

The meaning of old age

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Even at the beginning of recorded history, a handful of people survived to old age. Many of those who did served important functions in societies. Elders featured in religious texts, mythology and lore have been portrayed as prophets, saints, tribal leaders, and healers, providing cultural continuity, wisdom and concern for the common good. Thus, there is a twist of irony in the fear and anxiety that characterizes contemporary national and international discussions about anticipated coming hardships imposed by aging societies. But a preparatory state aimed solely at bracing for a crisis presents more than irony. It ensures that the crisis will arrive. If we are to realize the potential opportunities older populations offer, we must appreciate how aging individuals construct meaning in their lives, the social context that surrounds specific cohorts' collective understanding of aging and actively begin to build infrastructures, norms and policies that exploit the potential contributions older people can make to societies.¹

It is not the case that life has suddenly been extended beyond a point where people can live healthy, productive lives. Indeed, there is no reason to believe that human life *span*—the length of time the species *can* live - has changed much, if at all, throughout evolutionary history. Until the 20th century, on average, lives were short. Fewer than half of those born reached 50 years of age. What has changed is the sheer number and proportion of each birth cohort that now routinely lives into their 80s, 90s and 100s. In less developed regions of the world, life expectancies remain far shorter; however, these societies, too, are beginning to live longer and age rapidly - and within a decade will be on demographic trajectories that will reshape the distribution of age in every country in the world. The profound and global phenomenon driven by aging will transform all aspects of life.

Will these changes be for better or for worse? Will such demographic shifts inevitably burden economies, or will the gift of time we received from our ancestors in the 20th century present us with unprecedented opportunities? Will older people consume resources that would otherwise go to children? Or will older people become the resource children and societies in general so badly need? We maintain that if we play our cards right, elongated lives can allow us to redesign lives in ways that improve quality at all ages and across generations. The gift of time we received from our ancestors in the 20th century presents us with unprecedented opportunities. Just as sure, the opportunities will be missed if we do not begin to prepare for them. The real challenge, as we see it, is only partly about finding ways to care for dependent elderly. Aging societies will succeed or fail largely as a function of the new meanings we ascribe to both healthy and unhealthy longer lives.

Population aging presents a *cultural* problem.² The dramatic increase in the numbers of people who are making it to their 80s, 90s and beyond is generating a profound mismatch between the cultural norms that guide us through life and the length of our lives.³ Humans are creatures of culture. We look to culture to tell us when to get an education, marry, start families, work and retire. Because life expectancy has increased so quickly, we are still immersed in cultures designed for lives half as long as the ones we are living. The life course itself is a cultural construction. Two hundred years ago, human development did not include a distinct stage of life called, "adolescence." There was no more significance afforded to 65 than 55 or 45 years of age. We must ask the question: How can societies and individuals profit from old age?

To approach the topic of population aging with rose colored glasses, however, overlooking the real vulnerabilities associated with advanced ages, would be foolhardy. Societies today are enormously ill-prepared for populations in which there are more people over 60 than under 15. Not only are cultures youth-oriented in the popular sense of favoring the young, but the physical and social

environments and institutions were quite literally built by and for young populations. The tacit users of staircases, automobiles, telephones, furniture, parks, highways, train stations, airports and housing are young people. Workplaces and working lives – and even most hospitals - are tailored to those with considerable endurance. Medical science, a key part of culture, has focused on cures for acute diseases far more than prevention of the chronic diseases that unfold over years and decades. Expectations of workers include speed, agility, and facility with new learning. Further, many societal roles were designed when life expectancy was 47, and without knowledge of the unique capabilities that older adults could bring to the workplace and society. Though ageism is often invoked as the reason of the focus on youth, and though it may play a role, we live in a world that only recently included large numbers of older adults.

Worlds built for the young are often difficult for the old to navigate. Normal aging brings with it myriad changes, many of which are unwelcome. Slowing is a key hallmark of aging. The effects are ubiquitous. People move more slowly, metabolize toxins over longer time courses. Feeling stiff and sore when you wake in the mornings, recovering from injuries and illness more slowly, straining to hear a conversation, reflect “typical” age-related changes. Difficulty retrieving the name of a person you know well, forgetting why you walked downstairs as you find yourself at the bottom of a staircase, drifting off as you read the morning paper all represent real consequences of age-related changes in biological systems. Toward the end of life, disease and disability are prototypical. Thus, older societies have greater morbidity and more functional limitations than younger populations. There is a diminution of physical reserves, culminating for many, at the end of life, in the onset of frailty, a medical syndrome of decreased reserves and resilience^{4,5}, and – for some – disability and loss of independence. Even those who escape frailty experience diminished resilience and reserves as they get older.

The vulnerabilities of aging must not be overlooked when planning for aging societies.

Importantly, however, just as sure as there is loss, there are gains that come with age – and gains have

been largely overlooked. Paul and Margaret Baltes⁶, professors of life-span development, wrote

compellingly about the need to recognize the gains and losses inherent at all developmental stages.

Young people, for example, may be fast and agile but they lack experience and knowledge. Their futures

demand that they focus on their own personal advancement more than the broader community. The

impressive physical resilience in the young is not matched by emotional resilience, which comes much

later in life. We do not populate the state and federal courts with 20 year olds despite their cognitive

agility.

In fact, though historically most of the literature on cognitive aging has focused on deficiencies,

there is a growing literature pointing to unique strengths of older adults. As noted above, normal aging

is associated with slowed cognitive processing, memory impairments and difficulty concentrating.

Barring dementia, however, knowledge continues to grow. Especially in areas of expertise, practice

compensates well for declines in processing efficiency.⁷ Experts –whether musicians, chess players or

scientists – often reach their peaks in advanced years.⁸ Even in the general population, vocabularies are

larger and knowledge about the world is greater in the old as compared to the young. Recent findings

suggest that older people are more likely to change attitudes in light of new information⁹ and they

appear better able to take the perspective of younger people than younger people are able to adopt

perspectives of the old.¹⁰ Presented with cultural and economic disputes over resources, older people

generate more even-handed and acceptable solutions than their younger counterparts.¹¹ Indeed there

is intriguing evidence that there may be potential upsides even to deficits, like distractibility: Lynn

Hasher and her colleagues recently demonstrated that unsuppressed extraneous information in one

situation often becomes relevant and is utilized by older adults when solving problems that later arise.

In elegant experiments, she shows that older people are advantaged by access to extraneous

information downstream; younger people are not.¹² In everyday life, this can be associated with creative problem solving that emerges at older ages. Especially in emotionally charged situations, older people tend to generate more effective solutions.¹³ Emotional experience and emotional balance improve with age as well. Older people have lower rates of clinical depression, anxiety, and substance abuse.¹⁴ They regulate their emotions better, avoiding extreme highs and extreme lows.¹⁵ In other words, while aging is associated with declines in some aspects of cognitive processing, age-related gains also come with age. Greater understanding of the world coupled with emotional balance and improved perspective is, for many, the definition of wisdom.¹⁶

Importantly, aging trajectories also vary wildly across individuals. Scientists have documented considerable variability in older people in physical, social, emotional and cognitive capacity. This observation is important for at least two reasons. For one, variability speaks against inevitability. It suggests that aging per se is not the culprit when negative outcomes arise. Second, variability is far from a random process. It is important to emphasize that, in developed countries such as the US, only a fraction of adults 65 and older are frail (7-10% of those in community), disabled (20 percent or less with difficulty or dependency in managing households and/or basic self care, although half may have some difficulty walking, or in need of long term care (5-10%).¹⁷ Individuals who are educated and affluent have less functional disability and live longer than those who are disadvantaged in society. Not surprisingly, individuals who exercise regularly are more physically fit than those who do not – into the oldest ages, and they are also show less cognitive decline. Although age is a powerful predictor of length of life, in adulthood, education predicts even better.¹⁸

From a societal perspective, variability means that age-based policies, programs, beliefs, and communities are inherently problematic. People in their late 60s who are extremely sick, possibly facing the end of their lives, have more in common with 80 year olds in the same physical state than healthy

counterparts at either age. Discussions about older workers often draw on literatures about cognitive decline in the very old when they should be comparing 55 to 65 year olds with 65 to 75 year olds (where differences are far smaller and sometimes non-existent). Frailty is far more frequent among the very old than the young old. Again, social class and its correlates places people on very different aging trajectories. Thus, forward thinking societies should plan for older populations that are heterogeneous and develop plans to help those who need it while tapping the resources of those who can contribute. Indubitably, the category of "old age" will be parsed into multiple stages; just as adolescence was carved out as a special transitional stage into adulthood.

Because of the magnitude of the demographic shifts underway, aging will inevitably have profound implications for entire societies. Societies top heavy with frail, dependent, and disengaged people with relatively few younger people to support them will endure many hardships. We maintain, however, that societies top-heavy with experienced citizens will offer a resource never before available to our ancestors: large numbers of people with considerable knowledge, emotional evenness, practical talents, creative problem solving ability, commitment to future generations, and the motivation to use their abilities can improve societies in ways never before possible.

The meaning of age will continue to be a fluid concept and will be constructed through complex and iterative processes for decades, if not centuries, to come. As the odds of reaching advanced old age increase around the globe, people will gradually come extend their individual time horizons and engage in more philosophical thinking about the meaning of lives that last far longer than ever imagined by our ancestors.¹⁹ In Europe and the United States, boomers, because of their numbers, will transform the culture of aging. Because boomers came of age during an historical era when considerable progress around gender and race equality advanced, they tend to view themselves as rebellious and "youthful" despite their advancing age. The birth cohorts comprising the boomers identify more

strongly with younger generations than older ones and blur long-standing lines that mark age.²⁰ Future generations will continue to write and rewrite the meaning and purpose of advanced stages of life. Societies that find ways to collectively advance new meanings of life that utilize all of its citizens will prosper far more than ones in which social structures constrain contributions. To the extent that societies actively build cultural infrastructures that take advantage of new possibilities will realize many opportunities and benefits. To fail to do so would represent a tragic squandering of this gift of life. As we stand at the beginning of the 21st century, there is a tension between advocates for the elderly and others with concerns about the inability to provide seemingly limitless support. When more than half of the federal budget is allocated to care for older people it makes sense to worry about other societal needs.

We argue for a three-pronged approach. First, it is essential that we think programmatically about investments throughout life in health, education and social integration that pay off at all ages. Just as early investments in health and early education paid off with huge reductions in premature death and early morbidity a century ago, we must now conceive of lifelong investments that will produce healthy and engaged populations at all ages, but especially among all future cohorts of older persons.. Second, we must improve the care and autonomy of disabled older adults; in part for their own quality of life and, in part, because only at its extremes do disabilities render people completely dependent. To the extent that those who have functional disabilities still have access to opportunities to contribute, we believe that there is reason to predict that contributions will continue. Last, but arguably most importantly, we must build infrastructures that tap the real talents and potential contributions that healthy older people can make to societies, rid mixed messages about working and replace them with calls for all able citizens to contribute to the welfare of societies.

Population aging will transform the global community. The question is whether such changes will better societies or extract net tolls. Either is possible. If we continue to view the life course as our ancestors did and simply tack added years on at the end, we face sure calamity. If instead we begin to modify the life course and build infrastructures that support long life, societies can begin to utilize the strengths of older people and support the real vulnerabilities advanced age brings.

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