

Theorizing the Life Course: New Twists in the Paths

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As reflected in the title, this chapter is intended as a refinement and update of Dannefer and Uhlenberg's (1999) chapter titled "Paths of the Life Course" (hereafter referred to as *Paths*) published in the original *Handbook of Theories of Aging*. Since that time, interest in the life course perspective (hereafter LCP) has continued to flourish and expand. Its growth has been both substantive and methodological and is increasingly global in scope. Substantively, applications of the LCP now extend well beyond its original linkages to the domains of age and family to other substantive areas, including health and physical functioning (Ferraro & Kelley-Moore, 2003), work and education (Dupre 2007;

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Pallas & Boohar-Jennings, 2006), happiness (Yang, 2008), and crime (Sampson & Laub, 2005). At the same time, there has been substantial growth in number of data sources, a lengthening of windows of observation, and an increase in the number of observation points. Combined with methodological and statistical advances, we are observing more extensive and refined forms of quantitative data analysis applied to life course processes and new applications of qualitative methods, developments that may help to address some of the conceptual and methodological problems identified by numerous commentators over the past decade (e.g., Alwin & Wray, 2005; Bass, 2007; Dannefer, 2002; Hagestad & Dannefer, 2001). At the same time, interest in the life course has become more international and global, with expanding attention to global considerations (Baars, Dannefer, Phillipson, & Walker, 2006; Dannefer, 2003) and new and increasingly diverse forms of attention to the life course across Europe and beyond (de Ribaupierre et al., in press; Gluckman & Hanson, 2006; Priestley, 2001; Widmer, Burton-Jeangros, Bergman, & Dannefer, in press).

As noted in *Paths*, the life course is a flourishing, eclectic field, and these recent developments speak to its continued liveliness and energy. At the same time, it continues to be a field that lacks conceptual organization, is largely undertheorized, and is often poorly applied in empirical studies. Thus, it remains a field characterized by a number of theoretical and methodological challenges.

This chapter offers a reconsideration of the issues raised and the conceptual framework presented in *Paths* as well as an analysis of new developments that have emerged in life course theory and research over the past decade. The chapter consists of three major sections. The first reviews the necessary required founding premises—*first principles*—that are required as a conceptual foundation for approaching the life course, principles that remain unevenly recognized in life course research. The second section identifies some key problems in life course analysis, some of which derive from the neglect of these principles. Although it is clear that real progress has been made in regard to some of the problems identified a decade ago, additional challenges have emerged or require renewed attention. In the final section, we propose a refinement of the typology of life course research and scholarship based on a more detailed examination of the *explananda* and *explanans* of life course theory.

Founding Premises of Life Course Theory: The Individual, the Social, and the Asymmetry of Agency

The first principles concern the nature of the (a) human individual and (b) the social dynamics within which human lives are embedded. The special significance of the dynamics of social interaction and structure are anchored in the unique physiological and developmental characteristics of humans and also in the asymmetrical dynamics of structure and agency.

The Human Organism

Space does not permit a full treatment of the distinctively human features of individual development that underlie all life course processes. Discussions of these well-established—albeit neglected—features of human growth and

change are available elsewhere (Berger & Luckmann, 1967; Dannefer, 1999b, 2008; Montagu, 1989; Morss, 1996; Perry & Svalavitz, 2006; Rogoff, 2003). In brief, the potentials of the human brain and body for flexibility and environmental responsiveness are not merely options to be occasionally exercised by individual human actors, nor are they variables to be sometimes included in causal models of those of us who study human activity. Rather, they reflect essential constitutional requirements of the human organism for external structuring and direction and for relating to the world through agentic action. Because of these constitutional requirements, human *organisms* are fundamentally incapable of becoming human *beings* without participation in human *society*. Born premature, unformed, and utterly dependent (Berger & Luckmann, 1967; Gould, 1977; Montagu, 1989), the perceptions, tastes, and activity routines to which each individual becomes habituated are learned in social company, and the form that their humanity takes and the forms that their aging and life course structures take depend on the nature of the society in which they participate. In Barbara Rogoff's (2002, 2003) terms, human beings are *hardwired for flexibility*, and human development is *biologically cultural*.

Social Interaction

These conditions point to the uniquely potent and unavoidably necessary dependence of individual activity routines, life patterns, and age-related change on socially variable processes of social interaction. Social interaction is the mechanism through which the human *organism* is transformed both physically and mentally into a human *being* and through which the capability for agentic human action is generated and maintained. Interaction is crucial in the early years of the life course, but it also remains decisively important throughout adulthood (when it is often taken for granted and its effects are unrecognized). This has recently been shown through research using brain imaging techniques to document brain change and growth in adulthood in response to experience (Maguire et al., 2000). In adulthood no less than in childhood, the skills and routines of everyday life, the "knowledge" and "values" that one accepts as natural and the routines by which days extend into years, are sustained by the familiar and constantly reproduced rhythms of everyday life.

Social Structure

Social structure refers to the established and regularly reproduced social practices and rules that provide a sense of predictability and taken-for-grantedness in everyday life. Structures exist at numerous levels and in many forms, ranging from the institutionalized mechanisms for allocating roles and resources to the underlying cultural systems of language and aesthetics. Operating at these multiple levels, social structure organizes and constrains individual lives in the immediacy of the present at every moment. Of course, one need only compare patterns of aging in different historical periods or across cultures to recognize the profound significance of social structure on life course patterns and outcomes. Indeed, as is evident from historical variation in *chronologization* and in age awareness, age itself is a feature not primarily of individuals but of social structure. For each society at any given moment, age is culturally defined

as part of the knowledge system of that society. But the effects of interaction and structure also can be witnessed at the level of analyzing individual lives, as when comparing two teenagers growing up in socioeconomically different family and neighborhood situations or the different aging trajectories experienced by two similarly frail older persons who are placed in institutional care settings of divergent quality.

Agentic Asymmetry

Human activity is generically *agentic*. It results from the externalization of conscious intentionality in action. Because the process of forming intentions and acting in the world typically occurs against the backdrop of a taken-for-granted social world to which the actor is habituated, the power and scope of agency is typically overestimated. It is important to recognize that each human being enters the world as a helpless and dependent infant who learns language and other cultural forms and practices from parents or others more advanced in development. Thus, human agency is always fundamentally organized and constrained by the perceptual and motivational systems deriving from such situated learning experiences (Dannefer, 1999a; Lave & Wenger, 1991; Marshall & Clarke, in press).

Beyond such experience, agency is also constrained by other forces operating from the beginning of the life course onward. Important epidemiologic work has demonstrated that health outcomes such as adult obesity that have heretofore been linked to lifetime health behaviors of individuals (e.g., sedentary lifestyle and food choice) are substantially set by the developmental environment during the pre- and postnatal period, a time when individual "choice" is developmentally impossible (Parsons, Power, & Manor, 2001; Symonds & Gardner, 2006). Hence, social structure precedes individual agency in human development and continues to frame the range of choices across the life course.

Founding Premises, Enduring Problems: Six Challenges for Life Course Studies

In this section, we consider six significant challenges confronting life course theory and research. Some of these derive from a lack of attention to the founding principles set forth previously and their implications (as discussed in *Paths*). Others have become clear more recently, as researchers have grappled with new issues of analysis and interpretation to accompany large new data sets and new analytical problems. The six issues, in the order we discuss them, are as follows: (a) cohort analysis and the neglect of intracohort inequality, (b) confounding life course processes and change, (c) the need for renewed attention to intercohort variation, (d) time 1 encapsulation, (e) confounding the relation between age and time, and (f) expanding putative role of choice.

Cohort Analysis and Intracohort Variability and Inequality

Initially, cohort analysis provided a key fulcrum to draw attention to the importance of context and a corrective to the strong assumptions of a universal or "natural" trajectory of human aging because it compelled recognition that

patterns of aging are historically variable. The resultant focus on intercohort comparisons and differences inevitably led researchers to characterize each cohort in summative terms, typically relying on central tendency measures. While fruitful for many purposes, this practice had the unfortunate consequence of encouraging researchers to treat aging as a normal or normative process *within* each cohort (so that each cohort had a characteristic age pattern). This inclination toward normativity served to normalize age effects, thereby reproducing a tendency that has its roots in the traditional organismic model of aging and development (Dannefer, 1984; Lerner, 1986; Morss, 1990). Thus, while the analytical tactic of comparing cohorts demonstrated the *importance* of context, it also allowed cohorts to stand as virtually *coterminous* with context so that the role of social forces operating within each cohort (e.g., regulating heterogeneity and homogeneity) received little attention.

Intracohort stratification was recognized as important in some early research in the life course tradition, notably including Elder's (1974) classic work. Nevertheless, the phenomenon of cohort-level variability and the dynamics of diversity and inequality over the life course received relatively little attention until the late 1980s. As the pervasiveness of intra-age diversity and the robust processes of cumulative dis/advantage that lead to an increase in intracohort inequality over the life course of each successive cohort became recognized, the practice of analyzing life course trajectories in terms of central tendency characterizations has become complemented by a growing emphasis on cumulative dis/advantage processes within each cohort.

Thus, this problem is one of those in which clear progress has been made. Over the past decade, it has received substantial attention in several published volumes (Baars et al., 2006; Crystal & Shea, 2002; Daatland & Biggs, 2006; O'Rand & Henretta, 1999), and it has been the subject of several theoretical papers (e.g., Bass, 2007; Dannefer, 2003; Ferraro & Shippee, in press; Pallas & Booher-Jennings, 2006) and of a special issue of an international journal, *Swiss Journal of Sociology* (Widmer et al., in press). It has also been an increasing focus of research on the life course, age, and gerontology.

Confounding Social Change With the Role of Social Forces in Shaping the Life Course

From the beginning, cohort analysis and the LCP were conceptually linked to *social change* since change is a major reason that cohorts age differentially. Mortality and longevity, health and morbidity, and intelligence and wealth have all been clearly linked to changing social conditions. Thus, a linkage between social change and individual change has long been established as a dominant theme of the life course literature. This problem is closely tied to the first, since this linkage invited a focus on between-cohort comparisons rather than an examination of intracohort variation.

By comparing across cohorts, one could observe how social change and the resultant differences in social structure affected aging. As a result, studies of aging since that time have often given the cohort variable a privileged conceptual status. This can be seen in the frequent pairing of social and individual change (as in innumerable references to, e.g., "the changing person in the changing world") by both life course sociologists and psychologists

(see, e.g., Elder, 1996; Hareven, 1977; Hogan, 1981). This emphasis implies the salience of social change for understanding individual aging, and it invites the implicit assumption that social forces matter only in the case of social change. Absent is the acknowledgment that even if no social change occurred, human aging is no less socially constituted through fundamental processes of social interaction and allocation described in the founding premises set forth previously (see also Dannefer, 2008). A similar point has been made by Sampson and Laub (1993), who note that "stability itself is quite compatible with a sociological perspective on the life course" (p. 12).

In contrast to this recognition of the universal involvement of social processes in the constitution of life course outcomes, researchers often treated each cohort as having a pattern derived from historical circumstance. Thus, if there were no large-scale changes in circumstances, these cohort-specific patterns would be essentially identical. Such a condition of stability is improbable in any case, so there has been scant need to tease out this implication. Under stable conditions, then, one could worry less about historical and social effects and perhaps could more justifiably treat age as the master independent variable without worrying unduly about the specific factors that produced the age-related outcomes.

Age-Period-Cohort "Identification": The Renewed Neglect of Intercohort Variability

Among the salutary effects of the initial discovery of cohort differences was the recognition of the need to follow individuals over time and the development of a number of large-scale, high-quality longitudinal data sets. Currently, many longitudinal studies are based on samples of single age cohorts or adjacent cohorts. This type of design avoids the life course fallacy (Riley, 1973) and allows researchers to account for certain early-life structural constraints or opportunities. Although this commitment to longitudinal data is welcome and needed, it brings its own challenges concerning age-period-cohort identification. Indeed, this is a problem that has been chronically overlooked in recent work.

Notably, without the ability to compare multiple birth cohorts, we are unable to determine whether change or stability with age is cohort specific or universal across cohorts. In other words, we are studying a process within a single cohort and generalizing to the population of all persons independent of cohort (Alwin, McCammon, Wray, & Rodgers, 2008; Riley, 1973; Riley, Johnson, & Foner, 1972). This, in effect, confuses intracohort variability with the theoretical maximum range of heterogeneity across cohorts. Such an approach entails one or more implicit assumptions to which no thoughtful analyst would subscribe, namely, that birth cohort does not matter or that organismic age-related decline becomes the primary vehicle of change in the second half of the life course. In both cases, there is a substantial lack of attention to the social structural and historical context within which individual lives are embedded.

Time 1 Encapsulation of Social Forces

An additional challenge to understanding the life course has been called the *time 1 problem*. Commenting on this, Hagestad and Dannefer (2001) note that

in much life course research, social forces are “systematically considered at the initial observation period. When social-structural characteristics are considered only at Time 1, social structure at subsequent periods is unmeasured, and therefore treated as given” (p. 7). The effects of time 1 context are thus carried forward through time and assumed to manifest themselves as a characteristic of the individual in middle and late life. Thus, examination of the effects of social forces is limited to and encapsulated in the time 1 data collection period.

It is important to make this distinction in temporal context because early-life events or circumstances receive great emphasis. Elements of the social structure that are continuous or that occur later in the life course are external to the individual and influence opportunity structures in mid- to late life. Although the original trajectory was set much earlier, social structure (and interaction with it) may lead to turning points, changes, or even reversals, and indeed the stability of the original trajectory depends in large part on a stable and predictable set of social relations and institutions. The true test of the impact of early-life structural barriers or opportunities is whether we see differences in individuals (or between groups) over the life course. It is only through these divergent pathways that we can truly observe the “long arm” of social structure.

Confounding the Relationship Between Age and Time

Stability and change are common themes in analyses of the life course, and social scientists have long been interested in their correlates, predictors, and consequences over time. In response, the number and quality of panel studies have increased substantially in recent decades, as have the statistical methods for modeling change accurately. Gerontologists have long argued that age in itself is not predictive of change (Birren, 1988; Yates, 1991), yet, as noted in the discussion of intracohort variation, change in social, psychological, and health phenomena is often conceptualized and explained in a developmental framework as a normative age pattern (e.g., Baltes, 1979; Heckhausen, 2006; Wrosch & Freund, 2001).

It is important to exercise caution in attributing change to aging *per se*. While age-related processes and change may occur at numerous points in the life course, many transitions, changes, and even stability are actually time-based phenomena. This is a critical challenge for life course scholars because issues of time and timing are embedded in opportunity structures, macrosocial forces, and individual choices over the entire life course. As an illustration, Ferraro and Kelley-Moore (2003) demonstrated that accounting for the timing and duration of adulthood obesity and physical exercise helps explain the observed heterogeneity in physical function among midlife and older adults. Bengtson, Horlacher, Putney, and Silverstein (2008) separated age- and time-related change in religious activity by integrating historical and cohort trends in these attitudes and behaviors. With careful conceptualization and measurement, age- and time-based characteristics can be applied at the individual level or in combination with cohort and period effects.

Saving for retirement is an important illustration of a time-based process. Investments and other savings vehicles work on an accumulation framework, accruing value over time. Financial planners emphasize the need to invest “early and often,” even demonstrating that moderate investment in young adulthood

can yield greater returns than significant investment begun in midlife and continued longer. Lifelong wealth accumulation is based on the age one begins and the amount saved. Yet there are structural influences on that timing, including the length of one's training period, the amount of debt one has after the training period, type of job and salary, and other competing expenditures. Further, this time-based process can be overlaid on the life course such that the amount saved is greatly influenced by other events, such as marriage, childbearing, caregiving responsibilities, and one's health status.

There are three key implications associated with the potential confounding of time and age. First, relying on age to explain time-based phenomena ignores the first principles of life course theory discussed earlier. The timing and duration of phenomena are often driven by social structural and microinteractional forces, potentially leading to underconceptualization and/or poor measurement of early and midlife exposures as well as more temporally proximate compensation mechanisms. Second, separating age and time processes allows us to examine the symbolic constructions of age that are commonly overlaid on the life course, creating the perception that certain events or transitions are "early," "on time," or "late." If age is considered to be the primary vehicle of individual change or stability, then it deemphasizes the *meaning* of the change from the LCP. As we note in the third section of this chapter, the importance of symbolic constructions of age are already a woefully underconsidered area of life course inquiry, especially in North America. Finally, separating age and time processes allows us to consider and test empirically the potential interaction between the two. Early timing or late timing may not yield the same impact on the life course not only because of the social construction of age but also because of ontogenetic aging processes (e.g., the impact of age-related decrease in metabolism on attempts to lose weight).

Expanding Putative Role of Choice

The continued emphasis on individual choice-making warrants attention as a problem. In the study of action, choice is a problem to be analyzed, not an accomplishment to be asserted (Dannefer, 1999a; Marshall & Clarke, in press). Given the problematic epistemological and ontological status of "choice" in the wider social science literature (compared with concepts such as "hidden curriculum," "alienation," "social control," and so on), its remarkably unproblematic appearance in life course theory cannot be defended. What is almost always measured in such discussions is behavior, and it is simply *presumed* that behavior is based on choice. In such a usage of choice, the degree of constraints an individual feels and the differential levels of constraint that confront the individuals who have, for example, different health histories or who are differently located in opportunity structures are not analyzed. Nor is the degree to which perceptions and preferences are shaped by media-certified experts or by advertising.

Without a systematic analysis of the life circumstances and subjective experiences that lie behind the observed behavior, an appealing and culturally familiar image of a volitional and more or less autonomous individual obscures the analytical problem of the constraints within which choices are made and the constitutive role of social interaction and social structure in constructing "choice" in the first place.

Summary

In this section, we have presented a diverse range of theoretical and epistemological challenges in studying the life course. These problems are often overlooked, yet they must ultimately be confronted if life course scholarship is to avoid the microfication involved in individualized conceptual formulations and lay understandings and if the field of life course studies is to apprehend fully the potentials of sociological explanation. As an added step toward that end, it will be useful to clarify what life course scholarship seeks to explain and the kinds of explanations proffered. These are the tasks of the next section.

Types of Phenomena and Types of Explanation: The *Explanans* and *Explananda* of Life Course Theory

To develop a general perspective of work on the life course that encompasses the foregoing points, Dannefer and Uhlenberg (1999) created a matrix based on the cross classification of types of *explananda* and *explanans* within the life course literature. The original matrix comprised three analytically distinct levels of *explananda*: (a) the individual level (the structure of discrete human lives extended from birth to death and the characteristics of those lives), (b) the level of social aggregation (the *collective patterning* of individual life course structures in a population), and (c) the cultural or symbolic level—the *societal representation* of the life course in the socially shared stock of knowledge, including the nature of its socially recognized demarcations by life events and roles and the attendant meanings and norms. To avoid undue idealization, the third category needs to be expanded to include actual social structures, policies, and practices on which many of the representations of the life course are based (such as the legal use of age as an eligibility criterion).

Each of these levels contains important phenomena that require careful description and analysis. At the individual level, these include the identification of key transition points and trajectories, at the collective level is the aggregation of these individual-level characteristics in a population, and at the sociocultural level are the social structuring of age-graded roles and the definition and evaluation of specific ages and life stages in the context of a given social system (e.g., adolescence, old age).

The columns of the matrix were defined by two categories of *explanans*, or *explanation*, termed *personological* and *sociological*. The term *personological* is intended to refer to any kind of individual characteristic that is assumed to be stable and enduring and that is postulated to influence life course outcomes. This category includes characteristics that are inherently individual, such as dispositions as well as early-life contextual characteristics that become embedded in the individual and have enduring impact on the life course. The term *sociological*, by contrast, refers to social structural and interactional forces that operate continuously to shape life course processes or that are proximate to the time at which outcomes are measured. As discussed in the second section of this chapter, there are important conceptual and methodological distinctions between context in early life and context in later life.

The sociological/personological distinction signals a major conceptual divide that is reflected in citation patterns in different strands of the life course literature. For example, authoritative reviews of the field by Elder (1998, 2003, 2006) and George (1993), exemplars of a personological approach, do not usually cite those who tend to conceptualize the life course as a feature of social structure (e.g., Kohli, 1988, 2007; Meyer, 1986; Sorensen, 1986), whereas the latter do not cite those whose work is primarily personological (see, e.g., Kohli, 2007; Kohli & Woodward, 2001).

The matrix generated by cross classifying the *explananda* and *explanans* is presented in Figure 21.1. The categories of both typologies—*explanandum* and *explanans*—are quite broad. Both they and the cells that are generated by their cross classification warrant further refinement. Although a full elaboration of the matrix is a task that lies beyond the scope of this chapter, we illustrate how subtypes can be created within the categories. We then apply these subtypes of explanation to individual-level outcomes, which constitute the top row of the matrix (see Figure 21.2).

Personological explanations include at least four identifiable types of characteristics that are often proposed to explain subsequent life course outcomes: (a) personal choice; (b) inherent traits or other hardwired, evolutionarily selected “ontogenetic” characteristics; (c) presumably stable and enduring individual characteristics that are regarded as having been shaped by social context early in the life course (enduring tastes and predispositions and some aspects of personality); and (d) individual characteristics shaped by contextual factors associated with sociohistorical change and upheaval (with the Great Depression

21.1

Framework for classifying life course studies by outcome of interest and type of explanation.

		Focus of explanation (<i>Explanans</i>)	
		Personological	Sociological
Life course outcome (<i>Explananda</i>)	Individual	A	B
	Population	C	D
	Symbolic	E	F

21.2

Subclassification of explanations for life course outcomes

		Focus of explanation (<i>Explanans</i>)				
		Personological			Sociological	
Life course outcome (<i>Explananda</i>)	Individual	Personal choice	Inherent traits or ontogenetic characteristics	Early social context	Individual characteristics shaped by sociohistorical change	Micro
						Meso
						Macro
	Population	C			D	

as the prototypical example). With respect to *sociological* explanations, an obvious principle of subclassification is by system level: relevant studies have been conducted at macro-, meso-, and microlevels of analysis and are discussed in further detail later.

Cell A: Personological Explanations for Individual Outcomes

1. *Choice* (or synonymous terms such as *agency* or *decision making*). Choice is often invoked in discussions of the life course despite its problems (as described previously). In quantitative studies, choice is generally used to account for little more than the error term of an analytical model, and in narrative accounts of the life course it may be used quite uncritically. It is the deus ex machina that is brought in to account for unexplained variance. The frequency with which choice is mentioned as a factor to be considered is remarkable given its explanatory impotence (Dannefer, 1999a; Marshall & Clarke, in press). It is true that some detailed narrative studies of life history deconstruct individual choice-making as a reflective process occurring with an active consciousness (Gubrium, 1993; Matthews, 2002). In such cases, the process of deconstruction unavoidably brings context squarely into the "choice-making" process; hence, they may fit better in cell B.
2. *Inherent characteristics*. These include *traits* or other putatively inherent individual characteristics that can be discerned in some studies of life course outcomes within and beyond the field of life course studies. The diverse array of such permanent individual characteristics posited to have life

- course outcomes includes alcoholism (e.g., Pandey, Roy, Zhang, & Xu, 2004), psychological invulnerability (Seifer & Sameroff, 1987), and reproductive strategies (Belsky, Steinberg, & Draper, 1991).
3. *Contextually formed characteristics.* *Personality* is an example of a characteristic that many scholars regard as forged on the basis of early experience in a social context, whether or not it is conceived as having an underlying inherent component. A well-known example of research that seeks to use personality as an explanatory factor for outcomes in later life is Clausen's (1993) analysis of *planful competence*. Using the classic Berkeley and Oakland human development data, which trace cohorts born in the 1920s from early childhood or adolescence until 1990, Clausen argues that planful competence—a personality characteristic formed by adolescence—is a key predictor of life course success.
 4. *Sociohistorical change as a formative force.* Glen Elder, in particular, has consistently made the impact of sociohistorical context on the development of enduring individual characteristics central to his work. Given that both Elder and Clausen utilized the same databases of the Oakland and Berkeley studies, it is interesting to contrast this focus of Elder's approach with that of Clausen, who makes no attempt to introduce the impact of historical events and social change. The location of the life course in historical time has proven exceedingly fruitful in generating findings, hypotheses, and insights about the impact of circumstances on the life course.

As noted previously, however, it is important to consider how context is being utilized. In Elder's work, it is primarily as part of the prior experience of individuals, experiences that are carried forward through time within the individual. For example, early-life deprivation during the Depression was certainly a contextual factor, but its "effects" found in the 1980s are assumed to be carried forward in time largely through the effects of that early experience on the person. How those early experiences led individuals to occupy particular locations in social structure later on and the effects of temporally proximal social structures on the observed outcomes or the impact of temporally proximal economic circumstances or policy developments are not measured. This is a precise example of time 1 encapsulation described earlier in this chapter.

Cell B: Sociological Explanations for Individual Outcomes

Let us turn attention to cell B, which contains explanations of individual-level outcomes in terms of proximal or immediate aspects of social context. As noted, examples of such explanations can readily be found at the micro-, meso-, and macrolevels.

The microlevel considers studies that utilize ethnographic methods to explain the immediate dynamics of interaction and their relevance to individual characteristics, including the diagnosis and labeling of individuals and their management by social systems. Applications of labeling theory and of interactional analyses more generally to account for age-related outcomes fall into this cell (e.g., Dannefer, 2008; Holstein & Gubrium, 2000). The power of social forces in constituting individual outcomes can be most directly seen when observing their effects "close up" at the level of experience and face-to-face interaction.

The mesolevel considers studies that attempt to explain individual outcomes as a consequence of organizational dynamics—whether the organization is the workplace, the school, the neighborhood, or the mental hospital. With regard to schools, an especially clear example is provided; these also belong here, as do studies that focus on the effects on individuals of tournament-like (Lucas, 1999) and other organizational mobility processes (e.g., Rosenbaum, 1978, 1984; Sorensen, 1986). The power of self-fulfilling prophecies to create cycles of cumulative advantage for some individuals and disadvantage for others (Dannefer, 1987, 2003; O’Rand, 1996) has been observed in virtually all organizational settings—work, military, higher education, and prisons as well as schools, where it was first described and theorized (Buckley, 1967; Lemert, 1975; Rosenthal & Jacobson, 1968). Another important example of mesolevel forces is provided by the growing line of inquiry on community and neighborhood influences on well-being across the life course. Depending on its characteristics, neighborhoods can serve as buffers or exacerbators for physical health (Schootman et al., 2006), mental health (Ross, 2000), and even identity (Rosel, 2003).

The macrolevel includes at least two broad kinds of *explanans*: the effects of national-level policies (e.g., the consequences of welfare state provisions, including age-graded eligibility rules) and other macroforces, such as globalization and economic trends.

The second type of *explanans* at the macrolevel are structural variables, such as occupational position, education or other indicators related to social class, and race, ethnicity, and gender—characteristics that have explanatory power at a general level of social organization. Even if these categories are measured at the individual level (e.g., an individual’s race), it is the ascribed status and social meaning of those categories that are consequential because it reflects the macrostructural hierarchy. For example, insurance status is an individual-level characteristic, but its implications for accessing health care are actually rooted in the broader political and economic structure. As Kelley-Moore and Ferraro (2004) demonstrate, racial disparities in late-life physical function are influenced by both socioeconomic status and lifelong social selection processes, both of which are individual-level indicators of the macrostructural forces that create opportunities and barriers over the life course. The social gradient manifests in individuals, leading to the widely observed patterns of inequality between socially defined groups. Or, as described in chapter 22 in this volume, social inequality “gets under the skin.” Thus, scientists must carefully consider the inclusion and interpretation of individual-level variables to avoid mistakenly attributing them to personological explanations.

Because it has considered the effects of temporally proximate social characteristics, such as occupation, wealth, or social engagement, some recent work of Elder and associates is also properly considered to belong in this cell (Crosnoe & Elder, 2002; Willson, Shuey, & Elder, 2007).

Cell C: Personological Explanations for Population Outcomes

Despite the collective character of the *explanandum* in row 2, demographers and other analysts of population outcomes often invoke personological explanations ranging from choice to ontogenetic change.

With regard to choice, consider population-level studies dealing with the transition to adulthood. Reflecting the idealization of increasing autonomy as a feature of advancing modernity, many such studies begin with structural explanations for behavior in the past but shift to personological explanations for behavior as we approach the present. Structural forces that constrained behaviors in the past are not hard to detect, but when we get closer to the present, the social structural mechanisms shaping human behavior are deemphasized in favor of choice-making. One example is provided by the work of John Modell (1989, 1995) on the transition to adulthood. In explaining cohort variations in such areas as schooling, premarital sex, marriage, and parenthood, Modell emphasizes the influence in earlier cohorts of social forces, such as “the market demand for labor” and “needs of the family economy.” In more recent cohorts, however, increasing prosperity has meant that social structure has been losing its determinative force: “Young people . . . have increasingly taken control of the construction of the youthful life course” and “choose the timing of their own life course events and hence come increasingly to value the expression of personal choice in this as in other aspects of their lives” (Modell, 1989, pp. 326, 330). Other demographers have also frequently referred to choice, decision, or related terms like “preferences” and “options” in efforts to explain changes in marriage patterns and fertility (Cooksey & Rindfuss, 2001; Rindfuss, Choe, Bumpass, & Byun, 2004).

One irony of such interpretations is that, at least until recent decades, the presumed increase in personal freedom and choice was associated with greater conformity in behavior (see Dannefer, 1984, 1999a). For example, throughout the 20th-century United States and especially after World War II, a trend toward increased conformity among cohort members in transition to adulthood (Hogan, 1981) and in other life transitions was clearly evident. The interpretation typically offered for this finding has been, as in the previously given examples, increased prosperity in young adulthood, which provided increased degrees of freedom in choice and control; paradoxically, an increase in choice thus leads to an increase in conformity. We suggest that this can make sense only if one assumes that there is a strong set of impulses in human nature to differentiate from family of origin and marry soon after the period called adolescence. This is an example of the continued implicit reliance on the organismic model in sociological research.

An example of personological change driven explicitly by age-linked, ontogenetic characteristics for population outcomes is provided by the analysis of population cognitive aging by Alwin et al. (2008). They begin with an explicit assumption that

as a biological, neurological, social and cognitive process, cognitive aging can be defined as those time-dependent irreversible changes that lead to progressive loss of functional capacity for a point of maturity . . . these changes in the conditions of human frailty . . . are to some extent intrinsic within the organism rather than brought about by the outside environment. (p. 74)

Cell D: Sociological Explanations for Population Outcomes

Row 2 concerns life course patterns studied at the collective level, which typically entails the study of population or cohort patterns. The use of sociological

explanations for life course patterns of cohorts in later life is illustrated by studies of labor force exit (Henretta, 1992) and economic status (Crystal & Waehrer, 1996) and selective migration (Norman, Boyle, & Rees, 2005). Although such studies generally do not deny the influence of earlier life course experiences in determining later outcomes, they focus primarily on the significance of social factors encountered by cohorts as they move through later-life structures created by the state (e.g., Social Security) and the workplace (e.g., pension programs). These structures are seen not only as factors having an impact on the aggregate experience on cohorts in later life but also as forces that produce the internal stratification of cohorts (Crystal, 2006; Dannefer, 2003).

With the recent emphasis on structured inequality and cumulative disadvantage processes as related to age, a growing number of cohort-level analyses have been interpreted in terms of sociological explanation, the right-hand cell of row 2.

For example, Crystal and Waehrer (1996) argue that income distributions characteristic of cohorts in later life are shaped "not only by the numerous vicissitudes of individual life events and choices, but also by policy choices implicitly in the design and regulation of retirement income systems" (p. S301). Using longitudinal data for several cohorts moving from middle age into later life, they show average income declines and increasing inequality within each cohort. Individuals within a cohort differentially encounter such later life course events as retirement, loss of spouse, illness, disability, and inheritance. The effects of these transitions on economic status, however, are mediated by larger structural forces related to the income system. Without attention to the stratification of the occupational structure and to policies regulating public and private pensions, health care, and taxes, one cannot understand cohort patterns of income distribution in later life.

A second illustrative example can be drawn from the work of Norman et al. (2005), who examined the relationship between area-level deprivation and health inequality over a 20-year period. Specifically, they compared changes in health status among migrants and nonmigrants to determine the net effect of living in an economically disadvantaged area. Although this study used a combination of individual- and area-level data, their purpose was to examine contextual effects on the observed health inequality in specific geographic regions.

Both of these studies suggest structural explanations for observed population patterns, but neither is able to examine in detail how particular social structures produce particular outcomes. Focusing on this limitation, Elder and O'Rand (1995) criticize cohort studies that "typically speculate about historical forces and fail to extend analysis to their actual investigation. At most we end with a plausible story that does not advance scientific understanding." This observation can be accepted as a challenge to identify and develop hypotheses to examine the role of social structural factors in producing observed cohort patterns of aging. Nothing is gained, however, if this critique is taken to justify a retreat to personological factors only or to avoid engaging the sociological imagination for a lack of data. Clear understanding of life course trajectories is not enhanced by ignoring how the extrusion of individuals through regulative and often age-graded structures shapes collective patterns of aging.

A critical conceptual distinction exists between sociological explanations of individual differences in a given outcome and population-level inequality.

The latter fits squarely in cell D because the observed patterns are population characteristics or processes that are influenced by social structure. Studies at the macrolevel, such as cross-national comparisons, belong in this cell, as do studies on a smaller population scale, such as neighborhoods, communities, and institutions. As we noted in our discussion of row 1 of the matrix, the difference between cell C, which has personological explanations, and cell D, which has sociological explanations, lies in the causal assumptions being made about postulated independent variables. Researchers must recognize population outcomes are influenced by social, political, or economic structure and can occur at the micro-, meso-, or macrolevel. Cell D has tremendous potential for understanding population life course processes but has heretofore been neglected in favor of individual-level measures and personological explanations.

Cells E and F: The Life Course as a Social Apparatus

Our conceptualization of the third row of life course *explananda* represents an expansion of its treatment in *Paths* as “a symbolic construct” because what is intended here is more than that. It concerns the life course as a socially constituted set of social practices, policies, and structures and a concomitant symbolic apparatus of age-related meanings, values, and norms. Thus, the phenomena in question here are different from the first two. In both of the first two, the *explanans* consist of actual individual people, whether treated as individuals or aggregated. This third category of phenomena is really *social structural*, *symbolic*, and *cultural* in nature. It refers to the life course (and age) as social phenomena—as a set of *social rules and practices* and as a *socially objectivated idea* that has plausibility in a given societal context as a set of publicly shared meanings and expectations for the course of human lives.

Accounts of the features of the life course as a symbolic construct are often cast in sociological terms, as indicated in cell F. Notwithstanding certain organismic and logical constraints on role sequences (e.g., puberty precedes biological parenting), the dramatic historical and cross-cultural diversity in the timing, sequencing, content, and orderliness of roles and activities dictates the importance of sociological approach here.

The power of social structure to organize the life course was a central theme of the classic essay by Leonard Cain (1964) that first articulated the connection between, as its title indicates, “Life Course and Social Structure.” Perhaps the most familiar example of the life course as a social construction is the widely objectivated *institutionalized life course* of late modernity (Kohli, 1988, 2007). In welfare state economies and other modern states, age grading serves as a major organizer of what is defined as “normal” and “natural” human behavior, which is archetypically divided into the notorious “three boxes of life” (e.g., Riley & Riley, 1994).

The institutionalized life course includes an elaborate array of well-defined yet socially constructed markers the broad impact of which touches individuals whether or not they are able to conform to them. For example, the markers of transition to adulthood include economic and social independence from one’s family of origin. Young severely disabled adults are often perceived as failing to reach adulthood because they are physically or mentally unable to maintain employment and/or achieve culturally important markers of independence

(Tisdall, 2001). The current debate over the possible deinstitutionalization of the life course in response to broader social forces simply underscores how intertwined the social constitution of the life course is, not with individual aging but rather with broadscale social forces.

The life course as a social apparatus also includes a symbolic approach that encompasses age norms, meanings, and values (e.g., Chudacoff, 1989; Dannefer & Shura, in press). This is well illustrated by the work of Riley and associates, which has included a focus on the meaning of age and the processes by which it changes. Especially relevant are their discussions of age norms and expectations deriving from societal age-grading (e.g., Riley, Kahn, & Foner, 1994). Their treatment provides a framework for analyzing age as a formal and informal criterion to encourage or impede entrance into and exit from roles, thereby regulating access to resources and opportunities.

Studies of specific organizations or subcultures that have documented the operation of age norms in local settings are also important contributions to this cell. For example, Burton (1990, 1996) has documented a quite distinct set of life course and age-related expectations in poor minority communities. Tragically, the truncated or abbreviated life course has been established as an expected feature of the life course of street gang members, whose lives are organized by a remarkably orderly progression of "career development" (e.g., from homeboy to original gangster) (Bing, 1992; Klein & Maxon, 2006). Work organizations also have their own cultural systems, of which age grading is often a part. Lawrence (1984, 1996) demonstrated the power of normative expectations about age appropriateness for certain career levels within a corporate setting.

From this perspective, age norms are explained in terms of the confluence of demographic change with social policies that have bureaucratized and increasingly institutionalized the life course in a matrix of formal and informal social regulation (cf. Kohli, 1988; Meyer, 1986). Over the past century, these societal developments produced a steady increase in the use of age as a formal role criterion for education, work, and retirement, creating the "three boxes of life" (Riley et al., 1994), and an unprecedented degree of life course transition and role conformity, especially for men (e.g., Glick, 1977; Hogan, 1981; Modell, Furstenburg, & Strong, 1978). Such a high degree of age-graded societal regulation (which tended to homogenize the major roles and transitions of tens of millions of people) produced a widely shared view of the life course and hence of age norms (Chudacoff, 1989). Historians have traced the forces underlying these changes back to earlier changes in the meaning and status of age, deriving from demographic changes in the age structure and technological change that shifted health expertise from the aged themselves to medicine (Achenbaum, 1979), and to still other technical and social changes that reshaped the age grading of work and school, creating new levels of age segregation and age awareness (Chudacoff, 1989). From this vantage point, then, the very concepts of age and life course are themselves historically contingent as culturally relevant and plausible constructs.

Although perhaps more commonly and plausibly cast in sociological terms, personological accounts of the source of the life course as symbolic construct are also available, and examples are located in cell E. One example of such an account is provided by the work of Riley and associates (Riley, 1978; Riley, & Riley, 1994). Her concept of *cohort norm formation* is an attempt to provide an

action complement to the strong structural emphasis of the basic aging and society framework by explicating the role of individual behavior in creating population patterns.

Most personological accounts derive, at least implicitly, from the same kind of argument used by the historical demography in row 2. This cell contains work that views the culturally shared meaning of age—both age in general and being a particular age—as deriving from factors in the individual person. This is, of course, precisely the notion that is explicitly applied to old age when disengagement is said to be a realization of natural human tendencies. Despite its own age and its general disrepute, disengagement theory (Cumming & Henry, 1961) continues to resurface, as gerontological commentators regularly note. And in a context of a graying population, expanding health care potentials, and sharply rising health care costs, such theorizing is not irrelevant to economic arguments about aging. One recent reincarnation of disengagement can be found in Daniel Callahan's (1987) proposals that we think of a "full life" and an "expectable life course" of 70-odd years as a criterion of access to care. Such approaches provide a personologically based, organismic justification of contemporary age norms and of the biases they justify. This general point is relevant to current public debates on issues like withholding needed medical treatment from the very old and physician-assisted suicide. If the life course is seen as having an organismically determined end point within a certain age range, it is another argument for such practices and another form of social pressure to be visited on the aged individual in question.

Summary

In the mid-1970s, Glen Elder (1975) correctly referred to the life course as an "emerging field of inquiry" (p. 186). By the mid-1990s, the LCP had become the dominant perspective from which social scientists approached the study of aging, as reflected by the renaming of the American Sociological Association's section on aging as *Sociology of Aging and the Life Course* in 1997. Now, more than 10 years later, the LCP has been increasingly useful and widely applied in substantive domains of social science research. It nevertheless remains true, as Dannefer and Uhlenberg (1999) noted a decade ago, that the development of sociological theory to further our understanding of how social forces shape the life course is still in an early stage. From the perspective of social theory, the result is theoretical inadequacies in the formulation of life course issues, even though the term *life course* has a distinctly sociological heritage.

These theoretical inadequacies were the focus of the first section of this chapter. Discourse in the life course area has failed to acknowledge or utilize the basic insights concerning the unique role that social structure and interaction play in the constitution of individual lives and in the symbolic understanding of age and the life course. This tendency is evident even in the section name *Sociology of Aging and the Life Course* noted previously. Notably absent from both section titles is *age* (which identifies a structural dimension of social organization as opposed to the individual level)—an absence that invites a continuation of the tendency to obscure social structural aspects of the life course and to amplify the focus on individual aspects.

An adequate theory of the life course cannot ignore the unique features of the human organism (e.g., exteroception, neoteny, and exceptional physical flexibility and resilience and cognitive capacities). These features of human physical anthropology mean that human development and aging require social interaction processes, and therefore the *explanation* of human development also requires an understanding of the integral and irreducible role of social interaction. Social interaction processes are almost always institutionalized to some degree in group practices, which thereby organize and structure social interaction, giving *social structure* an important and irreducible role in organizing life course patterns. Accordingly, we have proposed that attention to social interaction and social structure stand as first principles of life course analysis. Without them, human organisms do not become human beings, and there is no life course. However, the importance of social interaction and social structures is consequential to human development not only in the early years, but throughout the entire life course. As we illustrate in this chapter, social interaction and social structure operate as constitutive forces over the entire life course.

Given these principles, a theory of the life course cannot be based on the organismic model appropriate to other species, with its assumptions of a “natural” aging trajectory. Yet, as we have seen, common intellectual practices in the study of aging and the life course, such as the tendency to associate the importance of the social with change or the tendency to naturalize the institutionalized life course, continue to invite a reliance on unwarranted organismic assumptions.

The final section of the chapter expands the classification scheme set forth in *Paths*. Each of the three levels of phenomena (*explananda*)—individual, population, and structural-symbolic—stands as a legitimate and important focus for life course analysis. However, research in the first two categories has overemphasized key transition points and trajectories of individual life paths. Moreover, further attention should be paid to life course outcomes at the collective level as well as the social structuring and social construction of age.

Of the two classes of explanations (*explanans*), research on aging and the life course has relied primarily on personological factors, including inherent personality traits, individual choice, and early-life social context. As we note in the second section of the chapter, overreliance on these factors as well as ontogenetic aging as explanatory mechanisms has led to a neglect of sociological influences on the life course, both conceptually and methodologically. Too often, the explanatory force of social structural and temporally proximate social context is neglected, leaving us with the popular but naive perspective of individuals aging outside the influence of a social world. One need not contend that the social has the primary explanatory contribution to make to every imaginable life course outcome in order to appreciate the value of clarity with respect to the kinds of explanation that are being assumed and the kinds that are being excluded by the causal assumptions and/or data available to the life course researcher.

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