Aging in Place: Context Matters

Designing and modifying the physical home is only part of the answer to successful aging in place. Equally important is the larger context of community and social relationships that give life meaning and purpose.

BY PATRICK RODEN, PHD

Many communities around the country are at a crossroads. Driven in part by the graying of the Baby Boom generation, the demographic transition we are in is like no other in human history. According to the U.S. Census Bureau (2011), adults 65 and older are now the nation's fastest-growing segment of the population. Between 2000 and 2010, this cohort grew at a rate of 15.1%, compared to 9.7% for the general population (U.S. Census, 2011). By 2060, the total number of individuals over 65 is projected to more than double, from 46 million today to over 98 million (PRB, 2016). Living longer is one of our greatest human achievements. Added years bring new opportunities, but also great challenges. The changes brought on by such a major shift in the age structure of our population will have ramifications in every aspect of our society. Key among them is where our older adults will live out their lives. This article explores in broad strokes the context of aging in place today, and the potential for aging in community tomorrow.

Home Is Where My Parents Still Live: Aging in Place Today

Children of the post-World War II generation are turning 65 at the rate of approximately 10,000 per day (Colby & Ortman, 2014). As has been true for many of their parents, most boomers continue to live in the suburbs, where they have spent most of their lives, first as children and later as parents raising their own families (Dunham-Jones and Williamson, 2012).

In 2014, about 53% of older adults were living in auto-centric suburbs with another 20% living in rural counties (Golant, 2017). Surprisingly, almost 40% of suburban residents are adults ages 45 and older (Dunham-Jones and Williamson, 2012). Most residents live in single-family homes, where they have lived for 20 or more years, often in the same house where they raised their children (ibid). The overwhelming majority—nearly 90%—want to stay in their homes, even if at some point they need long-term care assistance (Farber, et al., 2011).

The very qualities that draw Americans to life in suburbia—spacious homes and yards and a "get-away" location from metropolitan hassles—often become the features that present major challenges for aging in place. Approximately 38% of the housing stock in the U.S. is greater than 45 years old (Zhao, 2016). Keeping up with the maintenance, yard work, and care for a typical mid- to late-century 3-bedroom home with a good-sized yard often becomes a physical, financial, and even mental drain for residents as they grow older.

CHRONIC HEALTH ISSUES
Chronic issues such as arthritis, heart disease, and respiratory disease often become a major impediment in later life that often jeopardizes an older adult's ability to remain in their home without significant assistance. About 80% of adults 65 and older have at least one chronic condition, and 77% have at least two or more (National Council on Aging [NCOA], n.d.) The greater the number of chronic illnesses, the greater the risks for functional limitations that can lead to hospitalizations and institutional long-term care. An estimated 70% of adults 65 and older will eventually have functional limitations that require some assistance with activities of daily living (Bezaitis, 2009).

UNIVERSAL DESIGN FEATURES
Only 1% of U.S. housing has all five "universal-design" features recommended for aging in place (Baczynski, 2012). These include no-step entry, single-floor living, extra-wide doorways and halls, accessible controls/switches, and lever-style door/faucet handles.

Incorporating these types of home modifications, as well as assistive technology such as light sensors, can create a safer, more accessible living space that better supports an older person with failing eyesight or arthritic hands. Equally important are proactive home improvements for aging in place that can diminish the risks for adverse events such as falls—the leading cause of injury deaths and the most common cause of injuries and hospital admissions for trauma among adults ages 65 or older (CDC, 2007).

ARCHITECTURE OF ISOLATION
The suburbs have been termed "the architecture of isolation" by age-friendly city planners for the great spaces between houses, cookie-cutter subdivisions, poor road design, and the lack of a central downtown center with informal "third places"—the coffee shops, bars, public parks, and other places where people informally meet and socialize. Auto-dependence and youth-centric built environments are major challenges for a population aging in place, leading to physical and social isolation and an increased risk for loneliness.

Accessibility Is Only Part of the Equation
Much of the conversation surrounding the concept of aging in place by home-design and remodeling professionals focuses on the built environment, for good reason, as most obstacles to staying in-home are structural. Adding a handrail on the stairs, installing a raised toilet, and remodeling a bathroom to accommodate a wheelchair are physical changes that can lead to greater independence and autonomy. As important

"CHOICE ARCHITECTURE" APPLIED TO AGING IN PLACE PROFESSIONALS

"Choice architecture" (Thaler & Sunstein, 2008) refers to the practice of influencing choice by changing the way options are presented to people. This concept is highly applicable for professionals in the field of accessible home design and aging-in-place remodeling.

The authors draw many parallels between choice architecture and the more traditional forms of architecture (Thaler & Sunstein, 2008). One crucial parallel is that there is no such thing as "neutral" design. For example, the architect's selection of restroom placement in a business suite will have subtle influences on how people interact. Every trip to the restroom creates an opportunity to engage co-workers.

A choice architect has the responsibility for organizing the context in which people make decisions. For example, a doctor describing various treatment options to a patient, or a Certified Aging in Place Specialist (CAPS) remodeler describing various universal design options to a homeowner, are both choice architects.

Number of Choices Presented

One of the essential decisions facing any choice architect is the number of alternatives to present to the decision maker. Should the CAPS client (decision maker) be presented with one option at a time or several? Too few alternatives and choice architects run the risk of limiting options. Too many alternatives and choice architects run the risk of choice overload.

One recommendation that balances these considerations is that four or five non-dominating options may represent reasonable initial values for choice architects, given these tradeoffs. One could also proceed by starting with this limited choice set, but also provide the decision maker with the option of considering more options if desired (Johnson et al., 2012).

Insights Applied

For the CAPS remodeler, giving fewer choices, at first, with the option to consider more choices later is key. This helps to build trust with the decision maker. For example, offering the three highest-impact design elements of visitability (non-barrier entrance, 36- to 42-inch doorways, bathroom on the main floor), while explaining the autonomy merits of each element, is a strategic way to start with a new decision maker on their way to greater accessibility and aging in place.

as these physical changes are, performed outside the context of social support and meaningful relationships, aging in place is unlikely to be successful.

SUSTAINABLE QUALITY OF LIFE

Architect and developer of sustainable communities, Meda Ling, offers great insight about the economic and social aspects of true sustainability and the humane quality of life factor when designing for an aging population. According to Ling (M. Ling, personal communication, October 28, 2017):

> Of even greater importance to this line of thought: no matter how well an individual home may accommodate and adapt to the changing physical needs of a homeowner over time, if it does not encourage social interaction or a sense of belonging to a supportive community, whether intentional or serendipitous, aging in place is unlikely to be an option. One must always consider the context of a home within the greater environs of a neighborhood or community. Are the homes sited in such a way that people are encouraged to interact and know their neighbors? How does location of a home or development relate to the greater community and access to transit options, shopping, health care, entertainment, and passive and active recreation such that it encourages a healthy lifestyle? How does the home and the neighborhood relate to the environment: does it make sense in terms of land use and water/air quality objectives of sustainability? I have strong reservations about the concept of aging in place as a sustainable model for a humane quality of life. From the perspective of a site architect, I consistently find myself reminding my professional colleagues to step back and see the forest for the "kitchen cabinet" selection. I ask that we consider quality of life as the guiding principle of how we design, how we use the land, and how we build. Rather than designing/building for aging in place, please consider designing/building for living in community.

Ling's statement is a systems-thinking approach to designing communities that are sustainable and age-friendly. This brings up a paradox of aging in place: to be more independent one will need to be more interdependent. Planning for aging in place must occur within the context of a larger system of community. It must also meet the goal of increased quality of life for all, both present and future.

ARCHITECTURE OF CONNECTION

A new vision for planning and design can transform the "architecture of isolation" into the "architecture of connection." Communities planned for the spectrum of age and physical abilities are more inclusive. They increase interdependence and can ultimately decrease isolation and the costs of aging in place. One key to this approach is a more inclusive concept of aging as a pattern of change throughout the entire life span. When designing for children, older adults, and those with disabilities (temporary or permanent) we must not consider these as separate groups of users, but rather, as a spectrum of human-environment interaction— "inclusive design" (The Norwegian Centre for Design and Architecture, n.d.).

Failure to consider the contextual elements of aging in place and narrowly focusing on remodeling as the solution is flirting with disaster. Building with beautiful universal design in isolation can be inspiring in the short run, but shortsighted in the long run. Design and planning, guided by the principles of inter-dependence and living in community, are essential to our collective future direction.

Innovations that Support Aging at Home and Staying Connected to the Community

There are many creative housing solutions already in practice and even more on the horizon. Cohousing, older adult-student home sharing, older adult-planned intentional communities, and the potential of accessible 3D printed homes are just a few examples that hold great promise to deliver affordable and non-isolating housing solutions. However, how do we better integrate existing housing in the hundreds of thousands of American suburbs with the larger community?

Fortunately, with the rise of the New Urbanism and Transit-Oriented Development movements occurring in urban areas, land-use planners are taking a second look at how to reinvent and retrofit the infrastructure in outlying suburban areas. Decaying strip-malls/shopping centers, abandoned office parks, and vacant big box stores offer large tracts of relatively cheap land that can be converted into places that are more walkable, transit-oriented, and people-friendly. The most prevalent and impressive transformations have occurred in former shopping mall sites. For example, in Lakewood, Colorado, the former Villa Italia Mall from the 1960s, one of the biggest enclosed malls in the nation, fell into decay in the 1990s and closed its doors. In the early 2000s, the 104-acre location become the site for a busy mixed-use downtown district, covering 22 blocks with restaurants, specialty stores, salons, public squares with fountains and seating areas, and a variety of apartments, townhomes, and housing mixed throughout. Today in Denver, 8 out of 13 of the region's malls have undergone or are proposing to undergo similar retrofit transformations (Goodyear, n.d.).

New transportation choices, spurred on by advances in technology, are also being re-tooled or introduced for the 65 and older marketplace. Uber (Uber + AARP), Lyft (Lyft Hero), and the advent of self-driving cars, can all reduce the isolation of suburban and rural living. These options also lead to safer streets by giving older adults the option to give up the car keys sooner without sacrificing their mobility.

Technology is also increasing access to health care. New computer and smart phone Apps have opened the doctor's office to web-based video conferencing for non-medical emergency visits. This prevents unnecessary clinic visits, reduces costs, and decreases institution-acquired infections. Medications and medical devices are increasingly available for home delivery, and the promise of drone delivery technology will greatly decrease delivery time. In the future, medications and meals may be 3D printable from home.

New workplace policies afford informal caregiving relatives greater flexibility to care for their aging loved ones. Flex time, compressed work weeks, family leave options, and managers trained in family-friendly policies contribute to the aging-friendly workplace. Such innovative practices increase connection to loved ones and decrease care costs by reducing the need for paid caregivers.

Finally, better education, along with community planning, leads to better inclusion of older adults in our communities. Diversity education curriculum in schools and workplaces is beginning to include understanding of and sensitivity to the needs of older adults. Programs that engage older persons with students, such as intergenerational day care programs and community gardens, help to foster a more inclusive society.

Aging in place is frequently pigeon-holed into meaning growing old behind four walls. The tendency to treat "place" simply as a container for older people is limiting—a homogenous definition that fails to recognize the multifaceted nature of older people and the dynamic places they live. As professionals, we must look beyond the context and accessibility of the homeplace, to the larger context and accessibility of community. It is through recognizing and nurturing this interdependent connection between home and community that we can best assist older adults to have meaning, purpose, and a better quality of life. •CSA

Patrick Roden, PhD, spent his early years crawling around the floors of a nursing home where his grandmother was head nurse. He feels this experience imprinted him and influenced his life's work. Patrick's nursing career spans over two decades in a variety of clinical and non-clinical settings. In 2010, he was awarded The Lloydena Grimes Award for Excellence in Nursing from Linfield College School of Nursing. He is a contributing blogger for boomer-livingPlus.com and The Mature Market Experts and is the creative force behind aginginplace.com. Contact him at aginginplace@comcast.net.

▦ REFERENCES

Baczynski, B. (2015, July 06). Why universal design makes beautiful sense when renovating. Retrieved November 10, 2017, from http://www.nextavenue.org/why-universal-design-makes-beautiful-sense-when-renovating/

Bergal, J. (2016). Tax credits for ramps, grab bars to help seniors stay at home. Stateline: Research & Analysis, Pew Charitable Trusts. Retrieved April 22, 2018, from http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/08/24/tax-credits-for-ramps-grab-bars-to-help-seniors-stay-at-home

Bezaitis, A. (2009). The future of long-term care. Aging Well. Vol. 2 No. 5 P. 14. Retrieved April 20, 2018, from, http://www.todaysgeriatricmedicine.com/archive/110909p14.shtml

CDC, (2007). The state of aging and health in America 2007. Centers for Disease Control and Prevention and The Merck Company Foundation. Whitehouse Station, NJ: The Merck Company Foundation. Retrieved April 22, 2018, from https://www.cdc.gov/aging/pdf/saha_2007.pdf

Colby, S. L., & Ortman, J. M. (2014, May). The baby boom cohort in the United States: 2012 to 2060. Retrieved November 14, 2017, from https://www.census.gov/prod/2014pubs/p25-1141.pdf.

Dunham-Jones, E. and Williamson, J. (2012). Retrofitting suburbs. In Cisneros, H., Dyer-Chamberlain, M., & Hickie, J. (Eds.), *Independent for life: Homes and neighborhoods for an aging America*. (pp. 179-196). Austin: University of Texas Press.

Farber, N., JD, Shinkle, D., Lynott, J., AICP, Fox-Grage, W., & Harrell, R., PhD. (2011). Aging in place: A state survey of livability policies and practices. In Brief, 190, 1-2. Retrieved November 10, 2017, from https://www.aarp.org/content/dam/aarp/livable-communities/learn/research/aging-in-place-a-state-survey-of-livability-policies-and-practices-aarp.pdf.

Golant, S. M., Ph.D. (2017, August 10). Self-reliant older baby boomers are now better connected to goods, services, and care [Web log post]. Retrieved November 14, 2017, from http://www.asaging.org/blog/self-reliant-older-baby-boomers-are-now-better-connected-goods-services-and-care.

Goodyear, S. (n.d.). Editor's design choice: Belmar in Lakewood, CO. Build a Better Burb. Retrieved April 22, 2018, from http://buildabetterburb.org/belmar-in-lakewood-co/

Johnson, E. J., Shu, S. B., Dellaert, B. G., Fox, C., Goldstein, D. G., Häubl, G., . . . Weber, E. U. (2012, May 25). Beyond nudges: Tools of a choice architecture. Retrieved November 10, 2017, from http://www.dangoldstein.com/papers/Johnson_etal_beyond_nudges_tools_ML2012.pdf.

Ling, Meda. (2017, October 28). Personal interview with Meda Ling.

PRB. (2016, January 13). Fact sheet: Aging in the United States. Retrieved April 22, 2018, from https://www.prb.org/aging-unitedstates-fact-sheet/

Ruiz, S., Snyder, L. P., Rotondo, C., Cross-Barnet, C., Colligan, E. M., & Giuriceo, K. (2017). Innovative home visit models associated with reductions in costs, hospitalizations, and emergency department use. Health Affairs,36(3), 425-432. Retrieved April 22, 2018, from doi:10.1377/hlthaff.2016.1305

The Norwegian Centre for Design and Architecture. (n.d.). Inclusive Design - a people centered strategy for innovation. Retrieved November 10, 2017, from http://www.inclusivedesign.no/practical-tools/definitions-article56-127.html.

Thaler, R. H., & Sunstein, C. (2008). Nudge: Improving decisions about health, wealth, and happiness. New Haven, CT: Yale University Press: Retrieved October 26, 2017, from https://www.behavioraleconomics.com/mini-encyclopedia-of-be/choice-architecture/.

U.S. Census Bureau. (2011). 2010 census shows 65 and older population growing faster than total U.S. population. Retrieved November 14, 2017, from https://www.census.gov/newsroom/releases/archives/2010_census/cb11-cn192.html.

Visitability, (2018). Visitability: Basic access to homes. National Council on Independent Living. Retrieved April 22, 2018, from https://visitability.org/

Zhao, N. (2016, December 15). The aging housing stock. Retrieved November 10, 2017, from http://eyeonhousing.org/2017/01/the-aging-housing-stock-3/