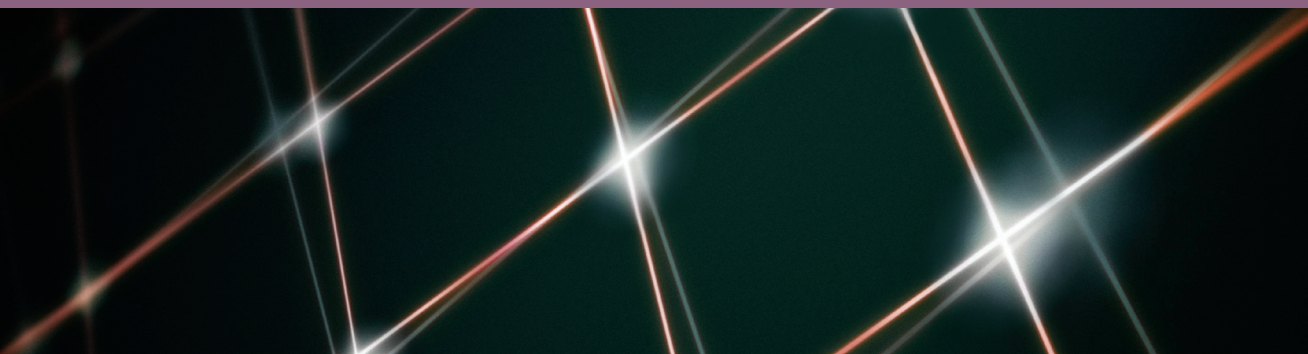


The SAGE Handbook of Social Gerontology



Edited by
Dale Dannefer and
Chris Phillipson



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Social Gerontology



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Chris Phillipson



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Preface

The subject matter of the *SAGE Handbook of Social Gerontology* deals with one of the most enduring and complex issues of human societies: namely, ageing and its social, economic, and cultural determinants. In the 21st Century, ageing has become one of the most challenging issues worldwide, as population ageing is becoming an increasingly visible reality in all societies, and is occurring in a context of globalizing economies and rapid technical and cultural change. These concerns are discussed in this handbook from the standpoint of **social gerontology**, defined here as the application of social science disciplines (e.g., demography, economics, social anthropology, and sociology) to the study and understanding of ageing populations and their interrelation with social forces and social change. Social gerontology is itself linked to the broad study of ageing, or **gerontology**, a multi-disciplinary and (increasingly) interdisciplinary approach drawing upon the behavioural, natural, and social sciences.

In recent decades, the scope of social gerontology has been stretched in a number of significant ways. For example, although the discourse surrounding ageing is often equated with the decades of later life, leading thinkers in gerontology have long recognized that ageing is a lifelong process and a complete understanding of ageing encompasses the full life course. A second example concerns the social significance of age itself, which varies dramatically across social and historical contexts. In particular, the social institutions of late modernity have developed a particular reliance on age as an organizing principle of society, thus making it an enduring feature of social structures even if it is a constantly changing feature of individuals.

Given the above background, the invitation from SAGE to the editors to produce a Handbook focusing on social gerontology was an exciting, albeit challenging, prospect. The opportunity provided was to produce a volume that presented a systematic overview of major advances in social gerontology, drawing upon theoretical and empirical studies undertaken over the past two decades. This period has been of considerable importance to furthering our understanding of social aspects of ageing, with the growth of funded research, the expansion of national societies concerned with the study of ageing, and the pooling of research findings across a variety of international organizations.

Given the above developments, three main objectives were set for the *SAGE Handbook of Social Gerontology*. First, a key concern was to provide a comprehensive assessment of the importance of 'social' aspects of ageing, in all its multi-dimensional and multi-disciplinary guises. Here, we were struck by the continuing relevance of a point made by Malcolm Johnson (2005: 23) in an earlier handbook, that:

Despite the growing importance of research on the social features of life in the Third and Fourth Ages, which explore the positive potentialities of being an older person, these studies are overwhelmed by the sheer weight of inquiries about illnesses—physical and psychological—and the interventions which might ameliorate their consequences. An analysis of the hundreds of presentations at national and international conferences shows that programmes are little different in structure and balance of content from those of ten, twenty, or even thirty years ago.

Similarly, the dominance of medicalized and biologized approaches as explaining basic processes of ageing has tended to confine the 'social' to the 'ageing-as-problem' discourse—dealing with topics such as individual needs and attitudes at the micro-level, and at the macro-level, the economic and political implications of global population ageing. Yet evidence is mounting to demonstrate that at every social system level, from intimate dyads through work organizations to the state, social processes influence physiological as well as psychological processes of ageing.

Secondly, part of this expansion in the social science literature has itself been driven by the internationalization of research into ageing, with the emergence of major research centres specializing in gerontology across all continents of the world. This itself reflects the nature of population ageing as a global phenomenon, one raising different, kinds of issues for social and cultural systems in, for example, Asia, sub-Saharan Africa, Latin America, and Europe. In this context, a second objective of the *SAGE Handbook of Social Gerontology* has been to illustrate the different challenges associated with ageing by drawing on examples from across a wide range of countries. The task set by the editors was to develop a handbook that demonstrated both the vitality of social science research and the variety of emerging perspectives, these reflecting the complexity and heterogeneity of the different economic and cultural settings in which research is produced. Of course, it has only been possible to draw upon a selection of societies and cultures. We have, however, wherever possible, invited contributors to draw in research from a wide range of countries to illustrate their arguments, and we believe this has added a valuable dimension to the volume.

Thirdly, although contributors to the book come from a range of perspectives within social gerontology, there are underlying themes and concerns running through the different chapters in the *Handbook* and these reflect important developments within the discipline. Over the period from the 1980s through to the 2000s, social gerontology began to embrace a variety of approaches, with important contributions from feminism, social history, political economy, and developmental psychology. In some cases, as Katz (2003: 16) observes, social gerontology began to draw upon areas that were—from the 1990s at least—losing ground in the rest of the social sciences (the influence of Marxism in the area known as critical gerontology being one such example). In other instances, researchers drew upon perspectives from beyond gerontology—the application of cultural studies to the field of ageing representing a case in point. At the same time, the underlying question for all social science approaches to ageing remained that of exploring the basis of social integration in later life, with contrasting points of emphasis around questions of self and identity, the influence of economic relationships, and the impact of social differences (or cumulative advantage and disadvantage) over the life course. Awareness of the impact of globalization also brought significant challenges to social gerontology, with many of its traditional concerns now debated within the context of global and trans-national settings.

As the above summary would suggest, social gerontology itself contains a vast array of themes and concerns, all of these reflecting and building upon the varied concerns of older people and the institutions to which they are linked. At the same time, a shared concern of all the contributors is to examine the way in which social processes are involved in shaping age and the life course, and which also create alternative conceptions and visions about the future of old age (Baars et al., 2006). In bringing together different strands of thinking, the *SAGE Handbook of Social Gerontology* also demonstrates the distinctive contributions which social science can bring to the study of ageing. One illustration of this was provided by Matilda White Riley in her 1986 Presidential Address to the American Sociological Association, where she explored how her interest in the nature of ageing flowed from wider concerns with the impact of social and cultural change. She summarized the link between individual ageing on one side, and social change on the other, as follows:

In studying age, we not only bring people (women as well as men) ... back into society, but recognise that *both* people and society undergo process and change. The aim is to understand each of the two dynamisms: (1) the *aging of people* in successive cohorts who grow up, grow old, die and are replaced by other people; and (2) the *changes in society* as people of different ages pass through the social institutions that are organized by age. The key to this understanding lies in the interdependence of aging and social change, as each transforms the other (Riley, 1987: 2).

Of course, this *Handbook* examines many complementary points to those raised by Riley, not least those concerned with issues of inequality and difference within cohorts, and the range of mechanisms—historical, economic, bio-social, and so on—that contribute to the social variations that are produced and reproduced in later life. But this idea of exploring the interconnections between ageing on one side, and social change (in all its manifestations) on the other side, provides the underlying pulse to many of the chapters in the handbook and is certainly a fundamental theme of social gerontology itself.

Finally, having set out the main objectives behind this handbook, we might just note how it relates to other such books within the field of ageing. Handbooks have themselves played an important role in providing reviews of sub-fields within the discipline. The first were devoted to surveying progress in gerontological research during the 1950s, and comprise Birren's (1959) *Handbook of Aging and the*

Individual, Tibbitts's (1960) *Handbook of Social Gerontology*, and Burgess's (1960) *Aging in Western Societies*. In the 1970s, a new set of handbooks were developed. These have undergone regular revision and are presently in their 6th editions: *Handbook of the Biology of Aging* (Masoro and Austed, 2006), *Handbook of the Psychology of Aging* (Birren et al., 2006), and *Handbook of Aging and the Social Sciences* (Binstock et al., 2006). At the same time more specialist handbooks were developed, such as the *Handbook of the Humanities and Aging*, edited by Cole et al. (1992), and the *Handbook of Theories of Aging* edited by Bengtson et al. (2nd edn. 2009). Finally, *The Cambridge Handbook of Age and Ageing* (Johnson, 2005) aimed to provide an overview both of literature from the social and behavioural sciences as well as an assessment of key developments in biomedicine.

We see this volume as providing a complementary resource to the more recent Handbooks listed above. This volume is the first since Tibbitts's 1960 volume to set out the full scope of social gerontology, a field that has expanded hugely since that time across the full range of the social sciences. The specially commissioned essays have been written by leading international experts in their respective fields. The volume is organized into five parts, each exploring different aspects of research into social aspects of ageing:

- 1 *Disciplinary overviews*: the chapters in Section One aim to provide summaries of findings from key disciplinary areas within social gerontology, including demography, economics, epidemiology, environmental perspectives, history, social anthropology, and sociology.
- 2 *Social relationships and social differences*: the chapters in Section Two explore the key social institutions and social structures influencing the lives of older people. Topics here include social inequality, gender, and ageing, the role of religion, inter-generational ties, social networks, and friendships in later life.
- 3 *Individual characteristics and change in later life*: the chapters in Section Three examine different aspects of individual ageing, including self and identity, cognitive processes, the experience of time, age and wisdom, and also biosocial interactions and their impact on physical and psychological ageing.
- 4 *Comparative perspectives and cultural innovations*: the chapters in Section Four review variations in the experience of growing old from a range of social and cultural standpoints within and beyond late modernity. Topics include ageing and development, ageing in a global context, migration, and cross-cultural perspectives on grandparenthood.
- 5 *Policy issues*: Section Five, the final Section, examines some of the main policy concerns affecting older people across the world. Topics include developments in social policy, long-term care, technology and older people, end-of-life issues, work and retirement, crime and older people, and the politics of old age.

The SAGE Handbook of Social Gerontology thus draws together a range of multidisciplinary and interdisciplinary perspectives on ageing. The editors are immensely grateful for the dedication and hard work of contributors. The handbook was conceived as an attempt to draw together a fresh assessment of findings relating to social, economic, and cultural aspects of growing old, drawing upon some of the best researchers and scholars working in the field. We hope that this volume goes some way both to confirming the strength of research in social gerontology as well as stimulating consideration of new areas for theoretical and empirical development.

Dale Dannefer
Chris Phillipson
August 2009

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Table 5.1 United Nations (2007) *World Population Ageing 2007*. Department of Economic and Social Affairs/Population Division. New York: United Nations. Reprinted with permission.

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Table 5.9 United Nations (2005) *The Living Arrangements of Older People Around the World*. Department of Economic and Social Affairs/Population Division. New York: United Nations. (Available at <http://www.un.org/esa/population/publications/livingarrangement/covernote.pdf>). Reprinted with permission.

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Tables 15.1 United Nations (2002) *World Population Aging 1950–2050*. Department of Economics and Social Affairs, Population Division. Reprinted with permission.

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SECTION 1

Fundamental and Disciplinary Perspectives on Ageing



The Study of the Life Course: Implications for Social Gerontology

Dale Dannefer and
Richard A. Settersten, Jr.

INTRODUCTION

A leading policy expert of the American Association of Retired Persons (AARP), John Rother (2009), has observed that the life-course perspective is the 'missing element in the public policy debate' on ageing (2009). The significance of the life course has also been emphasized by Robert Butler, who joined colleagues to issue a call for a 'new paradigm' of gerontological and geriatric research and practice anchored in a life-course approach (Butler et al., 2008). Across multiple societies, the fields of medicine and epidemiology are being transformed by life-course methods as investigators probe the long-term effects of early nutritional status, toxin exposure and other risks on age-related diseases, which create differential patterns of ageing and outcomes in old age (e.g., Ben-Schlomo and Kuh, 2002; Gluckman and Hanson, 2006a, 2006b). In China and elsewhere, increasing public and governmental concern is focusing on old age by reference to earlier life-course events – specifically whether or not one's job provided retirement pension (see Chapters 32 and 43). In advanced industrial societies around the world, many older people are engaging in a diverse array of activities and social involvement that build on earlier life experiences and shape the nature of their lives as older

people – whether in continuing labor force participation, volunteering, or recreational or creative activities. In these and innumerable other examples, often from unexpected arenas of policy and research, there is a growing acknowledgment that ageing and old age cannot be understood, either at the individual or societal levels, without paying attention to the cumulated life practices and experiences of ageing individuals.

What is the significance of this expanding emphasis on the life course? Most fundamentally, it represents the recognition of mounting evidence that demonstrates that the physical, psychological, and social aspects of individual ageing are often not dictated by chronological age per se, but instead shaped by a host of factors that cumulate in individuals over decades of living. This is a significant departure from the conventional practice of thinking about age in normative terms – reflected in ideas like 'normal ageing' or natural 'stages' of life. We now know that, even in childhood and adolescence, age by itself is not enough to define individual lives (Rogoff, 2002). This is especially true in later life, when variability is greatest among age peers (Crystal and Shea, 2003; Nelson and Dannefer, 1992).

This emphasis marks a paradigmatic shift away from viewing ageing as a *general or immutable process of organismically governed change* and

old age as a distinct phase of life to be understood on its own terms, and instead toward understanding ageing as an *experientially contingent reality* involving continuous interactions between the body, psyche, and social world. Thus, patterns of ageing are organized not only by organismically based changes but also are fundamentally dependent on one's social circumstances, opportunities and experiences over prior decades. Old age is no longer viewed as embodying a set of common and universal experiences, nor as a dark period of inevitable decline. Rather, old age is recognized as comprised of a set of experiences that are highly variable across individuals, groups, and nations, and highly contingent on health, wealth, social relationships, social policies, and other factors.

It is notable that this shift in the conception of ageing is now occurring in medicine, epidemiology and public health, and the policy sciences. Yet in no field is the emergence of the life-course perspective more significant than in research and theory in gerontology. Indeed, it was sociologists of ageing who first originated the life-course perspective and gave it conceptual structure (Cain, 1964; Clausen, 1972; Elder, 1974, 1975; Riley et al., 1972), just as psychologists of ageing did in originating the life-span perspective (e.g., Baltes, 1968; Schaie, 1965).¹

What the life-course perspective brings to gerontology is the recognition that life experiences, which are inevitably organized by social relationships and societal contexts in which individuals are located, powerfully shape how people grow old. The life-course perspective seeks to make visible the significance of 'macro,' or 'distal,' social forces, including the social institutions and cultural practices that organize everyday life routines, and unique historical events and periods of social change (see Kohli, 2007; Mayer, 2004; Settersten and Gannon, 2005). The life-course perspective also emphasizes the power of *social ties*, the ways in which the lives of individuals are intimately affected by the circumstances and actions of others.

Finally, the life-course perspective shines a spotlight on the significance of age, not only as a property of individuals but also as a property of social structure. Comparative studies have revealed that the meanings of age and old age, and even the very awareness of age, vary historically and cross-culturally. Societies differ in how age is regarded, and the significance of age in societies may change over time. This clearly happened with the development of advanced industrial societies. The late 19th and 20th centuries saw a rise in 'age consciousness' (Chudacoff, 1989), as age became an increasingly central basis of social organization and regulation in arenas such as education and work. Age consciousness – a feature of a culture that is

distinct from the biological ageing of individuals – becomes part of the social environment that has an effect on how people age. It shapes their ideas about what is appropriate ageing through the production of age norms, which through the 20th century were increasingly calibrated to specific chronological age (e.g., Kett, 1977; Lawrence, 1984; Neugarten, 1979; Settersten and Hagestad, 1996). Research on the emergence of age consciousness has focused on the United States, but similar developments occurred in Europe and elsewhere (Gillis, 1974; Kohli, 1986a).

From the vantage point of life-course analysis, then, the concept of age is itself a central object of inquiry, not a taken-for-granted part of the world. Yet in everyday life, age often *is* precisely a taken-for-granted part of the world. When an idea or phenomenon that is social in origin is assumed to be an inevitable aspect of human nature, it is an idea that requires deconstruction. The social practice of mistakenly attributing social arrangements to human nature or other natural forces is called *naturalization*. When age becomes a central organizing reality of society, and a strong normative sense of 'age-appropriate behavior' and perceived danger of being 'off time' emerge in cultural beliefs and practices, age becomes naturalized. It is the task of sociological analysis to deconstruct the processes by which this occurs. This strong emphasis on social processes does not mean that we do not recognize the importance of ontogenetic, organismic processes. Instead, it reflects a growing recognition of the extent to which the organism itself is shaped by context and experience in the process of development (Loehlin, 2007; Perry and Svalavitz, 2006) and through the life course (Langa et al., 2008; see Douthit and Marquis, this volume).

AGE AND THE LIFE COURSE: HISTORICAL PERSPECTIVES AND FOUNDATIONAL PRINCIPLES

The concept of the life course was first articulated in sociology in Leonard Cain's (1964) classic paper, 'Life-Course and Social Structure.' Cain's paper offered an initial conceptualization of some of the key paradigmatic dimensions of the life course that would later become central to life-course analysis. Cain pointed to age as a feature of both individuals and social structure, and thus anticipated elaboration of the life course as a major basis of social organization. The articulation of age as a property of both social systems and individuals was given its most elegant and

systematic formulation in Matilda Riley's initial presentation of the age stratification (Riley et al., 1972), of which the life course was an integral component (Clausen, 1972). Cain's early paper and the Riley approach laid the conceptual foundations for subsequent elaboration of the life course as a social institution, an idea that developed both in Europe (e.g., Kohli, 1986; Mayer, 1986) and in the United States (Dannefer and Uhlenberg, 1999; Hogan, 1981; Meyer, 1986; Settersten, 1999).

In the late 1960s and early 1970s, Glen Elder began to analyze data from several classic longitudinal studies, which led to the publication of his classic book *Children of the Great Depression* (1974, 1999) and a prolific programme of life-course research (see Elder and Johnson, 2003). Elder's work has consistently examined how discrete events and changes leave their imprint on the life courses of individuals and cohorts, and how their effects are mediated through family environments.

While Cain focused on the life course as systematically related to social institutions and foreshadowed the later elaboration of the life course as a full-blown feature of social structure, scholars like Elder, John Clausen, and others developed a predictive approach that sought to understand outcomes in later life as a consequence of early life experiences. Below, we discuss these two distinct approaches, which we call the 'personological' and the 'institutional.' But first it will be useful to set forth some general principles that apply to both of these approaches to the life course.

Life-course perspective, life-span development, and cohort analysis

Both the *life-course perspective* in sociology and a counterpart intellectual tradition in the discipline of psychology, *life-span development* (Baltes, 1968; Riegel, 1976), emerged as sites of intellectual excitement in the late 1960s and 1970s. Closely allied with a rapidly expanding new energy in the sociology of age (Riley, 1973; Riley et al., 1972), both of these traditions were initially catalyzed by the near-simultaneous introduction both in psychology (Baltes, 1968; Schaie, 1965) and sociology (Riley, 1973; Ryder, 1965) of cohort analysis as a radically new and essential methodological approach to understanding ageing.

An appreciation of cohort analysis is a key foundational element of the life-course perspective. Cohort analysis demonstrated the force of changing social conditions in altering patterns of development and ageing, and provided a method

for linking lives and history. A cohort is generally defined as a collection of individuals who enter a system at a common time or time interval. In studies of individual development and ageing, the entry point is typically defined by the year of birth. Cohort entry provides an anchor point from which individual trajectories can be constructed and change can be tracked, allowing comparisons across multiple cohorts. Before cohort analysis, research on 'age change' (or maturational effects) and 'age differences' almost exclusively assumed that patterns of individual ageing could be inferred by examining cross-sectional (point in time) age differences. Comparing cross-sectional findings with longitudinal (over time) trajectories made clear that the two often bore little resemblance to each other, and that to infer biographical patterns from cross-sectional data entailed a risk of a *life-course fallacy* (Riley, 1973; Riley et al., 1972).

The introduction of cohort analysis had a cataclysmic impact. It stimulated interest and investment in longitudinal research, compelled a permanent state of caution regarding the casual use of cross-sectional data to infer maturational (age-based) changes, and brought with it a host of new methodological challenges and complexities. In short, it established a new methodological paradigm and standard for how to approach research on ageing.

Distinctively human features of ageing and development: organismic foundations of the life course

In this section, we discuss distinctive features of human development and ageing which, because of their universal and formative significance, comprise foundational principles for understanding life-course dynamics. 'Cohort effects' and other forms of environmental influence may be found for nonhuman species. However, the magnitude of the effects of experience and social context in shaping development and ageing is especially pervasive and enduring in the human case because of several distinct characteristics of *Homo sapiens*. It is because of these features that life-course experiences matter so much in shaping patterns of ageing, and it is because of them that one's chronological age and bodily processes of ageing cannot, by themselves, account for how human beings develop and age over the life course.

A primary element in these foundational characteristics is the inherently interactive and contingent character of human growth and development. Humans are, in psychologist Barbara Rogoff's

(2002) terms, 'hard-wired for flexibility.' As Berger and Luckmann emphasized in their classic sociological treatise, *The Social Construction of Reality* (1967), human beings are, from the beginning of life to the end of it, 'unfinished' by biological determinants, and are formed and continuously reformed in the course of everyday life. The flexibility and unfinished nature of the human organism are, of course, most apparent in the early years of life, when developments that will be decisive for later life outcomes are set in motion.

But these characteristics are not restricted to the early years. They continue throughout life, reflected in the potentials of older people for lifelong learning, curiosity, and the continued evolution of the self. The 'world-openness' (to use Berger and Luckmann's phrase) of adult and elder humans, is an indicator of *neoteny* (Bromhall, 2003; Dannefer, 1999; Gould, 1977). Neoteny (sometimes called 'juvenescence' [Montagu, 1989]) refers to the fact that, in comparison with other species, adult humans are much more like human children psychologically and even morphologically (Gould, 1977). Neoteny refers to the cluster of features that give this lifelong youthfulness to *Homo sapiens*.

Potentials for learning, change, and growth in adulthood and old age are therefore constitutional and universal features of human ageing. This is why, for example, nonagenarians and centenarians can continue to gain new knowledge and acquire new skills in a wide array of areas (e.g., Snowdon, 2002). Because of the inherent responsiveness of the human organism, and because human individuals are always located in culturally specific social contexts, patterns of physical and mental ageing are socially organized in ways that are meant to promote fundamental flexibility. This does not mean that there are no universal features of development or no developmental or organismic imperatives (Dannefer and Perlmutter, 1990). But it does mean that there is a more significant way in which individuals are involved in development – through their own actions in the world.

This point introduces a second distinctive principle for approaching the life course: the principle of human action as *world-construction*, and human beings as *world-constructing actors*. Acting in the world, individuals do more than simply 'produce their own development' (Lerner and Walls, 1999); they simultaneously co-constitute relationships with others and their own personhood (Dannefer, 1999; Mascolo et al., 1999). This continuously occurring interactive process is inescapably organized by social institutions and practices, beginning with the fundamental institution of language. To acknowledge that experiences and contexts shape

individual life patterns and activity routines, and thus unavoidably *organize* the individual expression of agency, does not negate the significance of expressing agency. It clarifies that the expression of agency always operates within specific social settings – what Settersten (1999) called 'agency within structure.' Indeed, this recognition only enhances the significance of agency because it makes clear that agentic action is essential and constitutive of social relationships and social context.

These conditions begin at birth, as each of us enters the world and human community helpless and unstructured, with our entire being shaped by language and taken-for-granted practices of everyday life. Our actions, like those of others around us, largely conform to and reproduce those conventions. We are constituted within pre-existing systems of social relationships and, as our lives reflect the rhythms and characteristics of these systems, the systems are also reproduced.

Human world-construction, however, also has inherent impulses for innovation and change, deriving in part from the imagination and creativity of human consciousness. This is why human societies are unique in their ability to undergo change on scales of magnitude and rapidity that are unknown to other species. Of course, whether the actual change that occurs corresponds to the goals and intentions of those who implemented it is, however, another question. This can well be demonstrated by familiar experiences of the 'linked lives' – as when parental efforts at sanction and control backfire, leading to more radical but unintended change in a teenager's actions. This is a familiar illustration of the sociological principle of unintended consequences (Merton, 1968). Life-course processes thus cannot be separated from dynamics of stability and change.

These established principles have implications both for scholars who see ageing and the life course as determined by organismic processes (e.g., Gutmann, 1987; Levinson, 1997), and also for those who emphasize individual choice, freedom, and intentional action detached from social structure (e.g., Gilleard and Higgs, 2005). As organismic processes meet social environments, aspects of those environments open or close, accelerate or delay, and in many cases shape their expression. Moreover, such processes are largely mediated by the actor's conscious intentionality. Regarding choice, not only are the degree and types of options that individuals have facilitated or constrained by their circumstances, but their very desires and interests are also shaped by culturally (and often commercially) imposed definitions of what to strive for as 'the good life' (e.g., Ewen 1977; Ewen and Ewen, 1992; Schor, 2004).

DIMENSIONS OF LIFE-COURSE THEORIZING AND THEIR RELEVANCE FOR SOCIAL GERONTOLOGY

The life-course perspective encompasses several major types of phenomena and explanatory paradigms. One major paradigmatic approach – the *personological* – attempts to use key features of early life experience to predict and account for outcomes later in life, either for individuals or for populations. A second paradigmatic approach – the *institutional* – does not focus on individuals at all, but instead analyzes the life course as a social and political construct, often consisting of more or less explicitly defined age-graded stages that are reinforced in institutions, created by social policy, or legitimated by social and behavioral sciences. It therefore refers to a part of the social and cultural definition of reality that broadly organizes both people's lives and their 'knowledge' about age and ageing. We turn to each of these approaches below.

The personological paradigm

The role of early experience in shaping later-life outcomes

The personological paradigm is well exemplified in the influential research of Glen Elder, which has drawn heavily on the Berkeley Guidance, Berkeley Growth, and Oakland Growth Studies, begun in 1928–29. Elder brought great prominence to the life course as a field of study in North America and beyond, and his work has provided a nuanced view of how outcomes later in the life course may be affected by earlier life experiences. His work has especially demonstrated how the social conditions of one's youth and early adult years have a lasting influence in psychological and social characteristics. Elder's analysis of the intersection of biography and social change has also demonstrated the importance of timing – the effect of events may turn out to be quite different, depending on the age at which an individual encounters them.

The Oakland and Berkeley samples provided an exceptional lens for analyzing the role of timing in the nature of the effects of change because the samples were based on different birth cohorts. Since the Oakland sample was born in 1920–21 and the Berkeley samples in 1928–29 they were at very different ages when they encountered key events. Elder's landmark *Children of the Great Depression* (1974/1999) examines in detail the life-course patterns and outcomes of these study participants. The effects of the Depression

differed for boys and girls, by social class, and by whether families were economically deprived. Boys in deprived households more often aspired to or entered adult roles earlier than peers, but showed little evidence of persistent disadvantage from the Depression.

In contrast, Oakland females were more vulnerable psychologically, especially those from deprived families. Elder found that they had to assume domestic responsibilities as their mothers sought work, they felt less well-dressed, more excluded and self-conscious, and they experienced more hurt feelings and mood swings. Relative to non-deprived girls, they married earlier and more frequently stopped working after marriage or childbirth.

Born nearly a decade later, Berkeley children had different experiences than their older Oakland counterparts (Elder and Caspi, 1990). As very young children, Berkeley subjects were dependent on the direct care of parents and vulnerable to family instability and conflict. Elder attributed their differential outcomes to the difference in their ages when hardship hit. Such findings have led life-course scholars to emphasize *timing* as a key determinant of how events shape life-course outcomes.

Another key finding of Elder's work relates to the interconnected nature of the Great Depression and military service during World War II (e.g., Elder and Chan, 1999). For example, the great majority (90 per cent) of Oakland men served in World War II. For many of those from deprived families, military service provided a chance to 'knife off' disadvantaged pasts, recalibrating one's position in relation to powerful structures of opportunity.

In later life, observed differences among age peers have been traced to such earlier experiences. Here, as in some of the analyses in *Children*, a notable theme of Elder's work has been that some degree of hardship in youth or early adulthood – so long as it is experienced on the foundation of some key forms of environmental support and resources – is correlated with positive outcomes later in the life course. For example, by the late 1960s, 40 years after the Great Depression, when the mothers of the Berkeley children had reached in old age, middle-class mothers who had experienced hardship and deprivation in the Depression years were faring better than any other subgroups in terms of psychological functioning, including middle-class mothers who were not deprived, while comparably deprived working-class mothers were faring the poorest of any group (Elder and Liker, 1982).

A popular interpretation for such findings proposes that coping skills and resilience may be

nurtured in an effort to deal with hardship. Similar associations between teenage characteristics and late-life outcomes were also found by Clausen (1993), who also used data from the Berkley and Oakland studies. In offering interpretations for the differences observed in analyzing the diversity of life pathways, Elder, Clausen, and other life-course scholars have tended to emphasize individual choice-making as an irreducible component of individual lives, even though it is clear that childhood and subsequent experiences have produced differential risks that reverberate into later life, and which may have little or nothing to do with individual choice.

Critical perspectives on the personological paradigm

Any programme of research that is so extensive and so broad in its explanatory objectives as the personological approach to life-course studies is bound to generate controversy and critical analysis. Thus it is not surprising that, its unquestioned and influential contributions notwithstanding, a number of theoretical problems with this tradition of work have been identified, especially from a sociological perspective. Concerns have been raised over conceptual and measurement problems associated with the casual and uncritical use of the notion of 'agency' (see Dannefer, 1999; Dannefer and Uhlenberg, 1999; Settersten and Gannon, 2005; and also Chapter 22), a problem that has received a response in a recent effort by Hitlin and Elder (2007) to address the concept more systematically.

A second and more specific problem that characterizes much research in this tradition of life-course research is *Time One Encapsulation* (Dannefer and Kelley-Moore, 2009; see also Hagestad and Dannefer, 2001). This term refers to the practice of predicting later-life outcomes by measuring environmental factors only at the first observation period, or 'Time One,' without considering the continued explanatory potentials of similar (and likely correlated) social-causal factors later in the life course. For example, in the case just recounted of Elder's findings, we cannot know the extent to which the association between Time One causal factors (social status and hardship status in early life) and Time Two outcome (psychological functioning later in life) is a direct relationship, compared with the extent to which it is dependent upon the kind of work and family systems into which the individuals in question spent the intervening years. In subsequent work, Elder and associates have conducted some analyses that respond to this problem by including more proximate contextual variables (e.g., Wilson et al., 2007).

The limitations on explanatory understanding imposed by Time One Encapsulation are made clear in recent research that takes a 'developmental origins' approach in medicine and epidemiology. This research focuses on the relationship between one's early environmental circumstances and subsequent lifestyle and disease processes (Gluckman and Hanson, 2006a, 2006b). An integral part of this approach is a systematic examination of the causal role of experiential factors in adulthood, and the health effects of a 'mismatch' between childhood and adult experiences. For example, individuals who survive nutritional deprivation in childhood have a good chance of developing into robust and resilient healthy adults – unless in adulthood they begin to engage in the stereotypically unhealthy patterns so characteristic today, including being sedentary and consuming high-fat diets, which lead to 'chronic positive energy balance,' which has devastating consequences for health (e.g., Gluckman and Hanson, 2006a, 2006b). Thus, health outcomes cannot be understood by looking at childhood lifestyle alone, but only by their interaction with practices in adulthood.

Another set of critical concerns about life-course analysis are methodological. For the study of ageing, early experiences are important to examine because of their potentially decisive importance, yet their effects are challenging to demonstrate. Extending back so many decades, the life course becomes an endogenous causal system that seeks to explain the present while overlooking more proximate social effects with which earlier events may be correlated, thus creating a risk of spurious interpretations. The goal of understanding lives over many decades makes demanding requests of theories, methods, and data that often cannot be accommodated. The longer lives are studied, the more difficult it becomes to trace connections, and the possible connections seem endless and tenuous. It is hard to know which variables are important, when they are important, how they might be arrayed in sequence, and what processes and mechanisms drive these connections. Variables are likely to be multiply confounded not only at single time points in time but also, especially, across multiple time points. These complexities aside, few longitudinal studies are long enough to explore connections between old age and earlier life periods, though major investments are now being made in these directions.

Population patterns over the life course

Another important tradition of work examines life-course outcomes, not at the level of individual but at the population level, where a cohort's collective transition behavior (e.g., Burkhauser et al.,

2009; Hogan, 1981; O'Rand and Henretta, 1999) or resource inequality characteristics are of interest (Dannefer and Kelley-Moore, 2009). One expanding tradition of such work was stimulated by observations of the diversity of the aged (e.g., Riley, 1980; Rowe and Kahn, 1987, 1997) and by the concern with an emergent 'two worlds of ageing' (Crystal, 1982). The observation that diversity and inequality tend to be greater among older people than any other age group prompted the question of why, and led some researchers to begin to examine processes that might account for this circumstance (Crystal and Shea, 2003; Crystal and Wachrer, 1996; Dannefer and Sell, 1988; Easterlin et al., 1993; Maddox and Douglass, 1974). Such analysts study inequality and other distributional characteristics of a property such as income or health within a cohort.

A noteworthy set of developments in this area revolve around the growing interest in the concept of cumulative advantage and disadvantage (Crystal and Shea, 2003; Dannefer, 2003, 2009; Ferraro and Shippee, 2009; see also Chapters 9, 20 and 25). Cumulative dis/advantage refers to the tendency for inequality to increase among age peers as they move through the life course. This approach has focused attention on the intersection between the processes of ageing over the life course and the *socioeconomic gradient*, which has established a strong connection between economic resources and health (e.g., Link and Phelan, 1995; Marmot, 2004). The cumulative dis/advantage perspective suggests that the relatively high levels of observed diversity and inequality in old age partly reflect processes of social stratification that operate over the collective life course of each succeeding cohort as it ages. A piece of good news is that these are potentially modifiable processes; both public and private pension developments over the 20th century have had the effect of substantially reducing old age poverty compared to a century ago (see Chapter 3).

The institutional paradigm

A second major approach to the life course does not focus on patterns of individual change at all, but on the massively powerful social construction of life stages by social policy and cultural understanding. A simplified version of the institutionalized life course is exemplified by the 'three boxes of life' – schooling upfront, work in the middle, and retirement at the end. European scholars have placed more emphasis on this paradigm of life-course studies, analyzing the age-graded policies and practices that are the basis for a legally, culturally, and scientifically defined set of

prescriptions for organizing lives and their impact in organizing and regulating individual experiences and opportunities based on age. This approach has also received considerable attention in the United States, which has examined historical shifts in the actual demography of specific transitions such as home-leaving, education, work, marriage and parenthood, and retirement, as well as the age-based social expectations related to them. From late 19th century through to the latter part of the 20th century, evidence has pointed to a growing standardization (i.e., regularity) of life experiences (Burkhauser, 2009; Hogan, 1981; Modell, 1989; Settersten et al., 2005), which is consistent with the growing homogenization of life stages more generally, from 'childhood' and 'youth' through 'old age' (e.g., Gillis, 1974; Kett, 1977; Laslett, 1991).

Age norms and the rise of age consciousness in modern societies

These trends are also consistent with the historical emergence of age norms, which have been a significant reality-defining component in late modern societies (Chudacoff, 1989): that is, lives are socially structured – organized and regulated by the institutional apparatuses of government policy, professional expertise, and culturally imposed definitions of reality – and age is a central part of how life is structured. Yet precisely how age matters, and in what spheres of life it may matter more or less, is a matter of debate among psychologists, sociologists, and demographers who have different definitions and theoretical starting points (for a review, see Settersten, 2003).

In essence, age norms are social prescriptions for, or proscriptions against, involvement in 'inappropriate' activities or roles at particular ages (e.g., the age by which one should leave home, or get married). To carry the force of a norm, there must be a high degree of consensus about the rules. Moreover, the rules are enforced through overt sanctions and other mechanisms of social control. If an age-normative system is operating, individuals will be aware of the sanctions for violating norms.

Age norms often have a very general plausibility, shared at the societal level (e.g., Settersten and Hagestad, 1996). As is true for norms generally, their regulatory power is realized in the course of everyday interaction in families, schools, the workplace, or other local settings among people who know and interact with one another often (e.g., Lawrence, 1996; Settersten, 2003). Evidence also suggests that the degree of formal age structuring (via institutions and policies) may be stronger in spheres such as education and work, whereas the degree of informal age structuring

(though social expectations) may be stronger in private spheres such as family (Settersten, 2003).

As John Meyer (1986) has put it, norms become a way to 'construct appropriate individuals.' By providing a definition of what is 'normal,' age norms can, from a functionalist or constructivist perspective, provide a subtle sense of security to individuals. At the same time, they may operate as an effective source of personal constriction and social oppression across the spheres of schooling, work, and family. Many of these norms relate closely to ageist assumptions. Elders may fear sanctions for becoming romantically involved with or marrying a much younger person or for returning to school and taking a seat among a classroom full of twentysomethings. Lawrence has shown that norms about age-appropriateness of ranks and positions in a work organization exist, but workers actually estimate the age-in-rank to be younger than it actually is, thereby possibly contributing to ageism (Lawrence, 1984).

Especially if they are experienced as constrictive, why should such norms retain their plausibility and power, and why should individuals 'believe in' them? The key to the answer lies in the concept of naturalization, introduced earlier. Because age norms are legitimated by the pronouncements of pop psychology and supported by some serious clinicians and scholars, they are widely believed and followed, and in some cases defined and sanctioned by the state, which makes them plausible and compelling. Yet historical, sociological, and anthropological analyses have demonstrated that what is considered 'age-appropriate behavior' is historically and socially variable. Indeed, as Chudacoff, Rogoff, and others have clearly demonstrated, the very awareness of 'age-appropriateness' as a behavioral issue is socially and culturally constructed. Age-appropriateness, thus, is not a characteristic of the individual, but of social structure. To attribute these structurally generated norms to individual ageing or development constitutes a form of naturalization.

Age consciousness, chronologization, and the institutionalization of the life course

The ascendance of age norms and age consciousness through the 20th century offers a good illustration of the thesis of *chronologization* (Kohli, 1986b), which asserts that age and time are, and have increasingly become, salient dimensions of life. Among the prominent manifestations of chronologization were the development of age-graded compulsory schooling and the emergence of retirement, which together had the effect of partitioning off the front and back ends of the life course, thereby creating the 'three-box' model

noted earlier with education up front, work in the middle, and leisure and disengagement at the end (Riley and Riley, 1994). This model reinforces the distinctiveness of life periods and the allocation of roles and responsibilities on this basis.

The three-box model is also a good example of *institutionalization*, which refers to the ways in which the laws and policies of the state (e.g., compulsory schooling or mandatory retirement) as well as organizations, such as schools (with age-graded classes) and work organizations (with age-graded promotion ranks), define and structure the life course. European scholarship, especially, has emphasized the ways in which modern nation-states shape the life course via structural arrangements and the regulation of how resources are distributed (Kohli, 2007; Mayer, 2004). The mobility and urbanization that accompanied industrialization and its aftermath removed individuals from traditional community settings and attendant forms of informal social control, thereby creating new challenges for managing large and dense human populations. With this shift, the state began to regulate individuals formally and in far-reaching ways. Indeed, the very word *statistics*, which was originally defined as 'matters pertaining to the state' (Hacking, 1990), derived from the political and administrative challenges that were increasingly faced by governments. As part of the response to this challenge, age became a basis of social organization, with objectified depictions of the 'reality' of normal life at each of these stages.

De-institutionalization of the life course?

More recently, a debate has begun over the possible existence of counter-trends, as some scholars have begun to emphasize evidence of *de-chronologization*, *de-institutionalization*, and *de-standardization*. These tendencies are reflected in several parallel trends of increasing variability in life experience and transition behavior, which include evidence of increasing heterogeneity in experiences associated with the transitions to adulthood and to with retirement. This new evidence is especially apparent in the final decades of the 20th century and the beginning of the 21st century. For example, at the macro level, the globalization of labor leading to the collapse of manufacturing and the rise of service economies in advanced capitalist societies has led to declines both in secure, long-term jobs and retirement security that such work provided to large segments of the population through the 20th century. With the globalization of labor and concomitant corporate practices such as 'flexibilization' (e.g., Huiskamp and Vos, 2007; Stone, 2005), employers in advanced industrial societies no longer

invest in their employees as they once did and seek to reduce further their commitments to them. These changes have created greater variability in work patterns throughout adult life, not only at entry and exit points but also in between.

These and other structural changes may force or create conditions that create instability in the organization and experience of the life course. This instability is often presented to workers as 'opportunity' or 'flexibility' and in some cases is so experienced (for an extended discussion, see Settersten, 1999). It appears that more often, however, it reflects precariousness and unpredictability, especially for those who are more vulnerably positioned in the labor force (Dannefer and Patterson, 2007; Hughes and Waite, 2007). More generally, such developments contribute to the increasing heterogeneity of retirement age, and to the movement of older people in and out of the labor force (Burkauser et al. 2009; O'Rand and Henretta, 1999).

Indeed, there is substantial evidence that life-course patterns that were once relatively standard are now crumbling. There is a strong trend in these directions with respect to work and retirement, but it is especially with respect to the bundle of experiences traditionally associated with the transition to adulthood – leaving the parental home, completing school, finding full-time work, getting married, and having children. As a set, these transitions in many countries now occur in a far more prolonged and variable sequence than just a half century ago (e.g., Furstenberg, 2002; Gauthier, 2007; Settersten et al., 2005). For reasons ranging from structural to personal, these transitions are often not completed until young people are in their late 20s and early 30s, though the story for privileged and disadvantaged youth is dramatically different (for further discussion, see Settersten, 2007).

Trends toward the individualization (or de-standardization) of the life course have implications for old age both in the present and in the future. In the present, the effects are to delay retirement and to increase the diversity of the older population in terms of economic status, labor force participation, and possibly lifestyle characteristics. Looking toward the future, there is speculation that the changes in labor force stability and economic security going forward are likely to reduce family stability (while creating more diversity of family structures) and increase inequality in midlife, both of which can be expected to contribute to heightened inequality and economic vulnerability when those who are currently in midlife reach old age.

Several theoretical assessments have been made of the prospect that trends toward the individualization of the life course may expand to the magnitude

of a *Second Demographic Transition* (Hughes and Waite, 2007; Lesthaeghe and Neels, 2002). One of these, which remains close to the economic drivers of globalization and flexibilization emphasized above, can be called an *Inequality and Adversity* perspective. A second perspective, which might be called the *Third Age* perspective, focuses on the possibilities that may be enjoyed in later life when the constraints of institutionalized life course are loosened and when individuals are free of responsibilities in work and child care, in good health, have adequate resources and time left to live, and can realize new forms or a greater degree of self-fulfillment (e.g., Gilleard and Higgs, 2005).

A third perspective, which may be called the *Existential Risk* perspective, is articulate those who have expressed worry that current trends may put at risk those individuals whose lives no longer follow older models (e.g., Beck, 2001; Levy, 1996; Weymann and Heinz, 1996). These shifts may free individuals from institutionally defined life circumstances, but they also mean that individuals must shoulder the new risks associated with taking or being on paths that go 'against the grain.' Especially in the context of eroding welfare state supports, the more experimental nature of 'do-it-yourself' biographies makes them prone to 'biological slippage and collapse' (Beck, 2001). That is, when individuals take or find themselves on life pathways that are highly individualized and not reinforced in organizations, institutions, and social policies, they may lose yet other sources of informal and formal support. In this scenario, 'personal failures' that are actually traceable to changes in social structure are mistakenly understood as being one's own fault.

This tendency to generate a sense of social or existential security may well operate in tandem with economic adversity, thus serving to exacerbate the risks already faced by those who are in precarious positions to begin with. The individualization of transition patterns means that people are increasingly left to their own devices, with widely varying degrees of economic and social capital to confront demands, decision points, and challenges that will determine the directions their lives will take. As a result, the psychological capacities and social skills and resources of individuals may become even more important in determining life outcomes, even as such resources tend to covary with other forms of economic and social capital (Settersten, 2007).

In the above sections, we have attempted to demonstrate two broad approaches to the study of the life course, each of which has direct relevance to gerontology. The personological approach provides powerful evidence that 'how one ages' cannot be separated from one's earlier life

experiences at both the individual and collective-cohort levels. The institutional approach demonstrates that the meanings of age are social constructs through which long-term historical trends of institutionalization, chronologization, and standardization come to be widely accepted and taken-for-granted aspects of human nature, despite their sociopolitical origins. These trends have led to an increasing amount of social regulation based on age, and an emergence of 'age consciousness' in the populations of late modernity. Seen from the vantage point of sociological analysis, these trends comprise a *naturalization* of age.

IMPLICATIONS OF LIFE-COURSE THEORIZING FOR SOCIAL GERONTOLOGY

We turn now to a more specific consideration of the implications of life-course theorizing for social gerontology. We propose four ways that the life course is useful in sensitizing gerontology to the empirical realities of the process of ageing.

The life-course perspective sensitizes social gerontology to the impact of social change on human ageing

Virtually all of the scientific research on human ageing is based on cohorts born early in the first few decades of the 20th century. The last century saw the bureaucratization of the major institutions of education, work, unionization, retirement, and health care through which people's lives and opportunities are organized, and it was also punctuated by remarkable events and changes related to war, economic calamity, health epidemics, social movements for civil and workers rights, and technological change in medicine, communication, and transportation. In many societies, the Great Depression and military service during World War II, in particular, heavily marked the lives of men and women who are now old (see Settersten, 2006), and postwar economic and technological developments shaped them in profound but often subtle ways.

The magnitude and rapidity of change in the 20th century meant that those who were born in the first few decades of the 1900s were quite different from those born even a decade or two before or after. As a cohort, they have had 'distinctive experience' with social change, to use Rosow's (1978) term, which brought 'differential effects'

for them relative to adjacent cohorts. For example, in the United States and parts of Europe, successive cohorts had better cognitive test performance because of gains in educational attainment; they had better physical health because of improvements in nutrition and health care; marriage and family formation was promoted because of dynamics related to war and military service; postwar economic growth and the growth of industry opened new opportunities for work.

We saw earlier, in discussing the research of Elder and colleagues on the Great Depression and World War II, that the same historical events and changes can have very different effects on the lives of adjacent cohorts. Their different cohort position means that they are at different ages when those historical events and changes occur. Even a few years can create a meaningful difference. For example, those born in advanced industrial societies in the late 1970s will recall at least part of their early childhood without personal computers, while most of those born in the mid-1980s and later will not be able to imagine life without them. Children today are immersed in and take for granted an expansive digital world that saturates their everyday lives and has dramatically altered how they think, learn, and interact with others.

Although we now know much about how ageing and life-course patterns have been influenced by the circumstances, events, and structural conditions of the 20th century, the scope and magnitude of forces involved may well mean that some still are not well known. One thing that the experience of 20th century ageing has made abundantly clear is that ageing is a variable and mutable process, not a universal and unchanging one. This is consistent with the foundational principles set forth at the beginning of the chapter. Thus, for scholarship on age, the 20th century served as something of a laboratory of change effects – illustrating both the potentials for change and the uncertainty endemic to human circumstances, as well as the consequences they have had for individual ageing in terms of changes in longevity (Riley, 2001), the postponement or elimination of what were assumed to be late-life disabilities (Langa et al., 2008; see also Chapter 7), and the institutionalization and then de-institutionalization of the life course (Dannefer and Patterson, 2007; Hogan, 1981; Settersten and Gannon, 2005). What the 20th century has made clear to us is that there is no such thing as 'normal ageing' or ageing in a general sense, apart from the definitions of normality imposed by socially constructed notions of what counts as normal. These considerations require gerontologists to acknowledge that we do not know to what extent current knowledge of ageing can be extended to members of future

cohorts whose life experiences have been very different from those who are now old.

In some respects, we do not need to wait to see how they are different. In every society, the septuagenarians of 2075 and the nonagenarians of the year 2100 have been born, and the paths of their individual and collective lives have begun. Thus, we can already begin to discern some aspects of the future of global ageing. Of course, more is known about the cohorts currently in young and middle age (for illustrations, see Settersten, 2007). These cohorts have different physical, psychological, and social statuses relative to cohorts past and are themselves very different from one another. As their members age, these cohorts may challenge additional taken-for-granted assumptions about ageing.

The life-course perspective sensitizes social gerontology to variability in patterns and experiences of age

As noted earlier, the diversity of the aged is often emphasized to counter stereotypic or overly 'normalized' versions of ageing, but it also raises the significant question concerning the sources of diversity and inequality among older people. What are the processes or events responsible for this phenomenon? Available evidence suggests that this phenomenon results neither from sudden late-life changes in individuals, nor from cohort differences. Rather, it appears to develop biographically, as a *life-course* process.

As anticipated earlier in our discussion, the consistency of this pattern has significant implications for the study of age. If increasing diversity and inequality are regular features of cohort ageing that regularly recur in each succeeding cohort, it is misleading to describe ageing in terms of central tendencies or 'normative' patterns, and it is especially misleading to describe older people in homogenized ways (Dannefer, 1987, 2003a).

Describing trajectories of variability is not the endpoint but the beginning of understanding the factors underlying old age. Trajectories themselves reveal nothing about the underlying processes that bring the variability about as members of a cohort age. Few would contend that it can be explained by a single set of causal variables. In part, the diversity of the aged reflects the accumulation of particular experiences over many decades that create individual life courses that are in some ways as unique as fingerprints. Some scholars have emphasized the role of personality factors and processes of psychosocial 'accentuation' in which the characteristics and experiences

of individuals become more pronounced with the passage of time, creating greater distinction and differentiation (Clausen, 1993; Feldman and Weiler, 1976; Neugarten, 1979b). Such enduring individual explanations, which emphasize factors such as biographical uniqueness, personal choice, and personality characteristics, are well established and familiar – and they are, understandably, a natural starting point in psychology and in societies characterized by a strong ethos of individualism.

Yet it is clear that trajectories of diversity and inequality develop as individuals encounter stratified social institutions as their lives unfold, starting with early experiences in the family and educational systems, including preschool (Kanter, 1972; Rogoff, 2002). These are early points of entry into the institutionalized and lifelong process of cumulative dis/advantage described earlier. Schools, work organizations, and healthcare institutions inevitably generate inequality because they are naturally structured to regulate access to scarce and desirable resources – whether effective teachers, safe working conditions, and intellectually and socially satisfying work, or access to needed medical technology.

A considerable and growing body of evidence supports the power of these social processes, which also operate in ways that are subtle, hard to detect, or intended to be invisible (Crystal and Shea, 2003; Dannefer, 2003b, 2009). This is a conceptually significant development because it makes clear the fact that patterns of ageing over the life course cannot merely be understood at the individual level but also must include analysis of generic properties of cohorts. It is therefore misleading to think of age as something that mainly happens *within* individuals, rather than as something that occurs *between* people and can only be grasped in the context of cohort processes and as a central feature of social structure (Dannefer, 1987; Rosenbaum, 1976).

In view of these developments, a life-course perspective should sensitize gerontologists to variability and to socially structured processes of inequality that produce it. Indeed, to the extent that major economic strains continue, social class seems likely to become an even more powerful factor determining ageing and in creating serious divisions within societies (see also Kohli 2007; Settersten and Trauten, 2009). Given the great degree of variability among old people, it seems likely that subgroups of people *within* the aged population have great competing needs – especially in terms of wealth and health – which fractures the potential for political solidarity that is often assumed to be true of older age groups (see also Binstock, 2004).

The life-course perspective sensitizes social gerontology to 'linked lives' and their expanding significance in the context of global ageing

The general principle of 'linked lives' is an explicit part of life-course frameworks (e.g., Elder and Johnson, 2003; Settersten, 2003a). This principle simply states that the course of an individual's life is intimately shaped by the needs, circumstances, and choices of others. Despite the recognition that individual lives simply cannot be understood in isolation from others, the irony is that we analyze lives as if they are somehow purely individual. Yet most of the things people struggle with, hope and plan for, and feel pain around are tied to relations with others.

At a micro level, there is a voluminous body of research exploring how the linked nature of lives creates unexpected changes and circumstances. When lives are 'out of synch,' relationships are often strained. This principle applies throughout the life course. Common examples of such interdependence are found within the domain of family, and include many direct applications to later life. Widowhood, for instance, destroys what is typically assumed to be the most central 'linked life' – the partner relationship – and usually brings profound effects. The linked nature of lives may also constrain or foreclose opportunities, or drain individuals of important resources. One example of this is offered by the often-discussed 'sandwich generation,' in which middle-aged adults must simultaneously deal with the demands of raising children and caring for ageing parents, creating a 'life-cycle squeeze' (Oppenheimer, 1982) that constrains time, energy, finances, and choices.

The emphasis on 'linked lives' has focused almost exclusively on familial or other face-to-face relations, prompting a charge of 'microfication' in scholarship on the life course (Hagestad and Dannefer, 2001). Yet there is a largely undeveloped potential and increasing need to explore linked lives at meso and macro levels of analysis – such as the linkages across generations in a society, or across nations.

The global linkage of lives is often unnoticed, yet powerful. With the increasing global organization of late modernity, the lives of both young and old, and indeed the lives of age peers who live far apart and will never meet, are linked through sets of political and economic processes, notably those involving production and consumption: for example, with the lives of child laborers in the Global South and in East Asia, who work long hours to make low-priced consumer goods ranging from toys to T-shirts, which are consumed far away (Bales, 2002; Dannefer, 2003).

In some cases, such global linkages become intensely personal: some nursing homes in countries like Singapore are built with dormitory space to house migrant workers from India and other nearby countries who staff frontline care positions. In the United States, immigrants from the Philippines, Ghana, and the Caribbean fill the demanding, low-paid positions of nursing assistants (Foner, 1994). In a study in the United States of nursing home reform, the staff-hiring committee included resident members. Among a diverse pool of applicants, the residents selected candidates from Ghana because they demonstrated a palpable spirit of caring respect for elders that was not evident in native North American applicants (Dannefer and Daub, 2009). At the same time, such laborers are also spouses and parents, and the migrant work experience imposes strains on and changes power dynamics for linked lives within the family (Burawoy, 2000; Dannefer and Siders, 2009; Smith, 2005). Here, the focus is upon how care may be spread across continents, part of the 'globalization' of family life affecting migrants moving from the Global South to the Global North. This process generates new forms of transnational care-giving, with supportive and financial ties maintained between 'first' and 'second' homelands (Phillipson et al., 2003)

The life-course perspective sensitizes social gerontology to the existence of age as a variable and alterable property of social systems

The articulation of age as a property of social systems – i.e., as an integral part of cultural and symbolic systems that define and organize social life within a society – was given its most precise and elegant theoretical formulation in Riley's original formulation of the age stratification framework (Riley et al., 1972; see also Dannefer et al., 2005). This framework recognizes that societies differ in how they recognize and deal with age, and that in modern societies, all ages exist at once within a matrix of age-graded institutions that direct human behavior and very often segment age groups. These institutions exist independently of the individuals who constantly pass through them as they age, a process that Riley and her associates termed 'cohort flow.' Along with Cain's earlier paper, Riley's idea laid a firm foundation from which social science scholars could conceptualize the formal segmentation of age groups into institutionally differentiated spheres as a major, long-term process of social change, a process life-course scholars now refer to as the

institutionalization of the life course, described earlier.

In conceptualizing age as a property of social systems and not just of individuals, another potentially radical implication emerges for social gerontology: if age is a property of social systems, then it is possible to counterpose the social definitions of age with the experiences and interests of individuals who are ageing. Thus, Riley and her associates argued, a socially imposed age-segregated life course – one which dictated ‘normal’ behavior and excluded elders from full participation in society – ill-serves the potentials and interests of both members of a rapidly graying population and of a society as a whole, and needs to be changed. Yet age segregation continues to be a defining aspect of late modernity (e.g., Hagestad and Uhlenberg, 2006; Uhlenberg, 2009). The significance of this point is that these arrangements are not inevitable because they are socially created; they are not based on human nature and, in fact, are at odds with the interests of human well-being and quality of life. Social policies and cultural definitions that represent the human interests, and especially the interests of older people, will reject the forcing of individuals into outdated role structures based on age. The recognition that age is often a taken-for-granted ‘fact’ within a social system does not mean that it can or should be used in ways that are constraining or oppressive. Indeed, the wide interests, capacities, and resources of older people would seem to offer a liberating new vision for rethinking and inhabiting old age, or any period of life for that matter, in ways that would welcome at least some of the impulses to de-institutionalize the life course.

CONCLUDING COMMENT

We have sought to explain the necessity of the life-course perspective for social gerontology. Increasingly, leading gerontologists have issued a call to bring the life-course perspective to ageing research, policy, and practice. The life-course perspective recognizes the great degree and types of diversity among older people, and that this diversity must be understood as a function of earlier life experiences. It also recognizes that dynamics of ageing are a collective process characterized by the accumulation of inequality over the life course. A second paradigmatic approach to the life course is based on the recognition that, although age is important in every society, societies vary dramatically in how they define age and the meanings they attach to it. The meaning of age can also vary and change within societies. A familiar example

of such change has been the late 19th century and 20th century process of the institutionalization of the life course, and the concomitant rise in ‘age consciousness.’ The extent to which a counter-trend of de-institutionalization in the life course is occurring, and the implications of such a trend for ageing, are questions of ongoing and vigorous debate that will likely last for some time. However this debate plays out, one positive result is that it demonstrates the arbitrariness and often destructiveness of taken-for-granted notions of ageing – as well as the potentials of older people, and of people at any age, to rethink the possibilities of their lives in terms that are less defined by restrictive social roles that reify age and ignore human potentials.

NOTE

1 For a critical and comparative analyses of the perspectives of life-course sociology and life-span psychology, see Dannefer, 1984; Diewald and Mayer, 2009; and Settersten, 2009.

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Past as Prologue: Toward a Global History of Ageing

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INTRODUCTION

To write a history of ageing in a global context is a daunting challenge. On the one hand, we must learn more about temporal shifts in the meanings ascribed to old age and about the historical experiences of old men and women. On the other hand, there are huge gaps geographically. While scholars have surveyed the terrain, much deemed historical gerontology remains *terra incognita*.

For three decades professional historians, experts in the humanities, and social scientists have been systematically reconstructing the lives of older people in disparate times and different places. Spaces remain in our knowledge base. We lack paradigms to describe and explain individual cultural and structural forces that shape late-life circumstances. Crucial details are missing about adult life expectancies, family dynamics, social relations, work patterns, civic engagement, beliefs, dependency, frailty, and abuse in times past.

That the canons guiding historiography differ from how other researchers of (old) age proceed impedes progress. Narrative matters to historians who write books; theoretical articles count more in other disciplines. Interests converge, to be sure. Social and behavioral investigators write more international comparisons than Clio's heirs, though some historians are making the world their stage. They emulate such early 20th-century authors as Oswald Spengler, Arnold Toynbee, and H.G. Wells; and latter-day students Alfred Crosby, Robert Fogel, William McNeill, and Peter Stearns.

The first wave of historians of ageing in the 1970s and 1980s amplified and/or criticized

modernization theory then in vogue in social gerontology (Cowgill and Holmes, 1972). This approach largely was abandoned as researchers of ageing embraced other analytic frameworks. Since then, social scientists and experts in the humanities have offered two different methodological strategies for doing historical gerontology. Some borrow constructs from economics, epidemiology, the behavioral sciences as well as sociology and anthropology to bolster their narrative. Other scholars incorporate tropes from the humanities, an approach that yields felicitous discourse but does little for theory-building.

A middle ground exists – to compare and contrast across time and space how developments in urbanization, migration, technology, disease, secularization, and the arts affected continuities and changes in the meanings of age and the variegated situations of the aged over time. The environment, natural and made by humans, influence(d) how elders were perceived and treated, as well as how they acclimated and adapted to changes in their environs. Global histories generally omit cross-cultural similarities and variations over the life course. Consequently, they yield little about the paradoxical, ambiguous, and contingent features of maturity and senescence. Data come from national, regional, and local case studies.

This overview of historical patterns and developments in global ageing begins by analyzing the enduring impact of archetypes characterizing older men and women. Insofar as archetypes define the original pattern from which subsequent perceptions and concepts spring, such images are both descriptive and explanatory. Unpacking the

clusters of how people viewed themes within archetypes helps to unravel the complexities of older persons' characteristics and conditions.

The aged historically have always been recognized as an identifiable, heterogeneous group. But images alone do not reflect late-life diversity. Alternations in social institutions and structural networks create distinctive contexts for all age groups. Developments in childhood and adulthood now and in the past influence the late-life experiences of successive cohorts. Wars, plagues, financial booms and bubbles over the centuries have caused profound transformations in the expectations and experiences of ordinary persons as they advance in years. Organizational changes typically have evolved more gradually than societal dislocations, but their cumulative impact on processes of senescence have been no less decisive. Institutional changes have been more gradual, but their cumulative impact no less real.

Institutions and inventions are central in any historical narrative of global ageing. Social networks, political systems, economic organizations, and cultural resources affect life courses and, in the process, have transformed institutions and networks themselves. Cultural values lagged sometimes behind structural conditions, and vice versa.

The history of global ageing rests so far mainly on information gleaned from North American and Western European sources (Thane, 2005). Pre-modern historical data about old age in the southern hemisphere – Africa, the Middle East, South America, Southeast Asia, the Subcontinent – lie buried in modern accounts (Makoni and Stroeken, 2002; Phillips, 1992). There are lacunae in information about the condition of the old north of the Equator: little is known, for instance, about the history of old age in Imperial Russia, Byzantium, or the Ottoman Empire (Minois, 1989).

This historical overview of global ageing has four parts. First, I deconstruct archetypes ascribed to late life. The chapter devotes more space to archetypes than I have elsewhere (Achenbaum, 2005a), because these foundational icons capture so many divergent trajectories of ageing. Secondly, to the extent possible, I trace similarities and differences in individual and collective journeys of life over time and space. I pay particular attention to commonalities and variations in the circumstances of the aged by region, period, cohort, class, gender, ethnicity, and race. Thirdly, the chapter illustrates how successive increments of institutional configurations have created age-based norms and caused anomalies and alliances in intergenerational relations. Finally, I turn briefly to 20th-century developments, wherein the most radical transformations in the histories of ageing everywhere on the globe have occurred.

Historical perspectives are essential to gerontology. Reconstructing past conditions serves as a prologue for understanding how current opportunities and future challenges impact individual and societal ageing. Textured histories of global ageing – at the individual, institutional, and (inter)national levels – remind us both of the universal qualities of senescence and of its distinctive manifestations in particular times and places.

ARCHETYPES OF AGE

Three archetypal characteristics of old age are easily recognizable. First are the physical features of late life. Older people often have thin or scraggly white or gray hair. Wrinkles line their faces and extremities. Elders are missing teeth. Dental care is a low priority even in the postmodern era. Physical variations among the old are also visible: some have shrunk in body size and height, others are sickly, while still others are robust. Virtually none retains a youthful appearance.

Secondly are the physical and other differences that distance facets of youth from old age. Variations in status and experiences count. Those with wealth and power historically have been respected. Having few assets in late life generally diminished a person's social status in the community (Demos, 1978: S 277). Those who must depend on others for shelter and sustenance were deemed pitiable, pitiful. Some got support because of their neighborliness or rectitude. The plight of others was ignored; they were subject to cruelty and abuse.

Third is gender's relevance in constructing imagery. In many historical epochs men and women lived in parallel (but not identical) separate spheres. Older women, on balance, have suffered greater indignities and deprivations than older men because of what is culturally defined as diminished beauty and their lack of independent control over resources. Some postmenopausal women were perceived to have greater access than men to the Divine. Such powers inspired awe and fear. Etymologically, these three archetypal features of senescence ultimately trace back to meanings associated with a cluster of words used to define 'old.'

The old ones, etymologically

Classical languages had specific terms with which people contrasted old humans (*geraios* and *senex* in Greek and Latin, respectively) from old inanimate objects (*palaio*s and *vetus*). When Greeks used *palaio*s to refer to the aged, the connotation

was derogatory. According to the *Oxford English Dictionary*, 'old' built on Classical roots to form cognates in Early Middle English, Old High German, and Gothic. Greek and Latin words also had parallels in Etruscan, Sanskrit, and Armenian (*Omniglot*, 2007).

In the Classical era and subsequent centuries 'old' did not always refer to elderly men and women. The word 'old,' for example, could apply to the Devil, or it was used as a term of familiarity ('ol' buddy') in everyday encounters. Occasionally 'old' was affixed to a nation, especially to refer to inhabitants' experiences in ancient history.

Still, many definitions in English and other languages clearly applied to an advanced stage of human existence. The first verifiable use of the expression 'old age,' according to the *Oxford English Dictionary*, occurred in 1205, signifying an advanced phase period of life. Within decades, 'old man' had come into common parlance. So had the expression 'old woman,' which was deployed as a disparaging phrase in 1288. The phrase 'ripe old age' dates from the second half of the 1300s. 'Aged,' the condition of having lived or existed long, entered the English lexicon around 1440. Symbols represented letters in the Orient. Primitive Cantonese, Taiwanese, and ShuoWen had similar characters for an old man with long hair, leaning on a cane (*Dictionary.com*, 2007; *Etymology*, 2007).

Positive and a few negative connotations were associated with 'old age' in the 15th through 17th centuries. When features of late life were deemed praiseworthy, the adjective 'great' tagged with 'old age.' In the 16th century, wisdom (then defined as that capacity of knowing through lived experience) was associated with old age. During the same period, however, there were written instances of disrespect toward both older men and women; 'old age' was a term of jest directed toward both sexes a century later. Other combinations arose over time, such as 'old maid,' 'old woman,' 'old wife,' and 'old bachelor.' Twentieth-century American English incorporates 'old' and 'age' to identify public policies and age-based social organizations (Harris, 1988).

Not all such combinations referred to older humans (despite the likely presumption that they did). 'Old boy,' for instance, referred in the Middle Ages to a kind of strong ale. Botanists used human features of age to describe plants. In the 13th century, they named a certain type of cactus with the Latin cognate for 'old man's beard.' Some allusions to age in the botanists' taxonomy, such as the origin of the elderberry tree, are questionable.

Other words referred to the last stages of human existence. 'Alder' in Old English became 'elder' in Middle English. 'Elder' referred to a parent or ancestor as well as an older person.

In some African societies, 'elder' referred to a senior member of the tribe, usually someone invested with authority (www.Allwords.com, 2007). 'Eldership' was first used in 16th-century English texts to describe positively a senior position in ecclesiastical hierarchies. (The term was also employed negatively as a mock title of honor.) 'Elderly' entered the English language in the 17th century. Not necessarily referring to someone advanced in years, 'elderly' meant somewhat old, 'verging toward old age' (Achenbaum et al., 1996: 59–61).

The Latin term for old man, *senex*, was the basis for a variety of meanings in Indo European languages. The Old Persian term *hanata* meant 'old age, lapse of time.' *Sina* in Old Nordic referred to 'dry standing grass from the previous year.' The Old Welsh cognate meant 'weak or infirm from age' (*Online Etymology Dictionary*, 2007). Families placed 'senior' after a man's name to distinguish a father from his son. As early as 1380, 'senior' was an honorific title referring to an 'elderly person, worthy of deference by reason of age.' In English, the word 'senile' did not acquire pathological connotations until the 19th century; originally, it was simply a synonym for 'old.'

The realm of matriarchs and patriarchs

The differentiation of characteristics of older men and women dates back to the Classical era. *Senex* applied to old men; *anus*, which meant 'many years old,' referred only to old women. The Aberdeen Bestiary, which scholars date to the 13th century, abounds in distinctions between young and old, male and female, rich and poor. Asserting that older women were more lustful and passionate than men, the text refers to *virago*, a strong woman who does not perform offices assigned to a man though she does masculine things (Aberdeen Bestiary, 2007). Beginning in the 15th century a new set of late-life, gender-specific terms entered the English language. 'Grandfather' appeared in the mid-15th century. 'Patriarchy' was in the ecclesiastical vocabulary in 1561; the first recorded use of the term meant a 'system of society or government by fathers or elder males of the community' and occurred in 1632. 'Matriarch' was abstracted from 'patriarch' in 1606. 'Grandmother' like 'grandfather' found a place in the English lexicon around 1440. 'Beldam,' a flattering term to describe an aged woman, appeared in 1580. Use of the term 'matriarchy,' in contrast, cannot be verified before 1885 (*Online Etymology Dictionary*, 2007).

Patriarchies originated in the ancient era. Romulus founded Rome, Erectheus established

Athens, and Lacedaemon built Sparta. The Torah declares that Jews were descended from Abraham through Isaac; the Qur'an traces Arabic lineage to Abraham through Ishmael. These founders, great influences on their families and community, were accorded higher status than women as long as they fulfilled their proper roles. Men were not necessarily old when they established their patriarchies, but myth and history indicates that most founding fathers ruled for decades and lived to a ripe old age.

Wealth secured high status for men, but it did not necessarily qualify them as patriarchs. The Latin equivalent for an affluent Attic landowner in Greece was *paterfamilias*. They used their fortunes to secure sinecures for offspring, a practice extending at least into the Middle Ages (Herlihy, 1985). Wealth, conversely, gave elders a measure of control over adult children, to induce them to care for aged relatives in return for deferred compensation.

Gerontocracies were old men's institutions, dating back to the Spartan *gerusia*, which admitted 28 men over 60 years old to their council, and to the Roman Senate, which gave its eldest member the privilege of speaking first in a debate. A gerontocracy flourished in Renaissance Venice (Finlay, 1980). There are instances of more contemporary political gerontocracies. Old men ruled in Nigeria and wielded power in the Edo tribe. Especially after World War II, septuagenarians and octogenarians held key positions in the Soviet Politburo and in the Chinese Communist party (Davis-Friedman, 1991). Democracies mimic gerontocracies insofar as their leaders gain seniority in high positions by ageing in place. In the United States, key congressional committee chairs go to men who live long enough to benefit from incumbency (Achenbaum, 1985). Healthful age plus wealth generally assured high social status in premodern times; lacking wealth or power lowered old men's standing.

Old men were far more likely than older women to preside over religious institutions; in certain circumstances their rule may be considered gerontocratic. Joseph Smith was in his 20s when he founded the Church of the Latter Day Saints and led believers to Utah to escape persecution in antebellum America. Men well advanced in years control the polity and finances of the Mormon Church worldwide. Older clergy dominate affairs in Iran and Iraq, though they typically delegate day-to-day politics to younger men. The Roman Catholic hierarchy since the election of Gregory VII to the papacy in 1073 resembles a gerontocracy. There have been secular increases both in the average age of cardinals appointed to the Curia and in the ages at which successive popes die. Yet these geriatric indicators are counterbalanced

by other historical developments. Paul VI restricted papal ballots in 1965 to cardinals under the age of 80. And the church bureaucracy in most countries depends in part on the energy of priests and lay people (including women) under the age of 65 to support ageing priests and prelates (Achenbaum, 1993).

It is difficult to verify ethnographic and etymological data that intimate that politics some places were governed by older women. Myths exist about matriarchal tribes, such as the Amazons in the Aegean and women ruling in certain South American tribes. I found two matriarchies. Based on a study of 68 African Bantu dialects, old females apparently dominated in prehistoric times until cattle ownership altered gender politics. Men were better able to defend cattle from marauders; they used cattle herds to acquire wives (Bhattacharya, 2003). Secondly, elderly clan mothers ruled the Chamorro people of the Mariana Islands in Micronesia when Magellan first sailed to Guam in 1521. After the Jesuits began subduing and converting Chamorro compounds roughly 150 years later, older women preserved the indigenous language and perpetuated traditional culture (Shimodate, 2007). There is no incontrovertible evidence that any contemporary matriarchal state exists.

That said, anthropologists among other investigators have studied many communities south of the Equator sustained through matrilineal lines. Women control the household wealth. Lineage is traced through the mother's side of the family. Some matrilocal societies are matrifocal: the Nair community in Kerala, South India (until 1975); the Mosuo people, who live on Lugu Lake between the borders of the Yunnan and Sichuan provinces in China; natives of the Bolma archipelago in Guinea; and the Guajiro tribes in Colombia. Scholars disagree over definitions and the full extent to which women (especially older ones) truly possess socioeconomic control in these places (Mosuo, 2007; Stearns, 2000). Yet the historical record proffers ample proof that older women had certain forms of gender-specific power.

Wise elders

Although older women seldom predominated in secular affairs, contacts with the Sacred empowered them with wisdom. Aged women in ancient times were respectfully called 'hags.' Derived from the Greek term for 'holy woman,' *hagia* was related to the ancient Egyptian word *heq*. Wise Goddesses reigned in many ancient civilizations: Athene possessed the Wisdom of Zeus, Minerva the Wisdom of Jupiter. Lesser male gods deferred

to these women and sought their guidance. Pre-Islamic Arabs worshipped the Old Woman. Shakti was the Great Wisdom Goddess in India; mortal females were recognized to be shaktis on earth. Hebrew scripture (Prov. 9: 1–6; Job 38), such as the Book of Job, claims that Wisdom in the shape of a woman was present at Creation. Sophia and the Holy Spirit are portrayed as aged, feminine sources of Wisdom in the New Testament, Gnostic Gospels, and Syrian texts (Walker, 1985: 38, 55–59; Matthews, 2001). Even after male gods supplanted female gods in ancient cultures, people still considered the wisdom of older women divinely inspired. In the Middle East and Egypt, older women provided medical and social services through ecclesiastical auspices. They transcribed scripture and taught religious and secular subjects (Walker, 1985: 31). In the Confucian world, older women prevailed over their sons and daughters (Thang, 2000: 196). Despite the fact that by the 16th century the Roman Catholic and Orthodox churches banned women from sacerdotal roles, the Wise Goddess was called *Sapientia*, the essence, light, and life of all creation. This threefold characterization resembles the Oriental concept of a female goddess with the power (over men) to create, preserve, and destroy. Oriental cosmology in turn migrated back to the Renaissance: Jewish Cabalists sought to reunite God with his lost spouse (said to emanate from primordial Great Wisdom) in their mystic visions. Tradition dictated that men needed spouses who would direct them in matters sacred and profane (Walker, 1985: 61–2).

Years of experience, more than their connection to deities, ripened older men's wisdom. Hebrew Scripture ascribes extraordinary longevity to the Patriarchs. Methusaleh supposedly died at the age of 969. Moses survived to 120, which Genesis 6:3 claimed to be the maximum human life span. Byzantine iconography venerated age as a source of moral worth; some Orthodox artists even portrayed Jesus as an old man (Dagron, 1991: 28). Ancient texts from the East make an analogous connection between male longevity and wisdom. 'May we, living, reach a happy old age,' read a Sanskrit text no later than the 9th century, BCE. 'Always with good minds, with good sight' (Linguistics Research Center, 2007). Confucius (551–479 BCE) in his *Analecks* sketched the path to late-life wisdom:

At fifteen, I set my heart on learning.
At thirty, I became firm.
At forty, I had no more doubts.
At fifty, I understood Heaven's will.
At sixty, my ears were attuned to this Will.
At seventy, I could follow my heart's desires, and know they were right.

A millennium later the Indian poet and grammarian Bhartrihari (450–510) opined that wisdom in the last quarter of a 100-year life span came from the experiences of 'lamenting and grieving over a series of bereavements' (Bhartrihari, 2007). Paul's words in Acts and his Letter to the Romans three centuries earlier made a similar observation about suffering being a source of wisdom, although Paul did not live a long life.

Elders as strangers, crones, and conjurers

Aged men and women, in short, differed historically from the rest of the population because of (1) their relatively small numbers, (2) their appearances, and (3) their gifts of wisdom. No wonder older people over the centuries personified 'The Other,' an image from which less positive archetypal patterns derived. The aged could potentially deploy their distinctive assets to harm younger people. Indeed, the strengths of age paradoxically put elders at risk of being viewed less with deference and awe than with fear and trepidation. Youth often treated the old with indifference or contempt, particularly if the old lacked the strength and resources to exact revenge.

Psychologist David Gutmann (1987) has hypothesized, based on cross-cultural studies, that older people were 'strangers' in the land of the young – and to their own sense of selves. With few guides and precedents, the path in late life has been shrouded in mystery. 'Old age is the most unexpected of all things that happen to a man,' declared 56-year-old Lev Trotsky in 1935.

Social norms in most places and times required strangers to be hospitably welcomed as guests. But, like immigrants who do not speak with a proper accent and do not understand the customs and traditions in a foreign land, older people have felt lonely. They sought comfort in reminiscences of the past. Similarly, young ones who do not understand the assets and liabilities of age were likely to project their suspicions and anxiety unto senescence. Under the most dire scenario, older strangers have historically been physically abused, mocked, or killed (Brandes, 1996). Like conjurers whose strangely efficacious magic potions made them useful in times of crisis, old people wisely kept their distance until their services were required.

Women's role as strangers offers a vivid account of the historical transformation of an archetype. As we have seen, people in ancient times in the West revered the powers of 'crone,' earthly vessels of divine wisdom. Then something happened. Debates over women's changing place in ancient

cults and religions have radicalized theological studies. Feminist scholars have been investigating 'that part of pre-Christian religion that was most obliterated because men found it most intimidating: the negative aspect of the all-powerful Mother, who embodied the fearful potential for rejection, abandonment, death' (Schaberg, 2004; Walker, 1985: 12). So 'hagia,' the holy one, over time became hags, in the pejorative sense of being witches, wicked stepmothers. Muslims dreaded the evil eye of postmenopausal women.

Shifts in religious practice did not always affect the aged in negative ways. Shamans and conjurers in pre-Islamic Turkey, rare in number, were usually elders. People valued old ones who not only ensured the presence of the Spirit in households and communities but also served a healing function. Oguz legends deprecated those who did not kneel before the old and kiss their hands. The Qur'an commanded respect for age, an injunction honored for centuries in this predominantly Muslim country. In secular, contemporary Turkey, traditional norms such as caring for the vulnerable old in children's homes remain in place (Altun and Ersoy, 1998).

Like Shamans, old conjurers played a role as healers – and not just in Turkey. Native American conjurers, relying little on visions and incantations, claimed to draw from the bodies of patients objects alleged to cause diseases (Berthrong, 2007). Conjurers were important in antebellum US slave quarters; elders were respected for their ability to ward off evil spirits or occult illnesses attributed to supernatural forces. In Eastern cultures, such as among the Hmong people, conjurers intervened with the spirits that promoted health or illness by attempting to align a sick person's soul and energy (Kleinman, 1980). Conjurers, in short, were a distinctive group of (generally) old men and women whose mystical powers served earthly purposes. Possessing such powers, however, did not protect the old from misery and illnesses of their own.

The vulnerable and superannuated

The cumulative losses and physical vicissitudes of growing old(er) have always made aspects of late life unattractive. Older people felt vulnerable, as Hebrew Scripture attests. Hence the Psalmist (71:9) gives voice to elders' fear of rejection: 'Do not cast me off in the time of old age; forsake me not when my strength is gone.' This universal sentiment underscores the fact that age suffers in comparison with the beauty and strength of youth. In his *Aphorisms* (430 BCE), Hippocrates documented such maladies of old age as nephritis, apoplexy, cachexia, defluxions of the bowels,

cataracts, joint pain, vertigo, and coughs. Seneca (4 BCE to 65 AD) succinctly observed that *senectus morbidus est*, 'old age is a disease.' Nobel Laureate Elie Metchnikoff (1905: 48) reiterated this pathological model of ageing 1900 years later: 'Old age ... is an infectious, chronic disease which is manifested by a degeneration, or an enfeebling of the noble elements.'

Hebrew Scripture acknowledged that physical decline was progressive: 'The span of our life is seventy years, perhaps in strength even eighty; yet the sum of them is but labor and sorrow, for they pass away quickly and we are gone' (Psalm 90: 10). Ecclesiastes counterpoints the sorrows of age with the vanities of youth, while underscoring the transitory nature of all human existence from womb to tomb. Roman satirists, like Juvenal (AD 60–130) went further in visualizing the fate that awaited those who lived (too) long:

What a train of woes – and such woes – come with a prolonged age. To begin with, this deformed, hideous, unrecognizable face; this vile leather instead of skin; these pendulous cheeks; these wrinkles like those around the mouth of an old she-ape as she sits scratching Old men are all the same; their voices tremble, so do their limbs; no hair left on their shining scalps; they run at the nose like little children. To chew his bread, the poor ancient has nothing but toothless gums A perpetual train of losses, incessant mourning and old age dressed in black, surrounded by everlasting sadness – that is the price of a long life.

(quoted in de Beauvoir, 1972: 121–2)

When Bernice Neugarten in the 1970s differentiated the 'young old' from the 'old-old,' her scheme resembled the age-old distinction made between a 'green old age' and 'decrepitude.' Contemporary gerontologists recognize that octogenarians nowadays have greater vitality than even two generations ago. But with gains in adult longevity, the risk of co-morbidity increases. Everyone desires to live, noted Jonathan Swift, 'but no man would be old.'

For this reason, scientists, alchemists, and adventurers since ancient times have sought ways to prolong healthful longevity – indefinitely, if possible. Myths of rejuvenation existed from Icelandic sagas to Subcontinent legends. The promise of a Foundation of Youth, which cost Ponce de Leon his life, originated in the Orient (Hopkins, 1905: 15). In the West, some of gerontology's forebears – Aristotle, Francis Bacon, Luigi Cornaro, Cicero, William Godwin, Wilhelm Christhof Hufeland, and C.A. Stephens – 'were so optimistic that they foresaw a decisive solution to the problems of death and old age; they aimed at the attainment of virtual immortality

and eternal youth' (Gruman, 1966: 5). Yet, unless the current anti-ageing movement succeeds where earlier experiments have failed spectacularly, there will be no reversal of the ravages of age. Even the most vital among the growing population of old-old ultimately confront the vicissitudes of living far too long.

Loss of strength eventually diminished men's capacity to gain a livelihood. Archeological evidence from Africa between 7000 and 3500 BCE indicates that the formation of agricultural communities affected all age groups. Older men could not keep up with younger tribal members on hunts. Aged women found it increasingly difficult to gather plants to eat. (The pattern obtained in northern climes where food supplies were limited; the harsh physical environment weakened persons past their prime.) Prehistoric African elders became *superannuated*, marginalized economically on account of advanced age. The word, which entered the English language in 1633, was associated with exemption from performing military service and with phasing out home-based manufacturing. That the definition was ageist – 'retired on account of age ... obsolete, out of date' – had obvious consequences. A man who could not support himself, much less his household, was dependent on kin and neighbors for essentials. In times of scarcity, inactive older men were at the mercy of others, who themselves lived precariously.

The situation was far grimmer for aged women, usually lacking assets in their own right. Widowhood made older women quite vulnerable. Remarriage was unlikely. Older women depended on compassion, traditional norms, and whatever legal rules protected their rights. Thus Hebrew Scripture and the New Testament entreated readers to remember to care for the widow. Revealingly, 'widow' in Sanskrit meant 'empty.' They were non-entities. The English Reformation, which closed many Roman Catholic charitable societies, forced widows to seek new sources of alms. Parliament thwarted the efforts of those deemed unworthy of support (Botelho and Thane, 2001: 25–6). Widows, even more than their younger peers, had to behave properly, lest they be subject to witch hunts and derision (Stearns, 1982: 10).

Along with pain, dependency, and vulnerability came varying degrees of rejection in late life. Aristotle in *Politics* contended that older men were too petty and inflexible to serve in public office. Aristophanes agreed, adding a list of sexual foibles to his indictment of old age. A Roman expression, *sexagenarius ex ponte*, indicates that drowning senior citizens in the Tiber was one way to eliminate their presence – a custom practiced by aboriginal people who set their decrepit elders afloat on chunks of ice. Islam, in contrast, affirmed

virtue in suffering. The frailties of age were harbingers of disease and death, but the Qur'an taught that the vicissitudes of life provided an edifying opportunity to surrender to God (Thursby, 2000: 159).

Ageing and death

For most of recorded history, death struck at all ages, notably in infancy and childhood. Plagues, natural disasters, and wars killed people in their prime. To reach 40 historically raised chances of attaining a 'ripe old age.' In the contemporary era, people increasingly die in old age. Advances in public health, preventive medicine, diet, and technology enabled successive cohorts (initially those in industrializing nations) to survive until middle age. In addition to links between death and late life, older people served key roles in the rituals associated with death and burial at certain places and times.

Perhaps the most vivid image of age and death portrays Father Time as an old man. Around 1400, folk artists began to depict Father Time's sickle, an agricultural tool associated with fecundity, as an instrument of death. Father Time remains the Grim Reaper. Mexicans feature the image prominently in observances of the Day of the Dead.

Hinduism infuses its caste systems and cosmologies by connecting ageing and death from a life-course perspective. Most teachings link images of the birth canal and the burial ground. Believers hope to elude suffering through a series of rebirths. Some prayers honor the elders on their paths. Others allude to 'toothless and driveling' old age. Over time, people renounce familial bonds and social obligations. The aged in this context have been described as homeless sojourners who seek spiritual embodiment (Tilak, 1989).

Buddhist traditions treat old age and death differently from Hinduism. The founder, Gautama, had been shielded in his early years from sickness, poverty, ageing, and death. Confronting the ravages of age for the first time, Gautama shrunk from its ugliness as he awakened to the reality of suffering. Buddha sought several ways to achieve Enlightenment before he came upon his true nature, which meant giving up possessions and acknowledging the impermanence of mortal life. Over time, Buddha came to embody the compassionate wisdom that he so desired and taught. As a Cambodian aphorism puts it, 'Young people make rice, old people make merit.' The Buddha lived a long life; he was nearly 80 when poisoned by his cook.

Death and dying afford(ed) older women an unpaid but essential role to fulfill. The ancient Crone served as a Death Mother and funerary priestess.

Whereas old men performed the sacramental rites essential for the passage of the soul, older women cared for the dying and prepared the body for burial (Walker, 1985: 32–4). A gendered division of labor persists in modern-day rural Japan. Men oversee public festivals and ceremonies. Women console the survivors, by transmitting ancestral concern to kin. Performing such tasks makes the old ones ‘rojin,’ good individuals engaged in activities that promote social comity amidst a time of grief (Traphagan, 2004).

Many Archetypes, in sum, shadow the cultural history of global ageing. Far from conveying a monochromatic image, archetypes from different cultures and historical epochs reveal positive and negative, stereotypical and mythical, accurate and ambiguous characteristics of late-life physicality, wisdom, sexuality, roles, family relations, religiosity, and morbidity (among other things) in all its diversity, temporally and geographically. Some gender-specific meanings and circumstances have changed over time. Exceptions and anomalies exist. Ancient tropes resonate with modernity. Sometimes the words used to describe elders migrate from one extreme to another. At other times, transformations have been nuanced, fraught with ambivalence. How closely do continuities and shifts in archetypes of old age correspond to the lived experiences of older people in different times and different places?

THE JOURNEY OF LIFE

Demographic patterns over time

The limits of human longevity have fascinated people for millennia. Archeologists, anthropologists, and ethnographers have gathered reports from South America in the pre-colonial and modern era, in the state of Georgia in the former Soviet Union, and a few other places that boast that some residents have lived roughly 150 years. Cases of US men and women living 130 years and beyond are in Civil War pension records and Social Security beneficiary files. None can be authenticated. Respondents did not know when they were really born. Or, the claims of super-longevity served a societal purpose, such as promoting tourism.

The best scientific estimate of the maximum human life span is about 120 years, a span that has not changed greatly over historical time. That there are exceptions does not invalidate this historical generalization, although there have been dramatic changes in life expectancy. The average length of life in the Bronze Age was under 18, and in the Classical era was under 30, in medieval Britain 33. Currently, the worldwide average has doubled.

Some men and women reached remarkably advanced ages in societies past and present – an Egyptian papyrus claimed that the span between 40 and 100 were the best years of a person’s life (Parsons, 2007) – but in prehistoric settlements the proportion of humans over 65 rarely exceeded 2% (Hauser, 1976). Infant and childhood mortality devastated younger populations. Millennia later, a child born in the United States in 1790 had as much chance of reaching his or her first year as a child born in 1970 had of attaining 65 years. Only one in three children survived their first birthday in Bombay in 1900 (Robinson, 1989: 119). If a person in past times were extraordinarily fortunate to live until 50 – Peruvians, that age on the eve of the Spanish conquest were called ‘half old’ (Collier et al., 1992: 83) – she or he had nearly as much chance of reaching old age as someone in that region in the contemporary era.

The onset of ‘old age’ throughout recorded history has been considered to occur at age 65 – give or take 15 years either way (Achenbaum, 1978). That is a span larger than any other period of life. And that demographic range helps to explain the tremendous variance in older people’s physical, mental, economic, and social status. Gender differences matter: older women now on average live longer than older men; in past times, however, many died in childbirth. Racial differences persist. On average, chronic and accident-related disabilities strike people of color sooner than Caucasians.

Falling birth rates in North America and Western Europe since 1700 have resulted in increases in the percentage of older people in the population. Declining fertility rates and advances in life expectancy at birth (on average in the United States from 47 to 78 in the 20th century) have resulted in societal as well as individual ageing. There are striking global variations. Only 5 per cent of Japan’s population was over 65 in 1950; it now boasts increases in life expectancy from 50 to 78 for men and from 55 to 83 for women between 1947 and 1995, making Japan an ‘older’ population than Sweden (Thang, 2000: 193). South of the Equator, unlike northern countries, fertility rates remain high. Simultaneously, however, the percentage of older people in the Caribbean, Chile, Costa Rica, and Mexico is expected to double between 2000 and 2025 (Dickerson, 2007). Thus, policymakers must allocate resources to dependents at both ends of the life course.

Economic patterns over time

For most of world history, humans have engaged in agricultural pursuits. Despite the hard work often performed in inhospitable settings, this

activity has offered generally favorable economic conditions for the old. Even when their capacity diminished, the aged could help younger family members with necessary tasks and keeping track of the calendar and records. The elders knew how to interpret weather patterns and which parts of the land flooded. Years of experience made them useful managers, truly veterans of productivity. And the old almost invariably owned the household's land.

Maintaining possession of the family farm gave the old a measure of security in late life. Adult children had to work if they eventually were to inherit the land. Thus, wise aged men willingly gave their offspring parcels, on the condition that their heirs would care for them in their declining years and provide for widows when they were gone. While this pattern probably obtained in most places, the history of inheritance, especially in agrarian settings below the Equator, has not yet been written.

The Industrial Revolution transformed the economic status of the older persons at first in Europe and North America, in good and bad ways. New modes of production made improved goods accessible. New technologies made it easier for older people to perform daily tasks. Material progress contributed to overall prosperity, affording the old a higher standard of living (Haber and Gratton, 1994). Some elders profited mightily from industrialization. John D. Rockefeller, nearly 60 when he became the world's first billionaire, gave away \$500 million by the time he died on the eve of his 100th birthday. Managers who owned railroads, steel mills, and other profitable corporations enjoyed a disproportionate share of the nation's wealth.

That said, with the declining importance of agriculture and the diminished demand for handmade products, the Industrial Revolution contributed to obsolescence in old age. Many elders found it difficult to adapt to the demands of mechanized production: they lacked the stamina and efficiency to keep up with the pace set by the clock. Titans of industry valued the agile youth and speedy machines more than the skills of the older craftsman (Lynd and Lynd, 1929: 42–3). While historians debate the direction and magnitude of changes in employment rates during the initial phases of industrialization, according to official documents, labor force participation declined. By the 20th century the downward trend in old-age employment was unmistakable (Schaie and Achenbaum, 1993; Achenbaum, 1978). Among the unskilled, superannuation was treated as a form of disability. Older workers begged for money in saloons and at the factory gates as their middle-aged sons (prematurely old) risked life and limb performing hazardous tasks. Wives supplemented

household incomes by taking in boarders, running saloons, and working as shopkeepers (Bell, 1944). Industrialization provided jobs for young women in mills and other factories; such positions rarely went to older women.

During the second half of the 19th century, British and US banks and transportation companies began to offer pensions based on a worker's age and years of experience. Besides being rewards for good service, corporate pensions were incentives to maintain the loyalty of middle-aged workers. Corporations, under no obligation to honor pension commitments, extended gratuities to a relatively small proportion of the labor force. Those who did not receive pensions had to find odd jobs, supplement income with modest savings, or rely on union-sponsored subsidies, which were limited in scope (Hannah, 1985). The advent of retirement plans for government employees and social insurance schemes for workers offered the old a measure of old-age security, which in turn inspired innovations by private insurance firms and businesses (Graebner, 1981).

Political patterns over time

The State has historically been the key political actor deciding the rights and entitlements of older people. The Senate exempted Romans from military service at age 60; centuries later British and French rulers followed suit, retiring military personnel at prescribed ages. Twelfth-century Chinese emperors were the first to give pensions to loyal bureaucrats. Suleiman the Magnificent, who ruled from 1520 to 1566, exempted elders, priests, women, and children from paying taxes (Embree, 2004).

In the Middle Ages, public institutions increasingly became an important source of old-age relief, taking over larger shares of healthcare services traditionally performed by monasteries and church-related hospitals (Thane, 2005). In addition, local institutions allocated resources, providing food and fuel to elders in their homes, in other people's residences, or in public almshouses. In the United States, thanks to the nation's first gray lobby, the Grand Army of the Republic, veterans' pensions became the most important source of old-age financial assistance for Union soldiers at the turn of the 20th century. Outlays to claimants over 62 were the largest item in the Federal budget in 1914. Adding to the burden of losing the Civil War, Southern states went further in debt to assist Confederate veterans who received nothing from the victors (Skocpol, 1992).

Institutions come and go, giving rise to circumstances that alter relations across and within age groups. It is worth noting that older people, by

dint of their numbers and power as a voting bloc, gained unprecedented power in the 20th century as a political voice. The Townsend Movement, for instance, spurred age consciousness and political awareness and resulted in the political empowerment of the older population. Sexagenarian Frances Townsend filled stadiums with supporters convinced that his plan to give men and women over 60 years old \$200 per month on the condition that they do not work and that they spend the sum in 30 days. Supporters formed Townsend Clubs coast to coast, mobilizing support for a plan that would prime the economy by making elders consumers of goods produced by younger workers back on the job (Putnam, 1970). But Townsend's panacea was never viable. Twentieth-century fund economists demolished its logic. Key congressional committees listened politely to advocates, but few were swayed. The Townsend Movement fizzled before the first Social Security check was issued.

National governments spearheaded social insurance programs, covering the risks of illness, disability, and senescence. Old-age assistance schemes typically preceded old-age insurance plans and health-insurance programs. Initially, measures sought to reduce poverty among the old rather than assure income security (Beland, 2005). European countries (starting with Bismarck's Germany in 1889) and New Zealand took the lead; the United States was a relative late comer. Now, virtually every nation in the world makes provisions for its older population. Population size, ideology, the state of the economy, and availability of funds determined the timing and extent of coverage. The growth of old-age interest groups spurred expansion and prevented serious contraction of entitlements (Binstock and Day, 1995). Population ageing and anticipated limits to economic growth have dampened popular confidence in the fiscal and political robustness of publicly funded social-insurance schemes. Yet relying primarily on individuals or the private sector presents its own risks in a global economy.

Social patterns over time

Families traditionally have been the first line of emotional and economic support for older people. Household structures and generational dynamics have varied over time and place. Older men in Western Europe remained heads of household as long as physically possible. Nuclear families since pre-industrial times have been the ideal and norm (Laslett and Wall, 1972), though death, divorce, and harsh circumstances have necessitated temporary 'stem' families or extended residency in households by kin. The Elizabethan Poor Law of 1601 required

grandparents to assist grandchildren and cousins to care for any kin in need. In the modern era, greater emphasis in Europe and North America has been placed on 'autonomy' over 'independence.'

Matrifocal or matrilineal patterns have prevailed south of the Equator in Asia and Africa (Humphrey and Oron, 1996: 96). Daughters-in-law often co-resided with their mothers-in-law, with the expectation that the youngest daughter would care for elders in due course. Sometimes aunts and cousins helped with cooking, cleaning, and caring. Deference to elders, with males taking precedence over females, continues to shape Japanese customs (Bowring and Kornecki, 1993: 236). Aborigines tended to prefer more 'open' arrangements: 'fathers' and 'elders' were sometimes fictive kin who control household affairs.

Yet families have always been fragile safety nets. Divorce, estrangement, and death broke bonds. Poverty strained resources. In such situations, elders historically had to rely on friends and neighbors on an informal basis. Faith-based communities have always cared for elders. In the West older people could also turn to voluntary associations, such as unions and fraternal lodges, charities, and civic groups. Such organizations have existed globally, but nowhere have they lasted permanently. Consequently, the major source of assistance in most countries historically came with the rise of public social services. In addition, new modes of transportation and communication compensated for the geographic mobility that distanced kin.

Cultural patterns over time

Although old age has always been a distinct (if oftentimes marginalized) phase of life, throughout history everywhere elderhood has been interpreted in the context of other age groups. People move through time with other cohorts. An imaginative portrayal of this journey through life was rendered by European folk artists between the 14th and 18th centuries. In presenting 'the steps of ages,' male and female, artists traced the connection among biological age, chronological age, and social function upwards from birth to the prime of life (typically 40 or 50) and then depicted the descent to death.

Artists portrayed elders as vital beyond the prime of life. Roles changed: men in their 60s were businessmen or lawyers, no longer soldiers. They usually had beards, a mark of their learning and experience. In literature and historical accounts from the period, old men were mentors, willing and able to transmit life's practical and existential lessons to younger people wise enough to seek advice. Women, who did not look as

healthful as men their age, nonetheless remained busy in the home, surrounded by adoring (grand) children. By 80, the gloomy aspects of late life were manifest. Stopped, the aged were content to remain near the hearth. A decade later they were depicted as bedridden, as helpless as infants as they entered second childhood.

Jainism, an offshoot of Hinduism, offers an Eastern religious counterpart to medieval renditions of the stages of life. Childhood, youth, adulthood, and old age are considered modifications of transient forms of a living being. Only the soul has permanent substance. According to Jainism, when we die, we are born into another body, with the same soul (JCNC, 2007).

Intergenerational relations have not always been happy. The aged could be victims and perpetrators in strife, as Hesiod recounts. Cronus got rid of his father, Uranus, by castrating him at his mother's request. Fearing a similar fate, Cronus swallowed his five children alive. Alas, he did not succeed in eliminating his competition. Again at his mother's contrivance, one child (Zeus) managed to live; Zeus thereupon killed Cronos.

Contemporary rivalries are rarely so violent, but they can be nasty. Money, control, and esteem have long been the source of discord. But the cultural roots of modern-day intergenerational conflict go beyond family politics. Robert Butler (1975) coined the term 'ageism,' to describe the cultural animus against people on the basis of their years. Butler considered ageism comparable to sexism and racism. Ageism affects not only personal relations but also is endemic in most contemporary institutions, ranging from health-care centers to faith-based communities (Achenbaum, 2005b).

Lately, institutional ageism has been particularly virulent in the media, which has made much of a so-called generation gap. Magazine covers graphically show narcissistic elders enjoying the good life in posh settings, unmindful of accusations that they are squandering their children's inheritance. Critics deride members of the 'Greatest Generation,' men and women who survived the Great Depression and won World War II, as 'greedy geezers.' Sometimes columnists take cues from organizations like the Association for Generational Equity, which pitted the interests of white elders against the needs of poor children of color. The charge had little basis: in fact, there has been greater economic transfer from old to young in terms of paying tuitions and covering mortgages than from young to old. But in a culture of consumption where advertisers and drug companies exalt beauty and sensuality, allusions to aged sexuality and elders' vain efforts to look young draw laughs. AARP, which claims that '60 is now 30,' has not yet convinced people.

Thus, it is important to examine age-relevant institutions, to assess whether they promote age-appropriate sensibilities.

PAST AS PROLOGUE

The historical watershed in global ageing occurred in the 20th century. Two-thirds of all gains in life expectancy have taken place since 1900. Retirement has become widespread. Lifelong learning opportunities proliferate after centuries of being the stepchild of adult-education plans. Out of desire or necessity, older workers seek part-time jobs or volunteer their talents in unprecedented ways. The State's age-specific policies determine the scope of old-age income security and health care. Gerontologists document that chronological age is a poor predictor of old-age characteristics, yet bureaucratic criteria paradoxically become increasingly age-based. Experts are beginning to differentiate between individual and societal ageing. As the challenges and opportunities of societal ageing slowly become part of policymakers' agendas, there is an urgent need to examine structural and cultural lags confronting men and women with extra years to live.

Ironically, taking the historical record seriously complicates contemporary assessments of global ageing. 'Age' in modern times has become a critical determinant of access to work, wealth, and power, resulting from seniority. But older people as a group have not been the prime movers who altered fertility rates, industrialization, urbanization, democratization, globalization, secularization, or commercialization. Women and minorities around the world have become key agents of intergenerational change. Ethnicity and class are important signifiers. So should we begin with the needs and gifts of older people because of their recent ascendancy in modern sensibilities, or should we deconstruct 'age' by gender, race, ethnicity, and class?

Finally, the diversity of global ageing over time raises the issue of whether scholars should emphasize universal trends over localized features, or vice versa. Will historical vectors converge with globalization? Or, will age-old customs and traditions persist, affording us a window on the fragile, complex, nuanced, contradictory, ever-changing aspects of the meanings and experiences of growing old(er)?

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The Economics of Ageing

James H. Schulz

INTRODUCTION

The economic situation of the aged has improved greatly over the years around the world. Schulz (2001: 2), for example, characterized the situation in the United States at the turn of the 21st century as follows:

From a statistical point of view, the older population in this country is beginning to look a lot like the rest of the population: some very rich, lots with adequate income, lots more with very modest income (often near poverty), and a significant minority still destitute.

However, as Smeeding (2005) points out, while great strides have been made in reducing poverty among older people, the poverty rates in the United States (and the United Kingdom) are still higher than in other industrialized countries.

EARLY SOCIAL WELFARE IN THE UNITED STATES

From a historical perspective, the economic situation of the majority of older people before the mid-20th century was not good. The predominant situation was one of *dependence* and, as hard as it is to believe, one of *punishment*. Older persons in the 18th and 19th centuries who were landless in the United States found themselves at the mercy of a harsh market-oriented economy (Schulz and Binstock, 2006). Individuals were rewarded or punished, depending on their usefulness to the

production of economic goods and services. As industrialization progressed in the United States during the 19th century, older workers found that they were increasingly unable to compete for new jobs paying living wages. Usually without savings, they were forced to survive on what was often erratic help from their families. Those without families able to help them were forced to turn to charities or the government for aid. In any event, the result, more often than not, was that individuals in old age often faced economic deprivation.

In colonial times, older persons with inadequate economic resources were actually taken from their homes and 'boarded out'. Towns would take their land and other assets (if they had any) and then auction off the older person to the lowest bidder (Trattner, 1989). These impoverished older persons would then receive food and shelter in return for work – a system very similar to that of indentured servitude. Starting in the middle of the 19th century, the system of support changed, though it remained equally harsh. The needy were sent to what became known as 'workhouses', the main function of which, according to officials of the time, was to punish, reform, and 'cure' the poor of their bad habits and character defects. Later, almshouses and asylums replaced the workhouse system. Some of these provided a reasonable level of support but many were places of degradation, disease, starvation, violence, and corruption.

Finally, in the Progressive Era of the early 20th century, the situation began to change for the better. Control of welfare agencies gradually shifted from (often corrupt) local officials to state agencies, which were often less dishonest. But living conditions for older people in the United States

continued to vary considerably from state to state. As Quadagno (1988: 179) summarizes:

Three crucial factors affected the structure of the American welfare state: first, the power of private sector initiatives; second, differences in the material interests and relative access to power of the two segments of the labor movement, mass-production and craft workers; and finally, the impact of the existence of two economic formations – the North and the South – within the boundaries of a single nation-state Welfare programmes are not unique features of advanced capitalist societies but have served a dual function in most Western nations since at least the sixteenth century – *sustaining the vulnerable and allocating labor*. [emphasis added]

Over the years, there were many proposals for helping the poor through federal assistance. Unlike in Europe, however, the United States was slow to institute a public, collective insurance programme. Despite great need, there was a huge ideological obstacle – what has been called ‘the gospel of thrift’. Quoting historian David Hackett Fischer, Quadagno (1988: 21) points out that self-reliance based on saving has been ‘central to the system of secular morality in America since the Puritans’.

It took the Great Depression of the 1930s to galvanize the country into collective action. As economic conditions worsened, an unemployed doctor who was a political unknown, Frances E. Townsend, proposed a plan to help older people by giving a universal, flat pension of \$200 per month to every retired citizen age 60 and older. It was a seemingly simple plan whose appeal, even to the surprise of Townsend, swept across the country. Within a year of its initial proposal, there were over a thousand Townsend Clubs urging enactment of the proposal. As a result, pension politics became a major issue. ‘For many of its aged adherents, the Townsend Plan became a matter of faith, a new version of the millennium’ (Holtzman, 1963: 28).

President Roosevelt strongly opposed the Townsend Plan. He was determined to create a programme where people had an opportunity to ‘earn’ their benefits through work and contributions of money into a collective fund. For Roosevelt, the Townsend Plan was a handout that undermined people’s dignity, their desire to be self-reliant, and their incentive to work. The Townsend Plan proposal, however, ‘clearly helped to marshal political support among voters for federal pension legislation to help older people, and it strongly encouraged President Roosevelt to act sooner rather than later in taking action to deal with the problems of older adults’ (Schulz and Binstock, 2006: 52, based on information in

Brown, 1972). In 1935, Democratic leaders in the House of Representatives, urged on by Roosevelt, pressed the Congress to oppose the Townsend Plan, which was eventually voted down by a vote of 206 to 56. Following this, the Roosevelt plan, Social Security, passed the House by an overwhelming vote of 371 to 33 and then passed the Senate by a vote of 76 to 6.

BASIC PRINCIPLES AND SOCIAL SECURITY IN EUROPE

Social Security legislation initiated a dramatic change in the way that the United States managed economic support in old age. It was not, however, an American invention. By the time Social Security was adopted, it was already operating in most countries of Europe. Starting with Germany in 1889, under the leadership of Chancellor Otto von Bismarck, Social Security programmes were instituted to cover large segments of workers in Europe – not just military and government elites. Over a 25-year period, the Bismarck approach was adopted in a variety of forms in various countries – such as Denmark (1891), Belgium (1894), France (1903), Britain (1908), and Sweden (1913).

Many factors were important historically in stimulating the creation of Social Security programmes in Europe. Scholars generally agree that Bismarck, for example, was genuinely eager to help the masses but that other motives were also apparent. Bismarck, some other political leaders, and even a few large business owners, were concerned about the social problems that were a part of the industrial revolution and the new economic system built on competition. Bismarck was worried about the political consequences of ignoring these problems. Historian Hermann Beck (1995: 45) writes: ‘Warnings that social misery was the precursor of revolution lay in the air’. Both political officials and economic producers feared a revolt, and, as a consequence, supported the idea of creating worker pensions run by the government. And as observed by Ooms et al. (2005), the early promoters of social insurance (from Otto von Bismarck to Franklin Roosevelt) understood that guarantees of income security were needed in market economies if social harmony and productivity were to be preserved. This was especially true because industrialization brought with it economic insecurity arising out of job loss, illness, disability, premature death, and old age.

As far as benefit levels were concerned: ‘in most countries public old age benefits were initially designed as benefits for the ‘poor’. They were

social assistance (by another name) – providing low, subsistence-level benefits’ (Schulz and Myles, 1990: 401). That is, the first plans focused on basic survival needs. After World War II, very different public pension programmes developed. Starting with Sweden in 1959, Social Security programmes were based on the principles of (1) universal eligibility (no means testing) and (2) measuring adequacy by the amount of wage replacement provided by pensions.

The first universal benefits, however, were typically low, flat rate payments that did not result in significant income security. Countries ultimately saw the need for earnings-related pensions on top of the flat rate benefit. According to Schulz and Myles (1990: 403):

In the United States, coverage under Social Security expanded to most of the labor force through a series of amendments between 1950 and 1965. Income replacement levels were also raised in a series of changes between 1968 and 1972 to levels that approximated what were thought to be reasonable ‘income security’ standards.

The result was Social Security benefits that gave many people, for the first time, a meaningful option either to retire or to continue working.

At the present time, Social Security benefits are received by about 90 per cent of older persons. The *average* benefit paid in 2007 was about \$12,530 a year for retired workers and about \$20,560 a year for retired couples with both partners receiving benefits (Reno and Lavery, 2007). The Census Bureau (2006) reports that in the year 2004, 60 per cent of older persons received half or more of their income from Social Security, including about three in ten who got almost all their income from it.¹

While there is now near-universal Social Security coverage in the United States and other industrialized countries, coverage in most other countries of the world is low. For example, in those with very low per capita incomes, ‘statutory social security schemes, i.e. contributory and tax-finances programmes, do not cover more than 5 to 10 per cent of the labour force and/or population’ (van Ginneken, 2007: 39). The biggest problems relate to the coverage of workers in the informal economy – finding the workers, financing the benefits, and dealing with administrative problems. In India, for example, these uncovered workers comprise about 93 per cent of the labor force (van Ginneken, 2007). However, promising developments have occurred in some developing countries, especially those with higher income per capita. The International Labour Organization (ILO) (2003) has reported, for example, significant progress in the *coverage of workers* under

Social Security programmes, citing improvements in Brazil, Chile, Columbia, Costa Rica, Korea, the Philippines, Thailand, and Tunisia.

WHAT ROLE FOR THE FAMILY?

While public and private pensions are very important, one should not ignore the economic role of the family. First and foremost, the key to the income security of older people is dependent on what individuals and families do. That is true for people in all nations – both more developed and developing. Governments can and should assist, but the economics of old age should always be viewed as a joint process – involving individuals, the family, often employers, and government (Schulz, 1999). Today, as economic development proceeds around the world, countries must deal with the fact that the government’s activities ‘are interlocked with the market’s and the family’s role in social provision’ (Esping-Anderson, 1990: 21). Industrialization continues to place strains on family support systems. It also changes the basic nature of work and creates new ways for people to achieve income. The shift away from farming and other self-employment occupations complements the rise in labor markets. Increasing numbers of people face a new kind of insecurity as a result of no longer being able to directly exchange their labor for shelter and food. Individuals who enter these labor markets are subject to a new kind of coercion, given that their jobs can be terminated at any time. ‘People must move, leave their homes, change their occupations – and any of a number of possible major changes, none of their choosing. In addition, the mere threat of termination can be as constraining, as coercive, as menacing as an authoritative governmental command’ (Lindblom, 1977: 48).

At the same time, the nature of the family has been changing: smaller size, more females in the paid labor force, rising numbers of old people not working, and large numbers of the very old requiring extensive health and social supports. In addition, in many countries there have been growing divorce rates, increased geographic mobility, limited economic capacity for many, and changing attitudes about family obligations. Fortunately, despite all the problems, evidence indicates that many families continue to function well, providing economic and social support to various family members at appropriate time of need (Haber, 2006; see also Chapters 14 and 15). Yet, as indicated above, it would be a mistake to view ‘successful families’ as operating in isolation from the support of key community and governmental institutions.

In fact, over time, formal institutions have been given additional responsibilities for assisting families and, in some cases, have taken over some of their traditional responsibilities. This trend, however, should be viewed more as an effort *to supplement and support* the family and its traditional roles – not as a deliberate policy to supplant the family. One important example that illustrates this point is what happens at home during health crises requiring substantial care. In the United States and most other countries, families, not government, generally take on the bulk of caregiving responsibilities and do so quite willingly in most cases. However, crises at some point can overwhelm family resources – both personal caregiving and financial resources. ‘With even the most conservative assumptions and estimates, the value of family care [in the United States] is huge, dwarfing the value of paid home health care and nearly matching the total national spending on home health care and nursing home care’ (American Association of Retired Persons [AARP]/Public Policy Institute, 2007: 2). In November 2006, 30–38 million adults (mostly family members) gave care to other adults, care that was estimated to have a market value of \$350 billion (AARP/Public Policy Institute, 2007).

Increasing numbers of countries recognize, however, that these family caregivers need help. They need assistance with services and care provided at home, but they especially need help financially when the sick person’s state of illness and function requires institutionalization. To help meet this need, a number of countries have developed government-funded long-term care programmes to assist families in dealing with the financial burdens that arise (Cuellar and Weiner, 2000) (see Section Five).

MEASURING ECONOMIC WELFARE IN OLD AGE

The World Bank (Easterly and Sewadeh, 2001) estimated that in 2001 there were about 1.2 billion people (about one-fifth of the world’s population) living in ‘absolute poverty’. Aged poverty mirrors the general poverty of nations as a whole, with its rural character and a disproportionate number of women being affected. In many parts of the world, poverty in old age is the last phase in a *lifetime* of deprivation. Caution is in order, however, in generalizing from available statistics on income and assets (Schulz, 2001). Both underreporting and the lack of disaggregation cause serious problems for assessing the economic status of older people.

Money income is the most common measure for assessing economic well-being among older people. Using this measure, the official poverty rate in the United States for people 65+ in 2007 was 10 per cent, somewhat lower than the 12.5 per cent rate for all individuals; the rate for children below the age of 18 was 18 per cent. The major source of income in industrialized countries for older people remains that of Social Security, with earnings an important element for the minority of older people still working. For those no longer working, employer-sponsored pensions are the next most important source of income.

Expanding the analysis of economic status to include such factors as in-kind income, special tax provisions, and household size narrows considerably the measured differences between the economic well-being of the middle-aged versus the old. As the rates just cited indicate, many researchers and policymakers now say there are no significant differences between the two groups in the United States. Some even argue that older people are better-off. For example, Holden and Hatcher (2006) examined data on the percentage of households with incomes below the official government poverty threshold. They pointed out (using 2003 data) that:

Older individuals are less likely to be in poverty than are younger individuals. The difference is striking when comparing the older population to children, who are more than 70 per cent more likely to live in poverty. This gap is quite different from 30 years ago, when the poverty rates for older and younger Americans were quite close ... As is the case for the total population, among African Americans and Hispanics older individuals are less likely to be poor than are children in their racial categories (Holden and Hatcher, 2006: 222).

One major qualification to the ‘better-off’ conclusion (in terms of the prevailing poverty measure) is that Social Security benefit levels have been set by Congress in the United States at a level that barely keeps many elderly households out of poverty but results in a big reduction in the official poverty statistics reported annually. That is, large numbers of older people whose incomes are *above* the poverty index have incomes that are *clustered not far above it* – incomes that make them extremely vulnerable, for example, to the rising costs of healthcare and out-of-pocket healthcare payments.

One area where older people clearly do better than other groups is in managing inflation. Contrary to popular belief, they have a large measure of protection from inflation – given that Social Security, the Supplemental Security

Income (SSI) programme, civil service retirement pensions, and military pensions provide automatic adjustments for price increases. Those heavily dependent on financial assets and private pensions are the most vulnerable, since most financial assets and pensions do not automatically adjust.

Three decades ago, research by Moon (1977) described the limitations of the current official measure of poverty in the United States and called for a complete revision in concept and calculation methodology. Moon argued that a measure of potential consumption is superior to the current annual money income measure of economic status. In her proposed measure of poverty, Moon argued for including (1) imputations (i.e., researcher-generated estimates) for net worth; (2) imputations for the cash value of Medicare, Medicaid, and public housing; (3) the inclusion of intra-family transfers; and (4) deductions for income and payroll taxes paid. A later study by the National Academy of Sciences Study Panel on Poverty Measurement (Citro and Michael, 1995) also called for a new income measure, one that included changes in the poverty 'thresholds' and the use of different types of data.

One alternative approach to measuring welfare in old age is to compare the income received in retirement with the amount received before retirement, using what is called the 'replacement income approach'. The Center for Retirement Research at Boston College has developed a 'National Retirement Risk Index' using the replacement rate approach (Munnell et al., 2006). The index is based on measuring the proportion that an aged unit's retirement income represents of the unit's pre-retirement income. This amount is then compared to a 'target' replacement rate that, if achieved, would be sufficient to allow a retired household to maintain its *pre-retirement standard of living*. Based on this statistic, 'at-risk households' are defined as those where the projected replacement rates fall more than 10 per cent below the target replacement rate. That is, households with low replacements rates are designated to be at risk of not being able to maintain their standard of living into retirement as a result of declines in Social Security replacement rates.

INTERNATIONAL COMPARISONS

Smeeding (2005) points out that the preponderance of comparative international studies on poverty use a different measure of welfare and income adequacy from the ones discussed above.

The most common is a relative measure that defines poverty as falling below a certain percentage of the median income for all households in a country. However, the percentage used by various researchers differs. The European Statistical Office (Eurostat), for example, recommends a '60-per cent-of-median standard', while the majority of research studies, according to Smeeding, use a 50 per cent standard. Based on analysis using the relative measure, Smeeding (2005: 117–18) argues that

Poverty among younger pensioners is no longer a major policy problem. Rather, poverty in old age is almost exclusively an older women's problem. Poverty rates among older women ... rise with both age and changes in living arrangements. Three-quarters of the poor elders, age 75 or older, in each rich nation are women

(See Chapters 9 and 37 for further international comparisons of poverty and inequality in old age.)

The future, however, may be very different. The impact of the stock market decline and the more general economic contraction in 2008–09 on economic well-being in retirement will not be known for many years, especially with regard to the role played by defined contribution (DC) pension plans. At the same time, more information is needed about poverty among older people in developing countries. Over the years, however, there have been a number of country studies and some studies of particular regions of the world, especially Asia.² Three regional studies encompass, in two cases, much of South and Central America (Bourguignon et al., 2004; del Popolo, 2001) and, in another, the African continent (Kakwani and Subbarao, 2005; see also Chapter 30). Barrientos (2006: 371) has reviewed the effectiveness of pension provision (mostly employment-based) in Latin America, highlighting variations in old-age poverty across countries in Latin America:

Old age poverty ranges from 7.9 per cent in Chile to 38.4 per cent in Ecuador. In four countries, Chile, Uruguay, Argentina and Brazil, roughly one in ten older people are poor. In the next four countries, Peru, Nicaragua, Venezuela and Panama, around one in five older people are poor. In Honduras and Paraguay one in four older people are poor. For the remaining seven countries, roughly one in three older people are poor.

From this evidence, Barrientos (2006) concludes that old-age poverty remains a significant issue in the region, with new approaches needed

Table 3.1 Aged poverty in South America^a

Country	In poverty ^b (age 60+)	Total population (age 60+)	Receiving pension (age 65+)
Chile	7.8%	11.0%	64%
Uruguay	8.4%	20.5%	87%
Argentina	9.3%	13.5%	68%
Brazil	10.1%	9.1%	86%
Peru	18.3%	9.1%	24%
Venezuela	20.8%	6.6%	24%
Paraguay	22.9%	7.6%	20%
Columbia	29.5%	8.9%	19%
Bolivia	37.1%	6.4%	15%
Ecuador	39.0%	7.6%	15%

^a National household survey data for years 1999–2003.

^b Poverty is defined as adult equivalent units with household income below half of median income for the country.

Source: Barrientos (2006)

for raising the incomes of older people living in poverty (Table 3.1).

NEW PENSIONS MODELS

After almost a century of Social Security programme development around the world – programmes that became the main pillar of income support in old age – a significant change has taken place. From the 1990s onwards there has been growing interest in pension programmes that embody *individual* retirement accounts that are *privately managed*. These plans are called defined contribution (DC) plans and contrast with others that are called defined benefit (DB) plans. Defined benefit plans are a promise to pay a benefit of a *specific amount*. That is, the pension provisions state before retirement how much the plans will pay in benefits at retirement – benefits whose amount usually varies by years of service and/or earnings. In contrast, DC plans promise only that certain *specific contributions* (payments) will be made into an employee's pension account. With DC plans, the ultimate benefit amount is determined at retirement on the basis of the total amount available at retirement (accumulated payments plus any asset earnings and any appreciation of assets).

Simultaneous with the rising interest in DC plans, there has been a rise in questions regarding the future viability of Social Security programmes. Concern has been especially strong regarding these programmes' future financial situation in light of population ageing around the world and rising revenue needs to pay promised benefits. Many argue that DB Social Security plans should in whole or part be replaced by DC plans.

Public pension privatization: the cases of Chile and the United Kingdom

Historically, and globally, one of the first important developments in Social Security was the switch in Chile in 1981 to a new nationwide defined contribution approach to managing pensions. In 1973, a *coup d'état* resulted in General Augusto Pinochet heading a military government in Chile. Facing an extremely serious shortfall in pension revenues relative to promised Social Security benefits, Pinochet implemented radical pension reform. The Social Security programme was replaced with a public pension system that the world had never seen before – a national mandatory savings scheme administered primarily by the private sector. All Chilean wage and salary workers were (are) required by law to participate (except for the military and a few other exceptions).³

In the years that followed, diverse countries have introduced the defined contribution approach into their public pension system. It is now found in the public pension systems of countries such as Argentina, Bolivia, Columbia, Hungary, Kazakhstan, Latvia, Peru, Poland, Sweden, the United Kingdom, and Uruguay (Orszag and Stiglitz, 2001).

It is over two decades since Chile privatized its public old-age pension system and its success can now be evaluated. And the assessment, according to Chilean political leaders themselves, is very negative. In the debates leading up to the 2006 presidential election in Chile, both candidates, Michelle Bachelet and Sebastian Pinera, agreed that their country's pension system had very serious problems and needed immediate repair. Ms. Bachelet, who eventually won the election, characterized the system as being 'in crisis' (Rohter, 2006). The problems in Chile are many

and serious (Gill, et al., 2005; Kay and Sinha, 2008; Soto, 2005), and include the following:

- despite a legal requirement to participate, more than a third of the labor force remains out of the system;
- commissions and administrative costs have declined from the super-high amounts at the beginning but are still very high, dramatically reducing ultimate benefits;
- in the early years rates of return were very good, but the Chilean economy has been highly volatile, resulting in wide swings in investment returns;
- understanding financial matters (financial literacy) and the mechanics of the retirement programme are very low among participants;
- the hoped for competition among companies managing the retirement funds has never materialized;
- finally, while the aggregate impact of privatization on women is unclear and still very controversial, women have gained least benefit from the reforms.

In 1986, the Conservative government of Margaret Thatcher undertook a major reform of the UK's pension system. A defined contribution pension called the 'Personal Pension Plan' (PPP) was introduced with workers given the option, but also encouraged, to leave the old public and employer-sponsored plans in favor of this new alternative. In 2001, another defined contribution option called 'Stakeholder Pensions' was added, this time by a Labor government. The failings of these approaches were extensively discussed in reports of the UK Pensions Commission. The 2005 Report (Pensions Commission, 2005) concluded that the existing UK pension system was overly complex; not cost-efficient in many areas; not providing appropriate incentives to save; a contributing factor toward a highly unequal distribution of income; and, finally, likely to leave many individuals with inadequate pensions.

The Chilean and British experiences illustrate many of the serious problems that can arise with defined contribution plans. Yet many advocates of pension privatization in the United States have pointed to Chile and the United Kingdom as successful models to be followed. The final Report of the Pensions Commission (2005) discouraged such thinking, recommending that the United Kingdom rely *less* on Personal Pensions and *more* on the existing collective public and private pension programmes (Pensions Commission, 2005). The result has been major pieces of legislation passed in 2007 and 2008 that combine modifications to the Basic State Pension (BSP) with attempts

to encourage new forms of pension savings. The former includes indexing the Basic State Pension to average earnings, and reducing the number of years required to work for receipt of a full BSP. The latter includes introducing a new pension saving scheme of portable individualized savings accounts (from 2012), automatic enrolment into a qualifying workplace pension, and a national minimum contribution from employers (Phillipson, 2009; see also Chapter 37).

Employer-sponsored pensions: the United States

Similar efforts toward more 'personal pensions' have occurred in the American *private* sector, especially among plans set up by employers for their workers. There has been a dramatic shift by employers to DC plans, away from the DB pensions that once dominated the private pension scene. The shift to DC plans was in part encouraged by government action. The Revenue Act of 1978, section 401(k), permitted employees to make tax-deferred contributions to an employer-sponsored plan. The new section 401(k) was designed to encourage employers to create special personal plans for their workers. Judged by their proliferation, these employer incentives were seen as quite successful. At the end of 2003, there were 438,000 401(k) plans and 42.4 million active participants (EBRI, 2005).⁴ By the end of 2006, the value of assets in 401(k) plans had reached \$2.7 trillion (Investment Company Institute, 2007).

The Employee Benefit Research Institute (EBRI, 2007) reports that in 2004, 56 per cent of heads of families who participated in an employment-based retirement plan had only a DC plan. This compares in the same year with DB coverage of only 26 per cent. (18 per cent of household heads had both types of plan.) According to EBRI (2007: 1), 'this was a significant change from 1992, when 42 per cent of heads of families had only a defined benefit plan and 41 per cent had only a defined contribution plan'. EBRI (2009b) reports that in 2006, 67 per cent of workers participating in employer-sponsored plans considered their primary type of retirement plan to be a DC plan; DB plans were primary for 31 per cent.

As various kinds of DC plans have proliferated, there has been a substantial rise in the concerns and criticism regarding their adequacy, viability, and equity (Schulz and Binstock, 2006). One of the biggest concerns is informed choice. Holders of DC accounts typically must make decisions about the nature (asset mix) of their investment portfolio and who will be entrusted to manage it.

The hope is that individual workers, as good investor 'managers', will achieve investment returns over time that will produce adequate retirement income. However, in 2008 the world was shocked to learn that a highly respected (until then) investment manager by the name of Bernard Madoff had swindled governments, investment organizations, charities, pension plans, movie stars and producers, hedge funds, and individuals (rich and not so rich) out of billions. The biggest Ponzi scheme in the history of the world had defrauded them of close to \$100 billion. Unfortunately, many of the financial decisions that individuals and groups must make are very complex. The Madoff scandal demonstrated how unprepared people are in taking on that responsibility. So, for example, a survey of 1000 Dutch citizens found that the average respondent considers her/ himself financially unsophisticated and 'is not very eager to take control of retirement savings investment when offered the possibility to increase expertise' (van Rooij et al., 2007: 701). Lusardi and Mitchell (2007: 3) argue that such financial illiteracy is widespread: 'the young and older people in the United States and other countries appear woefully under-informed about basic financial concepts, with serious implications for saving, retirement planning, mortgages, and other decisions.'

One of the decisions DC pension holders have to make, for example, is deciding the proportion of their money to be placed in various types of investments. The most common general choice individuals must make is how much to invest in *bonds* as compared with *equities*. Bonds are viewed as safer in terms of fluctuating market value but typically have lower returns in the long run than equities. The investment decision with regard to the portfolio mix of these two types of investments is absolutely critical to determining the ultimate amount of benefits. Notwithstanding this, according to the Securities and Exchange Commission, *over 50 per cent of Americans do not even know the difference between a bond and an equity* (reported in Orszag and Stiglitz, 2001).

Another indication of problems is pension coverage for workers when changing jobs. Job changers in the United States typically have three options in dealing with any pension rights accumulated from a former employer: (1) leave it with the old employer, if permitted; (2) roll the funds over to another tax-qualified plan; or (3) take the money in a lump sum, pay taxes on it, and then spend what is left. Options 1 and 2 shelter the money from taxes and allow it all to grow until retirement; option 3 does not and undermines retirement income adequacy. What do job changers do? A study by the AARP Public Policy Institute (2006), using data for 2003, found that

more than half (54 per cent) of job changers did not roll over any of their lump-sum distribution into another retirement plan, annuity, or IRA. Instead, 30 per cent spent the money on vacations, other consumption, or gifts; 55 per cent used it to pay off debt; and 15 per cent invested it. Given this financial knowledge and behavior, it is not surprising to find in one survey that 37 per cent of people saving for retirement said they were doing only a fair job of managing their retirement portfolios, and 7 per cent said they were doing a poor job (Dugar, 2002).

The common response to issues of informed choice is to call for educating investors. But the practical problems with this remedy are enormous: Who will do the teaching? How will quality be assured? Who will pay for it? Some see the problem as overwhelming. Behavioral economist Richard Thaler told *The Economist* magazine: 'The depressing truth is that financial literacy is impossible, at least for many of the big financial decisions all of us have to take ... Financial literacy is not the right road to go down' (*The Economist*, 2008: 74).

In the United States, millions of citizens have lost substantial sums of money as a result of incompetent or illegal behavior by purveyors of investment and retirement products (Schulz and Binstock, 2006). The 2008 Madoff swindle, exposed by the strains produced by the broader financial crisis, is a more recent example of the results of financial illiteracy in the United States.

In 2008, the financial network in the United States ground almost to a halt as a result of the worst financial collapse since the Great Depression of the 1930s. Triggered by the deflation of a huge mortgage/housing bubble, it wiped out the value of many financial institutions stocks and bonds – leaving shareholders with huge losses. Again, the problem was predominantly unscrupulous individuals and unregulated businesses making huge profits by manipulation and using the financial system to entice people into risky investments that they did not understand. Millions of people were harmed.

Individuals are also faced with a variety of risks related to the honesty and competence of employers. These risks include companies going out of business or 'dumping' their retirement plans; companies inadequately funding plans and/or manipulating actuarial/accounting reports to hide problems; individuals and organizations promoting 'get rich quick' schemes; incompetent brokers and financial planners; and companies undertaking illegal acts of investment and trading (such as 'late trading' and 'market timing'). Another serious issue is the high costs associated with some of the defined contribution plans (Fioravante, 2007). Financial management costs can result in a

reduction of 21–30 per cent in the assets available to pay benefits at retirement.

Employer-sponsored plans: the Netherlands

Recent pension developments in the Netherlands are of special interest. Like the United States, private pension plans in the Netherlands were until recently mostly defined benefit plans. However, in an attempt to deal with the problems arising from employer-sponsored pensions a new type of plan has been developed (Ponds and van Riel, 2007). For much of the period up to the 1990s, DB plans were in the mainstay of provision in the Netherlands, with benefits determined by a formula based on earnings and years of service. Typically, these plans were designed (in conjunction with the public pension) to provide 70 per cent of final earnings. The dramatic financial turmoil in the early years of the 21st century, with its sharp drop in stock values and historically low levels of interest rates, caused employers to re-evaluate their pension obligations. The predominant reaction that followed was for employers to switch to new hybrid pensions based on *indexed average* earnings instead of final earnings. According to Ponds and van Riel (2007: 2):

An important feature of an average-wage plan is that the level of indexation in any given year depends on the financial position of the pension fund A typical characteristic of these schemes is that indexation of *all* accrued liabilities is dependent on the solvency position of the pension fund through a so-called 'pension ladder'. A policy ladder explicitly relates the contribution and indexation policies to the financial position of the pension fund.

The operation of this pension ladder allows amelioration of pension costs in any particular year. When, because of economic conditions and the financial market, the actuarial funding situation of the pension fund is deteriorating, there is a specific provision in the plan that permits a pension fund's governing board (composed of employer and employee representatives) to reduce the indexed benefit accrual in any particular year. In contrast, when the pension plan is 'well funded' (in terms of the value of pension reserves relative to fund liabilities), there can be an 'over-indexation' of retirement benefits as a partial catch-up for prior years of less than full indexation. According to Ponds and van Riel (2007: 5): 'the hybrid pension plans that have evolved in the Netherlands offer a promising way to balance risk

between employers, active workers, and retirees'. But it is important to see that this 'balancing of risk' is achieved by changing from defined benefit plans where employers assumed *most of the risk* to plans where *much* of the risk is shifted to employees and retirees.

Certainly, for Dutch employers this new option makes the pension burden they face more manageable. Employers know that their pension obligations will not fluctuate wildly (as happened historically with the old DB plans). This makes funding requirements in the Netherlands more predictable. The major hope is that the risk-sharing that now occurs between employers and employees will result (given indexation flexibility) in a *more reliable* provision of private pension benefits, together with the prospect for *relatively high pension levels* (but, of course, with more risk exposure for employees).

Hybrid pension plans in the United States

Attempts have also been made, in both the private and public sectors of the United States, to create pensions that are variants of the older types of plans but are designed to minimize some of the serious drawbacks from earlier approaches. Such plans, like in the Netherlands, are generally referred to as 'hybrid plans'. There are many different forms for these hybrid pensions, the six most common being cash balance, pension equity, floor-offset, age-weighted profit-sharing, new comparability profit-sharing, and target benefit plans. (See EBRI, 2009a for descriptions of the various types.) These hybrid plans typically combine features of both DB and DC plans. For example, in the very popular (among employers) cash balance plans, the ultimate benefit is determined (as in DC plans) by applying a formula specified by the plan and results in a predictable level of benefits for any individual in retirement.

Unlike earlier DB plans, cash balance plans allow companies to spread pension benefits more evenly over a participant's career by granting 'pay credits' based on each year's compensation, not just the highest salary levels prior to retirement. In recent years, however, serious concerns have been raised about many of these plans. Most employers argue that the new approach is a response to the pension needs of young and mobile employees. Critics argue, however, that they have been designed primarily as a way for employers to save on pension costs. It is argued that workers with long years of service have been losing benefits when companies change to the hybrid plan. With most cash balance plans the per cent of pay set

aside for workers' pensions basically stays the same each year. Traditional defined benefit plans, in contrast, increase a worker's pension accrual during the last years on the job when wages and salaries are usually higher than earlier in her or his working careers.

In fact, older workers in many companies have found the pensions they could expect upon retirement under the new cash balance plans to be lower. The argument over whether these new plans constitute age discrimination against older employees was taken to court, was ruled 'discriminatory' by a lower court, and then ruled 'not discriminatory' on appeal. The appeals court agreed with the lower court that older workers were financially worse off under the new plan. But the court then went on to argue that the plans were not discriminatory because workers with equal earnings and service got the same pension, regardless of age.

In view of the criticism and the legal arguments made about past practices, many American employers have modified their plans to avoid penalizing older workers with regard to benefits originally promised. Most companies that have switched from DB to cash balance plans have decided to give employees 40 and older a choice of either staying with the old plan or switching to the new one. As a further protection for these workers, some employers have decided to slightly increase the pension accrual each year as employees' age and seniority goes up (Hawthorne, 2007).

Notional plans

In some countries in Europe a new national pension type has emerged known as a notional defined contribution (NDC) plans. Again, as in the Netherlands, this new plan is a blend of the DC and DB plans. The major characteristics of the NDC plans are:

- 1 As the name implies, notional plans are pensions that in general appearance seem to be like one type of pension plan but in reality are actually another. Like DC plans in general, NDC benefits are tied to contributions, with employee and/or employer contributions 'credited' to a special account set up for each participant. *However, unlike DC plans, none of the contributions are actually deposited in these accounts.*
- 2 Instead, retirement benefits are paid primarily using pay-as-you-go financing.
- 3 An indexing procedure is used to periodically increase the balances in the personal accounts (similar to the monetary returns that originate when private funds are invested in financial markets).

- 4 At retirement, an annuity-type benefit is calculated based on an individual's account balance.
- 5 Benefits in general are adjusted for changes that occur in national average life expectancy over time.
- 6 Unlike most Social Security programmes, NDC programmes do not have an income redistribution component and are likely, therefore, to result in greater retirement income inequality.

Sweden, from 1998, was the first government to adopt an NDC type of plan. The main stimulus was to lower projected high national pension costs, given that (1) benefits in Sweden had been set very high, (2) the Swedish population was living much longer (raising pension costs), and (3) economic conditions (i.e., productivity, wages, and price changes) were difficult to predict and, of course, constantly in flux. 'Swedish officials wanted to stabilize pension funding and insure pension sustainability'.⁶

Other reasons given for the reform were the need to improve inter- and intra-generational fairness, the desire to increase the amount of personal saving, and a policy goal to keep pensions a neutral factor in worker retirement decisions (Rix, 2007). At the national level, the new Swedish pension system combines a national notional pension plan with mandatory defined contribution plans. Similar financial reasons were given when notional plans were adopted in Italy, Poland, Latvia, Kyrgyzstan, and Mongolia. As Williamson (2004: 6) points out about the notional approach: '[It] offers a way to shift from the DB model to a less DC one without the diversion of payroll tax revenues into funded individual accounts.'

However, as we have commented (Schulz and Borowski, 2006: 375):

Politically, the [notional] approach assists countries in the benefit retrenchment process – cloaking cutbacks with mechanistic programme provisions related to notional credits, indexing procedures, life expectancy adjustments, and transitional costs relating to prior programmes. At the same time, governments paradoxically hope that notional accounts will increase political support as a result of (1) what appears to be a more transparent benefit determination process, (2) personal accounts that foster a sense of ownership, and (3) a greater emphasis on individual equity.

THE ECONOMIC IMPACT OF POPULATION AGEING

Many argue that population ageing, as detailed by Victor in Chapter 5, seriously threatens the

economic welfare of nations (e.g., Kotlikoff and Burns, 2005; Peterson, 1999). A frequently cited statistic is the changing 'aged dependency ratio': the number of individuals who are age 65 or older divided by the number of people of working age (assumed to be 20–64) – that result multiplied by 100. This ratio is a crude measure of the number of workers potentially available to support a growing older population. That is, it is a ratio that measures the number of older persons in the society that are assumed not to be producing output, relative to those assumed to be doing the producing. Almost every prediction of the negative impact of demographic ageing trends on economic growth starts with this basic statistic and the fact that the ratio is rising. In 2000, the aged dependency ratio was 20 (i.e., 20 older persons for every 100 people of working age). It is projected that the ratio will rise in 80 years to a little over 40 (Social Security Advisory Board, 2005).

Although policymakers have placed considerable emphasis on dependency ratios, a large literature has emerged that discusses the *limitations* of the dependency ratio approach and related demographic measures when they are used to predict the *economic* impacts of population ageing (see, for example, Disney, 1996; Easterlin, 1995; Schulz, 2001). Instead of just a demographic analysis, an *economic* analysis of the impact of population change is crucial. However, it is technically a far bigger challenge to estimate the population ageing impact in economic terms rather than simply presenting demographic dependency ratios. Economists, for example, have given a lot of attention to the role played by saving in the economic growth process (Buchanan, 1993). If saving is reduced by population ageing, then economic growth might be negatively affected as a result of lower capital investment. Thus, the potential impact of demographic ageing on saving and growth has for decades been a major question but has resulted in a relatively inconclusive debate over the economic impact of Social Security on saving and growth (see the discussion in Bosworth and Chodorow-Reich, 2007; Disney, 1996; Schulz, 2001).

Some have argued that population ageing – with its (1) dampening impact on the size of countries' labor forces and (2) an accompanying rise in governments' budgets to pay for entitlements – will result in lower rates of economic growth. One major study, for example, projects that the aggregate labor force of countries in the European Union will contract by almost 30 million between 2018 and 2050 (Carone and Costello, 2006). These labor force projections, together with other factors, have been used by economists working for the European Union to model the economic effects of population ageing. 'Econometric models' in economics are

mathematical abstractions of the much more complicated social/political/economic real world. These models permit economists – through the use of logic, mathematics, available statistics, and various assumptions about individual and institutional behavior – to gain insights and predictive power with regard to how the real economic world operates.

In the case of the 2006 European modeling effort, the focus was on ageing and economic growth. The results were based on assumptions (among others) about population change, labor inputs, investment rates, interest and wage rates, and changing technology. Using a 'productive function approach', a modeling approach used extensively in economics since Robert Solow's (1957) growth model was introduced in the 1950s, the European modelers made estimates of the impact of population ageing on economic growth. The study projected that the annual average potential GDP growth rate will decline from 2.4 per cent during the 2004–10 period to only 1.2 between 2031 and 2050. Based on this projection, the modelers concluded that the 'ageing populations will have a significant [negative] impact on Europe's economies' (Economic Policy Committee and European Commission, 2006).

However, once again, this type of modeling has been criticized as too simplistic (e.g., Mokyr, 2002; Nelson, 1996). For example, little or no role is given in such models to changing education and knowledge. One of the giants of economics, Alfred Marshall (1948: 159), wrote many years ago in his *Principles of Economics*: 'Knowledge is the most powerful engine of production; it enables us to subdue nations and satisfy our wants'. His statement reminds us that the job of dealing with any economic strain arising from population ageing does not rest solely on increasing the size of the labor force or on saving and investment. Solow (1957) found in his path-breaking research that when he applied his model to data measuring the gross national product (GNP) in the United States, only about 12 per cent of the increase was explained by the additions of physical capital (a product of saving and investment). Fully 85 per cent of the increase in growth was unexplained by the model. That is, a huge proportion of the growth was not statistically explained and remained in the 'residual' of his equation.

In the years that followed there was much research and debate over using neoclassical growth models and the sources of economic growth (see, for example, Warsh, 2006). While still controversial, there now seems to be a consensus. Many economists now point to a variety of factors (other than investment) that determine the rate of growth. These are factors such as institution building, changing knowledge, the education of potential

workers, technological change, entrepreneurship, and culture. These factors together have had a powerful impact on the rate of economic growth. One group of economists emphasizes the importance of 'institutional' factors in the growth process (for example, North, 1990, 2005). Landes (1999) argues that growth is primarily about culture: i.e., some countries succeed because of hard-working and enterprising workers (as opposed to countries where workers are not). Paul Romer (1994) focuses on a broad concept of the economics of knowledge and, through it, innovation.

Certainly the more traditional factors featured in the earlier models – demography/labor force, saving, profits, and investment – are not ignored in the recent literature but are now seen as having less importance than originally portrayed in the economic literature. Thus, when highly regarded economist Edward Lazear argued: 'profits provide the incentive for physical capital investment, and physical capital growth contributes to productivity growth,' the equally regarded economist, Paul Krugman, replied in the *New York Times* that this was not necessarily true: 'today's record profits aren't being invested [to promote economic growth]. Instead, they're being used to enrich executives and a few lucky stock owners' (Krugman, 2007).

In summary, modeling the interactions of population and economic growth is a complex task and one still not well understood. Schulz and Binstock (2006) warn that most of the modeling and predictions of 'doom' arising from demographic ageing are wrong. Focusing solely on the size of the labor force and savings rates is bad economics that leads to bad policy recommendations. Today, as ever, the most important determinants of the future economic welfare of people (of all ages) are those many other factors listed above, which means the debate over changing economic growth and how best to run an economic system is concerned with far more than issues of ageing (or issues of financing Social Security). In fact, the ageing of populations has relatively little to do with the outcome (Schulz and Binstock, 2006).

CONCLUSION

With the institution of Social Security retirement programmes around the world during the 20th century, the challenges and risks associated with old age have been greatly moderated (Schulz, 1993, 2001). In addition, various types of health insurance programmes have dramatically increased the availability of quality health care as individuals enter a period of life with rising chronic and

life-threatening illnesses. Statistically, the economic status of the older persons as a group in the United States, for example, is now very similar to the rest of the population at other ages – which is a dramatic change from their disadvantages position in the past. And expanding the analysis of economic status to include such factors as in-kind income, special tax provisions, and household size narrows the statistical differences considerably between the old and younger adult cohorts of the population.

Measures of poverty vary from country to country. In the United States the official poverty index that is reported by the government is considered by most experts to be out of date, resulting in a serious understatement of the number of poor people, regardless of age. Other measures, such as the recently developed 'National Retirement Risk Index', indicate that there are still many serious economic problems confronting older persons.

How will the draconian events of 2008–09 affect pension policy? Before the economic upheaval, the policy trend (especially among private employers) was to shift to individuals more responsibility for dealing with these problems and future economic security in old age. However, recent events and the lessons discussed by scholars of social welfare history (e.g., Bengtson and Achenbaum, 1993; Berkowitz, 1997; Myles, 1984; Quadagno, 1988) support the expectation that the calls to rely heavily on non-government options will find acceptance more difficult. There is likely to be public pension reform based on old principles but modified mechanisms – with an overall return to heavy reliance on collective mechanisms of 'solidarity' (Diamond and Orszag, 2004; Thompson, 1998). No public or private programmes for older people have been static. Rather, they have continually changed as knowledge and conditions change. This will continue to be true in the future. The many reforms of public and private pensions that must by necessity occur in the future will provide the challenge and the opportunity to deal with past and future problems.

NOTES

1 US Census Bureau (2006). *Income of the Population 5 and Older, 2004*. Retrieved on June 6, 2007 from <http://www.socialsecurity.gov.policy>

2 Barrientos, A. (2006) 'Ageing, poverty and public policy in developing countries: new survey evidence.' Retrieved on April 4, 2007 from <http://www.ids.ac.uk/ids/news/ageing-barrientos.pdf>

3 The details of the Chilean approach can be found in Williamson (2005) and Kay and Sinha (2008).

4 EBRI (Employee Benefit Research Institute) (2005). *History of 401(k) Plans – An Update*. Retrieved on March 16, 2006 from <http://www.ebra.org/pdf/publications/facts/0205fact.a.pdf>

5 See Bogle (2005) for a discussion of this issue.

6 Mattoo, R (2006). 'Notional pensions: Does Sweden have the answer?' *Federal Reserve Bank of Chicago Pension Conference*. Retrieved on April 16, 2008, at <http://pensionconference.chicagofedblogs.org/>

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