COMMUNITY LIVABILITY FOR OLDER ADULTS: THE PERSON-PLACE RELATIONSHIP AND PROCESS

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ABSTRACT

KENDRA HEATWOLE SHANK: Community Livability for Older Adults: The Person-Place Relationship and Process (Under the direction of Dr. Malcolm Cutchin)

The concept of Community Livability is widely used, but it is not well studied or understood. It is important to gain a better understanding of the processes and dynamics that contribute to livability, particularly for the rising number of older adults in the United States who will 'age in place' in their homes and communities. This dissertation describes a grounded theory study of community livability and the daily activities, or occupations, of older adults who are aging in place. The purpose of the project was to theorize the key dynamics of livability for this population and to identify dimensions of the person-place relationship that should be the focus of future inquiry. A multiple-case study design was used, and twelve older adults (70+) were purposively selected for diversity of experience, socioeconomic level, and living situation. Data collection included sequential interviews; naturalistic observation with each participant during an activity of their choosing; and GPS data collection which yielded spatial data about location, routine, routes, and duration. The spatial and qualitative data were integrated during analysis, where time-space patterns served to contextualize interview and observation data, and qualitative data explained and expanded insights from spatial data. Findings from this study include a rich description of daily life for individuals aging in place in Durham, NC; patterns of participation in daily life that vary by personal and residential factors; and dimensions of place that influence how older adults navigate the social and physical dynamics of their community. A theoretical model of

negotiated livability is proposed and explained. Central to the model are three core processes including enacting an ideology of aging, building social infrastructure, and planning and strategic problem-solving. These processes are negotiated through participation, and they shape and are shaped by life course and place processes. These findings and the model are discussed relative to existing frameworks of livability, and are used to examine some current assumptions in the literature about participation in occupation and the experience of aging in place in the community.

Dedication: To my grandparents, Dwight, Melba, Vada and Willard. Your faithful lives and dignified aging shaped my interest in later life, and inspire my own living.

Let knowledge grow from more to more, But more of reverence in us dwell; That mind and soul, according well, May make one music as before.

- Alfred Lord Tennyson

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CHAPTER 1

Introduction

1.1. Aging in America

Evidence of an aging population is not difficult to find in day to day life in the United States. Older adults are highly visible in the public sphere working or volunteering, shopping, relaxing, and delivering and receiving health care services. According to the most recently released statistics by the United States Census Bureau, adults 65 and older currently compose 12.8% of the population (2011). As the Baby Boom generation enters retirement, that percentage is projected to increase to 14.8% in 2015 and to more than a fifth (21%) of the entire U.S. population by 2050 (U.S. Census Bureau, 2012a). Coupled with a lower U.S. birth rate than past decades, this skewed population age curve has led to the coining of phrases like "The Gray Tsunami" (Brooks, 2012) and "Boomageddon" (Asquith, 2009). These phrases are hyperbolic, but they reflect the general impression that an aging population will impact society in unforeseen—and likely dramatic—ways.

The aging population and falling birthrate in the United States are demographic trends shared across the globe, and the World Health Organization chose "Ageing and Health" as the theme of World Health Day in 2012 (WHO, 2013). While different countries will experience and respond to the demographic shift in different ways, a widely held view is that societies and communities need to make preparatory changes "in order to maximize the health and functional capacity of older people as well as their social participation and

security" (WHO, para. 2). One particular approach explored by researchers and communities is how to support older adults in the immediate context of their home environments, that is, older adults who are aging in place.

1.2. Aging in Place: The Answer?

Living at home throughout later life is widely desired by older adults in the United States (AARP, 2012). Research generally has shown that aging in place is associated with better social, financial, and health outcomes, and older adults who continue to live in their own homes benefit from a higher quality of life and fewer depressive symptoms. Communities, too, stand to benefit from the continued participation of older adults in both formal and informal roles. These positive outcomes cannot be taken for granted, however. Although the vast majority (89.7%) of older adults in the United States currently own the home they live in and only 3% move to a different retirement location (U.S. Census Bureau, 2011), the apparent stability is accompanied by challenges. Almost a tenth of adults 65 and older currently live on incomes below the national poverty level, and more than half of older adult households are people living alone (U.S. Census Bureau). Therefore, while aging in place is generally represented as both positive for older adults and in the best interest of the communities in which they live, there are many unanswered questions about economic sustainability, social isolation, and the day-to-day participation in community life for this growing sector of the U.S. population.

One way national and local policy makers as well as advocates for older adults have tackled the questions around aging in place is to address particular features of a community that are expected to translate into better quality of life, functional ability, and health

outcomes for older adults. Research about home modifications, about promoting physical activity through "walkable" urban design, and about improving access to services like public transportation and senior centers has suggested ways that each of these features can be addressed via targeted changes. While these are certainly positive steps, little research has been done to demonstrate that changes to particular features of a community actually translate into better experiences and outcomes for older adults, or—as some advocates and community leaders and policy makers are coming to call it—into better *community livability*.

1.3. Problem Statement

Although the concept of promoting livable communities is being adopted across the United States, the dimensions of participation in occupations at the community level that might represent this concept remain understudied. The primary problem with how livability has been addressed and promoted for older adults in particular is that it is narrowly conceptualized, and that conceptualization has translated into a narrow scope of applied policies and interventions. As suggested above, much existing work can be characterized by a reductionist approach, where a single or small cluster of community features is studied or modified in isolation. Within this approach, particular features of the community are tied to discrete outcomes (e.g., 'walkability' measured by number of places accessible from a private home, or amount of time older residents spend walking for exercise each week) without a sense of how that feature relates to the whole "choreography" (Seamon, 2002) of daily life. More importantly, research about issues of livability and aging in place tends to adopt one of two perspectives. The first is an objective, survey-based, policy-evaluation approach to cataloging and measuring features of the community, where particular elements

of the community environment are foregrounded. The second is a subjective, interview- and focus group-based approach to understanding the experiences and meanings of aging in a community, which foregrounds issues of identity, community roles, and sense of attachment to a place. These disparate approaches have included important aspects of communities and aging that are related to livability, but neither approach has been able to provide an integrated understanding of the person-place relationship as it unfolds in the latter phases of life.

What is most needed at this time is an understanding of livability as neither subjective nor objective but as relational. Instead of isolating particular features, researchers and policy-makers need to first understand the dynamics of the integrated person-place relationship that underpins livability for older adults who are aging in place. Examining and theorizing this complex and active relationship will allow better conceptualization of the dynamics and will enable researchers to ask better questions. Eventually, this work will be translated in to changes that support ongoing participation in the range of activities that older adults need to do and want to do—their occupations—as they grow older in their homes and communities.

1.4. Purpose

The purpose of this project is to study the person-place relationship underlying livability in order to (a) theorize the key dynamics of livability for older adults, and (b) suggest which dimensions of the person-place relationship should be the focus of research and policy going forward. Specifically, this project approached the question of livability with a focus on dimensions of living such as community participation and the negotiated relationships of people and places, with the aim of representing complexity instead of simplifying it. The purpose of the project, and the relational and complex nature of the

subject matter, informed my decision to theorize livability through empirical data about how older adults participate in their daily occupations while aging in place. I was particularly interested in how they negotiate and coordinate problems over time, practical supports and barriers to participation, space-time patterns of participation, personal and community history and characteristics, cultural values and expectations, and personal strategies and solutions that shape daily life experiences.

The following research questions guided this inquiry.

- 1. What are the experiences of older adults aging in place in Durham, NC?
- 2. How do those experiences unfold in relation to the time-space patterns and the social, cultural, historical and life-course contexts?
- 3. What community dimensions and processes co-construct those experiences and contexts?
- 4. How do the community dimensions and processes inform theorization of 'livability' for older adults aging in place?

1.5. Significance & Contribution

Toward the purpose of considering the complex relationships and multiple dimensions of livability, I designed a multiple-methods study that is significantly different from previous studies on this topic in that my study (a) is theoretically grounded in a relational approach to understanding person-place transactions; (b) focuses on participation processes over time; and (c) uses an integrated approach to gathering and analyzing data about the person-place relationship. These strategic differences resulted in the ability to

theorize livability as a dynamic, negotiated process. The study contributes to both the occupational science and gerontology literatures.

The theoretical orientation of this project is an important contribution to the occupational science literature. My use of a transactional perspective influenced the framing of the problem and the analyses toward understanding person and environment as a coconstituting whole. Theorizing transactions as dynamic processes also foregrounded the importance of active participation in the world through occupation which helps to make and re-make the situated experiences of older adults. Additionally, the theoretical framework that guided this study shows that the person-place relationship is both central and emergent; neither person nor environment appears as a distinct entity. This is a significant departure from previous approaches to the topic and previous theoretical models of person, environment and occupation. This project builds on theoretical work in occupational science that challenged the dualism of person and place (Cutchin, 2004; Dickie, Cutchin, & Humphry, 2006), and is one of the first in-depth applications of this meta-theoretical perspective to empirical research on occupation. The findings demonstrate the importance of occupation for older adults who are aging in place, and I suggest further areas for research about the role of participating in occupation for negotiating livability.

Focusing on processes of participation over time is another contribution of this study. Very little literature on participation exists, and the most common approach is to use participation as an outcome instead of seeking to understand it as a situated process in a particular place (e.g., Haak, Fänge, Horstmann, & Iwarsson, 2008). Conceptualizing participation as a process over time is a particularly important aspect of this study because it counters the static view, common in the literature about aging in place, of both older adults

and the community environments in which they live and participate. As static entities, environments are thought to be 'modifiable' and older adults described as 'adapting' to address problems; they are entirely separate pieces of a puzzle that can be tweaked to improve their overall fit. Using participation as the key concept of interest offers a theoretical and methodological solution to this problem, because participation is both active and helps to integrate people and their situations. This focus on participation is additionally beneficial for explaining livability as a process that is influenced by the life course of individuals and cohorts. While the paradigm of life course research has guided researchers in gerontology to consider issues of time and place through which older adults' live are influenced, these considerations have not been brought to bear on questions of livability for older adults. Reciprocally, although place is addressed in geographical gerontology, there has been little research that examines the role of place in aging as it relates to the life course. The relationship theorized here is a promising area for future research that incorporates the strengths of both traditions.

The findings and grounded theory of negotiated livability presented here reflect the complex, integrated relationships of older adults and their communities. This research has significant real-world implications for how communities and policy makers attempt to support individuals as they grow older at home. In addition to the contributions to occupational science and gerontology, this study concludes that livability can be supported and maximized through place-specific attention to the importance of participation in daily life, the strategic development of social relationships, and particular patterns of going and doing. The findings are relevant to the experience of older adults in many settings and can inform a broad range of efforts for community- and program-design to meet the needs of

older adults. The findings also suggest that particular places with particular histories will need particular approaches: livability is not one-size-fits-all.

Livability will continue to be an important issue for communities across the nation that want to enhance and extend wellbeing for older adults aging in place. A greater understanding about the emergent, complex person-place relationship through research and theorization is the first step. Better theory and subsequent research will enable existing programmatic efforts regarding livable communities to be evaluated and modified to best meet the needs of the current population of older adults in the United States as well as the Baby Boom generation that will increase the number of people aging in place in the coming years.

1.6. Definitions

Within this study, *aging in place* refers to the process of growing older in a non-institutional, "community dwelling" home setting, either by choice or by necessity. The home may be a long-term residence or a recently rented apartment; it may even be a home of relocation, chosen for a community's constellation of appealing features or services.

Although many settings can be the 'place' of aging, institutional settings such as assisted living residences, continuing care retirement communities, or other designated retirement centers are excluded from the definition used in this study. Because the concentration of services, building modifications, and demographics of the residents, these types of residential settings represent a different demographic composite with different spatial and social characteristics than the communities in which the majority of Americans live in their older years.

I use *community* to refer to areas of varying size and indeterminate boundaries with which residents have a particular affinity, embedded-ness, sense of belonging, and/or familiarity. In the planning literature, the term community is usually used to refer to an area closely surrounding the home where goods and services are exchanged, social interactions occur, or the majority of day-to-day activities are completed and needs met (e.g., Pivo, 2005). Participants in this study, however, used 'community' to mean a range of geographical areas, from their immediate neighborhood to the entire Durham metropolitan statistical area (including Chapel Hill, the Research Triangle Park, and Hillsborough). This was not a limitation in the data; rather the range of definitions was instructive for how different people or groups of people with different histories and different experiences related to varying spheres of their places.

In this study, the term *older adults* is used to represent people older than 65, which is a commonly used cut point for many demographic projections, previous research, and for the receipt of services and age-specific programs within many communities. As the age when many adults retire, it is also a period of time when individuals and families weigh options for retirement location and housing. The term 'older adults' is not intended to represent a homogenous category, however, and adults 65 and older include a wide spectrum of experiences, interests, capacities, frailties, and values. In recognition of the transitions that often occur around age 65, the older adults who participated in this study were 70 and older; however, the findings are expected to be relevant across a wide range of aging individuals.

1.7. Chapter Organization

In sum, this project developed a new theorization of livability through older adults' experiences of participating in the occupations of daily life. In the next chapter, I will review the current body of literature related to issues of livability including an overview of current recommendations and guides for communities, research about aging in place, and evidence for the significance of participation as a key construct in understanding livability for an older population. I also critique this literature from several angles and conclude by presenting my theoretical framework for this study. In the third chapter, I explain my methodology including my use of grounded theory, sample selection, the multiple methods used, and my integrated analysis process. Chapters four, five, and six present the major findings of the study. In Chapter four, I introduce and describe the city of Durham, NC and the 12 participant cases. In Chapter five, I describe and explain the key conceptual categories that emerged from the data including patterns and dimensions of participation. Chapter six lays out my theorization of livability grounded in the previous chapters' findings and includes a model of the process of negotiated livability. In Chapter seven, I discuss the implications of the findings and the theorization of livability, examine the limitations of this project, and suggest the implications for communities and research going forward.

CHAPTER 2

Literature Review & Theoretical Framework

2.1. Introduction

The current generation of retirees in the United States and the members of the Baby Boom generation that will enter retirement over the next fifteen years generally desire to continue living and aging in their private homes. A recent survey conducted by AARP showed that of Americans 65 and older, 88% espouse a strong preference for continuing to live in their home as they age (Kennan, 2010). Gerontological research evidence supports this desire on several grounds, linking both the physical (Oswald, Jopp, Rott, & Wahl, 2011; Wahl, Fänge, Oswald, Gitlin, & Iwarsson, 2009) and social (Cheng, Rosenberg, Wang, Yang, & Li, 2011; Rosel, 2003) aspects of the home environment to general well-being in older age. Research also suggests that aging in place has substantial health benefits for individuals (Marek, Popejoy, Petroski, Mehr, Rantz, & Lin, 2005) and is more cost-efficient (and therefore sustainable) than institutional long-term care (Rantz, Philips, Aud, Popejoy, Marek, Hicks et al., 2011). All of these factors—physical and mental health, social connectedness and wellbeing, and overall quality of life—are key outcomes in the current research and policy about how to best support the increasing proportion of older adults aging in their private homes, situated in familiar but changing communities.

Aging at home in the community, or "aging in place" as I will call it from here on, is not an option pursued only by healthy and well-resourced members of the older population.

The Federal Interagency Forum on Aging-Related Statistics (2010) reported that 38% of community-dwelling older adults have some functional difficulty with activities of daily living. This population of older adults, who age in place despite increasing difficulty engaging in the activities that enable well-being in a community setting, underscores the personal and social significance of understanding the person-place relationship in order to foster effective resources, programs, and policies.

Developing 'Livable Communities' is one approach to supporting the person-place relationship. This approach is gaining visibility in the United States, particularly through the advocacy of AARP (2012). 'Elder-friendly communities' and other aging initiatives have also been piloted and promoted globally (Green, 2012; Plouffe & Kalache, 2011). There seems to be a growing appreciation for the importance of attending to the dynamics of a community that make it livable for older adults, yet the theorization of this concept is nascent. This chapter will review the current literature and understanding of the concept of livability as it relates to an aging population, both within the United States and around the world. Second, I will explore how current conceptualizations of two key sub-processes influence how we think about livability for older adults: participation, and how it has been operationalized in gerontology and occupation-based literature; and aging in place, and how it is conceptualized and measured. I then offer a critique of the current theorization of place found in Lawton's (1982) ecological model, which is cited by the majority of the literature in this field. I will also provide a critique of "successful aging," which is often insidiously linked to continuing to live at home in the community into advanced age. Examining these aspects of the literature, and the gaps and weaknesses highlighted by my critique, set the stage for studying and conceptualizing livability in a new way. In the final section, I will

present and explain a framework for studying livability that addresses those gaps, and I conclude with a summary of the implications of this research.

2.2. Livability & Age-Friendly Cities

2.2.1. Livability: The United States

Although the concept of livability may appear to be a recent trend, promoting the livability of cities is at least a century-old concern in the United States. In the early 1900s, as New York City and other population centers dealt with industrial growth, pollution, and ill health in densely inhabited areas, Marquette (1928) lauded the efforts of New York City in successfully passing zoning laws and making the city more livable for its residents. This livability was quite literal: the ability of residents to *live*, not die from congestion, smog, tuberculosis, and other infections. In that time and context, simply creating a geographical segregation of residential, business, and industrial areas promoted the health and well-being of the city's residents. However, Marquette presaged the intricacy of promoting livability for a city-dwelling population in years to come, acknowledging that "the social factors bearing on health are so many and so interrelated that it has not yet been found possible to separate completely the effect of physical environment from such influences as income, race, education and medical service" (p. 1110).

Livable Community policy and intervention efforts in the early twenty-first century continue to be about how to best promote the health and well-being of the population, although the population in question is most often older adults, or other groups at some physical or social disadvantage. In 1977 a group called Partners for Livable Spaces, which later became Partners for Livable Communities, was founded with the mission to improve

livability in communities which they defined as better quality of life, economic opportunities, and social equity for all age sectors (Partners for Livable Communities, 2012). In the 1990s, this group and others (for example, architects, urban planners, and the Environmental Protection Agency) developed and expanded principles of livability through research and policy efforts and through concepts such as sustainability, smart growth, walkability, housing options, and civic engagement. This work was often targeted at local government officials and planners as a way to improve their communities (AARP, 2012). Advocates for groups of residents that were at risk or in some way disadvantaged in the community embraced many of these principles, and they were incorporated into reports on livability published by various organizations such as the National Council on Disability's report on livability for disabled adults (2004) and the first Livable Communities Evaluation Guide released by AARP—an advocacy organization for retired Americans—in 1999 (AARP). Both documents suggested that the livability of a community is assessed vis-à-vis housing options, safe and reliable transportation options, accessible and walkable physical environments, and access to employment, civic, and recreational opportunities. They cited existing research about the concept of livability, survey research with target groups, and interviews with key informants.

In the early 2000s, The Visiting Nurse Service of New York conducted a health policy research project that sought to establish a framework by which communities could evaluate their own readiness to support older adults living in the community (Hanson & Emlet, 2006; New York, 2004). In 2003, Feldman and Oberlink published the results of this project, which was named the AdvantAge Initiative. Using a review of the literature and four focus groups around the country, the authors concluded that the components of an elder-friendly community are that it (a) addresses basic needs; (b) promotes social and civic

engagement; (c) optimizes physical and mental health and well-being; and (d) maximizes independence for frail and disabled individuals. A few years later, Hanson and Emlet (2006) used this model to conduct an evaluative case study of a community in Washington State. This application was the original goal of Feldman and Oberlink's work; unfortunately, although helpful in identifying ways to improve a community, the AdvantAge model did more to operationalize aspects of an ideal community and concepts pre-existing in the literature rather than theorize what actually makes a community livable. However, the AdvantAge Initiative findings have been adopted as a framework for several subsequent studies and reports, including the one by the National Council on Disabilities (2004) mentioned above.

AARP's Public Policy Institute undertook a large national survey with Americans 50 and older to inform a 2005 report called "Creating Environments for Successful Aging" (AARP, 2012), which also led to an updated version of their community evaluation guide (AARP, 2005). Survey questions focused on social and community engagement and civic involvement. It is not surprising, then, that AARP's definition of livability is "how the physical and social environments can promote independence among individuals and strengthen the civic and social ties among them" (2012, p. 4). The recommendations for communities included in the report involve increasing opportunities for civic engagement such as volunteering; modifying homes and promoting safety and inclusiveness in public spaces; and facilitating transportation through driver education and mobility options. However, the raw data from the survey show that the majority of older Americans felt that being near friends and family, near places they want and need to go, and near sites of social

interaction was very important. Only one fifth agreed that being near public transportation was important to their wellbeing (Kennan, 2010).

Another recent project which also employed focus groups of older adults found that reciprocity, meaningful interactions, and minimizing structural barriers (specifically to transportation) were crucial elements when older adults considered whether their community supported aging in place (Emlet & Moceri, 2012). Their sample was primarily Caucasian women, 40 and older, which the authors suggested may have influenced the heavy emphasis on social connectedness and interdependence during focus group discussions. However, the findings from the AARP survey and from Emlet and Moceri's study demonstrated an inconsistency between the livability principles being applied by organizations and local planners, and the perceived needs of older adults themselves. Survey results and frameworks (such as AdvantAge and AARP's Community Evaluation Guide) emphasize features of the community such as volunteering opportunities, housing options, and transportation services, whereas older adults prioritize the physical, functional, psychological, and social domains related to being engaged in the community (Phelan, Anderson, Lacroix, & Larson, 2004).

In summary, current livable community policy and evaluation efforts in the United States are grounded in generic assumptions about what older adults need in order to age in place, such as accessible and affordable transportation, housing options, health care, safety, and community involvement opportunities (Alley, Liebig, Pynoos, Banerjee, & Choi, 2007). The major focus is on aspects of the community, particularly the physical environment, which I discuss in more detail in the section on theoretical assumptions that follows. While these community features have some individual support in the literature, there is no evidence that they, when used to evaluate or implement change in a community, actually relate to the

process of aging in a particular community; that is, we do not know whether such community features constitute livability.

2.2.2. Age-Friendly Cities: World Health Organization

International efforts to promote age-friendly cities, spurred by changing demographic profiles worldwide, were gaining momentum around the same time. In 2002, the World Health Organization (WHO) provided the Active Ageing framework which emphasized a life-course approach and interventions at early ages to promote lifelong health (WHO, 2002). In 2005, the WHO launched a collaborative project in 33 cities around the world to identify the key features of a city that promote active aging, so that leaders and policy makers could assess their community's 'age-friendliness' and identify where changes needed to be made (Plouffe & Kalache, 2010). In each city focus groups of older adults, direct care-givers, and public service providers were asked to discuss the eight topic areas from the WHO Global Age-Friendly Cities guide (2007). These topics were identified through literature from the U.S. and the guide specifically cited AARP's Livability Guide and the AdvantAge Initiative (AARP, 2005; New York, 2004). The resulting guide for cities around the world includes eight focus areas: outdoor spaces and buildings; transportation; housing; social participation; respect and social inclusion; civic participation and employment; communication and information; and community support and health services (See Table 4.1). Plouffe and Kalache reported in 2010 that this framework created a starting point for age-friendly development projects in many cities around the world. In a literature review around the same time, Lui and colleagues (2009) concluded that there had been inadequate study of the processes and outcomes of community and aging change over time, and the complexity of aging in place had not been addressed by the primarily descriptive focus-group studies.

Several provinces in Canada launched initiatives to evaluate and increase the agefriendliness of their communities, strengthened in part by the support of the federal
government (Plouffe & Kalache, 2011). In addition to community-specific development,
there is also a research and policy network to encourage the development and application of
new evidence, and to align age-friendly efforts with other visible public policy priorities
(Plouffe & Kalache). One such research effort by Menec and colleagues (2011) attempted to
conceptualize age-friendly communities. These authors built on the WHO's definition of an
age-friendly community as one in which "policies, services, settings and structures support
and enable people to age actively" (WHO, 2007, p. 5). However their further development
rested on Lawton's ecological perspective to elaborate the age-friendly domains established
by the WHO study (2007) which has several theoretical limitations (discussed below). Menec
and colleagues did introduce the idea of social connectivity as a heuristic, which expanded
conceptualization of age-friendly cities to include personal, social, community, and policy
environments.

Finally, two recent studies in Europe inform current understanding of age-friendly cities. First, Green (2012) reported on a survey conducted by the Healthy Aging Sub-network of the European Healthy Cities Network to assess how cities are (a) raising awareness of the status and role of older adults; (b) empowering citizens to participate in community action; (c) promoting supportive environments; and (d) supporting access to a full range of services. While this study did not directly conceptualize or interpret age-friendliness results, it described an overt effort to counteract the "orthodox perspectives of global ageing as a 'demographic time bomb' likely to impact negatively both on sustainable economic development and demand for health and social support" (para. 1). Green highlighted several

ways in which older adults ought to be empowered with knowledge and tools in order to establish, promote, and be responsible for their own aging. This study exemplifies the trend of shifting responsibility of achieving and maintaining wellbeing outcomes in older age from governments to individuals (see Section 2.5.2).

The second European study represents a different approach to conceptualizing the relationship between community characteristics and older adults' aging outcomes. Hank (2011) evaluated "successful aging" outcomes in 14 European countries, using measures of disease, dysfunction, physical and cognitive health, and engagement with 21,493 adults 65 years or older. His findings showed that there was wide variation in whether older adults were determined to be aging successfully, variation explained in large part by structural factors at the societal level such as general socioeconomic status and governmental policies. He concluded that efforts to support people who are aging need to consider cultural differences as well as the social policy and structures within which individuals carry out their daily lives. Hank thus added to the evidence suggesting that aging well in the community has dimensions beyond personal responsibility and choices.

2.2.3. Livability, Age-Friendly Cities, and the Ecological Perspective

One aspect that conceptualizations of livability and age-friendly cities have in common is a pervasive emphasis on the environment—the physical and social contexts—in which the older person lives. Many researchers explicitly draw on the work of Lawton and Nemahow's (1973) ecological perspective, also called the environmental press model, in which they posited an interaction between person and environment. In this interaction, an individual with fewer personal competencies or resources is more susceptible to maladaptive outcomes as a result of the demands of the environment. The goal presented in this model is

to achieve 'fit' (see Section 2.6.1), and the model stimulated growth in the field of environmental gerontology toward describing, explaining, and modifying that fit in order to support older adults (Wahl & Weisman, 2003). The vast majority of evidence available regarding livability, age- and elder-friendly communities, and even aging in place (discussed in more detail in Section 2.4) has been conceptually grounded in this ecological perspective. Many of the projects reviewed above cite Lawton's model (e.g. Emlet & Moceri, 2012; Green, 2012; Menec, Means, Keating, Parkhurst, & Eales, 2011; Plouffe & Kalache, 2010). Operating from this dualistic perspective translates to a dualistic approach to research, where the inquiry is primarily about features of an environment (e.g., Andersson, 2011; Yang & Sanford, 2012), or the characteristics, skills and attitudes of older adults (Emlet & Moceri, 2012; Haak, Fänge, Iwarson, & Ivanoff, 2007). This fit model greatly oversimplifies person and environment factors (Cutchin, 2003). Temporal and spatial processes are neglected, as are perspectives that foreground participation in occupation and a transactional understanding of the person-place relationship. Golant (2003) correctly concluded that although Lawton and Nemahow's (1973) formulation of person-environment fit is still pervasive, it is not compatible with the study of "holistic phenomena involving the confluence of people, space, and time" (p. 639).

2.3. Participation

One such holistic sub-process of livability is reflected in the concept of participation: the embodied experience of *doing*, or action, in daily life. Although it is not always clearly defined in the livability or age-friendly literature, increased or maintained participation in daily activities is generally viewed as desirable for older adults. Participation encompasses

physical and social dimensions and has become central to conceptualizing health in recent years (Vessby & Kjellberg, 2010). It was codified in 2001 when the World Health
Organization included participation in the International Classification of Function, Disability and Health (ICF) and defined it as "involvement in a life situation" (WHO, 2001, p. 14).

Participation is equally central in research on and conceptualization of occupation, and participation in occupation is the core paradigm of occupational therapy and occupational science. Law (2002) outlined participation as a meaningful and complex weave of patterns across time and space. Yet participation is still most often conceptualized as a result of 'fit' or overlap between person, environment, and occupation (Law, Cooper, Strong, Stewart, Rigby, & Letts, 1996), or as the band of performance that is maximized or limited by the person's skills and abilities or the resources of the context (Dunn, Brown, & McGuigan, 1994). In these mechanistic models, participation is seen as an outcome, not as a complex process unfolding through daily life.

While these models have been expanded and refined in later work, the central understanding of the environment as an adaptable, modifiable container that promotes or inhibits participation in occupation is still prevalent, particularly in relation to livability. In a recent societal statement on livable communities, the American Occupational Therapy Association declared that practitioners promote participation by advocating for "universal design and environmental modifications that remove barriers in homes and communities to ensure access to supporting community services [...] and to facilitate engagement by advocating for and assisting in the creation of more livable communities" (Fagan & Cabrera, 2009, p. 847). Participation, from this viewpoint, depends to some extent on the temporal

precedence of (a) the existence—or absence—of barriers, (b) gaining and maintaining access, and (c) general community advocacy and support.

2.3.1. Accessibility and Usability

These three determinants of participation (barriers, access and support) reflect current policy efforts, and are mirrored in the research literature about participation. Iwarsson and Stahl (2003) outlined the distinction between policies of accessibility and usability, and suggested that the terminology applied to person-environment relationships influences how participation is understood and supported. First, they argued that the term "accessibility" is a relatively objective approach based on minimizing barriers in the environment. Accessibility bears close ties to Lawton's ecological perspective in that individuals with fewer personal competencies—i.e., the disabled or older adults—will benefit when barriers to places, information, or services are systematically removed. Research in this vein includes home modification studies (Nygren, Oswald, Iwarsson, Fänge, Sixsmith, Schilling et al., 2007; Oswald, Wahl, Schilling, Nygren, Fänge, Sixsmith et al., 2007) and research on the relationship between the built environment and activity (Handy, Boarnet, Ewing, & Killingsworth, 2002).

Second, Iwarsson and Stahl (2003) argued that the term "usability" goes farther than accessibility, since it is not solely focused on reducing barriers for a particular population, and instead includes a subjective sense of the activity and use inherent in functioning within an environment. Usability suggests a focus on the "effectiveness, efficiency, and satisfaction" (p. 60) of participation. Research examining participation from this angle includes Haak and colleagues' (2008) examination of experiencing participation in home and neighborhood environments; Townley, Kloos and Wright's (2009) exploration of community integration

and activity space for individuals with serious mental illness; Therrien and Desrosier's (2010) analysis of daily activities and social roles of older adults in various communities; and McKenna, Broome, and Liddle's (2007) study of time use, role participation, and measures of life satisfaction of older adults in Australia.

Both accessibility and usability, however, are still grounded on the micro-level factors of person-environment fit (e.g., number of stairs to a particular building or a personal sense of attachment to a long-time home) that underlie theories of occupation and research within environmental gerontology. Some recent work provides a richer understanding of participation, primarily through the introduction of factors related to the society or culture. For example, Whiteford (2004) proposed the concept of occupational deprivation as antithetical to participation, and raises issues of geography, employment, incarceration, gendered stereotyping, and refugeeism to highlight meso-level social and political dimensions that might affect participation. Similarly, Sakiyama, Josephsson and Asaba (2010) expanded the lexicon of participation by describing the socio-political tensions experienced by individuals with mental illness as they participate in community contexts. These approaches to conceptualizing participation beyond the micro, immediate, personenvironment relationship are important steps in moving toward a more expansive theorization of community livability.

Finally, it is important to note that participation is treated almost entirely as a positive construct in both the aging and occupation-centered literature. Participation is often conceptualized as a determinant of health, operationalized as hours out of the home per day and/or more roles enacted (McKenna, Broome, & Liddle, 2007), or higher frequency of activities (Horgas, Wilms, & Baltes, 1998). Wilcock (2006) suggested a more nuanced

understanding of the relationship, arguing that health should not be the end goal but rather a resource for daily living. This implies an intuitive bi-directionality: health/well-being leads to the ability to participate in particular ways, and participation promotes a range of positive health and social outcomes. Hammell (2009a) goes further to point out that this reciprocal relationship could also be detrimental, where certain ways or contexts of participation have a negative impact on an individual or group's health. These assumptions will be critiqued later in the chapter.

In sum, participation is sometimes conceptualized as a quantifiable outcome such as number of activities or meaningful and goal-oriented time use, achieved by decreasing barriers and increasing skills. Such a conceptualization is limited in that it cannot reflect the dynamism and holistic nature of *doing*. Instead, a more useful conceptualization of participation from the literature understands it as a process over time, with reciprocal influence of actor and environment, occurring at a range of geographic scales and toward desired but ever-changing ends (see Section 2.6.2.c).

2.4. Aging in Place

A second sub-process of livability is aging in place, or continuing to live in a private, community-located dwelling into older age. Livability has been broadly targeted, and would ideally benefit residents of all ages and abilities (Partners for Livable Communities, 2010). However, it is uniquely relevant to older adults who are growing older in their own homes by choice or by necessity. While many institutional and other designated retirement settings provide services or create an environment where necessary and desirable destinations are available in close proximity, only a small percentage of older Americans will move to

institutional settings (AARP, 2005). The vast majority of older adults remain in a familiar home and community as they age. Marek and Rantz (2000) medicalized this reality, calling aging in place the new model for long-term care, which has implications for how livability is conceptualized. Like participation, aging in place is generally viewed as a positive phenomenon by researchers, practitioners, and policy makers, and staying at home is desired by the majority of older adults as well (Marek, Popejoy, Petroski, Mehr, Rantz, & Lin, 2005). Aging in place is associated with better cognitive, emotional, functional, and health outcomes (Marek et al.). The home environment is also closely associated with perceived autonomy and independence for older adults (Haak, Fänge, Iwarsson, & Ivanoff, 2007).

At a social level, supporting people to age in place is often argued to be a cost effective solution to the projected crisis of medical, social, and institutional demands by the aging Baby Boom population (Rantz, Phillips, Aud, Popejoy, Marek, Hicks et al., 2011). Critical scholars point out, however, that this "boomaggedon" mentality is a construction that attributes the 'problem' of increasing health care costs and demands incorrectly to older adults (Asquith, 2009) while simultaneously shifting the weight of responsibility for support from federal and state government to individuals and families (Martinson & Minkler, 2006).

2.4.1. Homes and Neighborhoods

Current research on aging in place tends to address either the home and modifications to the home (Fänge, & Ivanoff, 2009; Iwarsson, Wahl, Nygren, Oswald, Sixsmith, Sixsmith et al., 2007; Wahl, Fänge, Oswald, Gitlin, & Iwarsson, 2009), or the physical and social characteristics of the neighborhood environment. Like research on homes and home modification, research on aging in neighborhoods tends to use either a survey or observational approach to neighborhood characteristics or seeks to understand and represent

the subjective experience of aging in a particular neighborhood. In the observational approach, characteristics of the community are measured to determine their relationship with older residents' quality of life (Friedman, Parikh, Giunta, Fahs, & Gallo, 2012; Oswald, Jopp, Rott, & Wahl, 2011) and participation (Haak, Fänge, Hortsmann, & Iwarsson, 2008). In a recent review of research about neighborhood influences on older adults' participation, Hand and colleagues (2012) concluded that the neighborhood's socioeconomic level, the number of services, mobility barriers, physical problems, social cohesion, and safety are linked to participation for this population. In the subjectivist approach, researchers have examined older adults' perceptions of their neighborhoods (Walker & Hiller, 2007), sense of attachment to and inclusion within a changing neighborhood (Burns, Lavoie, & Rose, 2012), and a neighborhood's influence on well-being and identity of older adults (Peace, Holland, & Kellaher, 2005). The findings from these studies are generally thematic analyses of interviews, and authors reported domains of individual meaning, experience, and identity construction.

2.4.2. Person-Place Relationship

Both approaches described above—correlating features of the home and neighborhood in relation to individual outcomes, and building understanding of how the subjective experience of aging is influenced by neighborhood environment—reflect a person-environment theorization where the older adult is literally aging *in* place. The home and neighborhood are environments surrounding, yet very separate from, older adults. In contrast, the interdisciplinary field of geographical gerontology has explored the relationship older adults have with their homes and neighborhood living environments. Places are not seen as passive containers of social life but rather as integral parts of people's social lives (Andrews,

Cutchin, McCracken, Phillips, & Wiles, 2007). In this view, the 'place' of aging in place is not a backdrop, but rather it is imbued with meaning (Rowles, 1983c) and negotiated to maintain that meaningfulness (Heatwole Shank & Cutchin, 2010). Place is a dynamic interplay of many factors over time (Rowles & Ravdal, 2002) and is constantly changing through the actions and interactions of people, their histories, and their desired futures (Smith & Cartlidge, 2011). Wiles and colleagues (2009) built on the concept of place attachment by suggesting that older adults have a web of relationships and integrated places in the community that create a "social space." Their findings moved beyond the psychological and emotional characteristics of the person-place relationship that are commonly addressed in geographical gerontology toward a view of place as a multi-faceted *process* that occurs at different scales.

This research is clearly contrasted against the medicalized and static view of aging in place of the 'new long-term care model' (e.g., Marek & Rantz, 2000). Instead, this research defines aging in place as "a complex set of processes that is part of the universal and ongoing emergence of the person-place whole, and the creative social effort to reintegrate that whole in a meaningful way when problems arise" (Cutchin, 2003, p. 1079). The foundation for and implications of taking this view of the person-place whole are discussed in the following section.

2.5. Critiques

The research and theorization of livability, participation, and aging in place offers many insights into what makes it possible for older adults to do the things they need to do and want to do, that they find meaningful, and that promote their well-being. However, there

are noteworthy limitations. I offer two critiques of this body of literature, which both have implications for how future research is conducted and under what assumptions researchers and communities theorize livability. I will follow each critique by suggesting the implication for livability research.

2.5.1. Place in the Person-Environment Model

Place has been theorized in many ways, and the underlying assumptions directly influence the way aspects of aging in place are operationalized for study and intervention. Lawton's environmental press model continues to characterize the thinking and work in environmental gerontology that informs much of the work related to livability, which in turn has perpetuated the person-place dualism he proposed. In a recent example, Szanton, Thorpe, Boyd, Tanner, Leff, Agree and colleagues (2011) tested an interdisciplinary intervention for older adults living at home, with the targeted outcomes of improving basic functional levels, quality of life, and decreasing falls. Their rationale was that if disability is the gap between a person's functional competence and what the environment requires them to do, then it follows that by increasing functional capacity and decreasing demands, disability would be minimized. In this research and many other examples, (a) place is treated as a container; (b) a 'micro', narrow view of place is used; and (c) place is conceptualized in a static way, indistinguishable from *space*. These points are the focus of my critique.

2.5.1.a. Place as container. Place is treated largely as an environmental container within which a person lives. In this view, it is the spatial surrounding that puts demands on an individual, or that can compensate for the older person's decreasing competency (Kendig, 2003). Place is conceptualized as the constellation of backdrops and props in the physical world that "facilitate or impede activities that are sought, valued, or necessary for older

people" (p. 613). Places have discrete features that are physical, categorizable, observable, and ideally measurable. That way researchers, planners, policy makers and other professionals can best predict what will or will not create a good "fit" between the older person and the environment as they age. Lawton argued that place (environment) has three functions: that of maintenance, of stimulation, and of support (Wahl &Weisman, 2003). Such a functional conceptualization of place disposes researchers to isolate elements in order to develop explanations about the relationships between person and place. This reductionist approach creates research and theorization characterized by positivistic spatial approaches. Such approaches use a static treatment of person-in-place that does not address temporal factors or change, and a mechanistic understanding of amenities, barriers, and support. All curtail understanding place as a social process.

2.5.1.b. Scope of place. In environmental gerontology, place is functionally limited to a physical (or social) environment that is immediate—close enough to the older adult for a direct interaction to occur. Taking such a micro-view is not inherently problematic, and information about the features of a home or a residential facility can be valuable in an applied setting (e.g., Gitlin, 2003). Indeed, it is difficult to analyze or even locate "fit" between a person and an environment if the environment is conceptualized more broadly. This limits inquiry before it begins. The actual "environment" of growing old encompasses many other socio-political, regional, and economic considerations which, when ignored, greatly limit the scope of understanding possible. Despite Wahl and Weisman's (2003) description of the topical breadth of the field of environmental gerontology, the macro example they offered of exploring the rural-urban boundary does not address the political and economic macro view that would truly enrich research theorization in this area (Cutchin, 2009).

Framing the 'place' that older adults live in and relate to as only the immediate environment truncates both depth and scope of understanding. In the geographical gerontology literature, place is defined as the wider community that older adults are part of, use, identify with, and shape over time. This more expansive definition of place, while often approached as differing levels of insideness (Rowles, 1983c) or scope of social space (Wiles, Allen, Palmer, Hayman, Keeling, & Kerse, 2009), opens the door to studying the "interwoven nature of action, morals, and meaning in place" (Cutchin, 2003, p. 1079) beyond the proximal locations of daily life.

2.5.1.c. Place or space? A third critique of the majority of research about aging in place and livability treats place as a static and definable entity, akin to geographical *space* (Fried, 2000). In environmental gerontology, place is often conceptualized as a container (see Section 2.5.1.a), defined in large part by its functions of maintenance, stimulation, and support (Wahl & Weisman, 2003) that are examined cross-sectionally. Place is thus temporally divorced from past environments and meanings, or from anticipated futures; it is relatively inert, bounded in the present, and dimensionally limited.

In geographical gerontology and humanistic geography traditions, place is often conceptualized as a receptacle of meaning. The emphasis is on the personal "sense of place" which encompasses place attachment, place identity, and place dependence (Norris-Baker & Schiedt, 2005). While this approach to defining place is more social and processual in nature, it is still static in some ways. Place attachment is emotional, internalized by an individual (Rosel, 2003), and becomes an extension of the individual via accumulated experiences in a particular location (Rowles 1983b; Rowles, 1983c).

Alternatively, Creswell (2004) defines place as a *process*, an embodied relationship that is never complete. Place in this view is the merging of natural and social worlds, an articulation of social networks, people, and goods moving through time and space. Place is constituted by ongoing meaning-negotiation by multiple actors (Rowles & Ravdal, 2002), can be problematic and reintegrated in light of future meanings (Cutchin, 2001), and is part of a continuous narrative where the past shapes the present, which shapes the future (Westerhof, 2010). Place is not fixed nor ever completed: instead it should be seen as a process that is shaped by *and shapes* social, cultural, political, and economic contexts. Place in this view is not a bounded container, and it is not reduced to a measured set of relationships with an individual. Rather it is a shared experience, with shared meanings, that changes and is reinterpreted over time (Creswell).

2.5.1.d. Implications. Lawton and Nemahow's (1973) widely employed model of Person-Environment Fit (see Figure 2.1) has a certain elegance in that the simple model suggested how older adults function in their environment, and the model offered a formulaic approach to studying and implementing change in the person-place relationship. However, despite being employed for decades, the model has not resulted in richer conceptualization or theoretical refinement, and research findings are limited by the narrow scope and mechanistic approach. Conceptualizing place as a bounded, reducible entity is not conducive to theorizing and studying livability in particular, since living and participating in a community is an embodied, coordinated, and changing affair for individuals and groups. Livability implies place as well as action occurring in and through that place. An understanding of place that supports a theorization of livability needs (a) to be process-oriented, (b) to emphasize actors and actions of goods and people over time, and (c) to acknowledge the continuity of

experience in both the history of people and places as well as the desired and meaningful future. This theoretical orientation is discussed in Section 2.7.

2.5.2. Successful Aging

The question of how to live well, or what constitutes a good life, is relevant at all ages. However, it has been a particularly relevant question in gerontology, closely tied to theories of how people age in societies and how that aging process does or does not affect the relationships, goals, and engaged experiences of the individual. Aging theory has influenced perceptions of what it means to age, and age well. I will review the explicit conceptualization of "successful aging," raise three issues with the current conceptualization, and suggest how "success" is related to the concept of participation in particular. I conclude by suggesting how theorizations of successful aging are relevant to livability.

2.5.2.a Definitions. Settersten (2006) claimed that although there is continuity through all of life, older age is a unique phase of life for study. He was not arguing for Erickson's scripted life stages of generativity versus stagnation and ego integrity versus despair, but rather for an understanding of processes over time that aggregate in unique characteristics and challenges in older age. Settersten, like Marshall and Bengston (2011), stressed that there is great diversity across the aging population, and that aging theory that is grounded in normative roles or age divisions render older adults as passive vessels of socialization and the deterministic processes of political and economic structures. In contrast to the normative view, the life span model of successful aging (Schulz & Heckhausen, 1996) and the successful aging model (Rowe & Kahn, 1997) suggested an active role of the older adult, an innate capacity that can be developed and maximized, in aging successfully.

Rowe and Kahn (1997) defined successful aging as including "low probability of disease and disease-related disability, high cognitive and physical functional capacity, and active engagement in life. [...] Successful aging goes beyond potential; it involves activity" (p. 433). They argued that the three components of their model—avoiding disease and disability, engagement with life, and cognitive and physical function—are each within the sphere of individuals' control. First, genetics play a lesser role as people age and "lifestyle" plays an increasingly important role in determining disease risk (p. 435); second, high education and sense of self-efficacy lead to longer engagement; and third, physical and cognitive status can be improved throughout life, suggesting that "plasticity persists in older age" and "appropriate interventions can often bring older people back to (or above) some earlier level of function" (p. 437). Similarly, Schultz and Heckhausen (1997) suggested that successful aging is observed in relative comparison with ideals of human achievement as well as with personal goal attainment. They emphasized purposeful human behavior toward adaptive change via Baltes' (1997) selection, optimization, and compensation triad. In these definitions, older age is a unique phase of life in that it presents individuals with challenges that they can overcome in order to maintain and maximize physical, social, emotional, and cognitive well-being. This echoes the activity theorists of the 20th century (Marshall & Bengston, 2011). Some researchers have suggested the need to modify these individualcentric definitions to include more structural elements and explanations for well-being in later life (e.g., Hank, 2011), but many continue to accept and work within the general framework of the successful aging definitions.

2.5.2.b. Critiques. There are three points of critique for the definitions of successful aging described above. First, the idea of successful aging presented by Rowe and Kahn

(1997) is particularly influenced by Western ideals of the healthy and meaningful life.

Kantartzis and Molineux (2011) highlighted the assumptions that (a) humans should be active; (b) that activity is purposeful and goal-oriented; (c) that time, including older age, is a resource to be used and not wasted; and (d) that there is personal meaning and value in *doing*. While these assumptions may be consistent with the cultural contexts of some older adults, they are certainly not universal; in many contexts, these valuations are a form of power exerted over older adults whose aging process is not coherent with this 'normal' (Giddens, 1979/2007). Holstein (1999) suggests that "cultural messages which elevate an ideal of productive aging can easily subvert—or, at minimum, complicate—an older person's ability to find coherence and purpose in the face of frailty and disability" (p. 367). Therefore, the definition of successful aging is not only incomplete to theorize living well in older age, but it may actually threaten well-being for those who do not fit within the proposed frame.

A second issue stems from a political economy perspective. Martinson and Minkler (2006), among others, highlighted the conflation of successful aging with 'productive aging' and the expected civic and personal participation of older adults who have longer healthy years post-retirement. Increasing civic engagement is often interwoven with livability efforts, operationalized as volunteerism or family-care, although there is not a clear link between volunteerism and/or informal caregiving and a community's livability. The American Society on Aging has described the demographic of retiring Baby Boomers as a "vast, untapped social resource" (2005). The problem here is twofold. First, like the normative pressure of Western ideals discussed above, when an emphasis on productivity is conflated with living well in older age, it may unintentionally devalue older adults for whom volunteering is either unappealing or impossible (Holstein, 1999). Second, and more insidious, volunteering is a

mechanism by which under-funded governments and programs meet their service and staffing needs (Freedman, 2002). Successful aging is tied to volunteering within a capitalistic framework where the older adult ought to donate their time and energy—in the guise of engagement, leading to health and successful aging—without receiving direct compensation. This may actually be antithetical to livability for many older adults.

Similarly, in an era of diminishing responsibility and resources for human services from the government, the full weight for personal welfare is shifted to the individual and/or family (Martinson & Minkler, 2006). This third criticism of successful, or "positive" aging (Asquith, 2009), is consistent with a broader critique of neoliberalism. For example, Asquith traced a shift from Australian state support of health services infrastructure to private responsibility for health outcomes, and she challenged "armchair myths" (p. 261) surrounding the ideas of productive and successful aging. In the representations of older adults as either frail or spunky, and in media representations of and marketing toward older adults, Asquith noted a similar dichotomy with some messages about embracing age (via consuming certain products) but many more stigmatizing 'old' as a negative state to be avoided. Her primary argument was that the shift in national policy, mirrored by these other trends, needs to be exposed and decried by social scientists since it transfers a burden on to individuals and families who are least able to bear it.

Laliberte Rudman (2006a) made a similar case using analyses of newspapers.

Specifically focusing on messages about retirement, she argued that the neoliberal political rationality acts through discursive constructions to shape the shared understanding of what activities are valued and acceptable in older age, thereby promoting certain agendas (such as the personal responsibility for being active, staying healthy, being fiscally independent) that

benefit governments but may disadvantage older adults. Laliberte Rudman (2006b) further suggested that these political discourses shape not only shared cultural understanding of the *shoulds* of retirement, but also have implications for what older adults actually do *vis-à-vis* social and contextual supports for the occupations that are perceived as socially ideal. This structuring decreases occupational possibilities for older adults (Laliberte Rudman, 2005) and systematically disadvantages older adults who, due to functional, cognitive, financial, or other limitation, cannot 'participate their way to health.' It also neglects the important role of social, cultural, economic, and political factors (2006b) in daily life. This discursive practice of limiting possibilities while reifying activity as an expression of successful aging is happening in the United States context as well, evidenced in gerontological research (e.g., Horgas, Wilms, & Baltes, 1998) as well as internalized by older adults, themselves (Bryant, Corbett, & Kutner, 2001).

2.5.2.c. Implications. In the existing literature on livability, many of the priorities and recommendations for communities reflect Western ideals of being active and independent, the cultural pressure for older adults to spend time volunteering, and the idea that by simply ensuring that there are choices (such as housing options, transportation options, etc.) older adults will avail themselves of what they need in order to age successfully. These assumptions and recommendations need to be scrutinized carefully. First, most frameworks for supporting and evaluating livability presuppose the goal of promoting "successful aging," and therefore are operationalized through efforts to enhance activity, independence, and health. While these are positive goals, the push for greater amounts of activity, an obligation to be independent, stigmatization of illness or disease, and the assumed control an individual has in these areas can be problematic. Second, although there is an

overt effort to improve livability for low-income, rural, and minority older adults in some recommendations (Alley, Liegig, Pynoos, Banergee, & Choi, 2007; Hanson & Emlet, 2006), there is a disproportionate weight on volunteering and civic engagement as a determinant of livability (Feldman & Oberlink, 2003; Hanson & Emlet); this is without acknowledging that being active and socially engaged in older age is not cost-neutral for the older adult (Asquith, 2009). Finally, cultural messages about participating in socially meaningful and productive occupations may not actually be consistent with how older adults perceive the good life, nor does it support them in the "creative social effort to reintegrate [the person-place whole] in a meaningful way when problems arise" (Cutchin, 2003, p. 1079). It seems likely that for some older adults in some places, perceived responsibility to carry out their daily lives in certain ways, to certain extents and in certain locations may perpetuate or worsen disadvantages instead of promoting well-being.

2.6. Proposing a Framework for Studying Livability

In light of the critique above, and in order to study livability in a way that is more sensitive to the processes inherent in older adults' relationships with their communities, a new framework was necessary for my study. This framework needed to be consistent with key suggestions from the literature: participation in daily life is central to aging; the 'place' of aging is a social, cultural, and physical process; and relationships within those place processes are significant. I will first review commonly used and referenced representations of the person-place relationship from existing frameworks to build on the critiques above, and to set the stage for presenting my own framework. I next describe my meta-theoretical orientation to person-place relationships, based in a transactional perspective and consistent

with John Dewey's pragmatism. Then I will lay out three key characteristics of my framework —dynamic, continuous, and participation-focused—that extend from that orientation. I will describe how I employ the construct of occupation as a tool to examine participation, place, and relationships in the context of community life, and how it served as a sensitizing concept during data collection and analysis. Finally, I will present a model of the framework I used to approach the data, and the question of livability.

2.6.1. Previous Representations of the Person-Place Relationship

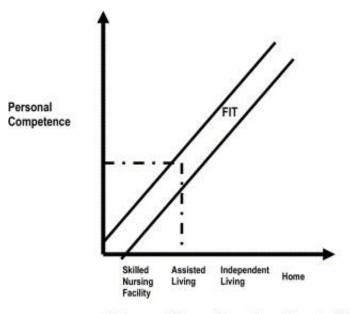
The existing research about the dimensions of a community that make it a supportive place for older adults to carry out the occupations they need and want to do has several weaknesses. These weaknesses include the evaluative and conceptual development outside of empirical work, and the almost exclusive reliance on individual and focus-group accounts of features that promote independence, quality of life, and social and physical outcomes.

Another significant weakness is how the person-place relationship is addressed and understood, which is most evident in how that relationship is represented through the dominant frameworks for study and the models that extend from those frameworks.

As already discussed, much of the literature on participation and aging in place uses the ecological person-environment fit framework. This framework is best represented in Lawton's (1982) diagram where the individual's competence and the demands and opportunities of the environment are on diametric axes, and a band represents where the optimal performance can occur (the fit). In this diagram (Figure 2.1), the person-place relationship is a simple intersect at an observable point. The extent of environmental press and level of personal competence meet at a single location, and either insufficient

competence or a highly demanding environment can result in an intersection outside the optimal band of functioning.

Figure 2.1. Person-Environment Fit Model (Lawton & Nemahow, 1973)

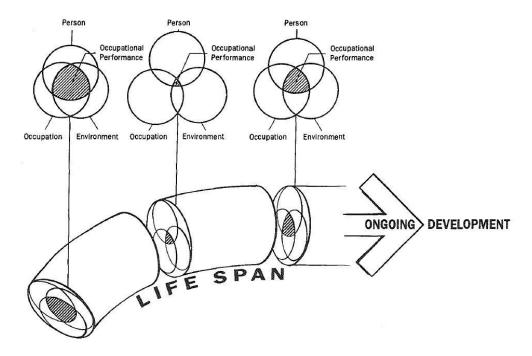


Environmental Press (Demands and Opportunities)

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In theorizations of occupation, the range where performance is optimized is also represented as 'fit' (Law, Cooper, Strong, Stewart, Rigby, & Letts, 1996). Law and colleagues go farther than the person-environment fit framework by suggesting change over the life span, and by including occupation itself in their diagram. However, similar to the person-environment fit framework, person and environment are each represented by separately bounded circles that overlap to a greater or lesser extent. The person-place relationship is thus an outcome that is promoted through change in the person, activity, or in the environment. The majority of the current research regarding the person-place relationship of livability employs these frameworks.

Figure 2.2. Person-Environment-Occupation Model (Law et al., 1996)



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A representation in which the environment is treated as a more complex construct, with social, physical, and cultural elements at multiple levels of influence, is Bronfenbrenner's (1992) ecological systems framework of human development. This model places the individual in the center of multiple nested concentric circles which represent micro, meso, exo, and macro systems. While this representation included multiple levels of environmental influences and captured more of the complexity of person-place relationships, it has several limitations for studying livability. First, the nested systems approach is reminiscent of the container metaphor of place (see Section 2.5.1.a). Second, action is not evident as a process within the model, which curtails representations and understandings of change, challenge, or negotiation over time for either the individual or the tiered systems surrounding the individual. Finally, and—although there are reciprocal arrows suggesting

interaction—each tier is bounded, and more distal tiers only indirectly influence individuals by "altering aspects of progressively more proximal environments" (Greenfield, 2011). The person-place relationship in the ecological framework, while inclusive of many more elements and levels of influence, is not significantly more dynamic or focused on participation than the ecological person-environment fit or the person-environment-occupation representations of the person-place relationship.

These three frameworks have been empirically conceptualized, expanded, and modified through the research of other scholars. However, the frameworks for research that extend from these models have resulted in a body of literature where experiences of the person and amenities of the environment are often examined separately, and where neither action (participation in occupation), continuity across time, nor the dynamic and emergent nature of aging in place are evident.

2.6.2. Meta-Theoretical Orientation

I understand the relationship of person and place to be what John Dewey called 'trans-action' (Garrison, 2001), or through what scholars writing about occupation have termed a "transactional perspective" (Cutchin & Dickie, 2013). This perspective views human action, or occupation, as holistic, emergent, contextual and meaning-rich, and transcends the dualism of person and place by asserting a person-in-environment continuity (Cutchin, 2004; Garrison). A transactional view foregrounds experience (Dewey, 1930/1998), situation, and action (Cutchin, 2001). This action—both by individuals and groups (Strauss, 1991)—is a process of inquiry and learning where past experiences, knowledge, possible consequences and valued outcomes orient action toward certain ends.

Cutchin (2001) argued that this "forward lean" of meaning through action (p. 40) is crucial to understanding how problems that arise in situations are addressed, resolved, and the situation is reintegrated. This integration is embedded in time and place, and leads to new meanings and new anticipated ends (Cutchin, 2004). Cutchin argued that Dewey's view is uniquely holistic and useful in that it conceptualizes the problematic nature of situations and how individuals and groups work to remake and coordinate places for the good of the place's elements: the people who inhabit a place (2004), as well as the natural and social features that comprise it (Cutchin & Dickie, 2012).

This transactional perspective offers a way to view situations as constituted of events, or emergent and dynamic processes, involving continuous elements that change with and through each other (Aldrich, 2008). It also foregrounds relational action (Cutchin & Dickie, 2012). Such an action-focused, process-oriented foundation that emphasizes the continuity of person-place is ideal for grounding research about how older adults in the context of aging in place functionally coordinate the occupations of their daily lives. Many elements of a situation are considered, not as a peripheral aspects 'setting the stage' for occupation but rather as interwoven with and integral to the action that unfolds.

2.6.2.a. Dynamic. A key characteristic of this theoretical orientation, and a difference between my framework and previous approaches to studying livability, is the emphasis on place as an emergent, dynamic process: place is never complete. Unlike theorizations of place as a container or backdrop, place as a diorama inside which action unfolds (Hägerstrand, 1982), or place as an accumulation of past experiences and personal meanings, (Rowles, 1983a), a dynamic approach views place is an ever-changing articulation of many elements (Creswell, 2004). Dewey's view of situations encompassed this emergent nature

(Boisvert, 1998). Cutchin (2001) extended Dewey's argument in his model of place integration, which suggested how action arises from and unfolds into situations to solve problems and create new meanings. The inherent instability and ongoing challenge of places (Cutchin, 2003) means that action and place make and re-make each other, and therefore a framework to study action-in-place should represent this dynamism.

2.6.2.b. Continuous. Dewey sees experience as based in the interconnection of person and context, so much that they cannot be divorced or fully understood without the other (Cutchin, 2001). In contrast to models where person and environment are represented as separate (albeit overlapping) entities (e.g., Law et al., 1996; Lawton & Nemahow, 1973), a transactional orientation suggests that the parts of a situation should be viewed as coconstituting parts of a whole (Aldrich, 2008; Sullivan, 2001) that cannot be fully understood in isolation. This continuity extends across natural and social worlds, as well as over time. Experiences of the past as well as anticipated or desired outcomes come to bear in the present through the process of weighing alternative courses of action to achieve those outcomes. Continuity of experience over time means that action is characterized by "incessant beginnings and endings" (Boisvert, 1998, p. 22) and is better understood as growth (Dewey, 1896/1998) than acting to achieve a predicted outcome. However holding ends-in-view does not imply a volitional process that arises purely within the individual, or a motivational force that propels an actor toward a goal. Growth does occur through a process of envisioning possible desirable futures, or ends-in-view, and charting a course of action that is constantly reevaluated based on desired (but subject to change) ends-in-view. Acknowledging continuity is a crucial element of this framework, particularly to address the lack of

understanding about the complex processes of aging in community over time highlighted by Lui and colleagues (2009).

2.6.2.c. Participation focus. A framework for studying livability must move beyond a focus on aspects of the community or service system, and instead focus on the complex relationship of person and place characterized by complexity, creativity, and habit all organized toward a provisional and changing end (Cutchin, Aldrich, Bailliard, & Coppola, 2008). The construct of participation is one way to incorporate this relationship-orientation, exemplified in the "relational" definitions, offered by Huot and Laliberte Rudman (2010) and Rowles (2008), that participation is an embodied and emplaced process. Seamon (2002) called participation the complex, ever-changing choreography of person and place. One benefit of using participation in a framework for studying livability is that it can be understood on many scales of analysis, from the immediate experiences of meaning, choice, and engagement of the individual, to shared social values and durable socio-political structures that shape materials, opportunities and challenges, to the broad elements of economic, cultural, and historical contexts of daily life. The implication for my framework of study is that, although it greatly increases the complexity of what needs to be attended to (Dickie, 2010), focusing on participation is a way to study the relationships of person and place at (and across) different units of analysis.

2.6.3. Occupation

Occupation is my central disciplinary construct, and is a useful tool for studying livability. Humans inhabit the world via occupation, and, as Rowles (2008) eloquently summarized, "we cannot be in no location or at no time" (p.129). Time and place are definitional aspects of occupation, as well as historical, sociocultural, economic, geographic,

and political contexts. However, the emphasis on the performance, or 'doing' aspects of occupation, or the subjective and personal experience of engaging tends to overshadow this emplaced nature of occupation in the literature. For this study, I use Cutchin, Aldrich, Bailliard and Coppola's (2008) definition of occupation as "a type of relational action through which habit, context, and creativity are coordinated toward a provisional yet particular meaningful outcome that is always in process" (p. 164). This definition is consistent with the dynamic, continuous, and action-focused framework proposed above.

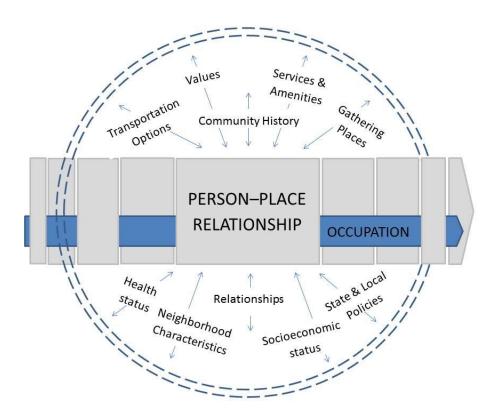
Research sets a precedent for using occupation as a central construct for understanding dimensions beyond the individual experience, including Hocking and colleagues' (2002) portrayal of the rich cultural situation of cooking and recipe work for older women in Thailand; Rowles' (2008) life-course-of-place approach to understanding meaning; the patterns and complex conflations of activity in daily life (Bendixen, Kroksmark, Magnus, Jakobsen, Alsaker, & Nordell, 2006; Larsson, Haglund, & Hagberg, 2009); and Huot and Laliberte Rudman's (2010) analysis of the interdependence of society and individuals via identity construction and negotiation. The significance of occupation is supported in the aging in place literature about participation, engaging in communities, and social relationships of older adults; therefore, it is a salient tool for studying community livability. Occupation itself became a sensitizing concept for data collection and analysis, particularly as it related to the elements in my framework below.

2.7. A New Theoretical Framework

In contrast to the dominant frameworks, and consistent with the theoretical orientation I outlined above, my framework for studying livability is depicted in Figure 2.3.

This representation of my conceptual framework includes participation in occupation as a constant process with and through the person-place relationship; a continuity of experience and relationship over time; social, physical, cultural, personal and historical factors that influence and are influenced by the unfolding action; and place as fully part of the situation, not a one-dimensional backdrop. Livability is not included *a priori* in this representation. The general orientation toward relationship and action as each change over time allows a theorization of livability to emerge as the quality through which the whole is integrated.

Figure 2.3. Person-Place Relationship Framework



This framework addresses the gaps in the current literature in several ways. First, I avoid the reductionistic approach of examining person-alone or environment-alone by presenting elements of individuals, groups, and contexts as part of an integrated, co-constituting situation (a whole, represented by non-specific porous boundaries of varying

scope). Second, the person-place relationship is represented as a holistic, continuous process over time that is permeated by participation in occupation. Third, I represent the person-place relationship as a forward-oriented process that influences and is influenced by the elements of the whole situation. With a transactional perspective as the meta-theoretical force behind it, this framework implies the importance of using multiple angles to understand the person-place relationship that underlies livability. Multiple methods are necessary since neither first-person account nor observational survey and measurement can fully explain the process through time or how occupation serves to coordinate the person-place relationship toward desired outcomes.

Using this framework also provided me with additional sensitizing concepts for data collection and analysis. These concepts included attention to the relationships among elements of the whole situation, change (and continuity) over time, participation in occupation, how occupation serves to negotiate disjunctures in the person-place relationship, and the desired ends-in-view of individuals and groups. Limitations of this representation include an incomplete inclusion of continuity over time and the limited dimensions of emergence depicted in the person-place relationship. However, this framework is a helpful new orientation toward a more holistic theorization of livability.

As the immediacy of addressing the needs of older adults and their communities grows, it is important to more carefully theorize livability in the context of a United States city so that eventual translation into programs and interventions does not, at best, only tangentially address the need; or, at worst, subvert older adults' participation in daily life by ascribing metrics of success that are unattainable and divert resources from solutions with actual potential for growth. Based on a critical review of the extant literature and existing

programs for promoting livability in the United States and worldwide, this project addresses a gap in the basic understanding of the processes through which the person-place relationship of aging in place can be understood and supported. Theoretically, this gap can be addressed by taking a relational view of the entire situation, such as that offered by a transactional perspective, and by foregrounding occupation as a key construct of inquiry since it is an embodiment of the person-place relationship. Methodologically, the clear implication for research on livability is the prioritization of multiple methods and the use of empirical evidence to suggest (not to confirm) conceptual categories that inform livability. I turn to these methods in the next chapter.

CHAPTER 3

Methods

3.1. Overview

This multi-method multiple case study was designed to examine the person-place relationships that are created, negotiated, and changed as older adults age in their homes and the wider community of Durham, NC. Multiple methods were included in order to illuminate the most pertinent dynamics and characteristics of everyday life—occupations—through which older adults coordinate the person-place relationship. Using diverse methods is consistent with an instrumental approach to the cases, where a depth of understanding regarding particular cases informs a broader issue (Stake, 2005). The broad goal of this project was to generate empirical evidence about how daily activities unfold for older adults in order to better theorize the meaning of community livability for a graying U.S. population.

To achieve the overarching goal of generating a better theoretical understanding of community livability for older adults, the specific aims of this research are (a) to describe and interpret place-based patterns, processes, and experiences of participation in community life, and (b) to theorize how the person-place relationships that are central to livability are experienced, negotiated, and coordinated by older adults. These aims were addressed via multiple methods detailed in this chapter.

A grounded theory approach (Strauss, 1991) informed the process of iterative data collection and the majority of the data analysis. Procedural details of recruitment, data

collection, and data analysis follow. The sampling approach, recruitment process, data collection procedures, and steps to protect participants described below were approved and supervised by the Biomedical Institutional Review Board at the University of North Carolina at Chapel Hill.

3.2. Setting

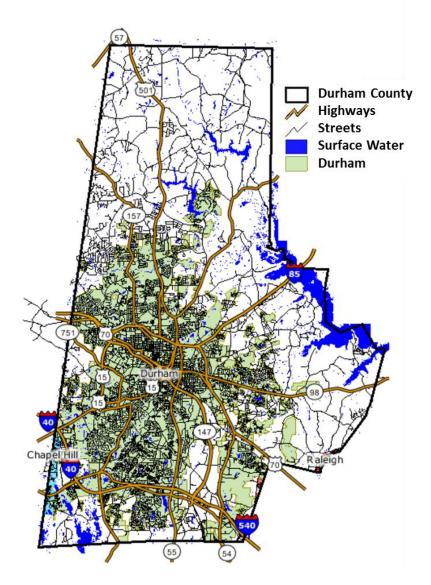
The city selected for this project was Durham, NC, which had an estimated 2011 population of 233,253 (US Census Bureau, 2012). Durham is projected to grow over the next five years at a rate of 9.1%, which is slightly higher than the rest of North Carolina at 8.2% (Durham Convention and Visitor's Bureau, 2010). The population of Durham is diverse, with 41% African American, 40% Caucasian, 14% Hispanic, and 5% Asian populations in 2010 (US Census Bureau). Approximately 40,000 people reside outside the city limits in Durham County (red on Figure 3.1) which is just 16 by 28 miles, making it one of the most compact counties in North Carolina (Durham Convention and Visitor's Bureau). Durham City is shaded in Figure 3.2.

Figure 3.1. Durham County and City in Central North Carolina



Cartography by K. Heatwole Shank

Figure 3.2. Durham County and City Map



Durham has a distinct downtown district that is slightly less than one square mile in size. The city has several designated historic districts and 100 year-old residential areas that are immediately outside the downtown loop (Durham Convention and Visitors Bureau, 2012). Due in part to several periods of rapid growth where residential areas were quickly developed and occupied, Durham has many delineated neighborhoods. A current register lists 129 neighborhood associations with active community websites and communication networks (Durham Hoods, 2012). Many neighborhoods have internally cohesive architecture

and infrastructure. There are neighborhoods of Craftsman-style homes and Bungalows that surround the downtown area, neighborhoods of primarily brick Ranch-style homes built in the mid-20th century as suburbs, and late-20th and early-21st century neighborhoods with larger homes located near roadways accessible to the urban and business districts in and around Durham, Chapel Hill, and Raleigh, NC. Several neighborhoods are historically African American-predominant communities, such as those in the Hayti Community district (Jones, 2001), and several are historically associated with Duke University, largely due to proximity (Office of Durham and Regional Affairs, 2012). A public transportation system links the downtown rail line and bus station with some outlying neighborhoods and shopping districts (Durham Area Transit Authority, 2012).

The tobacco warehouses, many located downtown and near rail lines, are a notable feature of the landscape. Durham's history of rapid development in the late 1800s is closely aligned with the tobacco industry's rise post-Civil War; as the industry declined between the 1940s and 1970s, the city did as well (Wise, 2002). Efforts to revitalize the downtown area began in the 1960s with mixed results. In the last two decades several key buildings and projects downtown have created new entertainment, residential, restaurant, and retail options within the downtown loop (Durham Downtown, Inc., 2007). Many buildings, however, remain vacant.

In addition to the varied urban characteristics, diverse population, and post-industrial revitalization, Durham is an interesting and relevant setting for this study because of the city's large and growing population of older adults. In 2010, 8.8% of Durham City residents were at least 65 years old (United States Census Bureau, 2012) and 9.8% of the Durham County population was older than 65 years (NC Department of Health & Human Services,

2012). Demographic projections for 2030 estimate that people over 65 will make up 13.9% of the county population (NC Department of Health & Human Services). Baby Boomers (those between 46 and 64 years old) represent almost a quarter of Durham's current population (NC Department of Health & Human Services), and in the next two decades the North Carolina Office of State Budget and Management (2010) anticipates a state-wide increase of 400,000 residents 65 and older per decade. These numbers signify significant demographic change, even compared to other states and metropolitan areas in the United States. In the early 2000s, North Carolina ranked near the middle of all states with a proportion of adults 65 and older around 12% of the population (Himes, 2002). However, a ranking of growth rate by region shows that southern states have the fastest rising percentages of older adult residents in general (7% in 2005), and North Carolina ranked 15th nationally with a growth rate of 8.8% from 2000 to 2005—higher than many other states in the southern region (Colello, 2007). Most strikingly, in 2005 the metropolitan area composed of Raleigh, Durham, and Chapel Hill was ranked 8th highest nationally with a 25.8% growth rate of older adult residents in the previous decade. Issues around aging in the community and services for older adults have been highlighted in the social and political discourse in Durham and in North Carolina, evidenced by the governor's recent call for annual statewide conferences on aging to inform community strategic planning and service provision (NC Department of Health & Human Services, 2010). These regional and local trends continue, and contribute to the sense that aging is a pertinent issue in Durham.

3.3. Participants

3.3.1. Sampling Approach

Participants in this project were older adults living in Durham, NC, in non-institutional home settings. Persons living in continuing care or other retirement communities were not included. Participants communicated fluently in English, and were cognitively able to engage in in-depth interviews and recall details of their daily lives. Participants were included if they did not have specific plans to relocate, and generally left their homes (for any purpose) at least 5 hours per week. Seventy years old was a minimum age for inclusion. This age cutoff was not included because of arbitrary categorizations of older age, but rather as a strategic age to target individuals whose activities were not shaped by full-time employment, and who—by proxy of advancing age—had experiences that would allow them to reflect on the changing nature of their participation in daily activities.

Attention was also paid to including participants with a diversity of backgrounds and living situations based on the assumption that these differences may translate into different experiences. North Carolina Aging Services Plan (2007) reports that 9.3% of Durham's population is 65 or older, and of these older adults 59% are women; 16% are African American; 7% live alone; 33% have less than a high school diploma and 12% live below the federal poverty level. Using a target sample size of 12 participants, Table 3.1 shows the projected and actual stratification of the sample to reflect population demographics.

Table 3.1. Targeted and Final Sample

	Caucasian	African American		
Women	6 (5)*	2 (3)		
Men	3 (3)	1 (1)		

*Final sample in parentheses

Approximately a third (4) of the sample were expected to live alone and I expected to include approximately half (6) from a lower SES relative to income and lack of education. Since enrollment and participation were rolling, volunteers were included if they met all inclusion criteria and helped achieve this variation. For example, once three Caucasian men had been enrolled, no additional participants in that quadrant were recruited or included.

Consistent with the theoretical orientation toward person-place relationships (see Chapter 2), the sampling strategy included attention to the neighborhood of the older adults' homes as well as the characteristics of those homes. Like gender, age, socioeconomic status, ethnic background, and education level, existing studies have suggested a relationship between the surrounding community and neighborhoods and older adults' participation in daily activities (Hand, Law, McColl, Hanna, & Elliot, 2012). Therefore, in addition to variation in personal demographics and experiences, I sought variation in home type (see Table 3.2) and neighborhood location (see Figure 3.3). As recruitment progressed (detailed below), snowball sampling allowed for targeted recruitment of possible participants whose home and neighborhood expanded the geographical profile of the sample.

Finally, a layer of strategic sampling was applied as the study progressed. Theoretical sampling, a concept original to the grounded theory tradition, is the process of expanding and clarifying insights from initial coding, memo-writing, and conceptual development by

selecting additional cases that in some way deepen or challenge that emerging understanding (Charmaz, 2006). For example, when participants described planning their occupations in geographical 'loops,' I recruited three participants who lived in different geographical areas in order to examine whether these loops were a neighborhood effect. I also included two more-frail participants whose limited participation made geographical planning more challenging and less applicable in their situations. Theoretical sampling is included in the analysis schematic (Figure 3.4), and discussed in the analysis section that follows.

3.3.2. Recruitment

Participants were recruited in several ways. I attempted to recruit via flyers hung throughout Durham. After six weeks and 60+ flyers, no participants were enrolled. Since recruitment via flyers proved ineffective, I moved to secondary recruitment strategies. First, I sent emails to professional contacts in the occupational therapy and gerontology practice fields in Durham and surrounding areas, soliciting participant referral as well as recruitment recommendations. The responses provided suggestions for community organizations and informal groups to contact. Based on those suggestions, I sent the recruitment flyer to several non-profit organizations targeting community-dwelling older adults, to several incorporated neighborhood associations of neighborhoods with a significant number of retired residents, and to an email list-serve of occupational therapists working in gerontology and geriatric settings. I also contacted the home-assistance program director at the Durham Veterans Administration, the director of a Medicare-funded pharmacy assistance program that makes house calls in Durham, and two doctors who contacts indicated had a standing interest in issues of aging in place. I enrolled five participants via those sources.

Data collection with this round of participants began in late February 2012. These participants were demographically similar: all were Caucasian, all had post-secondary education, all were relatively active in civic and social activities, and all owned their own homes which they had moved to in later (50 years or older) life. Snowball sampling with these participants resulted in some referrals of individuals that they perceived to have different experiences of aging in Durham, or who were ethnically and/or socioeconomically varied. These recommendations led to three additional participants, including an African American male. Data collection for this second wave of participants began in April, 2012.

Emerging concepts influenced the final round of recruitment through theoretical sampling, and a purposeful approach was used to fill gaps in sample variation. My key concern at that stage was including African American women. Via email and telephone conversations with some key informants, I discovered that the local AARP chapter in Durham is primarily women, and almost entirely African American membership. The president of the chapter used my inclusion criteria to contact eligible participants. Three African American women were enrolled in July, 2012. One final participant (a Caucasian female) was recruited via snowball sampling because of her residential location and history. Participant details are summarized on Table 3.2, and they are listed in order of recruitment.

Table 3.2. Demographic and Residential Characteristics of Participant Cases

	Co-residents	Ethnicity ^a	< High School	Lower SES	Age (avg. 78)	Years in Durham (avg. 46)	Home	Neighborhood Demographics & Stability	Neighborhood Location & Economics
Edith	None	С		*	72	40	1920 Bungalow; owns	High turnover, mixed student rental and homeowner	Downtown
Alice	None	С			72	40	Condo; owns	Restored building, homeowners	Downtown, wealthy
Rosie	None	С			73	7	Built 1990s; owns	>50% older adults	County location
Bonnie	None	С			81	36	Built 1990s; owns	>75% older adults	Suburban
Martii	Wife	С			78	25	Built 2000s; owns	Long-term homeowners	Suburban; wealthy gated community
Sterlin	g Wife	AA	*	*	74	74	Built 1950s; owns	Long-term homeowners, primarily AA ^a	County line with acre+ lots, depressed area
Phillip	Wife	С			83	58	Built 1990s; owns	>75% older adults	Suburban
Eugen	e Wife	С			72	43	Built 1990s, owns	>50% older adults	County location
Eleano	r None	AA	*	*	71	12	2000s Apt; rents	High turnover, mixed student and older adult rentals	Mixed-use development near business and retail
Harrie	t Family	AA		*	99	60	1920s Bungalow, owns	Hayti District ^b , mixed rental and homeowner	Downtown, depressed area
Viola	Family	AA	*	*	73	73	2000s Apt; rents	Subsidized housing units, Primarily Hispanic and AA ^a	Near Downtown, depressed area
Jane	None	С			84	84	Built 1950s; owns	Mid-century brick ranches, many long-term homeowners	Suburban; depressed area

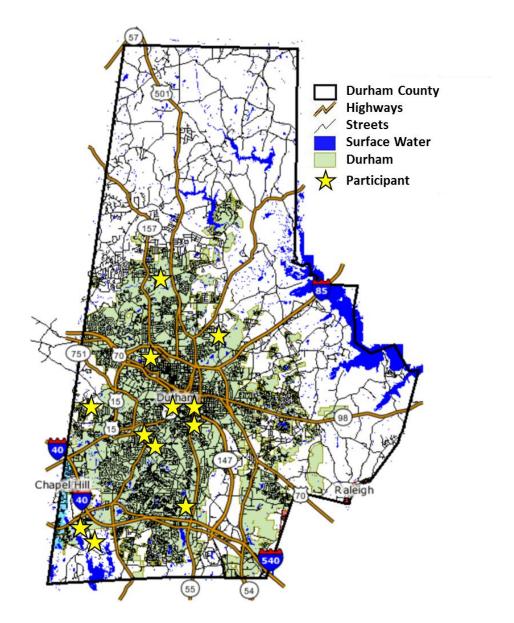
^a African American (AA) or Caucasian (C)
^b Hayti District is a historic African American community, and the predominant majority of current residents are African American.

3.3.3. Descriptive Summary

The final sample was very close to the targeted stratification. Demographics and key residential characteristics are summarized in Table 3.2. The average age of the sample was 78 years old, and the majority lived in their own home. Half lived alone, half lived with others, and all but one (Viola, who was temporarily not approved to drive following her heart attack) still drove on a regular basis. One half volunteered in some capacity, and one third had some part-time employment.

The participants' neighborhoods were geographically varied, including northern, central, and southern areas. Neighborhoods were also varied in demographics (mixed student and older adult, >50% older adult, >75% older adult, primarily African American), stability (student rentals, subsidized housing rentals, mixed rental and homeowner, all home-owner, and long-term/20+ year homeowners), location (downtown, surrounding downtown, suburban, mixed-used developments, county), and economics (wealthy, depressed areas, subsidized housing). The majority lived within city limits, and two lived in Durham County. The county locations were less than 10 miles from city center, and all participants carried out their day-to-day activities in Durham. The geographic distribution of participants' homes is presented in Figure 3.3.

Figure 3.3. Participant Home Locations in Durham County & City



The participants had lived in Durham (in their present and previous locations) for an average of 46 years. One quarter (three) had lived in Durham for their entire lives; four more had lived in Durham (primarily related to their careers) for their entire adult lives. Of the remainder, two moved to Durham for late-life career changes. Two widows moved into

Durham from smaller neighboring communities after their husbands' deaths, and one moved from a northern state to retire near family.

While there were varying levels of physical, cognitive, and social challenges in each case, all but one of the participants initially enrolled participated in all forms of data collection. The third African American woman to be enrolled suffered a second heart attack following the first interview. She survived, but was unable to drive, did not leave her home, and had substantial other visitors (home health, aides, etc.). We mutually agreed to end her participation at that point.

In addition to the twelve participants described above, several key informants from the community were identified during data collection and interviewed by telephone after providing verbal consent. These informants included representatives from an NGO called Project Compassion, Durham County Department of Adult and Crisis Services, Durham CAN (Communities and Neighborhoods) Older Adult Action Team; the Durham County Historical Librarian; staff at Durham Center for Senior Life (Durham County); and Durham City Planning and Community Development Departments. These individuals offered insights in to the social services, community history, built environment, and community priorities that comprise the landscape of aging in Durham.

3.4. Data Collection

3.4.1. Overview of data collection

Multiple methods were used to gather data about older adults' participation in community-based activities, and about how that participation was related to the physical and social dimensions of their communities. While participation in activities inside and outside

the home likely contribute to older adults' daily experiences of livability, and many occupations extend across both home and community contexts, community-based occupations (or occupations that occur outside the home) were the primary subject of inquiry for this study. Livability is generally conceptualized as a feature of the public spaces and characteristics of a community, so focusing on community-based occupations is consistent with broader literature. I refer to participants' community-based occupations throughout this and following chapters to reflect my focus on these activities that have spatial and social dimensions outside of the home. I am not, however, advocating for a categorical separation of home- and community-based occupations in this or future research.

Previous studies have used interviews to suggest how the subjective experience of aging in place might be related to older adults' ability to carry out (and their satisfaction with) daily occupations (e.g., Therrien & Desrosiers, 2009; Walker & Hiller, 2007). Other studies have attempted, through observation and survey, to identify particular community features in order to understand what does and does not support aging in place (e.g., Haak, Fänge, Horstmann, & Iwarsson, 2008). Using these methods separately has yielded helpful but incomplete understandings. To better theorize community livability, specifically to describe place-based patterns of older adult participation and to theorize processes of livability, I employed three specific methods in this project. Interviews elicited the individual's experiences, perspectives, and values. Naturalistic observations foregrounded how those experiences and daily activities unfold in real time. Global-positioning system (GPS) devices collected concrete spatial data about the geographic location and navigation patterns.

Including GPS data collection as a method for studying the daily lives of older adults is an important innovation in this study. The use of GPS and geographical information systems (GIS) analyses in social science research has been championed by Kwan (2006), who argued that a qualitative approach to GPS data could provide critical insights into how people experience and interpret their daily lives and that it is a useful method to visually represent the spatiality of processes in the community. Pavlovskaya (2009) also championed non-quantitative uses for GPS data, suggesting that map images could be used as both analysis and presentation and that it was a novel approach to theorizing and visualizing nonquantifiable social experiences. Little work has been done in this vein, however. The limited social science research that has employed GPS methods tends to use it to calculate and analyze activity spaces (e.g., Skelly, Arcury, Gesler, Cravey, Dougherty, Washburn et al., 2002), but this yields information about spaces—not processes—of social life. Further, Hirshorn and Stewart (2003) argued that using geographical data for community-based gerontological research is especially valuable since it can reveal patterns of community features and resource accessibility relevant to older adults. They also suggested that GPS can be compatible with other qualitative methodologies, for example, by raising questions that can be answered through other methods, or, reciprocally, by answering questions raised in other methods. For this study, GPS is inherently useful in theorizing and understanding social processes such as community livability, and is a method that can be fruitfully combined with other types of data collection to yield more holistic, integrated understanding of the personplace relationship. My combination of GPS with interviews and naturalistic observations was innovative in that it went beyond the typical first-person accounts of the experiences of place (common in much geographical gerontology; e.g., Rowles, 2008; Wiles, Allen, Palmer,

Hayman, Keeling, & Kerse, 2009) by including concrete spatial data. The approach also challenged the person-acting-in-environment theorization that characterizes the majority of aging in place literature (see critique in Section 2.5) by focusing on the person-place relationship instead of on place characteristics or subjective experience alone.

Using this combination of methods to address the over-arching question about livability has two specific benefits. First, multiple methods yield multiple types of data, which helps represent the real-world complexity missing in earlier research. Different types of data act as different lenses: they increase depth and crystallization of the many facets being explored when used together (Charmaz, 2006). Second, using multiple methods requires additional layers of analysis and yields a more nuanced understanding. In this project, I used spatial analysis as well as traditional grounded theory approaches, and employed a constant comparative method (Corbin & Strauss, 2008) to interrogate and integrate all data (see Section 3.5 below). The data from the three methods, which were constantly analyzed and used to inform on-going data collection, made it possible for me to test emerging insights across data from different methods and to refine my findings accordingly. Ultimately, using multiple methods allowed me to make a stronger theoretical assertion about community livability for older adults.

Following initial screening (usually by telephone) and IRB consent form review and signing (see Appendix A), data collection proceeded through five consecutive stages:

- 1. First Interview
- 2. Naturalistic Observation
- 3. Second Interview
- 4. GPS Data Collection

5. Third Interview

These five steps will be described sequentially in Sections 3.4.2 to 3.4.6 that follow.

3.4.2. First Interview

First, I conducted an audio-recorded semi-structured interview that covered topics including residential history, daily routines, meaningful occupations, social networks, and participants' perceptions of livability. The first interview began with the IRB protocol review and signing, and then often had a period of time (with the recorder on) of informal conversation about the project and my professional and residential history in the area. Of all of the data collection sessions completed, this interview most closely and formally followed the interview guide in terms of questions asked, and I followed most questions with probes for further detail or information (see Appendix B). Examples of items from the first interview protocol include:

- How would you describe your home/community/neighborhood to someone who is an outsider?
- What is a typical day like for you? A typical week?
- What activities do you do outside your home? Which activities do you find the most satisfying?
- What are your thoughts about what makes a community "Livable" in general?

 What makes a community "Livable" for you?

First interviews ranged from 40 minutes to 2 hours, and the average was 90 minutes. The majority took place in the privacy of participants' homes, and all were scheduled at the convenience of participants. All interviews (first and subsequent) were recorded at the consent of participants.

Data from the first and all subsequent interviews included recordings, transcriptions, and field notes typed immediately following each interview. Additional materials such as a flyer about a volunteer project, a church bulletin, a community newsletter, etc. were sometimes offered by participants in the course of their responses, and these documents were included in the data of each case. Typed data were formatted and stored in word processing software on a password-protected computer. Pseudonyms were used to identify participants, and the name-pseudonym key was stored separately.

3.4.3. Naturalistic Observation

Second, I observed an occupation that participants identified as a regular and important part of their lives. Either at the end of the first interview or via email or telephone call, each participant suggested an occupation that I could join as a participant observer. The majority of participants selected a discretionary, enjoyable, clearly defined activity for the observation component (e.g., an exercise class, a bowling game, an afternoon of volunteering, a religious service, an audited college course). A few participants suggested instrumental activities of their weekly routine such as grocery shopping or other errands. Observation settings included the activity location as well as the journey before, after, and during the chosen occupation, and I participated as fully as possible.

Although the specific activities varied, the general focus of these observations was on activities and patterns of daily life that were central to the social engagement and roles of the individual. Every possible attempt was made to be present from the beginning to the end of the occupation, which often meant meeting at the participants' home so that we could (for example) ride together, park, bowl, drive home via the public mailbox, etc. Observations

ranged from 90 minutes to 3 and a half hours. The average across all observations was 2 hours and 15 minutes.

Data from the observational component consisted of the field notes typed immediately following each observation. Field notes included (but were not limited to) detailed descriptions of the physical, temporal, and geographic environment; demographics and descriptions of the people present; social exchanges that did or (unexpectedly) did not occur; pace, sequence, speed, and habits in the way the participant moved and engaged; challenges or unusual aspects of how the older adult negotiated the milieu; roads taken or avoided when driving; and their explanations of why, how, for how long, when, and strategies used regarding community participation. As with the interview data, these field notes were stored electronically without identifiers.

3.4.4. Second Interview

Second interviews began with informal 'catching up' sessions (usually with the recorder on) which merged almost seamlessly into questions from the second interview protocol. Examples of items from this protocol include:

- Tell me about the changes and challenges (if any) you notice related to getting older in this particular neighborhood/community.
- How does being part of this particular community influence what you do?
- What is the significance to you of doing [observed activity] that way?

This interview also included discussion about the observation experience, and I was able to probe particular aspects of the community (physical and social) that had changed over time as well as challenges (such as vision changes, the re-location of a favorite store, or difficulty carrying grocery bags to the car) that the participant faced and negotiated. Whether the

observation came up in the initial conversation influenced the order of the questions I asked. Sometimes additional probes were not necessary because of the higher level of rapport, because we had shared experiences to discuss, and participants had a foundation for giving more thorough explanations. In this way, second interviews tended to be more individualized and flexible. Second interviews ranged from 40 to 105 minutes; the average was 80 minutes.

3.4.5. GPS Data Collection

Fourth, following two interviews and an observation, participants were invited to carry a Global Positioning System (GPS) device for approximately 10 days in order to continuously record their spatial behavior. That record revealed the geographic location, frequencies, routes, and duration of community navigation. This step of the data collection was presented as an option, not a requirement, because of the relative unfamiliarity of GPS tracking technology as well as the potentially invasive nature of the data collected. An additional consent addendum was used for the fourth stage of data collection (see Appendix A). The purpose and details of the method were described to the participant, and they were able to hold the device and look at a sample map prior to consenting to carry the GPS device. Participants were explicitly told what information was collected (location, routes, time) and what information was not collected (sound, type of business, personal/medical information from other devices). In addition to the instructions about when and how to carry the unit, participants were also told that they were free to leave the GPS at home if they were uncomfortable having a particular trip recorded on the device. All participants, with the exception of the woman who ended participation after the first interview, consented to carry the GPS under these conditions. The iTrail GPS unit was selected due to the large memory capacity and long battery life, meaning that recharging and uploading only needed to occur at the outset of each participants' data collection. Additionally, the iTrail device is a compact pocket-sized device, which limits the inconvenience of carrying it. Participants carried the device from 10 to 16 days; the average was 12 days.

Participants were instructed to carry the GPS anytime they left their home. After they had the device for about three days, I contacted each participant by phone. This served as a reminder to use the GPS if they had not already begun. The call also allowed me to trouble-shoot any problems they were having and to verify that the lights on the device showed the GPS was actively collecting data. At the end of each participant's use of the GPS, all of the data were uploaded, summarized, and a map and a travel log (a feature of the iTrail software) were generated. These were then copied for the participant, and during the final interview they were examined, clarified, and discussed.

Specific geographic features of the community that are relevant to each case were noted as part of the data, and the particularities of community features and community participation were unique and potentially identifiable in some cases. In those instances location names, road names, or other key details were modified for confidentiality. Maps were also slightly modified so that actual physical addresses are either indistinguishable or concealed.

The data from the GPS component of the study included the raw data files for each case, the data represented as a map, and the data represented as a travel log. Electronic copies were stored on a password-protected computer, and printed and annotated maps and logs were kept in a secure office. Participants were given copies of their maps, and three were also sent digital files of the maps per their request.

3.4.6. Third Interview

The final interview began with uploading the map image from the GPS device to a portable computer for viewing, or if I had previously picked up the device (in most cases), I gave the participant a hard copy of a map with their paths highlighted. These maps were examined and discussed. I pointed out the home and other general landmarks to orient the participant and we discussed the destination of various routes. I posed questions about patterns that were common, had not been mentioned in previous interviews or the observation, or any other aspects of the map that appeared relevant to understanding the person-place relationship for that case (e.g., exploring the reason no major highways were driven, or why a pharmacy farther from home was patronized instead of the neighborhood store). Participants would often explain where they had gone and talk about the rationale for why they drove a certain route, location, or sequence. They also explained events depicted on the maps that were unique and/or significant events: two participants had short hospitalizations while carrying the GPS, one fell in her driveway and spent a few nights at her son's home, recovering. One man pointed out that the road he always takes was closed for resurfacing for a few days which forced him to change his route. The recorder was on for these conversations, and they were included in the transcriptions.

The protocol for the final interview explored the values and meanings associated with specific activities, participants' expectations for the future, and revisited their perception of what characteristics make a community livable. Items from the third interview protocol included:

• In thinking about the last __ years you have lived in this community, what would you say are the changes that have most influenced your daily activities?

- Describe how you see yourself in 5 years. What things stay the same? What do you expect to change? If I were to come back and observe you doing _____ again, what would I notice?
- What are the most critical things based on your experiences that make your community more livable for you?

Final interviews ranged from 30 to 90 minutes, and the average was 65 minutes.

3.4.7. Summary

Data collection occurred from February, 2012 to September, 2012. It took approximately three months to move through all five stages of data collection with each participant, and the stages were staggered over time so that data collection with some participants concluded before the full sample had been enrolled. Participants were contacted periodically for scheduling purposes and to increase rapport and retention. I also telephoned if they had a significant life event (such as a birthday, a trip, or a hospitalization). Face-to-face contact with each participant ranged from 4.5 to 7.5 hours. The average time across all participants was 6.25 hours.

Although the study began during winter months, the vast majority of data collection occurred during spring and summer months. This may have affected the type, timing, and strategies of community participation. However, when specifically asked about the impact of the climate on their activities, participants unanimously said that they were more likely to stay inside (or otherwise limit their participation) when the weather was extremely hot, such as during July 2012 when there were multiple stretches of days with temperatures exceeding 100° F. Participants said that if the roads were in poor condition from inclement winter

weather they would curtail any activity involving driving; however, they said that such driving conditions were rarely the case in Durham.

3.4.8. Descriptive Summary of Data

The final data set included the following elements.

- 12 first interview transcripts and corresponding sets of field notes
- 11 sets of field notes from naturalistic observations
- 11 second interview transcripts and corresponding sets of field notes
- 11 GPS data files of routes and locations, saved in map and log format
- 11 final interview transcripts and corresponding sets of field notes
- Artifacts supplied by participants including flyers, church programs, society newsletters, tourist maps of Durham with notations, photos, and the course catalog of the Osher Lifelong Learning Institute at Duke
- 7 sets of interview notes with key informants

Prior to beginning analysis at each phase, the interviews were transcribed and printed, field notes for interviews and observations were printed, and maps and logs were printed as they were generated. These documents, and any additional materials supplied by participants, were de-identified, compiled by case, and stored in a secure office.

3.5. Analysis

3.5.1. Overview

The research problem driving this study is the lack of theoretical understanding of livability, which has implications for supporting the participation of older adults who are aging in place. I chose several methods in order to generate data about multiple dimensions

of the relationships of places and people that make participation possible. The analysis process therefore included procedures applicable to each type of data as well as integrative processes so that the findings and implications of the research were more than a sum of the component parts. The ultimate goal was to generate a nuanced, multi-faceted theorization of livability that has not emerged from research to date.

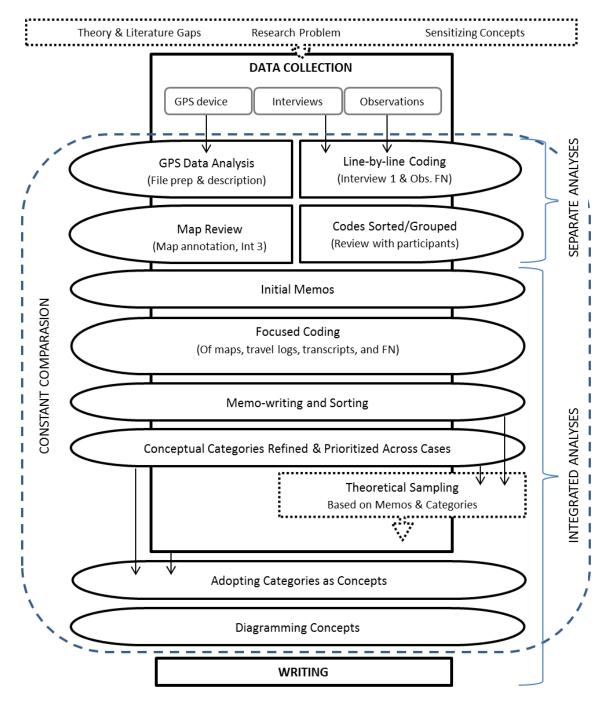
The majority of the data were qualitative in nature, and I selected a grounded theory approach (Strauss, 1991) for analysis because of the congruence with the study aims: to describe and interpret place-based patterns, processes, and experiences of engagement, and to theorize how the person-place relationship is experienced, negotiated, and coordinated by older adults. I drew on techniques developed by Strauss, Glazer, and Corbin, informed by a constructivist epistemology that emphasizes the co-created nature of knowledge and the emergent nature of research (Charmaz, 2006). A grounded theory approach is well-suited for empirical inquiry in under-theorized and exploratory topic areas (Strauss, 1991). In addition, the action- and process-orientation of doing grounded theory is particularly predisposing for studying the situated and changing nature of occupation (Nayar, 2012).

The guidelines that were adopted for this project include simultaneous collection of data and analysis; generating analytic codes from data instead of pre-conceived hypotheses; memo-writing at every stage, sampling for theoretical usefulness; and an emphasis on action and process (Charmaz, 2006). Two specific elements of grounded theory analysis were used to facilitate integration of spatial and qualitative data from interviews and observations. First, memo-writing was an integrative step used from early stages of data collection through final stages of developing conceptual categories. Questions and insights explored and developed through memos arose directly from my immersion in the raw data and my initial coding and

quantification of the spatial data. Second, constant comparative method (Corbin & Strauss, 2008) is a grounded theory strategy used to systematically compare incidences and ideas in order to develop groups or categories. Constant comparisons are typically used across cases and across time. I also used this comparative method to interrogate data across the different types. Constant comparison is depicted in the schematic as an analytic tool that encompasses both separate and integrated analytic processes.

The spatial data were first analyzed using basic descriptive measures and visualization. The qualitative data (interview transcripts and all sets of field notes) were first analyzed with open coding. These initial analyses are described in the following sections, and are depicted as divided ellipses in the analysis schematic below. Subsequent analysis included specific moves toward integration, depicted as unified ellipses in the schematic. The schematic of the analysis approach designed to achieve the data integration central to the purpose of this research is presented in Figure 3.4 (adapted from Charmaz, 2006).

Figure 3.4. Integrated Analysis Process



The initial analyses of the qualitative and spatial data will be described first in the sections below, followed by a description of the comparative method and other grounded theory-based steps used as integrative analyses. Sections are ordered based on the steps in

Figure 3.4. While this sequence appears linear in order to reflect analysis over time, it was actually an iterative process where analysis and data collection were concurrent and mutually influencing. It also is somewhat simplified because of the rolling nature of data collection. In practice, data from some cases had been coded and some categories developed before other initial interviews had taken place. While all cases were used in the analysis, earlier cases were influential in suggesting possible important categories, and later cases were more instrumental in challenging, deepening, and refining the categories. All data collection with participants concluded before categories were either adopted as concepts or set aside.

3.5.2. Initial Qualitative Analysis

I transcribed all interview recordings and read all transcripts and field notes in their entirety as they were created. Notations and corrections were made by hand to most-accurately represent the tone, meaning, body language, and other non-verbal elements of the conversation that would influence how the words are interpreted. Once the first interview and the naturalistic observation were completed for a participant, the interview transcript and those two sets of field notes were coded line-by-line. Concurrent coding and data collection allowed for refinement of the subsequent interviews. Codes that seemed important, unclear, or particularly rich were used during the second interview to tailor the conversation to elements of the person-place relationship that were salient for that case. Common codes were also tentatively grouped into some initial memos (e.g., about being involved "spontaneously" or "by osmosis"; having something to do that "gives me what I need"; preparing for decreased ability by gathering information; and the importance of having expected things to do). All first interview transcripts and field notes and observation field notes were coded in this manner, although codes from participants recruited in the later phases were incorporated

into categories and emerging concepts that had been refined over the intervening months. (Subsequent transcripts (interviews #2 and 3) and the accompanying field notes for all participants were coded later in the analysis process, using a more focused approach; see below.)

Initial analysis of the qualitative data was primarily intra-case, where each person's data was examined consecutively and codes were grouped to inform ongoing data collection. Some cross-case comparison and grouping of similar codes sparked the memos noted above. However, that process was primarily limited to noting overlap or divergence and exploring any obvious relationships between demographic characteristics of the participants with their experiences in order to steer ongoing recruitment.

3.5.3. Initial Spatial Analysis

Each participant's GPS data points were uploaded from the iTrail device into the iTrail software, and the entire file was saved in raw format. I played the file using the "paths" function of the software which showed the participants' navigation through the community rapidly. The whole time span of data collection could be watched and the paths visualized within a few minutes. Once the whole file had played and it was possible to see the general character and scope of the data, including any missing data or anomalies, an initial log was generated which listed trips, geographical locations, stopping times, and travels times by day. Stopping locations were included for any stop longer than 10 seconds.

To clean the data of any inconsistencies, each data set was exported and viewed in Google EarthTM, where participants' routes were mapped on real-world digital images. This allowed me to examine each stop location to determine whether it was relevant to understanding the trip as a whole (such as a seventy second stop in front of a friends' home,

or a brief stop in a pharmacy drive-through) or whether it confused the representation of the participants' actual community navigation (such as arbitrary points incorrectly recorded as a stop, like a break in tracking at a highway underpass). The relevant and actual stops were noted in each log, as well as the length of time of the stop. In the iTrail software, each of the eleven raw data files was reformatted with the case-specific parameters for stop times so that only meaningful stops were retained.

Once each raw file had been cleaned of stop-time artifact, I labeled homes with star icons and gave all routes and stops consistent representational qualities for easy visualization. These maps were printed at various levels of zoom to reveal neighborhood-level activity, total activity, or to highlight certain areas where a participant traveled most frequently. Hard copies of maps were used during later steps of analysis, discussed below.

Initial analysis of the spatial data was exclusively intra-case. The basic descriptive statistics I calculated for each data file included quantifying trips per day, stops per day, and stops per trip; number of miles per trip and average daily mileage; and percentage of days spent at home with no community travel. I reviewed range and frequency of speeds traveled (miles per hour) and summarized speed as 'primarily under 65 mph' or 'exclusively under 55 mph', etc., in a simple matrix along with the other descriptive statistics from the GPS data.

Maps were also reviewed with participants. During initial review, I played the routes in sequence to visually reveal how participants' spatial behavior was related to community features such as street networks, amenity clusters, residential areas, and other community aspects of interest. That review process generated a list of participant-specific topics and questions for follow-up and were clarified with participants during final interviews. For example, routes or patterns that did not make sense or multiple stops at an indistinguishable

business were noted for follow-up. Printed maps at different levels of zoom were used during the final interview so that the participant could jointly examine, give feedback, and explain the circumstances through which they participated in the community setting.

3.5.4. Integrated Analysis

3.5.4.a. Constant comparison. Comparisons were an important approach for elevating raw data and initial codes to categories based on shared or differing dimensions. Important for this project, constant comparison was a mechanism I used to integrate the multiple types of data through critical 'dialog.' I conceptualized this constant comparison as a reciprocal interrogation. Interview transcripts were used to question the observational experience, for example, noting inconsistencies between a spoken and lived account of an activity. Observations of several participants in the same or similar locations led to reflections about differences of those observations *vis-à-vis* participants' other activities revealed on GPS maps. GPS maps were provocative foils for expressed narratives about daily routines.

Comparisons happened within and across cases. The resulting notes were included in field notes following an interview or observation if salient to that dataset, or they were typed separately. Later comparisons were all in memo format, as compared data either aligned with or challenged emerging conceptual categories. A final formal comparative effort was done as categories were accepted as concepts (see Section 3.5.4.f), where potential categories were compared back to raw data and initial codes to assess credibility.

3.5.4.b. Initial memos. Following the separate analyses of the qualitative and spatial data, I wrote a few memos based on the grouped codes from the interview transcriptions and observation field notes, heavily influenced by questions arising from reviewing the first

participants' maps. These memos tentatively suggested areas of importance to the participant (such as similar qualities of the activities they described doing as part of their weekly routines) but primarily raised questions for further inquiry. Questions from these memos, which were the first step toward integrating spatial and qualitative data since they built on initial analyses and findings, informed ongoing data collection. I had ongoing discussions with participants about their data, and this member reflection (Tracy, 2010) enabled me to address these questions as I developed focused codes.

3.5.4.c. Focused coding. Focused coding occurred in several stages, related to emerging categories and discussion with participants. For example, when reviewing maps, some participants explained features of their spatial behavior such as times of the day or week that certain activities occurred, the determining factor(s) for routes chosen (including different routes to the same location), and/or areas or businesses that were not traveled or visited. Ideas from early codes and initial memos were drawn on to probe the meaning and experience of the routes and locations. Instances where there was a tension between the reported activity and the observed activity were often moments of great insight as the older adult evaluated their perception and experience against how it appeared through the geographical data. These tensions, along with any other descriptors or comments about codes, were included as annotations on the hard copies of the maps. Annotated copies of maps were included with the printed qualitative data for each case, and several annotations became *in vivo* codes for focused coding of transcripts and field notes.

Line-by-line codes from the transcripts and observation field notes were sorted and grouped across cases, and a few key issues emerged as being important and related to the annotated maps. Interviews continued, and those nascent ideas were discussed with

participants in their later interviews as well as with new participants just beginning the study. We discussed meanings and desired goals of their chosen activities, as well as other key ideas related to organized outings, structured versus informal social interactions, etc. Notes about these ideas and meanings were kept across cases, which were refined once all first interviews were complete. These notes became focused codes for later interviews and field notes.

Focused codes were not applied exclusively, however, and some line-by-line coding continued, particularly in cases that were different from the others on some key dimension, or in sections of text that were especially rich. Some codes were slightly modified after further discussion with participants. Examples of some of the focused codes developed, along with a brief explanation, are listed in Table 3.3.

Table 3.3. Examples of Focused Codes with Explanations

Shaping the Day	Organizing trips from the home related to available time, geographical location, grouping errands with 'leisure', stops per trip and trips per day
Getting out = Social	Occupations that are primarily social and occupations that are
	mundane/necessary that are seen as having a social value or purpose
Different from	Switch from responsibility, feelings of freedom, before retiring/after retiring
Younger Years	comparison, early retirement and "second phase" of retirement
Invested in Durham	Defensiveness about Durham's history, feel strongly that it is ideal, quick to
	point out resources, anecdotes about belonging
Cultivating	Strategic use of relationships to make community activities
Connections	smooth/successful/effective, connections influence where and when people
	go places
"You have to have a	Routine keeps you safe, routine keeps you healthy, routine connects you
routine"	with other people, routine creates opportunities
Frailty forcing	Discretionary/social & required occupations [prioritization process]→
prioritization	Required occupations become discretionary/social or are delegated

Focused coding allowed for the most salient and interesting aspects of the interviews to be coded across cases. It also showed patterns and similarities among cases and highlighted outlying events and non-confirming examples.

3.5.4.d. Memo writing and sorting. Notes about emerging topics of interest, focused codes, and observed points of discrepancy and insights from the maps were the foundation for more memos. At this stage the majority of data collection was complete, and common features of spatial behavior and the experience of aging in Durham could be noted across cases. Patterns of participation that appeared to co-vary with those features and experiences were also becoming apparent, such as the relationship of frailty/level of participation with the geographical shape and coordination of community activity. Memos written at this stage, along with memos from earlier stages that were still relevant, were then sorted into groups. Some memos did not fit well with others, but were not discarded since the goal during analysis was to generate conceptual richness and avoid reductionism. The majority, however, fit in to conceptual categories.

3.5.4.e. Conceptual categories refined and prioritized. A key element of integrating the various types of data collected in this study was the constant comparative method, described above, or "reciprocal interrogation" of raw spatial and qualitative data. Constant comparison was also used to systematically question the emerging dimensions of spatial behavior and experience against continuing GPS data collection. In a third tier of comparison, emerging conceptual categories sorted in the previous sections were examined against the qualitative data and then against the maps and annotations from each case. This interrogation process involved asking whether the category made sense with regard to the data of that case and whether it was a useful way to understand the whole situation of that case. Few changes needed to be made as a result of the process. Examples included changing the wording of a conceptual category and dropping a category (informal/formal and structured/unstructured interactions) that had many disconfirming examples. This stage

worked to refine the integration of multiple data types into each category, and to verify that the categories accurately represented the dimensions of participating in the community.

At this stage, conceptual categories were added as columns to the case matrix so that the variation and any systematic patterns could be explored. Areas where there was not enough information or where there was a disconfirming example, along with some of the memos from the earlier stage that did not fit neatly in to the prioritized categories, guided theoretical sampling during the final stages of data collection. Another example of theoretical sampling was using several memos about establishing relationships with people in different places (primarily retail and restaurants) around the community. Those memos served to formulate additional questions for the remaining six final interviews that explored whether these relationships were intentional means-to-an-ends, or otherwise motivated.

3.5.4.f. Adopting categories as concepts. Once conceptual categories were refined and all data collection was completed, each category was listed with any sub-categories and related focused codes on separate sheets of paper. These were then arranged variously to look for similarities, overlap, possible relationships between the categories, or how categories might together inform the research questions guiding the project. Categories were also entered as columns in a matrix so that how they applied to individual cases and how categories did or did not show variation among cases could be visually assessed. This process led to the adoption of several categories as key conceptual elements of theorizing livability, including concepts of time and space (place), participation patterns in place, variation in experience, the ideology of aging in place, planning, social infrastructure, "doing what makes me *me*", and foreseen but changing futures. These concepts were used as building blocks for the theoretical model of negotiated livability.

3.5.4.g. Diagramming concepts. Diagramming the concepts began with using slips of paper to arrange the key concepts in relation to one another and in relation to the construct of livability. Arrows, circles, and brief notations were used to depict and describe those relationships. The question "what are the core dimensions of the process of livability?" guided arrangement of the concepts and resulted in a theoretical model (see Figure 6.1) of those core dimensions within the person-place relationship.

3.5.4.h. Writing. Final analysis occurred during writing drafts of Chapters 4, 5 and 6. The concepts were described in relation to each other, elaborated through examples of the experiences and situations of the participants, and depicted and presented with the visual data. This final synthesis of the data, analyses, and conclusions into a coherent argument raised a few issues that had not been sufficiently resolved or clarified. Writing was included in the analyses schematic as the final step; however, during the writing process conceptual categories were re-examined and the diagram modified to best represent the findings from the research.

3.6. Trustworthiness & Reflexivity

Trustworthiness of the data collection was fostered through incorporating multiple data types and multiple data sources, and by refining codes and categories during follow-up interviews with participants (Morrow, 2005). Peer-debriefing and dialog about emerging insights, theoretical sampling, relationships and differences in cases, and ways to effectively integrate multiple types of data during analyses also increased the dependability of my analysis process. I spent 4.5 to 7.5 hours with each participant in several settings over multiple (4-8) visits. This time, and the conversations in which we reflected on the data and

general insights from across cases, support the dependability of the data and the fairness to and authenticity of the multiple viewpoints and experiences (Lincoln & Guba, 2000). The procedures for including multiple and divergent constructions and my reflexive process also enhanced the credibility of both process and findings (Morrow).

Consistent with a constructivist understanding of the co-constituted nature of data collection and data analysis, reflexivity was an important piece of my methodology (Charmaz, 2006). I incorporated several layers of reflection, beginning before formal data collection began and continuing through the analysis and writing processes. First, a reflective journal was maintained throughout the research process which detailed my experience getting to know the city, frustrations with recruitment, questions, concerns, brainstorms, and conceptual musings. Second, descriptive field notes from the first interview included a section I wrote prior to even meeting the person. These notes included my impressions and assessments of the neighborhoods and geographic area based on driving tours and searching online maps. These assumptions were revisited in later field notes and were compared across cases to gain insight into perceptions about neighborhood characteristics in relation to those mentioned by participants. For example, my initial notes about a participant's new apartment complex being in a convenient location contrasted sharply to her feeling that it was a place for students to live. She did not feel that she belonged, or that it was a good place for older adults. These reflections led to a memo about social factors that seem to trump physical proximity and a better understanding of the role of perceived dimensions of a place.

Third, field notes from observations and post-interviews included parenthetical additions about my experience as the researcher/interviewer and as a participant observer.

These notes included emotional responses to the situations, such as my extreme discomfort in

the medicalized living room of a participant who was being attended by her home health aide while I interviewed her, or the surprising feeling of belonging I experienced during an exercise/dance group of older African Americans. Parenthetical information also included notes and questions about my expectations related to people or their situations and how those expectations were challenged, confirmed, or otherwise brought to my attention. These notes were used during analysis stages of memo-sorting and category formation to 'cross examine' the categories for inconsistencies or biases related to my preconceived expectations.

Consistent with the constructivist foundation of this grounded theory analysis, conceptual insights and findings are held to be co-constructed through interactions of researcher and participant. Insights and findings are emergent and provisional, and shaped by the social, cultural, geographical and temporal contexts and values through which those interactions unfold. In these later stages of analysis, all reflective texts were re-read in order to (a) examine my own changing understanding of the city and what it was like to live there; (b) contrast my assumptions—practical and theoretical—about livability at the outset with my conclusions following data collection; and (c) assess the weight of my values and cultural lens on the proposed understanding of the person-place relationship. Finally, peer-review and dialog about reflections and questions was a significant part of the reflexive process throughout the planning and implementation of this project.

CHAPTER 4

Findings I: Durham, NC & Participant Experiences

4.1. Findings Overview

Findings from my study are presented in this and the following two chapters. In Chapter 4, I describe findings related to the city of Durham and the participant cases, and I discuss the daily lives, situational challenges, and cross-case variation for these twelve older adults. In Chapter 5, I explain the patterns of participation and dimensions of participating in place evident through the participants' community-based occupations. In Chapter 6, I explain the core processes of community livability informed by those patterns, present a model of the process of negotiated livability, and elaborate the dimensions of this model that inform my understanding of community livability. This organization mirrors the progression of my analysis and the conceptual development that grounds my theoretical model of negotiated livability for older adults. I use pseudonyms for the older adults throughout the findings chapters, and I use pseudonyms for places, businesses, and landmarks (as needed) to protect confidentiality.

The following sections describe Durham, North Carolina, the experiences of living and aging in Durham, and the 12 participant cases. I summarize the key demographic, residential, and situational characteristics for each case in a matrix. I conclude this chapter with a summary of the descriptive findings and suggest how they provide the descriptive context for understanding the patterns explained in Chapter 5.

4.2. City of Durham

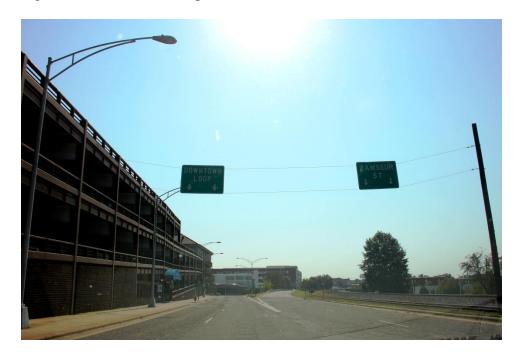
4.2.1. Introducing Durham

There are many roads that traverse Durham. The city is crossed by U.S. Interstate Highways 40 and 85, by the four- to eight-lane U.S. Highways 15/501 and 70, and by North Carolina Highways 54 and 55. These roads connect Durham to neighboring metropolitan areas of Raleigh to the east, Chapel Hill and Greensboro to the west, and Charlotte to the south. Several smaller communities in Durham County are contiguous with, or just outside of, the city boundaries. They are linked to downtown by roads that follow the terrain and old property lines, skirting the state parks and protected forests that exist along the outskirts of the city limits. These unincorporated communities are not part of county township governments, but they are referenced by some long-term residents as their community of birth or their 'home place' in the country.

Durham was incorporated 150 years ago, and the historic nature of the community landscape is evident throughout the city. Downtown historic districts are marked with placards suggesting their significance in the city's development: the American Tobacco district, the Brightleaf district, the Golden Belt district, the Warehouse district. The first series of streets laid out by the Washington Duke family—Washington, Duke, Gregson, and Watts—still structure the northern part of the city leading out of downtown. The rail line that passed through Durham Station from the mid-1800s to the mid-1900s is also still visible in places through the city (see Figure 4.1), although the Union Station was demolished in 1968 as part of a plan to revitalize downtown Durham. That project, funded by Federal Urban Renewal Program funds, resulted in the demolition of a number of old buildings and neighborhoods, the erection of a series of parking garages, and the construction of a

downtown driving loop meant to revitalize and facilitate commerce (see Figure 4.1; parking garage to the left where Union Station once stood, with a rail line to the right).

Figure 4.1. Downtown Loop in Durham



Some of the old buildings in Durham have been renovated into new purposes, such as the mixed use (law offices and luxury condominiums) Kress building where several lunch counter sit-ins took place during the civil rights era; the Brightleaf warehouses converted into boutiques and cafés (see Figure 4.2); and the American Tobacco warehouse, which was converted into dining, office spaces, and the studio for the local National Public Radio station. The new American Tobacco complex also has open areas for concerts and community events and is connected to the rest of Durham with bike and pedestrian paths (see Figure 4.3).

Figure 4.2. Brightleaf Warehouses Along West Main Street

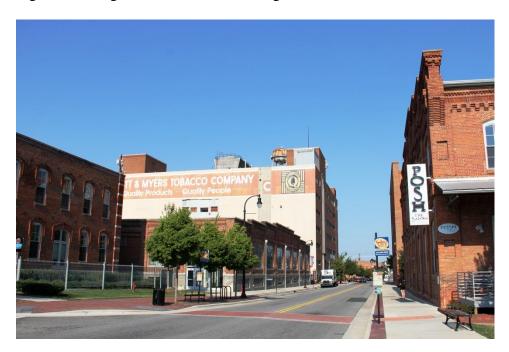
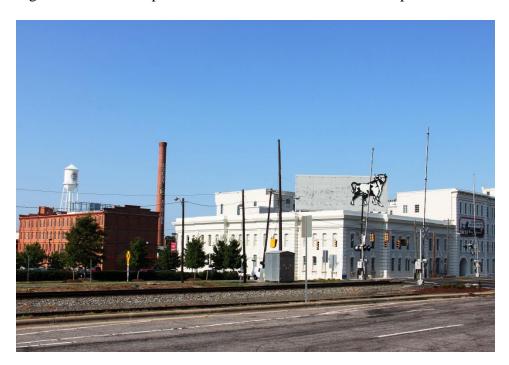


Figure 4.3. The American Tobacco District



New buildings are planned for some of the empty lots that still exist downtown. Large mounted signs show the glass-filled modern buildings designed for those spaces. New buildings that have already been completed are interspersed among the old brick warehouses and the historic courthouse and churches downtown, including the new Durham Transportation Station (bus and rail), the Durham Bulls Athletic Park, the Durham Performing Arts Center, and the 18-story 'The Renaissance at Durham Centre.' Some lots, particularly outside the downtown loop road, remain vacant (Figure 4.4).

Figure 4.4. Undeveloped Land Between the Downtown Loop & American Tobacco District



Downtown Durham exhibits different eras of urban development. Historic buildings and old, narrow roads and alleys are juxtaposed with modern buildings. Wide boulevards are paved in straight lines across old lots. The distinctive brick tobacco warehouses background small boutiques and new cafés with French names. In the last few decades the early efforts at

revitalization have shifted toward restoration and renewal. New businesses, a new downtown bus line that runs the length of Main Street (see Figure 4.5), and new residential development have changed the feeling of downtown. An area that was a "ghost town" (Edith) for many years now feels "lively" and "energetic" (Alice). Driving through downtown mid-morning, I saw most of the street parking spaces filled. Roads were busy with private cars, bikes, and buses. People in suits walked in groups between buildings and students with laptops sat in the small coffee shops and bookstores or out on the many benches (see Figure 4.6). Older men, primarily African American, clustered in groups near the courthouse steps, at the McDonald's on the corner of Morgan and Rigsbee, and in the open park spaces within the Loop. School buses parked in front of the library with loads of children, and groups of middle-aged men looking for day labor stood in the plaza behind the library waiting for the trucks that would stop occasionally in the mornings and pick up a few men.

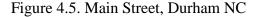




Figure 4.6. Rue Cler on East Chapel Hill Street



Durham's historic buildings, the diverse residents, and the tangible change of new buildings and old spaces getting new uses give the downtown and other areas of the city a feeling of vibrancy and growth.

4.2.2 Character of and Change in Durham

Durham has many of the stereotypical traits of a southern community. People greet each other as they pass on the street and there is a "slower pace" of living (Sterling). There is a "blue-collar ethic" (Eugene) as compared to the academic-, research- and government-centric identities of nearby Chapel Hill, Research Triangle Park, and Raleigh. Rosie affectionately described Durham as a civil place where "you can have great arguments and then go to lunch together." The majority of the participants described Durham in favorable—even glowing—terms. In response to a prompt to describe Durham to an 'outsider,' Alice

responded, "Oh, it is just wonderful. I don't know what else to say. It is easy and comfortable." Sterling added:

It's a great place to live in. It is a great place to raise kids, and now it's gotten better because they got this DPAC [Durham Performing Arts Center], they got the ball park, and they have a whole lot of activities where you can broaden your mind if you want.

Some, like Martin, described the physical beauty of the area and the moderate weather as key attractions when he was considering possible retirement locations:

[Durham] was green. There were a lot of trees, which is what we like. Oh my gosh. This winter. I lived a lot in the Midwest, where we'd be snowed in for months. ... I would describe it here as a benign climate. Easy to live here without dealing with a lot of weather-related stuff.

The diversity of Durham's population was another characteristic valued by several participants. Bonnie explained that she liked living in Durham because:

Durham is very diverse, and to call it the Bull City is exactly right. It is a wonderful place because you've got people from everywhere working together. And somehow we kind of get along pretty well here. Our mayor is a black guy, and we have black people on city council. Our population is about 50/50. Diversity is a characteristic of a real city.

Beyond diverse ethnic groups, diversity in the activities and culture of Durham (compared to other neighboring communities) was another way participants said they would describe their city. Alice tried to explain why the community's past was important to understanding Durham today. She said:

Durham was a blue collar town. When you talk about the research triangle Raleigh was government, Chapel Hill was University, and Durham was blue collar, although it had two universities. But it had two major tobacco plants, several textile mills And those were the real flavor of the town. Which is actually why we chose to live here ... Chapel Hill felt very kind of monotone. It was all one thing. Whereas Durham is extremely intellectually lively and always has been.

Eugene also felt that the blue-collar past was still relevant to his current experience of the atmosphere in Durham. He explained:

Durham is, to me, a lot of the spirit – I know there are not factories here anymore. But I worked as a factory worker for DuPont for a while. There is a certain pride in being a blue color worker. And Durham has blue collar character with a whole lot of white collar money.

These descriptions of Durham's character, while likely slightly idealized related to the prompt to describe the community to an outsider, were overwhelmingly positive and ranged from the region's weather to the unique social, historical, and economic situation of the city.

Despite the many valued traits and sense of Durham's stable character over the years, many people I spoke with, from town Commissioners to the participants themselves, emphasized the changes the city has and is experiencing. Jane, who had lived in and around Durham her whole life, had a long-term perspective on the community. She compared features of the downtown of her childhood memories to the downtown of the present, noting:

Down where the farmer's market is, all that in there has changed. All that has grown. [...] We now have a bakery downtown. Loaf, it's called. It is on Parrish Street. There are a couple of new places along there. They tore down the old bank that was on the corner of Main and ... Main and what? But anyway, it was a Fidelity Bank. When I was a little girl we used to go down there. But now they've torn that down and it's a little park-like. It has all changed.

A period of rapid change in Durham happened in the mid-1900s as the decline of the post-tobacco era and the development of suburbs resulted in a general out-migration of both residences and businesses from downtown. Alice recounted:

Everything moved out of downtown, so downtown really, for a while ... somebody said 'I expected to see tumbleweed!' You know, it was dusty, and there were very few stores open, and it took them a long time to get it back.

It was partly in response to this outmigration that the city adopted the revitalization efforts of the 1960s and 1970s during which many buildings were leveled and the downtown loop road constructed. Also in the mid to late 1960s, leaders in the area including Governor Terry Sanford pushed for the development of the Research Triangle Park between Durham and

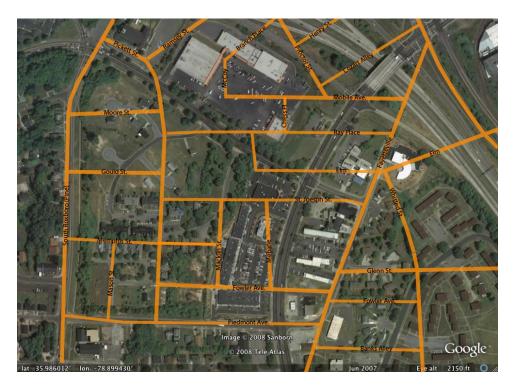
Raleigh in order to attract companies and provide jobs for North Carolinians. One feature of that development was the building of North Carolina Highway 147 that cut along the south edge of downtown Durham—a block below the old railroad line—to connect U.S. Interstate Highways 85 and 40. The road bisected the heart of the historically African American Hayti district and separated black neighborhoods from black businesses, re-routing old roads, and leveling neighborhoods. Aerial images from 1959 (Figure 4.7) and from 2007 (Figure 4.8) show the dramatic changes the construction of Highway 147 brought to that area.

Figure 4.7. Hayti Streets in Durham, North Carolina (1959)



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Although not directly affected by these changes, Martin and others referenced the impact on the historic community when the road was constructed. He shook his head as he told me that "Durham wrecked that [community] when they put 147 right through there. Wiped out neighborhoods, wiped out communities, wiped out the Hayti area." In many of the participants' accounts, however, Durham was not the villain in this history. Durham as a community was perceived as the underdog fighting back after being dealt repeated blows of circumstance and poor leadership decisions.

These changes of the past century were a complicated result of the raveling post-tobacco economic fabric of Durham, the post-war shift toward suburban living, and the strategic plans to reinvigorate the community. By the participants' accounts, the downtown area of the city felt deserted even in to the last few decades of the 20th century. In the past

twenty years or so, however, Durham has had another period of rapid change. This time, it is perceived as generally positive by Durham residents. Durham is coming—or has come—back. Rosie told me with pride the first time we met that "we've gone from a city that's seen better days to a well-integrated city, you know, with various socio-economic levels and plenty of things to do." Eugene was more specific about this recent shift, explaining that:

The feeling of things are changing here ... things are not like they used to be. You don't have to go to Raleigh anymore to see Cats—you go to DPAC [Durham Performing Arts Center]. And you don't go to Chapel Hill anymore to get seafood, you go to Fishmongers [in Durham] now. So there are opportunities in Durham which didn't exist ten, twenty years ago for sure.

As businesses, restaurants, and entertainment venues returned to the downtown area, people began spending time there. And as people spent more time downtown, more businesses opened. Jane offered the example that in 2012, two specialty cupcake shops opened downtown. She shook her head in disbelief that there was a market for a cupcake shop in Durham, let alone two, but conceded that they always seemed busy.

The causes behind these changes are difficult to disentangle, and none of the participants had a direct answer for why the revitalization intentions of many years had finally taken hold. However, a few mentioned the youth of many of the new residents and consumers of downtown suggesting a generational shift and interest in urban living. Edith, who moved to Durham after her marriage in the 1950s, said that the change in attitudes about Durham since then was "100%." She recalled:

When I first moved to Durham, I was in a receiving line, and this woman came through and said, she was saying she and her husband live in Durham ... 'but of course we live outside.' You know, nobody wanted to live downtown. Nobody wanted to be associated with Durham. [...] I don't know what has changed about Durham. Well, people moved here. I think young people. I went with a friend to a summer solstice they were having at the Museum of Life and Sciences. And it was a kind of a ... they had the food trucks in one area, and they had music in another area, and then they had little stands of ice cream [...] But the people there were young

people in their twenties! And they ... I just couldn't believe there were that many people. They're young, and they lived downtown!

Edith and others alluded to their generation's sense of Durham as an inferior place to live, work, and relax. Durham's low point occurred during the participants' adulthood when their families and careers were central concerns, and at a time with the national image of the American dream was a single-family suburban home with a car or two in the driveway. The new residents in Durham today, Alice explained, are:

young, very bright people who have come for the universities or the research triangle, who have come for jobs. And they don't have any feeling ... People talk about Durham's inferiority complex ... but they don't connect with that at all because they weren't here then.

This new cohort is changing the face and feeling of Durham, how the older residents perceive their city, and the experience of living and aging in Durham.

4.2.3. Aging in Durham

4.2.3.a. NC Aging Services Plan, Durham departments, and local organizations.

In the most recent North Carolina Aging Services Plan 2011-2015 (North Carolina Division of Aging and Adult Services, n.d.), strategic goals are outlined for the state with the purpose of evaluating and furthering the process of preparing for the coming needs of an aging population. It is an integrative document with input from and suggestions for many governmental agencies, social services and commissions, providers, and older adults themselves. The key focus areas outlined for the state include empowering older adults with information, volunteer opportunities, optimal health, and safety; ensuring an adequate direct-care work force, appropriate services and supports for aging in place; and the responsible use of publicly funded services. Informing those strategic goals was a series of "Governors' Policy Roundtables" which covered topics such as access and choice among services, the

economics of aging, homes and neighborhoods, lifelong engagement, safe communities, and health (NCDAAS, p. 13). The breadth of topics included in the goals and objectives for communities is consistent with the broad vision statement of "living wise and aging well" (p. 4) which suggests an orientation toward systematic and holistic considerations. This guiding document, published every four years since *North Carolina General Statutes 143B-181.1A - Plan for serving older adults* was passed in 1995, has only state-level goals and state-level performance measures. Individual communities are responsible for applying and evaluating their own progress.

One regional organization is the Triangle J Area Agency on Aging (TJAAA) which coordinates services, programs, and information for seven contiguous counties (Chatham, Durham, Johnston, Lee, Moore, Orange, and Wake) in central North Carolina (TJAAA, 2010). This agency, funded in part by federal Home and Community Block Grants, is tasked by the North Carolina Division of Aging and Adult Services to develop an Area Plan on Aging (Triangle J Council of Governments, 2012). This plan is similar in structure to the state-wide plan and includes an assessment of current services, a work plan, and performance standards for measuring progress. It is also updated every four years. The major components of the current plan are Physical and Accessible Environment, Economic Security, Technology, Safety and Security, Social and Cultural Opportunity, Access and Choice in Services and Supports, and Public Accountability and Responsiveness (TJCOG, 2012). This document evaluates the physical and social environment, the availability of resources, and how those dimensions of a community interact. However the actual services provided by the Area Agency on Aging, which vary by county, are primarily focused on meeting the health

care, transportation, nutrition, and caregiver support needs of the most-frail portion of the population.

Within Durham, the landscape of planning for an aging population is fragmented. According to an employee of Durham County's Department of Social Services (DSS) Adult and Crisis Service, the NC Aging Services plan informed some aspects of Durham County's own strategic plan development. The County's strategic plan primarily focuses on human services, citing changing behavior (e.g., residents getting more physical exercise) and knowledge (e.g., increasing community capacity for bystander emergency response) as key initiatives (Durham County, 2012). Although there is not a specific department or commission related to aging, livability, or aging in place, several departments have duties relating to older adults and supporting their ability to age and engage in the community. For example, the Durham County Department of Social Services oversees Medicaid-funded programs such as home care aids and transportation services. DSS also interfaces with the Triangle J Area Agency on Aging to provide ombudsman oversight of adult care homes and nursing home facilities. Durham County governmental departments, in the words of this county employee, are responsible for the "soft services."

In contrast, Durham city oversees the "hard," or infrastructure, services including managing community development, economic development, zoning and building codes, transportation services, waste management, soil and water management, and neighborhood improvement services. The city's strategic plan, by extension, is divided into five related goals: strong and diverse economy, safe and secure community, thriving and livable neighborhoods, well-managed city, and stewardship of the City's physical assets (Durham County, n.d.). Again, there is no particular umbrella department for aging-related

development, or for promoting and advocating for livability as it relates to the general population. Certain policies for seniors exist, such as the 65 and older free-fare policy of the Durham Area Transit Authority. However, policies are not integrated into an age-specific plan with aging-focused results.

Many non-governmental agencies and groups in Durham address the current needs of older residents as well as plan for growth in the older population in the coming decades.

Most prominent is the Durham Center for Senior Living (DCSL), a non-profit organization funded by the Older Americans Act of 1966 and through subsequent federal block grants.

DCSL operates four senior centers in Durham which offer congregate meals, transportation, adult education, exercise and art classes, caregiver support services, case management, and a resource library (Durham Center for Senior Life, 2013). One DCSL employee explained that since these services are not reimbursed by a direct payer (as compared to the county's Medicaid-funded transportation service) and block grant funds may run out before the fiscal year is complete, the DCSL often has to wait-list individuals for specific services. They have also created need-based criteria for other services to ensure the most vulnerable older adults and families receive assistance. The centers are nevertheless an important feature of the aging landscape in Durham, and a majority of the study participants were aware of or personally used their facilities or attended programs.

Other non-governmental organizations address more circumscribed issues. Project

Compassion organizes care teams for individuals or families who are experiencing life events
that require temporary support like yard care, doing errands, or being driven to medical
appointments. Another organization is the Durham Partnership for Seniors, an
interdisciplinary group composed of individuals who work with older adults in medical,

social service, religious, or other community settings. In addition to serving as the Advisory Board for the Triangle J Area Agency on Aging Block Grant, the Partnership for Seniors maintains a comprehensive resource guide for older adults and their family members and facilitates networking and partnerships among community groups serving older adults. A third group of organizations addressing day-to-day needs of older residents are the many incorporated neighborhood organizations in Durham. Especially in neighborhoods with a significant proportion of older residents, neighborhood organizations coalesce around the particular needs of their communities. These organizations provide services ranging from monthly information sessions, a vetted list of vendors and service providers, volunteer transportation, on-site nursing care, care teams in the Project Compassion model, and neighborhood social events.

In sum, state and regional organizations in North Carolina have aging plans that integrate social, economic, development and service considerations for supporting older adults, but are not specific to the needs of any particular community. Durham city and county have departments and commissions focused on isolated domains that pertain to aging, but there is no unifying body or dialog about how those community features and services interface. Local agencies and non-profit organizations provide the majority of targeted services but are limited by funding and scope of influence and tend to respond to the needs of the most vulnerable or frail instead of proactively shaping the community to support an aging population in the coming decades.

4.2.3.b. Is Durham Age-Friendly? According to the eight categories of the World Health Organization's Age-Friendly Cities Guide (2007), Durham has many age-friendly characteristics (see Table 4.1).

Table 4.1. WHO (2007) Age-Friendly City Criteria

	Outdoor spaces and buildings: pleasant and clean environment, green spaces, resting places,
1	age-friendly pavements, pedestrian crossings, accessibility, security, walkways and cycle paths,
	and age-friendly buildings
	Transportation : availability, affordability, reliable and frequent, relevant destinations, age-
2	friendly vehicles, specialized services, priority seating, safety and comfort, usable stops and
	stations, taxis, parking, and adequate information
3	Housing: affordability, essential services, design, modifications, maintenance, access to
	services, social connections, options, and positive living environment
4	Social participation: accessible opportunities, affordable activities, range of opportunities,
_	awareness of activities, addressing isolation, and integrating generations
	Respect and social inclusion: respectful behavior, fighting ageism and ignorance,
5	intergenerational interactions, role within community, helpfulness of community, role in
	family, and economic inclusion
	Civic participation and employment: volunteering options, employment options,
6	accommodations for older workers, encouraged civic participation, training, entrepreneurial
	opportunities, and valuing older peoples' contributions
	Communication and information: widespread distribution, right information at the right time,
7	word of mouth, age-friendly formats/design, usable information technology, and personal and
	collective responsibility
8	Community support and health services: accessible care, range of health services, ageing well
0	services, home care, residential facilities, network of services, and volunteers available

With regard to the first guideline, there are outdoor spaces with benches, trails, and trees downtown and throughout Durham, and many buildings and outdoor spaces are constructed or retrofitted for accessibility. In the main shopping districts and areas of downtown the sidewalks are smooth and curb cuts exist at pedestrian crossings. In some neighborhoods, along the busy roads connecting those shopping districts, and in older and poorer areas downtown sidewalks are scarce. The general air quality and cleanliness of Durham are not problematic for residents' health. The sense of safety in outdoor and public spaces was mentioned by the majority of residents (participants and key informants) with whom I spoke. Most felt that their neighborhoods were safe, like Jane who said, "It is a very safe neighborhood around here. People walk their dogs and ride bicycles ... people are friendly, nice. We don't have anything to worry about." At the same time, some participants alluded to

the crime rate in Durham in a general sense. They usually indicated that it was high, but the crime rate did not seem to impact participants' daily lives. They tended to dismiss the idea of Durham as a dangerous place which Alice suggested was part of the "inferiority complex" of the past. Edith offered her interpretation of why she feels safe despite hearing reports of crime in her neighborhood:

You know some people are afraid of Durham. We had—we have—such a reputation of lettin' it all hang out. I mean if we have a complaint or a fight, it's down at city hall and everybody's down there telling what they're telling. So we do have that reputation. We have a reputation of if there is a murder we're all down there talking about it ... so it seems like we have more stuff than everybody else because we talk about it all the time.

The second and third WHO (2007) guidelines address housing and transportation options. Available and affordable housing and transportation are features of Durham that affect the age-friendliness of this community. An employee of the Department of Health and Human Services said that evaluating housing stock and working to ensure a range of options is a key area of concern. Several initiatives are underway in Durham, including two new senior housing developments. There is a housing locator resource online as well as information about reverse mortgages and tax relief programs for home-owners. The DHHS employee could not say, however, how effectively the information met housing needs. Similarly, the Durham Area Transit Authority evaluates their senior ridership and has a farefree program for adults over 65. There is also a program for curb to curb transportation for individuals with physical disabilities and financial hardship who have applied for the program (Durham Area Transit Authority, n.d.). All participants in this study, with one exception, lived within several blocks of a DATA bus line or a Triangle Transit Authority (a trans-community line serving Raleigh, Chapel Hill and Durham) bus line. Durham City's strategic plan includes the implementation of a Durham Walks! Pedestrian Plan, the Durham Comprehensive Bicycle Transportation Plan, and the Durham Trails and Greenways Master Plan. These plans may provide good future transportation options for some older adults although they are less promising for the many older adults who do not live near downtown.

The fourth Age-Friendly City guideline highlights social participation through affordable and accessible activities. From participants who were still driving in the evening, and particularly for those with partners or close friends, I heard many accounts like Rosie's. She said with a shrug, "One of the hardest things about living here is choosing what to do for free on an evening." Even the many restaurants downtown seem to be a point of social participation, and some older adults talked about how nice it was to see people they knew as well as lots of younger people in such settings. Alice said:

It's a wonderful time for Durham, because Durham tried for so long to make this happen. And eventually things fell into place. So ... during the four years I've been here, I suppose maybe ten new restaurants have opened, very close by. And that is just fun.

The downside of change, however, is evident in neighborhoods where new development has not occurred and where old homes are turned into student rentals or left vacant. Harriet spoke poignantly of the isolation she felt in her long-time home south east of downtown, saying:

Well, it is so much different now. Everybody that was in this neighborhood, when we moved in, is dead now. All of the older people are deceased. Nobody is in that house there, but they keep it up because the daughter, when she wants to come home she comes home. And these people, I think ... they haven't been long moved there. So, like, we used to just hang over the fence and just visit and talk. That's not anymore. Because you don't know your neighbors, hardly. You speak, but you go your way, they go theirs. That is just how it is now.

Age-friendly respect and social inclusion (guideline #5) and age-friendly civic participation and employment (guideline #6) vary greatly in the Durham community.

Volunteer opportunities are curated at the Durham Center for Senior Life and through county agencies, and some older adults have full time or part time employment. The older adults

who were able to participate in work or volunteering—and who were, in general, experiencing fewer age-related or economic challenges—felt that they played a meaningful role in their communities. All participants, however, said they felt like they belonged in Durham. Martin said he liked having "a voice at the table" by working part-time in his old department at Duke University, and Edith enjoyed providing discounted tax services for international students each year because it gave her "that thing you need, that self-sense and value." For Viola, who was recovering from a recent heart attack, having a job meant not "... just being here all day and not doing anything. [...] It won't help me out, I'd rather be working. I enjoy being around a crowd at work."

The seventh guideline, communication and information about services and resources, is available in Durham in several centralized locations. The Durham Center for Senior Living maintains on-line and in-print resource guides and the senior centers are places of significant information exchange from peers, from bulletin boards covered with announcements and notifications, and from the staff. Durham Partnership for Seniors, the Area Agency on Aging, and the Durham County webpage all have on-line compilations of resources and information tailored to older adults. This information is somewhat restricted to older adults with the requisite internet access and technological skills. For the participants with smart phones there was no barrier to age-friendly information. For the older man with no computer and no internet at home, however, it took significantly more effort.

Finally, Durham calls itself the City of Medicine and has renowned medical services, a Veteran's Affairs Medical Center, and multiple hospitals. However, like the rest of the country, the availability of medical services does not necessarily mean older adults have access to care. Participants talked about wonderful experiences where they were treated

rapidly and effectively for cancer during the same week it was diagnosed. They also recounted avoiding going to the doctor's office because of inability to pay or because they dreaded the effort of finding parking in the parking deck. Harriet, an older African American woman, felt that she had been discriminated against and avoided going to Duke hospital even though it was minutes from her home. She explained:

My children were born at Duke. But when my mother was old she set the curtains afire and died. It didn't bother me at first, but then later I thought I was having a heart attack. And I went out to Duke, and I laid there about an hour before they ever saw me. You go out to Durham Regional, and they'll meet you at the Emergency door! The fellowship and the way they do you, I'd rather go there. I like how they treat me.

This summer, when she had acute appendicitis, Harriet had her grandson drive her 15 minutes to Durham Regional Hospital instead of driving 4 minutes to Duke Hospital.

The Durham community exhibits many of the "core age-friendly features" (WHO, 2007, p.11), although experiences of older residents vary and there is room for community improvement. In talking with participants and service providers in Durham, there was significant pride in the features that the community has as well as pride in people who live here and the atmosphere and culture of Durham. Many told me that Durham had been ranked first in a national ranking of good places to retire. However, while the medical care, pleasant outdoor space and climate, and opportunities of things to do were mentioned in the list of things they thought were important to an aging population, conversation typically turned to other intangible factors. Alice told me it seemed to her that "everyone here is happy." Martin described Durham as a beautiful "oasis of openness and liberalism in a southern state." The experiences of these twelve older adults demonstrate that the dynamics of participating in daily life are much more complicated and varied than Durham simply meeting the requirements of these eight domains of age-friendly cities.

4.3. Participant Case Findings

The twelve participants in this study had varied backgrounds, home situations, interests, and each faced different challenges. Some of these demographic and situational characteristics will be presented in Table 4.2. Here, I will briefly summarize each case with regard to daily life, occupations, and the main challenges they faced. I will also introduce several points of variation in experience represented by the cases.

4.3.1. Participant Cases: Overview of Daily Life & Occupations

Harriet was a 99 year-old African American woman who lived with her granddaughter in a 1920s Bungalow-style house on Fayetteville Street, south east of downtown and only a block from the Hayti Heritage center. Her burgundy sedan was parked in the grassy drive for most of the week. She took it out—backing out into the busy two-lane road—to attend her exercise classes twice a week, her Wednesday prayer meeting, and church on Sunday. Harriet also enjoyed traveling with the senior traveling group at the Senior Center, and she loved playing computer games on her computer at home late into the night. Her granddaughter, who lived with her temporarily while she attended North Carolina Central University down the street, did the majority of the household errands. Harriet had lived in that house for a few decades, moving there with her husband from their small home in north Durham that did not have indoor plumbing. She was a cigarette roller in the tobacco factories when she first moved to Durham in the 1940s but later worked in the cafeteria of a local school. Now, she said with a smile, she was just enjoying life.

Martin still worked part time in his department at Duke University although he said he was paid so little he usually thought of it as volunteering. One perk of his position was having a Duke campus identification card and parking pass, which allowed him to eat with old friends, attend evening events, and teach and attend classes at the Lifelong Learning Institute on campus. He was a 78 year-old Caucasian. Martin said very little had changed for him recently although he felt slower and only did things he really wanted to do. Over the course of a week he was on Duke campus for various meetings or events 2 or 3 times. Martin did the household grocery shopping and cooking, and he loved to walk on the nature trails near his new two-story home. On Sundays he occasionally went to church, but he always met a group of friends for brunch, coffee, and bantering. Martin and his wife moved to Durham as they approached retirement and intended to stay in their suburban home indefinitely.

Edith, a 72 year old Caucasian woman, lived alone in a small home along the northern edge of the Duke University campus. In her neighborhood, many of the small Craftsman-style homes had been converted to student housing rentals or were owned by long-term residents like herself. She was overweight and had been recently diagnosed with lung cancer; however, she was a strong proponent of seeking out information and found services and options that allowed her to get medicine and groceries delivered to her home. Her love for going to see movies had become a passion for NetFlix, and she hired someone to do yard work and house cleaning although she laughingly reported that she would not be able to afford the services for very long. Edith lived near a large shopping complex where she went to see people and to do basic errands. She lived within a few blocks of a post office, the dry-cleaners, and a few restaurants that she frequented. She said she got out, at least briefly, most days of the week.

Bonnie was 81 and also had lived in and around Durham for the majority of her life.

As a child, she lived on a farm nearby with her parents and recounted her childhood and early married life as a life of ease with plenty of "help" from their African American servants. She

currently lived alone in a neighborhood with a high percentage of older adult residents and where the monthly association fees were high enough to create a somewhat exclusive demographic. She loved her home and loved having friends close by. Bonnie still wrote for the local paper and enjoyed how that job kept her in the "mainstream of life" with plenty of opportunity to interact with younger people. She said as long as no one asked her to retire she would just keep going. Her favorite pastime was bridge which she played three times a week, usually within her neighborhood. She walked her small fluffy black dog a few times a day and said that was all the exercise she needed. Otherwise, she drove everywhere she needed to go. Bonnie had recently leased a new car and used it to see her best friend in a retirement home in Greensboro once a month. Bonnie and two of her bridge friends split groceries, and she carried the bags up the flight of steps into her home two at a time.

Sterling was a 74 year old man who always wanted to meet me somewhere out and about in Durham, saying with a laugh that he was only home to sleep. He lived with his wife in a small cinderblock home at the edge of the City limits where they had lived since the 1960s and raised their four children. Sterling was one of the African American men who hung out in the McDonalds restaurant downtown where he said he got the "news of the day" and met up with friends. He was the informal chauffeur for a family friend who recently had a stroke, and Sterling played the same role for other "bachelor" friends as well. Sterling described his days as routine. He went to McDonalds and the nearby senior center in the morning, did errands before lunch, then went out to the bowling alley for league bowling twice a week in the afternoon or over to the senior housing building downtown to play cards. He picked up his wife at 3 o'clock and then took her out to dinner. In the evenings, Sterling liked to drive out in the county to his favorite fishing location or back in to town to see a

baseball game in central park. He said he liked to keep busy, and he liked to be able to help other people out by driving them to the places they needed to go.

Jane also liked to "keep busy," primarily through helping others. She was an 84 year old Caucasian woman widowed several years ago and lived alone in the house she moved to as a newly-wed in 1954. She grew up in the small community of Dayton in Durham County and had gone to a bank in downtown Durham her entire life. Jane volunteered with many organizations, and she showed me her calendar that kept track of all her commitments. Many of her meetings and errands were a short distance from her home, such as her grocery store, pharmacy, hair dresser, and the restaurant she took her older neighbor to every Friday night. Jane's church was six miles away in downtown Durham, which she said felt like a far distance. However, twice a week she rode with another older woman on a 'Citizens On Patrol' route, during which they drove for a few hours to check on specific neighborhoods in their district and on people who were not able to leave home. Jane said she thought she ought to start doing less so younger people had a chance to get involved. Nonetheless, she was clearly proud of her full calendar and many community roles.

Phillip, on the other hand, was finding himself with more time to fill. At 83, he was struggling with his balance and had recently given up playing tennis and going to the gym, although he still enjoyed swimming. Similar to Bonnie, he enjoyed playing bridge and played a few times a week, although one group stopped meeting because a member moved into a retirement home and they felt it was too far to drive. Phillip volunteered at his church once a week and at a cancer recovery short-stay facility where he could talk to people and make friends with younger adults. He was also in charge of organizing the Eat Out Club in his neighborhood, and he picked the restaurant and arranged carpooling for the Sunday night

event. Phillip drove himself to most of these locations, but if he was going somewhere with his wife, she drove. A few times a year they made a trip down to the beach for a weekend which was something they used to do monthly. Phillip said he was learning to do things in new ways as he got older, such as taking his bi-weekly walks at the local Target instead of outdoors since Target was flat, air conditioned, and he could use a shopping cart for additional balance.

Eleanor also loved to walk for exercise, and she drove from her home to the mall—less than a mile but over busy roads—to be able to walk the mall perimeter four or five times a week. She also attended exercise classes at the senior center and saw friends there from church and from her NAACP chapter. Eleanor, 71 an African American, moved to Durham to be near her granddaughter 12 years ago when she retired from her job in New Jersey. Eleanor continued to work part time until shortly before I met her, and she said that she structured her week with the exercise classes and by volunteering at a rehabilitation facility close to her home. She lived in an apartment complex where the majority of residents are students, but she confessed that even though she would prefer to live somewhere quieter and nearer to people her age she could not afford to move. Eleanor was also involved in her church and attended a prayer meeting on Wednesday, Sunday school and church on Sundays, and a bible study in a friend's home on Sunday evenings. She said she was in her car every day of the week, and she just squeezed in errands on her way to and from other activities.

Rosie also was a driver, proud of her career in the auto industry, and laughingly informed me that she "doesn't walk anywhere." Rosie retired to Durham a decade ago, and at 73 she was nearing the age when she promised her sons that she would move to be near one of them. She was very involved in various activities in Durham, however, and she felt like it

was an ideal location for her. She therefore had asked her sons to dispense with their agreement about her move. Rosie attended the theatre and the Performing Arts Center shows, went to the movies, and ate out with friends multiple times each week. She took and taught courses in the Lifelong Learning Institute, and she liked the lectures and other programs available through Duke University. Rosie lived alone in her single-story home but in a neighborhood where more than half the residents were older than 65 and where there were many in-neighborhood social activities. Her gym, dry-cleaners, a grocery store, and a gas station were all in a strip mall at the entrance of her neighborhood, but she drove twenty miles to a hairdresser she liked in Raleigh. Rosie said her most important role in life right now was as a caregiver through her volunteer efforts in the neighborhood organization they called "The Village." She was part of several care teams organized by The Village project, and she gave rides to neighbors who needed to receive chemotherapy or go to other appointments for which they need a companion. Rose also picked up groceries and ran other small errands for these neighbors. She found her role on these care teams very rewarding.

Eugene was 72, Caucasian, and he lived with his wife in the same neighborhood as Rosie. He was aware of the high percentage of older adults in the neighborhood, but said he and his wife moved in when they still had kids at home because they fell in love with the quiet streets and large yards. Yard work and building things in his shop were still some of Eugene's favorite things to do, although he said he was doing less and putting less pressure on himself to complete projects. His wife volunteered, but he spent the majority of his time attending grandchildren's school events, meeting up with friends for breakfast, and occasionally running to the hardware store or thrift shop to get supplies for a project. They owned a cabin in the mountains and spent as many weekends as possible there—often taking

grandchildren along "while we still can." Eugene moved to Durham to work as a technician at Duke University, but he said he stayed now primarily because his children and grandchildren are all nearby.

At 73, Viola was the frailest of the participants. She had a heart attack shortly before the first interview, therefore many of her daily routines had been recently altered. Viola lived in a new subsidized housing complex. While she said that she lived there by herself, family members—daughters, granddaughters, grandsons—took turns spending the night at her house so she did not have to sleep alone. Her daughter was living with her full-time as Viola recovered from the hospitalization and surgery. Viola had a part time job at Duke Hospital, sitting two days a week at the information desk, but was unsure whether she should or could return. Her grandchildren were getting the groceries for her, and now her only outings were being driven to the doctor's office for follow-up appointments. When she drove herself, she used to go to the budget grocery on Lakewood Avenue that catered to the local Hispanic population. Many signs were in Spanish and many food products were from Latin America, but it was the only grocery store near her home. She was awaiting medical clearance before she could drive again, and she expected it would take weeks. Viola did not like the apartment complex where she was living and said that the managers had too many rules. However, she knew a few people in her complex. The young woman who lived above her called her 'mama' and stopped in to visit occasionally. Her living space was decorated with as much Duke Basketball memorabilia as it was family photos. She grinned while explaining, "when my games are on, I'm not going anywhere."

Alice lived less than a mile from Viola but in dramatically different circumstances. Following her husband's death, Alice sold their large home in the country and decided to

move downtown. She now lived in a luxury condominium on the top floor of a historic downtown building with a spacious interior and a large roof-top terrace that overlooked the downtown park, the courthouse, and the Performing Arts Center. She said that she "adored" her home and the ability to walk everywhere downtown but could do without the sirens. Alice drove very little, explaining that she could walk to restaurants, to any evening entertainment she desired, to her church (which is farther down Main Street), and to the bakery, cheese shop and wine store that substituted for a grocery. She was a 72 year-old Caucasian who lived alone except when her two grown sons, both single and unemployed, needed a place to stay. Alice had an office downtown until a few years ago where she did some writing and consulting work, but she felt like she was not being productive enough to warrant keeping it. Now she said her life is very relaxed—even too relaxed—and she wanted to find something meaningful to do, such as a project to work on, in the coming years. Alice's mother lived to be 100 and died at home, and Alice intended to make arrangements so that she could do the same.

4.3.2. Participant Cases: Overview of Situational Issues & Challenges

The participants' daily and weekly activities (described above and summarized in Table 4.2) were influenced by many factors such as the individuals' histories and interests, their employment status, and the weather. Several aspects of their situations created issues or challenged their ability to participate in their chosen occupations. These included the geographical locations of their homes, their health and functional abilities, a sense of social isolation, and financial considerations.

4.3.2.a. Geography. The geographical location of home mattered in several ways. In general, the proximity of participants' homes to main roads, to other older adults, and to the

locations where they participated in various activities had influenced the routine times and ways that these individuals arranged their days. For Alice and Eleanor, the location of their homes made it possible for them to walk to close-by entertainment or restaurants. The majority, like Jane and Martin who lived in suburban neighborhoods, made almost all of their trips by car and were more likely to mention 'efficiency' in their descriptions of their day. Eleanor, Jane, and Rosie lived on busy roads and considered rush hour traffic when deciding when to drive out, and they sometimes decided to wait or to skip an activity based on the traffic volume. Harriet, who had to back out of her driveway directly on to a main road, was even more conscious of avoiding rush hour in the morning and afternoon. Of the participants who lived in neighborhoods with many other older adults, most reported that the majority of their social lives revolved around neighbors and community activities because it was most convenient, and they avoided the challenges of driving and finding parking at other venues. Bonnie and Phillip played bridge with neighbors multiple times a week, Rosie volunteered with neighbors, and Jane spent time visiting neighbors and going out to eat with them. Sterling, by contrast, lived in a remote location and so spent a majority of his time away from home moving from one location to the next throughout the day.

In most instances, the participants had found solutions that seemed to help them negotiate the geographic challenges related to their home and destination locations. Eugene knew exactly when to time his coffee shop trips to avoid Duke students. Rosie explained that there were four different routes she took in and out of her neighborhood depending on the time of day: one for getting out quickly, one for going to the traffic light when traffic was heavy, one for going the back way during rush hour, and one for cutting through a neighboring community on the way home. In some locations the challenges were more

difficult to negotiate, such as Viola and Alice's limited access to grocery stores. In these ways, the issues participants faced—and their ability to negotiate those issues—were shaped by the location of the home and the geography of their activities.

4.3.2.b. Health and functional abilities. For many participants health and functional abilities were actively changing and affected how they went about their occupations. Participants broached issues that had not been resolved or that were just unfolding. Phillip reported at each subsequent meeting that it was harder for him to walk without support and that he had stopped other activities (tennis, then bridge, then going to the YMCA gym). Bonnie had a fall after the second interview and had hired a dog walker for her dog because she was worried about tripping on his leash. She was unsure about whether she should make other changes to her routine since her home was two stories, with a flight of stairs outside as well. After losing vision in her left eye to a blood clot, Harriet was worried that she wouldn't be able to drive. She said that now she just went places that she knows, that were a "straight shot," and where she did not need to worry about reading any signs. Similarly, Eugene had cataracts and avoided driving at night when it was most difficult for him to see. He said that parking was hard in the daytime and impossible in the dark. Scheduling and time use were also influenced by health factors. Edith's cancer diagnosis meant she had chemotherapy and doctor's visits as well as two trips to the rehabilitation gym every week. She shrugged as she told me that cancer had "driven out" everything else from her schedule, even going out to eat.

Most dramatically, a change in health status sometimes meant ceasing almost all occupations for a time. Viola, who was recovering from her heart attack, no longer left her home except to go to the doctor. It was difficult for her to describe or envision what her life would be like in a few weeks and how or if she would return to the occupations she used to

do. In contrast, changes in health or abilities for some participants led to new valued occupations. When Martin had his knee replacement a few years ago and could no longer run, he stopped going to the gym with all his friends and instead opted for long walks in the woods nearer his home. These walks were now one of his most valued occupations. Rosie noticed that she was having some short term memory loss and started attending seminars on memory and cognition where she made new friends. She was now in a "meaningful and helpful" support group for people with early memory loss. And Sterling, who had a heart attack in his early 60s that required retirement, found a renewed sense of purpose in helping other older men who need to "slow down and lighten up" for their own health. He valued his own experience as a way to help others. In sum, all participants had experienced changes in their health and ability to do things in daily life in recent years and had or were making adjustments in order to have an acceptable quality of life—through what they did, when, with whom, and what they felt they needed to do.

4.3.2.c. Social isolation. An issue that many of the participants faced was social isolation and loneliness. Some described feeling isolated despite getting out and about in Durham several hours and usually several times a week. This was particularly true for the six older women who lived alone. Although there were positive aspects such as being "sole commander of the remote" (Alice) and being able to stay up "as late as I want, even 'til 3:00 in the morning" to finish reading a good novel (Rosie), many described being alone at home as a factor that influenced their desire to get out into the community. Rosie reported that she learned from her late father-in-law the strategy of getting out of the house for something every day whether you really needed to or not. Bonnie, too, mentioned that she often split her errands up over multiple days so that each day "has something." Eleanor said that doing

things—anything—was good for her "mental health" and forced her to get up and get dressed in the mornings. If there is nothing else to do, she noted and chuckled, "there is always the Dollar Store."

On the other hand, the sense of being alone served to limit some social activities. Edith confessed that even though she knew it was "silly," she did not like going out to evening events in Durham like at the Performing Arts Center or the movies without a male companion. She also tended to get take-out food and eat at home so that she was not always eating in restaurants alone. But, Edith conceded, "you need that interaction." Over the years she had gone to a few places so frequently, however, that she felt that the owners were familiar people. That relationship made it feel like she was eating among friends. "I have five restaurants I go to," she said, "and I know those people." Jane, on the other hand, would like to go to more restaurants. She was also hesitant to go alone, and her sole companion was significantly more frail than she. Jane picked up this neighbor every Friday afternoon at 4:30, and they drove less than a mile up the road to The Golden Spoon. "It is easy for her to get in and out there," she explained, so therefore they always went to the same place.

Alice has taken an entirely different approach to negotiating the limitation she felt with not having a partner for some of the social activities she would like to do. "I do eHarmony," Alice explained:

I spend time at the present moment with about four people of the male persuasion. [...] I really like the fact that I can know people very well, and enjoy them a lot, and not have to be disappointed if they don't want to do exactly the same things I want to do. And it seems to suit them fine, also.

A feeling of being isolated at home therefore led some individuals to do errands or other activities for the sake of interacting with other people. Sometimes things participants would like to do were not pursued for lack of companionship, and other participants were strategic

about having a movie friend, becoming friends with people in the community, or arranging dates to negotiate these problematic aspects of their situations.

4.3.2.d. Finances. Finances were another factor that some participants said affected their participation in daily occupations. Rosie frequently quipped that deciding what to do for free in the evening was one of the hardest decisions she had to make. She was an exception, however; the cost of valet parking or parking in the guarded parking garages in Durham would have been prohibitive for many. For example, Edith said that she only did some of the things she wanted to do because she could not afford them, but that she "doesn't mind being poor" because it also meant she did not feel obligated to be doing things out of the home every evening. Eleanor, who lived in the primarily student-occupied apartments because it was the lowest rent she could find, worried about the cost of gas to get to her activities. Other than the mall, which was less than a mile from home, most of her activities required more than 15 minutes of driving. In regard to these activities, she stressed:

If I didn't like it, believe me, I wouldn't be doing it. Especially when the gas is so high. When the weather was really hot, I went to the mall because the more you use your air condition[er], the more your gas goes. So I go to the mall and walk. Those 100 [degree] days we had, I didn't go downtown. I just went to the mall and back.

Phillip recounted with sadness the decision he and his wife made to sell their beachfront home because of the money they were losing on the property. It had been a family
vacation home for more than forty years, and he described the loss as if it were a family
member. Now when they go, they rent the home next to their old home so that it is "almost
the same, but not really." They only go with grandchildren a few times a year, and Phillip
said that although it was the right financial decision he really missed that aspect of his family
life. Finances did not just serve to limit participation, however. Sterling sketched out on a
napkin a weekly cost analysis of why he almost always took his wife out to eat in the

evenings. The cost for the two of them to eat at a buffet restaurant was 14 dollars, and they might have some leftovers to take home. This was less than the cost of stopping at the grocery store to get groceries for a "full course meal." He said that it also was nice to see their friends in the evenings instead of just being alone at home. Thus, financial considerations sometimes limited what these older adults were able to do—whether entrance costs, driving costs, or associated costs. Sometimes such considerations were the deciding factor between multiple options within their situations.

Situational issues for each individual influenced how participation in their chosen and necessary occupations unfolded. Variations in neighborhood and home location, living situation, ability to physically and mentally meet the demands of day to day life, and financial constraints and opportunities all influenced the on-going person-place relationship (see Figure 2.4). Many of these examples highlight limitations the participants experienced. Others illustrate aspects of their situations that were problematic and stimulated their action toward resolution. Highlighting these problematic elements, however, should not overshadow their generally positive experience of aging in the community. With the exception of Viola, whose life and future were very uncertain following her recent heart attack, all participants expressed that they were "blessed," "lucky," or otherwise had an excellent quality of life. They found meaning in the things they were able to do, enjoyed living at home, and intended to remain at home indefinitely—until, in Eugene's words, "they come carry me out."

4.3.3. Variation among Characteristics and Experiences

Participants varied across many personal and situational characteristics due in part to my sampling strategy (Table 4.2). They had varied home and living situations as well as varied neighborhood locations and histories. Participants had lived in Durham for different

periods of time and varied in their socio-economic situation. The group also reflected the ethnic and gender stratification of older adults in Durham. Other important variation was not reflective of the sampling strategy. Those points of difference stemmed from varying experiences as residents of Durham and with their own aging parents, for example. This variation was part of the life course dimensions (see Chapter 6) that influenced participants' current participation and shaped how they envisioned their future lives.

For the three participants who had lived their entire lives in and around Durham, reflecting on the features of the city seemed to be somewhat challenging, and they rarely offered a summative statement about Durham. When asked to describe their community, these three tended to reflect on relationships with other people and the geographically closeto-home aspects of daily life like having a post office nearby or living on a road that had little traffic. A sense of Durham as a unified whole was not part of their descriptions or explanations. They did offer helpful insights in the changes that happened during their lifetime, situating their own narratives within the context of a changing city. For example, Sterling motioned to the Durham Bulls Athletic Park and explained that he was born in a home that stood where that building now stands. That home, the one he moved to with his brothers when he was in his late teens, and the home where his mother lived when she died were all destroyed during the construction process. He and his wife had already moved to the city limits to get their children out of the downtown Durham context. When he talked about the new buildings in the downtown area he said "they have" and "they built," suggesting that to some extent he saw himself as an outsider to the revitalization process.

Jane also had little to say about Durham in general. She did share stories about how as a child growing up in the rural area a few miles east of Durham city she would come "in to

town" with her father or mother when they needed to come to the Fidelity bank and twice yearly when she and her sister were fitted for new shoes by a cobbler on Main Street. During this study, Jane lived within Durham city limits in the brick ranch she and her husband moved to in the early 1960s. However, she still talked about going "in to town" for church on Sunday which was one of the farthest distances she traveled (at approximately six miles). In the last 60 years, Jane's experience of Durham seemed to have been concentrated into an area a few miles from her home. This was not because she was no longer capable of driving distances, but rather because she was able to find what she needed within this small radius. She also noted that she had learned to "make do with what's here."

Participants who had moved to Durham early in their adult lives had similarly long histories to share. In contrast, the participants who had moved to Durham during late-life career transitions, as widows in their 60s, or after seeking a retirement location tended to offer more generalized descriptions of Durham as a whole. They made sweeping comments about the culture, about the vitality of the city, and about the features that made it good for an aging person. This likely reflected their decision to move. They had evaluated Durham as a composite place to live in older age against other possibilities, and they chose it for diverse reasons. Rosie, Martin, Alice, Bonnie and Eleanor described the community of Durham, as a whole, as being a positive place for them to live. Their experiences in Durham also seemed to be more varied, less entrenched in particular places or neighborhoods, and those experiences provided an interesting contrast to the hyper-local perspective of the longer-term residents.

Several of the participants, primarily women, used stories of taking care of their aging parents or examples from their relatives' lives to illustrate what they did or did not want for themselves. Rosie found a positive example in her parents-in-law who, "when they retired,

made a trip into town every day, whether they had to or not, just to be social." She said she tried to do that, although she did enjoy being at home all day as well. She also said that after seeing how her own mother's geographical isolation from other family members made "caring from a distance" a difficult necessity, Rosie promised her two sons that when she turned 75 they would "draw straws" and she would move to be near one of them. Edith also felt like she had learned a lesson from her mother's older age and took a different approach in her own life. When Edith's mother needed someone to accompany her to her many doctor's appointments and treatments when she had cancer, she depended almost exclusively on family who lived close by. Edith said the time burden strained those relationships. When she herself was diagnosed with cancer, she called her children and set up a rotating schedule so that it would be "fair" and that they were all contributing. Alice and Harriet referenced their mothers' later years and deaths as their own goal. Although their mothers' deaths were difficult (Alice's mother died at 103 after a decade with dementia, and Harriet's mother died in her 90s after setting her house on fire), both women had been able to stay in their own homes and receive help while in their familiar, loved environments. Some participants found their relatives' experiences undesirable. For example, Eugene reported that his parents were extremely poor and isolated. Bonnie's brother refused to stay in a nursing home and instead died rather quickly at home alone. Similar to the history of their residence in Durham, these varied experiences with aging relatives became part of the situation in which these individuals made choices, organized their days, related to other people, and participated in the occupations of their daily lives.

4.4. Multi-Case Matrix

Details for each case are shown in the matrix below, which includes demographic details, residential history in Durham, aspects of occupation, and the relative informality or organization of the individual's activities. I will describe some of those key patterns of participating in place, particularly as they frame variation among cases. Additional details about patterns of participation are presented in Table 5.1. The participants are organized by recruitment order (as they were in Table 3.2).

The matrix displays cross-case variation, patterns, and relationships. First, while a participant's involvement in organized versus informal activities did not seem to relate to whether or not they were working, individuals who participated in more organized activities often did organized volunteering—that is, they volunteered at set times and in the same location each week (6 of 8 cases). Those whose primary occupations were more informal did not tend to volunteer, were not working, and tended to be more frail (more physical challenges, less energy). Second, the level to which individuals' experiences with physical or cognitive challenges affected their daily lives did not seem to be closely related with either the nature of occupations they enjoyed (informal or organized) nor their likelihood to be employed or a volunteer. Possible reasons for this, particularly related to strategies in daily life, will be discussed in Sections 5.4.4 and 6.3.3.

Table 4.2. Descriptive Multi-Case Matrix

	Age	Gender	Ethnicity	Years in Durham	Working ^a	Volunteering	Challenges ^b	Primary Occupations Out of the Home	Nature of Occupation ^c
Edith	72	F	С	40	PT	No	2	Medical appointments, errands, dinner take-out, time with friends	1
Alice	72	F	С	40	No	Yes	1	Eating out, downtown entertainment & theatre, church, yoga, dates	0/I
Rosie	73	F	С	7	No	Yes	2	Eating out, volunteering, committees, gym, Osher Lifelong Learning Institute (OLLI), theatre,	0/I
Bonnie	81	F	С	36	PT	No	3	Bridge, newspaper job, walking dog, visiting friends	0/I
Martin	78	М	С	25	PT	Yes	1	OLLI, walks, work at Duke, social events with wife	0/I
Sterling	74	М	AA	74	No	No	1	Bowling, hanging out with friends, errands, fishing, eating out with wife	ı
Phillip	83	М	С	58	No	Yes	3	Church, bridge, exercise, errands with wife	0/I
Eugene	72	М	С	43	No	No	1	Grandchildren's events, cabin projects, meeting friends, church	I
Eleanor	71	F	AA	12	No	Yes	2	Bowling, exercise & other classes, church meetings, mall-walking	0
Harriet	99	F	AA	60	No	No	2	Exercise classes, prayer meeting, church	0
Viola	73	F	AA	73	PT	No	3	Medical appointments	I
Jane	84	F	С	84	No	Yes	1	Volunteering, visiting friends, church, committees	0/I

^a Participant report: no paid work (No), part-time work (PT), or full-time work (FT)

^b Severity of physical and cognitive challenges affecting daily life: minimal (1), moderate (2), or significant (3)

^c Nature of occupations: organized (O), informal (I), or both organized and informal (O/I)

4.5. Summary & Implications

For many in this study, Durham was a good place to age. Durham has many features and characteristics of an age-friendly city according to the WHO (2007) guidelines, and it is located in a state with a significant aging population and a state-wide Aging Services Plan. The city is growing and has increasing opportunities for business and leisure, a large population of young adults, and a stable economic foundation in local industry, medicine, and universities. However, despite the many resources and the increasing proportion of individuals older than 65, no integrated city-wide organization or governmental body oversees planning, implementation, evaluation, and improvement of the community in relation to and in support of aging in place in Durham. "Promoting Livability" is the expressed mission of the City government, but it is a fragmented, service-centric effort.

The cases included in this study are diverse demographically and represent the gender and ethnic stratification of older adults in Durham. The participants are also diverse with regard to their daily occupations, the challenges they face, the constellation of places and people with whom they transact in daily life, their personal family and residential history, and their perspectives on what the future holds. Yet within the variation of experiences there were several distinct patterns across the cases. Those patterns were related to time use, navigation of physical and social spaces in the community, and daily life decisions. Such patterns combined to delineate several distinct approaches to doing the meaningful and necessary activities of daily life while aging in place. I turn to these patterns in Chapter 5.

CHAPTER 5

Findings II: Patterns of Participation

5.1. Introduction

In this chapter I will present the second body of findings from the study. These findings build on insights about participant experiences from Chapter 4 and show important cross-case patterns of participation in community-based activities while aging in place. I first use a case by variable matrix to present key categorical characteristics of each case. In subsequent sections I explain spatial and temporal patterns of participation, and I focus on key dimensions of place-based participation using participants' quotes and maps. The chapter concludes with a summary of the findings and foreshadows how the patterns and dimensions of participation relate to the processes of livability which are modeled and explained in Chapter 6.

5.2. Participation Matrix

Table 5.1 displays data from the GPS data logs. It also displays categorical data that summarize spatial behavior, temporal orientation, attitudes toward public transportation, and attitudes toward aging in place which are derived from my analysis. This arrangement displays how participants vary within each category, and also shows several relationships across the categories. 'Shape of the Day' (see Section 5.3.3) is used to organize the participants within the table to show these relationships most clearly.

Table 5.1. Participation Matrix

	Ave. Driving Days / Week	Ave. Trips / Day	Ave. Stops / Trip	Shape of the Day ^a	Public Transportation	Temporal Orientation ^b	GPS: Distances	Attitudes of Aging in Place ^c
Rosie	6	1-3	2-8	Т	Won't consider	R	most <8 mi.; 30+ mi. circuits 2x/week	No Change
Sterling	7	2	5-12	T	Won't consider	F	20-40 mi. per day; trips 2-8 mi.	Natural
Eleanor	5	1-2	3-4	L	"If needed"	С	most <5 mi.; 9 mi. to bowling 1x/week	Info
Eugene	5	1-3	3-4	L	Feels N/A	R	2-6 mi. errands; 14 mi. to doctor	Natural
Jane	5	1-2	2-4	L	Feels N/A	С	most 1-8 mi.; always <10 mi./day	No Change
Martin	5	2	2-6	L	Feels N/A	R	walks ~1.5 mi.; drives 1-6 mi.	No Change
Alice	2	0-2	2-4	L	"If needed"	R	walks ~1-4 mi. downtown; drives 6 mi.	Back-up
Edith	4	0-2	1-2	S	"If needed"	С	most < 1 mi.; 6 mi. to Walmart 1x/mo.	Info
Bonnie	5	1-2	1-2	S	Feels N/A	С	most 2-8 mi.; <1 mi. neighborhood	Back-up
Phillip	4	1-2	1	S	Feels N/A	F	all <6 mi., most <3 mi.; Dr. office farthest	Back-up
Viola	0	0-1	1	S	"If needed"	F	-	Natural
Harriet	3	1	1	S	"If needed"	F	< 2 mi. alone, more riding with daughter	Natural

^a Shape of the Day: Tour (T); Loop (L); or Spoke (S)
^b Temporal Orientation: Time is A Resource (R); Day is an Empty Container to Fill (F); Day is Choreographed (C)

^c Attitudes: Continuing on same trajectory (No Change); Only Natural Option (Natural); Gathering Information (Info); or Making Back-up Plan related to Assisted Living or Continuing Care Retirement Community (Back-up)

Grouping by shape of the day is useful because it shows general trends like greater distances traveled and greater number of trips for some participants. It also helps to see the likelihood of the most activity-limited participants to view the day as an empty container to fill. The concept of shape of the day is also directly related to individuals' trips per day, physical and social activities, and degree of challenge in daily life.

There were significant patterns and differences in how the participants were oriented toward time and how they arranged activities within days and weeks. There were also noticeable spatial patterns as participants navigated the places they lived and wanted to go in Durham. These temporal and spatial patterns will be explained with examples and further interpreted in Section 5.3. Some patterns of participation evident from this cross-case comparison were related more directly to dimensions of *place* and experiences of livability. These dimensions were evident in all cases, although manifested in different ways and to different degrees. In Section 5.4, I explain dimensions of participation in place including developing and maintaining routines, transportation choices, prioritizing relationships in the community, and ways of organizing participation in place with examples in Section 5.4. Throughout the sections of this chapter, I describe and explain these patterns and dimensions in detail through examples, quotes, and maps from participants' lives.

5.3. Patterns of Participation

Maps, observations, and participants' explanations helped to reveal patterns of participation in the community. Temporal and spatial patterns were key aspects of participation that varied for the participants, and I will highlight several categories and key spatial patterns that structured this variation using both quotes and maps. I will then lay out

the connection of these spatial and temporal patterns to patterns of participation—what I have called 'shape of the day'—for participants. This analytic strategy of examining both patterns and variations specifically informs my understanding of how each person negotiated the problematic situations they faced. I conclude by summarizing the patterns of participation that make it possible for participants to carry out their necessary and meaningful daily occupations.

5.3.1. Temporal Orientation

In describing their daily routines, participants ran through the sequence of their day or week and talked about time in several distinct ways. Codes addressing this temporal nature of occupations included "planning a route for efficiency," "wanting days to be full," "living by a calendar," "having the freedom to do anything, anytime," and "doing something until _____." These showed that these individuals considered time in how they planned their day, what they valued, and how others' schedules influenced them. Their orientation toward time tended to fall into one of three categories.

First, Sterling, Harriet, Viola, and Phillip talked about their *day as an empty container to fill*. Speaking from this orientation, participants described having things to do as a way of filling an afternoon, or they explained that getting ready very slowly and reading two newspapers made the mornings pass. Phillip, for example, had several weekly activities that had recently "dissolved:" he stopped playing tennis doubles after having a fall, and his group of friends who played bridge rotating among houses had stopped meeting when one member moved 6 miles away to a retirement facility. He explained that these changes left "holes" in his day, and he was "not sure whether I need to find something to take their place, or if I should just have less in my life." Finding and using activities to fill the day was an

orientation shared by some of the frailer and less active participants. Harriet attended exercise classes in two different locations during the week as well as various church meetings and services. In a typical week, she was away from home from about 9:30 a.m. until noon on Mondays, and 10 a.m. to 1 p.m. on Wednesdays. In scheduling our meetings, however, she said she was "out" on Mondays and Wednesday. We always met on Tuesday or Thursday for interviews since those were her "free" days. Her sense of a full day was clearly different than Sterling's, who also talked about the day as a container of time to be filled with activities. Sterling was the only very active participant in this category. However, his activities were closely intertwined with others' who either had strict work schedules (his wife) or who were more frail (his friend whom he chauffeured). Sterling explained:

I'm the only one who has a car. So I carry them wherever they want to go. If they've got a doctor's appointment, or whatever. My life is built around other peoples' lives. [...] I don't mind it, you know. It gives me something to do. Makes me feel important.

He described his typical day for me on several occasions, and although the component activities varied, he always related a similar time structure and the idea that he did one thing until it was time to start the next activity. There were several non-negotiable times during the day like dropping off and picking up his wife, getting his friend to the Senior Center around 8:30 a.m., and the noon start of Sterling's bowling league practice. Errands he took friends on, playing cards, and doing his own laundry filled the time in between those points. In Sterling's case, the filling of his day was quite literal.

The second temporal orientation was toward *time as something to be choreographed* in order to get their activities accomplished. These participants were not trying to "fill," but rather trying to "fit" their activities into available time. Edith, Bonnie, Eleanor and Jane exemplified this category. Jane told me during our first meeting that she "just lives by a

calendar" and that sometimes she did not even write everything down since things came up unexpectedly. Similar to Sterling, there are some things she knew she would need to do at specific times, like committee meetings or attending events at church. The other things she wanted to do, like phoning friends to "check in" and doing little errands, were arranged within her day in a sequence that made sense for how much time was required (as well as how much travel time was required to get to that location). Jane recounted the choreography of one of her days:

Ok. Monday I played bridge. Well, first of all we have a group from church that meets once a month for birthdays, so. Do you know where Neo China is? Over ... it used to be South Square. Anyway it is a restaurant over there, and I went to that. No, first I went to see Estella in the hospital, because I knew I wouldn't have time after. So I did that, then played bridge, and after that I went to the PAC meeting, which is Partners Against Crime. [...] A pretty good day. I'm trying to think – did I go see Estella? Yes. I went *before* Church Chicks, because I knew I wouldn't have time after. [...] The days just go!

Another dimension of choreographing the day involved the sequence of activities. Eleanor said that she liked to get up and go to the mall to walk first thing in the morning because it forced her to get up and get dressed, even if she did not have anything else to do that morning. "If I don't get up and get started," she explained, "I can just, you know, stay in the house all day." She felt that doing exercise first made it more likely that she would do the activities and errands she intended to do later that day.

Third, Martin, Alice, Eugene, and Rosie tended to talk about *time as a resource for themselves and for others*. These individuals had all retired around five years ago and seemed to be in what Rosie called the "second phase of retirement." In the first phase, she explained, you revel in the free time and "do nothing but lounge around in your slippers. You read all the books you wanted to read and visit all the friends you've been wanting to visit."

According to her, the second phase involved realizing that you still had many years to live

and that "slippers and late night TV get sort of old." In the second phase, Rosie told me, you start looking for something meaningful to do with yourself again. In her case, she said that "caregiver" was currently her most important role. She liked having free time for her own purposes, but she also found it very meaningful to be able to do errands for neighbors, call and visit "shut-ins," and drive others to appointments. Rosie spoke poignantly about how difficult it was for her to care for her mother from a distance during her mother's final years and how much she depended on her mother's friends and neighbors "on the ground to be [her] arms and legs." She said that now it is her turn to "give back" by being both close and available for her own neighbors. Martin also felt like he had time to give to others. Through his part-time connections at Duke Chapel, Martin said that he was positioned to be a resource to students and peers. He reported that he frequently got phone calls and emails asking:

'Can I talk to you?' 'Can you help with some resources?' So I have this little group of about 20 that I am resourcing about their faith journey, as they've moved from a more traditional position to a more untraditional position. [I am] helping them negotiate how they deal with this.

Although he had been in a mentoring role most of his career, Martin described his current involvements as giving him a real sense of purpose, even leaving a legacy, because he was able to spend so much time helping others through difficult points in their lives. For Eugene, his time was invested much closer to home. He lost his oldest son to brain cancer months before we met and spending time with his son's children was the first thing he mentioned when we discussed routines or priorities. Eugene described his sense of having time to give and a role to play:

I hear people who say 'oh I don't want to retire because there will be nothing to do.' But it's just not like that. We have two grandsons in Chapel Hill who live three miles from us. Lost their father in October. We are wanted and needed in that house. [...] They have a delayed start once a month for school. Their dad always took them out to breakfast. When he got sick, a comment was made about it would be bad for the kids

... so I took papa and the two kids. And when Amos got too sick I didn't take him anymore. So I always try ... I really try hard to be here for late openings. I'll cancel trips to the mountains for a late opening. That is a real high priority.

For these individuals, using their time in a way that mattered—that was personally meaningful and fulfilling—influenced how they arranged and prioritized occupations to put their time to good use.

5.3.2. Spatial Patterns

Spatial patterns were revealed while reviewing activity maps with participants. I encouraged them to discuss how, why, and when they went to specific places or used specific routes. Some participants were aware of *using familiar corridors, avoiding interstates and highways*, and *avoiding left turns*. Others found this surprising and only recognized the patterns when trying to articulate the reasoning behind what we saw on the maps. In most instances, participants expressed that their spatial patterns were the product of many years of moving about the city and not something newly developed. I will use both quotes and maps to explain the three patterns. Yellow stars on the maps denote the general area of the participants' homes, and their paths are shown in orange.

5.3.2.a. Corridors. Most participants' maps showed a zone extending not far from their home that contained frequent activity. Friends' homes and local shops near the home were frequent destinations or stops along longer routes. However, instead of appearing as a web extending beyond that nucleus of homes and shops into areas of progressively less dense activity, several maps showed paths and activity in long corridors with continued density of paths extending in a few discrete directions. Martin was particularly surprised to see his map, since he described himself as getting around with no difficulty. He reported that at 78, "nothing has really slowed me down, nothing has really stopped me from doing what I want

to do." He felt that he was quite active and involved, as did his wife who told me that "Martin is the youngest 78 year-old you will ever meet!" From his home there were two main corridors. One headed east toward Duke University campus where many of the meetings, lunch groups, his favorite grocery store, and a coffee shop were all within a mile of each other. The other primary corridor headed south toward another grocery, a strip mall complex with stores, take-out dining, and a pharmacy. He was somewhat puzzled to see that most of his activities were contained in two fairly circumscribed areas, which branched only short distances from the two primary corridors.

Figure 5.1. Martin's Paths: Corridors



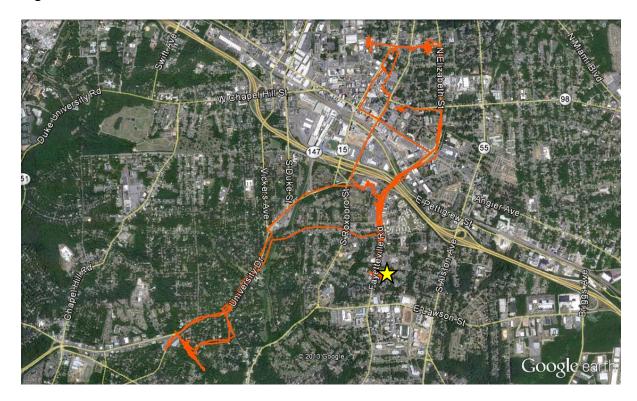
Martin speculated that he went south to the shopping district simply because that was closest to his house and made the most sense. Since both he and his wife work at Duke, the

proximity to campus was one of the reasons they chose their home location in 1996. He conceded that "Duke is kind of a bubble in Durham. So a lot of our experience has not been in the city." He reflected that he probably used to go to more different locations, but he has "sort of simplified." He did note that the trip to his church was not shown (although it is just two turns off Cameron Boulevard, his northern corridor) and his map (see Figure 5.1) also includes an unusual excursion to the airport (the southern route that runs out of view) to drop his wife off for a business trip.

Harriet's paths also branched off one main corridor. Unlike Martin, who lived in a suburban location, she lived a few blocks from downtown and within a grid of residential streets surrounded closely by small shops, a recreation center, and other businesses.

However, Harriet almost always headed north since she had to back out into the north-bound lane and did not like backing across both lanes to go south (see Section 4.3.2). From the main road she lived on, Harriet merged on to North Elizabeth Street which led to her church, the downtown senior center, and the community center where one of her exercise classes was held. Using this corridor made it possible for her to continue driving the few places she wanted to go each week. This corridor did not necessarily support participation in new locations, however. For example, this map (Figure 5.2) also shows a trip she took with her grandson to a nearby park. Although it was only a few miles from her home and accessible off her main corridor of Fayetteville Road, Harriet said she rode with someone because it was not a "straight shot," and she did not like to drive places that she might have to read the street signs.

Figure 5.2. Harriet's Paths: Corridors

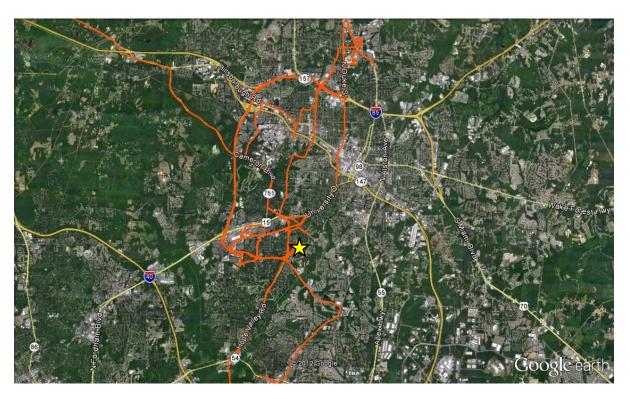


5.3.2.b. Highways and interstates. Just as Harriet avoided going south on her two-lane street, several of the participants told me that they avoided driving on interstates and highways because of the speed other cars drove. For example, Bonnie said:

I don't mind driving. I try to stay off interstates, because I don't like big trucks going past me so fast, you know. So I tend to ... take 70 and go through Hillsborough. It is the back way, I'm the back-road queen!

This was true for her longer trips, such as taking Highway 70 instead of Interstate 40 west to see her friend. The same applied to trips in town. Bonnie avoided many main roads as she drove in Durham, instead driving through neighborhoods on her way to various stores and along roads parallel to the Highway147 bypass south of downtown on her way to meet friends for lunch. She did take Interstate Highway 85 for a short period on her way to the doctor's office one day, but she explained that she was running late and felt like she had to go the fastest route that morning.

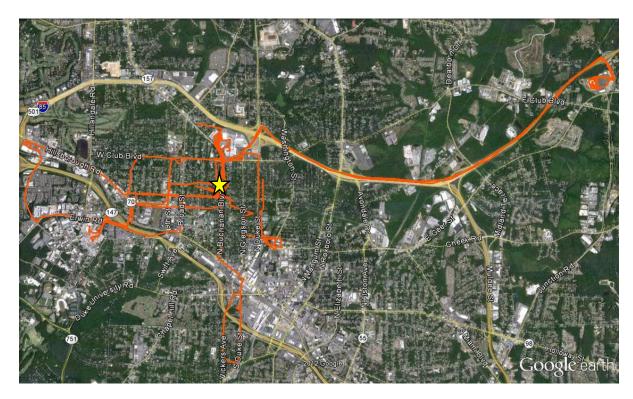
Figure 5.3. Bonnie's Paths: Avoiding Interstates & Highways



Harriet, Jane, Phillip, and Eleanor also mentioned avoiding main roads, including interstates and primary roads through town. Edith explained that she only used Interstate 85 once per month when she went to Walmart in order to purchase her prescription drugs; otherwise, she said that she tries to do everything she needs to do "inside the beltlines" (Figure 5.4).

5.3.2.c. Left turns. Edith's map also shows the third spatial pattern of arranging routes and the order of certain stops to avoid particular turns—primarily left-hand turns across traffic. In Edith's navigation of her neighborhood especially, her looping approach to driving was visible. She approached destinations from one direction and left from another, meaning that both turning in to and out of parking lots were right-hand turns. At larger venues, such as the mall that is two blocks north of her home, she would make a left turn toward home since the intersection was governed by a traffic light.

Figure 5.4. Edith's Paths: Avoiding Interstates & Highways, Avoiding Left Turns



For Rosie, getting back into her neighborhood was the turn that caused her trouble since it was an ungoverned intersection on a four lane road and the speed limit was 45mph. She said:

Getting back in, I come down Covington Road, turn right on [Highway] 54, then there is an indentation [in the median] in front of the gym where you can cross 54 if people will let you in. But sometimes I just go down to the light, because I assume people won't be nice drivers.

Instead of turning on the road that led into her subdivision (and to which her driveway connects), she went about a half mile farther to a traffic light where she could turn left and then weave through residential streets to get home. Or, if traffic was not heavy, she did a Uturn and turned right on to her road. Bonnie had a similar situation at her pharmacy. She preferred that particular pharmacy because of her long-standing relationship with the pharmacist who worked there. The only problem, she explained, was that "you can't turn left

coming out of CVS. You have to pull out on Garrett Road, turn left, and then turn left again to come home. That is sort of a disadvantage, but everything's got its problem." It was somewhat of a challenge for her now, and she knew it might become more of a problem if something changed in her capability in the future. She said during an early interview that "I could have my drugs mailed to me, and it might be a little less expensive ... but I'm not going to do that until I have to. Because I really value the interaction I have with the pharmacist." A few weeks later, after having a fall, she had to have a friend pick up her prescriptions for her since her neck was too stiff to drive. Although Bonnie's situation had not resolved into a new pattern during the time we met, this shift in the person-place relationship is an example of a problematic situation that led to the patterns of avoiding main roads and interstates highways in many of the cases.

These three patterns of spatial behavior showed up in the maps and discussions with many of the participants. Many identified their patterns as ways they negotiated mobility challenges. However, some participants did not seem to have experienced significant problems or changes in how they drove, in their perceptual abilities, or in the places that they frequented. For example, both Eugene and Sterling drove frequently to diverse locations, on varied routes, and without any special regard to the traffic patterns. Alice, too, did not seem to have experienced much change in her spatial behavior in the past few years, however, as the only participant who walked to a significant number of her destinations her driving was limited to a few distant locations. Characteristics of how the participants navigated the places that they lived and the places they wanted and needed to go were thus varied. Nevertheless, for those individuals who were actively negotiating challenges, the three spatial patterns described above applied broadly. I characterized all participants' spatial behavior by the

average number of trips away from home each day, the average number of stops or destinations each day, and a ratio of average stops to average trips (see Table 5.1).

Quantifying these aspects of their spatial behavior revealed three over-arching patterns of participation, which will be described in the next section.

5.3.3. Shape of a Day

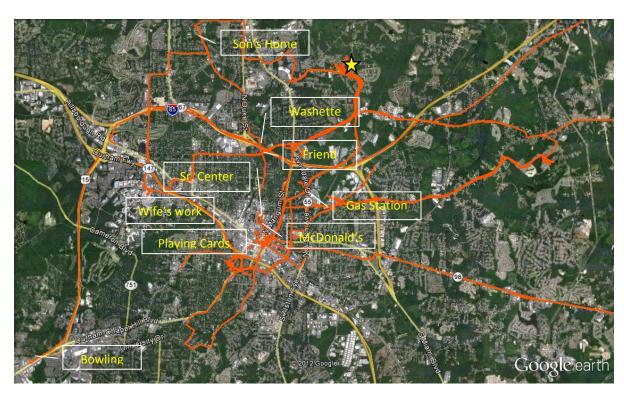
The range of trips and stops each individual made during the days they carried the GPS device are shown in Table 5.1. Those distances and stops, along with watching the participant's paths play in sequence, revealed three patterns of navigating the community in order to participate in daily occupations. These patterns were visually evident but also had an experiential quality which Phillip called his sense of the "shape of the day." The three shapes of *tour*, loop, and *spoke* represent how participants organized their participation within the geography of Durham. They will be described below using quotes and maps (participants' homes are denoted by a yellow star). These patterns are important because they illustrate how participation is structured by an array of variables far more numerous and interwoven than those depicted in previous research. Also, they depict how the person-place relationship is emergent—both the outcome of past decisions and situations, as well as an ongoing process forming present and future situations. Moreover, that relationship is managed through these patterns because it allows individuals to meet their physical and social needs.

5.3.3.a. Tour. The first shape characterized the days of two participants whose daily schedule mirrored a work day in the sense that they got ready and left their home in the morning and often did not return until much later in the day. Both Sterling and Rosie also had other people—friends, family members, and neighbors—who depended on them for transportation around town. Sterling and Rosie only made a trip or two away from home each

day, but these trips involved 8 to 12 stops. Sterling even had a few days with 14 and 15 stops. Sterling described his typical day, saying:

I drop my wife at work, at Duke. And I go and I pick up a friend of mine. And I carry him to Senior Life, but we stop at McDonald's first, and we stay there until 8:30. Then I carry him over to Senior Life. Then I'm pretty much flexible from 8:30 until about 11:30. And about 11:30 I pick him up, and then I pick up a couple more friends. We'll go out and we'll go shopping, and after we finish shopping and whatever we'll go to the bowling alley. And we'll bowl until about 3 o'clock. So I drop them off, take them wherever they want to go, like the train station, take them where they need to be. And I try to have all that, everything out of the way around 3 ... 3:20. And I get ready to get my wife. After I get her, we either go out to eat, or I'll go home and cook for her so she'll have a nice lunch. And after I get her settled in and she gets comfortable, then I'll go fishing..... I fish evenings mostly, and at night. But that is about my routine.

Figure 5.5. Sterling's 'Tour'



Sterling's map (Figure 5.5) showed these winding tours through town. Destinations were strung together in an order determined by the key time points that structured his day, and his paths often crossed as he back-tracked over roads. He covered around 30 miles a day.

For these two individuals, long distances were not considered a drawback. Rather, they emphasized how much they valued a full day, the meaning they found in helping others, and the ease of getting from place to place. The shape of their days was large, complex, and heavily influenced by the social nature of the activities in which they engaged.

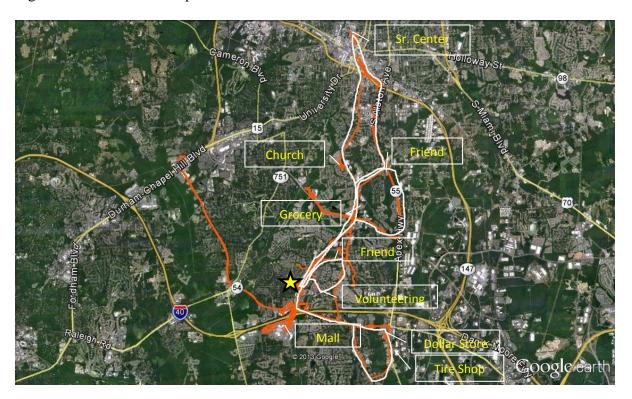
5.3.3.b. Loop. The 'loop' shape characterized the participation of half the participant cases. In this pattern, individuals made multiple stops on a single trip, making a loop through town. Some made multiple trips with multiple stops, creating several loops like the petals of a flower. For example, Jane would go to a meeting at the local police district headquarters then stop at the grocery store and post office on her way home. Edith would wait until she had a few errands that needed to be done in the shopping district south of town, then she would spend an afternoon moving from store to store to complete her list. Eugene set one morning a week as his "thrift store morning," typically a Monday, when he would drive to the four thrift stores in range of his home. For these participants, it made sense to group certain activities together by time, location, or type of destination. Eleanor explained her pattern of doing errands after or between her scheduled classes:

On my way back from wherever ... if I'm coming back from downtown classes, I just stop at Walmart, stop at the gas station. Get gas, go to Walmart and pick up what I need. If I need something from Krogers I run there and get it. They I come back and get gas. No, if I need gas, first I get gas. Then I'll go Kroger, then I go to Walmart, and then I go home. And if that is not sufficient, then I go to ... the Dollar Store is on 55, and I like going there a lot. So maybe another day, if I'm out in that direction I'll stop at the Dollar Store. ... Everything is so convenient. I just squeeze it in on the days that I'm already out.

Eleanor's map (Figure 5.6, with loops traced in white) shows some of her loops, each with multiple destinations along the path. Like Sterling and Rosie, she was in her car most days of the week. However, Eleanor usually traveled less than 5 miles per trip and only exceeded 10

miles on bowling days when she drove 9 miles each way to the AMC Lanes on Highway 15/501.

Figure 5.6. Eleanor's 'Loops'



These participants tended to be involved in more structured activities like classes and volunteering, and they mentioned things like 'being efficient' in their interviews. Classes or other organized occupations, such as religious services or volunteering jobs, often served as the primary structuring features of the shape with other informal activities added based on geography (other shops nearby) or timing (activities that could 'fit' within a gap between other activities; see Section 4.5.1). The shape of their day was planned, appeared organized and logical, and was influenced by efficiency, location, and timing.

5.3.3.c. Spoke. The 'spoke' pattern characterized the participants who were the most limited in terms of activity and energy. These individuals tended to describe the day's

activity in the singular. For example, one day might be shaped by going to a doctor's appointment in the morning then returning home for the rest of the day or perhaps making another single trip in the afternoon with a single destination. These maps showed paths radial to the home. Martin described this pattern of activity, explaining:

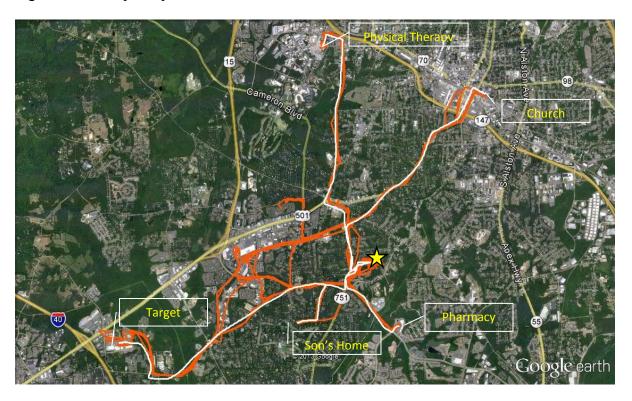
I have something going on every day. I teach on Tuesday mornings. I have a men's group that meets the first and third Wednesday of every month. We are going to be volunteers at South by Southwest this year, weekend ... the documentary film festival. We have, um ... book club that meets once a month I saw the chiropractor yesterday ... we counseled a couple last night here in the home about a wedding we might do for them. This morning I met with another instructor from OLLI, then I met with you, tonight we're going to the Deep Dish theatre in Chapel Hill. Tomorrow I'm going to a conference on paranormal activity. That's Friday night and Saturday ... sometimes I'll go to church on Sunday, if there is a class I want to show up for. So that's, you know, kind of what I do.

Phillip generally did one activity per day as well, although he occasionally went along as a passenger with his wife when she did a series of errands. In describing his own primary occupations, he said:

Thursday I went to church and sat at the desk for 3 hours ... every other Wednesday I go to Caring House and volunteer for 2, 3 hours. I used to play tennis twice a week. [My neighborhood] has got a bridge thing going up at the clubhouse, so twice a month there will be two tables set up. Susie and I enjoy that. Normally, other than Sunday night, we don't do much night stuff. On Sunday nights we have a group... go out to some cheap place to eat. We've been doing that for a good while.

His map (Figure 5.7, with spokes traced in white) shows the spoke pattern to Phillip's days and the heavy travel within his own neighborhood as he repeatedly drove the half mile to the neighborhood clubhouse and back.

Figure 5.7. Phillip's 'Spokes'



For some of these participants, one activity per trip was necessitated by limited stamina or by balance challenges. Their days were spoke-shaped by default. For others, like Bonnie, the things she needed to do outside the home were not extensive. By doing one each day—even splitting her grocery shopping in to two trips and going twice per week—she had something to do to "get out" and see other people (see Section 4.5.1). This spoke pattern of participation was strategic, with concise driving and participation spread out in coordination with the physical and social needs of the individual.

5.3.4. Patterns of Participation

These temporal orientations, spatial behavior in community navigation, and shapes of the day all suggest that participation is patterned within time-space and unfolds within the context of a particular person-place relationship. The patterns discussed above vary by case, particularly by frailty of the individual and by their home location. Yet all participants talked about the importance of time in making decisions about their day, about the taken-for-granted influence of street and building design, and each shaped his or her days in particular ways to achieve the type (and extent) of participation they desired. It is important to note that all participants' patterns were shaped relative to their use of private vehicles. The implications of this auto-mobility are discussed in Section 7.4.

These patterns of participation also occurred in the particular social, physical, cultural, and historical milieu of Durham. The patterns were *emplaced* patterns. Place comes to bear on patterns in several ways, some already discussed: home location and neighborhood type and history, the available transportation and free senior classes, the climate, and the landscape of old buildings and roads re-figured and re-made over time. Other dimensions of emplaced participation relate more closely to the process of negotiated livability for these older adults. Those dimensions will be explored in the following section.

5.4. Dimensions of Participation in Place

Several columns in Table 5.1 reflect the interviews and observations of the participants' approaches to and perspectives on participating in their daily activities that were influential across patterns. Codes such as 'knowing the insider routine,' 'leaving home early,' 'doing things to keep up appearances,' 'use it or lose it,' and 'avoiding planning for the future' were less about specific patterns of participation. Instead, these dimensions of experience suggested strategies for negotiating the person-place relationship, the participants' values, and their attitudes toward what it meant to age in *place*. The four dimensions of participating in place described below—the advantages of routines, perspectives on aging in their current home, the significance of people in places, and strategies for going and doing—

inform my understanding of the processes of negotiated livability (explained in the following chapter).

5.4.1. Advantages of Routines

Participants discussed the advantages of their routines in multiple contexts and from differing angles. For some, routine meant the benefit of having a schedule for the day, something they were expected to do and a practical way of organizing their time. For others, engaging in certain routines had broader social and participation implications, opening doors to other possibilities and making them feel like a visible, valued member of society. The overarching sentiment, however, was that having routines confers advantage to them as individuals as they participated in and navigated through the community. There also was a sense—although it is not captured in the four categories of routine below—that routines created a continuity of selfhood over time, perpetuating roles and involvement and lending a sense of normalcy in the current structures of their lives. These elements of the life course influences will be explored in Chapter 6.

5.4.1.a. Routine keeps me safe. Harriet, who was 99 and had lived in her current home for 60 years, said that she only drove places that she knew well like her church and the senior center. She felt this kept her from getting lost or from having to read signs to find her way home. Bonnie explained more generally that having a routine "keeps you from doing something you'll regret," from forgetting your wallet at home to taking a dog-walking route that is unfamiliar and too steep. This caution was insightful. Two weeks later she parked her car in front of her home instead of in the garage (as usual) because a friend wanted to look at it. When they got out of the vehicle Bonnie's dog was on a leash, but he dashed after a passing truck. This threw Bonnie off balance and she fell, which resulted in a trip to the

emergency room. Routines of going and doing also made it possible for others to check in and more quickly notice if something was wrong. Rosie said that if her newspaper was still on her stoop at 10 o'clock a.m., her neighbor would call to see if anything was wrong.

5.4.1.b. Routine keeps me healthy. Routines also afforded mental and physical health benefits. Alice said that she had lost weight since she moved downtown and started walking to most of her activities. Phillip reported that he and his wife also walked for exercise and that he still swam even though he went by himself. He said on several occasions that he knew he had to "use it or lose it" when it came to physical abilities. Phillip explained that he had to insist that his wife let him drive occasionally, because she went faster than he did and would otherwise drive all the time. He was worried that if he did not drive routinely he would lose his confidence to get behind the wheel and would be trapped at home. For Bonnie, routine kept her healthy by preventing accidents with her medications. Bonnie explained that despite the inconvenience of driving farther from home, she always returned to the same pharmacy. It gave her peace of mind. She explained:

The reason I like it is that I've gone there for 20 years, and they know me and they know what drugs I take. And I can depend on them to tell me if there is a problem. And they do. He'll say, 'wait a minute! Maybe we need to talk to the doctor about this.' ... Anything I need to know, I ask him.

The mental health benefits of a routine stemmed primarily from getting out of the house and interacting with other people. Eleanor said simply, "it is good to get out so you aren't staring at your four walls." She arranged her week so that most days included an activity she really enjoyed in the morning because, "having a place to go every morning gets me up, gets me going." Getting up and getting ready in the first part of the day meant she was motivated to get out of the house. She gave herself Thursdays off, and those were the days that she would

"do the little bit of shopping, or just hang around here." Having a day off seemed to also contribute to her sense of wellbeing.

5.4.1.c. Routine connects me to others. Similar to the social element of staying mentally healthy, many participants talked about the role of having a routine in staying connected to other people. Edith explained that she went to the same restaurants, the same grocery stores, and the same cashiers because that way she got to know people and they got to know her:

I check out with the same person, even if their line ... the woman I check out with at Kroger isn't very chatty, but still ... I know her. She knows me. I get in her line every week, you know. [...] Whole Foods, I know somebody. The restaurants ... I have five restaurants I go to. And I know those people.

Edith and others expressed the sense of value in these acquaintance-connections. After dropping off dry-cleaning together, Edith confided in the next interview:

I was very pleased, when I went back to the dry cleaner's ... she went and got my clothes. Because she remembered my name. And that was such a nice feeling, you know? But I don't know, I think that is just going to the same place over and over. It gives you a sense of community.

Sterling created this sense of community by going to the same locations as well, although for him it was more about being consistent so that others knew where to find him. "People know where to find me. I'm in a predictable place," he explained. Since he was moving throughout the day and did not use a cell phone (although he did carry one for emergencies), being in predictable locations created windows in which he could meet with people who needed rides or meet with family members or church friends to share news. It gave him something to look forward to and kept him "in the loop." Phillip had a similar sense of being visible and involved when he volunteered at his church and at the Friendship Home. A few years ago he had to stop volunteering at the prison because the noise made it impossible for him to hear

the person he was to be conversing with. He continued to do both of his desk volunteer jobs, explaining:

It is so rewarding to me. I get as much out of it as I might give to them. I'm sure there are some other things here [to do] but you know, it sounds strange, but I cannot get involved in doing any more things. [...] So I just like [Friendship Home], and particularly since our daughter is there ... you just get to have a lot of interaction with different people.

His volunteer experience did not seem to lead to deep friendships; rather, he just enjoyed the stimulation of talking to different people and having routine interaction with people who were in quite different stages of life.

5.4.1.d. Routine creates opportunity. A few participants alluded to the experience of being engaged in a routine aspect of their lives when other opportunities just 'came up.' Alice summed it up by recounting a recent experience when she attended a routine meeting at her church, and she left having been asked to serve on two new Durham committees: "this is what happens when you stay around. You get to know people. You get involved, just sort of by osmosis." Martin shared his perspective that activity begets activity without much effort from him. He laughed and said that he was an introvert and might be a hermit if it was not for his wife. However, since she was very social and involved, going to events with her had become part of his routine. "Tagging along" had resulted in some very meaningful opportunities for him, such as participating in a national research study about clergy who lose their faith. Martin explained that "things just happen. [...] I mean, I'll show up for a lecture or luncheon, and I'll know people. Things just happen. Opportunities come up, and I grab them."

Sterling felt that he was more actively responsible for creating these opportunities for himself. As we discussed the changes downtown and the activities that had not been

available when he was a younger man, he talked at length about the Senior Center events and how he did things because they were available. These activities led him to learn about other things to do:

I participate in some of the things that are going on that I can attend, like the gym had a tournament at the same time we were having the checkers tournament ... being able to talk to people, to meet people... some I know, and some I don't know. And it's just a lot of things. You know, I played—what is that, shuffleboard?—which I've never played before. [...] And the bean bag where you try to drop it in the hole, and horseshoes ... I end up doing stuff that I normally wouldn't do, but I participate in what is going on in the city, that the city parks and recreation gives. As long as you involve yourself, you can enjoy.

Thus participation in regular, routine activities led to additional opportunities, to forming and maintaining connections with others, to mental and physical health, and to a sense of safety.

All of these individuals described routines as a positive personal and social dimension of participating in place.

5.4.2. Attitudes and Aims

Almost all of the participants clearly expressed their intent to remain in their own homes indefinitely. When we began the first interview, not one had any concrete plans to move nor had any made reservations at retirement communities or arranged for services to provide care in their homes. Some, like Edith, were aware of various services that were available for home- and yard-maintenance, and Bonnie mentioned having her prescriptions delivered to her home. There was a disconnect between their expressed aims to stay at home and their attitudes toward planning for long term care and transportation alternatives. Examples are provided below, and the implications for livability are more fully explored in the following chapter.

5.4.2.a. Aging at home aims. There were four general attitudes expressed by the participants regarding planning for long term care. One attitude was that aging in place in

their current home was the "natural and only option." This attitude was held by three of the four African American participants who each expressed confidence that they would be taken care of by others no matter what happened. Viola pointed out that her daughter had moved in with her post-heart attack, and Harriet said her grandchildren "just love to do for me." Eugene also shared this mentality although his confidence was not in his family. He related, somewhat dismissively, that his parents and all of his siblings stayed at home until they died. They were his example and formed his expectation for his own experience.

Similarly, some participants implied that they would just maintain their current trajectory forever although conceding that they may be "slower." These were primarily quite active participants. Martin, Jane, and Rosie all answered my question about what I would notice if I spent time with them in ten years by saying nothing would have significantly changed (Jane would be 94, Martin would be 88, and Rosie would be 83). Interestingly, Rosie expressed on a different occasion that she thought it would be ideal to "time out at 80" because she was already bothered by her little aches and pains and did not think she wanted to live with any significant physical or mental limitation. Both of these attitudes reflected an assumption on the part of the individual that their relationship with their place would not significantly change in the coming years, or that any changes could be easily negotiated.

Alternatively, two women described that they were not sure what the future held, so they were looking for information and resources that they could use "down the road" (Edith). Both Edith and Eleanor had particular issues in mind. Edith's cancer diagnosis and the resulting treatment regime meant that she had little time for other activities. She was searching for services that could save her trips, such as home-delivered groceries. Eleanor was frustrated with the atmosphere and lack of community in her student-dominated

apartment complex, and she was worried that the rent had gone up for the second year in a row. She said:

I would really like to move into a senior retirement building, where mostly seniors live, you know. But you have to have a certain income and what have you, to live in those places. But I'll stay here for the time being.

She was aware of two new senior buildings being built in Durham, however, and she intended to find out if she qualified. Edith and Eleanor had experienced a change in how they participated in their community, and gathering information was one way of resolving the tension between what they felt was problematic in their current situation and their desire and ability to age at home.

The remaining participants shifted from an initially confident dismissal of leaving their home to a hedged position of declaring their intent to stay at home while having a back-up plan. These three individuals—Alice, Bonnie, and Phillip—lived in the most exclusive settings in terms of property values and amenities, and they were certainly among the most affluent participants in the study. Alice said that her intent was to live at home until she died, getting help as needed like her mother had. Later she reflected that she had just helped several friends move in to a retirement community and related how much nicer it was than others she had visited. She told me that she had downloaded the application form that same evening, and she was "pleasantly surprised" at how affordable it was and how much people seemed to enjoy that community. Phillip told me in our first interview that "our close friends are moving to Edendale. I can't even conceive of leaving. I can't conceive of moving to the other side of town." He felt that his neighborhood was ideal in the sense that it had many older adults who were looking out for each other and helping each other as needed. In later interviews, he reflected on his recent physical challenges and told me "I'm not trying to stay

young ... I'm not trying to act like I'm 60 or something ... but to be honest with you, I'm getting a little nervous with how old I am." Although he had told me earlier that neither he nor his wife wanted to move from their home, which was near their children's homes, to the resort-like retirement community where many of their friends lived, they made an appointment with the retirement community's admissions officers. Phillip told me that they had put their names on a waiting list for a single bedroom cottage so that if one of them was left alone they would have it as an option. He shook his head as he ended that story, saying, "there's no question you have to change what you do when you get old," Phillip recognized, after seeing the changes that happened when his friends moved to Edendale, that a change in home location would be a life-changing shift in his relationship with the people and places that he currently enjoyed.

5.4.2.b. Public transportation attitudes. Another facet of participants' perception of what it meant to age in place was their attitudes toward public transportation. The geographic location of their homes was one dimension of this. Other dimensions included their experiences with and affinity for driving, the perception of convenience, and categorizing public transportation as a resource, not a skill.

Participants lived in varied neighborhoods in Durham (see Figure 3.3), but almost all were either on or within a few blocks of the DATA transportation line (see Section 3.2). While a few individuals were quite aware of their proximity to the bus line and had used the bus in the past, the majority either felt that using public transportation was not applicable to them because they were "too far out" (Jane) or would not consider it for personal identity reasons. "I was in the auto industry for many years. I drive," Rosie summarized. Harriet said that she liked living on a bus line because it was "there if you need it," such as in the event

that her car broke down, but riding had never been part of her routine in the decades she had lived in that home. Edith said she liked knowing where her bus stop at the corner could take her, although she did not use it on a regular basis. Eleanor, too, said of the bus system "it's there if I need it." However, like others she did not use it regularly, even to attend her classes at the senior center when she otherwise stopped going in the summer to save gas money. The rest of the participants felt that it was impractical based on where they lived. Rosie said "Oh, you could never live here [her neighborhood] if you didn't drive." Jane said that if she was no longer able to drive she would "find a driver" to be able to stay where she was.

Although public transportation was something most participants were neutral or dismissive about, many were quite positive in their descriptions of driving a private vehicle. This, along with the convenience aspect I will discuss next, seemed to be the primary reason most participants did not use transportation alternatives. Bonnie said "I just hop in the car" whenever she needed to go out. Driving was associated with independence, autonomy, and flexibility. For Rosie and Sterling, being able to drive was central to their primary occupations of giving others rides, and driving his own car was one way Phillip marked his health and abilities. Driving a car was part of how these individuals had all moved about in their community for many years, and it was an ingrained feature of their patterns of participation. Using public transportation would alter the timing, sequence(s), destinations, and spatial patterns of their occupations.

Beyond lack of access that some participants perceived, there was also a strong perception of inconvenience. For trips that were already less than five miles, walking to a bus stop, riding, walking to the store or other destination, then repeating the ride for the return trip home would greatly increase the amount of time required. To make multiple sequential

stops, as many of the participants did in their 'loop' patterns of participation, multiple buses with multiple schedules would need to be navigated. This would negate the emphasis they placed on efficiency and carefully choreographing their day. Eleanor belonged to the Bus Club at the senior center, but she enjoyed the social aspect of the club more than the actual bus-riding:

Well, I belong to the bus club, and we take a trip once a month. The girl at the senior center, she sponsors the group. [...] She is trying to teach seniors to ride the bus in case you ever need to ride the bus. 'Cause you never know when you're going to have to give up your car or your license or whatever. [...] We meet at the center, we go get the number 4 bus to the terminal. Then when we get to the terminal we go get the bus that we need to take. Like, they are going to go to Northgate on Friday. The seniors are having an event at Northgate on Friday, so she is going to take them over there ... I'm just going to drive. [...] If I had to do it I would, but since I drive I'm not going to do it. I'll just drive. I can be there in half the time.

For those who were more frail and had a 'spoke' pattern of participation, using a bus to go to their habitual places may have made sense. The additional time required would also not be a drawback for those trying to fill their days. However, for these individuals, the increased physical demands of walking to and from the bus stops (which were not directly in front of their homes nor their destinations) posed a challenge that they could not resolve easily. Phillip, for example, drove to Target to do his walking during the hot summer months. He would park in a handicapped space then rest for a few minutes—up to 6—before getting out and walking to the store. If he had ridden the bus from his home he would likely have driven his car close to the stop in his neighborhood. However, once he got off at Target, he would be at the far end of the parking lot with no place to rest before walking inside. Aspects of independence, inconvenience, and identity could be called barriers to riding the bus, but a more accurate understanding is that the location and timing of available transportation were not compatible with the older adults' established spatial and temporal patterns of

participation. Thus public transportation did not serve to solve problematic aspects of participating in place.

As Eleanor's story of the Bus Club suggests, using public transportation is a skill acquired through practice and familiarity. Using public transportation instead of a private vehicle entails changes to where and how participation unfolds in a particular place, which must be negotiated within the transportation structures available. Many of the participants, however, talked about public transportation—buses especially—as if they were a direct substitute for their cars if they ever needed to stop driving. Edith alone reported using the bus to go somewhere in order to make sure she knew how:

[The gym] is on the bus line that comes by right down there at the corner, and it takes me all the way out. I don't use it often, but I have used it to make sure I can. So I drive out there, and I like it.

Harriet, Viola, Alice, and others regarded the bus system as simply a possible resource for the future. Participants viewed public transportation as something they would face and figure out in the difficult-to-pre-consider possibility that they ever had to permanently stop driving. These aims and attitudes regarding what it meant to age in place, and the practicalities of being able to stay at home in the possible scenario of needing alternative transportation, suggested an underlying ideology of aging that influenced perception and action. The process of enacting this ideology will be discussed in Section 6.3.1.

5.4.3. Proximity versus Relationship

One dimension of participating in place that revealed a strategy of person-place relationships was the significance of interpersonal relationships. This dimension included codes from interviews and observations such as 'the social nature of errands,' 'familiarity and a sense of being known,' 'frailty forcing prioritization,' and 'driving farther for better.'

The first layer of this dimension is simply that the interactions individuals had with others—even relative strangers—were both significant and strategic. Many narratives of daily life alluded to the social aspect of errands, like Rosie and Eleanor's efforts to get out of their homes every day just to see other people or the loss of activities Phillip experienced when a friend moved a few miles farther away. However, there was a more strategic element beyond simply enjoying others' company. Edith declared that one should:

always go to the same checkout person in the grocery store. You know, even if the line is longer, always get the same clerk in the grocery store so that you establish relationships. I even tried going to the same bar every night. But I don't know, they didn't want to talk to me much. So I dropped that one. But I do continue that. I check out with the same person, even if their line ... the woman I check out with at Kroger isn't very chatty, but still ... I know her. She knows me. I get in her line every week, you know.

Edith enjoyed the sense of being known and described thinking that the owners of the restaurants she frequented would miss her and wonder what had happened to her if she did not show up. Similarly, Bonnie talked about having friends in the community, from the man who worked at the post office to the clerks at grocery stores. She explained:

You have to have a lot of friends. That is one thing when you are old. [...] If you don't have friends, you are in big trouble. And I mean, you need to be friends with the pharmacist, you need to have a friend at the grocery store, a friend who knows about inspecting cars and all that stuff. When you call them, they know who you are. And that is really important. And that is one of the secrets to living well in a city – you have to have that network. That is really important. [...] You just have to talk. And they get the 'oh, that is the old woman who comes in here and talks to you', and then they know you and look out for you. You just, you need to do that. 'Cause we are all so interdependent of each other. We don't realize it, but we are.

Bonnie's emphasis on interdependence came up at other times, such as when she talked about living alone. She valued her neighborhood for giving her a sense of security as well as for providing practical services like help rearranging furniture. For her, daily living and doing was tethered to the gravity of these relationships.

The second aspect of this social dimension was that these relationships trumped other community features that are commonly perceived to be related to livability, such as amenities in close proximity to home, accessible buildings, and high-density development of shops and services. Eugene reported that he and his friend had to change their "breakfast date" morning recently because the restaurant where they always went changed location. Since it was farther north by several miles, he needed to go on a morning that he had more free time for the longer drive. "But the owners are such wonderful people," he said, "we couldn't help but keep going." Bonnie drove further for the pharmacy where she knew the pharmacist, and Harriet had her son drive her to an emergency room farther away because of her past positive experiences with the staff there. Harriet also drove to a senior center for her exercise class that is located downtown, about 8 minutes' drive, rather than the senior center that is 250 ft. north of her home. She explained:

when I first got started, they was having all the classes up there, and the senior travel was all run out of that building. So I just got started there, and got to know the people. So that is where I go, I don't know anybody that comes to the one down here.

Edith also found that her history with certain businesses and people trumped her distaste for going to the local mall, although she mentioned on several occasions that she found the number of stores and required walking completely overwhelming. She reported, however:

I went to the dentist and the optometrist, and I took my prescription out to the place that I go. They've moved all the way to 'hell'—Southpoint, Streets of Southpoint, whatever it is called—the mall. I hate it so bad. But I trudged out there. But I know why I go. When they pulled out my record, it was this thick! I can't change now. I've been going there forever.

Whether from a sense of loyalty, the confidence of being recognized and cared for, or the practicality of going to a place where you have invested time and have relationships, this social aspect of participating in place was an important way participants made decisions

about where and when to go. Relationships fostered a sense of safety, security, and interdependence even when driving farther from home or to an inaccessible building. The strategic development and use of this social infrastructure will be further connected to the process of livability in Chapter 6.

5.4.4. Organizing the Going and Doing

The fourth dimension of participating in place was the particular, strategic decisions and plans the participants made about the timing and organizing of their daily occupations. Timing—both with regard to the spatial behavior of other groups of people and within the scope of the day—was an important aspect of this planning. The primary consideration for the timing of some outings was traffic. Harriet, on her main road, worried about just getting in and out of her driveway:

Well, sometimes that traffic is so bad you can't hardly get in or out. And I have to back out, so I just sit there and wait until I get a chance. They used to stop and let you out, but they don't do that much now.

However, for others it was more about the traffic they would encounter along the way.

Eugene always waited for the "morning rush" to dwindle before he went out to do his thrift store rounds even though he had been awake since 6:00 a.m. Eleanor groaned about the traffic, saying:

On Saturdays it is a bit much. Yes, it is a bit much. That is why I don't want to be out in it. Everyone is going to the mall. You can't even get through the intersection because the lights change before you can even get... Huh-uh. I don't even bother about trying to go on Saturdays.

If it was hot in the summer and she wanted to walk, Eleanor would go early in the morning to do a loop or two, but she stressed that she is "out of there by 10" when the shops opened.

Participation in place was thus shaped by the sociocultural patterns of the work day, by roads

particularly affected by rush hour, and by the flow and peak of shoppers in community locations.

Another aspect of strategically planning how the day would unfold was how the participants organized and shuffled their possible and necessary activities within the day. Edith had a "list system" which she said she had used for most of her adult life. She kept a piece of paper folded in her purse on which she wrote lists of where she needed to go (particular stores) as well as a list of things she needed that were not store-particular. She explained that she decided where and when to go due to:

time constraint. That day [last week, I had] enough time to get all the way out to the recycling center. So that was that. The list I was working on this week had 'wash the car' on it. And I didn't have enough time to go to [highway] 15/501 to get the big washing. So I went to the five dollar place. [...] When I get low on toilet paper, I make a Food Lion trip. And of course it goes up in priority based on how close you are out! So there are a lot of factors that will get something on the list of things to do. If you need something new to wear, you have to spend an afternoon at Macy's no matter how much you hate it.

For some individuals, particularly those with more informal activities, time seemed to be the primary consideration in arranging their day. A few, like Bonnie and Phillip, wanted something to do each day but did not have many time commitments to negotiate. Relating their day's plans reflected that informality. Phillip explained:

I want to finish planning a little thing for potted plants, and will probably have to go on out to hunt for some stuff ... I want to fill up a pot with stuff that comes back every year, so I can just fill it up and not have to worry about it. I'll go look at that this afternoon maybe.

Their participation in place was loosely structured, sometimes even spontaneous. On the other hand, individuals who did structured activities several times a week tended to assign that day a label of 'exercise day,' etc. Harriet had exercise class days, and Sunday was a church day. Alice described a similar structuring, explaining:

Friday is kind of a day off. I go to Yoga on Monday and Wednesday. On Thursday I usually go to Pilates and then walk with a friend. She and I have been walking together for probably ten years every Thursday that we're both in town.

For this group of participants, additional activities such as errands, making doctor's appointments, or going shopping were assigned to 'free' days. Their days were either informal and able to be used for time-flexible activities as they came up, or pre-determined, whereby the day's activities required showing up in a particular time at a particular place.

Unlike the first two general strategies for organizing the day, individuals who had multiple formal activities each day did less organizing by time and more organizing by geography. These were individuals like Jane and Martin who could only explain their routine to me by displaying their weekly calendar with its scrawled fullness. Their many other activities that did not make the calendar, such as grocery shopping, stopping at the pharmacy, or dropping by to see a friend who was hospitalized, were organized into the day based on location. Participating in an activity downtown meant that Jane would do other errands she had in that direction immediately before or after the meeting. After a morning coffee with friends and before going over to a Lifelong Learning Institute class, Martin might stop at the grocery store near Duke campus or swing by his wife's office to say hello. For these individuals, the geographic density of amenities did contribute to livability. It was ironic, however, that individuals with multiple formal activities already had the most extensive spatial patterns of participation of the group.

Organizing the timing and sequence of participating in place, like other dimensions of place-participation discussed in this section, suggest significant aspects of how the participants experienced livability in Durham. These dimensions also are part of the processes of 'negotiated livability,' the theory presented in the next chapter.

5.5. Summary

In this chapter I described spatial and temporal patterns of participation, and through maps and quotes I illustrated how patterns worked to shape an individual's participation across several categories. In this explanation it was evident that there were patterns across cases, such as similarities in how certain individuals were oriented toward time, and similarities in how they negotiated the spatial context of their daily lives. Variations within these patterns, as could be expected, appear to have some relation to the frailty of the individual, particularly in how their spatial patterns related to driving and navigating the challenges of a city's landscape. Variation was also partly related to relationships with and responsibilities for others, length of residence in Durham, and the location of the older adults' homes. The clearest point of variation was the relationship of time and space as it unfolded in the 'shape of the day' concept which reflects timing, sequence, geography, social influences, personal capabilities and histories, and expectations for the future.

All of these patterns, and the variation across cases that both shape and relate to those patterns, expanded my understanding of how patterns of participation are emplaced in the social, physical, historical and cultural context of Durham. The built and social environments of daily occupations, which supported and posed challenges to on-going participation, constitute a unique place that is constantly changing. However, there were several dimensions of participation in place that were consistent across the cases. First, the routines of going and doing in certain ways, at certain times, and in particular locations conferred physical and social advantages. These routines were intimately connected to the participants' life experiences, values, and priorities. Second, participating in place shaped and was shaped by the individuals' perspectives and attitudes about aging at home and negotiating changes.

Third, participation in place revealed the significance of social connections when prioritizing locations and timing of community activity. And finally, participation was organized in relation to the timing and geography of emplaced occupations. These dimensions of participating in place inform my theorization of the core processes of livability in Chapter 6.

CHAPTER 6

Findings III: Theoretical Model of Livability

6.1. Introduction

Current models of the person-place relationship of aging in place (Section 2.6.1) and conceptualizations of livability (Section 2.2) do not capture the complexity and variation of experience described in the previous chapters. The general understanding of livability to date has been that it is a positive ratio of supports to barriers and/or the presence of certain features in the community. Participants' experiences and patterns in place described in Chapters 4 and 5 challenge this static view. In this chapter, I will propose a new theoretical model of livability consistent with these findings and grounded in the older adults' experiences of participating in their community-based activities. This model is also consistent with the meta-theoretical orientation of a transactional perspective that emphasizes the dynamic, action-centered, and continuous nature of the person-place relationship. I first present the model and then describe characteristics of livability that are represented in the model. In Section 6.3, I will explain the three core processes of livability included in the model using case exemplars to demonstrate how these processes are related to the experience of aging in the community. These processes will be related to the extant literature to identify points of congruence and discrepancy. I conclude with a summary of these findings and a brief discussion of the strengths and limitations of the model.

6.2 Model

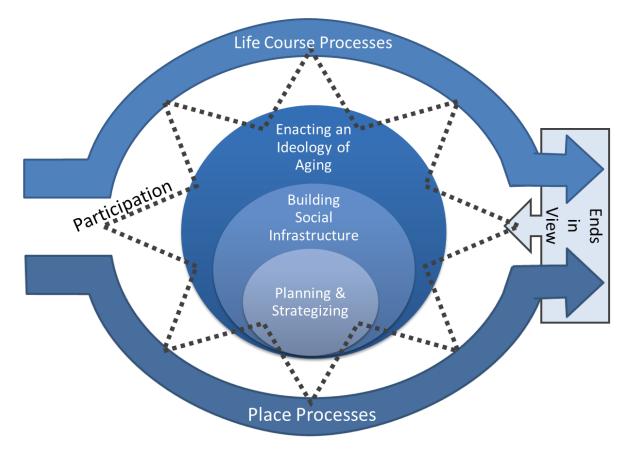
6.2.1. Process and Participation

My theoretical framework, described and depicted in Section 2.7, oriented me toward processes of daily life that relate to livability. The framework also reflects my metatheoretical perspective that the person-place relationship cannot be separated from participation in occupation, particularly because they are in co-constituting and mutually emergent transactional relationship. In examining the cases, it became apparent that community livability is itself a negotiated process: it has a dynamic quality that varies by situation; it is describable yet flexible and changing; and it is constantly shaped by and shapes human action within a particular life course and through a particular place.

Participation in occupation is central to understanding livability, it follows, because it is central to understanding the person-place relationship that underlies livability.

I therefore theorize the process of livability for older adults as participation in daily life, negotiated through the core processes of 'enacting an ideology of aging,' 'building social infrastructure,' and 'planning and strategic problem-solving.' These core processes are coordinated in place, embedded in a continuous life course with associated values, roles and habits, and they are oriented toward perceived but changing ends-in-view. This grounded theory is modeled in Figure 6.1. In this section, I explain characteristics of the theoretical model including the centrality of participation, how livability is coordinated in place, the nature of continuity over the life course, and the future orientation of participation. In the subsequent section I explain the core processes of negotiated livability.

Figure 6.1. The Process of Negotiated Livability for Older Adults



6.2.2. Participating in Daily Life

This theoretical model depicts the central role that participation in occupation plays in understanding negotiated livability. First, the three core processes (see Section 6.3) are active processes that occur through participation. Ideologies of aging are enacted, social infrastructure is developed (built), and occupations are planned and strategized. Second, participation is an embodiment of the person-place relationship and is shaped by and shapes the life course and the place over time. Third, participation is the action through which livability is negotiated toward certain desired ends and through which those desired ends-inview come to bear on the present.

For older adults aging in place in Durham, participating in daily life included going to structured events like attending church services, exercise classes, bowling games, and bridge clubs. It also included doing unstructured or spontaneous outings like errands, fishing in the evening, or eating out at restaurants. Participation entailed seeing others and being seen in key community locations that matter to the person or to their social network. Examples include being in the coffee shops around Duke University, walking a dog through the neighborhood twice a day, or attending the mid-week prayer meeting at church. Sometimes participating in an occupation was an end unto itself, such as attending a meaningful church service. Sometimes participation was a means to other ends, such as driving multiple times a week to maintain a skill that would be important in the future. Occupations ranged from formal roles like part-time employment with the local newspaper to very informal activities like hanging out with friends at the senior center. Most described their going and doing in the community in terms of "being active" and stressed that they only did what they wanted to do (despite the high number of outings devoted to basic errands and trips to see the doctor). In this theorization of livability, participation in community-based occupation entails the full assemblage of chosen, required, habitual, and strategic activities that are structured and coordinated through time and space.

6.2.3. Coordinated through Place

Participation in daily life is coordinated by the particularities of time and space through particular places. This coordination is part of the dynamism of livability. Being able to go and do activities in the community required a complex coordination of the physical space, history and preferences, the expectations and needs of others, and how multiple activities were cobbled together to achieve the individuals' practical and social goals.

An example of how participation was coordinated through place is the contrast between the arrangement of formal and informal activities. Formal occupations had specific time and location determinants, such as teaching a course to other seniors at the Lifelong Learning Institute, or showing up from 3:00 to 6:00 pm every Thursday to sit in the church office and answer the phone. Participating in these occupations depended on the time of the activity and on the geographic location of the place, as well as on the juxtaposed activity of going out to eat with friends after class. These time and geographic elements of place often constrained the ways an individual could participate in their chosen formal occupations. The physical locations of buildings or the class schedules arranged by the staff at the senior center were dimensions of the activity that the individual could not change. Thus coordinating formal activities through place involved indirect coordination of other activities or paths in the day, and it involved the sequence and social nature of what the individual chose to do. Informal occupations, by contrast, were not tied to a specific time frame. In some cases these occupations could be completed in a range of physical locations such as going to the grocery store, dropping by a mailbox to send bills, or picking up some take-out food for dinner. Participating in these occupations depended on the time the individual had available, on the level of urgency of the errand, on the errand's geographic or temporal compatibility with the individual's other destinations, and on the possible social interactions it entailed. These time and geographic elements of place served to enable participation since the dimensions of the activity could be more directly coordinated.

Figure 6.1 shows place, which encompasses spatial, temporal, and social factors, as a continuous process within which participation unfolds and livability is negotiated. For older adults, livability is both the ability to participate by coordinating occupations through place,

as well as the quality of being able to negotiate solutions when there is a disjuncture in the person-place relationship (e.g., between what the person wants to do and is able to do). The 'shape of a day' concept is an example of this double nature. For Edith, who was relatively frail and found doing things outside of the home took significant energy and time, going to the grocery store in the morning was a single 'spoke' of her day. This outing was structured by the time of day she felt most energetic, by the local rush hour traffic along the main road that waned around 9 a.m., and by her knowledge that it would take her around 20 minutes to drive each way. She chose a particular grocery store because although it was slightly farther from her home than the Food Lion and Compare Foods, she felt that Kroger had better produce selection. The parking lot was also in better condition, and she was more likely to interact with store clerks and cashiers whose first language was English. Additionally, this grocery store was close to a main road so she did not need to weave through neighborhoods to get there, and there was a pharmacy on site where she could get a prescription filled while she shopped. These factors of when, where, and how the activity unfolded were coordinated through Edith's experiences in that place over time, in concert with her expectations for what she wanted to do, and by how the activity fit within the larger structure of her day and week. Coordinating these factors constituted livability in that Edith was able to accomplish the errand in a way that met her physical and social needs.

Her actions were also part of the process of negotiating livability because she was actively solving problems of her relationship with place. Edith's decision to do her errand in a location where there was a cluster of services, her preference for a driving route with minimal turns, and her comfort with the staff were based on recent challenging experiences. Aspects that had posed challenges or had prevented her from completing her errand had been

adjusted according to her available time and energy. Carrying out the activity as a 'solution'—the actual participation—is therefore also part of the process of livability. If she was able to achieve her errand and the related social and personal aims, then the temporal and spatial dimensions of the action were perpetuated and become a habitual part of how her activities unfolded in the community. If this coordination of the activity in time and space did not result in her desired goal, the activity would be re-coordinated. All elements of the situation are emergent processes. Therefore, Edith's participation in her morning errand may be shaped by a change in her abilities, in the temporal aspects and spatial features of the occupation, or in how the elements of the situation were inter-coordinated.

The reciprocal nature of the place processes and participation shown in Figure 6.1 represents the on-going experience of livability (e.g., participating in a way that is coordinated toward ends-in-view) as well as the process of negotiating livability through participation (e.g., when some aspect of the situation changes and new strategies for intercoordination need to be tested). What works is retained and perfected, and what does not work is altered or re-coordinated though place to change the situation for future participation.

6.2.4. Embedded in a Life Course

The process of negotiating livability is embedded within the life course of older adults. Continuity of the life course stream influences livability at multiple scales. These various scales, ranging from broad social issues to individualized combinations of experiences and habits over time, have resonance with the principles of the life course paradigm as summarized by Marshall and Mueller (2003). The life course of older adults has macro-, meso-, and micro-level influences on how the process of livability unfolds for people who are aging and participating in place. In this section, I relate the three levels to principles

from the life course perspective (listed in italics), explain them with examples, and discuss each in relation to the process of livability. Figure 6.1 shows the life course as a continuous process within which participation unfolds and livability is negotiated.

6.2.4.a. Macro-level life course influences. Macro-level influences on the experience of living and aging in place are related to the principles that lives unfold in particular historical times and locations and that the timing of events within the lifespan matter. For example, several participants talked about the significance of having a home in a suburban location away from the city's center. In the post-war era of the 1950s and early 1960s, living in a suburban development was part of the shared social understanding of 'the good life' and was in indicator of social status, identity, and values (Despres & Lord, 2005). Most participants in this study were in their young adult years—between 20 and 35 years old—during that time, and they were making decisions about where to settle and raise a family. They would have been part of what Despres and Lord called the residential "resistance" (p. 320): the generation that moved during the suburban expansion of the 1950s and 1960s while inner city neighborhoods around the country fell into decline. For the older adults in the study who still lived in those 1950s brick ranches in neighborhoods several miles outside of city center, the values and urban designs of mid-century America closely shaped their daily patterns of participation. For some who lived in different settings, like Eugene and Rosie's neighborhood that was developed in the 1990s or Martin's two-story home in a gated community, the appeal of the private home, personal vehicle, and the "quiet streets" (Eugene) of a neighborhood still guided their residential decisions. These neighborhoods were a more modern version of their neighborhood ideal. A few participants explained the value of their current locations—downtown, in an apartment, or in a less

desirable part of town—using the 1950s ideal as a foil. They described neighborhood living as inefficient, impractical, or too difficult if you were living alone. Some complained that suburban neighborhoods were too ethnically homogenous. All participants, however, were influenced by formative experiences as young adults and the pervasive cultural messages about family values and personal success tied to the suburban lifestyle, as well as by a landscape of housing options created decades ago.

Macro-level influences on livability include these historical and social dynamics. Key national or local policies, such as the GI Bill, influenced some generations more significantly than others. The financial recession and retirement fund uncertainty from 2008 through 2010 had similar effects. Although the participants in this sample represent a generational cohort whose biographies were shaped in common ways, there are two important points to remember. First, these macro influences do not dispose all members of that cohort to have the same experience or make the same decisions (as evident in the different residential choices); significant variation is expected. Macro influences are not predictors of experience but rather structure the general cultural milieu in which lives are lived. Second, the circumstances of aging are different for different cohorts. The Baby Boom generation that is just beginning to enter retirement age has had differing historical, social, and political experiences, and the decisions and actions they took during their lives will differentially influence how livability will be negotiated in the next thirty years. For example, many of the older adults in this study expressed a strong personal value for volunteerism and had pursued some type of volunteer work since retiring. Members of the Baby Boom generation, on the other hand, may be more likely to work past the typical retirement age because of depressed financial markets (Gustman, Steinmeier, & Tabatabai, 2010) and less support from certain

social programs like Medicare (Vernon, 2012). They may be less likely to volunteer because of ongoing employment or because of a generally lower ethic of civic engagement compared to the previous generation (Putnam, 2000). Macro-level influences of the life course thus shape the context of aging and dispose older adults toward certain occupations and the locations where they live and travel. Those influences also shape the values that lead them to prioritize certain activities and outcomes over others.

6.2.4.b. Meso-level life course influences. Meso-level influences on the experience of aging in place are related to the principles that development and aging are lifelong processes and that lives are linked in specific socially-mediated ways. Part of understanding the process of negotiated livability in the present entails understanding the life course trajectories and the interdependence of families, friends, and communities. For example, Jane and Bonnie moved to Durham because of their husbands' jobs. As wives and mothers, their daily activities took them to certain locations in Durham and not to others. In later life, they expressed 'no need' to go to downtown Durham, likely due, in part, to their history of going to neighborhood amenities and to friends' homes in areas nearer their own suburban homes. A few of the participants who had academic jobs for the majority of their professional lives expressed a strong value in keeping their minds active. They continued to find ways to be involved in the academic scene. Some taught a course to other older adults, took free courses themselves, or just spent time in places that college students frequented. A few continued to work and expressed dismay at the thought of what they would do with their time and who they would be without the identity of their job.

These processes of development over the life course include the interests, knowledge, and connections accrued through paid employment. They are also related to less visible

processes like long-term access to health care, the number of times a couple or family moved during their adult years, and the negotiations inherent in living with others who were also continuously developing. Jobs and careers seemed to be especially significant for understanding participants' development and experiences during their lives. Employment, both retired and current, continued to shape how individuals understood and valued themselves and was part of how they presented themselves to others. This was described variously in the interviews as "doing what makes me *me*," "having that something to give me self-satisfaction," and "keeping myself in the mainstream of life."

Lifelong processes of self-identity, development, and participation in the community were also evident in the older adults' organizations. For example some participants were known in their church communities as a youth sponsor or as a song leader despite not having fulfilled those duties for many years. Another described the activities of his church when trying to explain the ways that he gave back to the community, implying that his church community (in which he used to be active) continued to be an extension of his selfhood.

These examples suggest participation over time is both influenced and maintained through the jobs people do, the roles they play in their families and communities, and the way those identities and actions have duration through the relationships and locations of their daily lives. Participation patterns shaped both personal development over time and coordinated the relationships and negotiations among linked lives. Participation thus had a durable nature across the life course.

Meso-level life course influences on livability include the social roles, formal employment, organizational membership and family structures described above. Other influences could be job-relocation decisions, two-earner household dynamics, access to

health care services and preventive medicine in childhood and early adulthood, family size, and the stability of the local labor market. Many of these elements of society are in flux and will likely shape the process of livability differently in the coming years. Careers are less stable, and many people hold multiple jobs in multiple locations as adults. Individuals and families are more mobile, and they move to new locations and have to develop new relationships and routines. Fewer people grow old in communities in which they were children, surrounded by people they have known for decades. Like the macro-level influences, these social and personal dynamics have a significant effect on the durable relationships, identities, and roles that shape participation patterns in those communities.

6.2.4.c. Micro-level life course influences. Micro influences on the experience of living and aging in place are related to the principle that individuals make choices and act within the constraints and opportunities of their particular situations. For example, participants chose which exercise classes to attend out of the available options. Joining the free bowling team meant meeting at the AMC Lanes every Monday and Wednesday afternoon. Some areas of Durham, such as the depressed area south east of downtown, have zero or one grocery store within five square miles. These features of timing and geographic availability served to create opportunities and constraints, and all participants made decisions and choices within the options available in their situations. However, the routines through which participants structured their daily lives and the details of how and where they got things done were not just influenced in their later years as they negotiated aging in place.

Participants were influenced by micro-level factors their entire lives, whether in another location or as younger adults in Durham. A lifetime of influences such as the availability of activities or stores, the time constraints of certain activities, the proximity of

grocery stores and other conveniences to their homes, etc., came to bear on the current ways these older adults participated in the community. For example, walking to a coffee shop for a few hours after dropping off her car for servicing at a downtown garage had been part of Edith's routine for decades. She continued to go to the same shop now, choosing a day when the weather was supposed to be nice enough for walking outdoors despite the garage-owner's plea that she make an appointment and allow them to take her home in the shuttle. Bonnie explained her current interest in bridge by recounting stories of watching her mother play with friends and reminiscing about the years her husband was in veterinary school out of state and playing bridge with another couple was one of their primary social events. She also pointed out that it was something that many other people in her neighborhood happened to also enjoy. In these ways, current participation reflected a lifetime of accrued decisions, experiences, and actions that influence both the situation of the older adult as well as how they acted through that situation.

Micro-level influences on livability include the timing, geography, sequence, and perceived value of going and doing. They also encompass the availability of choices about activities to do and businesses to patronize. These influences shaped the individual's health, their living situation, the relationships that were possible, and how each day unfolded. While some opportunities and constraints within the city influenced many residents at many ages, the more localized neighborhood- or social network-specific structures were important in understanding livability for the participants. The constellations of influences on individuals were highly varied. Yet for the older adults in this study who faced a change or a challenge in their community participation, having multiple options facilitated problem solving. The process of livability, which entails negotiating those challenges, plays out through individual

choices and actions throughout the lifespan, none of which can be understood outside of the constraints and opportunities of the community context.

6.2.5. Toward Shifting but Perceived Ends-in-View

Just as participation in occupation is oriented toward particular ends-in-view (see theoretical framework, Section 2.7), the process of negotiated livability is also oriented toward perceived but changing ends. Table 5.1 shows a range of attitudes regarding aging in place related to participants' perceptions of where they would be and what they would be doing in five or ten years. These longer-term projections seemed to have limited effect on the choices they made and patterns of participation in their current lives. More influential were their values related to how they wanted to appear as individuals, such as where one should live or what a retired person should do with their time. These images of what life *ought* to look like influenced what they did, with whom, and how proactively they made decisions about the future. A sense of *should* for their own future lives served as the metric for choosing some activities over others. Based on a sense of what lies ahead, participants did some activities as a means to future ends and chose ways of participating that would be sustaining in the coming years.

Participating as a means to an ends was related to this future orientation. For example, an individual's desire to be physically healthy for many years translated into current occupations of taking daily walks, going to yoga and exercise classes, or being a "gym rat." This ends-in-view, or what the individuals perceived as a desirable future, was not always easily integrated into daily life. Some goals such as continuing to work and/or stay at home indefinitely did not appear to translate into their current lives and ways of going and doing. Few, for example, were preparing to use public transportation in the event that they could not

drive, and most lived in homes that would be physically inaccessible if they became wheelchair users. This disconnect between desired future situations and current actions will be discussed further in Section 6.3.1.

In several cases, participants were actively negotiating their perceived future because of a disjuncture in the person-place relationship. When it became evident that certain expectations were not compatible with their abilities, supports, or ways of participating, their expectations—or perceived ends—had to be adjusted. Individuals re-formed their perception of what outcomes were desirable or acceptable. An example of this negotiation, and concomitant changing ends-in-view, was Phillip's decision to put his name on the waiting list at a retirement community after previously saying he could never conceive of moving. His recent health challenges and increasing "worry about getting older" led him to weigh the advantages of communal living and the disadvantages of moving differently than he had in the past.

An even more significant shift in perceived ends was Bonnie's changing relationship with a male companion. In early interviews she described this relationship as friendly, and she explained that she tried to get her work done in the early evening so she was free to telephone later in the evening. She repeatedly expressed her distaste for the idea of being romantically involved again, saying that she had cared for a dying husband once and did not intend to do it again. Following her fall, Bonnie was forced to reevaluate some aspects of her daily life and living situation. She reported that her male friend had asked her to marry him, and she was strongly considering it. "I don't love him" she assured me, but she explained that it was a small cost for the security of living with someone else and having someone to take care of her. Her value for her own independence and her appreciation for the neighborhood

she lived in became less important than the perceived safety of living with another person after 35 years of widowhood. The process of negotiated livability was thus influenced by an individuals' perception of the skills and activity level they should maintain, the activities they ought to be involved in, and the way they should do those activities in order to achieve certain ends. When the situation—the current person-place relationship—changed, the individuals' ends-in-view were also re-formed leading to significant life decisions and shifting priorities.

These four characteristics of the theoretical model of negotiated livability suggest that key processes of negotiating livability emerge through participation; that the process of livability is coordinated in particular ways by time and geography of the place process; that livability is embedded within the life course and influenced at multiple levels; and that participation is oriented toward perceived ends which are subject to renegotiation over time. There is significant variation in the experience of livability, yet there are also some processes common across cases. I theorize that these processes are also common across multiple geographic locations and different cohorts of older adults. These three core processes of livability are explained next.

6.3. Core Processes of Negotiated Livability

The three core processes of livability reflect the dynamic and active nature of participation. They are the primary processes through which negotiated livability is created and re-created in later life. In this study, older adults were not passive benefactors of certain features of the community, nor was the 'place' of Durham a static backdrop for daily activity. Both person and place were emergent, always changing, and mutually influencing. All three

core processes of negotiated livability are ongoing transactions of person and place that unfold through participation in community-based occupations. Despite variation case to case, these processes were evident in each older adult's situation. I will discuss the processes moving from the most ideological to the most pragmatic, and I will use Rosie, Edith, and Harriet's lives as exemplars to show how these processes are central to negotiating livability. In each subsection I will conclude by suggesting how these processes are related to extant research on occupation.

6.3.1. Enacting an Ideology of Aging

The process of enacting an ideology of aging in the world is depicted as the 'foundation' for the other two core processes because individuals act, choose, value, and participate in their occupations as a manifestation of their ideology. An ideology of aging is the composite of internalized social messages about the *shoulds* of aging and what it means to age well. In the social and historical context of this study, older adults explicitly and implicitly portrayed their image of aging well as being physically active, socially engaged, independent, autonomous drivers, and as being financially prepared for the future. Many spoke of not being a burden, whether to children, to their families, or to society in general. These views were held by many in the study largely because they are the messages available in their world. The Durham Center for Senior Living bears the inscription and motto: "Healthy. Active. Independent." The Lifelong Learning Institute course catalog claims a commitment to "community service and lifelong learning." These messages of being active are passed through media images of older adults, as well as informally. When Harriet attended her exercise class at the community center, other older adults flocked around her and asked to have a picture taken with her. They said that she was an "inspiration" to be so

active and independent at the age of 99. Eugene related stories of friends needing to move out of their homes by saying "they didn't keep up with things," and implied that they let themselves get out of shape.

Rosie is an excellent example of how participants enacted a particular ideology of aging. She frequently described herself as active and independent, and she stressed that she was "always busy." Her most meaningful occupations were attending arts and theatre events in Durham and serving as a caregiver for other individuals in her neighborhood who needed help with the instrumental activities of daily life. Rosie felt that this was her role and that spending her time for others was the personally fulfilling and socially responsible thing to do. She related examples of seeing others in physical or cognitive decline when explaining why she also tried to be a "gym rat." Rosie was adamant in her sense that she wanted to "time out" (die) before she had any significant physical or mental impairment. Things that she currently found difficult, like changing light bulbs and maintaining the outside of her home, she dismissed by saying that she "chooses to hire someone." She sought out a class about preparing for retirement to help her determine how to best manage her "discretionary time," and to "figure out how you want your life to end and then figure out what you should do to reach that goal." Rosie believed that it was important for everyone to be personally prepared for whatever the future held. One element of her own preparedness was promising her two sons that when she turned 75 she would move to live near one of them to minimize the burden of long-distance caregiving. At 73 years old she was approaching that age, but she related that her sons agreed that she could stay in Durham since she was "enjoying life and doing well." By Rosie's account of her actions and her plans, she was aging well in Durham and did not need to take concrete steps to change her situation until something went wrong.

Enacting an ideology of aging meant that participants were engaged in activities they found meaningful and that perpetuated their physical and social participation and wellbeing. However, like Rosie's shift away from the family plan because of her belief that she was too active and independent to need to move, enacting a particular ideology of aging also served to limit some preparations or actions that would prolong participation and the ability to age in place. In this respect, this ideological process could run counter to the older adults' intent to maintain their present relationship with place. The premium on independence, activity, wellbeing, responsibility and autonomy is consistent with Kantartzis and Molineux's (2012) characterization of the values of the western world. Living within these norms—meeting societal and one's own expectations—may itself contribute to wellbeing (Nilsson, Lundgren, & Liliequist, 2012). However, like Asquith (2009) and Laliberte Rudman (2006b) argued, these messages of what is normal or ideal also increase the risk of 'failure' for individuals aging in place by narrowing the scope of what is considered successful aging. Negotiated livability is experienced through this process of enacting cultural and personal ideologies of aging. Older adults living in the community act through the value system of what aging 'should' be and within the mediated structures of occupational possibilities in which they live, participate, and perpetuate ideas of what it means to age well.

6.3.2. Building Social Infrastructure

Relationships and social interaction provided tangible and intangible benefits in daily life, and participants described these benefits as well as how they intentionally cultivated connections in the community. Benefits from this process ranged from having sources of information, to connections and personal treatment at particular businesses or facilities, to the intangible sense of belonging and being known. *Building and maintaining social*

infrastructure—a framework of beneficial relationships throughout their community—took time and concerted effort. Participants described changing the time of day of an outing or going to an out-of-the-way location in order to maintain familiarity with certain employees. They spoke about prioritizing activities that had a social component, like going to church or developing friendships with community acquaintances to combat loneliness. Sterling built a social infrastructure by maintaining regular rounds in the community where he saw the workers and patrons of particular businesses multiple times a week and was well-known by them. "Just ask anybody where I am," he told me prior to our first meeting, "they all know me." Many participants shared Bonnie's experience that it was worth the effort to go to the same grocery check-out person and to the same pharmacy in order to get better service and personalized assistance when needed. This social infrastructure was built and maintained by continued contact and effort over time.

Edith actively built her social infrastructure in many ways. In addition to going to the same bar and same grocery check-out person to build rapport, she also explained that since she had lived in her current home for several years she had a network of restaurants close to home. She lived alone and did not enjoy cooking, but she also wished for company while eating. Edith worked to befriend the owners of several "ethnic places" to eat: Mexican, Indian, Peruvian, and Bar-be-Que restaurants. She said that when she ate at those establishments, she felt like she was eating with friends because they knew her and would miss her if she did not show up to eat one week. "Going to the same place over and over, it gives you a sense of community," she explained. Edith also managed her social network by prioritizing certain interactions over others. Going to the movies used to be one of her favorite things to do, but since it was hard for her to find a peer to go along she changed

instead to watching movies at home with a movie-by-mail delivery service. In lieu of going to the movies, Edith sought interaction during her regular errands. She exulted when the dry-cleaner remembered her name, and she liked to make small talk with people she encountered. These personal connections gave her a sense that "they'll take care of me" if ever she had a problem.

Edith had one more relationship that she maintained which was unique among the participants but that she mentioned several times. For Edith, the city itself—the familiar buildings where important people in her life had participated in community life—provided a relationship that sustained her and supported her ongoing participation. She drove routes to pass by her favorite buildings, pointing out the church where her grandchildren attended preschool, the many buildings her son helped to rehabilitate in his work as an architect, and the building on campus where she had an office for many years. Edith said she still recognized people who worked or taught in the various places. Having this shared history and ongoing relationship with buildings and the people who work there "makes you feel like you belong. [...] It does give me a sense of community, of I belong here, that these buildings are infused with some of my [history] ... some of me."

The importance of social relationships is frequently addressed in the literature on aging in place. Having a social network can contribute to feelings of inclusion (Burns, Lavoie, & Rose, 2012) and security (Walker & Hiller, 2007) for older adults. Social relationships are an important part of what makes a community feel friendly and supportive for individuals aging in place (Emlet & Moceri, 2012). Most of this literature, however, focuses on how past relationships are or can be maintained, suggesting that declining contact with friends and connections formed in the past lead to less satisfaction with life and poorer

social and health outcomes in the future (Shaw, Krause, Liang, & Bennett, 2007). These authors assumed that social relationships, like the neighborhoods built in the post-war era, change and disintegrate over time. The experiences of older adults in this study tell a different story. Although many did experience a loss or change in their relationships as spouses died, friends moved, or employment and leisure patterns changed, the process of developing social networks was ongoing. I called this process 'building social infrastructure' because in addition to providing an immediate benefit in some cases, these connections and relationships were often developed and maintained as preparation for the future. The time and relational energy was an investment, something the older adults hoped to benefit from at a later time when they needed advice, assistance, or some other form of help. For older adults aging in place, building social infrastructure shaped and supported current patterns of participation. It was also an ongoing and strategic process oriented toward their goal of continuing to be 'independent' and active members of their communities. Thus it is modeled above as a process that builds on the foundation of enacting an aging ideology.

6.3.3. Planning and Strategizing

Planning and strategizing in daily life extends from the process of proactively building social infrastructure, and it is the most pragmatic of the three processes. The older adults in this study carefully considered how to successfully accomplish the things they needed and wanted to do. Participants planned their paths and strategized their participation with awareness of others' patterns and schedules, heavy traffic times, and other landscape features that affected their navigation. The goal was to maximize efficiency and effectiveness and to prioritize going and doing in ways that were valued. The older adults also described taking routes or going places in order to negotiate challenges that came up or changes they

experienced. Like the organization discussed in Section 5.4.4, participants ordered the possible components of their days and weeks in a spatial and temporal arrangement that best suited their situation. Planning and strategizing as a process of negotiated livability goes beyond this basic ordering, however. In order to negotiate limitations of energy or timing, participants layered the purposes of outings and routes as well. A common example of this strategy was using errands as a way to achieve social goals such as simply going out and being seen, doing an outing with a friend, or dropping groceries at a friends' home. Phillip went to Target to do both his exercise—walking indoor in a flat and air-conditioned environment—and to pick up gardening supplies or a few groceries. Jane always went to the hair dresser on Thursday mornings because her sister (four years her senior at 88 years old) also went that morning. This arrangement gave them a chance to sit and "catch up" for the hour or so that they were in the beauticians' chairs.

Harriet's experiences clearly demonstrated this careful planning and strategizing. Her driveway on the main road necessitated a certain amount of planning relative to traffic patterns. She had strategically narrowed her participation to occupations that were north of her home to avoid crossing traffic lanes. Her planning also involved adjusting the timetable of certain activities. One of the exercise classes she attended was downtown in a relatively derelict area where the sidewalks were littered and buildings were in poor repair. The only parking spaces available nearby were the approximately twenty spots for parallel parking along the road in front of the building. The class began at 11 o'clock a.m., but Harriet left her home over an hour earlier. She explained that this gave her plenty of time to drive, allowed her to be one of the first people there, and would also permit her time to talk with friends before the class began. Arriving early was important for making this social time possible, but

it was most important because being early meant a greater likelihood of finding two consecutive parallel parking spots so that she could pull forward into a space. "I don't even try to back into a spot no more," she explained. Harriet had also stopped doing basic household errands and delegated them to her granddaughter. Harriet did not attribute this to a limitation in her own energy or abilities, and she explained that she was at a point where she would just do what she wanted to do. The other exercise class she attended was a recent addition to her schedule. Friends from church suggested it as a good fit for her because the class met immediately before their Wednesday prayer meetings at church. Harriet explained her strategy: she could get ready in the morning, go exercise, go to church, and then come home in time to rest in the afternoon. The other advantage of that particular exercise class was that the organizers provided a grocery bag of food for each attendee. Harriet said it "saved shopping" in the second half of the week.

This layering of purposes and careful consideration of temporal, geographic, and social factors when arranging the day is central to the process of negotiated livability.

Although the arrangements were as unique as the situations of each older adult, the general process was of negotiating the relevant constraints and opportunities by participating in a specific way. Another main characteristic of this process was evident in the participants' lives. Very few occupations were purely for leisure, purely instrumental activities of daily life, or purely volunteer or paid work. Not only did participation include less-individualized occupations such as caring for others and building community (Hammell, 2009b), it also defied categorization in to the neat domains (leisure, work, self-care, rest) proposed in some research on occupation (e.g., Ellegärd, 2006). Instead, it is more accurate to describe participant occupations as action through which multiple ends-in-view were negotiated,

where the process of doing is of equal importance to the outcome, or goal, of doing. This will be discussed in greater detail in the concluding chapter.

Older individuals thus plan and strategize so that the process of participating is consistent with the basic considerations of time and space as well as their own abilities, priorities, and needs. They plan and strategize configurations of multiple activities over days and weeks in order to meet immediate physical and social needs. Planning and strategizing also enabled participants to build and maintain the social infrastructure that sustains their ability to participate in the community, and to enact a version of successful aging consistent with their ideology.

6.4. Summary

I argue that community livability is best understood as a process of *negotiated livability* through which older adults actively shape their experiences and patterns of going and doing. Their participation in daily occupation is, in turn, shaped by the community in which they live—the complex composite of buildings, street networks, friends, memories, businesses and one-way roads—just as participation in occupation serves to shape the community and experiences of others. The theoretical model in Figure 6.1 shows that this person-place relationship is coordinated in place, is a process unfolding in the particular history and circumstances of the life course, is future-oriented, and is negotiated through three core processes of participation.

This model has several differences from previous understandings of the relationship of older adults to the environments in which they are aging. First, person and place are not represented as mutually exclusive entities. Rather their relationship—embodied via

participation in occupation—is depicted as being central to negotiated livability. Second, the place of aging, represented as a process over time which includes time and space, is part of the dynamic process instead of simply a container or backdrop for action. Third, instead of the static cross-section in time inherent in most 'fit' models, temporality is introduced in both the forward stream of time through which participation unfolds, as well as in the orienting influence of future ends-in-view. These novel elements provide significant advantages for understanding livability. The person-place transaction becomes the focus of inquiry and intervention instead of person-alone or environment-alone. The former is more likely to yield an understanding of the situation beyond a generic list of features a community should cultivate. Viewing livability as a life-long and historically situated process that is negotiated toward specific ends also is unique in the literature about both livability and aging in place. This view is a more accurate way to understand the complexity of participating in occupation while aging in place. It is also a useful view in that it broadens the range of possible points of intervention or change to enhance the wellbeing of older adults who continue living in the community as they age.

This theoretical model has several limitations as well. Limitations of the graphic depiction include an incomplete representation of the emergent nature of the person-place relationship via participation, although the dashed line is meant to indicate that it is not a fixed process. The depiction also implies that the core processes build upon each other and are shown in various sizes to show the relative pervasiveness of influence. However, they may be interpreted as being mutually exclusive whereas in reality the processes extend from each other and overlap. One theoretical limitation of this model is that it does not explicitly suggest reasons for or mechanisms of change in the person-place relationship which may

stem from temporal, spatial, or social aspects of place; personal or life course changes; changes in the occupation; or changes in perceived ends-in-view. Additionally, other situational characteristics are not shown in the model without which there is a greater risk that the model—and livability—will be interpreted in an individualistic light.

The core processes of livability are active processes. In addition to offering a more expansive understanding of how older adults negotiate the opportunities, challenges, and changes of going and doing in the community, these three processes help clarify some existing assumptions about aging in place. Planning and Strategizing supports the idea that older adults navigate particular physical and social spaces according to their own abilities and the demands of the task. Yet it expands what is sometimes termed 'adaptation' by emphasizing the active nature of the process, the strategic layering of purposes, and the complexity of factors that contribute to participating in occupation. Building Social *Infrastructure* is consistent with findings that social support systems are important for older adults and correlate to better outcomes for individuals aging in place. However, building social infrastructure goes further by demonstrating that social networks are not simply maintained over time but actively developed and redeveloped for present and future benefit. Enacting an Ideology of Aging reflects the cultural messages that being active and healthy in older age should be personally and socially desirable for older adults in the United States and is consistent with the idea that being active and socially engaged can be a self-fulfilling goal. However, enacting an ideology of aging also raises the consideration that certain messages are personally and culturally perpetuated in ways that may not be constructive for individuals' desire to remain at home.

These findings offer insights into specific sub-processes of negotiated livability that may be true for older adults in many communities. The dimensions of negotiated livability also offer a new way of understanding the person-place relationship for older people.

Individually, these processes and characteristics offer insights on topics that are already being addressed for a population aging in place. Combined, however, the processes and characteristics of livability described in this study suggest a new way of explaining the experience of growing older in the community and indicate an integrated approach to shaping communities to support the ongoing participation of older adults. The possible implications of these findings, as well as directions for future research, will be discussed in the final chapter.

CHAPTER 7

Discussion & Conclusions

7.1 Summary of Findings

In this study I used a relational framework to examine the key dynamics of livability for older adults who are aging in place. This relational perspective, which diverges significantly from the more reductionistic and static conceptualizations of livability to date, allowed me to approach the question of livability with an attentiveness to dimensions of living including occupation, participation, and the negotiated relationships of people and places. My view of the problem required the inclusion of different factors that might be significant for understanding livability, and I chose to employ several methods to understand the many facets of the person-place relationship. The data generated from these methods revealed complex yet coordinated processes of negotiating change over time and participating in meaningful yet changing occupations. Those processes emerged together with my discovery of processes of navigating physical and social contexts and emerging personal and community histories. All were important in the daily experiences of my participants. Livability, I therefore argue, is far more complex, more varied, and a more interesting process than current research and policy suggest.

Specifically, the findings from this study show the multidimensional nature of livability for older adults, particularly with regard to how individuals participate in their chosen and necessary occupations. Patterns of participation, such as the shape of the day,

reflect the intersection of life course influences and time-space aspects of the community. Dimensions of participation, such as the advantages of routine and significance of people in place, suggest that participants use active strategies and perspectives on aging that mold what it means for a community to be livable. Both patterns of participation and dimensions of participating in place inform my theoretical model of the process of negotiated livability. The model, which is consistent with a relational view of people and places, depicts livability as a process negotiated through ongoing core processes and lived via participation. Unlike previous models of aging and environment, livability is theorized here as an integration of person and place, where active processes create and re-create the situation in which older adults carry out their daily activities in the community.

In this final chapter I will examine the implications of my findings and theoretical model for the occupational science and gerontology literatures, and I will discuss the limitations of this research project. I conclude by suggesting avenues for future research in this topical area—steps toward designing communities and supporting older adults with the goal of maximizing wellbeing for the population who will age in place.

7.2. Implications for Occupational Science

7.2.1. Theoretical Implications

My project informs ongoing research about occupation at several levels. The metatheoretical orientation posits occupation as an embodiment of the transactions that occur among many elements of a situation. Proponents of this perspective have acknowledged that expanding consideration to factors beyond the individual's immediate occupational engagement makes research complex (Dickie, Cutchin, & Humphry, 2006), even "messy" to conduct (Dickie, 2010, p. 195). This project demonstrates one approach to including historical, socio-cultural, geographical and individual elements into an integrated understanding of the context through which the occupations of older adults unfold.

Using a transactional perspective to frame this research also provided the theoretical foundation for examining temporal elements of occupation such as the future orientation of action. Ends-in-view, or the desired futures that shape occupations and processes of problem-solving in the present, are not fixed goals or end points to achieve (Garrison, 2001). Rather, ends are provisional, dependent upon experiences and milieu, and are changing constantly (Garrison). This theoretical 'image of what lies ahead' is useful in studying occupation. We recognize that past experiences shape the values and expectations that influence occupation. Future possibilities also should be included along with the myriad other considerations Hocking (2009) outlined for investigating occupation. An individual's vision of that future influences what they do and how they prioritize and weigh the myriad options life entails. Action, or occupation, should therefore be studied as a continuous stream that extends into the future as well as from the past (Cutchin, 2001).

The concept of ends-in-view, grounded in this transactional perspective, is compatible with Laliberte Rudman's (2005) concept of occupational possibilities. An individual's or cohort's sense of what the future ought to be like is closely related to their sense of what occupations are "ideal and possible" (p. 149). Older adults' ends-in-view cannot be divorced from social constructions and discursive processes. Although Laliberte Rudman is not claiming this as a deterministic explanation, these social discourses act to shape what is considered possible for older adults aging in place (2006a). This is particularly evident in the core process of enacting an ideology of aging (Section 6.3.1) which explains how

participants generally held the belief that staying active, involved, being financially prepared, and living a positive lifestyle was a personal responsibility. The implication for occupational science, which also shares a disciplinary bias toward the ideals of activity, purposivity, and meaningful doing (Hammell, 2009a; Kantartzis & Molineux, 2011), is the importance of critical research to fully explain the significance of occupation. These discursive processes, constructions of ideal futures, and perceived occupational possibilities need to be further examined. A transactional perspective provides useful theoretical grounding for the job.

7.2.2. Conceptual Implications

This study has several conceptual implications for occupational science as well. First, the core process of planning and strategizing participation in community-based occupations (Section 6.3.3) supports Cutchin's (2004) critique of the concept of 'adaptation to environment.' The active processes through which the participants in this study negotiated the physical and social environments of their daily lives were ongoing. Making adjustments and re-configuring schedules was a process of coordinating and re-coordinating the situation in which they acted in order to achieve a "harmony" (p. 309). This process was never complete. Planning and strategic problem-solving was not an isolated 'adaptation' applied to the person-place relationship at a single point in time, but continuous.

One aspect of the negotiation process for these participants was a strategic combining and layering of occupations to meet their physical and social needs. This finding challenges the impulse to assign quotidian occupations into categories. Few of these individuals' activities could be accurately placed in the categories of paid employment, education, housework, personal needs, free time, and unspecified occupations (Ellegärd, 2006) alone. Even the more expansive categories of time use and occupation offered by McKenna,

Broome and Liddle (2007) suggest separate categories for volunteer work, social leisure, health care, spirituality, caring, and instrumental activities of daily life. However, domains of occupation overlapped in the layered purposes described by participants. The findings from this study suggest that occupations should not be reduced to a few categories in order for the frequency to be measured (e.g., McKenna et al.). Those occupational categories reflect artificial divisions that mask the real nature of participation as something that is relationally coordinated and part of the larger sphere of life.

Conceptually, this study challenges the idea that occupations have a single "unifying motivation and goal" whereby they can be usefully categorized (Bendixen, Kroksmark, Magnus, Jakobsen, Alsaker, & Nordell, 2006, p. 8). Occupations are not goal-defined. Instead, the occupations of these older adults can best be understood as various processes through which multiple aims—or ends-in-view—were negotiated. Participants actively combined these categories in daily life to achieve ends beyond simply volunteering or just attending a church service. For example, they perceived their occupations as having additional ends such as being physically or mentally active, seeing family members, or practicing the skill of driving. Through the active process of participating in their community-based occupations, multiple purposes were layered and multiple ends-in-view were pursued. While this process-nature of occupation is important for older adults aging in place, it is conceptually relevant for occupational science in general. The discipline will be best served by adopting definitions of occupation that reflect this process-nature (e.g., Cutchin, Aldrich, Bailliard, & Coppola, 2008). The implication for conceptualizing occupation for different groups and individuals is a more accurate reflection of the nuanced nature of participation.

The concept of participation is more fully developed through these findings. I used participation in occupation as a central construct in the theoretical framework that guided this study. The findings, however, contradict some currently held assumptions about participation in occupation. For example, participation in occupation is often treated as the summative 'result' of combined personal and environmental factors, as in an equation. That is, if barriers are first minimized, supports are made available, and there is an adequate fit between person and place, participation is the result. However, this conceptualization suggests a temporal precedence that is inconsistent with these individuals' lives. Participation for these older adults was constant, and it was through active participation that they negotiated challenges, tested new solutions, forged routines and support structures, and continued participating.

Another noteworthy aspect of participation revealed in this project is the issue of scope beyond the individual. Participating in occupation is most commonly used in the literature to refer to an individual's temporally immediate performance of an action. Through a qualitative study with older women in Sweden, Haak and colleagues (2007) broadened the conceptualization to include both performance-oriented participation and togetherness-oriented participation. However, they, like others (e.g. Therrien & Desrosiers, 2009), continue to operationalize participation as a number or extent of daily activities and social roles performed (Haak, Fange, Horstmann, & Iwarsson, 2008). In contrast, this study suggests that participation has many non-immediate qualities beyond 'performance.' Participation, these findings show, has temporally and spatially expansive characteristics. For example, several older adults maintained roles and identities within their church or civic group from previous years, although they were no longer doing the actual tasks associated with that role. Some described ways that they gave back to the community or participated in

their neighborhood that were 'proxy' or virtual in nature. Simply being part of the organization meant they were participating in the action of that organization. These findings confirm that participation is a meaningful and complex weave of patterns across time and space (Law, 2002), but they also suggest that participation has durational and virtual characteristics.

An additional implication for conceptualizing participation arises from the process of negotiated livability modeled above. Like the expansion of elements considered in relation to occupation proposed above (Section 7.2.1), participation in this model occurs at many levels. Older adults in this study participated in the revitalization of Durham by dining at new restaurants downtown, adopting the narrative of a city that is fighting its way back from disrepair. They patronized museums, the performing arts center, theatres, and shops that are the new face of Durham. These older adults participated in the perpetuation of a vehicle-centric community. And, they participated in the process of negotiating livability in Durham by sharing tips about which exercise classes to attend, learning and using secondary roads, and by frequenting certain businesses and locations over others. Participating in occupation, it follows, has broad implications for individuals and the communities that shape and are shaped by their action. Future conceptualizations of participation need to address this breadth of connection to community and personal life.

7.2.3. Methodological Implications

Methodologically, this study design is significant in occupational science because it demonstrates an approach to integrating multiple methods in order to consider a wider array of transactional elements related to occupation. The use of spatial data gathered through global positioning system devices, particularly, has implications for future research on

occupation. This method has not been used much to date, but it is ideal for investigating how occupations unfold in particular places with geographic and temporal properties. The majority of research on occupation treats place as the context of action (a container) or as a static, bounded system with which an individual interacts. In these views, people do occupations in place, use place, and places are classified as more or less adaptable and accessible.

Recently Rowles (2008) suggested a more expansive, "multi-layered" (p.130) way to conceptualize place in occupational science. Being in place, he argued, is a product of action, awareness and orientation within a context, and emotional affinity for places. Huot and Laliberte Rudman (2010) also developed the concept of place in relation to occupation by linking place and occupation to negotiating identity. They defined place as an embodiment of routine. These are positive developments toward including place in occupational science, however, substantial room remains for a better understanding of the occupation-place relationship. Spatial methodologies reveal characteristics of occupation-in-place beyond the individual's subjective experience. Use of spatial methodologies also will allow occupational scientists to study occupation as the active process through which place is enacted, modified, and perpetuated at a range of geographic scales.

7.3. Implications for Gerontology

The concept of participation as central to older adults' lives and experiences of community livability has implications for gerontological literature as well. This study shows the possible intersections of two traditions in gerontology that have not substantially overlapped to date. Life course theorizing and research has guided researchers to consider

issues of time and place in understanding the 'transitions, institutions, and interrelations' (Heinz & Marshall, 2003) that characterize older adults' experiences. Research in this vein has explored how various institutions, like employment and state policies, shape the life course. The interconnectedness of lives, and the cumulative advantages and disadvantages of many years, show that aging is a collective process, but it is also systematically heterogeneous (Dannefer, 2003). Although the principles of life course research should be widely applicable across many areas of inquiry (George, 2003), there has been little crossfertilization of life course perspectives and geographical gerontology. Geographical gerontology is constituted by multiple fields of interest and multiple academic disciplines. The core interests of population aging and distribution, health geographies, kinship and migration, aging in place, constructions of older age, and living experiences and environments (Andrews, Cutchin, McCracken, Phillips, & Wiles, 2007) are synergistic with life course research. However, Andrews et al. argue that there has not been sufficient integration of theory with applied research.

Participation is a construct that could serve to integrate these fields. Participation, particularly when conceptualized in an expansive way (see Section 7.2.3), is integral to understanding how the life course comes to bear on the experience of living and doing in older age. This study shows how transitions and institutions over the life course relate to the experience of livability (see Section 6.2.4) and to issues of place. Yet, it is the 'living' of livability that should inform how we theorize the relationship of older people and places over time. Reciprocally, the experiences and meanings of place, as well as general patterns of migration and change addressed in geographical gerontology, are also closely tied to the participation patterns of individuals and groups. This study shows how using the principles of

the life course to better understand the person-place relationship counters the idea of place as a container or as a separate entity with which individuals develop attachments (e.g. Wiles, Allen, Palmer, Hayman, Keeling, & Kerse, 2009). Life course processes and place processes are connected via participation and mutually shape the experiences of older age. At their intersection, these two gerontology traditions will allow researchers to investigate changing experiences of older adults, in changing physical and social contexts, through participation.

7.4. Limitations

One limitation of this research is the nature of the sample. First, having more participants could have expanded my ability to theorize the process of negotiated livability. However, this sample size permitted the multiple phases and methods of data collection that promoted depth of understanding within and across cases. Moreover, the demographic stratification and variation among cases strengthens the findings and increase the significance of the findings and theoretical model (Corbin & Strauss, 1990).

Despite the demographic stratification and variation in the sample, there are several important ways that these participants' experiences likely diverged from the general aging population in Durham. First, all of these individuals had driver's licenses and (with the exception of Viola, who awaiting clearance post-heart attack) drove regularly each week. Their access to and use of personal vehicles certainly shaped the patterns and negotiations of daily life I observed. Older adults who have limited auto-mobility, regardless of the reason, likely have differing experiences and processes of negotiating livability than the twelve individuals in this study. Second, an unintentional characteristic of this sample was that all of the female participants were divorced or widowed; most were living alone, although three

had other family members who were temporarily staying in their homes. All four male participants were married and living with their spouses. While this interaction of gender and marital status did not appear to be a significant factor in explaining variation or patterns among cases, both gender and marital status would be expected to shape experiences of aging in place and negotiating livability. Both auto-mobility and gender features of my sample composition need to be considered in how the findings from this study are interpreted and used. Future research should specifically include sub-groups of people aging in place not included in this project, such as males living alone or individuals without a license to drive or otherwise limited auto-mobility.

Another possible limitation of this research is the inclusion of only one community setting. In addition, as I described in Chapter 4, Durham and the surrounding metropolitan area have many characteristics of an age-friendly city. Durham has one of the fastest growing populations of older adults in the country, and the city ranks among the top desirable retirement locations nationally. These characteristics likely mean that the experience of aging in Durham is different from aging in other areas of the country. Despite the relatively high 'livability index,' however, the findings from this study show that negotiating daily life in Durham was challenging and complex for these participants. This complexity and challenge, even in a setting that has many of the features described in current livability literature, serves to underscore how important it is to better theorize and support the person-place relationship that grounds livability.

7.5. Avenues for Future Research & Application

There are several avenues for future research in this area, and this study has potential for direct translation to community and policy development. One of the purposes of this project was to identify some of the dimensions of the older person-place relationship that should be the focus of future research on livability. A primary dimension I was unable to fully explore was the relationship of ethnic background and the process of negotiated livability. Due to my sample size, I could not say whether variation in experience was related to being African American in Durham. However, the African American participants in this study tended to face more financial challenges and lived in some of the least desirable locations in terms of access to community amenities, grocery stores, and recreation spaces. The most-wealthy participants, all of whom were Caucasian, tended to have more personal, social, and information resources that positively influenced their sense of wellbeing. With a larger sample, this complex interrelationship of ethnicity and socio-economic status (perhaps informed by ideas of cumulative advantage and disadvantage (e.g., Dannefer, 2003) could be better explained.

Another dimension of the person-place relationship that merits additional research is the phenomenon I have called a 'disjuncture,' or what Cutchin (2001) called the "problematic situation" (p. 35). This term is non-specific and includes any disruption or inconsistency in the person-place relationship that changes or challenges participation. Bonnie's stiff neck following her fall caused a disjuncture, as did the re-routing of traffic on Rigsbee Avenue during road construction downtown. I have used the term generally as (a) a way to discuss the immediately problematic aspects of the participants' situations, and (b) in relation to the idea of ends-in-view, where it is defined by the necessity to re-vision possible or desirable

futures. These times when an individual or group's routine patterns of participation are no longer possible, and when their ends-in-view must be adjusted, need additional research. For example, a disjuncture that is more personal or circumscribed in nature may be experienced differently than a disruption that affects many people or even a whole community. Disjunctures that develop gradually over time may be negotiated quite differently from a disjuncture that is sudden. Examining how these points are experienced and how the disjuncture in person-place relationship is negotiated through occupation will provide insights about this important aspect of negotiated livability. For example, although I did not employ the concept of 'habit' in the analysis, it may be a useful concept for exploring and explaining various processes of negotiating livability and the disjunctures of the person-place relationship. Future studies could more concretely address how the concept of habit, as a feature of occupation, extends or challenges these findings. Examining disjunctures, and the roles of habits in creating and negotiating those disjunctures, may also contribute to a better understanding of how transactions of person and place are embodied and emergent through occupation.

As I re-read my reflective texts during the final stages of analysis, I realized that my initial impressions of neighborhoods and homes (recorded for each participant before I met them) were also influenced by an ideology of aging. Neighborhoods that were quiet, well-maintained, and near (but not on) main roads and amenity centers I noted with positive descriptors. I recorded expectations about the individuals' relatively high socio-economic status and personal resources related to aging. Alternatively, some neighborhoods and homes were dilapidated, on main roads, in apartment complexes with flights of wooden stairs, or in areas at the outskirts of town. For those, I noted expectations for past or current challenges

and used descriptors like 'isolated' and 'abandoned.' These preconceptions about what a good place for aging looked like were challenged by the conceptual categories I had developed. Specifically, my analysis showed that the best-resourced participants were in some ways shielded from actually making changes and preparations for aging at home, and were therefore more poorly positioned to negotiate significant challenges than some of the individuals who lived in less physically desirable locations. Although I do not expect that this relationship would necessarily predict wellbeing outcomes, it would be useful to study how this inversion directly relates to experiences of aging in a community setting over many years.

This project generated a theory of the process of negotiated livability which is a first step toward understanding how wellbeing for a population aging in place can be maximized and extended. There are implications for policy and ways these findings could be translated into a community setting. While my findings do not directly contradict the existing definitions of livability, they do suggest that livability is much more complicated and layered than the availability of certain features or resources in a community.

First, livability is a place-specific process that will change over time as the cohort of older adults of a community changes. No single policy will resolve the issues. Communities should have designated commissions or working groups (including older adult residents) that interface with government and private sector bodies. The focus of combined efforts should be on issues of development and social services that plan for the future needs of the community and that serve in a consultative role to policy makers and businesses regarding aspects of community livability and aging in place. Second, opportunities for people to interact should be increased and supported instead of replaced by automatic tellers, clerks, etc. In an era of

increasing automation, this prioritization of face to face interaction may not be true for subsequent generations. For the current cohort of older adults, a grocery store, no matter how appealing, will be less negotiable if all cashiers are replaced with self-checkout.

Third, being able to go and do in the community requires navigable paths that link one place to another. A destination may be accessible and age-friendly by some standards. However, the required driving, the parking lot, the turns, the amount of traffic, and the time of day all influence how and to what extent older adults are able to participate. Fourth, public transportation options should offer choices that reflect the 'shape' of daily life. In addition to circuits, point-to-point routes from residential areas to grocery stores or shopping districts would be more consistent with how frailer older adults want and are able to participate. These point-to-point routes could be offered during limited windows of time each day, with different destinations for different days of the week. Fifth, a sense of community identity or pride, developed through a particular narrative or around specific features of the community, is important. The sense of belonging fostered by such initiatives promotes participation. Being invested in the place and the people who live there also seems to counteract negative features of the community, such as perceived crime, that would otherwise limit participation. Most importantly, communities and policy makers who want to increase the livability of their communities need to hear and consider how older residents envision their future participation. These communal ends-in-view should ultimately guide the steps a community takes to support residents who are aging in place.

APPENDIX A: Informed Consent & Consent Addendum

University of North Carolina-Chapel Hill Consent to Participate in a Research Study Adult Participants Social Behavioral Form

IRB Study #11-2288		
Consent Form Version Date:	December 7, 2011	

Title of Study: Community Livability for Older Adults: Person-Place Relationship and Process

Principal Investigator: Kendra Heatwole Shank, MS OTR/L UNC-Chapel Hill Department: Allied Health Sciences UNC-Chapel Hill Phone number: (919) 843-4472

Faculty Advisor: Malcolm Cutchin PhD

Study Contact telephone number: (919) 240-7257
Study Contact email: Kendra_Heatwole@med.unc.edu

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this study is to learn about the experiences of older adults who are aging in a community setting (commonly called "aging in place"), and how they engage in daily activities both inside and outside of their homes. Research suggests that there is a link between daily activities and overall health and wellbeing for older adults. In general, this research shows that being able to engage in activities that people *need* to do and *want* to do enables older adults to stay in their homes longer and to have a higher quality of life. Some organizations and communities are trying to support engagement in necessary and meaningful activities by designing "Livable Communities." However, we don't know enough about which dynamics of a community make it livable, because very little research has been done in the United States about this important topic. This research study will contribute to building a better understanding of livability, especially as it is related to older adults who are aging in place.

How many people will take part in this study?

If you decide to be in this study, you will be one of approximately 15 people enrolled.

How long will your part in this study last?

This primary data collection will last for three to four months. The total time commitment will be 8-10 hours.

What will happen if you take part in the study?

- 1. Your participation in the study will begin with an interview, which will be conducted by the PI in your home or another location of your choosing. This interview contains questions about your home and community, your daily routines and activities, your social experiences and relationships, and your thoughts about livability.
- 2. Following that interview, the PI will arrange to accompany you during one or two selected activities for the 'observation' component of the study. You will also be given an "activity diary" to record the timing and location of your activities over the course of several days.
- 3. A second interview will allow both you and the researcher to reflect on the observation experience, and will focus on understanding the process of aging in place in a particular setting. Looking at, drawing, and/or tracing routes and locations on maps may be a part of the interview.
- 4. You may be given a Global Positioning System (GPS) device to use for 7 to 14 days. The device would gather location information as you go about your daily activities. The location information that the GPS collects could be used to create a digital map of your travel in and through the community.
- 5. Finally, a closing interview will conducted. This interview contains questions about change over time, thoughts about the future, and your reflections on the research process.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. You may not benefit personally from being in this research study. However, many people find that the opportunity to talk about their experiences and life situation is a positive experience, and the reflection may result in an awareness of how certain activities or dynamics of the community support your own well-being.

What are the possible risks or discomforts involved from being in this study?

There are no known risks to being in this research study.. You should report any problems to the researcher.

How will your privacy be protected?

Your privacy is very important. All of the data gathered during this study will be de-identified by the PI, and she alone will have access to a master list of information such as names and telephone numbers of participants. Pseudonyms will be created and used in all transcriptions, field notes, and mapping exercises. Both electronic and printed records will be stored in a locked office or on password protected computers, and will not be shared with anyone not directly involved in the research.

Participants will not be identified in any report or publication about this study. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.

During interviews, the researcher may wish to make a digital audio recording. Recordings will help the researcher more accurately recall and transcribe the interview, and will not be shared with anyone not directly involved with this research. Recordings will be stored on a computer that is password protected, and will be destroyed at the end of the study. If you consent to audio recording, you may still request that the recording be turned off at any point in time.

Check the line that best matches your choice:
OK to record me during the study
Not OK to record me during the study

What if you want to stop before your part in the study is complete?

You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time.

Will you receive anything for being in this study?

You will not receive anything for taking part in this study.

Will it cost you anything to be in this study?

There will be no costs for being in the study.

What if you have questions about this study?

You have the right to ask, and have answered, any questions you may have about this research. If you have questions, complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

lace Relationship and Process
ne questions I have at this time. I
 Date
 Date

Printed Name of Research Team Member Obtaining Consent

University of North Carolina-Chapel Hill Consent to Participate in a Research Study Addendum to provide additional information to subject after original consent

RB Study #11-2288	
Consent Form Version Date:	November 11, 2011

Title of Study: Community Livability for Older Adults: Person-Place Relationship and Process

Principal Investigator: Kendra Heatwole Shank, MS OTR/L UNC-Chapel Hill Department: Allied Health Sciences UNC-Chapel Hill Phone number: (919) 843-4472

Faculty Advisor: Malcolm Cutchin PhD

Study Contact telephone number: (919) 240-7257 Study Contact email: Kendra_Heatwole@med.unc.edu

The following information should be read as an addition to the original Consent Form that you read and signed at the beginning of the study. Unless specifically stated otherwise in the following paragraphs, all information contained in that original Consent Form is still true and remains in effect. Your participation continues to be voluntary. You may refuse to participate, or may withdraw your consent to participate at any time, and for any reason.

New or additional information

You are being invited to participate in an additional component of the study. In this part of the study, spatial information is gathered by Geographical Positioning System (GPS) units. The GPS unit is a small electronic device, similar in size and appearance to a cell phone. It is a type of technology that is used in many difference ways, such as the navigational GPS tools for vehicles. The purpose of using GPS in this study is to see a visual representation of the actual routes, locations, and patterns that are part of the relationship between you and the community you live in. The maps that can be made with GPS data will help to "set the stage" for your experiences of aging in this community.

When it is on, the GPS unit records details about the physical space including

- Location (coordinates on a map)
- Routes of travel
- Average speed of travel
- Time of day

The GPS unit does NOT record sound or visual information, such as

- Types of locations or businesses
- Social interactions/conversations
- Medical or personal information

What would will your participation entail?

You will be given a GPS unit to carry when you are out of your home, for between 10 and 14 days. This will occur during the time frame of the original study. Being oriented to the GPS unit by the PI will take a small amount of time (less than one hour). No technology experience is required. There is no monetary cost to you. At the end of the data collection period, the PI will pick up the GPS unit.

How will your privacy be protected?

Your privacy is very important. All of the data gathered by the GPS will be uploaded into computer software for analysis by the PI. No personally identifying information is gathered by the GPS, and the information uploaded will not be linked to your name or telephone number. Your home address will be noted by the PI for analysis purposes, but will not be stored with the data and will not be used in any presentation or publication that comes out of this research. You have the right to see the GPS data at any time, and you may stop your participation in this aspect of the study at any time without penalty. Withdrawal from GPS collection will not affect your participation in the larger study.

Participant's Agreement:

voluntarily agree to continue to participate in this research study.			
Signature of Research Subject	Date		
Printed Name of Research Subject			
Signature of Research Team Member Obtaining Consent	Date		
Printed Name of Research Team Member Obtaining Consent			

I have read the information provided above. I have asked all the questions I have at this time. I

APPENDIX B: Interview Guides

Community Livability for Older Adults: Person-Place Relationship and Process

A. Semi-Structured Interview Guide

Interviews will contain questions such as the ones that follow, but will be guided by participant responses in both content and order. PI will probe responses that warrant further elaboration or attention.

- 1. How long have you lived in your home? What are the circumstances that brought you to this location? What other homes/neighborhoods have you lived in? [If moved to multiple locations in Durham area]: Why did you move?
- 2. How would you describe your home/community/neighborhood to someone who is an outsider?
- 3. What is a typical day like for you? A typical week?
- 4. What activities do you do outside your home? Which activities do you find the most satisfying? Why?
- 5. Can you describe the relationships that are part of your life? (Prompt: family; friends; casual encounters; relate to previously identified activities for examples)
- 6. In what ways do you feel that you belong to this community?
- 7. What do you encounter that makes doing activities challenging? What do you encounter that makes belonging to the community challenging?
- 8. What are your thoughts about what makes a community "livable" in general? What makes a community "livable" for you?
- 9. If you could change anything about how you do the things you do and go the places you go, what would it be?
- > Thank participant.

Community Livability for Older Adults: Person-Place Relationship and Process

B. Open-ended Interview Following Observation(s)

Interviews will contain questions such as the ones that follow, but will be guided by participant and researcher reflections specific to previous observation(s) with that participant. PI will probe responses that warrant further elaboration or attention.

- 1. How does being part of this particular community influence what you do?
- 2. Tell me about the changes and challenges (if any) you notice related to getting older in this particular neighborhood/community.
- 3. Can you give me an example of how that challenge has been or is being resolved?
- 4. [Questions arising from the observation, for example]
 - a. Why did you drive/walk that route?
 - b. Is this the way you have always organized your errands?
 - c. How does this activity reflect who you are as person?
 - d. What is the significance to you of doing _____ that way?
- 5. After talking about your activities, and the relationships that shape what you do on a daily basis, do you have additional (or different) ideas about what makes a community 'livable' or not?
- > Thank participant.

Community Livability for Older Adults: Person-Place Relationship and Process

C. Closing Interview

Interviews will contain questions such as the ones that follow, but will be guided by all the data previously collected with the participant. PI will probe responses that warrant further elaboration or attention.

In thinking about the last ____ years you have lived in this home/community, what would you say are the changes that have most influenced your daily activities (and/or the activities of others)?
 Describe how you see yourself in 5 years. What are things that stay the same? What do you

expect to change? If I were to come back and observe you doing _____ again then, what

- would I notice?3. What would you say are the most critical things, based on your own personal experience,
- 4. What things have we not talked about that might be important to my research or to your

that make your community more 'livable' for you?

> Thank participant.

experience in Durham?

REFERENCES

- AARP. (2005). *Livable communities: An evaluation guide*. AARP Public Policy Institute, Washington, DC. Retrieved from www.aarp.org/research/housing-mobility/indliving/d18311 communities.html
- AARP. (2012). Beyond 50.05: A Report to the Nation on Livable Communities, Creating Environments for Successful Aging 2005. Retrieved from http://www.aarp.org/content/aarp/en/home/livable-communities/learn/civic-community/A-Report-to-the-Nation-on-Livable-Communities.html
- Aldrich, R. (2008). From complexity theory to transactionalism: Moving occupational science forward in theorizing the complexities of behavior. *Journal of Occupational Science*, 15, 147-156.
- Alley, D., Liebig, P., Pynoos, J., Banerjee, T., & Choi, I.H. (2007). Creating elder-friendly communities: Preparations for an aging society. *Journal of Gerontology in Social Work*, 49, 1-18.
- American Society on Aging. (2005, March). Atlantic philanthropies supports ASA's new project to promote civic engagement. *ASA Connections Newsletter*. Retrieved from http://www.asaging.org/asa connection/05mar/top.cfm
- Andersson, J.E. (2011). Architecture for the silver generation: Exploring the meaning of appropriate space for ageing in a Swedish municipality. *Health and Place*. 17, 572-587.
- Andrews, G.J., Cutchin, M.P., McCracken, K., Phillips, D.R., & Wiles, J. (2007). Geographical gerontology: The constitution of a discipline. *Social Science & Medicine*, 65, 151-168.
- Asquith, N. (2009). Positive aging, neoliberalism and Australian sociology. *Journal of Sociology*, 45, 255-270.
- Baltes, P.B. (1997). On the incomplete architecture of human ontogeny: Selection, optimization, and compensation as a foundation of development theory. *American Psychologist*, *52*, 366-380.
- Bendixen, H.J., Kroksmark, U., Magnus, E., Jakobsen, K., Alsaker, S., & Nordell, K. (2006). Occupational pattern: A renewed definition of the concept. *Journal of Occupational Science*, 13, 3-10.
- Boisvert, R.D. (1998). John Dewey: Rethinking our time. Albany: SUNY Press.
- Bronfenbrenner, U. (1992). Ecological systems theory. In V. Ross (Ed.), *Six theories of child development: Revised formulations and current issues* (pp. 187-249). London, England: Jessica Kingsley Publishers.

- Brooks, D. (2012, March 13). The gray tsunami: Scourge of the 21st century. *The New York Times*. Retrieved from http://www.ohio.com/editorial/david-brooks-the-gray-tsunami-scourge-of-the-21st-century-1.272999
- Bryant, L., Corbett, K., & Kutner, J. (2001). In their own words: A model of health aging. *Social Science & Medicine*, *53*, 927-941.
- Burns, V.F., Lavoie, J., & Rose, D. (2012). Revisiting the role of neighbourhood change in social exclusion and inclusion of older people. *Journal of Aging Research*. doi: 10.1155/2012/148287
- Charmaz, K. (2006). Constructing grounded theory: A practical guide through qualitative analysis. Thousand Oaks, CA: Sage.
- Cheng, Y., Rosenberg, M.W., Wang, W., Yang, L., & Li, H. (2011). Aging, health and place in residential care facilities in Beijing, China. *Social Science in Medicine*, 72, 365-72.
- Colello, K. (2007). Where do older Americans live? Geographic distribution of the older population. CRS Report for Congress: Congressional Research Service. Retrieved from http://aging.senate.gov/crs/aging5.pdf
- Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons and evaluative criteria. *Zeitschrift für Soziologie*, 19, 418-427.
- Corbin, J., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: SAGE.
- Cresswell, T. (2004). Place: A short introduction. Oxford: Blackwell Publishing.
- Cutchin, M.P. (2001). Deweyan integration: Moving beyond place attachment in elderly migration theory. *International Journal of Aging and Human Development*, *52*, 29-44.
- Cutchin, M.P. (2003). The process of mediated aging-in-place: A theoretically and empirically based model. *Social Science & Medicine*, *57*, 1077-1090.
- Cutchin, M.P. (2004). Using Deweyan philosophy to rename and reframe adaptation-to-environment. *American Journal of Occupational Therapy*, 58, 303-312.
- Cutchin, M.P. (2009). Geographical gerontology: New contribution and spaces for development. *The Gerontologist*, 49, 440-445.
- Cutchin, M., Aldrich, R., Bailliard, A., & Coppola, S. (2008). Action theories for occupational science: The contributions of Dewey and Bourdieu. *Journal of Occupational Science*, 15, 157-165.
- Cutchin, M.P., & Dickie, V.A. (Eds.). (2013). *Transactional perspectives on occupation*. Dordrecht: Springer.

- Cutchin, M.P., & Dickie, V.A. (2012). Transactionalism: Occupational science and the pragmatic attitude. In G. Whiteford & C. Hocking (Eds.), *Critical perspectives on occupational science: Society, inclusion, participation* (pp.23-37). London: Wiley.
- Dannefer, D. (2003). Cumulative advantage/disadvantage in and the life course: Cross-fertilizing age and social science theory. *The Journals of Gerontology: Psychological and Social Sciences B*, 58, 327-337.
- Despres, C., & Lord, S. (2005). Growing older in postwar suburbs: The meanings and experiences of home. In G.D. Rowles & H. Chaudury (Eds.), *Home and identity in later life: International perspectives* (pp. 317-340). New York: Springer Publishing Company.
- Dewey, J. (1998). Conduct and experience. In L. Hickman & T. Alexander (Eds.), *The essential Dewey, vol.* 2 (pp. 67-77). Bloomington, IN: Indiana University Press. (Original work published 1930)
- Dewey, J. (1998). The reflex arc concept in psychology. In L. Hickman & T. Alexander (Eds.), *The essential Dewey, vol.* 2 (pp. 3-10). Bloomington, IN: Indiana University Press. (Original work published 1896)
- Dickie, V. (2010). Are occupations 'processes to complicated to explain'? What we can learn by trying. *Journal of Occupational Science*, 17, 195-203.
- Dickie, V., Cutchin, M., & Humphry, R. (2006). Occupation as transactional experience: A critique of individualism in occupational science. *Journal of Occupational Science*, 13, 83-93.
- Dunn, W., Brown, C., & McGuigan, A. (1994). The Ecology of Human Performance: A framework for considering the effect of context. *The American Journal of Occupational Therapy*, 48, 595-607.
- Durham Area Transit Authority. (2012). *About DATA*. Retrieved from http://data.durhamnc.gov/about.cfm
- Durham Area Transit Authority. (n.d.). *Access*. Retrieved from http://data.durhamnc.gov/access.cfm
- Durham Center for Senior Life. (2013). *General information*. Retrieved from http://dcslnc.org/gen_info.php
- Durham Convention and Visitor's Bureau. (2010). *Durham research & statistics: Durham Demographics*. Retrieved from http://www.durham-nc.com/about/research_stat/
- Durham Convention and Visitor's Bureau (2012). *Durham facts*. Retrieved from http://www.durham-nc.com/about/overview-facts-history/durham_facts.php#siz
- Durham County. (2012). *Durham County strategic plan*. Retrieved from http://strategicplan.dconc.gov/uploads/2012_Durham_County_StrategicPlan_Final.pd

- Durham County. (n.d.) *Durham's Got It! strategic plan: Goals*. Retrieved from http://www.durhamnc.gov/StrategicPlan/Goals
- Durham Downtown, Inc. (2007). *Downtown Durham development projects by district*.

 Retrieved from
 http://www.downtowndurham.com/index.php?option=com_content&task=view&id=26&Itemid=42
- Durham Hoods. (2012). *Neighborhood maps & mailing list hub Durham, NC*. Retrieved from http://durhamhoods.com/
- Ellegård, K. (2006). The power of categorization in the study of everyday life. *Journal of Occupational Science*, 13, 37-48.
- Emlet, C.A., & Moceri, J.T. (2012). The importance of social connectedness in building age-friendly communities. *Journal of Aging Research*. doi: 10.1155/2012/173247
- Fagan, L.A., & Cabrera, C. (2009). AOTA's societal statement on Livable Communities. *American Journal of Occupational Therapy*, 63, 847-848.
- Fänge, A., & Ivanoff, S.D. (2009). The home is the hub of health in very old age: Findings from the ENABLE-AGE Project. *Archives of Gerontology and Geriatrics*, 48, 340-345.
- Federal Interagency Forum on Aging-Related Statistics. (2010). *Older Americans 2010: Key indicators of well-being*. Washington, DC: U.S. Government Printing Office. Retrieved from http://www.agingstats.gov/agingstatsdotnet/Main_Site/Data/2010_Documents/Docs/OA_2010.pdf
- Feldman, P.H., & Oberlink, M.R. (2003). The AdvantAge initiative: Developing community indicators to promote the health and wellbeing of older people. *Family and Community Health*, 26, 268-274.
- Freedman, M. (2002). Civic windfall? Realizing the promise in an aging American. *Generations*, 26, 86-89.
- Fried, M. (2000). Continuities and discontinuities of place. *Journal of Environmental Psychology*, 20, 193-205.
- Friedman, D., Parikh, N.S., Giunta, N., Fahs, M.C., & Gallo, W.T. (2012). The influence of neighborhood factors on the quality of life of older adults attending New York City senior centers: Results from the Health Indicators Project. *Quality of Life Research*, 21, 123-131.
- Garrison, J. (2001). An introduction to Dewey's theory of functional "trans-action": An alternative paradigm for activity theory. *Mind, Culture, and Activity, 8,* 275 296.

- George, L. (2003). Life course research: Achievements and potential. In J. T. Mortimer & M. J. Shanahan (Eds.), *Handbook of the Life Course* (pp. 671-680). New York: Kluwer Academic/Plenum.
- Giddens, A. (2007). Agency, structure. In C. Calhoun, J. Gertis, J. Moody, S. Pfaff, & I. Virk (Eds.), *Contemporary sociological Theory* (2nd ed., pp. 231-242). Malden: Blackwell. (Original work published 1979)
- Gitlin, L. (2003). Conduction research on home environments: Lessons learned and new directions. *The Gerontologist*, *43*, 628-637.
- Golant, S.M. (2003). Conceptualizing time and behavior in environmental gerontology: A pair old issues deserving new thought. *The Gerontologist*, 43, 638-648.
- Green, G. (2012). Age friendly cities of Europe. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. doi: 10.1007/s11524-012-9765-8
- Greenfield, E.A. (2011). Using ecological frameworks to advance a field of research, practice, and policy on aging-in-place initiatives. *The Gerontologist*, 52, 1-12.
- Gustman, A.L., Steinmeier, T.L., & Tabatabai, N. (2010). What the stock market decline means for the financial security and retirement choices of the near-retirement population. *Journal of Economic Perspectives*, 24(1), 161-182.
- Haak, M., Fänge, A., Horstmann, V., & Iwarsson, S. (2008). Two dimensions of participation in very old age and their relations to home and neighborhood environments. *American Journal of Occupational Therapy*, 62, 77-86.
- Haak, M., Fänge, A., Iwarsson, S., & Dahlin-Ivanoff, S. (2007). Home as a signification of independence and autonomy: Experiences among very old Swedish people. *Scandinavian Journal of Occupational Therapy*, 14, 16-24.
- Hägerstrand, T. (1982). Diorama, path and project. *Tijdschrift voor Economie en Sociologie Geografie*, 73, 323-339.
- Hammell, K.W. (2009a). Sacred texts: A skeptical exploration of the assumptions underpinning theories of occupation. *Canadian Journal of Occupational Therapy*, 76, 6-13.
- Hammell, K.W. (2009b). Self-care, productivity, and leisure, or dimensions of occupational experience? Rethinking occupational "categories." *Canadian Journal of Occupational Therapy*, 76, 107-114.
- Hand, C., Law, M.C., McColl, M.A., Hanna, S., & Elliot, S.J. (2012). Neighborhood influences on participation among older adults with chronic health conditions: A scoping review. *Occupational Therapy Journal of Research*, *32*, 95-103.
- Handy, S.L., Boarnet, M.G., Ewing, R., & Killingsworth, R.E. (2002). How the built environment affects physical activity: Views from urban planning. *American Journal of Preventive Medicine*, 23, 64-73.

- Hank, K. (2011). How "successful" do older Europeans age? Findings from SHARE. *The Journals of Gerontology B: Psychological and Social Sciences*, 66, 230–236.
- Hanson, D., & Emlet, C.A. (2006). Assessing a community's elder friendliness: A case example of the AdvantAge Initiative. *Family and Community Health*, 29, 266-278.
- Heatwole Shank, K., & Cutchin, M. (2010). Transactional occupations of older women aging in place: Negotiating change and meaning. *Journal of Occupational Science*, 17, 4-14.
- Heinz, W.R., & Marshall, V.W. (2003). *Social dynamics of the life course*. New York: Walter de Gruyter, Inc.
- Himes, C. (2002). Elderly Americans. *Population Bulletin*, *56*(4). Population Reference Bureau. Retrieved from http://www.prb.org/Source/ACFD30.pdf
- Hirshorn, B., & Stewart, J. (2003). Geographic information systems in community-based gerontological research and practice. *Journal of Applied Gerontology*, 22, 134-151.
- Hocking, C. (2009). The challenge of occupation: Describing the things people do. *Journal of Occupational Science*, *16*, 140-150.
- Hocking, C., Wright-St. Clair, V., & Bunrayong, W. (2002). The meaning of cooking and recipe work for older Thai and New Zealand women. *Journal of Occupational Science*, 9, 117-127.
- Holstein, M. (1999). Women and productive aging: Troubling implications. In M. Minkler & C. Estes (Eds.), *Critical gerontology* (pp. 359-373). Amityville, NY: Baywood.
- Horgas, A., Wilms, H., & Baltes, M. (1998). Daily life in very old age: Everyday activities as expression of successful living. *The Gerontologist*, 38, 556-568.
- Huot, S., & Laliberte Rudman, D. (2010). The performances and places of identity: Conceptualizing intersections of occupation, identity, and place in the process of migration. *Journal of Occupational Science*, 17, 68-77.
- Iwarsson, S., & Stahl, A. (2003). Accessibility, usability, and universal design: Positioning and definition of concepts describing person-environment relationships. *Disability and Rehabilitation*, 25, 57-66.
- Iwarsson, S., Wahl, H.W., Nygren, C., Oswald, F., Sixsmith, A., Sixsmith, J., et al. (2007). Importance of the home environment for healthy aging: Conceptual and methodological background for the European ENABLE-AGE project. *The Gerontologist*, 47, 78-84.
- Jones, D.P. (2001). The end of an era. Durham: Brown Enterprises, Inc.
- Kantartzis, S., & Molineux, M. (2011). The influence of western society's construction of a healthy daily life on the conceptualization of occupation. *Journal of Occupational Science*, 18, 62-80.

- Kendig, H. (2003). Directions in environmental gerontology: A multidisciplinary field. *The Gerontologist*, 43, 611-615.
- Keenan, T. (2010). *Home and community preferences of the 45+ Population*. AARP Research & Strategic Analysis. Washington, D.C.: AARP.
- Kwan, M.P. (2006). Doing qualitative research using GIS: An oxymoronic endeavor? Guest Editorial. *Environment and Planning A*, *38*, 1999-2002.
- Laliberte Rudman, D. (2005). Understanding political influence on occupational possibilities: An analysis of newspaper constructions of retirement. *Journal of Occupational Science*, 12, 149-160.
- Laliberte Rudman, D. (2006a). Positive aging and its implications for occupational possibilities in later life. *Canadian Journal of Occupational Therapy*, 73, 188-192.
- Laliberte Rudman, D. (2006b). Shaping the active, autonomous and responsible modern retiree: An analysis of discursive technologies and their links with neo-liberal political rationality. *Aging and Society*, 26, 181-201.
- Larsson, A., Haglund, L., & Hagberg, J. (2009). Doing in everyday life: Experiences of the oldest old. *Scandinavian Journal of Occupational Therapy*, 16, 99-109.
- Law, M. (2002). Participation in the occupations of everyday life. *American Journal of Occupational Therapy*, *56*, 640-649.
- Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The Person-Environment-Occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*, 63, 9-21.
- Lawton, M.P. (1982). Competence, environmental press, and the adaptation of older people. In M. Lawton, P. Windley, & T. Byerts (Eds.), *Aging and the environment: Theoretical Approaches*. New York: Springer Publishing Company.
- Lawton, M.P., & Nahemow, L. (1973). Ecology and the aging process. In C. Eisdorfer & M.P. Lawton (Eds.), *Psychology of adult development*. Washington, DC: American Psychological Association.
- Lincoln, Y. S., & Guba, E. G. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Handbook of Qualitative Research* (2nd ed., pp. 163–188). Beverly Hills, CA: Sage.
- Lui, C.W., Everingham, J., Warburton, J., Cuthill, M., & Bartlett, H. (2009). What makes a community age-friendly: A review of international literature. *Australasian Journal on Aging*, 28, 116-121.
- Marek, K.D. & Rantz M. (2000). Aging in place: A new model for long-term care. *Nursing Administration Quarterly*, 24(3), 1-11.

- Marek, K.D., Popejoy, L., Petroski, G., Mehr, D., Rantz, M., & Lin, W.C. (2005). Clinical outcomes of aging in place. *Nursing Research*, *54*, 202-211.
- Marquette, B. (1928). Making cities livable. *American Journal of Public Health*, 18(9), 1109–1114.
- Marshall, V.W., & Bengtson, V.L. (2011). Theoretical perspectives on the sociology of aging. In R.A. Settersten, Jr., & J.L. Angel (Eds.), *Handbook of sociology of aging* (pp. 17-33). New York: Springer.
- Marshall, V.W., & Mueller, M.M. (2003). Theoretical roots of the life-course perspective. In W.R. Heinz & V.W. Marshall (Eds.), *Social dynamics of the life course: Transitions, institutions and interrelations* (pp. 3-32). New York, NY: Aldine de Gruyter.
- Martinson, M., & Minkler, M. (2006). Civic engagement and older adults: A critical perspective. *The Gerontologist*, 46, 318-324.
- McKenna, K., Broome, K., & Liddle, J. (2007). What older people do: Time use and exploring the link between role participation and life satisfaction in people aged 65 years and over. *Australian Occupational Therapy Journal*, *54*, 273-284.
- Menec, V.H., Means, R., Keating, N., Parkhurst, G., & Eales, J. (2011). Conceptualizing Age-Friendly Communities. *Canadian Journal of Aging*, *30*, 479-493.
- Morrow, S.L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, *52*, 250-260.
- National Council on Disability. (2004). *Livable communities for adults with disabilities*. Washington, DC: National Council on Disability. Retrieved from http://www.ncd.gov/publications/2004/12022004
- Nayar, S. (2012). Grounded theory: A research methodology for occupational science. *Journal of Occupational Science*, 19, 76-82.
- New York. (2004). *The AdvantAge Initiative: Improving communities for an aging society*. Visiting Nurse Service of New York. Retrieved from http://www.vnsny.org/advantage
- Nilsson, I., Lundgren, A.S., & Liliequist, M. (2011). Occupational well-being among the very old. *Journal of Occupational Science*, 19, 115-126.
- Norris-Baker, C., & Scheidt, R.J. (2005). On community as home: Places that endure in rural Kansas. In G.D. Rowles & H. Chaudury (Eds.), *Home and identity in later life: International perspectives*. New York: Springer Publishing Company.
- North Carolina Aging Services Plan. (2007). *Putting the pieces together*. Retrieved from http://www.ncdhhs.gov/aging/stplan/NC_Aging_Services_Plan_2007.pdf

- North Carolina Department of Health & Human Services. (2010). *State aging conference aims to build a livable, senior-friendly North Carolina*. Retrieved from http://www.ncdhhs.gov/aging/News/2010oct13_state_aging_conference_news_release.pdf
- North Carolina Department of Health & Human Services. (2012). *Aging profile: Durham*. Retrieved from http://www.ncdhhs.gov/aging/cprofile/durham.pdf
- North Carolina Division of Aging and Adult Services. (n.d.). *Aging Services Plan 2011-2015*. Retrieved from http://www.ncdhhs.gov/aging/stplan/NC Aging Services Plan 2011-2015.pdf
- North Carolina Office of State Budget and Management. (2010). *Population estimates and projections*. Retrieved from http://www.osbm.state.nc.us/ncosbm/facts and figures/socioeconomic data/census home.shtm
- Nygren, C., Oswald, F., Iwarsson, S., Fänge, A., Sixsmith, J., Schilling, O., et al. (2007). Relationships between objective and perceived housing in very old age. *The Gerontologist*, 47, 85-95.
- Office of Durham and Regional Affairs. (2012). *Trinity Park neighborhood*. Retrieved from https://community.duke.edu/duke/partners/Partner%20Neighborhoods/Trinity%20Park%20Neighborhood.php
- Oswald, F., Jopp, D., Rott, C. & Wahl, H.W. (2011). Is aging in place a resource for or risk to life satisfaction? *The Gerontologist*, 51, 238-250.
- Oswald, F., Wahl, H.W., Schilling, O., Nygren, C., Fänge, A., Sixsmith, A., et al. (2007). Relationships between housing and health aging in very old age. *The Gerontologist*, 47, 96-107.
- Partners for Livable Communities. (2010). *Livable communities for all ages: When older adults age in place, everyone benefits* [Brochure]. Washington D.C.: Partners for Livable Communities.
- Partners for Livable Communities. (2012). *Mission & history*. Retrieved from http://livable.org/about-us/mission-a-history
- Pavlovskaya, M. (2009). Non-quantitative GIS. In S. Elwood & M. Cope (Eds.), *Qualitative GIS: A mixed methods approach to integrating qualitative research and geographic information systems* (pp. 13-37). London, UK: SAGE.
- Peace, S.M., Holland, C., & Kellaher, L. (2005). The influence of neighborhood and community on well-being and identity in later life: An English perspective. In G.D. Rowles & H. Chaudhury (Eds.), *Home and identity in late life: International perspectives* (pp. 297-315). New York: Springer Publishing Company.

- Phelan, E., Anderson, L., Lacroix, A., & Larson, E. (2004). Older adults' views of successful aging: How do they compare with researchers' definitions? *Journal of the American Geriatrics Society*, 52, 211-216.
- Pivo, G. (2005, March). Creating compact and complete communities: Seven propositions for success. *American Institute of Certified Planners: Practicing Planner. American Planners Association*. Retrieved from http://www.u.arizona.edu/~gpivo/Practicing%20Planner%20Pub.pdf
- Plouffe, L.A., & Kalache, A. (2010). Determining urban features that promote health aging. Journal of Urban Health: Bulletin of the New York Academy of Medicine, 87, 733-739.
- Plouffe, L.A. & Kalache, A. (2011). Making communities age friendly: State and municipal initiatives in Canada and other countries. *Gaceta Sanitaria*, 25(S), 131-137.
- Putnam, R. (2000). *Bowling alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.
- Rantz, M.J., Philips, L., Aud, M., Popejoy, L., Marek, K.D., Hicks, L.L., et al. (2011). Evaluation of aging in place model with home care services and registered nurse care coordination in senior housing. *Nursing Outlook*, *59*, 37-46.
- Rosel, N. (2003). Aging in place: Knowing where you are. *International Journal of Aging and Human Development*, 57, 77-99.
- Rowe, J.W., & Kahn R.L. (1997). Successful aging. The Gerontologist, 37, 433-440.
- Rowles, G.D. (1983a). Between worlds: A relocation dilemma for the Appalachian elderly. *International Journal of Aging and Human Development, 17,* 301-314.
- Rowles, G.D. (1983b). Geographical dimensions of social support in rural Appalachia. In G.D. Rowles & R.J. Otha (Eds.), *Environmental perspectives on growing old* (111-130). New York: Academic Press.
- Rowles, G.D. (1983c). Place and personal identity in old age: Observations from Appalachia. *Journal of Environmental Psychology*, *3*, 299-313.
- Rowles, G.D. (2008). Place in Occupational Science: A life course perspective on the role of environmental context in the quest for meaning. *Journal of Occupational Science*, 15, 127-135.
- Rowles, G. D., & Ravdal, H. (2002). Aging, place, and meaning in the face of changing circumstances. In R. S. Weiss & S. A. Bass (Eds.), *Challenges of the third age:*Meaning and purpose in later life (pp. 81-114). New York: Oxford University Press.
- Sakiyama, M, Josephsson, S., & Asaba, E. (2010). What is participation? A story of mental illness, metaphor, and everyday occupation. *Journal of Occupational Science*, *17*, 224-230.

- Seamon, D. (2002). Physical comminglings: Body, habit and space transformed into place. *Occupational Therapy Journal of Research*, 22(supp.), 42-51.
- Settersten, R.A. (2006). Aging and the life course. In R.H. Binstock & L.K. George (Eds), *Handbook of aging and the social sciences* (6th ed., pp. 3-19). Amsterdam: Elselvier.
- Shaw, B. A., Krause, N., Liang, J., & Bennett, J. (2007). Tracking changes in social relations throughout late life. *The Journals of Gerontology B: Psychological and Social Sciences*, 62, 90-99.
- Schultz, R., & Heckhausen, J. (1996). A life span model of successful aging. *American Psychologist*, 51, 702-714.
- Skelly, A.H., Arcury, T.A., Gesler, W.M., Cravey, A.J., Dougherty, M.C., Washburn, S.A., et al. (2002). Sociospatial knowledge networks: Appraising community as place. *Research in Nursing and Health*, 25, 159-170.
- Smith, J.S., & Cartlidge, M.R. (2011). Place attachment among retirees in Greensburg, Kansas. *The Geographical Review*, 101, 536-555.
- Stake, R. D. (2005). Qualitative case studies. In N. H. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443-466). Thousand Oaks, CA: SAGE.
- Strauss, A. (1991). Creating sociological awareness: Collective images and symbolic representations. New Brunswick, NJ: Transaction Publishers.
- Sullivan, S. (2001). *Living across and through skins: Transactional bodies, pragmatism, and feminism.* Bloomington, IN: Indiana University Press.
- Szanton, S.L., Thorpe, R.J., Boyd, C., Tanner, E.K., Leff, B., Agree, E., et al. (2011). Community aging in place, advancing better living for elders: A bio-behavioral-environmental intervention to improve function and health-related quality of life in disabled older adults. *Journal of the American Geriatrics Society*. doi: 10.1111/j.1532-5415.2011.03698.x
- Therrien, F., & Desrosiers, J. (2010). Participation of metropolitan, urban and rural community-dwelling older adults. *Archives of Gerontology and Geriatrics*, 51(3). doi: 10.1016/j.archger.2009.11.017
- Townley, G., Kloos, B., & Wright, P.A. (2009). Understanding the experience of place: Expanding methods to conceptualize and measure community integration of persons with serious mental illness. *Health and Place*, *15*, 520-531.
- Tracy, S. J. (2010). Qualitative quality: Eight 'big tent' criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837-851.
- Triangle J Area Agency on Aging. (2010). *Programs & services*. Retrieved from http://www.tjaaa.org/programs-services.aspx

- Triangle J Council of Governments. (2012). *Area Plan on Aging*. Retrieved from ftp://ftp.tjcog.org/pub/aging/tjaaa/J%20Area%20Plan%20on%20Aging%202012%20">ftp://ftp.tjcog.org/pub/aging/tjaaa/J%20Area%20Plan%20on%20Aging%202012%20">ftp://ftp.tjcog.org/pub/aging/tjaaa/J%20Area%20Plan%20on%20Aging%202012%20">ftp://ftp.tjcog.org/pub/aging/tjaaa/J%20Area%20Plan%20on%20Aging%202012%20">ftp://ftp.tjcog.org/pub/aging/tjaaa/J%20Area%20Plan%20on%20Aging%202012%20"
- US Census Bureau (2011). *The Older Population in the United States*. Current Population Survey, Annual Social and Economic Supplement. Retrieved from http://www.census.gov/population/age/data/2011.html
- US Census Bureau. (2012a). 2012 National population projections: Summary tables.

 Retrieved from
 http://www.census.gov/population/projections/data/national/2012/summarytables.htm
 1
- US Census Bureau. (2012b). *State & county quick facts: Durham City, North Carolina*. Retrieved from http://quickfacts.census.gov/qfd/states/37/3719000.html
- Vernon, S. (2012, December 12). How raising age of Medicare would affect seniors. *Money Watch*. Retrieved from http://www.cbsnews.com/8301-505146 162-57559633/how-raising-age-for-medicare-would-affect-seniors/
- Vessby, K., & Kjellberg, A. (2010). Participation in occupational therapy research: A literature review. *British Journal of Occupational Therapy*, 73, 319-326.
- Wahl, H.W., & Weisman, G.D. (2003). Environmental Gerontology at the beginning of the new millennium: Reflections on its historical, empirical, and theoretical development. *The Gerontologist*, 43, 616-627.
- Wahl, H.W., Fänge, A., Oswald, F., Gitlin, L.N., & Iwarsson, S. (2009). The home environment and disability-related outcomes in aging individuals: What is the empirical evidence? *The Gerontologist*, 49, 355-367.
- Walker, R.B., & Hiller, J.E. (2007). Places and health: A qualitative study to explore how older women living alone perceive the social and physical dimensions of their neighbourhoods. *Social Science & Medicine*, 65, 1154-1165.
- Westerhof, G.J. (2010). During my life so much has changed that it looks like a new world to me": A narrative perspective on migrating in time. *Journal of Aging Studies*, 24, 12-19.
- Whiteford, G. (2004). When people cannot participate: Occupational deprivation. In C.H. Christiansen & E.A. Townsend (Eds.), *Introduction to occupation: The art and science of living* (pp. 221-242). New York: Prentice Hall.
- Wilcock, A. (2006). An occupational perspective of health (2nd ed.). Thorofare, NJ: SLACK.
- Wiles, J., Allen, R.E., Palmer, A.J., Hayman, K.J., Keeling, S., & Kerse, N. (2009). Older people and their social spaces: A study of well-being and attachment to place in Aotearoa New Zealand. *Social Science and Medicine*, 68, 664-671.
- Wise, J. (2002). Durham: A Bull City story. Charleston, SC: Arcadia Publishing.

- World Health Organization. (2001). *International Classification of Functioning, Disability and Health, ICF*. Geneva: WHO.
- World Health Organization. (2002). Active ageing: A policy framework. Geneva: WHO.
- World Health Organization. (2007). *Global Age-Friendly Cities: A guide*. Retrieved from http://whqlibdoc.who.int/publications/2007/9789241547307_eng.pdf
- World Health Organization. (2013). *Health topics: Ageing*. Retrieved from http://www.who.int/topics/ageing/en/
- Yang, H., & Sanford, J.A. (2012). Home and community environmental features, activity performance, and community participation among older adults with functional limitations. *Journal of Aging Research*. doi: 10.1155/2012/625758