STUDIES IN HUMANISM AND ATHEISM

Meaning and Aging

Humanist Perspectives

Edited by

Joachim Duyndam
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palgrave
macmillan

Meaningful Aging via Lifelong Growth and Development

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Nor are we to give our attention solely to the body—much greater care is due to the mind and soul, for they, too, like lamps grow dim with time,unless we keep them well-supplied with oil.
—Cicero (106–43 B.C.)

Introduction

From the beginning of my career, I advocated for an approach to positive aging concerned with making the most of personal talents and capacities (self-realization), even in the face of challenge and adversity. I revisit those ideals in this chapter via consideration of three distinct topics. First, I examine formulations of successful aging prominent in the early years of social gerontology and contrast them with recent conceptions that give

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J. Duyndam, A. Machielse (eds.), *Meaning and Aging*, Studies in Humanism and Atheism,
https://doi.org/10.1007/978-3-031-55806-1_2

greater emphasis to healthy physical aging. Both old and new conceptions ignore aspects of meaningful aging evident in developmental, existential, and humanistic approaches. Second, responding to this neglect, I distill my program of research over the past three decades and advocate for a multidisciplinary, integrative approach to aging well. The central message is that it is inherently limiting to formulate positive aging within the confines of any single disciplinary perspective, be it psychological, social, biomedical, or humanistic. This observation is a call to transcend insularity in how we think about what it means to grow old in rich and fulfilling ways that are mindful of the losses and physical challenges of aging. In the third section, I offer reflections about possibly core ingredients for nurturing meaningful, growth-oriented aging. These core ingredients likely ensue from commitments to continued learning as well as from encounters with the arts and humanities. These domains of human experience are missing from present and past research on successful aging and thus represent promising directions for future research and practice.

Successful Aging: Then and Now

Social Gerontology in the 1960s–1970s

Trained as a life-span developmental psychologist, I began my career enamored of the idea of continued personal growth as a sine qua none of the well-lived life, not just in old age but in preceding decades as well. To distill the core features of this view, I advocated for a *developmental approach to successful aging* (Ryff, 1982). Reigning formulations at the time, such as the Kansas City Studies of Adult Life, gave prominence to life satisfaction as a key indicator of successful aging (Neugarten et al., 1961). Others emphasized the importance of a stable social system and a balanced exchange between the individual and the social system (Williams & Wirths, 1965). Extensive gerontological research grew out of these early formulations, with life satisfaction emerging as one of the most widely studied variables in the field of aging. Along the way, the conception of life satisfaction was elaborated to include happiness, adjustment, morale, health, and the balance between aspirations and achievements (Cutler, 1979; George, 1979; Palmore, 1979). These ideas were accompanied by a multiplicity of measures and empirical findings over 30 years, as distilled by Larson (1978).

My early-career responses to this work at the time were twofold. First, I observed that all of the proposed definitions of successful aging were lacking in theoretical guidance. That is, no *a priori justification* was offered for any proposed indicator of successful aging. Instead, there was a focus on exploratory empirical findings. Second, most proposed conceptions were *not fundamentally about aging* but reflected aspects of optimal functioning that could characterize successful living at any age. Thus, I called for a greater focus on the unique challenges of growing old successfully. These might include attending to the instrumental limitations of aging and related needs to redefine one's physical and social living space and possibly substitute alternative sources of life satisfaction and self-evaluation.

More importantly, I saw the need for a theory-guided developmental perspective. This meant searching for the higher, more differentiated growth processes that occur with aging rather than examining nondevelopmental factors (e.g., life satisfaction) that could constitute subjective well-being in any period. To articulate the nature of these growth processes, I revisited the ego development model formulated by Erikson (1959), with its adult tasks of intimacy, generativity, and integrity, as well as Bühler's (1935; Bühler & Massarik, 1968) formulation of basic life tendencies that work toward the fulfillment of life. Neugarten's (1973) writings on the "executive processes" of personality in midlife and the "turning inward" (interiority) in later life were also considered. Together, these writings underscored no single form of successful development in middle or old age but rather a multiplicity of characteristics as possible definitions of optimal adult development. This awareness subsequently led to still other conceptual formulations of human fulfillment evident in clinical, existential, and humanistic psychology. All such inquiry culminated in the model of psychological well-being (Ryff, 1989) that became the centerpiece of my career contributions. I return to that formulation in the second section, but, here, I underscore what early views of successful aging in social gerontology (the 1960s–1970s) left out—namely, the unique challenges and opportunities of middle and later adulthood. To move in that direction, I advocated strongly for a developmental approach.

Rowe and Kahn (1998) and Thereafter

Rowe and Kahn's (1998) book on *Successful Aging* focused on three key elements: the absence of physical illness or disability, the presence of high

levels of cognitive function and physical functioning, and active engagement with life. Little empirical research accompanied the formulation, although a study of Canadians (Weir et al., 2010) showed that only one of the three criteria was empirically viable. That is, the majority of older Canadians maintained connections with their community (active life engagement), but with increasing age, many experienced disease-related disabilities and impaired physical functioning. Other formulations (Young et al., 2009) further challenged Rowe and Kahn's conception, arguing that normal aging often involves the emergence of chronic conditions and functional limitations, although these may be accompanied by compensatory psychological or social processes. Nearly 40 years earlier, Clark and Anderson (1967) had recognized that "comorbidity" (having multiple chronic conditions) was a common (i.e., normal) feature of aging for most persons.

Thus, the Rowe and Kahn conception was increasingly seen not only as idealized and out of touch with normal aging but also as a formulation that shifted much of the discourse about successful aging toward physical and biomedical matters. Left behind were psychological and social features of positive aging prominent in the earlier formulations of successful aging, as described above. Reaching toward integration of these different disciplinary perspectives, Friedman and Ryff (2012a) called for an approach that formulated successful aging as a *biopsychosocial phenomenon*. This meant attending to the interplay between biological, psychological, and social aspects of aging. If early social gerontology left out biology in conceptualizing successful aging, later models (Rowe & Kahn, 1998) lost track of the psychological and social aspects of positive aging. Embedded in our call for an integrative approach was explicit dissatisfaction with traditional biomedical models preoccupied with later-life disease, disability, and dysfunction.

In making this case, we revisited the biopsychosocial model of health proposed by Engel (1977), notable for its critique of the traditional biomedical model. Trained as a psychiatrist, Engel argued that physicians needed to become more familiar with the social and psychological contexts of patients' lives (e.g., environmental factors associated with mental health, cultural and psychological factors that influence a person's decision to seek treatment). His larger goal of changing the practice of medicine was not widely adopted, however. His exhortations are thus as pertinent now as they were 30 years ago.

Nonetheless, aspects of *biopsychosocial science* took off in recent decades, exemplified by fields like psychosomatic medicine (Novack et al., 2007), psychoneuroimmunology (PNI) (Lutgendorf & Costanzo, 2003), and psychoneuroendocrinology (PNE) (de Kloet, 2003). PNI studies how immune systems are affected by social and psychological experience and the biological pathways, including brain regulation, through which these influences occur. PNE, in contrast, studies neural and hormonal responses to social and psychological experiences, while psychosomatic medicine integrates the basic sciences of PNI and PNE to consider clinical outcomes and interventions.

Returning to the need to blend biological, psychological, and social influences, Friedman and Ryff (2012b) addressed how to live well vis-à-vis the realities of later-life comorbidity. Evidence shows that most older adults have two or more chronic conditions (Anderson, 2007). Indeed, fewer than 12% of respondents over 65 from the Health and Retirement Study (McLaughlin et al., 2010) met Rowe and Kahn's (1998) successful aging criteria, largely because of disease and/or physical impairments. However, such profiles stood in stark contrast to *older adults' views of their own aging*, many of whom considered themselves to be aging successfully (Montross et al., 2006; Strawbridge et al., 2002). To these differing realities, we brought advocacy for new science focused on the role of psychosocial strengths as *protective factors* against the accumulation of later-life disease and disability.

Taken together, these summaries of early and recent approaches to successful aging underscore the tendency to formulate optimal later-life functioning within rather than across disciplinary boundaries. Importantly, all prior approaches ignored developmental, existential, and humanistic conceptions of positive aging. In what follows below, input from these realms comes into play via a model of psychological well-being proposed several decades ago (Ryff, 1989), around which considerable research has been generated.

Integrative (Multidisciplinary) Approaches to Aging Well

This section provides a brief overview of a model of psychological well-being explicitly concerned with meaningful aging articulated in terms of continued growth and development. Select empirical findings from this

model are summarized, including what has been learned about the challenges of meaningful aging as well as growing evidence of health benefits among those who remain purposefully engaged as they age. Such advances call for interventions to promote growth-oriented (*eudaimonic*) well-being in different periods of the life course. The final section concludes with observations about what is missing in this body of research and practice.

Aging Well Eudaimonically

Studies of well-being have proliferated in recent decades, with most following one of two traditions (Ryan & Deci, 2001), both traceable to the ancient Greeks. *Hedonic* conceptions of well-being are concerned with positive feelings (pleasure) and the avoidance of pain, thus aligning well with the emphasis in early social gerontology on life satisfaction and positive emotional experience (high-positive, low-negative affect) as key indicators of successful aging. *Eudaimonic* conceptions, in contrast, are concerned with the realization of personal capacities and continued development throughout life. Aristotle's *Nichomachean Ethics* (translated by Ross, 1925) asserted that the highest of all human goods was the *activity of the soul in accord with virtue*. He then articulated what the highest virtue is, which goes to the core of eudaimonia. For Aristotle, the highest virtue is about achieving the best that is within us—it is thus a kind of personal excellence tied to each individual's unique capacities and talents (the meaning of *daimon*).

Although in the spirit of Aristotle's philosophy, the model of psychological well-being and related assessment tools I developed was extensively influenced by diverse writings from the last century. Included were efforts to articulate the meaning of full human development (Allport, 1961; Bühler, 1935; Erikson, 1959), define what constitutes positive mental health (Jahoda, 1958; Jung, 1933), depict humanistic views of self-actualization (Maslow, 1968; Rogers, 1961), and incorporate existential perspectives on finding purpose in adversity (Frankl, 1959). These formulations were united in their concern with the upside of the human condition, variously referred to in terms of full development, maturity, personal fulfillment, individuation, self-actualization, and purposeful life engagement. Despite their inspiring messages, these works had a minimal presence in empirical research largely due to a paucity of tools to assess the qualities they described.

The Ryff (1989) model of well-being thus accomplished two important tasks. First, it conceptually integrated the above literature by identifying *primary points of convergence in these many formulations.* The benefit of doing so was to generate a distilled set of dimensions that captured recurrent themes in the above writings. Second, based on definitions of these key dimensions (taken directly from the underlying theories), *structured, self-report assessment tools were generated* so that varying aspects of well-being could be quantitatively assessed. Numerous subsequent publications described the six key dimensions of well-being (Ryff, 2014, 2018a; Ryff & Singer, 2008).

For present purposes, they are distilled as follows: (1) the extent to which individuals perceive that their lives have meaning, purpose, and direction (*purpose in life*); (2) the extent to which they see themselves living in accord with their convictions (*autonomy*); (3) the extent to which they see themselves as making use of their personal talents and potential (*personal growth*); (4) how well they perceive they are managing their life situations (*environmental mastery*), (5) the depth of connection they have with significant others (*positive relations with others*); and (6) the knowledge and acceptance they have of themselves, including personal limitations (*self-acceptance*).

These dimensions of well-being and related scales subsequently took on a life of their own. The measurement assessments have been translated into 40 languages, and more than 1400 publications have been generated. Diverse questions have been investigated in these studies: How does well-being change across adult development and later life? What are the personality correlates of well-being? How is well-being linked with experiences in work and family life? How does socio-economic inequality matter for well-being? How does well-being matter for diverse aspects of health, including biological risk factors? And whether well-being can be promoted via educational and intervention programs (for details, see Ryff, 2014, 2018a). Select findings are highlighted below as they bear on the themes of this volume.

Select Empirical Findings

An unanticipated finding from the first empirical study of the above six aspects of well-being (Ryff, 1989) was that older persons reported lower levels of purpose in life and personal growth compared to young and midlife adults. These findings were based on cross-sectional evidence,

leaving it unclear whether the outcomes reflect the actual decline in purpose and growth with aging or cohort differences among individuals living through distinct historical periods. Subsequent evidence with longitudinal data from three separate studies (including two national samples of US adults) documented that purpose in life and personal growth were, in fact, declining as people aged from midlife to later adulthood (Springer et al., 2011). Such decrements suggested that meaningful aging may be a notable challenge for many older adults.

What might lie behind the loss of meaning, purpose, and growth in old age? One possibility is the "structural lag" problem (Riley et al., 1994), which argued that contemporary institutions in work, education, and community life *lag behind* the added years of life many older adults now experience. Thus, declining levels of purpose and growth may implicate diminished opportunities for meaningful life engagement, continued self-realization, and growth during the added years of life that many now experience.

Nonetheless, a further important finding was that there was considerable *within-age group variability* in many of the studies conducted. Such variability means that some older individuals, in fact, maintain high levels of purpose and growth (i.e., they are notably above the average for their age group). More importantly, their high profiles on purpose and growth as well as other aspects of eudaimonia were linked with notable benefits for health. The take-home message, as elaborated below, was that maintaining a high-purposeful engagement in later life portends well for multiple outcomes, including how long people live (mortality) and reduced risk for disease (morbidity).

For example, a first study from the Rush Memory and Aging Project (MAP), a six-year community-based longitudinal study, showed that those with higher levels of purpose in life at baseline were more likely to be alive six years later compared to those with lower levels of life purpose (Boyle et al., 2009). These effects were evident after adjusting for numerous covariates (depressive symptoms, disability status, neuroticism, medications, income) correlated with purpose in life. Two additional studies, one from the midlife in the US (MIDUS) national longitudinal study (Hill & Turiano, 2014) and a meta-analysis involving ten prospective studies (Cohen et al., 2016), offered further evidence that high purpose in life is associated with reduced risk for all-cause mortality.

Other findings from MAP showed that high purpose in life in aging is associated with reduced risk for Alzheimer's disease and mild cognitive

impairment six years later after adjusting for multiple covariates (Boyle et al., 2010). Participants donated their brains after dying, thereby allowing for postmortem assessment of the degree of organic pathology in the brain (Boyle et al., 2012). Again, purpose in life emerged as a key factor modifying the link between disease pathology in the brain (e.g., neurofibrillary tangles) and global cognitive functioning while participants were still alive (net of numerous covariates). At high levels of brain pathology, participants with higher levels of purpose in life showed higher cognitive function compared to those with lower purpose profiles. Finally, the MAP study showed that greater purpose in life was associated with a 50% reduction in cerebral infarcts (stroke) (Yu et al., 2015).

Another large longitudinal study of aging, the Health and Retirement Study (HRS), offered further evidence of the health benefits of purpose in life. Among those with coronary heart disease, individuals with higher levels of purpose in life showed a reduced risk of myocardial infarction (net of confounds) two years later (Kim et al., 2013a). A related study showed that higher purpose predicted reduced risk of stroke four years later, net of confounds (Kim et al., 2013b). Another study from HRS showed that a higher purpose in life predicted more preventive health behaviors (doctor checkups, cholesterol tests, cancer screenings) (Kim et al., 2014). Purpose in life was also linked with objective measures of physical function in HRS participants (Kim et al., 2017). Research from the Australian Longitudinal Study of Aging (ALSA) showed that higher purpose in life was associated with lower levels of functional disability, better performance on cognitive tests (episodic memory, speed of processing), better self-rated health, and lower depressive symptoms (Windsor et al., 2015).

The MIDUS study has been a forum for investigating linkages between eudaimonic well-being, including purpose in life, and diverse biological risk factors. Over a ten-year period, purpose in life at baseline was found to predict lower levels of allostatic load (Zilioli et al., 2015), a summary index of biological risk implicated in multiple disease outcomes as well as a decline in physical and cognitive functioning. Boylan and Ryff (2015) linked both hedonic and eudaimonic well-being with metabolic syndrome, a composite of risk factors (central obesity, dyslipidemia, hypertension, and poor glucoregulation). Both aspects of well-being were linked with fewer components of metabolic syndrome and reduced risk of meeting diagnostic criteria for metabolic syndrome.

Returning to the previous idea of living well with comorbidity, Friedman and Ryff (2012b) asked whether aspects of psychological well-being

(purpose in life, positive relations with others) served as buffers against the biological burdens that accompany increasing chronic conditions. The answer was affirmative: although those with greater comorbidity had higher levels of inflammatory markers (interleukin-6 (IL-6), C-reactive protein (CRP)), which are known to fuel disease processes among adults with higher levels of purpose in life and positive relations with others, reduced levels of inflammation were evident compared to those with comparable comorbidity but lower well-being. Other evidence from MIDUS has demonstrated the buffering effects of eudaimonic well-being on the inflammatory marker IL-6 (implicated in several disease outcomes) among those who are educationally disadvantaged (Morozink et al., 2010).

More recently, many MIDUS findings have grown around purpose in life. Boylan et al. (2023) found that purpose in life and social support mediate the links between religion/spirituality and mortality, while Friedman and Teas (2023) found that purpose in life moderates the link between self-rated health and mortality. The link between childhood emotional abuse and neglect with adult depressive symptoms was moderated by purpose in life (Hartanto et al., 2020). Speaking of its protective influences, purpose in life was found to reduce the risk of drug use and prescription medication misuse (Kim et al., 2020). New meta-analyses have further shown that purpose in life predicts less loneliness over time (Sutin et al., 2022a), better cognitive outcomes (verbal fluency, episodic memory) across different demographic and cultural groups (Sutin et al., 2022b) as well as less depressive symptoms and anxiety, particularly in clinical populations (Boreham & Schutte, 2023).

Two final areas underscore novel advances at the interface of well-being (hedonic and eudaimonic) and functional genomics, on the one hand, and brain circuitry, on the other. A sample of healthy adults showed that high levels of eudaimonia were associated with a healthier profile of gene expression, whereas high levels of hedonic well-being were associated with a less-healthy profile (Fredrickson et al., 2013). These findings were subsequently replicated (Fredrickson et al., 2015), and additional work showed that eudaimonia appeared to compensate for the adverse impact of loneliness on gene expression (Cole et al., 2015). Regarding affective neuroscience, findings from MIDUS showed that those with a higher purpose in life showed better emotional recovery from acute negative provocation compared to those with a lower purpose (Schaefer et al., 2013). A subsample participated in a neuroimaging study where findings showed that those who showed sustained activation in reward circuitry (ventral

striatum) in response to positive stimuli also showed higher eudaimonia (overall composite) and had lower daily cortisol output (Heller et al., 2013). Finally, eudaimonic well-being has been linked with greater insular cortex volume, which is involved in an array of higher-order functions (Lewis et al., 2014).

Such biomedical work may seem far afield from what concerns most humanists, including authors and readers of this volume. Why include a glimpse of these findings? The primary reason is to show achievements in getting the biomedical world to take notice of fuzzy subjective concepts such as meaningful aging and purposeful life engagement. When scientific studies document that these factors predict how long people live and afford protection against disease and disability while also promoting better health behaviors, they achieve heightened credibility and importance. Ironically, humanists have always cared about topics of meaning, growth, and self-realization, though they have been less interested in understanding how such experiences might matter for physiological or neurological processes involved in illness or its prevention. The larger point is to underscore the gains of embracing a view of positive aging that fluidly crosses disciplinary boundaries and is committed to putting together pieces of the larger puzzle. So doing brings concerns and priorities of humanism into a wider sphere while simultaneously showing the limitations of biomedical models that ignore meaning-making activities fundamental to the human condition.

Nonetheless, an important omission remains: even enlightened multidisciplinary research has failed to grapple with a critical core question: What nurtures meaning, purpose, and growth as individuals grow old? If such experiences matter for how long people live and can afford protection against illness, far more scholarship and science are needed to address what promotes purposeful life engagement and continuing self-realization in later life. As argued below, these queries signal a deeper return to topics of long-standing interest to humanists.

What Nurtures Lifelong Growth and Development?

How can later-life well-being be promoted and facilitated, particularly the eudaimonic variety emphasizing continued self-realization? One possibility is that lifelong learning may be fundamentally important. A related possibility is that the arts and humanities may constitute uniquely salient domains for nurturing meaningful aging. The first section below reviews

recent scholarship in support of these ideas, drawing on multiple literature, including scholarship on the value of the humanities. The second section then considers the possibility that the arts and humanities are of heightened importance during periods of adversity, be it living in a world fraught with turmoil or, more specifically, aging, facing the final challenges attendant to one's demise. This section ends with a consideration of *how* meaning may, paradoxically, be nurtured during the worst of times, with gains in emotional insight and development accompanying the journey.

Lifelong Learning and the Salience of the Arts and Humanities

Keeping the Mind Well Supplied with Oil

The idea that *continued lifelong learning*—that is, remaining actively engaged in ever-broadening personal horizons—nurtures meaningful lives and continued growth was understood by Cicero, who asserted over 2000 years ago that minds, like lamps, grow dim with time unless kept well supplied with oil. An emerging body of research now investigates how continuous participation in nonformal lifelong learning may help sustain older adults' psychological well-being (Narushima et al., 2018). Such thinking was incorporated into the Active Aging Framework advanced by the World Health Organization over 15 years ago (WHO, 1948). This formulation has influenced aging policies and practices around the world by promoting a positive shift in social attitudes about aging, from viewing later life as a period of deficits—described as decline narratives—to seeing it as a time of competency, knowledge, and moral agency (Laceulle & Baars, 2014). Growing research shows links between adult learning and subjective well-being and health (Feinstein & Hammond, 2004; Hammond, 2004) while acknowledging barriers among vulnerable aging subgroups, such as those with low incomes, limited education, widowed and living alone, and poor health (Grundy, 2006). They may lack the requisite skills or motivation to partake in lifelong learning, but disadvantaged elders also likely live in neighborhoods and communities offering few opportunities to partake in continued learning. Social class differences in access to lifelong learning are thus critical concerns.

Eudaimonia via the Arts and Humanities

If lifelong learning promotes meaning and self-realization, a relevant question is, *what kinds of continuing learning* nurture inner vitality and

continued growth? One hypothesis is that continual encounters with the arts and humanities may be important. In the background are weighty issues, such as what art is and how it affects us (Dewey, 1934), along with whether distinctions between high art and low art or "superior art" and "mass art" (Carey, 2006). Such matters are not central concerns here, though Virginia Woolf's essay, *The Middlebrow* (1946), is worth noting. She bristled in response to a critic calling her a highbrow and offered thoughts on the battle of the brows. High and lowbrow types were depicted, but she gave particular emphasis to those that sit between these two. Colorful observations of the middlebrow type invoked class-based stereotypes about where people live, what they do, and what they think. Lauding the merits of both the highbrow and the lowbrow, Woolf expressed ire for the middlebrow: those of "middlebred intelligence" who are preoccupied primarily with status and appearance. Carey's (2006) recent perspective on these issues offers a compelling rebuttal to elitists who claim that high art is inherently superior.

In sharp contrast, Gene Cohen's wonderful book *The Creative Age: Awakening Human Potential in the Second Half of Life* (2000) embraces diverse forms of artistic expression, particularly in later life. Compelling narratives describe all manner of creative genius, from great scientists and Supreme Court justices to individuals who never touched a paintbrush before learning to paint in old age, including those suffering from Alzheimer's disease. His inspired message underscored untapped possibilities latent in all to create or consume art.

How might encounters with the arts broaden personal horizons and nurture individual becoming? A starting point is to consider the reading of great literature. What exactly does it do for us? Mark Edmonson's book *Why Read?* (2004) provides insight through the lens of how he teaches literature to undergraduates. At the outset, he asserts that liberal, humanistic educational experiences help foster individual becoming. In the face of modern technology and information overload, he vigorously advocates for a retreat to great literature and poetry, asserting that these sources offer new or better ways of understanding self and others, including in contexts of difficulty.

He illustrates such thinking with Woodworth's famous poem "Lines Composed a Few Miles Above Tintern Abbey," composed in 1798 (see Edmondson, 2004). Setting the stage, we learn that the poet's life had become troubled; he was living in a din-filled city among unfeeling people and sensed he was becoming one of them. He then returned to a beautiful

place in nature he enjoyed as a child and crafted his poem. The work "enjoins us to feel that it (the answer to one's despondency) lies somewhere within our reach—we are creatures who have the capacity to make ourselves sick, but also the power to heal ourselves" (Edmondson, 2004, p. 49). Wordsworth's poetry also served a vital function in the life of John Stuart Mill (1989), who realized in early adulthood that he was not happy, the ultimate desideratum of utilitarian philosophy in which he was trained. Mill reflected on his exceptional early life education—a father teaching him Greek and Latin as a young child—which was notably deficient regarding the emotional side of his being. To escape the logic machine he had become, Mill began a quest to feel something and to minister to his soul. He credited Wordworth's poetry for helping him recover from what he called "the crisis in my mental history".

Despite such uplifting tales, Edmondson reminds us that much education in the humanities teaches dissociation of intellect from feelings and, instead, advocates for the cold capacities of critical thinking. He challenges this mentality and instead calls for a humanistic approach through which great writing can become the "preeminent means for shaping lives" (p. 86). In so doing, he is explicitly concerned with human growth but underscores that this is not about mere happiness. The point is not to cheer ourselves up but rather to pursue truths. "We can seek vital options in any number of places. They may be found for this or that individual in painting, in music, in sculpture, in the arts of furniture making and gardening" (p. 111). Knowledge and continued learning from the humanities thus offer the best of what has been thought and known and thereby provide multiple truths and viable paths about how to become better, wiser, more vital, kinder, sadder, more thoughtful, and more worthy of the admiration of children. Great reading thus takes minds to places where they have "fuller self-knowledge, fuller self-determination, where self-making is a primary objective, not just in the material sphere, but in circles of the mind and heart" (p. 142). It is a journey of achieving humanism's highest promise.

Books by Alain de Botton—*How Proust Can Change Your Life* (1997) and *Art as Therapy* (de Botton & Armstrong, 2013)—offer popular views on how classic literary or artistic works can minister to basic human needs. Reading Proust, for example, can teach us how to love life today, take our time, suffer successfully, express our emotions, and open our eyes. Numerous illustrations are delivered with humor, including how a little insomnia is not without its value in nurturing an appreciation of

sleep—those who fall into bed and cease to live until they wake hardly know they are asleep. With regard to art, De Botton and Armstrong delineate seven key functions: remembering, hope, sorrow, rebalancing, self-understanding, growth, and appreciation. Museum curators now focus on issues of how to make their holdings more relevant and meaningful for wider segments of society (Mid Magasin, 2015).

Despite such advocacy for the arts, current scholarship laments the growing ascendancy of science and technology vis-à-vis the ever-retreating status of the humanities (Hanson & Heath, 1998; Nussbaum, 1997). Within the universities, fewer students major in literature, philosophy, art, music, theater, or dance. Outside the academy, at least in the US, fewer citizens partake in art exhibits or the performing arts (Cohen, 2013). This larger diminishment of the arts and humanities cuts people off from important sources of moral and ethical identity (Taylor, 1989), which translates to further problems. At the individual level, people struggle to find meaning in their lives; at the societal level, neglect of the humanities impedes the fostering of responsible, tolerant, morally sensitive citizens and the creation of public practices and policies needed to nurture benevolent societies. Recent scholarship thus explicitly defends the humanities. Small (2013) delineates multiple values served by the humanities: they illuminate the meaning-making practices of a culture, they preserve and curate culture, they make vital contributions to human happiness, they contribute to the health of democracy via the cultivation of skills of critical reasoning, debate, and evaluation of ideas (see also Nussbaum, 2010), and finally, the humanities have intrinsic value—they matter for their own sake. Further advocacy for the arts is now happening in science as well. Given Snow's (1959 [1998]) distant characterization of the "two cultures problem" between the arts and the sciences, it is ironic that the sciences are increasingly making a case for the arts.

Promising Signs of Change

New signals are a foot to support claims that individuals and societies need the arts and humanities. In 2013, The Royal Society for Public Health in the UK published a lengthy report titled "The Arts, Health, and Well-Being", which summarized the benefits of the humanities (philosophy, theology, literature, music, poetry, film) for human health and public policy. Extensive evidence showed the useful roles that the arts play in professional education (medical training) as well as in therapy, health care, and community life. Relatedly, a new field, "health humanities", emerged built

around the application of the arts, literature, languages, history, philosophy, and religion to the promotion of human health and well-being (Crawford et al., 2015). Similarly, in 2009, a new journal, *Arts and Health,* was initiated.

A further window on such change concerns the problem of disciplinary silos in higher education. A recent report by the National Academies of Sciences, entitled *Branches from the Same Tree*, appeared in 2018. It called for the integration of the sciences, engineering, and medicine with the arts and humanities. The opening rationale stated that critical, creative thinkers with effective communication skills are likely forged educationally by greater exposure to the arts and humanities. Little research supports such claims, although interesting anecdotes were provided, such as the observation by Leon Botstein, conductor of the American Symphony Orchestra, that there are more skilled and virtuosic musicians alive now than ever before. What is missing, however, is not technique and expertise but the interpretation and musical expression, qualities likely nurtured by the arts.

Others studying what the arts do for us include Brown and Novak-Leonard (2013), who considered how individuals are affected by attending live theater performances. Their formulation identified several possible impacts, including captivation (absorption in performance), intellectual stimulation, emotional resonance, spiritual value, aesthetic growth, and social bonding. Kreutz et al. (2004) examined how choir singing and listening affect biomarkers linked to immunity and stress as well as emotional states. A further visible study (Kidd & Castano, 2013) linked the reading of literary fiction to the theory of mind, which involves the capacity to identify and understand the subjective states of others. Multiple experiments compared the reading of literary fiction to reading nonfiction, popular fiction, or nothing at all. Multiple experiments supported the hypotheses, although subsequent work has been unable to replicate the effects (Panero et al., 2016). Finally, Lomas (2016) called for a new field known as "positive art" that encompasses major art forms (visual, music, literature, drama) and considers their impact on sense-making, enriching experience, aesthetic appreciation, entertainment, and bonding.

Collectively, these works reflect the "immediate experiences approach" to individual encounters with the arts (theater, music, drama) and their short-term consequences. An alternative formulation focuses on "cumulative exposures" to the arts and humanities and their importance for lifelong well-being and health (Ryff, 2019). Key questions in the latter are what kinds of higher educational experiences cultivate interests in and

sensibilities for lifelong participation in the arts (as creator or consumer). Ideas of cumulative adversity and cumulative advantage are mainstays in life course research in the behavioral and social sciences (Alwin & Wray, 2005; Dannefer, 2003), but such concepts have never been applied to long-term profiles of partaking of the arts and humanities. Extensive prior research documents that cumulative stress exposures compromise people's health, but counterpoint questions as to whether frequent encounters with music, literature, poetry, and nature nourish mind and body have not been examined. The final section below sharpens these queries to ask whether such encounters are particularly consequential during periods of significant life challenges.

Meaning-Making, Art, and Adversity in Turbulent Times: Four Examples

The capacity to find meaning and fulfillment in life *through* significant difficulties has deep resonance for the study of human strengths. The issue is whether adversity activates deeper and more complex processes by which we come to know and accept ourselves, find meaning in our life struggles, and realize our talents, love, and care for those dear to us. Four cases are considered below, the first two covering widely known instances of transforming personal adversity into creative acts (books, poetry). The third, less visible case illustrates the translation of personal trauma into multiple art forms (music, painting, writing). The final case invokes classic poetry about refusing to yield in the face of aging's final challenges.

Victor Frankl (1959) gave lasting insight into how unimaginable hardship, deprivation, and indignity could become a journey in which hidden resources are discovered. He survived three years in Nazi concentration camps via effortful actions, such as looking to the past and recalling beautiful things, like rich and detailed images of his wife. One wonders if he also reflected on his favorite books, music, poetry, and places he loved in nature. He also used his imagination to look forward, seeing himself (a psychiatrist by training) giving lectures about life in the camps to attentive listeners. His great insight at the time was about his spiritual freedom: although he could not control what was happening to him, he could choose his reaction to the happenings. Frankl chose to search for the meaning of the experience. His subsequent book, along with his creation

of logotherapy, which treats human suffering via meaning-making activities, changed the world.

A second example is Joseph Brodsky, winner of the Nobel Prize in Literature in 1987. He nearly died of starvation as a child during the siege of Leningrad. As a teenager, he became an underground poet, and in early adulthood he was sentenced to two years in a labor camp for his dissident ("decadent") poetry. Brodsky believed in the mysterious power of poetry as a deep moral alternative not just to cruelty but also to the banality and vulgarity of Soviet totalitarianism. Celebrating the rich humanistic tradition of literary Petersburg, he wondered why it did not draw large audiences in the US, which welcomed him as a citizen in 1977. As US poet laureate in 1991, he spoke of the power of poetry to affect society:

> By failing to read or listen to poets, society dooms itself to inferior modes of articulation, those of the politician, the salesman, or the charlatan. What distinguishes us from the rest of the animal kingdom is precisely the gift of speech. Poetry is not a form of entertainment and in a certain sense not even a form of art, but it is our anthropological, genetic goal, our evolutionary, linguistic beacon. (Library of Congress, 1996)

Seeking to broaden the impact of poetry, Brodsky suggested that inexpensive anthologies of the best American poets be made available in hotels and airports, hospitals, and supermarkets. He believed those who are restless, fearful, lonely, or weary might find their way to emotions that others have discovered in poetry and use them to celebrate life rather than escape from it.

Charlotte Salomon (1981) was born in 1917 into a prosperous Jewish family in Berlin. Her artistic talent was visible early on and led to her opportunity to study at the Berlin Arts Academy for two years. Family life was complicated—multiple members of her family (mother, grandmother, sister, aunt) committed suicide. When the Nazis came to power, the family decided to leave Germany, and she was sent to the south of France to live with her grandparents. For a two-year period thereafter, she painted more than 1000 watercolors using three primary colors. The work was mainly autobiographical, covering the main events of her life. She included narrative comments with the paintings as well as notes about appropriate music to increase dramatic effect—thus seeking to fuse poetry, music, and the visual arts. She and another refugee were dragged from their home in

1943 and transported to Auschwitz. Salomon and her unborn child were gassed upon arrival.

Comments in her book reveal a fierce ambition—"only he who dares can win, only he who dares can begin" (p. 193), accompanying paintings about her early experiences in art class. Many paintings are about family members—sad faces with troubling words about never being happy. One work powerfully depicts depression—a slumping, thin woman holding her head with the comment, "I've no one left now. Fate, fate, how harsh you are" (p. 159). But others show her inspiration from great art by others (the Pietà) and the inspiration she drew from it. A series of facial self-images, large eyes, and somber expressions is accompanied by these words:

> But I realized that this was not easy. I realized that no heaven, no sun, and no star could help me if I did not contribute by my own will. And then I realized that I still had no idea who I was. I was a corpse. And I expected life to love me now. I waited and came to the realization: what matters is not whether life loves us, but that we love life. (p. 257)

Her brief period of dramatic artistic production reveals intense activities of meaning-making in the face of extreme loss, fear, and impending threat. Art did not save Charlotte Salomon's life, but it did transform the limited years that she had into a heroic becoming in which personal talents and capacities were powerfully realized.

A final example comes from Harold Bloom's (2000) reading of Tennyson's *Ulysses*, one of many great works he examines to show us how literature can help us recover our sense of the ironic, clear the mind of cant, and find our true selves. The poem, closely connected to the challenges of aging, elevates the powerful urge to go on, even when death is approaching. Bloom describes the protagonist as ever roaming with a hungry heart, *seeking after meaning* even on this mad, final voyage where, on the brink of death, the quest continues:

> Old age hath yet his honor and his toil;
> Death closes all: but something ere the end,
> Some work of noble note, may yet be done,
> Not unbecoming men that strove with Gods. (p. 77)

The emphasis on noble deeds at the end and the honor and toil of old age conveys a vibrant embrace of life in which striving does not end.

Bloom describes Tennyson's clash of antithetical voices at the close of the poem as universally human:

> Though much is taken, much abides; and though
> We are not now that strength which in old days
> Moved heaven and earth; that which we are, we are;
> One equal temper of heroic hearts,
> Made weak by time and fate, but strong in will
> To strive, to see, to find, and not to yield. (p. 78)

The heroic heart, weakened by time and fate but continuing to strive, seek, and find, epitomizes the unending commitment to becoming what this chapter is about. It also accords with Bertrand Russell's (1930/1958) compelling, albeit less dramatic, view that *happiness is a conquest*, which requires effortful, frequently challenging, and frustrating engagement in living, perhaps especially in old age. Eudaimonic well-being is thus a journey of ever-deepening internal strengths honed by challenge and loss.

Taken together, the four examples above reveal aspects of personal insight and continuing emotional development that can flourish in contexts of notable challenge. They show a deepened understanding of the powerful dialectic between positive and negative experience—that is, in pain, loss, and trauma, new realizations about the beauty and meaning of life may emerge. In addition, one's emotional capacities may be heightened and rendered more complex (Ryff, 2018b), possibly leading to a greater understanding of self and others. The joining together of profound positives and negatives is similarly evident in the humanities (philosophy, art, literature). Friedrich Schiller wrote about "sublime pathos" to capture the triumphant human struggle against suffering, itself a kind of freedom. In art, there is the tradition of fixing broken pottery, known in Japan as *kintsukuroi*. Breakage and repair are viewed as part of the history of the object rather than something to disguise. Lacquer resin is mixed with powdered gold to make such repairs, thus producing an art form of uniquely beautiful imperfections. This embracing of flaws is part of the Japanese philosophy of *wabi-sabi*. The core observation is that embracing paradox and contradiction can nurture notable strides in personal development, perhaps most prominently at the end of life.

Summary

This chapter has covered extensive territory, beginning with a return to prior conceptions of successful aging from the early field of social gerontology as well as more recent formulations. Both were critiqued for not embracing humanistic ideas of meaning-making and lifelong growth and development as well as for failing to put psychological and social aspects of aging together with the biomedical realities of growing old. An integrative, multidisciplinary approach to the aging well was then presented. At its core is a model of eudaimonia emerging from existential, developmental, and humanistic conceptions of positive human functioning along with distant philosophical insights from Aristotle. The six components of well-being that emerge from this model have had a widespread scientific impact, which was briefly distilled. Select findings point to unique vulnerabilities among older adults in maintaining purposeful life engagement and continued personal growth. Nonetheless, elders who remain vibrant in these domains show numerous health benefits (longer lives, less disease, better biological regulation). Missing in this literature has been the deeper question of what nurtures lifelong growth and development. A provisional response was put forth, suggesting that continued learning may be key and, further, that regular encounters with the arts and humanities may be especially important contributors to eudaimonia. Varieties of scholarship addressing how encounters with the arts can nurture individual becoming were reviewed, along with recent scientific initiatives seeking to document the benefits of the arts and humanities on health and well-being. A final section, drawing on case examples, considered how meaning-making and the arts may be critical during periods of significant life adversity.

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