case study 2. When Ann and Alvin purchased their home some 40 plus years ago, it was already located in a well-established neighbourhood a few miles from Edmonton's city centre. At the time, Edmonton was a rapidly developing community, attracting a wealth of young talent. Recently discovered significant oil reserves were bringing a tangible and intangible sense of prosperity to the community. While both of Ann's sons continue to live in Edmonton, no one, other than Alvin's mother, left England to join them. This meant that the young couple was not compelled to live in any particular area of their new city. Instead, they were free to fall in love with the well-kept homes and mature landscapes they enjoyed in their daily strolls.

Ann's postwar 1950s raised bungalow, at just under 900 square feet on one level, was originally comprised of two bedrooms, a full bath, kitchen, and living room on the main floor. A partially finished recreation room and laundry area were located in the basement. Within 5 years of living in the home, Ann and Alvin, adjusting to a growing family, had the basement professionally redone, removing the rec room, thereby making room for three bedrooms and a full ensuite. Today, the laundry room remains unfinished and is located in its original corner. The two main floor bedrooms became a dining room and a den that served primarily as Alvin's studio and office. The home's physical space, while always kept in good repair, remained for the most part unchanged for the next several decades.

Once the boys left home and Alvin had retired, the home began to undergo extensive modernization. The renovations began with updates to the fixtures and décor of the bathrooms, which Alvin undertook himself. Additionally, new high-end German windows were installed. The kitchen saw the most dramatic transformation, as Ann had received an inheritance, allowing it to

be entirely gutted and rebuilt by a local European kitchen designer. Ann was impressed that this designer also imported his very sophisticated and forward-thinking cabinets directly from Germany. After Alvin's passing, the home underwent what Ann calls "the big renovation"; once again the basement was torn back to the studs so the mechanical aspects of the home could be modernized and the décor updated, the exception being the ensuite that Alvin had recently renovated. Upstairs, a floor to ceiling wall unit was added to the new kitchen to complete it. New exterior doors were installed along with a monitored security system. The front entrance was redesigned to include innovative built-ins. Modern flooring and painting completed the work. Ann selected the kitchen's major age-friendly renovation to discuss in the home renovation interview.

Now that the interior of the home has been completed, Ann has turned her attention to the large yard that surrounds the home. The garage is located in the backyard, off the back alley. The remainder of the yard is comprised of a patio area, next to the house, and several large flower gardens. With the recent focus on the home's interior spaces, as well as Alvin's illness before he passed, the gardens have not received the attention they once did. While the entire family has always enjoyed the pleasure provided by the yard, Alvin was the gardener. Today, Ann has begun working with a landscape architect to bring the outside areas of the home up to the same standard as the interior spaces.

While Ann has been fortunate to be able to rely on professionals for a great deal of the renovation work, the efforts of her sons cannot be overlooked. They have been there in the planning, selection, accommodation of living arrangements through the construction process, and all the other homeowner responsibilities that go along with caring for a home. This extensive transformation of the family home has been the focus of countless hours and energy by every member of the small family. To Ann, the home is still very much their home as much as it is hers. Ann receives help in maintaining smaller elements within the home, snow shovelling, and gardening from her sons or paid professionals.

Ann still strolls the neighbourhood almost daily. Situated within a community with many amenities, much of what Ann needs to accomplish on a weekly basis remains within walking distance. Additionally, although Ann still drives, the area's proximity just off a main thoroughfare

into the downtown core, means that public transit options are extensive. The building of a light rail subway only blocks from her home is already under discussion. The home's floor plan lays out the main floor and basement, as shown in Figure 3-8.

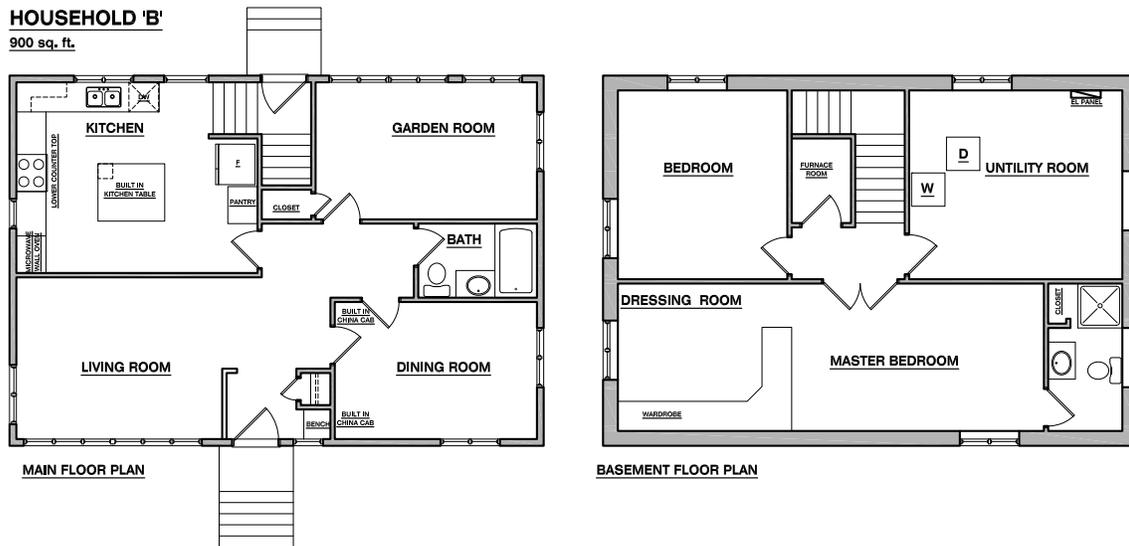


Figure 3-8. Ann's home's floor plan.

Archival Artifacts: The Unassuming Data Source

It was conceivable that I alone would not be able to identify all the things the households consciously, as well as unconsciously, acknowledged as having played a notable role in their age-friendly renovation experience. As a result, *Cultivating Home* provided the households the opportunity to share any additional materials they felt should be included in the research data. These materials make up the third data source, archival artifacts and documents. A few possible sources of potential archival data are identified; see Figure 3-9.



Figure 3-9. *Cultivating Home*: Archival artifacts and documents.

In the end, each household shared old photos. Elaine's photos of her childhood home showcased the front of the house before and after it underwent extensive renovations while she was still living there; see Figure 3-10. She also selected several photos of her yard and of family and friends using the pool.



Figure 3-10. Elaine's childhood home before and after renovation.

Ann's photos included her aunt, from whom she received her inheritance, and summer photos of her yard, taken while Alvin was still alive. A particularly interesting artifact was the project management binder that Alvin had created at the start of the renovation process; see Figure 3-11.



Figure 3-11. Ann's project management binder.

This binder held a wealth of product information sheets and invoices for the goods and services purchased. It served as a valuable tool for her recalling the timeline of the renovation process. What was most poignant was Ann, without being prompted, also mapped-out the outside yard of her childhood home.

These items further informed and strengthened the researcher's understanding of what prompted these households' age-friendly renovation decision, and their perceptions of the events that transpired from it.

Data Collection: Methods and Techniques

In *Cultivating Home*, seven methods, involving a range of techniques, were used to collect the data. A technique, in the words of Sandelowski (2010), "connotes ways to operationalize method" (p. 79), whereas a method is derived from and entails "some understanding of the world and how to know it" (p. 79). Methods are directly influenced by the methodological viewpoint of the researcher at a certain point in time. *Cultivating Home* involves the use of exploratory, ethnographically-orientated, case study methods. Conversely, techniques are tools, such as an artifact analysis or interview, used to implement a method. They are developed out of a particular methodology's intention, and are typically operated in conjunction with the methodological lens it is traditionally associated with and being utilized by the researcher at a given moment. However, with *Cultivating Home*'s blended methodological approach, some overlap exists between the methods and techniques. The data collection method's various techniques, and the order in which they were undertaken, are indicated below:

1. Researcher's journaling.
2. Home Artifact Analysis: The researcher's solo examination of each home.
3. Homeowner Guided Tour: A homeowner guided examination of each home.
4. Life History Interview – Schedule C: Completed by Elaine (Case study 1) and Ann (Case study 2).
5. Home Renovation Interview – Schedule D: Completed by Elaine and Gerry together (Case study 1) and Ann, a widow (Case study 2).
6. Analysis of archival artifacts and documents.

7. Participants' journaling: Completed by Elaine (Case study 1) and Ann (Case study 2).

How a researcher selects the methods and techniques chosen to implement is determined by several factors including the researcher's interests, training, the research questions, and access to the phenomenon. As a mature adult interacting daily with older parents, I am increasingly fascinated by the lives of older individuals and their ability to cope with the changes associated with aging. As a material culture student, I have been taught to seek out solutions to everyday challenges, such as those associated with aging. By asking the question, "what can we learn from older individuals that have successfully faced these challenges?" my aim is to find solutions that will assist other older individuals facing similar concerns as they age. Fortunate to have the opportunity to work with two experienced, perceptive, descriptive, and reflective households who have undertaken an age-friendly renovation, it makes sense to make use of methods and techniques that facilitate a holistic, in-depth approach that provides rich data in many different forms.

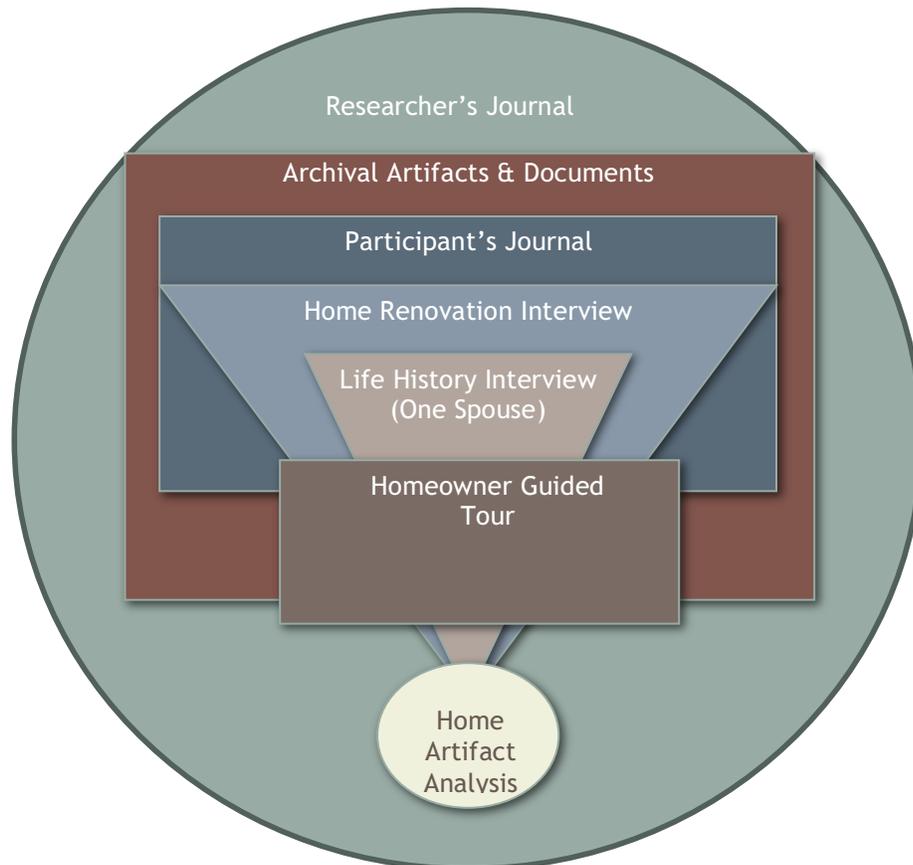


Figure 3-12. *Cultivating Home*: Data collection methods.

The data collection process is reflected in Figure 3-12. The different shapes indicate who led each stage of the data collection process: ovals represent those lead by the researcher, squares were participant led, and triangles mark collaboration between the parties. The layered design indicates the inductive nature of the data collection process and whether or not previous data collected influenced subsequent data collection. Where no contact or overlap exists between the coloured shapes, no prior influence between the data collection methods is assumed. For example, the researcher has not reintroduced ideas revealed in data collected from the home artifact analysis into any data collection stages other than the life history interview, home renovation interview, and the researcher's journal. Conversely, all data collected in the earlier stages has influenced all subsequent data collected. The researcher's journal maintains an overall presence throughout the data collection process.

Data collection involved visiting each home on three occasions. In each case, home artifact analysis and the homeowner guided tour occurred on the first visit, while the life history interview and home renovation interview occurred on the following two visits. With Elaine and Gerry, the visits were conducted three days in a row; with Ann the three visits were individually spaced approximately a week apart. Member-checking occurred after the data had been transcribed, which served as authorization to enter the data into the data set.

Researcher's Journal

This journal served as a log of the research process and was used continuously throughout the study. It included simple items such as "to do" lists, linkages to reference material, and notes of contacts made with community members. More importantly, it was used to record the researcher's reflections and reactions to key moments during the research process. It also served as a record and reminder of previous observations and justifications for previous decisions made, while also informing later decisions.

Home Artifact Analysis: Appendix 1

Central to material culture is the data that may be gleaned from an artifact; home artifact analysis provided the opportunity to explore the homes freely. This first visit began by reviewing

the purpose and design of *Cultivating Home*, outlining the required commitment of participants, discussing anonymity, and obtaining informed written consent. The silent home artifact analysis walkthrough permitted me to independently form my impression of the role the space plays in the owner's ability to age-in-place. This audio recorded walkthrough was self-guided, grounded in my sensorial feel for the overall space via close inspection, allowing speculation on the household's current perspective and use of the area. Photographs of the home's features, as well as drawings of the home's layout were also completed. A breakdown of the home artifact analysis techniques and examples of questions to be answered are laid out in Home Artifact Analysis: Appendix 1. When considering the home's space, additional age-friendly modifications that could further facilitate the participant's aging needs were looked for. These suggestions were shared with the participants, after debriefing, as an expression of thanks.

Homeowner Guided Tour: Appendix 2

As the research examines the homeowner-home relationship, the homeowner guided tour allowed for observation and recording of what the homeowners deemed as instrumental in their transitional experience, permitting them to physically point out the home's features and demonstrate the impact it had. During the second exercise, Elaine and Gerry (Case study 1) and Ann (Case study 2) led a tour of their home. Data was gathered on their perceptions of how their home's physical form does or does not support their desire to age-in-place. Their verbal description of the space's use was audio recorded and thumbnail sketches were made highlighting noteworthy features. At all times, while the homeowners were encouraged to elaborate on their thoughts and experiences, they remained in control of the tour. Homeowner Guided Tour: Appendix 2 provides examples of prompts used to stimulate conversation when necessary.

Life History Interview: Schedule C

People's attachment to their childhood home may have a major bearing on the home they establish as adults. People draw on their childhood experiences, not only of the physical house where they grew up, but also their experience with others in that home during this impressionable period of their life. This interview examined Elaine's (Case study 1) and Ann's (Case study 2) relationship with their childhood home, investigating their perceptions today of how they reflect

upon any prior exposure they had to family members who have aged-in-place and if they would consider their childhood home as age-friendly. This inquiry also explored whether any past experiences they had with their own physical challenges, or with exposure to disability in others, influenced their transitional expectations and experiences today. While primarily composed of semi-structured questions, a few structured questions were included to provide context. The interview was audio recorded to ensure that the details of the conversation were captured accurately, including the tone of the discussion and the wording used by the homeowners. In addition to the discussion, observations were noted such as the participant's appearance, body language, and the time and location of the interview.

Home Renovation Interview: Schedule D

Concentrating on only one particular portion of the age-friendly renovation allowed the opportunity to capture the homeowners' experiences in depth, revealing rich descriptive details of the process. This interview explored each participant's motivation, goals, decision processes, practices, and experiences directly related to the renovation processes that took place in their homes. Topics investigated included: who initiated the process; what challenged them the most and why; and how they overcame these challenges. The individuals were also asked about their experience living in the age-friendly space. In the case of the Elaine and Gerry, answers were sought on each spouse's individual experience, as well as their joint experiences. Specific questions were directed towards the second spouse after the first one had answered. By doing so, the transitional experience of the couple, not just the one individual, were unpacked. As each spouse possesses a distinctly different personality, at times significantly different dynamics in their age-friendly renovation experience were revealed. Data collected in the previous meeting that was considered particularly pertinent was reintroduced, facilitating a more in-depth consideration of the topic.

Analysis of Archival Artifacts and Documents

When people engage in a process extending over decades, such as the creation of their meaning of home, the past becomes highly poignant. Archival documents retain the unique ability to shed light on these past experiences. Material culture analysis of any documents or additional

objects identified by, and deemed significant to, the participants during the study was carried out. In the case of old photographs that were shared by Elaine and Ann, the images were rephotographed by myself. During the course of Ann's life history interview, she identified the garden of her childhood home as an instrumental memory and voluntarily proceeded to map out the home's yard. The drawing that Ann made during this discussion was collected as an archival artifact. Ann also kept and shared a binder containing resources associated with her renovation's details of which photographs were taken.

Participant's Journal

By extending an invitation to the participants to consider the phenomenon through detailed usage patterns, different dynamics such as sensory notions of how they comprehend the experience may be garnered. Participants were given a journal in which, over a period of 24 hours, they individually wrote or sketched their interaction with, within, and around their home's features (spaces, doors, stairs, etc.) and objects (appliances, cupboards, etc.). Elaine, at Gerry's request, completed the task for both of them. Both Elaine and Ann were encouraged to practice beforehand, also recording those entries in their journal if they wished. A short introduction to the exercise, along with a list of possible prompts, was written in the journals to make them more comfortable with the exercise; see Participants' Journal Introduction: Appendix 3. They were encouraged to call if they had any questions while engaging in their journaling, although neither did so. Being their last undertaking in the study, any additional reflections they had on *Cultivating Home*, including the data collected to date, was welcome in the journal.

Data Analysis: Discovery of Understanding

The analysis process involves unpacking the age-friendly space, interpreting the homeowner-home relationship, and reading archival documents and artifacts to elucidate the couple's perceptions on renovations undertaken to create homes that are well suited for aging-in-place. Prown (1982) stated "mundane, utilitarian objects such as domestic buildings" (p. 4) or a person's home are often such unassuming spaces that they ironically end up being a forthright representation of "cultural expressions" (p. 4). The couples may hold personal aging-in-place convictions so embedded in their cultural beliefs and practices that they may not even be

conscious of their deep relationship with their home. Because of this, as Hodder (2003) pointed out, exploring and analyzing daily lifestyle practices can be notoriously difficult for the participant and researcher to interpret in an eloquent, meaning-filled fashion (p. 162). An approach to reading the data that allowed me to deconstruct it, while also facilitating the reconstruction and interpretation of themes it held, had to be devised to reveal the understanding necessary to provide insight into the participants' perspective of the meaning their experience of renovating to age-in-place held.

Gray (2014) defines a theme as capturing "something important about the data in relation to the research question, and represents a level or *patterned* response or meaning within the data" (p. 609), making an inductive thematic analysis an appropriate basis to work from. Even though my data collection was generated as audio recordings, my analysis did not begin with the transcription of the home artifact analysis, homeowner guided tour, life history interview, and home renovation interview material. Instead, following my initial in-home meeting with the homeowners, a short summary of the session was written, and I began a rudimentary identification of the themes that might more formally develop later. This inductive approach created the opportunity to explore those that did emerge in greater depth later. The audio recordings of the participants were transcribed verbatim by a professional transcription service and entered into the homeowner's electronic data files. The transcripts were checked for accuracy by simultaneously reading them while listening to the audio, correcting less audible portions of the conversations. The journals of Elaine and Ann (Gerry having chosen to be included in Elaine's) were also re-typed and added to their electronic files. These files were saved on a desktop and an external hard drive. Table 3-2 provides a record of the data collected.

Table 3-2

Cultivating Home: Record of Research Data Collected

Data type	Quantity	
	Case Study 1: Elaine & Gerry	Case Study 2: Ann
Audio recordings (minutes)	404	433
Transcripts (pages)		
Home artifact analysis	15	14
Homeowner guided tour	44	79
Life history interview	51	66
Home renovation interview	67	81
Participant journal (pages)	3	21
Photographs	380	239
Interview field notes (pages)	47	34
Original archival documents	14	2*
Researcher journal	2 coil scribblers	

Note. *Includes one original document Ann drew during the life history interview that mapped her childhood homes yard.

Being that the analysis was inductive, referred to by Gray (2014) as “data driven” (p. 609), the themes transpired from multiple readings of the data. The second reading commenced the deconstruction of the data, which involved “identifying interesting features of the data systematically” (Gray, 2014, p. 609) and labeling them with a descriptive relevant term, or code (p. 609). This included those often illuminated in what Sullivan (2012) calls a “sound bite” (p. 74). These are personal expressions or means of communication that are unusual, often bringing a concept into sharp focus in an interesting way (Sullivan, 2012, p. 18). These snippets of conversations were cut and pasted under a code linked to a material culture theme repeatedly appearing in the data, both in terms of frequency and the number of different data collection sets it appeared in. At this point, the themes anticipated in the literature review began to emerge, including: attachment, identity, memory, and affordance. Other themes were also present, such as public versus private and gender differences, but these were not as prevalent.

Still, given that *Cultivating Home*'s methodology is an ethnographically orientated case study, at times it became difficult to work with only these snippets. They did not provide enough context to allow, with certainty, the development of well-defined, vivid themes. This was problematic, as context is central when working with in-depth, rich, descriptive data. With these rather simple codes in mind, all the data was re-read a third time, expanding some of the codes

into short summations of an idea. For example, in one situation, the notion of the timing of the change became the ‘willingness to modify their home as their health changed’. The point in time as coded here pertained specifically to the context of change brought about via a shift in their personal health. At this time, Elaine and Gerry’s data was reread in its entirety, without looking at Ann’s data – taking what Yin (2014) calls a replication approach where “each case’s conclusions are then considered to be the information needing replication by other individual cases” (p. 59). I studied my first case in-depth and then use my second case to determine if the patterns found matched those found in the previous case.

As I read Elaine and Gerry’s material this time, these short summations were noted as discovered. Data fitting a particular summation was recorded thereunder. This process was repeated for each data set, building on the number of summations identified, as well as gathering details specific to each summation; descriptive details used at the end of the analysis process to uniquely define each summation. I then re-read Ann’s data in its entirety, noting references from her data sets that matched the short summations garnered from Elaine and Gerry’s data. Figure 3-13 shows the short summation process used. The blue pen under a short summation heading represents Elaine and Gerry’s data, while the green pen represents Ann’s data. Lastly, when it was apparent that a new idea was emerging from Ann’s data that had not revealed itself in Elaine and Gerry’s data, a short summation of that idea was created with references to note where it had occurred in the data. In the end, the original short summations from Ann’s data were compared once again to Elaine and Gerry’s material to see if this idea was present and had been over looked.

Next, these short summations were “clustered,” involving “a process of inductively forming categories and the iterative sorting of things” (Miles, Huberman, & Saldaña, 2014, p. 280), necessitating me to reconstruct relevant themes that had transpired directly from the data. This process created what might be labelled as “thematic maps” (Gray, 2014, p. 610). From here, each cluster was assigned a theme, defined in my own words. The first stage of this clustering process is shown in Figure 3-14. This was followed by a more refined clustering process that more fully highlighted each of the ideas that went into the development of the central themes definition. Figure 3-15 displays the mapping of the identity trait that became defined as the theme of mindful.

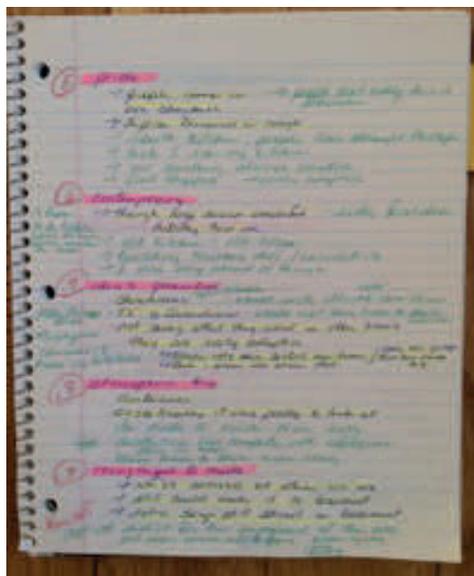


Figure 3-13. The short summation process.

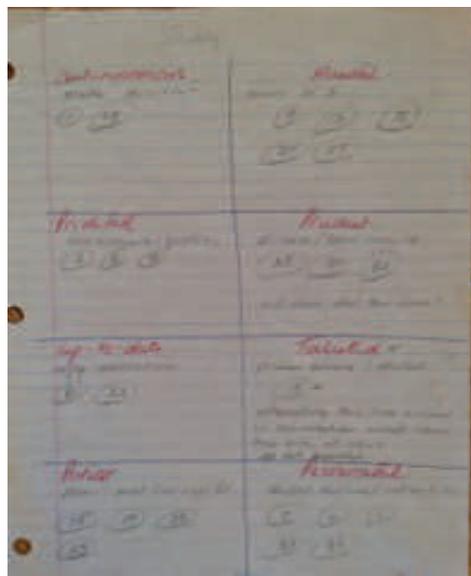


Figure 3-14. The first stage of clustering.



Figure 3-15. Mapping and defining of the theme of mindful, one of eight identity traits.

In some cases, upon reviewing these themes I recognized that a particular idea might have turned out to be minor and not well supported in the data – the best example being the minor role security played in influencing these couple’s experiences and decision-making process. In other cases, even before clustering the short summations began, linkages became apparent that collapsed multiple summations into one. For instance, initially, references to the timeline of the changes made to the home were separated from how the design of the modification worked because the make-up of the household had evolved. In reality, the change in the nature of the household typically determined the timeline of the renovations. Finally, these clusters or themes were associated with the household’s approach to aging-in-place and age-friendly renovation experiences, as well as traditional material culture themes.

After the themes (attachment to possessions and place; identity broken down into eight separate traits; memory; and affordance) had been clearly identified and defined, the data was reviewed a fourth time, and a complete hard copy was printed. The data was then hand coded one last time using these well-developed themes, this time actually cutting the transcripts “into individual chunks” (Patton, 2015, p. 530) of supporting text. Doing so allowed the physical grouping together of a single households evidence of a theme across all of their data sets, including: the researcher’s journal, home artifact analysis, homeowner guided tour, life history interview, home renovation interview, the participant’s journaling, and archival artifacts and documents. The cuttings along with the relevant photos were placed in an envelope labeled with the theme. Two envelopes were created for each theme, one for Elaine and Gerry and the other for Ann; see Figures 3-16.

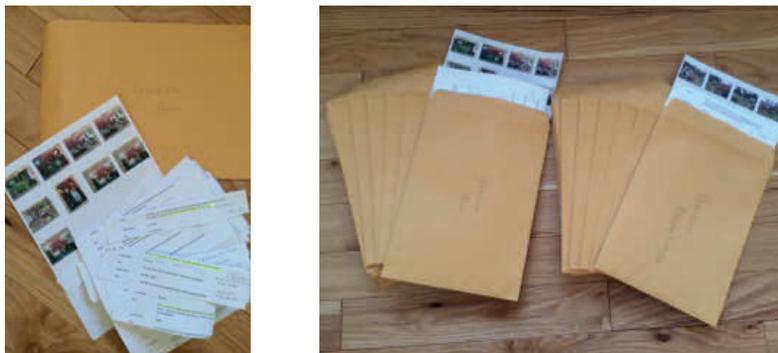


Figure 3-16. A theme envelope for one case and a full set of theme envelopes for each case.

When it came time to report my findings, I not only had my sound bites sorted according to themes that encompassed the environment in which they occurred, but I also had the original text of the context within which the theme was discovered. The photographic evidence was cut and sorted in the same way. By keeping separate the two case studies data sets, each case could first be independently dealt with and then cross-referenced for similarities and differences.

In the end, the data had been read in-depth no less than four times, following what Patton (2015) calls the best piece of advice regarding coding and analysing data; that is, “to read the data collected over and over and over” (p. 530). By doing this I had enabled the patterns and themes to “jump out at me” (Patton, 2015, p. 530). Ultimately, this inductive thematic approach had systematically empowered me to execute “the real analytical work” (Patton, 2015, p. 531) which Patton professes “takes place in your head” (p. 531).

Credibility of Research

According to Sayer (2000), “meaning has to be understood, it cannot be measured or counted” (p. 17). Further, Sayer questions how can excellence in qualitative studies be measured to be both answerable to the scientific community and responsible to the community studied (Sayer, 2000, p. 1). This is the quest of the researcher.

Terms such as “rigour” and “trustworthiness” emphasize both the research process and the study’s outcome. Essential to credibility is that the researcher remains attentive to the data, constantly reassessing and reflecting on their decisions and actions. Qualitative research is iterative, demanding the researcher continually move “back and forth between design and implementation” (Morse, Barrett, Mayan, Olson, & Spiers, 2002, p. 10). Creswell (2013) argues that it is critical that the concepts associated with credibility are “translated into practice” (p. 250).

The choices I made reflect my “creativity, experience, knowledge, talents, support, and sensitivity [as] the researcher” (Boeije, 2002, p. 409). To ensure credibility in my work, I continually explored the values behind my thoughts and actions. By engaging in reflection throughout the entire research process, I acknowledged that research findings are “only as good as the researcher” (Morse et al., 2002, p. 10). Table 3-3 lists *Cultivating Home*’s validation strategies and method of implementation.

Table 3-3

Cultivating Home: Approach to Validation

Examination of <i>Cultivating Home</i> 's validation strategies	
Reflexivity	It is the job of the researcher to track the study's process including pausing at moments from the beginning of the research until completion to reflect not only on the decisions made but also what may be influencing those decisions. Reflexivity is critical to the integrity of the study for it is through this process that the researcher recognizes their potential for bias and how their life experiences are informing the research.
Triangulation	Three sources of data, seven methods of data collection, and three methodologies made up the research design, achieving multiple triangulations.
Peer review & debriefing	The study took place under the supervision of Dr. Megan Strickfaden with the assistance of Dr. Arlene Oak, professors of Material Culture at the University of Alberta. The study's findings have been shared through public presentation. Publication may occur in a peer-reviewed publication at a future date. Debriefing of the participants occurred at the end of the research process and included the presentation of a copy of the thesis.
Member checking	All research was conducted with the written consent of the participants. Transcripts were transcribed and shared with the participants to confirm accuracy and clarity, before entering into the data set for analysis. No participants withdrew from the research.
Rich thick description	Emphasis was placed on collecting detailed descriptive data. Participants were selected based on their willingness to provide open access to their home and share their personal reflections.
External audits	My researcher's journal served as the primary record of the progress and direction the study. Included in this thesis is a final summation of the time and resources utilized in the research. Transparency of the research design, decisions made, and actions taken were strictly adhered to.

Summary

Cultivating Home's research design combined traditional identification and progression of the research stages to facilitate early isolation of material culture themes that were continually built on throughout the research process. The interdisciplinary approach of this material culture study took an innovative exploratory, ethnographically orientated case study approach to investigating two older homeowner-home relationships as it related to their age-friendly renovation experience. The three supporting pillars of this research involved the researcher, the home, and the homeowners. The researcher began by exploring what they brought to this research and their

meaning of home. In consideration of the home, the researcher remained respectful of the privacy of its residents, and obtained permission to handle any features or possessions of interest. It was the responsibility of the researcher, working with the homeowners, to establish informed consent, ensure confidentiality and anonymity, as well as demonstrate care and compassion for their well-being. The home, homeowners, and any archival artifacts and documents they chose to share made up the data sources. The homes and the homeowners were selected based on an eligibility criteria predetermined by the researcher. A variety of techniques and seven methods of data collection were used to gather the data, including: the researcher's journal, home artifact analysis, homeowner guided tour, life history interview, home renovation interview, analysis of archival artifacts and documents, and a participant journal. Inductive thematic analysis was employed to identify patterns and themes in the data. Credibility of the research involved the strategies of reflexivity, triangulation, peer review and debriefing, member-checking, rich thick description, and external audits.

CHAPTER 4: FINDINGS

Themes of affordance, identity, memory, and attachment were discovered in the seven data types through predominantly inductive data analysis. Serendipity was responsible for another noteworthy finding: how the relationship the homeowners shared with their home's exterior space penetrated the home's interior space. While this finding may be linked to an individual's attachment to place, the degree to which the entire age-friendly renovation's transformational process and experience was impacted was surprising. Equally revealing was the contrasting approaches taken to aging-in-place and age-friendly renovations. After providing context of the households varying approaches to aging-in-place and age-friendly renovations, this chapter examines the four themes of affordance, identity, memory, and attachment. Each area of the home is examined, revealing the affordances present. Further, affordances that the researcher would have anticipated could be beneficial but appeared absent were noted. The section on identity examines eight personality traits the homeowners possessed facilitating the age-friendly renovation process. Along with identity, memories strengthen the homeowner-home relationship attachment bond. The section on memory recounts three stories per homeowner of how memory enriches this attachment bond through illustrating the past, invoking involuntary recall, as well as serving as a historical record. The following section, attachment, is considered within the three human contexts of historical, functional, and intentionality. It is made evident how these contexts generate attachment, ultimately driving the desire to seek out affordances. The last section considers the role of the home's yard and how it strengthens the attachment bond.

Providing Context

Since *Cultivating Home* aims to understand the perspectives of these homeowners' transitional renovation experiences, it is important that these findings are discussed within the context each household took towards aging-in-place and age-friendly home design. It was interesting how different the two households approaches were in how they came to age-in-place and the manner in which they engaged in the age-friendly renovation process.

Approach to Aging-in-Place and Age-Friendly Renovation: Elaine and Gerry (Case study 1)

Elaine was well prepared to recognize the couple's advancing age through her career as a nurse and her mobility challenges that began when she was just 20 years old. She has had four major knee surgeries, the most recent in 2015. Furthermore, she briefly cared for her dying father in her home and witnessed the hardship her elderly parents encountered having moved into a bi-level when they were in their 50s. With this experience, she has great respect for Gerry's insistence their own home be a bungalow; "it worked, because he said, I'm not climbing stairs. My mother and father built the house, she had a stroke ... she was in terrible straits." This insistence of Gerry to avoid stairs in the home has allowed them to take a pragmatic approach to aging-in-place.

Even though their home has minimal stairs, Elaine's foresight after the children left prompted the decision to assess whether they could continue to stay. Therefore, "several times" she asked whether they should consider moving. Equally cautious, and after exploring alternative options, Gerry concluded, "I went and looked at what's available and it didn't compare with what we have over here. I said, 'It's not feasible for me to move.'" He justified this stance stating, "I was comparing all the room we had. The comfort of this home and the quality, I didn't find it out there." They decided to stay for the time being. The conversation then shifted to how they could modify their home to meet their anticipated aging needs: "eventually it seems to work out that in five years we have to rethink how we're living or where we're living." The couple inadvertently created a review cycle where every five years they assessed their changing needs and the accommodations required to meet them. This reassessment process has been repeated multiple times.

Fortunate to possess skills to envision their wants and devise solutions, they began introducing modifications to their home 25-30 years ago. Occasionally, with assistance from family and friends, Gerry, adept with his hands, accomplished most of the modifications himself. Today, under his supervision, Gerry's "adopted sons" – younger men that he hired and trained while working – willingly take on these projects. The networking that allowed the couple to originally build their house at a minimal cost has allowed them to renovate it at modest expense.

Elaine and Gerry began modifications with the addition of a sunroom, using Elaine's inheritance. The latest renovation moved the laundry facilities from the basement into the kitchen. Now in their 80s, the couple doesn't anticipate further age-friendly renovations. They are confident the home is well prepared to accommodate their desire to stay as long as health allows.

Approach to Aging-in-Place and Age-Friendly Renovation: Ann (Case study 2)

Ann's approach to aging-in-place was in stark contrast to Elaine and Gerry. In her words, "I just presumed I'll stay here until I can no longer, literally no longer be able to stay." For Ann this seems inherent, having only lived in two homes, except for a few short-term residences the couple occupied between arriving in Canada and deciding to stay. The concept of moving later in life was never discussed, even while Alvin was alive, as "any move would have been back to England." Ann associates her move to Canada as a disruptive and traumatic event: "I cried on the plane all the way here." Ann believes only two events may challenge her ability to age-in-place: her health turning or her boys leaving Edmonton. Otherwise, she will do what she can to stay, even if this requires bringing in assistance or further modifications to her home: "as long as I'm healthy and well, I'd like to stay as long as I can." While Ann's decision to stay may initially be viewed as casual or unconscious, her commitment to do so has been a firm conscious one.

As teachers, the couple had minimal exposure to disability. While both had lived in multigenerational households, older family members remained healthy for as long as Ann and Alvin lived with them. Nonetheless, even with their families in England, they remained involved in decisions regarding the care of their aging parents. In Ann's case, her parents, living alone in the extremely large family home, eventually found it too difficult to manage and moved into a condo. Living alone in the condo worked until into their 80s, at which point they required more support than the family could provide. It became necessary to move them into a long-term care facility, an experience Ann found painful: "I don't know about long-term care centres here, but sometimes they look all very grand at the entrance, but they're not so grand." She was particularly upset when her father, sharing a room with her mother but sleeping in single beds, died. The home "got another lady to take [the bed] where my father had slept."

Ann and Alvin also had the unusual experience of moving Alvin's mother, at age 91, from England to Edmonton: "we have to have her here because we couldn't go there." Initially, they moved her into a new assisted living facility. Later, "when she was no longer able to live there," she was moved into long-term care. These memories are tough for Ann. She vividly remembers what it was like for her mother-in-law dealing with the delayed arrival of, and damage to, some of her belongings: "she was beside herself. She never got over it. She just didn't." The time she spent in care was equally distressing. As soon as I arrived "you would hear her going, 'I want to go home.' I could hear the shouting. Of course, home was London." Ann has also been perceptive in observing how other family and friends have struggled with the needs of aging parents, some moving in with their parents, others moving them closer. One friend built a garden suite for their parents; "they came, but they were incredibly lonely." As Ann witnessed:

You're doing the best you can for them, but when they actually go to live there — it was one of the worst things they could have done. They'd of been better staying in their neighbourhood and perhaps move into a facility there, they would know the neighbourhood and the people. ... So I think that's the mistake sometimes people make with the best of intentions. We're not thinking of it from the parents' point of view. We're not seeing it from their point of view.

Ann is sensitive that there is rarely an easy answer to addressing the housing needs of older individuals.

The means undertaken with Ann's age-friendly renovations, for the most part, are unlike Elaine and Gerry's do-it-yourself, gradual, pragmatic approach. While Alvin had tackled the bathroom updates as do-it-yourself projects shortly before his death, knowledge of age-friendly design is not evident. A large deep tub was installed in the main floor leaving the only shower in the basement ensuite, problematic if Ann has to eventually move upstairs.

Hired professionals, familiar with age-friendly design, have undertaken subsequent renovations. Aside from the installation of new windows, two other extensive renovations have been completed in just five years. The first, "a whole renewal — a rebirth of the kitchen"; the second, what Ann calls the "big renovation," required her to move out for six months. For this project, other than the bathrooms and kitchen, "the house was gutted and downstairs they went

right back to the studs.” Ann is now working with professionals to refurbish the home’s exterior and gardens.

In discussing the material culture themes, I begin by identifying the perceived affordances that were realized as a result of the renovations, what was learnt about the homeowners’ identities that facilitated their decision-making, the role memory played in these consequential decisions, and how attachment to the home’s inside and outside spaces, factored into this transformative process.

Affordance

Renovations in both homes have resulted in attention being paid to the practicality of the spatial environments, which may be defined as attention to affordance in design. Affordance in *Cultivating Home* was defined as any feature in the home, original or new, that made the homeowners’ day-to-day tasks easier, more enjoyable, and perceivable by either the “emic” homeowner and/or the “etic” researcher. While the vast array of affordances identified were interesting, the comparison of the similarities and differences in affordances between the homes was telling. This is particularly intriguing given that Elaine and Gerry’s age-friendly solution relied, for the most part, on their lay knowledge of what would work best for them, while Ann had the opportunity for her ideas to be vetted by professional renovators familiar with age-friendly designs.

The photos and tables discussed in this chapter indicate the presence or absence of age-friendly design features in the home’s different areas. The quotes represent various perspectives of the homeowners regarding the features’ intended and actualized affordances, as well as my own artifact analysis observations. Occasionally noted are situations where an original affordance has been lost or limited to accommodate a new preference. In a few select instances, an age-friendly preferred option is presented to provide context to the existing feature. The catalyst or individual behind the age-friendly design, when apparent, is presented below the quote.

The Kitchen

Elaine’s kitchen embodies self-confidence in her ability to not only provide for herself and Gerry but also to remain stylish and in-touch with contemporary design. Likewise, to Ann, her

kitchen represents a dream come true; it efficiently accommodates her every need, filling her with pure pleasure.

The most comprehensive addition of age-friendly renovations that incorporate affordances in both homes has occurred in the kitchens. Even though Elaine and Gerry's floor plan has remained virtually unchanged, significant changes in the room's features have been introduced – the most pronounced being the relocation of the laundry into the kitchen. Conversely, Ann's layout has been entirely revamped and the cupboards replaced. While the floor space has not increased, one wall was recessed to allow for more storage. In both kitchens, a variety of counter heights exist. Elaine and Gerry's kitchen has always had a built-in wall unit counter and desk, while Ann had some counters customized to her height.

The lower cabinets in each home have been converted to drawers and the corner cabinets contain lazy susans. Ann's cupboards also include an extensive array of innovative storage solutions. The upper cabinets, in both cases, have been outfitted with accessible D handles and include under cabinet lighting. Multiple pot lights have been added to the ceiling of each home, however the placement of them is less than ideal for Ann. She finds the lack of task lighting over the kitchen sink problematic. The windows in both north-facing kitchens are large and free of window coverings, making the kitchens as bright as possible. The floor coverings of each home are composed of different materials; both are upper end, easy to wipe and maintain surfaces. All appliances in the two kitchens have been updated. Elaine has removed the stovetop and wall oven and replaced them with a freestanding stove, converting them from electric to gas. While Ann has also converted to gas, she has done exactly the opposite; in place of her freestanding stove, a custom height side opening wall oven and cooktop, consistent with ideal age-friendly design, was installed. Figures 4-1 through to 4-3 features Elaine and Gerry's kitchen, while Figures 4-4 through to 4-8 highlight Ann's kitchen. Table 4-1 summarizes the two kitchens' affordances.

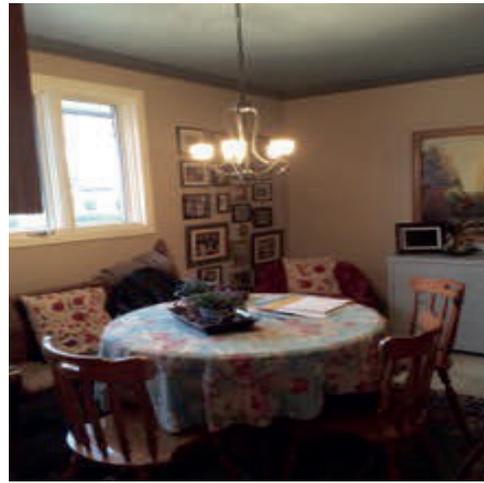


Figure 4-1. Elaine and Gerry's kitchen prep area and dining area.

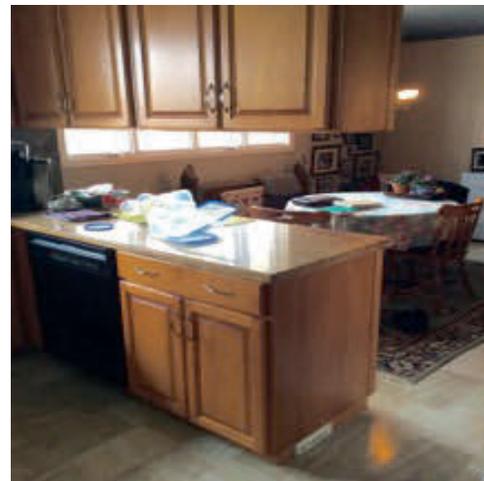


Figure 4-2. Elaine and Gerry's lazy susan and vacuum sweep.

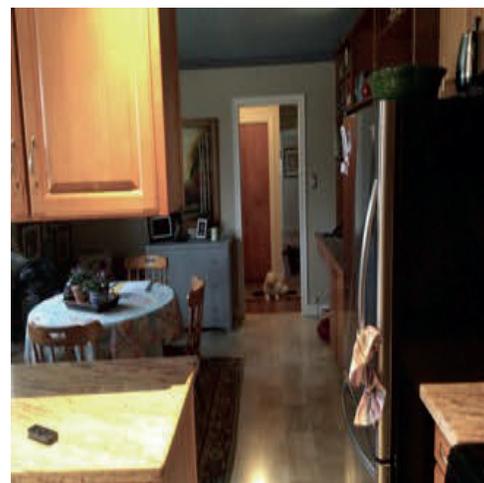
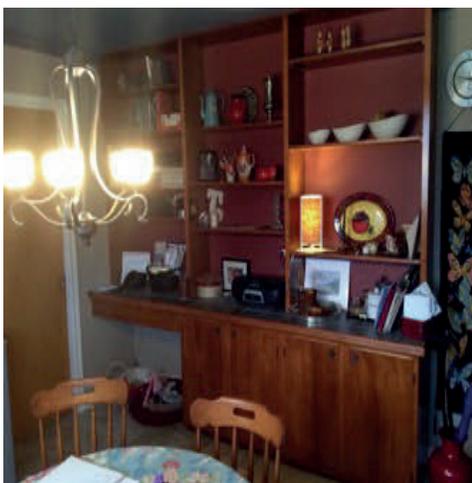


Figure 4-3. Elaine and Gerry's lower counter and desk and pinch point.



Figure 4-4. Ann's wall oven, microwave, as well as garbage, recycle, and compost bins.

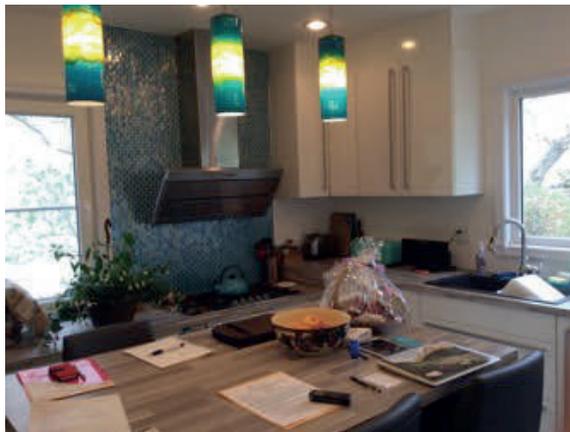


Figure 4-5. Ann's full-length D cupboard and drawer handles.



Figure 4-6. Ann's trolley cart.

Table 4-1

Cultivating Home: Summary and Comparison of Kitchen Affordances

Affordance	Kitchen	
	Elaine & Gerry's home	Ann's home
Layout and size of the work space	Elaine: "I mean look what they've done to kitchens! They've made them humongous and they don't even use them! I said to my son, do you realize where your stove and your sink is? You have to go across the room to your refrigerator and ovens. I would need a skateboard if I had to live here."	Ann: "The triangle though, what did they say? Sink, stove, and fridge. It's good. Yeah, it works. It works very well, yeah."
	Elaine & Gerry	Age-friendly professional kitchen designer
Lower cupboards replaced with drawers	Elaine: "This is the newness that he provided us with, which I didn't have before, the drawers."	Ann: "It works well especially if you're older and you open the cupboard here. It has the pull-out drawers."
	Kitchen craftsman	Age-friendly professional kitchen designer
Dual access to some cupboards	Elaine: "We didn't have anything on this side. He said, 'I can give you that'."	Ann: "it's very easy to slide out. So now I can get it from here or that side."
	Kitchen craftsman	Age-friendly professional kitchen designer
Lazy susan in the corner cupboard	Elaine: "I thought the lazy susan was wonderful when we started, because nobody had one."	Ann: "Then you just keep pulling...that would've been dead space."
	Original to the home	Age-friendly professional kitchen designer
Customized cupboard storage solutions	None	Ann: "I love this one because I have to sort garbage, recycle and in the summertime compost."
		Ann: "You can store little things [like dish washing items] at the back there, so I like that design."
		Ann: "I like this one because you can just pull them [the dish towels] out".
		Age-friendly professional kitchen designer
Cabinet hardware	D style cupboard handles, good for arthritic hands.	D style cupboard handles, good for arthritic hands.
		Ann: "The drawers all move smoothly and they and all the cupboard doors close quietly. They're a self-closing type of idea. So I really appreciate all of that."
		Age-friendly professional kitchen designer
Faucet	Single lever, good for arthritic hands	Single lever, good for arthritic hands
	Elaine: "I went to the new one when we replaced [the original] which was guaranteed for life. I said, 'I don't want that one back again', so we replaced it with this one."	
	Elaine & Gerry	
Multiple levels of countertop	Elaine: Referring to the built in desk, "basically this was...the kids did their homework here".	Ann: "I had to stand up and put my hands out over the, cause there wasn't anything there, about where I would be cooking, baking. And so that is much lower than it would be in many homes".
	Original to the home	Age-friendly professional kitchen designer
Proximity of the kitchen counter to an exterior door	Linda Marie: "The proximity of the exterior door to the kitchen counters would make it very convenient for bringing groceries into the home especially since this door opens adjacent to the front of the garage. It really is a short hop from the car to the fridge".	Ann: "The neat thing is, coming in in the winter-time from the back I put my shopping bags here...so I can put all the dairy stuff in the fridge. All the dry stuff goes here".
	Original to the home	Age-friendly professional kitchen designer

Table 4-1

Cultivating Home: Summary and Comparison of Kitchen Affordances (Cont'd)

Affordance	Elaine & Gerry's home	Ann's home
Small appliance storage	<p>Elaine valued having the small appliances easily and neatly accommodated on the counter.</p> <p><u>Linda Marie</u>: "The small appliances for the most part are neatly stored on the countertops, which minimizes the need to be pulling them out and putting them away."</p>	<p>Ann highly valued small appliance storage from an aesthetic perspective as she preferred them hidden, and is evident from her disappointed that the renovation could not facilitate storing her large mixer out of site.</p> <p><u>Ann</u>: "the mixer on the counter because it's too heavy. I thought there's a thing that you can put your mixer on and then it comes out onto the counter. But for me, I couldn't do that. So that was the only disappointment in a way."</p>
Range	<p>This change was interesting because they went from a pull out cooktop to a conventional freestanding stove that has introduced a slight pinch point in the flow of traffic between the kitchen prep and eating areas. This small reduction in the freedom of movement between the spaces seems to be offset by the ease it provided in switching from electric to gas.</p> <p><u>Elaine</u>: "When we redid the kitchen, we reconfigured this, because the original kitchen had electric appliances. It was an electric home. Here is where I had a stovetop. A Jenn-Air and you pull the drawer out, so it was always enough room to be going back and forth. Then when we redid it, I said, 'I came from gas growing up and wherever we rented we had gas stoves and I'd prefer to cook on gas.' So, we converted. Now, because the appliances started becoming big we had to be very selective. We lost a few inches here."</p>	<p>A cook top at a custom height is significant for Ann as she is small and is continuing to lose height as she ages.</p> <p><u>Ann</u>: "This was made this height for me."</p>
Oven	<p>Elaine's original wall oven has been replaced with a conventional freestanding range, which is now gas instead of electric. Again the agency of the gas oven versus the ability to access a higher oven was seen as more valuable to Elaine.</p> <p><u>Elaine</u>: "The oven was here, high."</p>	<p>Age-friendly professional kitchen designer</p> <p>Custom height, side opening wall oven</p> <p><u>Ann</u>: "I thought no, I'd like a wall oven. And that was the catalyst because I didn't want to be on my hands and knees, a little old lady, eventually, trying to get stuff out of the oven."</p> <p>Ann</p>
Dishwasher	Standard size, front controls	<p>Small capacity, top controls</p> <p><u>Ann</u>: "The best thing in here I think is the dishwasher. It's for at least six place settings, which is what most families have, anyway. So it's really good."</p> <p>Ann</p>
Fridge	Single door, bottom freezer	<p>Split door, bottom freezer</p> <p><u>Ann</u>: "The design of our new fridge was quite different from the old single door one. My husband wished for a split door model he was very happy and pleased with our purchase. Now, I only have to open half a door to get what I need."</p> <p>Alvin</p>
Additional freezer	<p><u>Elaine</u>: referring to chest freezer in the sunroom that came from the basement, "that is the other thing I brought up."</p> <p>Elaine</p>	None

Table 4-1

Cultivating Home: Summary and Comparison of Kitchen Affordances (Cont'd)

Affordance	Elaine & Gerry's home	Ann's home
Lighting - General	<u>Gerry</u> : referring to addition of an extensive number of ceiling lights, including one directly over the sink. He says he "put all of these lights in."	<u>Ann</u> : "I'm not very happy with his work because if you look, some of the light bulbs are different and some of it seems to be a bit off center. There's nothing over my sink. I'm doing dishes here—the light is behind you—which is dreadful. I was angry about that sort of thing."
	Professional electrician - Family	Professional electrician - Hired
Lighting - Under cabinet	<u>Linda Marie</u> : "Stick on battery lights have been added under the upper cabinets."	<u>Ann</u> : "My neat little under the counter lights. Yeah you don't see any wires or anything plugged in. And I really do if I'm here on my own in the early evenings then I always put the kitchen lights on here... you can change it, it can be brighter or dimmer."
		Age-friendly professional kitchen designer
Windows	The windows on the front side of the home, which include the kitchen prep and eating area windows, are large. One is located over the sink and the other right beside the table, but unlike many of the other windows in the home, one cannot see out of it while seated. With the room north facing and darker, both Elaine and Gerry prefer nothing on them. <u>Elaine</u> : "I said, 'I'm not covering up anything.' By 6:00 at night when it is dark we are not here anyway. We are in the backside of the house." <u>Gerry</u> : "No, because the neighbours are too far away. We don't see them."	There are three windows, two of which are the original size, while the one over the sink was enlarged when the kitchen was redone. <u>Ann</u> : "The window was maybe, that wide at the most. It was very, very small. And I can't remember if it was centered over the sink, it might have been."
	Elaine & Gerry	Ann & Alvin
Flooring	Pergo laminate Kitchen & ½ bath <u>Elaine</u> : "when everybody was kind of updating their houses I said, what are we going to do here? [we put in this] Travertine flooring, but it is a synthetic."	Marmoleum Kitchen & kitchen stairs. <u>Ann</u> : "A Dura Luxury floors. These tiles." <u>Ann</u> : "When the boys prepare a meal it's just everywhere so I just wait until the next morning and then sweep the floor."
	Elaine & Gerry	Ann & Alvin
Doors	They originally had two pocket doors that allowed them to completely close off the kitchen and ½ bath from the remainder of the house. They removed the door into the dining room but kept the one that opens into the hall leading to the main bath and bedrooms. <u>Elaine</u> : "We can say, put the dryer on and go to bed and we're far enough away and should I feel there's something in there, like it has buttons or whatnot. I just have to close that sliding door."	<u>Ann</u> : "It's good that we have the door, because occasionally if you burn anything...I close that door so that the cooking smells aren't particularly wafting through."
	Original to the home	Original to the home

The Bathrooms

Both homes' bathrooms could benefit more from age-friendly design features. Elaine and Gerry's home has one and a half baths, with both a tub and shower in the main bath. Ann has two full baths, with a tub in the main floor bathroom and a shower in the basement ensuite.

None of the bathrooms in either home have any grab bars, even though all but the half bath in Elaine and Gerry's home displayed the potential to easily accommodate them around the toilet. Grab bars in the showers are not possible given they are both fibreglass stalls with glass doors. The showers also have a step-in feature and are not curbless. They are also too small to accommodate a seat. Elaine and Gerry did have a hand held showerhead, while Ann had only a fixed head that was placed too high, making it difficult to rinse her hair. A more age-friendly option would be a wet room-styled tiled shower with as low as possible thresholds or curbless entry, a fixed glass divider with an open entrance, the inclusion of a combination fixed and hand held showerhead, and a shower space large enough to accommodate a seat.

Each house also had a deep tub that saw limited to no use. A future age-friendly design suggested renovation for Elaine and Gerry would be replacing the present tub with a low profile one, having an approximately 30 cm wide tiled ledge along one side which can be used to rest on while entering and exiting. Since Ann has no shower upstairs, and it is conceivable that she may eventually have to move upstairs full-time, a recommendation would be to remove the tub and replace it with the age-friendly shower described above. Plywood backed walls in the bathrooms would also facilitate custom-placed grab bars.

Tile flooring in three of the four bathrooms was smooth surfaced and would be slippery when wet. Age-friendly design would be to recommend a more textured surface, and in the basement ensuite, in-floor heating. A loose non-rubber backed bathmat was present outside Ann's shower, posing a significant risk.

Age-friendly findings in both homes included high-rise toilets, as well as ample artificial and natural lighting. Obscured window glass in each bathroom eliminated the need for window coverings, thereby providing extensive sunlight. Figure 4-7 is of Elaine and Gerry's bathroom. Figure 4-8 is Ann's basement ensuite, and Figure 4-19 is her main floor bathroom. Table 4-2 summarizes the two homes' bathrooms' affordances.



Figure 4-7. Elaine and Gerry's bathroom.



Figure 4-8. Ann's ensuite.



Figure 4-9. Ann's main floor bathroom.

Table 4-2

Cultivating Home: Summary and Comparison of Bathroom Affordances

Affordance	Bathrooms	
	Elaine & Gerry's home	Ann's home
Counter	An appropriate height with counter space on both sides.	Standard height, which is higher than ideal for Ann. Limited counter space but drawers conveniently located below. <u>Ann</u> : "I'm used to it now and I really, I only use to come here really and wash my hands and sometimes at lunchtime I just brush my teeth. I use the basin downstairs more every day." <u>Ann</u> : "And these [drawers in the main floor vanity] you can stick all sorts in because they go all the way back."
	Elaine	Alvin
Toilet	High-rise toilet installed very recently; replacing the one selected during the earlier bathroom renovation. <u>Elaine</u> : "What we did was replace it with a higher toilet Because of the changes and what, production was coming forward for the ageing people. This is the part of the story- it's part of aging in place... We've made changes to help us age here." <u>Gerry</u> : "The toilet we had before was small and gringy. That's two inches higher than the normal toilet. Which helps."	High-rise toilet Ann's toilets measure at the midpoint of the high-rise bowl range. This was surprising given her short stature and therefore must have been originally selected for Alvin's height. Alvin was noticeably taller than her based off of the kitchen table height that was custom built to allow him to use it while standing for meal preparation. This has turned out to be a benefit for Ann as even for her, it makes it easier to use after breaking her hip.
	Elaine & Gerry	Alvin
Shower	Fibreglass corner shower stall. Main bathroom. <u>Gerry</u> : "One of the reasons the bathroom was renovated, "we knew we had the shower downstairs and we wanted to put the shower up here." <u>Linda Marie</u> : "the shower is very easy access, with an easy push to the side the doors can both be opened."	Fibreglass corner shower stall. Only present in the basement ensuite. <u>Ann</u> : "I'm very careful now. How I get in and how I get out because I don't want to slip."
	Family member	Alvin
Tub	Large deep tub, seldom used. <u>Elaine</u> : "We don't use that very often. It is there and we still can't get in and out of it but we use it therapeutically more than anything".	Deep tub, main floor bathroom, never used. With no shower on the main floor Ann was restricted to sponge baths while recovering from hip surgery. The same issue will arise if she needs to move upstairs full time. <u>Ann</u> : "I just had sponge washes, I think. Oh I had a helper. Who came twice a week, and we put a chair here. And she would give me a sponge bath."
	Family member	Alvin

Table 4-2

Cultivating Home: Summary and Comparison of Bathroom Affordances (Cont'd)

Affordance	Elaine & Gerry's home	Ann's home
Taps • Sink • Tub • Shower	<ul style="list-style-type: none"> • Double handle tap • Pull out shower head • Handheld showerhead 	<ul style="list-style-type: none"> • Single lever tap • Single lever fixed tap • Fixed wall shower faucet <p>Ann: "we did it together, we'd go shopping and look around. And we liked that one and that's a Kohler I think."</p> <p>Ann: "What I would like is to get this to come straight out and then straight down. My hair is quite thick. So it takes a long time to rinse it properly...I really need an extension to come straight down".</p>
	Family member	Alvin
Grab bars	None.	<p>No formal grab bars. However, while the towel rack outside the shower is not a formal grab bar, it is well anchored and strong. As a result, it is often used as a grab bar. She also uses the shower doors to rest against when getting out. These unconventional uses support the benefit grab bars would provide.</p> <p>Ann: when asked if she uses the towel rack as a grab bar she replies, "Yeah I do. Or I can hold on to you know I push both these [shower doors] back. Then I can put my weight against it."</p>
Lighting	<p>Linda Marie: "There is a nightlight and the makeup mirror is also lit. The counter-sink area is very well lit with two large fixtures on either side."</p>	<p>Both bathrooms are well lit with pot lights. The main floor bathroom with the tub has a dimmer switch.</p> <p>Linda Marie: "it's well lit with the pot-lights".</p>
	Family member	Alvin
Windows	<p>Linda Marie: "Beautiful stained glass windows".</p>	<p>Ann: "This one is frosted. And you really can't see in. It's pretty good."</p>
	Elaine	Ann & Alvin
Flooring	<p>Tile</p> <p>Linda Marie: "The floor is actually a bit slippery and has a bathmat that could be considered a risk."</p>	<p>Tile</p> <p>Linda Marie: "It's a tile floor in the bathroom down here, nice big tile floor. A little bit cold though."</p>
	Family member	Alvin
Doors	<p>The main bath has a standard door opening into a very large bathroom so there is no issue with the door's clearance within the room.</p>	<p>The opening of the door into the main floor bathroom is restricted by the size of the newer toilet. This made it difficult for Ann to enter the bathroom when she was using a walker after her hip surgery. A more age-friendly design would be the installation of a barn door.</p> <p>Ann: using my walker "I came in sideways."</p>
	Original to the home	Original to the home
Storage	<p>Open wall shelves and under the vanity.</p>	<p>An older closet in the ensuite bathroom has been converted to open glass shelving with no door. The addition of a light inside the closet would be beneficial.</p>
	Elaine	Alvin
Additional features	Towels are placed in multiple spots.	Mounted wall hooks

The Master Bedroom

The most substantial change to both master bedrooms was with the closet space and storage. In each home, an unused bedroom has become a wardrobe space used daily. Gerry has moved some of his everyday clothes into the free bedroom across the hall, which he also now uses for changing. This was done in part to accommodate the addition of a television in the bedroom closet; see Figure 4-10.

Ann's modification has been dramatic. She opened the attached bedroom's wall creating an entirely new walk-in dressing room. The wardrobe includes age-friendly design features such as adjustable rods and shelf heights, clear front drawer panels for easy identification of some items, along with solid fronts on drawers that contain more personal items. Magnetic lights have been added that automatically turn on when a door is opened. Figure 4-11 shows Ann's dressing room. Table 4-3 summarizes the two homes' master bedroom affordances.



Figure 4-10. Elaine and Gerry's closet television.

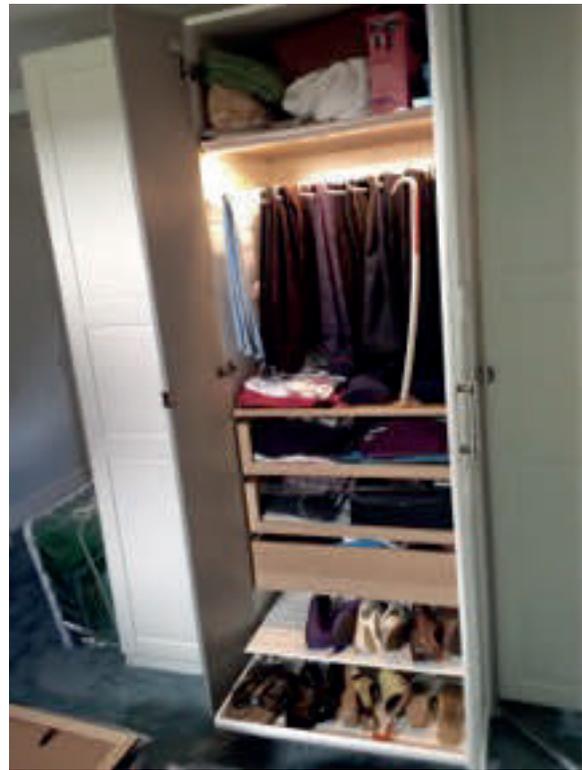


Figure 4-11. Ann's dressing room.

Table 4-3

Cultivating Home: Summary and Comparison of Master Bedroom Affordances

Affordance	Master bedroom	
	Elaine & Gerry's home	Ann's home
Wardrobe/ closet	<p>Gerry now keeps some of his clothes in the spare room.</p> <p>Gerry: "that room was free. What do I do? At night, over here, I change my clothes in there. My pyjamas and things like that I put in there."</p>	<p>Ann's new walk in closet Adjustable with lighting and glass front drawers.</p> <p>Linda Marie: "The master bedroom is made up of more than one room now. Obviously one of the three bedrooms has been turned into a sitting room with her desk and also it serves as a walk-in closet now. It has a built in beautiful wardrobe and mirrors built into the wardrobe."</p> <p>Linda Marie: "some of the drawers have glass fronts to them, making it really easy to see what you've got stored, and then other drawers have a flat-front wood to them so they have more privacy... the whole system in terms of the shelving and the hanger heights is...adjustable, because it's done in a peg board type structure."</p> <p>Ann: "Last year ... Come on in, yes so we had fun at Ikea doing all of this. And you just choose ... Oh and they just brought out a lower version because the tall one, I could never use. I couldn't get it in, so we were thrilled. So we went to town one of these, one of those, and ... a touch of turquoise!"</p>
	Gerry	Age-friendly professional renovator
Proximity to bathroom	Next door, with tub and shower.	Ensuite, with shower.
	Elaine & Gerry - Original floor plan	Alvin
Cable/ telephone jack and plug	A landline is located on the dresser.	<p>While a jack is located beside the bed, her landline is located around the corner on her dressing table.</p> <p>Linda Marie: "She has a cable outlet next to her bed, jack, so she could have a television or a computer or a landline phone accessible to the bed if need be, but there isn't one here right now."</p>
		Age-friendly professional renovator
Lighting	There is a combination of a flush mounted ceiling light and a number of lamps.	<p>The ceiling lighting is on a double switch, with one located by the headboard alongside switches to the wall sconces positioned on either side of the headboard.</p> <p>Linda Marie: "The main light switch, the ceiling light, is on a double switch, the first switch is located outside the bedroom door and there's a second switch dropped down at the head of the bed beside her bed lamps."</p> <p>Linda Marie: "The master bedroom also is the only room that is missing the ceiling halogen lights, so you don't get that overpowering brightness, you just get a more elegant, softer light."</p>

Table 4-3

Cultivating Home: Summary and Comparison of Master Bedroom Affordances (Cont'd)

Affordance	Elaine & Gerry's home	Ann's home
Lighting (cont'd)		Ann: "I like the lights, these little lights, look quite pretty when they are on. They're not really good for reading, but I don't really read in bed, I prefer to read upstairs in the daylight." Age-friendly professional renovator
Windows	An average size window on each exterior wall with hand cranks.	Since the ground level bedroom window looks out on to the front street it is smaller so that it is more discreet. Like all the windows it operates with a hand crank. Ann: "We had to add the little window because we made that long rumpus room into a bedroom."
	Elaine & Gerry - Original to the home	Ann & Alvin
Flooring	Hardwood flooring.	Carpeting. Even though this requires vacuuming because it is on a concrete basement floor it provides warmth.
	Elaine & Gerry	Ann
Additional features	Television located in the bedroom. Gerry: "I put this [sliding shelf] and the television here in the bedroom clothes closet".	There is a small alcove space next to the bed that was the original closet, which has been enlarged. Ann is pondering over what special memento she would like to place there. Ann: "They made it bigger and that's a space to be considered."
	Gerry	Age-friendly professional renovator

The Living and Dining Room

The importance of windows in the heavily used living rooms of these homes is striking. In both cases, there is a vast expanse of south facing windows permeating a warm sunny feel throughout the rooms. The rooms are central in the homeowners' private activities, including reading and socializing with family and outside visitors. Furthermore, a television is located in both living rooms.

An interesting phenomenon is that over time, both dining rooms have been extensively opened up to the remainder of the house. In Elaine and Gerry's home, this was partly to allow for access into the sunroom, as one must pass through the dining room to access it. Ann often referred to her desire to create an unimpeded flow throughout the house and, for this reason, still ponders if she should remove one of the dining room's French doors.

The personal comfort styles of the homeowners are well defined in these rooms, with Elaine and Gerry's traditional formal décor contrasting with Ann's classic European look and built in cabinetry. The size of the furnishings is well suited to their personal body sizes; Ann's furnishings are often lower and smaller. In each situation, the dining room also houses the home's most expensive furnishings, which can be adapted to accommodate larger gatherings and growing families. Figure 4-12 shows Elaine and Gerry's living room and Figure 4-13 their dining room. Figure 4-14 shows Ann's living room and Figure 4-15 her dining room. Table 4-4 summarizes the two homes' living and dining room affordances.



Figure 4-12. Elaine and Gerry's living room.



Figure 4-13. Elaine and Gerry's dining room.



Figure 4-14. Ann's living room.



Figure 4-15. Ann's dining room.

Table 4-4

Cultivating Home: Summary and Comparison of Living and Dining Room Affordances

	Living and dining room	
Affordance	Elaine & Gerry's home	Ann's home
Size and layout	<p>The dining room has been enlarged and significantly opened up to the other areas of the home. Part of the wall separating it from the living room has been removed, creating easy access to the sunroom. Additionally, the original pocket door into the kitchen has been removed.</p> <p><u>Gerry</u>: "We needed a big, bigger dining room, because the family was getting bigger. We decided to put a bigger dining room there."</p>	<p>The character of the dining room has changed as it has been increasingly opened up over the years. Alvin opened up the wall between the living and dining room, installing a French door. Additionally, the original bedroom door has also been replaced with a French door. Ann nevertheless wonders if she should open up the space even more by removing the living room door.</p> <p><u>Ann</u>: "This one was always here [the original bedroom door], this one was created when we had the alterations done [decades ago that moved all the bedrooms to the basement].... Alvin made this door. Made this opening."</p> <p><u>Ann</u>: "that always had a door but it was just a solid wooden door... Sometimes I wonder about taking this one off. Because then it just all flows through. Right?...I mean, I think I'll leave it for now. It could come off...it's something to think about".</p>
	Elaine & Gerry	Alvin
Furnishings	<p>The furniture in these two rooms is very formal in appearance and size with the exception of Gerry's lazy-boy chair. Elaine sees these rooms as demanding respect; she takes great pride in how well furnished they are.</p> <p><u>Elaine</u>: "For ten years we had no furniture. Then we went to Toronto and we bought the furniture; one of the wing back chairs I had recovered. The wood stuff is all original. This is the second couch. The bookcase came from my mother's."</p> <p>The dining room is home to the most prized furnishings.</p> <p><u>Elaine</u>: "all of this furniture is from Italy. I did all of the needlepoint on the chairs."</p> <p><u>Elaine</u>: referring to the dining table, "this is called zebra wood. I didn't know, but my nephew told me it comes from Africa. I don't know if they can even do that anymore. It has got 15 layers of...lacquer."</p>	<p>The European feel furnishings are generally made up of clean simple lines and no ornamentation. In the living room is a chick teal [her favourite color!] leather couch and armchair. They are extremely modern and slightly lower to the floor. Beside it sits a leather armchair and ottoman particularly well suited to Ann's size.</p> <p><u>Ann</u>: "when I retired, my sisters in England bought me the chair and the footstool. Two of them came over and we went shopping. And they said oh come and sit here and try there. Ooh..., okay that one fits you, right, we'll have this piece."</p> <p>In the dining room is an expandable round rosewood table and sideboard that can accommodate a crowd.</p> <p><u>Ann</u>: "I have one, two, I can sit, I think the most is fourteen. Mind you the one at the end is sort of sitting on the arm chair."</p>
	Elaine & Gerry	Ann & Alvin
Lighting	<p>The living room has a combination of many different lamps several strategically placed for reading. The dining room also has lamps as well as an elegant petite-chandelier.</p> <p><u>Elaine</u>: "The light fixtures are from Moreno glass."</p>	<p>Care was taken to match the glass of the dining table pendant lights to those found in the kitchen.</p> <p><u>Ann</u>: "the lights go with the kitchen."</p> <p><u>Ann</u>: "I like the linkage between the two rooms."</p>
	Elaine & Gerry	Ann, Alvin & two sons

Table 4-4

Cultivating Home: Summary and Comparison of Living and Dining Room Affordances

Affordance	Elaine & Gerry's home	Ann's home
Windows	Included in the living room is an extremely large ceiling to almost floor widow. In the dining room, large French doors open into the sunroom replacing the original sliding patio doors.	The vast majority of the exterior wall space in the living room consists of windows low enough to see out of while seated. The dining room has two kitty corner windows; again low enough to see out of while seated. <u>Ann</u> : "I'm not into curtains. I'm not gonna have curtains."
	Elaine & Gerry	Ann & Alvin
Flooring	Hardwood with an area carpet.	Hardwood, royal oak with a cherry stain. <u>Ann</u> : "We wanted something that was warm, to go with the rosewood."
	Elaine & Gerry	Ann & Alvin
Storage	Elaine came up with a creative way to store her liquor in the dining room; using her mother's stereo cabinet. <u>Elaine</u> : "This came from my mother's house and it had a record player but I put booze in it."	Two corner cabinets have been custom made to hold her china, linens, and wine. Interesting is the more recent cabinet, which was originally a bedroom closet, resulting in a trade off of between aesthetics and affordance. <u>Ann</u> : "The dining room, which was the main bedroom. And there was a closet that sort of came, like here. A closet where I put the liquor bottles and you know wine and stuff like that. I had boxes on the floor under a shelf with Easter things, and Christmas things and all that. Which of course I lost." <u>Ann</u> : "My wine I used to keep in the cupboard that used to be in the dining room. But that cupboard was re-designed, you can put eight bottles at the top, which I can't reach, but nowhere else."
	Elaine	Ann, Alvin & two sons
Additional features	The original wood-burning fireplace has been converted to gas. <u>Gerry</u> : "We put the gas fireplace in. That used to be wood."	A trolley cart is also kept in the dining room.
	Elaine & Gerry	Elaine

The Sunroom/Garden Room

The essential role these rooms play is providing these households the opportunity to thrive while aging-in-place was the most surprising finding. These rooms bestowed a unique offering that was central to the homeowners' perspective of what was necessary to enable their desire to age-in-place. This is not a space that is common in Canadian homes and so the fact that both homes possess what many could consider a space of luxury was striking. Noteworthy is that neither homes'

original floor plan had a space for this purpose. The current homeowners demonstrated their tie to the homes' outside yard space via their investment in the creation of these rooms. For Elaine and Gerry, this space represents the most substantial modification to the home, both in terms of the investment of physical labour and monetary resources, as well as the enjoyment generated. While Ann's physical and financial investment was smaller, to have designated an entire room for this pleasure, in an upstairs floor space of less than 900 sq. ft., is telling of its worth to her. These rooms represent not only more casual living space within the home, but also display a reflective character that envelops the owners with a sense of relaxation. Figures 4-16 and 4-17 show Elaine and Gerry's sunroom; Figure 4-18 shows Ann's sunroom. Table 4-5 summarizes the homes' sunroom/garden room affordances.



Figure 4-16. Elaine and Gerry's sunroom.



Figure 4-17. Elaine and Gerry's sunroom, winter.



Figure 4-18. Ann's garden room.

Table 4-5

Cultivating Home: Summary and Comparison of Sunroom/Garden Room Affordances

Affordance	Sunroom/garden room	
	Elaine & Gerry's Home	Ann's Home
Creation of a sunroom/garden room	<p>The sunroom addition was the first major age-friendly renovation. It is 20x20 sq. ft. with floor to ceiling windows all around. The leather furniture is well lived in and the vast variety of items in the room, from the exercise equipment to the freezer, indicates it is central to their daily lives.</p> <p><u>Gerry</u>: "Then, we wanted to stay here in the fall and in the spring. We wanted something comfortable and that's why we decided to put the sunroom in there. That 20 by 20 sunroom. It's on the south side and serves the purpose for the similar reason that in the fall the sun comes in and warms up the tile, even though it's heated. It's insulated. In the springtime, it's the same thing. When it's really cool outside, then the sun comes in there, you're, it's just like, it's beautiful."</p> <p><u>Gerry</u>: "Okay, we decide that we needed the sun room. That is what we did...but this is a lovely room, we love it, we enjoy it."</p> <p><u>Elaine</u>: "usually about this time of the day [in the afternoon] through the winter we're not doing things and we come into this area, so we get cozy because you'll see as you go around I opened the French doors because that is our addition...once the weather is nice and on sunny days we're in that back room because it's the south side."</p> <p>Elaine & Gerry</p>	<p>When the bedrooms were originally moved downstairs this back bedroom became Alvin's study and art studio. Today, while Ann has replaced the furnishings changing the presentation of the room altogether, she has retained the space's reflective atmosphere.</p> <p><u>Ann</u>: "There was a corner window here, that's original, but not here. This was just a wall. We had a small window put in, well more of those sizes next. Alvin sort of used this as his study as it were, most of the time. And he had...He was always interested in art. He used to have his easel here for painting and he could look down the garden from inside here."</p> <p><u>Ann</u>: "As I say, originally this window as a bit smaller". It was made larger and lower "So you can see out and you could sit. We just wanted a big window...it's nice just to sit and look at the garden. It's a restful, gentle sort of room."</p> <p>Ann & Alvin</p>

The Interior Stairs

The homeowners' attitude to stairs by far represented the strongest contrast in perspectives regarding age-friendly design. Right from their home's inception, for Elaine and Gerry the concept of minimal to no steps has been a key criterion. This is even truer today, as it is seen as pivotal in their homes capacity to accommodate their aging needs. The presence of very few steps in the home is the primary reason Elaine and Gerry believe they continue to be able to reside comfortably at home.

The absence of natural lighting in Elaine and Gerry's staircase is still a concern, despite how little it is used. In a power outage, it would be completely dark. The simple task of resetting a breaker requires use of the staircase. A battery powered emergency light installed at the top of the stairs is recommended. Figure 4-19 shows Elaine and Gerry's basement staircase and Figure 4-20 their sunroom's interior step.

For Ann, other than while recovering from her hip surgery, she has never seen stairs as worrisome. She is still extremely comfortable using them countless times throughout the day. Ann is content with her bedroom, main bath, and laundry being in the basement. Most intriguing is how relaxed Ann is with her dependency on stairs, particularly given that conversion of the stairwell is problematic because it incorporates a directional change and is also too small to accommodate a wall lift. Ann's stairway also involves a half step at the bottom and the staircase has a relatively steep angle that more resembles a ladder's pitch. Ann's only solution if her reliance on the stairs became too challenging, would be to move upstairs permanently, an idea she is open to.

Ann's stairwell is well lit with electric and natural lighting. However, since Ann requires daily use of the basement in the evening, she could further safeguard herself by installing a battery powered emergency light in the stairwell.

In each home, the stairs have one full-length banister. Ann recently added the railing to her main stairwell after her hip surgery because she was aware this could help her traverse up and down more easily. Except for the four steps leading to Ann's kitchen from the back door, there is the potential for a second railing. A wall closet would need to be modified to allow for a second railing on Ann's kitchen stairs. Unexpectedly though, given that Ann is not preoccupied with the

elimination of stairs in her home, she was still perceptive of the advantage that a second railing could provide. Figure 4-21 shows Ann's basement staircase. Table 4-6 summarizes both homes' interior stairs' affordances.



Figure 4-19. Elaine and Gerry's basement staircase.



Figure 4-20. Elaine and Gerry's sunroom step.



Figure 4-21. Ann's basement staircase.

Table 4-6

Cultivating Home: Summary and Comparison of Interior Stairs Affordances

Affordance	Interior stairs	
	Elaine & Gerry's home	Ann's home
Number of steps	<p>There has always been an effort made to minimize the number of steps in the home. Other than a single step into the sunroom, the only full staircase is the rarely used basement stairs.</p> <p>Elaine: "The only major thing we did was to make sure we didn't put any more steps than we had to; that's why that's just a one step down to go to the sunroom. There's really graduated steps in the front of the house if you noticed. There's no big staircases. The back stairs are the only ones."</p> <p>Elaine & Gerry</p>	<p>From the back door landing inside the home there are four steps up to the kitchen and approximately seven down to the basement.</p> <p>Ann: referring to converting the sunroom, "I can always make that room into a bedroom."</p>
Stairway railings	<p>Runs top to bottom on the open side of the basement stairs</p> <p>Elaine: "The only other thing he did for me here is he put in the railing for me, because I was having trouble."</p>	<p>Kitchen and basement stairs have one railing.</p> <p>Ann: "Maybe I should have another one on the left hand side of the wall as I go down the stairs, especially if I am carrying something down the stairs?"</p>
Overhead clearance	<p>Standard with no overhead bulkhead.</p>	<p>In the big renovation the bulkhead was modified to add clearance.</p> <p>Ann: the renovator "chipped away all the plastic and altered the angle and then made this a little slope, and this a slope. So as you go down you get a bit more headroom. It helps a lot."</p> <p>Age-friendly professional renovator</p>
Lighting	<p>Light fixture at the top of the stairs, no natural lighting.</p>	<p>Good use of both natural and fixture lighting.</p>
Windows	<p>None</p>	<p>Back door window</p>
Flooring	<p>Berber carpeting</p>	<p>The kitchen stairs are well done in a marmoleum hard surface flooring with an extremely effective tactile nosing, which permits the user to feel the transition between steps easily. It also assists in being able to visually define each step.</p> <p>In contrast, The lower half of the staircase has been covered using the basement carpeting. Without the nosing, and such a plush pile, the stairs become almost slippery. Additionally, since Ann still does her own cleaning, it requires her to use a vacuum cleaner on them rather than just sweeping them with a small hand held broom and dustpan.</p> <p>Ann: "we did this, I had the carpets laid. From the stairs all the way in each room".</p> <p>Ann & two sons</p>

Table 4-6

Cultivating Home: Summary and Comparison of Interior Stairs Affordances (Cont'd)

Affordance	Elaine & Gerry's home	Ann's home
Additional features	This stairwell could incorporate a lift if necessary	<p>The other concern with the basement stairs is that it ends with a half step at the bottom because of a raised sub floor.</p> <p>Lastly, the furnace vent is located in the kick of a lower stair where one's toes could easily catch on it. This vent could be relocated to the wall the stairwell shares with the furnace room.</p> <p>Ann is keenly aware of these anomalies though as she took great care to repeatedly point them out to Megan and I for our own safety.</p> <p><u>Ann:</u> "the only thing is, don't forget about the grill."</p>

The Entrances

The only exterior staircase into Elaine and Gerry's home is the sunroom's four steps; see Figure 4-22. Due to the yard's elevation, a small staircase was unavoidable in the sunroom design. By raising the sunroom above grade, the choice was made to incorporate the stairs on the room's exterior rather than interior. This was preferred given traffic within the home's interior is more common than between the sunroom and the yard, particularly during the winter months. Even so, these exterior stairs are heavily used in the warmer months and Elaine has required the installation of a handrail. Gerry also made a concerted effort to make the steps as large, sturdy and level as possible. All other entrances have minimal stairs.

In Elaine and Gerry's home the front door's two stairs have been revamped into two landings (see Figure 4-23), an age-friendly design that allows someone with less stability to pause between steps. Additionally, replacing the older doorknob hardware with levers could benefit Elaine given her arthritic hands. Security could be improved with the addition of a deadbolt on the front door and a second door lock in the sunroom. The main side entrance has two steps located on its exterior; see Figure 4-24.

Inside Elaine and Gerry's home, the vestibules are small and cannot accommodate a seat. What's more, at the main side door entrance, the combination of the location of the basement

stairs and a lack of storage, particularly for footwear, creates a tripping hazard that could cause someone to fall down the basement stairs; see Figure 4-25. Their recent efforts to limit the need to access the basement make it easier to keep the basement door closed.

Ann presently has to deal with stairs at either entrance to the home, on the exterior at the front and interior at the back. However, given the extensive space around her home, a ramp or lift could be incorporated into a new front step. Currently, the family is discussing whether the outside front staircase (see Figure 4-26) should be replaced during the exterior renovations. Whereas the opportunity to extend the top landing area has been identified as a benefit, the incorporation of a ramp into the new design has not. This is critical, especially as this is the only entrance where one could design access that avoids stairs altogether. Although the back door has fewer stairs on the exterior (see Figure 4-27), people immediately enter into a very small landing leading to stairs going up to the kitchen and down to the basement. If Ann eventually needs to move upstairs, a possibility that even she acknowledges, a ramp at the front would be vital.

A front ramp would work well given the excellent setup in the front vestibule. The space includes a bench, with innovative built in shoe storage below, and a side coat closet. Hooks on the wall conveniently accommodate clothing accessories and outdoor items such as her umbrella. The bench drawers below provide shoe storage; see Figure 4-28.

Ann's door hardware is user friendly and the locks secure, however the weight of her front door may become an issue so it will be critical that it opens and closes freely. Her security system at the back is ideally located within arm's reach of the back door, which is the door she uses the most. Table 4-7 summarizes both homes' entrances and vestibules affordances.



Figure 4-22. Elaine and Gerry's sunroom entrance.



Figure 4-23. Elaine and Gerry's front entrance.



Figure 4-24. Elaine and Gerry's side entrance, their main entry way.



Figure 4-25. The main side door vestibule with basement door on the left.



Figure 4-26. Ann's front entrance.



Figure 4-27. Ann's back entrance.

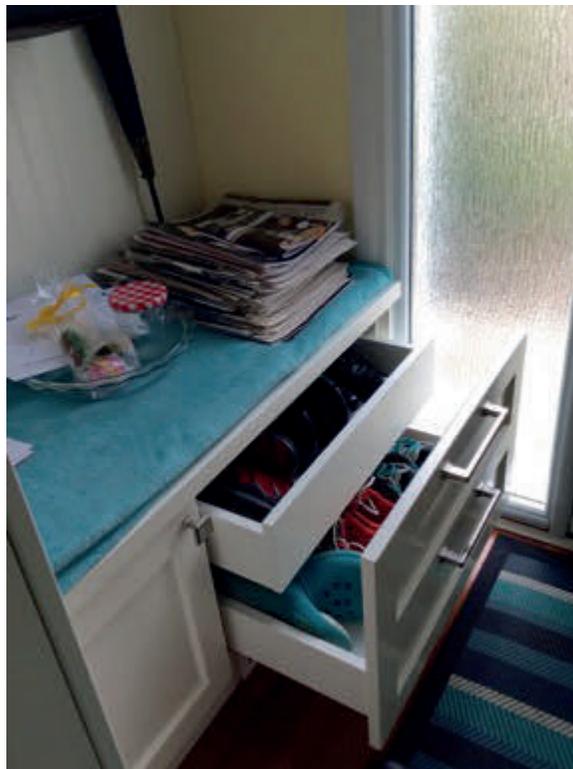
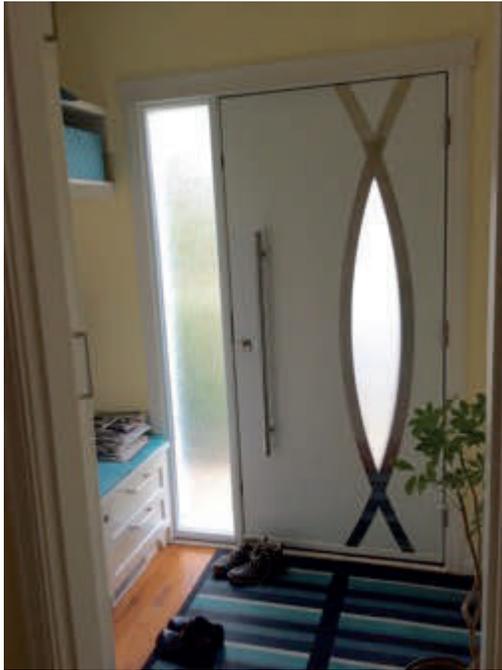


Figure 4-28. Ann's front entrance bench, hooks, and shoe storage.

Table 4-7

Cultivating Home: Summary and Comparison of Entrance Affordances

Affordance	Entrances	
	Elaine & Gerry's home	Ann's home
Stairs	<p>On the exterior there are three graduated steps at the front door, the side door has two and the sunroom four.</p> <p><u>Gerry</u>: "I modified the front too."</p>	<p>On the homes two exterior doors, there are five high steps up at the front and two gradual steps at the back. Key finding here is that the idea of incorporating a no step means of entry into the home is not something recognized as potentially an essential need in the future.</p> <p><u>Ann</u>: "This is what the boys wanted. They want the top to come more this way, out to this step". When I mentioned that she might want to look at adding a ramp into the design her reply was "I'd never thought of that."</p>
Railings	<p>One on one side of the four exterior steps out of the sunroom.</p>	<p>Front staircase has two.</p>
	<p><u>Gerry</u></p>	<p>Original to the home</p>
Exterior porch covering	<p>The front and side door is covered but the sunroom door is not.</p>	<p>Both the front and back originally had a porch roof, but the front has recently been removed to facilitate the exterior renovation work. A decision of what to do next has not yet been made.</p>
Lighting	<p>Both the interior and exterior of all the doors are well lit.</p>	<p>Both the interior and exterior of both doors are well lit.</p>
Doors & Locks	<p>The front door lock is a traditional doorknob lock.</p> <p>The side has, on the exterior, a large D handle, and a doorknob on the interior, with a deadbolt lock.</p> <p>The sunroom has a wooden pull handle with a sliding door lock.</p> <p>While the D handle and wooden pull are age-friendly, given that Elaine has arthritic hands, it would be easier if the doorknobs were replaced with levers.</p> <p>The front door and sunroom locks could be upgraded.</p>	<p>Ann is extremely proud of the statement that her new custom made front door makes. The door not only is heavy and solid, but also is outfitted with multiple deadbolts on one locking system making it extremely secure.</p> <p>The back door, while more conventional is also new and outfitted with a screen door; again with a multiple dead bolt lock system.</p> <p>The interior and exterior handle on the front door is a vertical pole idea, European in character and matching the pulls on the kitchen cabinetry. The back door and screen door each have a traditional lever, user friendly for someone with arthritic or full hands.</p> <p><u>Ann</u>: "We saw this and of course decided and then when they brought it we didn't think it would fit and it weighs a ton. But anyway, it modernizes the front to bring it into like, the twenty first century."</p>
Windows	<p>Front door has no window but there is a screen door.</p> <p>The side door has a small window but no screen door.</p> <p>The sunroom has a double glass sliding door.</p>	<p>Ann & two sons</p>
		<p>The front door has a glass pane incorporated into its design and a sidelight. All the glass is opaque.</p> <p><u>Ann</u>: "This is called rain something or other. Because we, if that had been solid, this would have been very dark."</p> <p>The back door has a window as well as a screen door.</p>

Table 4-7

Cultivating Home: Summary and Comparison of Entrance Affordances (Cont'd)

Affordance	Elaine & Gerry's home	Ann's home
Security System	None	<u>Linda Marie</u> : "Right at the [back door] entry is the security system, so if you were setting it to go out the door you literally have to turn around and leave the door, it wouldn't be hard to get out in time. Also, the door beeped when it was opened and closed so you would know if somebody was opening the door."
Storage	The original front and back door entrances inside the home are both small spaces. The front door closet is next to the door, while the original back door closet has been converted into the new main floor laundry space. The sunroom door, steps directly into the 400 sq. ft. room with chairs nearby.	<p>The front entrance area has been extensively redesigned to incorporate age-friendly features including: a bench; drawers for footwear; a coat closet; wall hooks; and a shelf. The original plan was for a cubby tower to sit on the bench for small items, such as gloves, but Ann was disappointed in the final product's aesthetics and instead placed it inside the coat closet, reducing its affordance.</p> <p><u>Ann</u>: "We wanted a wardrobe that went up to the ceiling and then just hanging space here and shoes and this little thing. What I wanted something here for gloves and scarves. But it looks too heavy. It just doesn't look right. So I pushed it to the back and I can still get to it. It works ok."</p> <p>Ann & two sons with the assistance of an age-friendly professional renovator</p>
Additional feature	<p>There is immediate access to the half bathroom room from the side door.</p> <p><u>Elaine</u>: "So this was great, if they got playing and had to go to the bathroom they just whipped in here and even with winter time it was easier. To this day it's still easier, only you have to know how to stand as a grown up in it. It's so tiny!"</p>	<p>The front vestibule has seating with innovative footwear storage below that makes it easy to change ones shoes.</p> <p><u>Ann</u>: "Here, and then this one is quite neat [for] shoes and then there is a heater here so it sort of warms it up in the wintertime."</p> <p>Ann & two sons with the assistance of an age-friendly professional renovator</p>

The Laundry

While the location of the two laundry task spaces is very different in each home, both facilities reside on the floors where the laundry is generated. Elaine's machines have been recently relocated from the basement to the main floor, whereas Ann's laundry is in the basement utility room, adjacent to her bedroom and ensuite.

Even though Elaine's laundry area is on the opposite end of the home from her bedrooms and main bathroom, her machines are located where she insisted they be placed: in the kitchen. Elaine enjoys her role in the kitchen and likes to spend much of her time there; by nestling her washer and dryer into the kitchen workspace, she is happy multi-tasking. Figure 4-29 shows Elaine

and Gerry's past basement laundry task space. Figure 4-30 shows their relocated laundry task space now in the main floor kitchen.

Similarly, despite Ann's machines being conveniently located, she too wants to improve the atmosphere of the laundry space; see Figure 4-31. She has earmarked the upgrade of the utility room as a potential winter project; one in which she also plans to have a lot of say. Ann noted that she spent quite a bit of time in the laundry room since she washes her clothes there, hangs many articles to dry rather than putting them through the electric dryer, and occasionally irons in it. Table 4-8 summarizes both homes' laundry task space affordances.

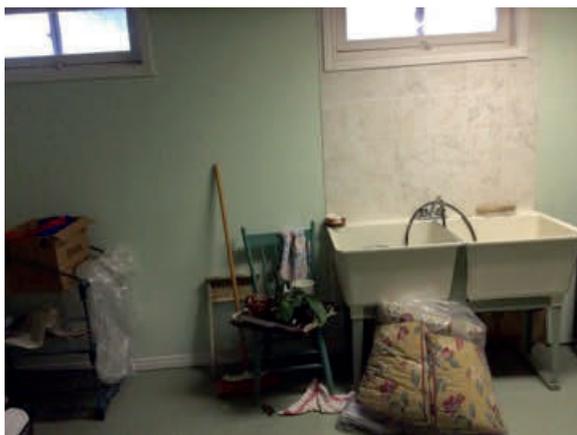


Figure 4-29. Elaine and Gerry's past basement laundry task space.



Figure 4-30. Elaine and Gerry's relocated main floor kitchen laundry task space.



Figure 4-31. Ann's basement laundry task space.

Table 4-8

Cultivating Home: Summary and Comparison of Laundry Task Space Affordances

Affordance	Laundry task space	
	Elaine & Gerry's home	Ann's home
Location	<p>In the kitchen.</p> <p><u>Elaine</u>: "I couldn't do the stairs. I refused... this would be much more comfortable, because while you're doing the laundry there's always prep in the kitchen".</p> <p>Elaine</p>	<p>In the basement utility room.</p> <p><u>Ann</u>: "I think a washer and dryer should be placed on the floor where people sleep."</p> <p><u>Ann</u>: "What needs doing and what bugs me is the utility room...I think it needs to be made a much pleasanter room to do laundry in cause I've been down there for donkeys years doing laundry. It's a grotty room."</p> <p>Original to the home</p>
Set up of appliances	<p>Washer stacked on top of dryer</p>	<p>Raised washer, kitty corner to dryer</p> <p><u>Ann</u>: "For me it works well because I open my dryer door for sheets, towels, things like that. And then I open—the front-loading washer, and I just sort of put them... a slight twist and they transfer easily into the dryer."</p>
Caliber of appliances	<p>Not only was the style of the machines critical to them being able to fit in the space but also the quality of them was equally important. They are easy to use, efficient and quiet.</p> <p><u>Elaine</u>: "Whatever is there has got great life and great products. It's a Bosch. Yeah, it's a Bosch."</p> <p><u>Elaine</u>: "Basically, I think we have the most efficient product, because you don't have any odour. You don't have any moisture."</p> <p>Elaine</p>	<p>The physical shape and size of the machines selected was not constrained, as the utility room is a good size. What was important though was quality; they are upper end German Miele appliances. Even so, Ann is somewhat frustrated with the washing machine. She senses that it is out of balance because of the violent shaking that occurs when it is spinning.</p> <p><u>Ann</u>: "What a difference to have good quality appliances, big investment but worthwhile."</p> <p><u>Ann</u>: "I think this is not balanced properly. And they came once to see, but when I do a load of laundry, these boxes, which are heavy—[move around a great deal]—it is an expensive machine."</p>
Storage of cleaners	<p>Limited to top of the washer with larger bottles stored in the basement.</p>	<p>Large counter located beside the washer. Overall, the utility room is a concern; it is the area of the home that has become dishevelled due to the renovations. She will reorganize it this winter.</p> <p><u>Ann</u>: "Maybe we could put a different storage unit there. Because at the moment, we've got shelves that I can't reach."</p>
Proximity to a sink	<p>Laundry room tub close by.</p> <p>Original to the home</p>	<p>Kitchen sink close by.</p> <p>Original to the home</p>
Opportunity for air drying	<p>Elaine has always had an outside clothesline that is still used the majority of the year. She also had a large one strung from the basement ceiling that has been replaced by a rack in the sunroom during the winter months.</p> <p><u>Elaine</u>: "Up until November, I was doing the drying outside, because we had sunny days. As soon as maybe even in March sometime I'll just tell him, put up the clothesline."</p>	<p>A small clothesline is strung across the ceiling. The original outside clothesline has recently been taken down to accommodate the exterior renovations. Currently, she occasionally uses a rack outdoors.</p> <p><u>Ann</u>: "This is my clothesline. And this unhooks and rolls back into that from Mothercare in England...I only use the dryer for my sheets and towels. I hang everything else out. If I do sweaters in the summer I turn them inside out and put them outside"</p>

Overall, age-friendly design renovations proved to be significant to these homeowners' well-being. The home's kitchen, laundry area, and sunroom renovations stood out as not only adding to their functional quality of life, but also to the pleasure their homes provided. A strong finding was the emphasis both households placed on the importance of good lighting, particularly natural lighting. The size, number, and lower position of many of the windows, in addition to the construction of Elaine and Gerry's sunroom and Ann's garden room, and the removal of window coverings, reinforce this. Elaine is proud of the fact that even 52 years ago, she and Gerry recognized the value of lighting. She commented, "many people didn't have big windows in their homes and we have. We don't have to replace any windows". Ann repeatedly emphasized the important role of lighting, using terms such as lighting, sunshine, and window more than 130 times. Her journal entry titled *Seniors' Useful Ideas* noted "plenty of good sized windows to let the maximum amount of daylight sunshine in." Elaine and Gerry's home is also air-conditioned and has a wood-burning fireplace located in the basement that could be used to heat the home should they lose power.

One surprising finding was how safety and security was not directly identified as a sought after affordance. The only instance in which safety was even mentioned was when Ann explained how difficult it is to see into her home because of the size of her yard, "so I don't feel unsafe." The lesser role that safety played in these homeowners' renovation decisions was evident in how age-friendly design was underutilized in the bathrooms, particularly regarding the design of the showers and the absence of grab bars. From an entire house standpoint, while safety features such as electrical GFI plugs and smoke detectors were common, the absence of innovative electrical products emphasizing safety was apparent. In addition to the recommendation to add battery-powered stairwell lamps, age-friendly wall switches with a built-in night lights, exterior and interior motion lights – particularly into rooms frequently entered or exited with full hands – and smart lock technology are products that could provide safety affordances.

Smart lock technology could assist those with arthritis, such as Elaine, but also allows for access to be provided remotely to first responders in an emergency. This is particularly beneficial

for someone like Ann who lives alone. It was also unfortunate that while a professional electrician had updated the electrical panel in each home, they had not recognized the opportunity to relocate them to provide main floor access. In both homes, it would not of been difficult to at least relocate them nearer to the top of the basement stairs.

In the kitchen, a smaller electrical detail would be to provide a few plugs at the front edge of the kitchen counter rather than having to reach over the counter to the wall. Ann did benefit from the age-friendly recommendation to customize the height of switches and sockets. They “need to be higher up on the wall so seniors do not have to bend down low to put a plug into the socket”. However, even age-friendly renovators miss things. On her own, Ann discovered the benefit rounded beading on wall corners would provide: “I wish now I sort of got them to maybe just curve these edges. I bang into them sometimes. And I think, as you get older, plasterers should be encouraged to curve straight edges. What you call rounding the edge.” No one person holds all the knowledge of what works best; it takes the sharing of ideas by many, not least of all the user, to create a truly age-friendly home. Who these users are may in part be defined by eight personality traits found to be present in the three individuals and are the focus of the material culture theme of identity that follows.

Identity

Steinfeld (1981) wrote that “housing is both used by individuals in the presentation of self and serves as an influence in the shaping of identity by structuring one’s social network and social world” (p. 202). Building on this, he suggests that as we age, our homes “as a symbol of self should reflect changes of identity and adjustment to it in old age” (p. 203). Steinfeld is alleging that an individual’s home is not only a reflection of its owner, due to the social power it holds in shaping the lifestyle of its resident, but that as one’s identity adjusts with the passage of time, the home adjusts to this new status. In other words, homeowners and their homes grow old together.

Eight personal traits were common amongst all the participants’ identities. When described in single words they are: autonomous, prideful, up-to-date, patient, mindful, prudent, talented, and resourceful. While some overlaps exist between these traits, each trait was individually strong enough to be repeatedly identified throughout the various data types. A discussion of each trait follows, including how it is defined for *Cultivating Home*. Direct quotes from a variety of data

sources are used to support these findings. A summary of these traits and their definitions appears in Figure 4-32.

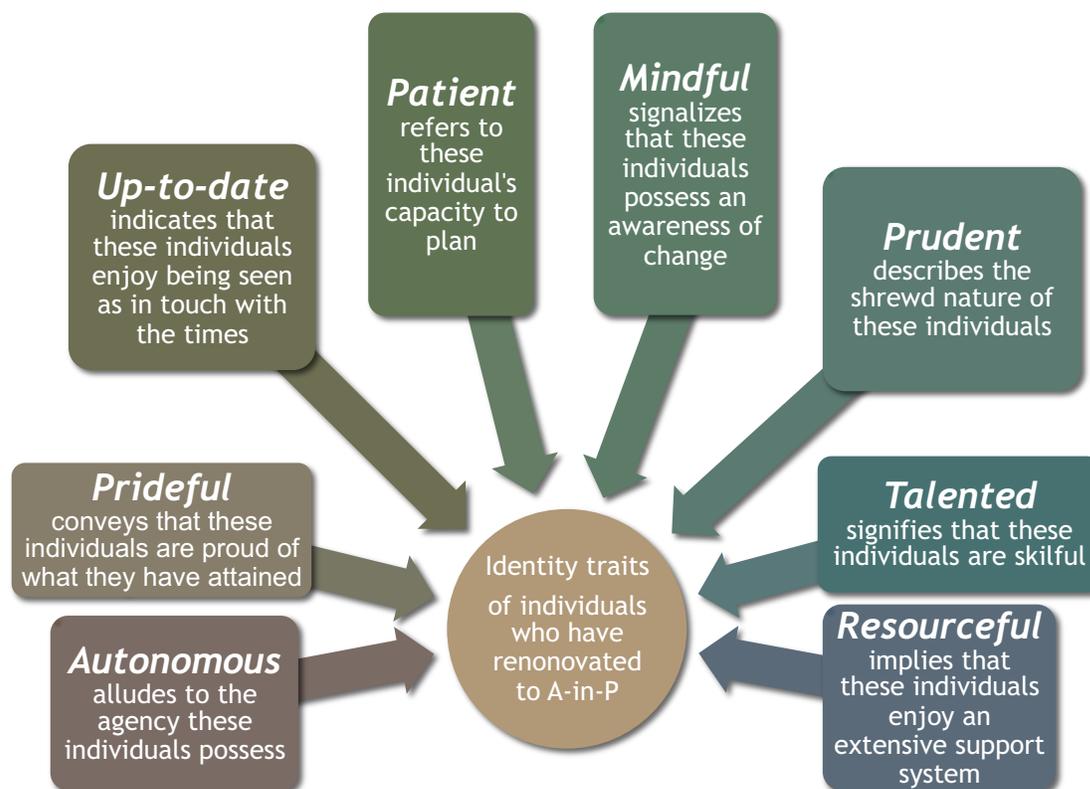


Figure 4-32. Summary of identity traits and their definitions.

Autonomous

Autonomy alludes to the agency these individuals possess; these households control their daily lives and the decisions that must be made. While input is often gathered from others, the participants in the study ultimately made the final decision, specifying what needs to be done and how it will be done.

Elaine and Gerry have tackled decision-making with confidence their entire lives. Elaine's comment regarding the pool addition underscored this: "It was a decision we had to make, I said 'we can't take these kids for a vacation and to go to cottages, we just don't have that kind of lifestyle.'" Furthermore, they made decisions that require breaking from the norm. Elaine often speaks of their decision to build a bungalow at a time when split-levels were the new fashion. She says of Gerry, it was "all because you said 'I'm not climbing stairs.' That is why it worked, because

he said, 'I'm not climbing stairs.'" Gerry's experience of living on the top floor of the boarding house instilled a life-long dislike of stairs.

The input provided by others includes family members, such as adult children, who are invested in Elaine and Gerry's best interests. Ultimately, this input was weighed against what the couple believed would work best for them. In conversation concerning relocating the laundry, Elaine insisted:

The debate came. Every person that came in this house had a different idea. The laundry should go in the middle of the hall...because of the bathroom being there. The laundry should go in the front closet. I said, "No, it's going in the kitchen and you can do it, watch."... So, they were involved in wanting it, but I stuck to my guns.

Gerry reiterated this trait when asked if there was any message he would pass on to other older individuals wishing to age-in-place who find themselves working with trades. He replied:

Most of them, they're professionals and they tell you how you should do it. Then, your decision is yours, whether you agree with him or not. If you have some ideas of your own, for your own pleasure and your own comfort, then you say, "No, I want it this way."

Ann also displayed autonomy when she intervened in her son's attempts to take charge of reorganizing of the laundry room. She asserted when "the boys say, 'Oh we'll move the washer and the dryer!' Well, hold on a minute. The dryer is gas. You cannot move [it, besides] I said 'for me it works well.'" Even major decisions, such as how her own inheritance from her aunt would be spent demonstrated self-assurance. She alone decided the money would go towards a new kitchen, an idea Alvin resisted initially, although she reflects, "I think in the end he learned to enjoy it." Even in this difficult situation, Ann remained adamant this is what she wanted. The fact that "it was my money ... as opposed to our money" rationalized her autonomous decision. Furthermore, she reaffirmed her position professing, "I don't regret doing that."

Prideful

Prideful conveys that these individuals are proud of what they have attained; these households exhibit a sense of accomplishment in the quality of home achieved.

To take pride in what one has is a value instilled in Elaine at a young age. This trait is evident in the high standard of care invested in their home. Elaine elaborated the couple's commitment to maintain and improve their home's quality, declaring, "perhaps the fact that you

come from people who give you the stories of being landowners impresses upon you to have pride in the building you build and the hard work you put into it.” This is further reinforced; at the time their home was built, electric energy was the gold standard. Repeatedly the couple stated that “this whole house was built as an electric home. ... Oh yeah, gold medallion home.” Today they see this pride as having transcended them, materializing in their grandchildren. Elaine affirmed this multigenerational family pride, expressing “consequently, you can have your grandson say, ‘you can’t sell the house. We want it.’” This achievement provides confirmation for the lifetime of hard work put into their home.

Do Ann’s sons want to live in their childhood home again one day? When asked, Ann paused, responding that while the home is small and may not be suitable for them, due in part to what Ann perceives as her son’s larger stature, she shared that “I’ve told them that they’re very welcome to take the appliances and just put something else there, because they know the quality of them. ... I don’t mind them doing that if they would like to.” While it has never been her explicit idea that the boys would return, she’s comforted by the fact that her prized appliances could find a new home in the care and admiration of loved ones. What’s more, Ann is proud of her kitchen’s appearance. She is particularly fond of the wall tile behind the stove: “I love the tile. We looked for tile for ages and ages. ... I think it was a good choice. I really do. It just makes that part pop.” Ann’s pride manifests in the pleasure and gratification from the reactions the new kitchen evokes in both visitors and herself. She laughs as she recounts that most guests simply “just come straight through here and sit down!” An accomplishment Ann portrays as the “kitchen that you’ve always dreamed about, but never thought you could have.”

Up-to-Date

Up-to-date indicates that these individuals enjoy being seen as in touch with the times; they are keen early adopters, appreciating the advantages gained by utilizing innovative product and design technologies, and they value the self-esteem derived from owning a contemporary and cutting-edge home.

Elaine continually uses the term “ambiance” to describe her belief that a home is more than a basic physical resource. Gerry acknowledges this, stating “she loves it a little more than a

house.” Elaine admits this is true, responding, “What’s there to say? I created that ambiance for you.” Her ability to create a feeling of “ambiance” was so strong that I found myself using the same term to describe the spaces in their home: “there’s quite an ambiance to the bathroom,” attempting to verbalize that this room of necessity exuded a feeling of luxury and relaxation.

Elaine values the sensual atmosphere the home offers and displays. She sees it as the duty of the homeowner to create an environment capable of instilling a sense of well-being amongst family members. She believes her mother achieved this by maintaining a contemporary fashion style in her childhood home: “She had the desire to ingratiate our family from being just working and sleeping. You needed that ambience. So she took that front of that house – probably with an architect” and completely updated the family’s home, her husband’s childhood home. This is an approach Elaine adopted as well. She quickly responds to the question of what prompted her to renovate the bathroom, immediately making it clear how important remaining current is to her identity: “The fixtures at this point ... dated us if we were going to stay here.” This significant trait is reinforced when she says, “If we were going to stay here, although it was very functional, I couldn't adjust anymore [by changing] the colours of paint or doing anything [else] I needed the fixtures out.” Living within a contemporary styled home expresses her desire for the family to be seen as in fashion, popular, and approved by the general public.

The idea that the home remains up-to-date was also important to Gerry: “Once we did the floor then I decided to replace all the casings around all the doors and all the baseboard.” This renovation’s motive was more than just the enjoyment it brought, it also represented security, as Gerry explains: “In case something happened and we had to sell the house it was ready to be sold.”

Moreover, Elaine’s ability to learn and adapt to new technology is also valued. She appreciates the benefits innovation can provide towards the ease and enjoyment of life. She mentions with pride her new washer and dryer, particularly pointing out the quality and functional stacking design: “whatever is there has got great life” and it is “very easy to program. It’s so simple.” It “was the superior one for the fact that it was going where it was going” and drawing attention to the ease which the chore of laundry is accomplished. Elaine further emphasized how she always remained current, stating: “This is from someone who started her married life with a

wringer washing machine.” With this statement Elaine is underscoring how capable, progressive, and thankful she is to keep abreast of the times.

This desire for maintaining a contemporary and up-to-date home is also apparent in Ann, resonating through her repeated use of the word “modern” describing how she “wanted a modern kitchen,” as well as introducing the story of her kitchen as the “beginning of the modern kitchen.” For Ann, the word is so fitting. Similar to Elaine, I found myself using the word “modern” eight times in describing Ann’s home while exploring it for the first time, emphasizing that “everything is extremely modern, extremely fashionable and current.” Modern to Ann translates into the notion of being forward thinking. She shared how she would spend the winters going from show-home to show-home, lamenting, “I don’t think I ever saw a show-home kitchen that I thought, ‘Oh, that would fit in my home.’ When you open the drawers and cupboards, same old, same old.” In our conversations, she challenged builders and designers to push the boundaries of how things are done. She appreciates that “architects and builders are getting together more to come up with practical ways” to incorporate original ideas in keeping with evolving lifestyles. As Ann motions to her kitchen, she highlights how she values innovative design: “Some of the more modern ones are beginning to have them just like this,” referencing her cupboards and drawers design details. Her delight in the modern is more than a fascination with a trendy look or even efficiency; just as rewarding is how an innovative design maintains and supports people’s changing needs. I have “benefited more from new ideas. ... It works well ... especially if you’re older.” Ann doesn’t mind being older; she does however want to remain efficient in how she handles household tasks.

Patient

Patience refers to these individuals’ capacity to plan ahead; these households undertake a tremendous amount of research before they implement new ideas into the structure and details of their homes.

My observations revealed that the homes of the participants are and have always been important in their day-to-day lives. Elaine drew attention to how the home emerged from efforts to constantly enhance it: “It was, what could we do? How much work can we put into it?” She believes that the home they have today is the result of their continued concerted effort to keep it relevant,

adapting it to their changing needs. Elaine says, “basically, I think people who need to update have to think about doing this if they’re going to stay in place while they’re in their 60s, because by the time they’re 80, it’s too late.”

The participants in the study could be described as researchers, often looking for solutions that do not yet exist in the marketplace. Instead of settling for second best, they are willing to wait it out. For example, there was a two year timeline between when Elaine presenting the idea to move the laundry upstairs and when the construction actually started. Time was invested in discussing where to relocate the machines, how to make it happen, and finding the right size and quality of appliances. Elaine feels that their patience was rewarded: “because we waited and did it when we did it, we got the proper appliances.”

When asked to explain the process, Gerry replies, “it’s a long story.” Even though the majority of the work was carried out by friends, his do-it-yourself interest facilitated his ability to describe the full scope of the construction process, including stressing that attention to detail was instrumental in the success of the renovation project:

There were no surprises. Usually there is, but there wasn’t, because everything was laid out and everything worked out really good. Usually, when you do construction, there’s always surprises and for the worst really. But this worked out really good.

Ann also alluded to the benefits of having patience when it came to making changes in the home. She waited for cupboard designs to catch up with her vision of a dream kitchen. She received an inheritance from her aunt around “the beginning of the millennium” and construction “started in ... must have been right about 2012.” She went through numerous show homes, open houses, magazines, and watched home and garden television for ideas for her ideal kitchen. Ann even shared various clippings she had collected along the way. Critiquing kitchen designs became a fun family event “fancy putting something like that there! ... Picking up ideas of what you would like” before settling on a renovation plan. Ann views herself as a constructive critical thinker who begins by gathering as much information as possible.

The planning for Ann’s renovation project became a massive effort extending over 12 years. She continued to persevere with a less than ideal kitchen, including the old stove “and that stayed like that for quite a long time but it was really difficult when the stove was more in the

corner.” The kitchen was one construction project, albeit a major one: “It always takes longer than you presume. I think we were fortunate there weren't too many glitches along the way. And it's well worth the effort when it's all done, as you know.” Taking time to focus on detail has resulted in the bliss provided today; “so little finishing touches that's what makes a kitchen I think. The finishing touches that might be a bit different,” indicate that for Ann, the kitchen was “worth waiting for.”

Mindful

Mindful signifies that these individuals possess an awareness of change; these households see change in both their and their family's abilities, needs, and desires.

Elaine seems to have always been aware of the shifting needs of the family, often prefacing a statement pointing out how the evolving family situation necessitated the adjustment. No longer needing a high chair, when “everybody needed to sit I said, ‘it is time,’” motioning to the kitchen table. Until then, the kitchen floor was unencumbered, providing the children a play space, close by and under her watch: “The kids had their toys here, and like I said we closed the door, we used the TV, the kids played in here and then we converted it to this.” Likewise, Gerry recognized a need for change as the family matured, mentioning “we needed a bigger dining room, because the family was getting bigger.”

Today Elaine is very forthcoming of her awareness that her and Gerry's day-to-day needs have changed as they have aged and this has required changes to the home, articulating “I recognize what our needs [are] now that ... we've arrived at where we are. We make it comfortable for ourselves.” As Gerry has begun to experience a few minor health challenges, she believes he is quicker to accept the changes she suggests, observing that:

He started having some health problems. And that put the icing on the cake, so to speak. ... I think the fact that he slipped into that little health problem ... it just was a better reason for him to say, “Yeah, I think you're right.”

Ann also acknowledges that life has changed: “I can't do what I use to do.” More care is required in undertaking household tasks, otherwise she risks not only impacting her daily routine but those of her boys as well: “I can't do that and if I did, the boys would not be very happy with me.” How she shares her home with others has also changed. Today Ann is less likely to prepare

formal meals for guests stating: “I don’t entertain as much anymore.” Instead the kitchen space is more often enjoyed in the company of her visiting sons who announce “we’ll make supper.” So while she is aware that how the space is used has evolved, she is still certain that it was worth it. As she says, I “could of used the money for other things, but [then] I’d of still had an old kitchen.”

Furthermore, since Alvin died, Ann is cognizant that certain areas of the home have been repurposed, including Alvin’s study and painting studio that seemed empty without him because it changed the “character of the room.” Once Alvin’s place of retreat, she has put her “distinctive mark” on the room. Instead of the easels and art supplies occupying the space once used by Alvin to paint the garden, it has been refurbished so when in “the morning, the sun streams in” she can enjoy sitting and looking “at the garden.” Still feeling his presence in the room, the space now belongs to her to use as she chooses.

Prudent

Prudent describes the shrewd nature of these individuals; these households value the resources they have earned and make a concerted effort to invest them wisely.

Elaine’s desire to be efficient while doing laundry reveals how careful the couple are with their resources and the decisions they make. While examining the basement on my own, it was apparent that the dryer once located there had been used sparingly. The room had been strung with several long clothes lines making it “obvious that most of the clothing was air-dried.” Elaine confirmed this when commenting on the machines removed from the basement: “The dryer I had downstairs, I probably only used it ten times. [It was] avocado [green in colour]. Does that tell you how long [it was] there?” Even with her new appliances, Elaine often starts the drying process using the machine but completes it by air-drying, “because so many of the programs on the dryers are gentle, ... it’s easy to start [it in the dryer] and to complete it in the sunroom when the sun shines.” Gerry added that “in the summer we’ve got a clothesline outside.” The laundry appliances are also used as much as possible when hydro rates are low: “We have a schedule of the high end hydro rates ... we do things when the time limit says to do them.”

Ann displays similar prudent laundry habits. While in her basement laundry room, I noted in my fieldnotes that it seemed like “she’s not using [her dryer] as often as the washer because she

has strung a small clothes line across one end of the laundry room where her clothes are presently hanging.” She to air dries her clothes, “sometimes in the summer I bring the [drying rack] upstairs. Dry it on the deck type of thing.” A significant investment was made in her laundry machines, as I noted “her washer and dryer are both front load, very high-end, Miele appliances, definitely newer.” She confirms this, stating her washer “is an expensive machine” that was a “big investment but worthwhile.”

Ann’s laundry appliances are not the only purchase revealing shrewd shopping. Numerous times she shared her good fortune acquiring the exceptional quality new kitchen appliances. Alvin found the stove that was “exactly what I wanted, like a blue stove inside, and not quite as low down as the other one was.” She shared what transpired when purchasing:

So he said \$6,000. So I said, “Well there goes my budget.” I just thought, you know, forget it, that’s ridiculous. And then he said, “hold on a minute” because he said, “well, we really are moving. We’re moving out. Let me go and have a word with my boss.” Well, I got the microwave, Gaggenau from Germany. I got the hob, Gaggenau from Germany. I got the [hood fan], which is Faber from Italy for \$5,999. ... I could have had the fridge and also a warming drawer underneath the oven. But I thought, I don’t really need those things anyway. But yes it came to \$5,999.

Ann has also made a number of purchases at IKEA, which is known to offer a quality for those shopping on a limited budget. Referring to a number of turquoise lamps, her favourite colour, Ann shares: “the lights I’ve had for quite a while. But they’re IKEA. You know those are IKEA.” Ann carefully selects those purchases she chooses to invest in, and when looking for quality items, will invest time to save money. With her kitchen appliances, Ann remarks if you want quality, which is “what I want out of mine. You know, basically a lifetime” you can’t expect to do one stop shopping: “you have to go to individual stores to get them.”

Talented

Talented signifies that these individuals possess skills that they utilize in their capacity to problem solve; these households are often able to contribute to the many creative solutions implemented in the home.

Gerry’s talent for working with his hands is evident everywhere, as my fieldnotes on observations in the basement attest:

In the last room we see even more tools and a workbench and it definitely looks like it was alive and in good use at one point. Somebody had a lot of skills with a lot of different tools here. The bench itself looks ancient, incredibly solid, and heavy. I don't know that you'd ever be able to get it out of the house. I would say it's part of the house now.

Here, I was capturing how Gerry's workbench is not only central to his ability to work in the home and is representative of how integral his do-it-yourself skills are, but it also is as if it has become ingrained in the home. These skills have been utilized in infinite ways, including accomplishing larger projects such as the sunroom independently: "I had somebody to put the windows in and that is all." What's more, he has put countless hours into smaller projects including modifying the stairs at the front door. These efforts are discernible in his expressive storytelling of the skunks under the stairs:

Finally, because nothing would work, from work I brought couple of scrap metal [pieces] and I put it right beside the block and tap the whole thing with tap down screws. ... They couldn't get in anymore. They decided to go – they went down the street to my neighbour's, Carlo!

It is obvious that Gerry has faith in his own abilities when speaking of what he would do if he was a young man just starting out today, emphasizing "the sooner you build your own house, the better. ... I would do a lot of things myself because I can. I could." Furthermore, even the way Gerry stores and manages his tools today indicates his ability to problem solve:

Most of the stuff that I use every day, I moved into the garage. Instead of going downstairs all the time to get a screw or to get this and that, I go to the garage and it's a little crowded, but it serves the purpose.

While Gerry may possess more practical skills, Elaine is instrumental in not only prompting the change but also in thinking through the potential solution as well: "What became problematic for me was having to go down the basement, but we've remedied that." This comes through in her resolve to ensure the plumber worked with her to select the kitchen as the spot to relocate the washer and dryer to, reasoning "everything he needed was there including the ventilation." Likewise, Gerry recognized Elaine's contribution to the project on two occasions, in passing when he responds, "she brought everything upstairs" and more specifically when expressing how even though he wanted the hall location selected the plumber settled the issue when he concurred with Elaine's logic, reiterating to Gerry: "the vent and everything is right there." Furthermore, he ended the debate by saying, "Gerry, she's right."

Elaine's modesty aside, on a number of occasions she did demonstrate her own handy work, narrating how the room her daughters originally occupied was redecorated, saying: "Okay, you paint the room Gerry, I'll find some drapery, because I'm not good at doing anything, and I reupholstered that chair with the help of my sister. That is all I did." Moving on to the room her son used to occupy, she continues: "All I did was take the dresser and repaint it, just to keep the room fresher." Elaine's mannerism reinforces her impression that her talents are more matter of fact, contending "you know the whole thing is you just fix it as your moving forward." Elaine inadvertently validates her and Gerry's talent as problem solvers when she makes reference to the home's future owners and the idea that they may want larger rooms; she declared "that will be their problem," implying the couple has solved many problems from the home's design in the past. This issue however they're leaving up to the home's future owner to resolve.

The war left Ann as witness to the deepest experiences of problem solving. As young as she was, she remembers her mother "utilizing space in a different way." One memory is of her three sisters' and her sleeping arrangements: "The four of us, during the war years, we slept each in our own little bed [in what] would have been like a drawing room ... like the lounge area, or a nice sitting room." A major modification resulting from the war required the addition of an upstairs kitchen for her aunt and uncle, who had moved in after losing the family bakery: "I have a feeling my aunt's kitchen might have been created from perhaps a bedroom."

How Ann personifies this ability is observed when she recounts her experience returning home after hip replacement surgery. Unable to access the bedrooms, which had been relocated to the basement years earlier to allow the young family more upstairs living space, she converted the main floor garden room back into a bedroom. When she was uncomfortable getting in and out of the bathtub, even with assistance, she modified her bathing habits to take sponge baths instead. Ann was resilient in meeting these challenges as they emerged and she seemed to actually delight in the manoeuvring that was required to get into the smaller bathroom with a walker: "I came in sideways type of idea. Ever inventive!" Ann is creative and able to overcome obstacles.

On multiple occasions Ann also shares how Alvin "liked to tinker around," including his remodelling of the bathrooms, where he "did all the tiling," and how he "made this door," an

opening between the living and dining room. Together, the family has devised scores of ideas of how to best utilize the home's spaces. Most recently, they redesigned the front entrance: "We designed the cupboard that they built for us there, the boys, I worked it out ... we wanted a wardrobe that went up to the ceiling and then just hanging space here and shoes and this little thing for gloves and scarves." Ann became so involved in the details, that when "they brought hooks, they were awful, so I said no, I'll go get my own hooks and put them up." Ann is confident in what she likes and what works best for her.

Resourceful

Resourceful implies that these individuals are capable of drawing on an extensive support system to assist them when needed; these households do not shy away from getting help when it comes to renovating and maintaining their homes.

Each of these participants has access to diverse sources of information and assistance. Specifically, one of the most valuable resources was the accommodating help from strong young male family members, including their sons and grandsons. From the start, Elaine and Gerry have had an extensive network of people willing to assist them, from older family members when they were first married to younger ones now that they are aging. Elaine's family provided the young couple with extensive help; her parents offered a place to stay so they could save to build: "We are in need of some assistance because we want to build a home so my father says take the apartment." Her father, who knew the local architect, had him "do up the plans"; her uncle "did the masonry work and all the stonework in the front of the house, including the fireplace"; and her grandfather "came and helped with the work" of building the house.

Later Gerry became a locksmith, which allowed him to "exchange favours" for the gifts of labour they received, recalling how "every time his [friend's] uncle needed a lock or things like that, I went there and I installed it." This is a skill that he still shares: "I used to do, and I still do, you know, people come, oh Gerry I need a couple of keys, so I've still got a lot of blanks in there in storage and that is what I do."

Today these favours of labour also come from Gerry's "adopted sons" with whom he still gets together once a month, but they increasingly originate from the younger family members.

Elaine, reflecting on the bathroom renovation, says her son-in-law was "very good at taking my thoughts and converting them into everything I wanted." Furthermore, they frequently mentioned the increasing assistance provided by their grandsons. Elaine comments how Gerry "would have his jobs and I would have my jobs and that's where we were until the boys entered the picture beginning in their teens." Gerry states sincerely, "It would be harder for me if I didn't have the boys." The boys help "to open and close the pool."

Their modest lifestyle allows them to live comfortably and hire assistance when necessary. Elaine mentions, "It was feasible for us to bring in a house cleaner every fifth week. ... It's light work for her, but it would be too heavy for us. That's why we stayed." Family inheritance was a monetary resource that facilitated their first age-friendly renovation, the sunroom. Elaine recounts, "we came into our inheritance ... my father died and I said we can finish this room now."

While Elaine and Gerry continue to be active within the community with a wide range of individuals who might benefit from age-friendly design, it was interesting that the only source of information regarding age-friendly design specifically mentioned was HGTV, the Canadian home and garden television channel. Both she and Gerry credit the idea of moving the laundry as coming from "Canadian programming." What's more, the ideas the show presented were options that Elaine considered as fitting for Canadian homes and lifestyles: it "was important to me, I'm watching what's suitable for us in our world."

Ann is also familiar with this Canadian programming, and more than once made reference to Mike Holmes, the channel's well-known renovator, commenting: "Holmes has some very practical advice and I thought he was always very good." Ann's exhaustive list of sources of information included: show homes, open houses, home shows, shopping excursions, and, she shares, "I did a lot of looking in magazines."

Although Ann modestly benefited from Alvin's do-it-yourself skills and her neighbours, a tile setter was hired for a few jobs, including the kitchen tiles, saying "I think he did an amazing job". However, she has been more inclined to hire renovation businesses. Like Elaine and Gerry, this has been possible, at times, due to inheritance. As a beneficiary of her aunt's will, once "the estate was finally settled" she used her inheritance as seed money for the kitchen. Ann's shrewd

nature has allowed her, given her modest lifestyle, to invest in highly skilled trades that bring with them other talented professionals. Her kitchen, she proudly states was “really just one man mainly and a plumber,” her kitchen designer and the plumber recommended to install the dishwasher. Ann willingly returns to those trades demonstrating professionalism and proficient knowledge of their craft: “All the plumbers had come round, oh you can’t do that, impossible. So I went to [the kitchen designer] and I said, I can’t find anybody.” He passed along his suggestion and Ann was grateful, remembering how the plumber approached the task: “Oh, that’s okay I can get that done for you.” She reinforces this resourceful nature when mentioning that her sons, “having been through this experience ... will go to” the same designer when it is their turn to renovate their kitchens.

Ann’s sons are a significant resource to her. Her emphasis on the need to have the assistance of young men was first evident when telling the story of her father wallpapering her childhood home, and how he must have done it by himself as “he didn’t have any sons and it was a long time before he had son-in-laws.” Ann continually refers to the vital involvement of her sons in her daily life: “If either of my boys ever left Edmonton then that would make a huge difference.” These young men’s input was present during each step of her renovation process, beginning with the research and planning stages right through to the discussions of her next project, the home’s exterior, saying, “I’ll keep the white and then just rethink with the boys, what would look best” and “the boys, we really wanted [the smoke detector] ... easily accessible and close enough that it would be loud enough to wake you up.”

This exploration of identity and how these homeowners’ personalities have impacted their ability to both age-in-place and undertake age-friendly renovations to their homes are evident in the narrative and social performances they shared. In particular, these individuals were found to possess the freedom and opportunity to be autonomous, prideful, up-to-date, patient, mindful, prudent, talented, and resourceful. A summary of Elaine’s identity traits appears in Figure 4-33, Gerry’s in Figure 4-34, and Ann’s in Figure 4-35. While these identity traits seem to be key to the implementation of age-friendly renovations that facilitated the earlier confirmed affordances, these alone were not the only material culture themes evident in their behaviour. I briefly turn my attention to the role memory played.



Figure 4-33. Elaine’s identity traits.



Figure 4-34. Gerry's identity traits.



Figure 4-35. Ann's identity traits.

Memory

Scholars who study material culture often identify memory as a significant aspect of home (Marcus, 1995, p. 244). The belongings passed down through the generations and the objects built into the fibre of a home, such as a fireplace, or even a new, practical, day-to-day object like one's fridge, are significant elements that relate to people's memories. *Cultivating Home's* findings revealed that for homeowners, these objects are just as storied; illustrating the past, invoking involuntary recall, and serving as a historical record. The memories these objects prompt revealed emotional attachments that individuals have within their home and their power to influence age-friendly renovation decisions.

Many people have experienced the pleasure a fireplace may provide. This is true of Elaine and Gerry. While seated beside the burning fireplace on a winter's afternoon Elaine shares, "usually about this time of the day through the winter we're not doing things and we come into this area so we get cozy." While this sentiment describes the contentment they experience in the presence of the fireplace, *Cultivating Home's* research data uncovered that Elaine and Gerry's relationship with this original feature of the home is more complex. Elaine shares how her uncle was responsible for "all the stonework [in the home], meaning the stone in the fireplaces, in the entrance of the house, was done by him." Furthermore, when she describes her memories of her childhood home's renovations as a young girl, she highlights how a similar fireplace was added, "because the uncle that did mine did that." The fireplace she is sitting beside today embodies memories of her childhood home and the gift from a late family member.

When Gerry tells the story of how an escaping ember from the original wood fireplace resulted in the floor being damaged and then replaced, his story comes out in a jubilant re-enactment of a great Canadian passion: "Marcel Dionne scored and I went, 'He scored!' and a piece of coal flew and burned the rug!" Gerry's fireplace acts as a lightning rod not only for his memory of the carpet on fire, but also for a country's fiery emotions wrapped up in a moment of Canadian hockey history.

Another memory of Elaine's that stands out emphasizes how in the early days, the young family got by with little more than the necessities. To provide context, Elaine uses the example of

the fireplace screen. To her, the evolution of the fireplace screen records the story of how the affluence the family enjoys today progressed over time. The rewards of the family's years of hard work are materialized in the historical record of the fireplace screen: "That's why you had the fireplace, but you didn't have the screen. You sat there with chicken wire and two blocks."

With the experience of the ember on the living room floor, Elaine was resolved that "even though the fireplaces made of stone [are today being], covered up. I'm not about to do that with this [one]." Instead, the couple settled on an age-friendly renovation that maintained the integrity of the original stonework and "just converted it from wood to gas." What's more, the renovation experience itself adds to the history of the home. In another story, Gerry retells:

That used to be wood, but it was embers in there, okay? We had to cut that and they put the torch in there and everything else, I said they are going to burn my house. It was good; it cost me a dinner, that is it. It was nice. Oh those guys are fantastic.

In Gerry's words, this "amazing" fireplace that they couldn't take with them if they moved, represents a noteworthy aspect of what it means to him to be able to age-in-place. This fireplace not only provides Elaine and Gerry with access to the memories of family, events, and friendships over the past 52 years, but continues to record those of the present. Figure 4-36 highlights Elaine and Gerry's memories, including: Elaine's childhood fireplace that was installed by her uncle; the ember flying and catching the carpet on fire; and the original basement fireplace which today is still wood burning.

For Ann the power of memory is not in one of her home's older objects, but in her new, age-friendly, split door fridge that she and her husband bought a few years before his passing. The most poignant moment that she shares involving her fridge is the story of its arrival:

The night the new fridge was delivered was a bitterly cold one and the delivery men said Alvin would have to take the old door down to allow the new fridge to go through, what a cold task it was! Afterwards when the man helped Alvin re-install the door we all had a cup of Cadbury's hot chocolate.

This story of Ann's is an illustration of a past, happy, cozy time, almost a mini celebration, at home on a winter's night with her late husband. The fridge and its connection to her memories of her husband are further reinforced when she writes, "the design of our new fridge was quite different from the old, single door one. My husband wished for a split door model, he was very happy and

pleased with our purchase. Now, I only have to open half a door to get what I need.” When she opens the fridge door today this simple mundane task has the power to remind her of a happy Alvin, years earlier.

As we sat in Ann’s kitchen, comparing it to the kitchen of her childhood home, her memory led to the retelling of how a second kitchen was added upstairs when her aunt and uncle came to live with them after losing their own home during World War II. As Ann looks around her own kitchen, spotting her fridge, she tries to recall the fridge in her aunt’s kitchen. This exercise unexpectedly leads her to remember a room in her childhood home that she had completely forgotten about, even though we had just discussed the family home in detail only moments before. The memory her fridge invokes takes her on a journey, not only to the forgotten room, but to her mother washing the young family’s laundry by hand in it:

No, the fridge was down in the other room! That was another room we had, we had a big kitchen room. Not the kitchen, but a big kitchen room, where the boiler was for the hot water and the fireplace ... you pull the thing, pulley, and the huge racks of four lengths, for when everybody did their laundry. Then you haul them up and tie them on the wall. Then the heat from the fire would ... and the water tank as well. Then on this window, there was a window with a white porcelain sink. You could ... it was the washboard. Because my mum didn't have a washing machine until ... I think Nola [her younger sister] was born.

Ann’s fridge had, purely by chance, acted as a lightning rod to unlock a long forgotten memory of both her childhood home and a family experience.

As a historical record, Ann’s reflections involving her fridge operates as a reference point to the events and timeline of the recent kitchen renovation. Another journal entry written by Ann recounts: “the experience of installing the new fridge reminded me of how long the complete kitchen renovation took.” The fridge launches the start of the story with “we began looking for new appliances around 2012” and moves to how by luck she came by the majority of her new appliances: “the store didn’t want to move any of the ‘old’ appliances to their new store ... [so] for the price of the oven, we purchased that and quite a few other appliances. A happy outcome!” Moreover, this memory encapsulates for her the overall good fortune and joy that today she associates with what she calls her “dream kitchen.” She concludes her story with how it was, after all, an inheritance she received from a childhood neighbour, who she considers an aunt that

provided the opportunity to build this kitchen. Thoughts of her fridge trigger memories of one lucky event after another that came together, evolving into ownership of a kitchen she never could have imagined having. In her words, the fridge reminds her that by simply being “at the right place at the right time” on more than one occasion “I got my new kitchen!”

The fridge acts as a vault for other more current memories as well. In another entry in Ann’s journal, when asked to select and record an interaction with one aspect of her age-friendly renovations, she journals light-heartedly about cleaning out her fridge. Ann writes, “when I tackle the dreaded task of cleaning the fridge/freezer, I always listen to CBC radio. It occupies my mind in a pleasant way.” She then follows up with how she carries out the task, stating next she “empties the contents of the fridge, they cover most of my kitchen table-horrors!” She then proceeds to sort and discard those items that are “beyond the ‘best before date.’” What’s telling in these journal entries is the way Ann uses the fridge to conjure memories of past events, writing, “it’s interesting to try to remember when I last used some of these products.” As she completes this task, she challenges her memory to recall the timeline of life’s more recent events. As she puts it, “judging by the date [it was] a long time ago!”

While accomplishing the mundane task of cleaning out the fridge, Ann is recreating a visual video of her personal past events. What’s more, when the fridge cleaning task is completed, it is as if she has sorted and organized her memories: “I experience a sense of accomplishment.” Once “the [fridge] interior is clean and sparkling,” she considers her fridge reset and is ready to capture the next episode of her life. She even celebrates this achievement: “When all this sorting and cleaning was complete I sat in the living room for a short rest and drank a very small glass of sherry and [ate] a ginger biscuit. Well deserved I thought!” This is not to say that she has wiped away the old memories as she wiped down the interior of her “easier to clean” age-friendly fridge, for “quite a few notices on the [exterior] doors of the fridge” remain. These notes suggest that Ann’s fridge door acts as an entry into past memories and as a calendar that allows her to peer into the future. Figure 4-37 reveals Ann’s memories, including: her new split door fridge that Alvin selected; her aunt and uncle’s suite in her childhood home after the war; and as a reminder of the kitchen’s age-friendly renovation timeline.



Illustrates the Past

Elaine: My uncle is responsible for “all the stonework [in the home], meaning the stone in the fireplaces, in the entrance of the house, was done by him”



Involuntary Recall ‘lighting rod’

Gerry: “Marcel Dion scored and I went, ‘He scored!’ and a piece of coal flew and burned the rug!”



Historical Record

Elaine: “that’s why you had the fireplace, but you didn’t have the screen. You sat there with chicken wire and two blocks”

Figure 4-36. The memories Elaine’s fireplace holds.



Historical Record

Ann: "The experience of installing the new fridge reminded me of how long the complete kitchen renovation took"



Illustrates the Past

Ann: "The night the new fridge was delivered was a bitterly cold one and the delivery men said Alan would have to take the old door down to allow the new fridge to go through, what a cold task it was! Afterwards when the man helped Alvin re-install the door we all had a cup of Cadbury's hot chocolate"



Involuntary Recall 'lighting rod'

Ann:" ...No, the fridge was down in the other room! That was another room we had, we had a big kitchen room where the boiler was for the hot water and the fireplace...you pull the thing, pulley, and the huge racks of four lengths, for when everybody did their laundry"

Figure 4-37. The memories Ann's fridge holds.

Kwint, Breward, and Aynsley's (1999) brief definition of memory, "to live is to remember" (p. 2), eloquently captures the roles the fireplace and fridge play in the memories of these participant's aging-in-place practices. Elaine, Gerry and Ann are still very much living with these objects, in part because they have ensured that these objects evolved with them. They have embraced change in the age-friendly renovation of these objects. To be objects capable of invoking memories, these individuals recognized that the form of the object does not need to remain static. Rather, an object that evolves alongside its owners seems to be more likely to remain active in the owners' daily life and, as a consequence, in their memories. The positive memories an object possesses typically serves to strengthen an individual's attachment to it, such as is the case with an individual's home. Attachment is the fourth material culture theme revealed.

Attachment

Over time, homes often transform into museums facilitating the curating of possessions the family has become fond of (Rubinstein & Parmelee, 1992, p. 153). These objects' influence resides in their intangible ability to instill a sense of who we are, where we've come from, and where we're going (Belk, 1992, p. 37). Leaving home can mean parting with many of these belongings, a destabilizing process that Cooper Marcus (1992) described as the equivalent to "cutting off a part of the self" (p. 101). In both homes, many possessions existed that were, as Belk (1992) described, "priceless, irreplaceable, indispensable, passionate and personalized" (p. 45). What's more, as the homeowners aged, these possessions' intrinsic qualities increasingly pertained to the memories they evoked of other people, some of whom are no longer alive.

Attachment to Possessions

The possessions to which attachment occurs that is commonly observed in older individuals, as was the case in this study, included photos, paintings, and furnishings, particularly of deceased family members. Both Elaine's mother (Case study 1) and Alvin (Case study 2) were painters. Elaine's attachment to her mother hangs throughout the home: "whenever you see a painting around, they are my mother's." Accompanying her mother's paintings was Elaine's framed christening gown; "my mother did many things ... my mother made my christening dress. I had it done that way as a piece of artwork." When I asked if her own children had worn it, she responded

“no, because that thing was rolled up in a ball in the trunk in that room for so long.” Yet over time, with the passing of her mother, it has been transformed into precious art.

One of the most poignant displays in Elaine and Gerry’s home is a corner “shrine” to past and present generations; see Figure 4-38. One wall is covered with a collage of family photos, on the other hangs one of her mother’s large paintings. Tucked in the kitchen corner sits Elaine’s mother’s chair. Unconventionally located in the kitchen, this cherished possession not only avoids Elaine having to “relegate it to the basement” but more importantly, even though “it might feel a bit crowded, it suits” the room. Elaine’s kitchen is integral to her, both in its materiality and immateriality. Her mother’s presence in the room, as keeper of the family, is innate in Elaine’s feelings of where she has come from, who she is, and how she sees herself in the future. Furthermore, the idea for this corner was conceived as the couple left for Italy: “Gerry’s mother passed away. While we were gone I said I want the kitchen painted and I’m going to do that wall.” The wall not only marks the attachment the couple feels to Elaine’s family roots, but also Gerry’s.

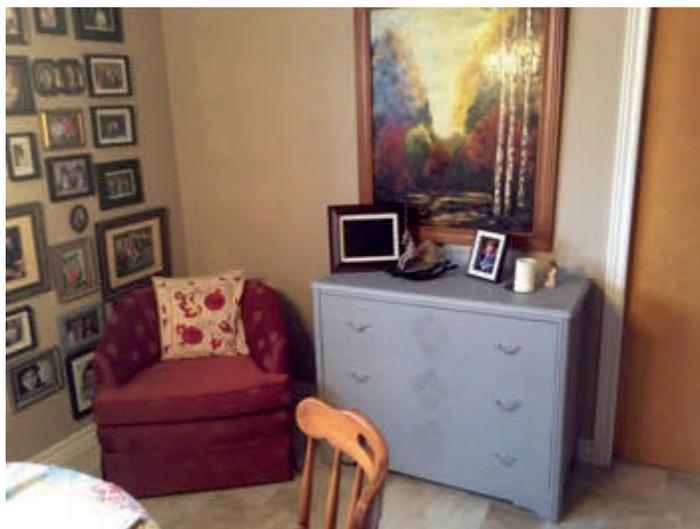


Figure 4-38. Elaine’s collage of family memories.

Another striking unconventional possession sitting in Elaine and Gerry’s kitchen is a small church pew; see Figure 4-39. Elaine explains:

Our church was having things done, so I said to Father Joe, because we were singing in the choir and all of the flooring was being replaced, and I said, if you are taking the benches out, because this was in the choir loft, because you can’t accommodate pews up there, I said, can I have the smallest one? He said, oh sure. That has got to be 150 years old.

I was captivated by this piece noting in my first walkthrough of the home; "while it just jumps out at you when you enter the room it seems very natural to have it there, it somehow is comfortably adsorbed in to the atmosphere of the room." I discovered its ease comes from its position as a testament to the family's history with the church, part of the fibre of the family. Elaine continues, "I was baptized there, I was married there, I will probably... ." The pew represents every major milestone of shared family experiences, most likely marking many of her parents and grandchildren's as well. When asked what is to become of these treasures, Gerry answered, "that is why the kids say, oh you're not going to sell the house."



Figure 4-39. Elaine's church pew.

With Ann's extended family overseas, she only has pieces of furniture belonging to Alvin's mother. When we came upon her mother-in-law's dresser, she immediately recounts the story of how Alvin's father "was a chauffeur ... and when the [Duke of Windsor] had to abdicate ... he drove them ... straight on to the liner, the ship." The dresser recalls for her not only immediate family members, but iconic English royalty that could have been influential in her English upbringing. Alvin's mother's writing desk now occupies a spot in his former den; "until recently, we had it in the living room. ... When all this was done, I thought it would be better to have it here. So I think it's worked better," seemingly comforting to her that Alvin and his mother's spirit occupy the same space; see Figure 4-40.



Figure 4-40. Ann's mother-in-law's desk.

Ann drew our attention to smaller pieces acquired from her own family. The first was a silver candelabrum, a gift from her mother and father “when it was [her parents’] silver anniversary.” More than once she mentioned how at “Christmas time, I have candles that I light ... in my mom's candlestick.” Accompanying the candelabrum on the table are “some of grandma's cutlery.” When Ann sets her table for special family occasions, it is apparent her parents and grandparents are present, alongside her Canadian family.

Only having recently finished the renovations, that included repainting the home, rather than the walls being covered with photos and paintings, pictures and canvases possessing the power to recall others are stacked neatly against the wall: “see these are all my paintings ... masses of them.” The one painting hanging in the dining room is an image of Ann's hometown's harbour, purchased by her father while she was a child and gifted to her years later; see Figure 4-41. Not only does the painting serve as a reminder of the family back home, but the setting also acts as a reminder of the events that took place there, such as “this is the ... building where my niece was married about a year and a half ago.” Sharing a story of her sisters attending the community celebration of a royal vessel's retirement, she says, “I wish I had been there, I really do.” Riley (1979), in his paper *Reflections on the landscape of memory*, suggests that “the remembering of

the place has less to do with the place *per se*, and more to do with the yearning for the emotion or mood it once invoked” (as cited in Cooper Marcus, 1992, p. 111) and the social relationships that occurred there (Riley, 1992, p. 19). Ann longs for the company and celebratory mood her family shared as they partook in the harbour festivities, describing it as “a wonderful time” and “it was great,” making me, as the listener, question whether she was also there. A fascinating aspect of Ann’s favourite painting is that a Canadian Pacific logo appears in the backdrop. She remarks, “little did we know” I’d move to Canada, “I think it’s something.” The painting appears to bridge the ocean that binds the two countries she calls home by acting as a window to where Ann came from.

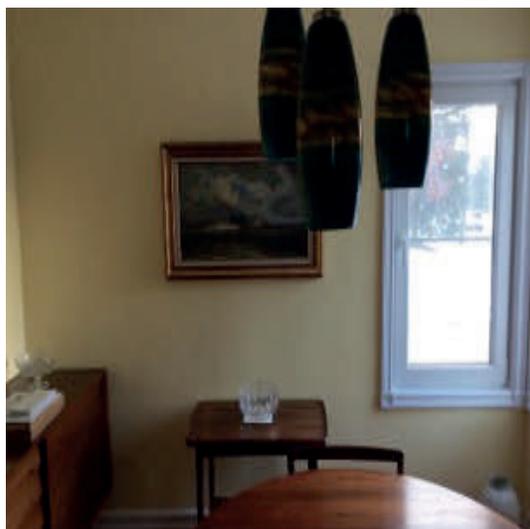


Figure 4-41. Ann’s painting of her childhood city.

Attachment to Place

For older individuals, place attachment represents a means to recall “one’s life course ... keeping the past alive,” “retaining a positive self-image,” and “representing independence and competency” (Rubinstein & Parmelee, 1992, p. 140). To understand how the experiences shared with a place translates into a “space that has been given meaning” (Low & Altman, 1992, p. 5), or place attachment, Riley (1992) suggests examining these experiences in the context of human history, function, and intentionality (p. 31). These three human experiences were also described in Proshansky, Fabian and Kaminoff’s (1983) discussion of their concept “place-identity” (p. 59). They

defined “place identity” as an individual’s “cognitions about the physical world” (Proshansky et al., 1983, p. 59) in which they live and suggested it involves: the emotional ties of “place-belongingness” (p. 76) that occurs when an individual is immersed in a setting for an extended period of time, fostering development of environmental skills, and the learning of a new social role (p. 76); the individual’s cognition of their ability to “play their role” in the setting (p. 77); and, in situations where the physical environment does not “‘work’ for the person” (p. 77), how some individuals will manage to “‘transform’ the inadequate physical setting” (p. 77). Therefore, an individual’s stories of their experiences within a place possesses the potential to demonstrate how the homeowners’ emotional belongingness (history) combines with cognitive knowledge of the situation (function) to generate their future expectations, resulting in behaviour that transforms their home’s spaces (intentionality). A brief exploration of the renovation, using these three human contexts, follows. The attachment to place process is examined from the perspective of the female participants, since only they completed the life history interview.

Elaine’s renovation relocated the laundry from the basement into the kitchen. During the home renovation interview, when asked why a front-load rather than top-load washer was selected, she replied with fervour:

I’ll tell you why. While I was ... [in] California ... my mother got Westinghouse products and it was front loading at that time. Whenever I remember that, I [remember how I] washed a few of my checks in there when I did my uniforms. I’d have to go back to payroll and say, “can you give me another check. I just washed it.” “Well, bring me the part” [they responded]. I said, “What part?”

Today, when looking at the new washer and dryer she chuckles, remembering herself as a young woman using her mother’s machines for the first time; a fond memory of an inexperienced young woman at home, supported by her mother.

Today, Elaine’s a laundry expert, prudent in her ability to efficiently get the job done in a frugal manner, a lesson she passes on to her grandson. She tells the story:

At one point in time, [he] stayed over and the clothes didn’t go in the dryer. You know what towels can look like and feel like. He said, “boy, that’s a scratchy towel.” I said, “well, I’m sorry, but it was a sunny day and there was no wind and you got scratchy towels.”

This conversation highlights Elaine's knowledge of how to do laundry effectively, providing an opportunity to spend (and later relive) time with her grandson and memories of shared experiences with him in the backyard pool on a warm sunny day.

When the conversation turned to what prompted bringing the washer and dryer up from the basement, the decision process was initially "I couldn't do the stairs. I refused." Yet as Elaine continues, it is clear there is more, saying, Gerry "said, he could do [the laundry]. I thought, you know, there's no way he can do the kind of laundry the way I do. He can't.'" Through this statement, the task of doing laundry is identified as her skill, one she has mastered, providing her a sense of value and thus maintaining self-esteem. Elaine's control of this household ritual is part of her identity as the family caregiver: "I'm washing twice a week and that's not bad for a home where basically, I'm making sure he's changing his underwear!" The intentional decision to move the laundry upstairs was motivated by more than the finding that it provide her with the opportunity to multi-task in the kitchen; it guaranteed, in the home she and Gerry built together, that she remained capable of accomplishing her most important job; reinforcing this, while looking at Gerry, she utters "I take good care of him." Figure 4-42 displays the ease of use of Elaine's washer and dryer and the close proximity detergents to her machines.



Figure 4-42. Elaine's easy to program washer & dryer and her convenient detergent storage.

Ann's renovation focused on the renewal of her kitchen. Before World War II, her mother's family owned and operated a well-regarded bakery "known for miles around for their baking and their bread." Tragically, after just investing to have "it all modernized and new electric ovens and

things like this put in” it was lost during a German bombing blitz. The bakery was never rebuilt. Ann explains: “They lost everything. In those days, you didn’t get compensation.” This traumatic family experience weighs heavily, not only on her recollections of where she came from, but also in how she has always seen herself. As we reflect on her English childhood during the home renovation interview, she opens the conversation with “I was born a week before war broke out, so my memories might be a bit different.”

Even so, there are many reasons her kitchen invokes happy memories of home. With the inheritance, the kitchen was a gift from a close aunt who “used to push me in my pram when I was a baby and she was like a big sister to me as I grew up.” As a result, it was only fitting that Ann desired “a European look; clean lines” in her kitchen’s style. This point is reiterated when excitedly describing the first visit to the kitchen designers shop: “As soon as I walked in, it was just like Europe because I wanted a European kitchen.” Ann’s “dream kitchen” carries her back to joyous times at home, in the care of loved ones and in a community that remembered her family with pleasure for years after the war; “even up until maybe a decade or so ago people would stop and say, ‘well, I remember when you baked this and that, all these’... they still remember the bakery.” Even though her family’s history can’t help but be overshadowed by the horror of war, the emotions she treasures, and which her kitchen invokes, are of a loving aunt and a community with lingering feelings of warmth for her family.

While an extremely confident woman, Ann is also modest. Asked to identify her special talent, she pauses and at first replies “I don’t think I have one.” When pushed to consider the question further, after listing off multiple things she doesn’t think is she accomplished at, Ann brightens up when the kitchen is mentioned again, announcing “I like to cook and bake. I like to bake. That’s what I like to do. Yah, I do!” This is followed with the comment that her “mom was good at baking.” Additionally, although her mom was at home, Ann quickly adds, “once a week she taught a cooking class.” She feels her family’s roots, her mother in particular, equipped her well to not only prepare meals for her family, but to enjoy cooking and baking as a pastime. While Ann still feels comfortable preparing meals for herself, her days of preparing larger meals have dwindled. Instead, she is rewarded by her sons’ eagerness and proficiency in using the kitchen’s new

amenities to prepare family meals; “the kitchen table’s covered in stuff, everything. And they clean it all up. You know we’ve had a great meal. It really does work well.”

What made Ann decide to put the inheritance towards a new kitchen? At first glance, the obvious answer is as a tribute to her generous aunt; “I thought, Auntie used to like cooking. She had a tiny kitchen but she did some great meals and things and she’d bake. ... So I decided to put it into the kitchen.” On further investigation, there is more behind this intentional act. When asked whether she renovated the kitchen so possibly her sons would someday call it home again, she reflected she hadn’t really considered that, even though “it’s a nice little bungalow.” Instead, “my idea now is to make it welcoming and cozy; you know, if it’s warm and cozy then people come.” She didn’t remodel the kitchen only “because it is cleaner and modern and easy to work with” for her or her sons; she renovated to ensure others might visit. As Ann says, “I think the kitchen is the centre of the home.” She values the company of others, and sees her bright, clean, modern kitchen as possessing the ability to make her guests feel as equally at home as she does. Figures 4-43 to 4-48 highlight more of the innovative age-friendly design features that Ann has integrated into her new kitchen.



Figure 4-43. Ann’s multiple, custom counter heights.



Figure 4-44. Ann's pot drawers.



Figure 4-45. Ann's roll out pantry.



Figure 4-46. Ann's lazy susan.



Figure 4-47. Ann's smaller dishwasher.



Figure 4-48. Ann's side-opening wall oven.

The renovations the two homes undertook are the result of these women's experiences with the everyday tasks of living. Their very deliberate decisions to renovate drew on their experience from the childhood home they came from and who they have become in their present homes over the last 40-50 years. The common motivation for change was the appreciation that the place they call home is instrumental in their shared meaningful experiences with others; something they feel empowered to ensure continues. In these two renovations, these women have decided who they want to be, and be seen as, as they age. The following figures summarize these women's experiences with place attachment that compelled them towards renovations that better met their expectations of what they imagine their futures to be; Figure 4-49 represents Elaine and Figure 4-50 represents Ann.

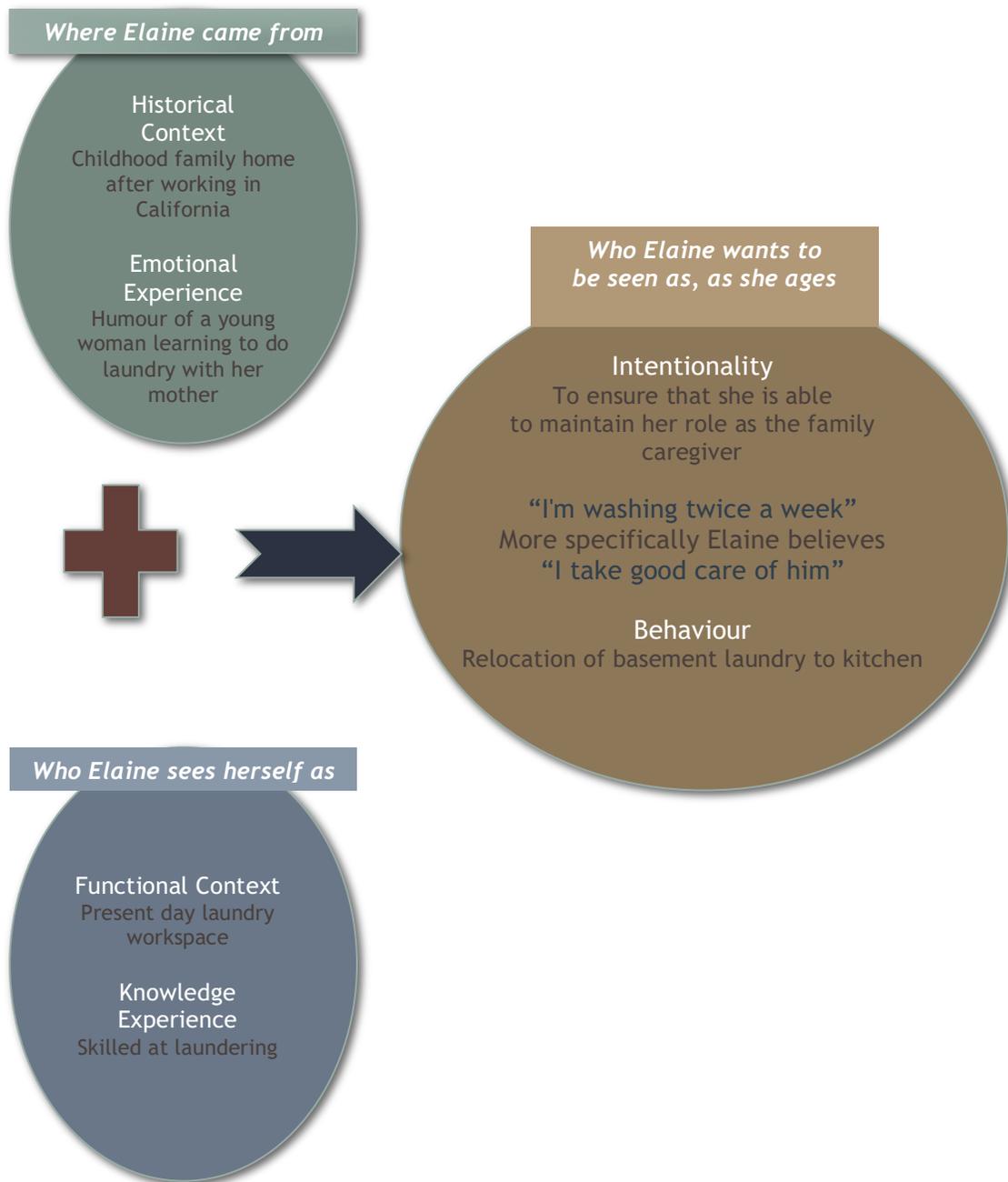


Figure 4-49. Elaine’s homeowner-home attachment relationship that prompted the moving of the washer and dryer from the basement to the kitchen.

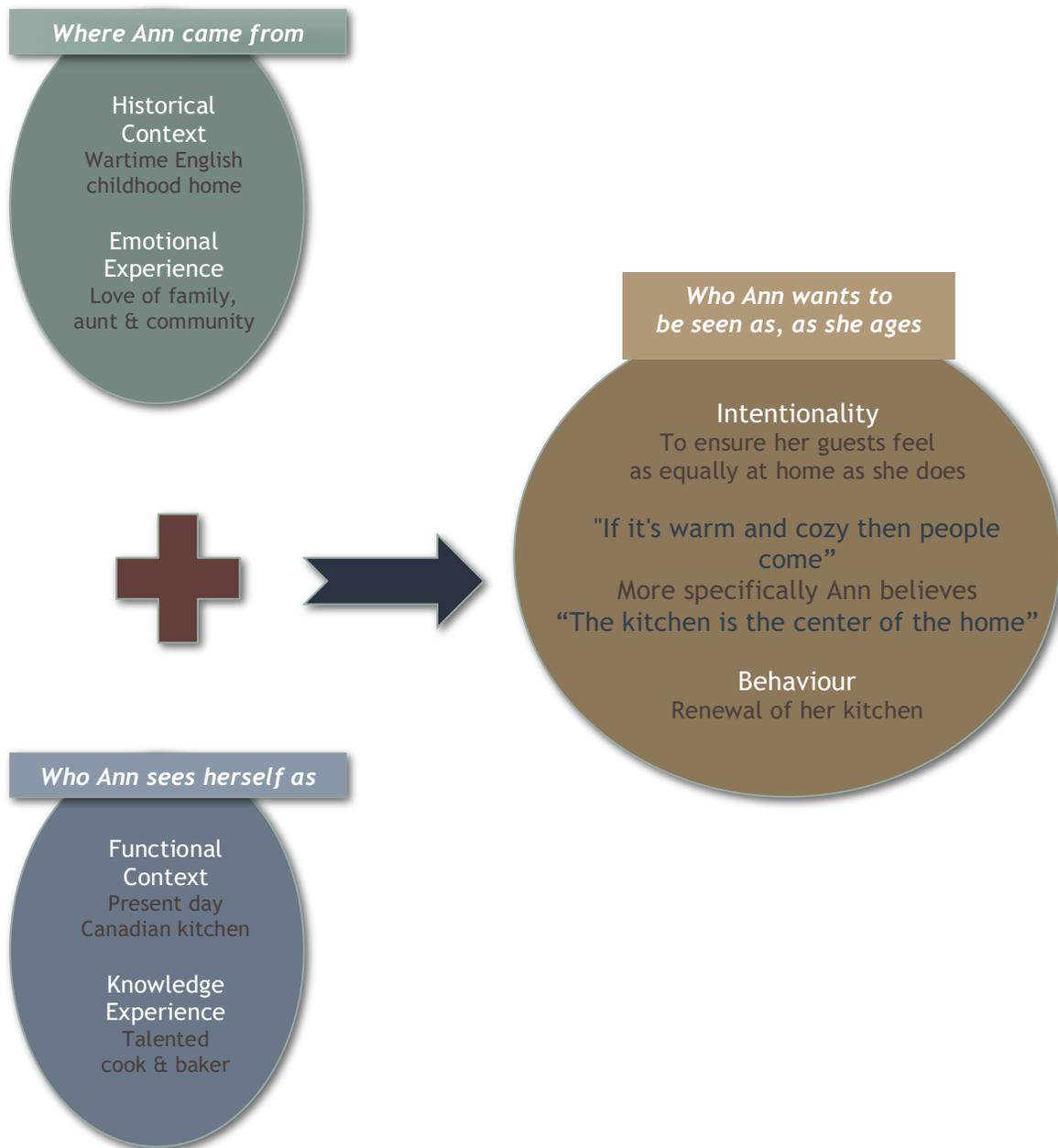


Figure 4-50. Ann's homeowner-home relationship that prompted the renewal of her kitchen.

The Garden

The final aspect of place attachment that, as a surprise, came to the researcher was the role the home exterior, the front and back yard, played in influencing what occurred inside the home. For the sake of clarity, the various outside spaces contained within a home's yard are referred to simply as the "garden". The word garden is primarily used for two reasons. First, this was the term that all the participants used, freely and often, when referencing any of their home's outdoor spaces. In each case, it became apparent that the garden represented the home's lawns, flowerbeds, vegetable patches, patios, and, for Elaine and Gerry, even the pool. Second, the scholarly research drawn upon to examine the relationship between the individual and the home's interior and exterior spaces also extensively uses the term garden to encapsulate these numerous, unique, outdoor spaces. In *Cultivating Home*, the garden is understood to be any outdoor space located in close proximity to the home, over which the homeowner has control as a result of ownership of the property. This privately controlled space is not to be confused with any public gardens within the homeowner's community. Autonomy in how the home's exterior space is arranged and utilized is understood, in this study, to be as important as the control the homeowner has over the design and use of their home's interior.

Riley (1992) determined that in terms of place attachment, nature and home are typically "privileged categories" (p. 25) of landscapes often instinctively bound together in the expression home and garden. Why and how does the garden's outside space factor into the decision to renovate the home's inside space? Cristoforetti, Gennai, and Rodeschini (2011) suggest that "the introjection of external spaces" (p. 230) is one process that older individuals continuously use to re-evaluate and re-construct their attachment and meaning of home. In this process, Cristoforetti et al. note that "non-domestic space is transformed into a domestic one" (p. 230) and involves the homeowner "bringing 'the outside' into the home" (p. 230). The construction of the sunroom and garden room, as well as the emphasis on large accessible windows, was the intentional actions that potentially bore this attachment out. *Cultivating Home* revealed that while the role of the garden varied from home to home, what was mutual was the positive value associated with this space.

Elaine confirmed how their “life revolves around nice weather,” the backyard pool providing pleasure. Historically, Elaine has an emotional attachment to her childhood summers at her father’s cottage. From a functional context, Elaine was astute in realizing that they did not have the means to provide a similar opportunity to their children. Elaine describes her process of attachment to the pool: “I said ‘we can’t take these kids for a vacation and to go to cottages, we just don’t have that kind of lifestyle.’ I said ‘I come from that kind of lifestyle, my father had a cottage, we grew up that way but for us it was more feasible to have the pool in the ground’ so that’s what we did.” Their intentional solution was to install a pool. With the children gone, the pool continues to be consequential as a vehicle for bringing several generations of family together in a variety of different ways, as seen in an archival photo; see Figure 4-51. Additionally, it extends Elaine’s belief in the importance of ambiance to the outside space. Elaine confirms this in her story of how Gerry accidentally spilled chemical in the pool that discoloured it, necessitating that the pool be repainted as it “is awful way to look at something that is so beautiful.”



Figure 4-51. Elaine and Gerry’s pool years ago.

Gerry’s love of the yard is derived from the recreational and social contentedness it provides. This became apparent when asked why they had decided against moving, Elaine responded because of the “yards that are available”. The yards of the homes they had looked at

were far less desirable than their own. Furthermore, she recognized how important the yard is to Gerry's well-being, stating "that's part of your life Gerry" to which he replied "I love my backyard".

While not having done a life history interview with Gerry makes it harder to identify the yard's historical emotional attachment to him, Elaine, in friendly conversation, did mention that Gerry came to Canada because his father was unable to feed his large family. Therefore, Gerry's vegetable garden in particular, may provide him with the sense of food security absent during his childhood. His functional knowledge is evident in how hobby gardening provides a sense of purpose and keeps him fit as he ages. This is clear when he describes how, with the best of intentions, his grandsons disrupted this: "I had to stop them from cutting the grass, because I want to do it for exercise." Intentionally, his solution was not only to ask the boys to leave the mowing to him, but he also consciously "picks the time when it's adequate" to work outside, meaning when the weather and his health are conducive. Figure 4-52 shows Gerry's vegetable garden.



Figure 4-52. Gerry's vegetable garden.

A lifelong passion for the garden is evident in Ann's detailed description of her childhood yard, including a sketch she did of it, shown in Figure 4-53.

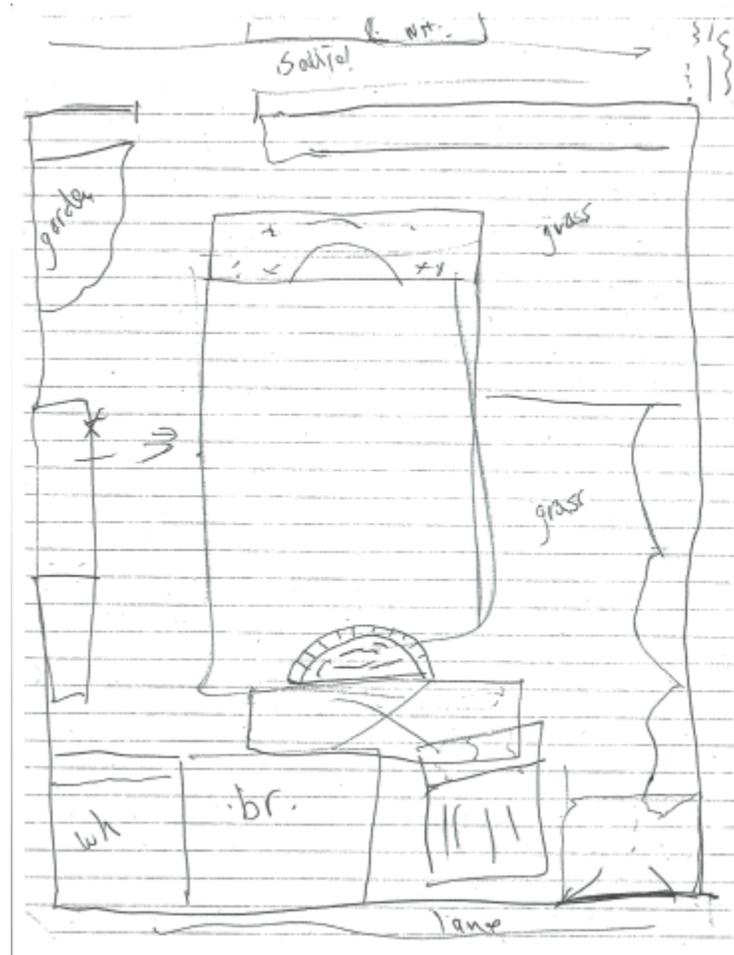


Figure 4-53. Ann's sketch of her childhood garden.

Ann was keen to sentimentally express her parents' emotional perspectives concerning the garden's care: "my mom loved the garden, of course my dad was sick of it. He would be digging weeds and digging up the plants." In her marital home, Ann attributes Alvin as having possessed the knowledge and skill invested in the garden for "he did all the back garden, cut the beds and things like that." Today gazing at the garden, she remembers Alvin. Although Ann is not one to garden, she has intentionally enlisted the help of a professional landscaper to keep it vibrant, stating, "we are also having the front garden re-designed soon." Ann and Alvin chose this home

because of the beauty of the neighbourhood: “We used to walk around the neighbourhood and it was really nice.” Nowadays, Ann assumes responsibility of Alvin’s role in maintaining a neighbourly tradition of pride by ensuring the home’s exterior space is well kept, writing, “ours is an older neighbourhood with magnificent trees and boulevards which we all hope will be there for many years to come.”

Summary

Cultivating Home’s findings have identified that the material culture themes of affordance, identity, memory, and attachment to possessions and place factor into an older person’s age-friendly renovation decision. Affordance occurred when the participants perceived that a feature of the home was easy to use and supported the tasks and activities they wished to accomplish. Common to the identities of these homeowners were the personal traits of being autonomous, prideful, up-to-date, patient, mindful, prudent, talented, and resourceful. The force an object has to illustrate the past, invoke involuntary recall, and serve as a historical record formed the basis of memory. Attachment to possessions further fostered the participants’ sense of identity, including where they came from, who they are, and who they wish to be seen as, as they age. Moreover, as these individuals aged, these possessions were increasingly valued for their linkage to others, alive and passed on. The examination of attachment to place, within the context of the emotional historical experiences of their childhood and a lifetime of functional knowledge based experiences, highlights how these contextualized human experiences combined to spark intentional actions that resulted in age-friendly renovations; prompting changes to the environment that ensured their often conscious and unconscious future expectations are met. Eye opening was the degree to which place attachment of the home’s immediate exterior space, including the garden, influenced their decision to modify their respective home’s interior space.

CHAPTER 5: DISCUSSION

It is amazing how the mind wanders in the garden. For many, including myself, the garden retains a mystical power to open up the imagination to observations and ideas that otherwise might be unwittingly disregarded. Ironically, it was while I was working in my own garden that the unexpected results of this study unfolded. I was caught off guard with the role of the home's immediate exterior space in the age-friendly renovation process. While I had intended on examining the location of the home, particularly its proximity to different amenities, I never considered investigating the nature of home's yard in my preparatory work. I had inadvertently considered only how the phenomenon related to the house's interior spaces, even though I spend as much time in my yard as inside my house. I discovered through the participants of the study that the house's interior and immediate exterior spaces are entangled because they are highly valued. Together the interior and exterior spaces of the house defines home. So, blindsided by these findings, I found it necessary to renew my commitment to continually re-engage in reflexivity to regain perspective.

The discussion that follows therefore begins with a brief description of the context I found myself in at the time my findings became apparent. It then reflects on a new meaning of home and how this impacted these individuals' willingness to adopt age-friendly home designs inside the home. Next, material cultures themes of memory, identity, and attachment are explored, revealing how the homeowners' relationship with their homes immediate outside space has contributed to their propensity to seek out new affordance inside their home. Lastly, suggestions are made as to how gardening may be used, as a communication channel, in the promotion of age-friendly home design.

Home and Garden

Twenty-one years ago, while building our home, I suggested we purchase and consolidate two lots to overcome what we perceived as lot shrinkage. I have always been an outdoor person. I saw the garden as key in our children's play, an area to grow food, and a medium to express creativity. I love my garden. Two years ago, with the children grown and a greater appreciation of the work required in maintaining a large yard, I saw a need to renovate it. No longer needing to

watch our children, more privacy was desired, so a fence was built. Determined to lighten the annual planting, more perennials were introduced. With the sun harder to tolerate, more trees were added. To reduce struggling with the lawnmower, the contours of the beds were softened. And finally, worried about my elderly parents tripping on our raised walkways, they were replaced with ground level interlocking stones. I am presently engaged in my own age-friendly renovation phenomenon in the garden. What's more, as my husband and I are do-it-yourself individuals, countless hours have gone into this mammoth task. While shovelling stones this summer, my mind continually wandered back to the impromptu garden stories shared by my participants. It was obvious they possessed a similar ardent love of their yards. So much so that, like myself, both had built a sun/garden room; a room that blurs the boundary between the home's interior and exterior spaces. I am not sharing this because my experience with my garden favoured these findings and I found it necessary to "come clean in an apologetic or confessional manner" (Kleinsasser, 2000, p. 161). Instead, it enabled me to perceive the linkage between how what happens outside the home's walls encourages what happens inside them. The aim of this discussion is to reveal how the themes of attachment, memories, identity, and affordance the individuals have with the home's exterior spaces have consciously and unconsciously factored into their age-friendly interior home renovation decisions; how they found themselves "cultivating home."

A New Meaning of Home

I began this work emphasizing the distinction between the terms house and home. What has become clear is that for the homeowners studied, home extends beyond the house's physical walls to encompass the garden space. The strongest evidence of the value and meaning the yard space holds lies in the fact that very early on, each household undertook an age-friendly renovation to create a sun/garden room; a room Chevalier (1998) called an "intermediate space between the inside and outside" (p. 39), softening the boundary between the house and yard. Fluidity exists between the house, home, and garden, impacting people's perception of their meaning of home (Bhatti & Church, 2004, p. 44). The garden is a "spatial continuation of the house" (Chevalier, 1998, p. 40) and therefore significant to one's meaning of home.

Age-Friendly Design and the Garden

Still, the garden possesses a unique quality not found inside the house; “it is a living organism” (Leaver & Wiseman, 2016, p. 771), allowing for interaction with nature (Bhatti & Church, 2004, p. 38) in a personally charged manner (Bhatti & Church, 2004, p. 40). Salisbury (2012) contends that “soil is dynamic [and] alive” (p. 28). The most relevant aspect of the garden to *Cultivating Home* is its ability to draw an older individual’s attention to the lifecourse and the “tensions, ambiguities and contradictions” of aging (Bhatti & Church, 2004, p. 49), as well as providing a “powerful means of coping with the difficulties of life in older age” (Adams, Pascal, & Dickson-Swift, 2015, p. 23). The garden is more than a time and place for quiet reflection; it possesses the power to tangibly display change over time, that in these households invoked adaptation. It is the routine practical tasks of homemaking, both inside the home and outside in the garden that has informed these homeowners’ perceptions of home (Bhatti & Church, 2001, p. 369). This long-term homeowner-home relationship has become ingrained in their memory and identity, strengthening their attachment to home (Cooper Marcus, 1992, p. 107). As individuals live with their home’s landscape, the actions partaken in, whether “habitual, accidental, subversive – is both ‘of the moment’ and something that extends forward and backward in time and place” (Bender, 2002, p. S107). These actions provoke a sense of where we came from, who we are, and how we see our future selves; elements of the theme of attachment. What’s more, Rubinstein and Parmelee’s (1992) research deemed older individuals’ attachment to place significant in ways that mirror the themes revealed in *Cultivating Home*’s findings: “remembering one’s lifecourse ... keeping the past alive”, memory; “strengthening the self ... retaining a positive self image”, identity; and “enacting ... independence and continued competence” (p. 140), affordance. I believe that what promoted these individuals’ willingness to implement age-friendly renovations inside the home was in part fostered through their varying personal relationship with their outside gardens; a place that allows them to “engage, confront, and understand the changing natural world” (Bhatti & Church, 2001, p. 380). This ultimately spurs their agency to address their experiences with the aging process (Bhatti & Church, 2001, p. 380).

Memory, Identity, Attachment, and the Garden

Bhatti (1999) stated that “gardens are the work of human agency, a very personal act steeped in emotion, family history and self-identity” (p. 184). Therefore, not only is each garden space as unique as the individual it belongs to (Leaver & Wiseman, 2016, p. 771), but the relationship between individuals and their garden varies considerably. Stenner, Church, and Bhatti (2012) identified four distinct ways individuals use their gardens, two of which appeared present in *Cultivating Home’s* findings; the nostalgic and pragmatic modes of operation (pp. 1718-1719). Nostalgic refers to the role memory plays and the linkage to others nurtured by these reflections (Stenner et al., 2012, p. 1720). Conversely, pragmatic focuses on gardening as an activity and the individual “pleasures and pains associated” with gardening tasks (Stenner et al., 2012, pp. 1721-1722). Based on *Cultivating Home’s* findings, I see the garden as a setting that intensifies a person’s attachment and meaning of home, both via historical memory (nostalgic) and functional identity (pragmatic) modes of operation (Bhatti, 1999, p. 188).

Memories in the Garden

For many older individuals like Ann, spending time in the garden is as rewarding as the act of gardening (Hawkins, Mercer, Thirlaway, & Clayton, 2013, p. 110; Leaver & Wiseman, 2006, p. 768). Ann is a leisure gardener. While she minimally engages in the act of gardening, she immensely enjoys spending time in it (Bhatti & Church, 2004, p. 43); see Figure 5-1.



Figure 5-1. Ann in her garden.

Ann's lifetime of memories drives her desire to remain connected to her home's garden. As Ann sketched out her childhood garden, it was obvious how acute her image is as she arranges the lawn, beds, greenhouse, children's summerhouse, and pond. On numerous occasions, while she spoke of how she does not remember returning home after the bombing, she does "remember a big party at the end of the second World War [and] everybody in the back garden." The war ended and her family and friends were able to celebrate unscathed in the garden. Cooper Marcus (1992) refers to such vivid childhood memories of place as "psychic anchors" (p. 89) that become a part of who we are. Ann is likely to forever associate her garden with a sense of security (Milligan, Gatrell, & Bingley, 2004, p. 1787) and likely a safe, peaceful place to be.

Ann also sees her childhood family in her garden. The British are "a nation of gardeners" (Bhatti & Church, 2004, p. 37). Reflecting on her garden not only brings to mind her parents' cultural practice of caring for the family garden, but also how as retired older individuals "everyday they would go and walk around the gardens", a leisure pursuit they engaged in at Ann's current age. Furthermore, Ann draws her sister into the fold, commenting on how "my mum and dad would be thrilled to see" how my sister's garden has "developed." For Ann, the garden is full of family; those passed on and still living (Stenner et al., 2012, p. 1722).

What makes Ann's memories in her present home's garden space even richer is how it continues to make her life with Alvin visible (Berns, 2016, p. 168). By caring for the garden, whether by herself or by hiring someone, Ann continues in her role as a wife. Harrison (2003) describes how the living and the dead are mutually indebted; the dead depend on the living to "preserve their authority, heed their concerns, and keep them going in their afterlife" (p. 158) while the dead "help us to know ourselves, give form to our lives [and] organize our social relations" (p. 158). The garden preserves not only Ann's role as Alvin's wife, but also the unity of their small Canadian family. This is especially poignant given Alvin created, planted, and maintained the garden. He even completed paintings of it while gazing out from his study; the same room that today is the home's garden room; see Figure 5-2. The garden was dear to Alvin, making it exceedingly dear to Ann.



Figure 5-2. Alvin in his garden.

Gardening and the Creation of Identity

Gerry exemplifies the definition of a keen gardener (Bhatti & Church, 2004, p. 43), an older individual literally living for his garden: “I love my backyard, I go out there and I could spend, she [Elaine] says, ‘you’re going out to play now.’” This attachment to his home’s outdoor space is deepened by its ability “to develop and maintain” (Gross & Lane, 2007, p. 235) his identity. Gardening not only provides a sense of purpose, but having to relinquish it might likely be “stressful and upsetting” (Gross & Lane, 2007, p. 236). Gerry’s lifetime investment of creative endeavours in the garden, such as the interlock patio he built, (see Figure 5-3), further intensifies its meaningfulness (Cooper Marcus, 1992, p. 108); as Elaine emphasizes, “that’s part of your life, Gerry.”



Figure 5-3. The interlock patio Gerry built.

Elaine’s relationship represents a blend of what Leaver and Wiseman (2016) refer to as doing and being in the garden (p. 768). While her projects have been smaller, including reconfiguring a quiet area under the tree that incorporates her mother’s table, “her design, not mine” adds Gerry, Elaine’s primary enjoyment is derived from being in the pool, “I am [still] here because I want the pool”; see Figure 5-4. Elaine and Gerry’s home’s outdoor space embodies Gross and Lane’s (2007) suggestion that “gardens can contain and accommodate multiple identities, with couples allocating areas or chores that match personal preferences or styles of activity in the garden” (p. 235). The eight identity traits outlined below (autonomous, prideful, up-to-date, patient, mindful, prudent, talented, and resourceful) and revealed in *Cultivating Home’s* findings, are apparent in Elaine and Gerry’s joint relationship with their garden.



Figure 5-4. Elaine’s remembrance garden with her mother’s table, as well as her pool.

Autonomous. After putting in the pool, Gerry made the decision to pour a concrete driveway, as Elaine explains, “to upgrade his home knowing he was going to live here until he left feet first, he needed to have a concrete driveway.” The design was a source of contention:

I was so unhappy with the driveway. There’s no break there, it’s all concrete. And I say, wouldn’t it look nice if we had a row of blocks up each side or in the middle. I had to fight with him to get the front serpentine, not to have it straight.

Elaine admits that while she “wasn’t enamoured” with it, she also knew “it had to be done.”

What's more, it benefited her, "it made living in the home cleaner," reducing the dirt "coming through from the garden." This autonomous decision demonstrates the couple's control over and satisfaction with managing the driveway installation (Gross & Lane, 2007, p. 236).

Prideful. Overlooking the home's backyard, Elaine draws my attention to the flagpole that stands with pride in it: "The only other thing I asked Gerry to do was to put up a flagpole." Gerry continues the conversation, describing how he crafted and delivered, strapped to the side of his car, the "50-foot" pole, arriving "just like Sir Lancelot!" He stresses the flagpole is "very well made because it is well balanced", making it easy for him to raise the flag alone; see Figure 5-5. This experience highlights the couple's "positive connotations associated with ownership" of their home's garden space, as well as it providing an "opportunity for self-expression and creativity" (Gross & Lane, 2007, p. 239).



Figure 5-5. Gerry's flagpole.

Up-to-Date. "Ambiance" is the term Elaine used to describe the vibrant up-to-date atmosphere she created inside the home, which extends into the outside garden. Together, using dollar-store shower curtains and plumbing pipes, they created a poolside cabana. Elaine accentuates how, with the curtains tied back, "it just gives you that whole ambiance." Innovation

is a trait Williamson (1993) has historically linked to gardeners (p. 99). The basis for fashionable ideas often comes from a continued commitment to a wide variety of current day media (Milligan et al., 2004, p. 1782) and its mix of “technical advice with presentations of actual gardens” (Chevalier, 1998, p. 47). Elaine made particular reference to her interest in home and garden television, popular with gardeners (Bhatti & Church, 2001, p. 373).

Patient. The ability to cope with the garden’s care requires critical thinking that promotes “adaptive responses” (Milligan et al., 2004, p. 1782). Gerry’s patient resolve to continue cutting the lawn by spreading the task over more than one day indicates how the garden provides “a powerful means of coping with the difficulties of life in older age” (Adams et al., 2015, p. 23). When gardening, Gerry not only encounters challenges arising from his aging body, which Elaine acknowledges, saying “there are days he cannot [cut the lawn] because the wind affects him and the heat will exhaust him,” but, when able, this task also provides exercise. Gerry values this for its ability to “keep the body active” and resist the discrimination associated with ageism (Bhatti, 2006, p. 322).

Mindful. Change is the constant in an outside garden (Leaver & Wiseman, 2016, p. 771), easily visible in the seasonal interaction of “plants, wildlife and other physical elements” (Bhatti & Church, 2004, p. 39). A garden’s presentation is never static, regardless of whether the owner has time for it; “nature is working all the time” (Gross & Lane, 2007, p. 237). While these daily changes are often subtle (Adams et al., 2015, p. 12), mindful individuals like Elaine still pick up on them. This is apparent in Elaine’s remark of how “global warming has made it impossible to container plant.” Additionally, she mentioned how the use of her birdbath had been recently curtailed due to the fear “of disease.” This ability to perceive change over one’s lifetime while aging-in-place is in keeping with Adams et al.’s (2015) finding that “contact with nature in the domestic setting” (p. 22) facilitates not only recognition of environmental change, but likewise “the process of aging” (p. 22).

Prudent. Just as Gross and Lane (2007) confirmed that older individuals “will make adjustments to their activities in order to continue gardening” (p. 236), their research has shown that older gardeners also deal with declining capacity by lightening their workload (p. 236). Gerry

has implemented this practice, having recently reduced the size of his vegetable garden. The couple also demonstrates prudence in the lighting of the outside spaces; “when the electricity was cheap we use to have flood lights all over the place.” Now a strategy has been devised to address “a lack of finances”, a constraint common amongst gardeners (Gross & Lane, 2007, p. 236), by cutting back on this luxury. Still, gardeners in general consider gardening a cost accessible pursuit (Leaver & Wiseman, 2016, p. 773).

Talented. Observation and exploration are central to the gardening experience (Milligan et al., 2004, p. 1785). Gardeners learn to problem solve through experimentation (Chevalier, 1998, p. 47), as Elaine and Gerry confirmed in their multiple attempts to deal with climate change. After container gardening became difficult, due to an incessant need for watering, they planted impatiens, which became diseased, requiring them to again try something new. They recently have “been putting geraniums in” with mixed results. Adaptation is a talent of successful gardeners, requiring a dedication to lifelong learning in their unending search for new materials and methods. They frequently acquire ideas “while sharing something with others” (Leaver & Wiseman, 2016, p. 772).

Resourceful. At times, the solution to a gardening issue comes from assistance offered by family and friends (Bhatti, 2006, p. 331). These resourceful people often benefit from the input of family members in decisions concerning the outside garden (Taylor, 2008, p. 6). Gerry acknowledges that if he ended up alone in the house, without his grandsons’ help the pool would significantly impact his ability to continue age-in-place. He perceives his only option would be to remove it, but at a cost of “\$20,000 that’s not feasible, [so] probably I would sell and move,” a decision he hopes he never has to make. Furthermore, reaching out for assistance may result in “building bridges” to other existing community supports (Myers, 1998, p. 181).

Attachment to Home and the Garden

What I have begun to reveal is that attachment to nature, as demonstrated through the participants’ love of their home’s gardens, appears to have further strengthened the homeowner-home relationship by capitalizing on the emotional and functional forces of memory and identity. This deepened attachment serves to intensify the meaning of home, and in these households, it

seems to have equipped them with the resolve, traits, and information that, in turn, opened them up to the advantages of age-friendly design. They were able to recognize, calculate, and validate the affordances that age-friendly renovations could bring to their quality of life. Table 5-1 summarizes the dynamics of the home and garden attachment process.

The findings of this study suggest that these participants' attachment to their home invariably motivated them to seek affordances in their home supporting their desire to enact independence. This desire was accentuated through their attachment to the home's outside garden spaces and, I believe, intensified these older homeowners' desire to seek out and implement age-friendly design affordances in their home's interior and exterior spaces.

Table 5-1

Cultivating Home: The Dynamics of the Home and Garden Attachment Process

Individuals' attachment to their home and garden			
Significance of individuals' attachment to their home & garden:	Remembering where one came from	Strengthening one's self-image	Confirms who one wishes to be going forward in life
<i>Cultivating Home's</i> themes instrumental in individuals' attachment to their home & garden:	Memory	Identity	Affordance
Human contexts of individuals' attachment to their home & garden:	Historical	Functional	Intentionality
Attachment to the home & garden provides a means of:	Maintaining continuity throughout one's life course	Retaining positive self-image	Enacting independence

The Garden and Age-Friendly Design

The home's privately owned immediate exterior also possesses an immense power for change because it is a hybrid of private and public space for discovery (Taylor, 2008, p. 6). Chevalier (1998) illustrated through the space's different uses and interpretation how the front yard is public and back yard private (p. 39). Therefore, these two mediums possess distinctly different means through which to ignite change.

The private back yard is charged in its potential to encourage reflection and an individual's freedom to be inventive; to creatively personalize their age-friendly renovation experience. This freedom empowers them to embrace change at their own pace, in a manner that is culturally appropriate and aesthetically pleasing on a personal level. And, particularly for older individuals who enjoy do-it-yourself work, the sensory and hands-on properties their experience in the garden develops may result in transferable skills that could be utilized indoors.

Conversely, the front yard is charged in its potential to tap into gardening's social dynamics. Gardening is an easy conversation starter (Bhatti & Church, 2000, p. 187) that encourages interaction with others, providing an avenue by which they may gain insight through discussions and exposure to examples that may be inspirational. By increasing peoples' familiarity with the concept of age-friendly design, society comes together to generate knowledge and acceptance, simultaneously driving collective ideas of form and devising ways to accomplish implementation.

The Garden as a Tool to Facilitate Age-Friendly Home Design Education

Many readily accessible tools, conducive to both private and public means of learning about the garden, already exist. The Canadian gardening industry is seeing rapid growth (Lynch & Hofmann, 2007, p. 9), perhaps due to seniors today being "generally healthier than the seniors of previous generations" (CMHC, 2012, p. 22). By introducing age-friendly elements into the garden through innovative tools and landscapes, such as raised flower and vegetable beds, individuals can privately experiment. Successful uptake of age-friendly gardening products could motivate the gardening industry, and others, to build on this, potentially invoking innovation and economies of scale. As goods and services become more affordable, the pace of adoption may also increase. Social media, including gardening blogs, offer lay people a private and a relatively free platform to explore and visually share ideas. Within the community, gardening clubs and the more recent phenomenon of garden visiting, may provide access into a stakeholder population of keen learners. Many low-cost distribution channels are available in traditional materials, including books and magazines, providing libraries the opportunity to display gardening materials alongside age-friendly home design guides. Home and garden television has already been shown to be popular, but its

effectiveness may be increased through the inclusion of age-friendly set designs. By incorporating age-friendly set design in movies and television, particularly home and garden television, the age-friendly industry may make viewers more receptive to the concept. Attendance at farmers' markets and strategically placing age-friendly design presentations adjacent to the gardening section at local home and garden shows might stimulate the interest of gardeners who possess the capacity to "grow" the age-friendly industry!

Ultimately, the overall goal is to use the tools at our disposal to break down the stereotypical attitudes of ageism that exist in the minds of individuals and society's institutions. By using people's often-positive attachment to their home's garden, we may reinforce the possibility that older individuals can comfortably and confidently transition into old age at home. Figure 5-6 summarizes how the private and public home garden supports the adoption of age-friendly home design affordances.

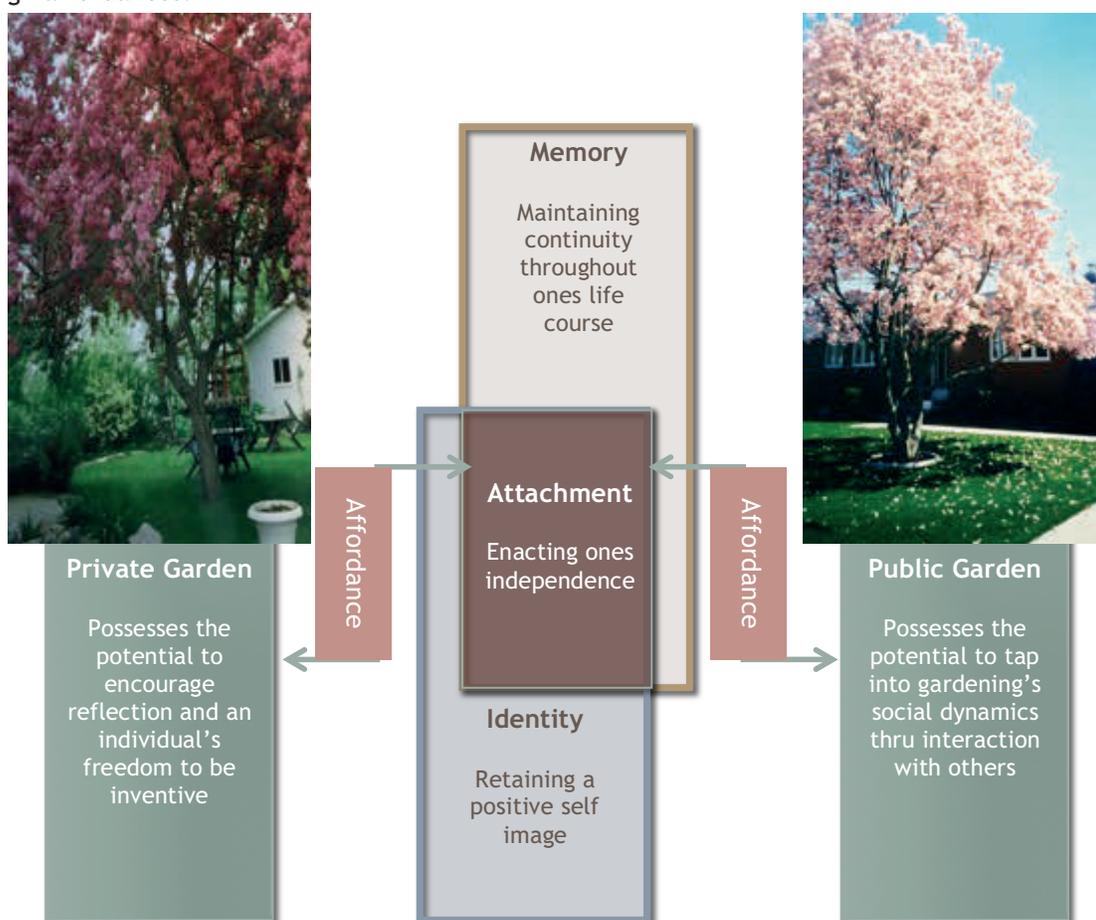


Figure 5-6. The private and public home garden as a driver of age-friendly design renovations.

Summary

Nature and the home garden have a mystical way of engaging individuals in the world around them. The entanglement of home's interior and exterior spaces in older individuals' meaning of home was unanticipated by the researcher, even given the fact this was true of their own meaning of home. The exterior garden provides a "living" extension to the home's interior. The power of the garden lies in its independent propensity for change that may evoke a sense of passage of time and the aging process. *Cultivating Home's* findings appear to reveal how these homeowners' relationships with their outdoor space reinforces the older person's overall homeowner-home relationship through the strengthening of memory and the creation of identity. These two themes, it seems, invariably further intensify older individuals' collective attachment to their home. This attachment may then drive them to seek out affordance through age-friendly renovations supporting their ability to age-in-place independently. The garden's unique blend of private and public spaces offers multiple personal and social ways to address the minimal uptake in age-friendly renovations by homeowners intending to age-in-place. Many existing tools that gardeners could access to educate themselves in gardening practices might easily be utilized to educate them in age-friendly home design.

The primary objective of *Cultivating Home* was to use material culture as a means to learn about some of the aspects that prompted and supported long-time homeowners to undertake an age-friendly renovation. I believe part of the answer may lie in their relationship with their home's privately owned, immediate outdoor spaces, which I have referred to as their garden. In closing, I have begun to discuss how people's feeling and interaction with their garden may be a powerful mechanism for studying and better understanding cultural diversity in everyday home-making practices and the decision-making process. This insight may enlighten researchers on how people's perceptions of an age-friendly renovation have the potential to impact their desire to age-in-place. I leave the last word to Salisbury (2012): "soil is the stage upon which life is enacted, but it is also a prop, an actor, and the cement that binds it all together" (p. 38).

CHAPTER 6: CONCLUSION

As the rate at which the Canadian population is aging quickens, there is increased focus on exploring and better understanding the older individual's homeowner-home relationship, particularly as it pertains to aging-in-place. Past research in the field of material culture has examined the meaning of home and how it shapes individuals and their lifestyle. Material culture themes relevant to one's relationship with home have more recently been introduced into environmental gerontology research investigating how imposed age-friendly home modifications may impact the experience of home for older individuals living with some degree of age related disability.

Age-friendly home design has the potential to benefit older individuals faced with a decline in physical function due to the normal aging process. Working with an older couple and a widow, who are long-time owners of the home they live in and who made the independent decision to proactively undertake an age-friendly renovation, this research sought to answer the question: What material culture themes are revealed, and knowledge gained, by examining the perceptions of older homeowners multifaceted meanings of home, involved in independently making the decision to transition the home they own, from a non-age-friendly space to an age-friendly space? *Cultivating Home's* findings demonstrate that the material culture themes of identity and memory were instrumental in the formation of the meaningful attachment to home these homeowners exhibited. As a consequence, this strong attachment to home possibly influenced their desire to seek out affordances in the home via the introduction of age-friendly home design modifications.

Notable was how this study revealed the unanticipated finding that the relationship these older homeowners have with their home's exterior front and back yard spaces, the garden, appears to have had a profound effect on their meaning of home and their propensity to introduce age-friendly design into the interior home environment. *Cultivating Home's* findings suggest that the blend of the garden's private and public space may provide an opportunity for older individuals to learn and experiment with age-friendly products and ideas through both personal pursuits and in a social setting. Gardening is a rapidly growing industry that many associate as a positive experience. If we can enrich the understanding of how an older person's relationship with their garden operates

within their everyday lives while aging-in-place, opportunities to utilize the garden as a powerful educational tool in championing age-friendly design could potentially be developed.

Response to Research Questions and Objectives

In referring back to the original research questions, it is possible to highlight some of the most powerful findings *Cultivating Home* uncovered regarding the role practical considerations, cultural variables, as well as expectations and reactions played in the age-friendly renovation experience. In terms of practical considerations, it was apparent that while these homeowners were still very independent on a daily basis; when it came to tasks that involved substantial manual labour they relied heavily on the assistance of family. For Elaine and Gerry, their grandsons' role materialized in the care of the pool and the "adopted sons" had taken over the physical aspects of recent renovation projects. In Ann's case, while the majority of the work was carried out by professionals, without her sons' help packing up the house in preparation for the trades, she could have found the renovation process extremely difficult, if not impossible. In order to make age-friendly renovation doable, it appears there needs to be family support available.

In terms of the cultural variables, I was struck by the fact that in both homes the women had, for all intents and purposes, only lived in two homes their entire life: their childhood and matrimonial homes. The attachment these women had with their homes was so deep-seated that both were still living there despite having undergone joint replacement surgery (Elaine her knee and Ann her hip). This demonstrated their strong personal conviction to remain at home. What's more, both women had experienced their own parents moving later in life, and observed other significant challenges brought on by these moves. Elaine's, who's parents made the decision to move in their 50s into a new tri-level home conveniently located down the street from her, saw the challenges of her mother struggling with stairs after suffering a stroke in her 60s. Ann's parents, unable to maintain the large family home, initially moved into a condominium, but eventually had to move into a care facility due to health challenges. Ann describes the care facility as a place that "looked very nice [but] then it wasn't quite as nice ... as it looked." Their parents living arrangement later in life was not only hard on them but also on their daughters.

For Elaine, the vast majority of the people she knew as a child "just lived in place until some illness took them away." Observing older individuals coming from the same cultural background as Gerry and her, she continues: "Even the culture of the Italians, having gone to Europe and lived there for the summertime. My mother-in-law, well into her 90s could walk the village ... and their homes all had stairs and even though she used a cane, she still did all those stairs." Gerry adds more about his mother to the story, saying "when she couldn't climb them anymore she did them backwards." Today Elaine and Gerry, even though displaying the same resolve to age-in-place, are not willing to take the stairs seated "one step at a time"; rather, they will modify their home to ensure they can stay.

When asked about her experience with older individuals' housing choices as a child, Ann does have memories of "residential places to age in," particularly one she visited on Sundays, "a home for first World War servicemen." Still, she wonders if older individuals' residences were a consequence of the wars rather than traditional British culture, saying, "I think the war changed a lot to do with the culture in Britain." For the most part, as a child and today, her experience with older English family and friends has been that "many older people stayed, and stay in their homes as long as possible." She told the story of how friends built a garden home on their property that they moved their aging parents into and still "it was one of the worst things they could of done. They'd have been better staying in their neighbourhood and perhaps moving into a facility there, they would know the neighbourhood and the people." In Ann's opinion, "sometimes people make the mistake with the best of intentions but [are] not thinking of it from the parents' point of view." Like Elaine and Gerry, this cultural experience has intensified her desire to remain in her home even when faced with challenges.

These participants each came from cultural backgrounds where, during their lifetime, moving in general was limited. Furthermore, the majority of older people chose to remain at home even when faced with challenges. Today, they do not perceive moving as a solution that ensures one will avoid the difficulties common to aging. Instead they have seen that the decision to move, for the few that did, even when undertaken for well-founded reasons, as often creating challenges that didn't exist beforehand.

In terms of these homeowners' expectations and reactions regarding what an age-friendly renovation would offer them, they were realistic and rational. They took their time to carefully determine what would work best for them and the most practical way to achieve their desired outcome. At the same time, all the participants acknowledged that at some point, the desire to remain at home might become unmanageable. Gerry, when asked if he thought he could continue at home if Elaine should pass away first, responded: "Probably for awhile, but not too long. ... I'd find a little home, something. I don't know." Elaine's response to the same question was: "I know I couldn't ... I couldn't for the simple reason I would have to have far too much help to live in place. I would. I wouldn't want to do that unless someone could stay." Ann, when talking about the significant investment she has made in her kitchen and when asked whether she was ever concerned that she might not see a return on her investment, replied: "I didn't do it with that in mind, ever. I couldn't do that, because I really don't know what tomorrow is going to bring." While these participants were confident that by modifying their home they would be more comfortable at home for the time being, they all acknowledged that the day may still come when they have no alternative other than to leave. They all understood that there is a limit to the independence and security age-friendly renovations can provide. Even though all the participants had studied all of their personal concerns and identified the most effective and efficient solution, they still recognized that age-friendly renovations did not guarantee their ability to stay forever. A summary of *Cultivating Home's* research questions, corresponding objectives, and key findings are presented in Table 6-1.

In both cases, these homeowners didn't wait until they were in dire straits; they recognized that doing the age-friendly renovation earlier rather than later not only made their present life easier but also brought them pleasure and a sense of pride. Elaine was direct when saying "I think people who need to update have to think about doing this if they're going to stay in place while they're in their 60s, because by the time they are in their 80s, it's too late." These older individuals had a clear understanding of the resources at their disposal, their desire to age-in-place, what they were seeking from the age-friendly renovation, and what they were prepared to do to make it happen.

Table 6-1

Cultivating Home: Research Questions, Corresponding Objectives, and Key Findings

<i>Cultivating Home</i>			
	Research question	Corresponding objective	Key finding
Primary research question	What material culture themes are revealed, and knowledge gained, by examining the perceptions of older homeowners' multifaceted meanings of home, involved in independently making the decision to transition the home they own, from a non age-friendly space to an age-friendly space?	To make known, through material culture, what society can learn about the multiple dynamic relationships older homeowners have with their homes that prompts and supports their ability to undertake an age-friendly renovation, facilitating their desire to age-in-place.	<i>Cultivating Home's</i> findings demonstrated that the material culture themes of identity and memory were instrumental in the formation of these homeowner's attachment to home. This strong attachment was key in seeking out affordances via the introduction of age-friendly modifications.
Secondary research question #1	What practical consideration factors are influencing the older homeowners' desire to age-in-place and the decision-making process concerning the undertaking of an age-friendly renovation to their home that would facilitate the attainment of this wish?	To underscore an appreciation of the everyday reasoning involved in an older homeowner's complex decision-making process concerning taking a proactive course of action to implement home renovations that may be required to age-in-place.	In order to make age-friendly renovation doable there has to be family support available. While this support comes in many forms one particularly relevant to the age-friendly renovation process was the assistance of young strong males with tasks requiring physical labour.
Secondary research question #2	What cultural variables influence these older homeowners personal meaning of home, and what bearing do they perceive this relationship has on their capacity to achieve their wish to age-in-place via the undertaking of an age-friendly home renovation?	To draw attention to the ways in which cultural variables impact an older homeowner's meaning of home, specifically the likelihood and ability they will make the decision to age-in-place, as well as, complete an age-friendly renovation to their home that facilitates this decision.	The idea to move is uncustomary in these women's upbringing and cultural background. What's more they have witnessed that those older individuals who chose to move, regardless of whether it was necessary or not, often ended up facing challenges associated with aging that had not existed previously.
Secondary research question #3	What are the expectations and resulting reactions of the older homeowners pertaining to their personal process of transitioning their home from a non-age-friendly space to an age-friendly space?	To highlight how these older homeowners comprehend the concept of age-friendly renovations and the impact they anticipate them having on their ability to age-in-place.	Even though the participants identified the most effective and efficient way to address of their personal concern, they appreciated that age-friendly renovations did not guarantee they would be able to stay forever.

What these homeowners' behaviour expressed most poignantly was that there is no one age-friendly renovation method, product, or design that works for all. Additionally, age friendly renovations also may not always be the best solution to an older individual's housing situation. For many though, age-friendly home design, at the very least possesses the potential to assist for a period of time. For this to be achieved, age-friendly design solutions should be made available in a range of options, giving consideration to factors such as: access to resources, different means of accomplishing a daily homemaking task, multiple methods of executing an age-friendly renovation, variance in tastes and aesthetics, as well as affordability.

Overall, the results of this research provide insight into aging-in-place and age-friendly renovations from the unique perspective of material culture. Previous research had begun to demonstrate material culture's potential to shift ways of thinking about older individuals experiences with aging-in-place. More specifically, *Cultivating Home* highlights that material culture possesses a unique means of revealing aspects to this homeowner-home relationship that the literature review suggested has been previously overlooked. This is highlighted in part by one of *Cultivating Home*'s findings that in these two case studies, the importance of the home's exterior space, and how the homeowners enjoy this outdoor garden space, appears to influence their propensity to implement age-friendly renovations in their home's interior. In other studies exploring older individuals' aging-in-place, no research could be found that merged the interests and habits of the homeowners' relationship with their garden and how it pertained to the implementation of age-friendly design renovations inside their home. Past material culture research has demonstrated how material culture is a field well suited to studying the meaning of home. *Cultivating Home* has shown how material culture could inform a community's understanding of what home means to older individuals aging-in-place, particularly those who have experienced transformation of themselves and their home through the process of an age-friendly renovation.

Anticipated Contributions

The main anticipated contribution of this exploratory study was to initiate a conversation around older individuals aging-in-place and their propensity to adapt the built environment of their

homes to meet what they anticipated their aging needs would require. The difficulty encountered in recruiting participants for this study was a strong indicator that there is a lack of awareness, knowledge, and understanding within the community on the concept of age-friendly home design. Further to that, it was even harder to find individuals who had renovated their home in an age-friendly manner in contrast to having built an age-friendly home, although even these types of homes were hard to find. Therefore, I believe the main contribution this study makes is its potential to bring this issue to the attention of: others studying various aspects of the aging-in-place phenomenon; those addressing seniors' wellness and support needs in the community including assessment of the need for caregiving assistance; aging-in-place policy researchers and politicians regarding seniors' housing preferences and building codes; the education of the trades, construction, and interior design industry so they might knowledgably lead the promotion of age-friendly home design; those in community programming to promote offering instruction to non-professional do-it-yourself individuals interested in expanding their own age-friendly renovation skills; product developers marketing to older homeowners; the banking sector to whom some of these older individuals will have to turn to for financing; the insurance industry to instill a recognition of the probability increased safety in age-friendly designed homes might reduce home liability concerns; the real-estate industry to bolster appreciation for how age-friendly features potentially can add to the value of a home and recognize the potential for growth in the age-friendly home market; and to raise older individuals' and their supporting families' awareness of the benefits of age-friendly design, fostering assurance that aging-in-place may extend the time at home for many older homeowners. And lastly, to attest to the notion that the desire to age-in-place could be met in a practical and gratifying manner. The more discussion generated around age-friendly home design and what it has to offer older individuals aging-in-place, whether they own their own home or not, the more successful I will consider the study to have been.

Future Research

From the literature review, we recognize that knowledge of this phenomenon is sparse and a need exists therein to generate interest in further research. I see this study as only being an introduction to the topic, work that promotes a need for further research to flush out more of the

dynamics of age-friendly home design; studies that through in-depth examination of the capacity of age-friendly design renovations might inform purposeful application to improving the quality of life of older individuals' aging-in-place. As I did not initially set out to explore the homeowner-home relationship and its impact on age-friendly home renovations as it relates to the home's immediate exterior space, I would continue this work by implementing a second study with a similar research design, this time focusing on the front and back yard spaces, which I have referred to as the garden.

I would begin by having the material culture researcher visit the home again and undertake an independent artifact analysis of the home's exterior spaces. Next, proceed to the homeowners leading a tour of their yard. The life history interview would ideally be done with the individual who engages in the activity of maintaining the home's exterior the most, including looking after the gardens. If neither homeowner gardens, I would suggest working with whoever spends the most time in the garden. The idea is to seek out the individual who presents the strongest attachment to the home's outdoor space. Inquiry would be directed to the role the yard played in their childhood home and continues to play in their daily life. As well as, if they garden, what would it mean to them if they had to retire from gardening or move away from their garden? The last interview would involve both homeowners, together, discussing how do they use their home's outdoor space: Has this changed as they have aged?; Does anyone help them with its maintenance?; Has the design of the space changed over time?; Do they perceive that what the garden means to them has changed over the period of time they have lived in their home?; Has the amount of time they spend in the garden changed?; and, What would it mean to them if they had to give up their home's garden?

The participants would also be requested to complete a second, twenty four hour, personal journaling exercise, similar to the one completed inside the home, recording their interactions with their home's outside spaces. Additionally, they would be invited to include the time spent gazing out their home's windows at the garden. This is particularly relevant in older individuals' behaviour, as researchers have discovered that as a normal decline in physical capacities is encountered, one's relationship often shifts more to "being" in the garden rather than "doing" the

garden. Moreover, as their physical restrictions continue to increase, the older individual often adapts the relationship further to becoming one of a “view from the window” (Gross & Lane, 2007, p. 237).

A second area of further research might be the introduction of the political and economic context to the study of the age-friendly renovation decision-making process, a limitation of *Cultivating Home’s* research. In particular, based on *Cultivating Home’s* data and findings, it could be interesting to explore the role inheritance plays in an older individual’s age-friendly renovation decision. This concept could be examined both in terms of how inheritance may be chosen as a source of funding to cover the renovation costs while, at the same time, how the homeowners perceive the renovations may impact the home’s future market value and, therefore, the wealth they are able to pass on to those inheriting their estate.

I would suggest that future material culture research in these areas could further inform society’s understanding of older individuals’ meaning of home and how it translates into their perception of the dynamics age-friendly renovations brings to their relationship with home and influences the renovation process.

Debriefing

At the completion of the study, I spoke with the couples to share my final thesis, in printed and digital form. I also put together a short report on ideas of how age-friendly features could be further incorporated into the home. I reiterated that I would keep them informed of any presentations that I will be making involving my research and that they would be welcome to attend. Likewise, if any publications result from this work, I will be certain to share a copy with them. A gift card was included in a handwritten thank-you card. As a researcher, I recognize that the participants’ contribution to this research involved a significant number of hours and much thought. Without them, my work would not have been possible.

Summary

This exploratory study has clearly shown through the use of material culture themes, and the study of older homeowners’ relationships with their home’s interior and immediate exterior spaces, that material culture research can help explain how society understands and interprets the

benefits to and process of implementing age-friendly home renovations. Included in this study has been an examination of practical factors, cultural variables, as well as expectations and reactions that have been instrumental in the renovation process. Age-friendly renovations are a timely topic that could benefit from additional research, particularly exploring older homeowners' relationship with their home's outside spaces, further deepening society's understanding of individuals' decisions to modify their homes to support their desire to age-in-place; a complex, intimate relationship of habitual change between the homeowner and home that potentially has the power to transform both parties as they continually engage in redefining what home means. It is a bond Glassie (1999) reflects the intimacy of expressing:

Architecture works in space as history works in time. History interrupts time's ceaseless flow, segmenting and reordering it on behalf of the human need for meaning. Architecture intrudes in the limitless expanse of space, dividing it into useful, comprehensible pieces. Converting spaces into places through disruption, architecture brings meaning to the spatial dimension. (p. 231)

Schedule A

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Recruitment Notice

December 20, 2017

Cultivating Home: Our Home for All Ages & Stages of Life

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In completion of my Master's thesis in Material Culture, I am seeking participants interested in sharing the experiences of older homeowners who have made the decision to renovate their long time home to support aging-in-place.

Two older households are needed for this in-depth study

- ❖ One household will be in the early planning stages and/or currently renovating
- ❖ One household will have completed a renovation

You & your spouse's commitment will include participating in:

- ❖ Two separate walk throughs of your home
- ❖ Two interviews, one completed by a single spouse and another as a couple, in your home
- ❖ A short period of journal writing to be completed by each spouse

The eligibility criteria for this study are:

- ❖ You are Canadian
- ❖ Each homeowner is over 50 years of age
- ❖ You have lived in your home for 5+ years
- ❖ Your home has no more than 4 bedrooms and 3 bathrooms
 - Possible renovation projects include a kitchen, bathroom or entry way
- ❖ You possess a typical understanding of age-friendly home design
 - No immediate family or friends are professionals familiar with age-friendly design
 - This includes professions, such as; architects, builders, designers, gerontologists
 - Or specialists in disability, such as; doctors, nurses, & occupational therapists
- ❖ You are willing to have the renovation features of your home photographed or videotaped
- ❖ You are comfortable allowing the walk throughs & interviews to be recorded

The anonymity of the participants can be facilitated

If you or anyone you know is interested in this study you are invited to contact: Linda Marie Johnson or Dr. Megan Strickfaden

Schedule B

Participants' Walkthroughs and Journaling

Cultivating Home: Our Home for All Ages & Stages Of Life
December 20, 2017

First walkthrough

Introduction

We are interested in your experiences related to the renovation of your home to support aging-in-place.

Would you be willing to allow us to walk through the renovated portion of your home and explore its significant spaces/features/objects that will support your plans to age-in-place?

Note: This walkthrough is based purely on the researchers sole observations

Second walkthrough

Introduction

We are interested in your experiences related to the renovation of your home to support your decision to age-in-place.

Would you be willing to take the researcher through the renovated portion of your home highlighting and describing the significant spaces/features/objects that you are considering, or have considered, in support of your plans to age-in-place?

Note: this walkthrough is based purely on the homeowner's own observations and comments

Journal writing

Introduction

We are interested in your experiences related to the renovation of your home to support your decision to age-in-place.

Would you be willing to keep a journal for the next week?

Would you be prepared to, over the next week, spend a minimum of 15 minutes per day reflecting on and describing your interaction with the spaces/features/objects of your home that support your plans to age-in-place?

Would you be willing to, over the course of the journal writing week, commit to taking the time for one full day to record everything that you interact with, as well as, how you interact with the spaces/features/objects of your home that support your plans to age-in-place?

Note: This journal writing exercise is based purely on each homeowner's independent thoughts

Schedule C

Participants' First Interview: Life History Interview

Cultivating Home: Our Home for All Ages & Stages Of Life
December 20, 2017

Note: This interview is to be completed by only one homeowner. This homeowner will ideally be the participant that initiated the age-friendly renovations of the home. If this participant is not comfortable doing the interview, or neither homeowner can be identified as the initiator, either homeowner is welcomed to complete the interview.

Introduction

We are interested in your experiences related to the renovation of your home to support your decision to age-in-place.

Would you be willing to share with us some general demographic questions about yourself?

Would you be willing to share with us your childhood experiences with home?

Note: It is understood that all the answers that require you as a participant to reflect back in time will be provided based on your memory of the event or experience.

Personal information

Full name?

Birthdate?

Place of birth?

➤ **If born outside Canada**, what country were you born in and date of immigration?

Did you move around, in terms of countries, before you immigrated to Canada?

If so, Can you list the countries in which you lived, along with your age at the time?

What was the reason for your move to Canada? (can you provide some context)

What individuals made the move with you (e.g. parents, grandparents, siblings, extended family, friends)?

What is or was your occupation?

Have you had multiple career experiences?

Members of your childhood homes

Who lived in your childhood home with you?

What was yours and their age at the time of your memory?

Note: From this point forward, all household members including blood relatives and any other individuals that lived with the family for an extended period of time will be referred to as a family.

What was the role of each family member?

What did mom do?

What did dad do?.....

Characteristics of your childhood family home

Can you list the location of the principle residence that you lived in as a child?

What age were you when you lived in this home?

How long did you live there?

Can you tell me a little bit about the neighbourhood of this home?

What stood out to you as a child?

What stands out to you today?

Can you tell me anything about the building style (e.g., two story, bungalow, etc.) and age of this home?

Are there any physical features of this home that stood out to you as a child?

What stands out to you today?

What was the overall feel or impression of this home to you, as a child?

What feeling or impression do you have of home today?

Experience with family members, living with unique physical challenges, in the family home

Did anyone in your childhood household ever live with any unique physical challenge(s)?

If so, who in the family was it?

At what age did they experience the onset of the unique physical challenge(s)?

Can you describe the impairment to me?

Were any of the homes your family lived in modified to accommodate a family members unique physical challenge(s)?

If yes, who initiated the renovation?

Can you describe the renovation features?

Do you think these changes had an impact on you as a child?

How would you reflect on these renovations today?

Experience with family members and aging-in-place

Did any family members ever continue to live in their own private long-time home well into their senior years?

Until what age approximately?

Did these older family members live alone, as a couple, with other family members, or friends?

If they lived with family or friends in their home, who were these individuals?

At the time, was it common for very old adults to live in their private home well into their senior years?

What other types of housing were available/typical for the very old at the time?

How was it usually determined where an older person lived at the time?

Do you think your older family members who did live in their home into their later years made a conscious decision to continue living in their private home?

Why or why not do you believe the decision was conscious?

Do you think that the older family members who made a conscious decision to stay made changes to their home based on this decision?

Did any of the older adults in your family who continued to live in their private home well into their senior years do so while living with a unique physical challenge?

If yes, Can you describe the unique physical challenge?

Did these physical challenges prompt the modification of their home?

If so, can you describe the changes made to the home?

At what age was the family member when these changes were made?

How long after the onset of the physical challenges were the changes made?

Was there any impact on other family members?

Debriefing/Closing

Is there anything else that we did not ask you about that you would like to talk about now?

Schedule D

Participants' Second Interview: Home Renovation Interview

Cultivating Home: Our Home for All Ages & Stages Of Life
December 20, 2017

Note: This interview will be undertaken with two older adult households. Each household will be at a different stage of completing the renovation of their home, to accommodate their decision to age-in-place. The first household will have just begun their renovations, while the second household will have completed their renovations within the last two years. The questions that follow have been adapted to accommodate these two different renovation stages.

History of your relationship with your home

How long have you lived in your home?

What was your reason for moving into this home?

Who was living with you when you moved into this home?

Have you ever considered moving instead of renovating?

What is it about your home that makes you want to stay?

What is it about your home that provides you with the most pleasure?

What is it about your home that provides you with the most displeasure?

Making the decision to renovate

What prompted the decision to renovate?

Was any one else involved in making the decision?

If yes, Who?

How did they become involved?

Can you identify the key reasons that played a role in your decision?

Note: Have each participant answer this question for themselves

Roles of the various people involved with the renovation design

What was the time frame between making the decision and beginning construction?

Can you describe how you initiated the construction process?

Who did you contact first?

How did you select them?

Did any of these individuals have past experience working with age-friendly design?

Renovation features

Did you undertake any research to learn about the age-friendly design?

Can you identify any personal experiences you might of draw upon while drafting the design?

What physical challenges that frequently occur with aging did you consider in your design?

If so, How?

Has how you accomplish a task in the space changed? (ie might one tend to work alone now versus together?)

Is it important to you that the spaces/features/objects being incorporated into your home appear invisible to visitors to the home?

Why or why not?

Were there any other issues that were a concern?

Experiences with the renovation process

What things did you want to see incorporated into the new age-friendly design?

Why?

Did you have to alter any of your ideas during the construction process?

Did you have to eliminate any ideas?

Did you add any new ideas?

What were your initial feelings before the construction began?

Did any particular feelings stand out during the construction process?

How do you feel about the renovation now?

What surprised you the most about your reactions?

Final thoughts

How much did the renovation cost?

What would you say has been the most rewarding aspect of your renovation?

What has been the most challenging aspect of your renovation?

What surprised you the most about the completed renovation?

If you could pass along any message to other individuals considering the decision to undertake an age-friendly renovation, what would it be?

If you could pass along any message to professionals interested in working with individuals that have made the decision to undertake an age-friendly renovation, what would it be?

Having gone through this renovation what do you think might prompt you today to move?

If one of you were to pass away could you see the other continuing to live in the home alone?

Debriefing/Closing

Is there anything else that we did not ask that you would like to talk about now?

Schedule E

University of Alberta

Department of Human Ecology
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Room 302 Human Ecology Building
Edmonton, Alberta, Canada T6G 2N1

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Information Sheet

Cultivating Home: Our Home for All Ages & Stages Of Life
December 20, 2017

Principal Investigator:

Linda Marie Johnson
Masters Student
Department of Human Ecology
University of Alberta
780-263-6712/lmj5@ualberta.ca

Research Supervisor:

Dr. Megan Strickfaden
Assistant Professor
Department of Human Ecology
University of Alberta
780-492-3012/
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Dear Potential Participant:

Why are we doing this study?

This study explores the transitional experiences of older adult homeowners that are interested in, or have done, renovations to their long-time home to accommodate aging-in-place. Many homeowners continue to remain in their own home even though they may encounter specialized needs due to the unique physical challenges that happen over the course of a healthy aging process.

We are interested in speaking to homeowners that have been long-term residents of their present home that they own and who are thinking about or have renovated to create a more age-friendly space.

In the study, we will be exploring why and how a homeowner embarks on the decision to change their home in order to prepare for aging-in-place. Our aim is to gain knowledge and insight into the transition process these individuals experience during the course of the renovation. The results of this study will be used in support of the Principal Investigator's Master's thesis.

What happens if you agree to participate?

We will ask both you and your spouse to participate in two home walk throughs, two interviews, and the keeping of a journal. Four research meetings will take place in your home, at mutually agreed upon dates and times.

- The Home Artifact Analysis/first walk through will enable the researcher to visit your home, with you present, to independently record their own observations of your home's renovation spaces, features and objects.
- During the Home Owner Guide Tour/second walk through, you will be asked to take a lead role in the examination of your home's age-friendly spaces, features, and objects. We request that you provide your comments on what you consider to be your home's significant age-friendly spaces, features, and objects.

During both walk throughs and the interviews, we ask permission that the specific areas, features, and objects of the home, identified as either non-age-friendly or age-friendly, be audio recorded, photographed or video recorded by the researchers. Audio recordings will ensure that accuracy is maintained. Video recording allows us to capture the physical interaction encountered by the participants as they engage with the non-age-friendly or age-friendly spaces, features or objects.

- During the Life History Interview/first interview, one homeowner will be asked a series of questions that examines their life experiences related to their childhood home(s). The homeowners may choose who will be interviewed. However, ideally the homeowner that has initiated the renovations will choose to complete the interview.
- During the Home Renovation Experience Interview/second interview, you will be asked a series of questions that prompt you to describe, as homeowners, your decision to undertaking the renovation of your home. Additionally, you will be requested to share the experiences encountered as you, as a homeowner, transition(ed) through the process of renovating your home to age-in-place.

The information recorded during the interviews will be transcribed and shared with you.

- You will be asked to review the prepared transcripts within one week of receiving them and, with the researcher, add or subtract any details of concern. Following each review, the transcripts will be understood to be final.
- Between the first and second interview, the researchers will ask each participant to keep a journal for a period of 24 hours that records any interaction with and personal reflections that arises concerning the renovations spaces, features and objects. As well, any additional thoughts that the participant's feels is of relevance to the study, and relates in any way to their experience, can also be included. All transcripts plus journals will be either dropped off by the researcher, picked-up by the researchers, or sent electronically.
- Additionally, as a homeowner, you will be asked to share with the researchers your own photographs or materials, of any nature, that you feel would strengthen the researchers data set.

How long will it take?

The researchers have outlined below the time that they anticipate it will take for each meeting. However, it should be noted that in every case but the Home Artifact Analysis/first walk through, the actual length of time taken for the meetings will depend on the nature of your responses.

- The Home Artifact Analysis/first walk through should last approximately one hour.
- We ask that approximately 1 1/2 hours be set aside for the Homeowners Guided Tour/second walk through.

Ideally, the two walk throughs will be spaced no more than one week apart.

- We ask that approximately 1 1/2 hours be set aside for the recording of one homeowner's Life History Interview.
- We ask that approximately 2 hours be set aside for the recording of the homeowner's Home Renovation Experience Interview.

The interviews, if possible, will be spaced no more than 7 days apart.

- The journaling commitment will ideally occur between the first and second interview we ask that you record over a 24 hour period all the interactions you had, over the course of that day, with your home's age-friendly or non-age-friendly spaces, features, or objects.

Will you be paid for participating in this study?

No, you will not be paid for your time. However, to thank you for your participation, each homeowner will receive a \$50 gift card to a restaurant of his or her choice. (\$100 per household)

What are the benefits and risks of being in this study?

By participating in this study, we hope you will benefit from the positive feelings garnered by assisting the researchers in gathering a better appreciation of the role your home's built environment has had on your decision to age-in-place, and your experiences with the renovation process. As well, it is possible that at the conclusion of the study, the researchers may be able to share with you ideas that they have identified which could potentially improve the way you interact with your home as you age-in-place.

There are few, if any, risks associated with discussing your experiences with a trained researcher. However, should you encounter any questions that make you feel uncomfortable, you can refrain from answering them. Your participation is voluntary and you are free to withdraw from the study at any time. No further information will be collected after the point of withdrawal. You do not have to give a reason for your withdrawal. What's more, it will not affect your affiliation with the University of Alberta. The information collected while a valid consent is in place will be; transcribed, reviewed by the participant and concerns discussed between the participant and researcher. After this date, the information collected cannot be removed from the data set.

What will happen to this research?

Architects, builders, renovators, home product suppliers, and other researchers may possibly use these findings. The overall goal will be to advance the education of students and professionals working in the building and renovation industry, as well as, government policy makers regarding issues that relate to both;

- The impact the built environment of the home has on the changing physical needs of older adults.
- The factors that play a role in the decision process of older adults who decide to renovate their long-time home to better support aging-in-place.

As our population ages, an increasing number of older adults will be choosing to live at home in the coming years. This suggests that numerous homeowners will face the decision of whether to renovate their homes as they determine their plans to age-in-place. This research may be used to assist others in this decision making process. The goal of the research is to limit the challenges encountered in making the decision to renovate their home to age-in-place, as well as, to highlight the benefits of that choice.

What about confidentiality?

It is your choice whether or not you would like to remain anonymous during the course of the study. The choice of anonymity would include not revealing your name, along with any other identifying information obtained during the completion of the study or in the sharing of the findings. The only constraint to your choice is that if your partner makes the decision that they do not want their identity revealed, you will also be required to remain anonymous. If you wish, you may opt to choose a pseudonym name that will be used to refer to you during the study.

All information will be kept confidential (private), except when professional codes of ethics or legislation (the law) requires reporting. The information from this study will be kept in a secure area (a locked filing cabinet) indefinitely from the date of completion of the study, unless you choose to be completely anonymous then any identifying information will be destroyed after 5

years. However, photographs, transcripts and other written materials will be retained indefinitely, as this data may be used to inform other experts in the industry, as well as, possibly being combined with future research.

The information gathered during this study will be analyzed and included as part of the Principal Investigator's Master's thesis and will be shared in the form of a written document and presentations. You will be invited to attend any presentations that are done locally.

Are you interested in taking part in this study?

If you wish to participate in this research study, please complete the consent form and return it to Linda Marie Johnson.

Contacts for this study

Any questions that you may have about this study may be directed to Linda Marie Johnson; by phone at 780-458-6712 or by email at lmj5@ualberta.ca. You may also contact her Research Supervisor, Dr. Megan Strickfaden, directly; by phone at 780-492-3012 or by email at megan.strickfaden@ualberta.ca.

The plans for this study have been reviewed for adherence to ethical guidelines. If you have any questions about your rights as a study participant contact the University of Alberta Research Ethics Board at 780-492-2615.

Your signature on the attached consent form means that you understand the information being requested of you in participating in this study and that you agree to participate in the study. Please keep these pages for future reference.

Schedule F

Department of Human Ecology
 Faculty of Agriculture, Life and Environmental Sciences
 Room 302 Human Ecology Building
 Edmonton, Alberta, Canada T6G 2N1

Tel: 780-492-3824
 Fax: 780-492-4821
 Email: hecol@ualberta.ca
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Research Participant Consent Form

Cultivating Home: Our Home for All Ages & Stages Of Life
 December 20, 2017

Principal Investigator:
 Linda Marie Johnson
 Masters Student
 Department of Human Ecology
 University of Alberta
 780-458-6712/lmj5@ualberta.ca

Research Supervisor:
 Dr. Megan Strickfaden
 Assistant Professor
 Department of Human Ecology
 University of Alberta
 780-492-3012/
 megan.strickfaden@ualberta.ca

Do you understand that you have been asked to participate in a research study?	Yes	No
Are you confident that you meet all the eligibility requirements, to be a participant in this study?	Yes	No
Have you been given and read a copy of the study's Information Sheet?	Yes	No
Do you understand the benefits and potential risks involved in participating in this study?	Yes	No
Have you been given ample opportunity to discuss and ask any questions you may have regarding this study?	Yes	No
Do you understand that your participation in this study is voluntary?	Yes	No
Do you understand that you can withdraw at any point in time and if you choose to withdraw, no data will be collected after the point of withdrawal. However, the information collected while a valid consent was in place will be transcribed, reviewed by the participant and concerns discussed between the participant and researcher within 7 days of the interview. After this date, the information collected cannot be removed from the data set.	Yes	No
Has the issue of confidentiality been explained to you?	Yes	No
Do you understand who will have access to your information?	Yes	No

I agree to take part in this study Yes No

Signature of Research Participant

Do you wish to remain anonymous throughout the study? Yes No

Note: Both partners of the couple must be in agreement with wanting their personal information revealed. Otherwise, the identity of both partners will be concealed.

If yes, do you want to be given a pseudonym? Yes No

If yes, what would you like to be known as? _____

If you agree with the following conditions, please indicate yes by circling the corresponding check mark. Please enter your initials in the large box

I agree to the audio taping of the walk through meetings and interviews,

I understand that I can review the transcript of

the interviews to verify the data

✓

✗

Initials of the Research Participant

I agree to photographs and/or video being taken of age-friendly spaces, features or objects in my home

✓

✗

Initials of the Research Participant

I agree to the collection and use of the personal thoughts written in the journal that I have been requested to keep

✓

✗

Initials of the Research Participant

I request that my personal journal, compiled during the course of the study, be returned to me after relevant sections have been copied for use in data analysis

✓

✗

Initials of the Research Participant

Participant's name:

(Please print)

Participant's phone number:

Participant's e-mail address:

For the Principal Investigator

I believe that the person signing this form understands what is involved in the study and voluntarily agrees to participate

Signature of the Principal Investigator

Schedule G

Department of Human Ecology
 Faculty of Agriculture, Life and Environmental Sciences
 Room 302 Human Ecology Building
 Edmonton, Alberta, Canada T6G 2N1

Tel: 780-492-3824
 Fax: 780-492-4821
 Email: hecol@ualberta.ca
 WWW.hecol.ualberta.ca

Team Member Consent Form

Cultivating Home: Our Home for All Ages & Stages of Life
 December 20, 2017

Principal Investigator:
 Linda Marie Johnson
 Masters Student
 Department of Human Ecology
 University of Alberta
 780-458-6712/lmj5@ualberta.ca

Research Supervisor:
 Dr. Megan Strickfaden
 Assistant Professor
 Department of Human Ecology
 University of Alberta
 780-492-3012/
 megan.strickfaden@ualberta.ca

Do you understand that you have been asked to participate in the completion of a research study as a Team Member?	Yes	No
Have you been given and read a copy of the study's Information Sheet?	Yes	No
Do you understand the benefits and potential risks involved in assisting with this study as a Team Member?	Yes	No
Have you been given ample opportunity to discuss and ask any questions you may have regarding your duties in assisting with this study?	Yes	No
Do you understand that your assistance in this study is voluntary?	Yes	No
Do you understand that you can withdraw from your duties at any point in time?	Yes	No
Has the issue of your duty to ensure that the participant's identity and the study's data remain confidential been thoroughly explained to you?	Yes	No
I agree to take part in this study as a Team Member	Yes	No

Team Member's Signature

Team Member's name:

(Please print)

Team Member's phone number:

Team Member's e-mail address:

For the Principal Investigator

I believe the person signing this form understands their involvement in assisting with this study

Signature of the Principal Investigator

Schedule H

Data Collection Protocol Guide

Cultivating Home: Our Home for All Ages & Stages Of Life
March 20, 2017

The collection of this research data will occur over the course of multiple interactions with each household. The first household will have just begun the renovation of their long-time home to introduce age-friendly spaces, features, or objects allowing them to age-in-place. The second household will have completed their homes age-friendly renovations within the last two years, having modified or added age-friendly spaces, features, or objects that accommodate their decision to age-in-place. During each of the home visits, the Research Supervisor will accompany the Principal Investigator, also known as the researcher (furthermore, to increase the readability of the text below, let it be understood that whenever the term researchers is used, it is referring to both the Principal Investigator and the Research Supervisor together). The steps involved in the study's participant and researcher interactions consist of:

1) Introduction phone call from the researcher

Arrangement

The call will be placed once the researcher has received a potential name and phone number of a individual that has expressed interest in the study from an individual within their personal network of university academics, students, architects, designers, renovators, tradesmen, relevant committee members of boards addressing accessible design, friends, and family members.

Purpose

Allows the researcher to vet the participants as to their eligibility as qualified study participants. Each household will be required to meet all the participant criteria laid out in the study's proposal.

Allows the researcher to have the opportunity to outline the intentions of the study along with the specifics of how the individuals will be requested to participate should they choose to participate in the study.

Assuming that the participants are deemed to be eligible for the study, the researcher will ask the individual if they are interested in formally participating in the study.

Note: one member of the household can respond to this inquiry on behalf of the other spouse, as long as, the researcher has reason to believe that the participant answering the question has first confirmed with their spouse that they have also agreed to participate in the study.

Allows the researcher to obtain the homeowner's home address, as well as, arrange a time when she can meet with the homeowners in their home. Additionally, the researcher will leave her name, phone number and e-mail address with the homeowners should they need to contact her in advance of the meeting.

Allows the researcher to email to the homeowners a copy of the Research Participant Information Sheet, which should be reviewed before the researcher's first visit to the home. This will facilitate the homeowner's complete understanding of the purpose of the study along with the role they are being asked to fulfill. Should they have any reservations at this point, they can either contact

the researcher in advance of the first visit or compile a list of questions to ask the researcher during the first visit.

2) The researcher's first walk through of the homeowner's home

Arrangement

At the mutually agreed upon time determined during the previous phone call, the researchers will meet with the homeowner in their home. Upon completion of the tasks outlined below, the researchers will share a few relaxed moments with the homeowners, at which time they will confirm the next meeting date. Before departing the home, the researchers will thank the homeowners for their co-operation and time.

Purpose

Allows the researcher to become familiar with each participant.

Allows the researcher to introduce herself to the homeowners, sharing highlights of her background.

Allows the researcher to obtain written consent from each partner of the household, which stipulates that they completely understand what their duties and role is in agreeing to partake in the study.

Allows the researcher to determine if the homeowners would like to remain anonymous throughout the study's data collection, analysis and final report. If this is the case, to inquire whether they would like to be given a pseudonym and what they would like the pseudonym to be.

Allows the researcher to confirm that the homeowners are willing to have the walk through meetings and interviews audio recorded.

Allows the researcher to confirm that the homeowners are willing to have photographs and videos taken of the age-friendly spaces, features, or objects in their home.

Allows the researcher to confirm that all participants agree that parts of the personal journal they are asked to keep can be copied for use in data analysis.

Allows the researcher to take the opportunity to explore and consider, independent of the homeowner's comments, what she considers relevant age-friendly spaces, features, and objects in the home.

Allows the researcher to do the following in observing the homes age-friendly spaces, features, and objects deemed as relevant: take field notes and jottings; make thumbnail sketches; touch and interact; take photos and film; and draw layouts indicating the location of the features and objects in the home.

3) The researcher's second walk through of the homeowner's home

Arrangement

At the mutually agreed upon time, arrived at during the first walk through, the researchers will meet with the homeowners in their home. Ideally, this visit will come no later than one week after the first walk through. Once again, the researcher will confirm with the homeowners that they are willing to have the meeting audio recorded, as well as, photographs and videos taken of the age-friendly spaces, features, or objects in their home. Upon the completion of the tasks outlined below, the researchers will then share a few relaxed moments with the homeowners,

at which time they will confirm the meeting date for the first interview(s). Before departing from the home, the researchers will thank the homeowners for their co-operation and time.

Purpose

Allows the researcher to request that the homeowners provide a guided walk through of their home, this time having them draw attention to what they consider to be their home's age-friendly spaces, features, and objects.

Allows the researcher to encourage the homeowners to provide comments on their home's age-friendly spaces, features and objects.

Allows the researcher to further prompt each participant to describe, in depth, what it is about these spaces, features, or objects that they view as key, either in a positive, restrictive, or a combination thereof, to their ability to age-in-place in their own home.

Allows the researcher to attempt to draw out of the homeowners the spaces, features, or objects in the home that initiated the renovation process; probing them to further explain its significant role in relation to their ability to age-in-place.

Allows the researcher to do the following to record the data provided pertaining to the home's age-friendly spaces, features, and objects: write field notes and jottings; draw thumbnail sketches; take photos and video (recording features and objects in interactive motion with the homeowners in the surrounding age-friendly spaces); make notes as the homeowners touch and interact; and draw layouts indicating the location of the features and objects in the home, as the homeowners views them now, how they wish to see them after the renovation, and how, in the case of the second household, they saw them before the renovation.

4) Conducting the first interview in the homeowner's home

Note: This interview is to be completed by only one spouse. This spouse will ideally be the participant that initiated the age-friendly renovations of the homeowners home. If this participant is not comfortable doing the interview, or neither spouse can be identified as the initiator, either spouse is welcomed to complete the interview.

Arrangement

At the mutually agreed upon time, arrived at during the second walk through, the researchers will meet with either one of the spouses in their home. The purpose of this first interview is to explore the life experiences of a single spouse related to their childhood home. Since the first interview's structure is focused on only one spouse it is not necessary for both spouses to be present. Ideally, this visit will come no later than one week after the second walk through. The researcher will again confirm with the participant if the interview can be digitally recorded. In addition, during the interview the researchers will take written notes.

Upon the completion of the tasks outlined below, the researchers will then share a few relaxed moments with the participant, at which time they will arrange a date and place to provide the transcripts of the interview(s), which the participant will be asked to member check, and when each of the homeowner's journals can be collected. In addition, the parties will arrange a meeting date for the completion of the member checking and second interview. Before departing from the home, the researchers will thank the participant for their co-operation and time.

Purpose

Allows the researcher to conduct the semi-structured interview with either one of the spouse's.

Allows the researcher to pose the structured questions of the interview in order to be able to describe, in depth, the demographics of the participant involved in the study.

Allows the researcher to proceed with the open-ended portion of the interview, on occasion prompting the spouse to consider the points expressed in greater depth. This interview will allow the researcher to explore the childhood life experiences of the spouse, as it relates to their childhood home.

Note: It is important that the interview take an inductive approach, allowing the researcher to capture the dynamics of the experience that the participant considers as central in their reflections.

In the case of the homeowners whose renovations have not yet completed, they will be asked to focus on their home's age-friendly spaces, features and objects that: (1) are to be renovated; (2) are in the process of renovation; or (3) have been completely renovated.

In the case of the homeowners whose renovations have been completed, they will be asked to focus on their home's finished age-friendly spaces, features and objects.

Allows the researcher to explain the concept of member checking that the spouse will be asked to undertake with the completed transcript.

Allows the researcher to discuss with the participants that she would be interested in collecting any artefacts that they may have used throughout their decision making or renovation experience; artefacts that the homeowners feels played a role in their transitional experience.

5) Exchange of first interview's transcripts and journals

Arrangement

At the mutually agreed upon time and place, arrived at during the first interview, the researcher will meet with at least one of the spouses to pick up both journals and drop off the transcript of the first interviews. This exchange could occur at the homeowner's home or another mutually arranged location. As no new data will be collected and the previous data will not be discussed, the meeting may occur in a public place with either of if the participants if, both agree and, they find this more convenient. Ideally, this visit will come no more than one week after the first interview. This exchange should only take a matter of moments.

Upon the completion of the tasks outlined below, the two parties will confirm a meeting date for the completion of the member checking. And also the date of the second interview that, will take place in the homeowner's home will also be confirmed. Before departing, the researchers will thank the participant(s) for their co-operation and time.

Purpose

Allows the transcripts of the first interview to be left with the participant for member checking.

6) Conducting the first member checking review with the researcher

Purpose

The researcher will contact the homeowners to complete, either by phone or in person, the first member checking exercise in which they discuss their feedback with the researcher.

The discussion regarding the homeowner's member checking feedback may be done over the phone, rather than in person, and therefore may not require a follow-up meeting. This will be done only if the homeowner is comfortable with this arrangement. Whether the review of the feedback is done over the phone or in an additional meeting, this discussion will finalize the transcript of the first interview.

7) Conducting the second interview in the homeowner's home

Arrangement

At the mutually agreed upon time, arrived at during the meeting in which the journals and transcripts were exchanged, the researchers will meet with the homeowners in their home. Ideally, this visit will come no later than two weeks after the first interview. The researcher will again confirm with the homeowners that it is okay that the interview be digitally recorded. In addition, during the interview the researchers will also take notes.

Upon the completion of the tasks outlined below, the researchers will then share a few relaxed moments with the homeowners, at which time they will arrange a date, time and place during which the second interview's transcript can be passed over to the homeowners for member checking. A date for completing the member check with the researcher will also be set.

Before departing, the researchers will thank the homeowners for their co-operation and time.

Purpose

Allows the researcher to conduct the second semi-structured interview with both partners present at the same time.

Allows the researcher to proceed with the open-ended portion of the interview that will continue to take an inductive approach.

Allows the researcher to explore the combined experiences of homeowners regarding what prompted the decision to renovate.

Allows the researcher to examine the experiences of the homeowners as they transitioned through the renovation experience.

Allows the researcher to investigate further themes derived from the data collected to date. This will include data from the: (1) previous two walkthroughs; (2) first interview; and (3) journal writings.

Allows the researcher to review and discuss the feedback generated from the homeowner's member checking exercise. This feedback can then be used to streamline the second member checking exercise.

Allows the researcher to discuss the homeowner's need to member check the second interview together.

Allows the researcher to collect from the homeowners any archival data that they may have collected during the decision-making or renovation experiences. Photos

may either be taken at this time of the artefacts, or they may be loaned to the researcher with the promise that they will be returned at a later date.

Allows the researcher, upon completion of the interview, to discuss with the one homeowner, the nature of the reflective journal that each participant will be asked to keep. The researcher will request that the journal be used as a tool for the participant to record their personal interactions with their home's age-friendly spaces, features or objects over the course of one day (one 24 hour period). The task will involve recording completely every one of the interactions that they have with their home's age-friendly spaces, features and objects.

8) Exchange of second interview transcript

Arrangement

At the mutually agreed upon time and place, arrived at during the second interview, the researcher will meet with at least one of the spouses to drop off the transcript of the second interview. This exchange could occur at the homeowner's home or another mutually arranged location. As no new data will be collected and the previous data will not be discussed, the meeting may occur in a public place if the participant finds this more convenient. Ideally, this meeting will come no more than seven days after the second interview. This exchange should only take a matter of moments.

Upon the completion of the tasks outlined below, the two parties will arrange a meeting date for the researcher to contact the homeowners to, either by phone or in person, to complete the final member checking exercise, with them. The researcher will then thank the participant(s) for their co-operation and time.

Purpose

Allows the transcripts of the second interview to be left with the participants for member checking.

Note: The discussion regarding the homeowner's member checking feedback will, if possible, may be done over the phone and therefor will not require a follow-up meeting, if the homeowner is comfortable with this arrangement. Whether the review of the feedback is done over the phone or in an additional meeting, this discussion will finalize the transcript of the second interview. This will conclude the data collection stage of the study.

Additionally, each participant's journal, which they have completed since the second interview, will be passed over to the researcher.

9) Conducting the second member checking review with the researcher

Purpose

The researcher will contact the homeowners to complete, either by phone or in person, the final member checking exercise in which they discuss their feedback with the researcher.

The discussion regarding the homeowner's member checking feedback may be done over the phone, rather than in person, and therefore may not require a follow-up meeting. This will be done only if the homeowner is comfortable with this arrangement. Whether the review of the feedback is done over the phone or in an additional meeting, this discussion will finalize the transcript of the first interview.

10) Debriefing

Arrangement

At the mutually agreed upon time and place, arrived at during the exchange of the second interview's transcript (or during the review of the member checking feedback), the researcher will meet with the homeowners in their home.

Purpose

1. Allows the researcher to review the results and discussion section of the study.

Allows the researcher to share any suggestions she might have of how the homeowners could consider refining their home's age-friendly spaces, features, or objects to their advantage.
2. Allows the researcher to return the participant's journals.
3. Allows the researcher to return the homeowner's artefacts.
4. Allows the researcher to provide the homeowners with a final copy of the Master's thesis.

Allows the researcher to present restaurant gift certificates as a gift of thanks to the homeowners.

Allows the researcher, one last time, to thank the homeowners for their considerable gift of co-operation and time.

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Appendix 1

Guide Sheets for Home Artifact Analysis

	Field Notes	Thumbnail Sketches	Mapping	Photos & Video
Neighbourhood	<ul style="list-style-type: none"> -Age of development -Style of homes in the area -Style of the couple's home (bungalow/2story/split?) -Location of the home to nearest neighbours -Proximity to goods & service -Age of individuals that might be out and about in the area -Transportation issues (bus stops and location of arterial roads) 	Defining features of the homes exterior appearance	<ul style="list-style-type: none"> Placement of the home within the community Proximity to neighbours Proximity to goods & services 	<ul style="list-style-type: none"> Photos of the Neighbourhood -Street -Homes exterior
Layout of lot	<ul style="list-style-type: none"> -Define the front yard from the back and the public from the private space -Identification and location of accessory buildings -Position of home on the lot 	Defining features of any accessory buildings	<ul style="list-style-type: none"> Location of the home on the lot Position of the home in relation to the street Layout of the yards features/accessory buildings in relation to one another 	<ul style="list-style-type: none"> Photos of the yard and its accessory buildings
User's Traits	<ul style="list-style-type: none"> -Photos providing insight into the make-up of the family -Personality expressed in the style of décor -Evidence of hobbies & interests -Memorabilia or collections present 	Defining features/objects of the key features/objects that reveals information of the nature of the users	Location of the key features/objects that reveals information of the nature of the users	<ul style="list-style-type: none"> Photos of the features/objects that reveals information of the nature of the users

Characteristics of Space	<ul style="list-style-type: none"> -Size of the floor space -Ceiling height -Shape of the space -Location and size of doors and windows -Is the space closed in or more of an open concept -Materials used in the construction of the space (ex. flooring, ceiling, style of windows and their coverings) -Amount and type of lighting -Age & style of décor -Cleanliness -Presence of its features/objects -Orderliness -Placement of objects in the space, relevancy of there location in the space -Placement of objects in relation to one another, relevancy of this -What objects in the space are located in the open and what objects are concealed/hidden -What objects are within an easy reach and which are not (ex. Location on a top or lower shelf) <p><u>Note:</u> Be sure to observe the space not only across the floor but also from the floor up to the ceiling</p>	Defining features/objects of space	<p>Location within the home</p> <p>Flow of foot traffic within the space</p> <p>Layout of the features/objects within the space</p> <p>Scale of space to other spaces in the home</p> <p>Location of one object to another</p> <p>Grouping of objects</p>	<p>Photos of the overall space</p> <p>Photos of features/objects in the space</p> <p>Photos of key layout of objects in the space</p> <p>Photos of key groupings of objects</p> <p>Video demonstration of my movement within the space</p>
Homes Access	<ul style="list-style-type: none"> -Review the access to the lot (does it occur through public or private space or a combination of both) -Any ground level access, front, back or side -Presence of stairs, ramps or lifts 	<p>Defining features of homes access</p> <p>Time laps sketches of how any mechanical doors/lifts might operate</p>	<p>Location of entrance space inside home</p> <p>Flow of foot traffic that connects the renovation space to the rest of the home</p>	<p>Photos of the homes access</p> <p>Videos of the use of mechanical doors/lifts</p>

<p style="text-align: center;">Inventory Features & Objects</p>	<p>-Identify a number of the spaces features/objects -Describe there; *Age *Size *Weight *Shape/design *Materials used *Construction *Aesthetics functional or decorative?</p> <p>-What do I believe is the objects intended purpose *Is it in working order *How well used is it * If worn where is the wear apparent *What type of user is it more suited to, what leads me to believe this *Technological level of skill required to use it, primitive or advanced *Speculate on the objects cost and the savings that might be generated through its use *What utilities/costs might be associated with its use (electricity, water, internet) *What other objects might it depend on in order to operate properly</p> <p>-How many, of a certain selected object are present</p> <p>-Note the absence of any related objects</p> <p>-Level of order, highly organized/cluttered</p> <p>-Speculate on how some of the objects may have been acquired</p>	<p>Defining features/objects of space</p> <p>Time laps sketches of how any features/objects might operate</p>		<p>Photos of features/objects</p> <p>Video demonstration of my suspected use of features/objects</p> <p>Photos of patterns of wear on objects</p> <p>Photos of any collections</p> <p>Photos of objects storage</p>
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Sensorial Response	<ul style="list-style-type: none"> -What am I drawn to first -What holds my attention the longest -Describe the touch/texture of selected objects -Sounds present & their sources -Smells present & their sources -Reaction to lighting -Response to the use of colour -Overall warmth of the space -Is the space awkward or restricted in anyway -Does the space have a more male or female impression/feel, what is it that contributes to this 		<ul style="list-style-type: none"> The direction in which I move throughout the space Patterns of lighting Location of sources of sounds Location of sources of smells Locations of features/objects that restrict my movement 	<ul style="list-style-type: none"> Video's of my reactions to the touch of some objects Time lapse photos of the changes in light patterns over the course of the visit
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Appendix 2

Guide Sheet for Homeowner Guided Tour

Ideas of how to prompt the couple into engagement without leading them

Can you tell me about the space before the renovation?

Can you tell me about the space during the renovation?

Can you tell me about the space having done the renovations?

Can you describe what it is about the space overall that lead to the renovation?

Can you describe the things you did in the original space?

Can you describe how you felt in the original space?

Can you describe who you spent time with in the original space?

Can you describe the things you do in the new space?

Can you describe how you feel in the new space?

Can you describe who you spend time with in the new space?

Appendix 3

Participants' Journal Introduction

Thanks for participating!

This is the last step.

Please write or sketch in this journal the interactions with, within or around your home it's features (spaces, doors, stairs, etc.) and objects (appliances, cupboards, etc.) for a 24 hour period.

It may be helpful to practice beforehand so you are more aware of how the things in your home support you to do certain activities. If you practice, please also write these into the journal.

Do not worry about the journal being neat and tidy, I just need to be able to read it.

Enter anything you can think of even when it seems silly or mundane.

After you've notated things please reflect back to add details about your actions related the features and objects. You may ask yourself these and other questions:

- How long did I spend with my object or in the space?
- Was I alone with it or was someone else there also?
- Do I do this interaction with an object or space everyday or only occasionally?
- Has this interaction changed over time, how?
- Are there challenges when I engage with this object or space? (e.g., is it annoying or fun to do)
- How does it make me feel when you are doing it?
- Are there any memories that come to mind during the interaction?
- How might your lifestyle be different without the ability to do it?

It may be useful to write in the journal for 24 hours and then go back and reflect on what you wrote later.

There is no rush to get this done, I am simply interested in knowing about how you engage with spaces and things in your home.

Sandra will mail the journals back to me whenever you have finished it.

Call if you need my help with anything! No question is silly.

Home (780) 458-6712 or Cell (780) 263-6712.

With appreciation,
Linda Marie